NYSEG

New York State Electric & Gas Corporation

Mechanicville Central Avenue
Former Manufactured Gas Plant
Mechanicville, New York

SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
APPENDICES A - E
SEPTEMBER 2004

VOL. II OF V



Prepared For:
New York State Electric & Gas Corporation
Kirkwood Industrial Park
Binghamton, New York

URS

URS Corporation - New York
28 Corporate Drive, Suite 200
Clifton Park, New York 12065

APPENDIX A
SITE PHOTOGRAPHS

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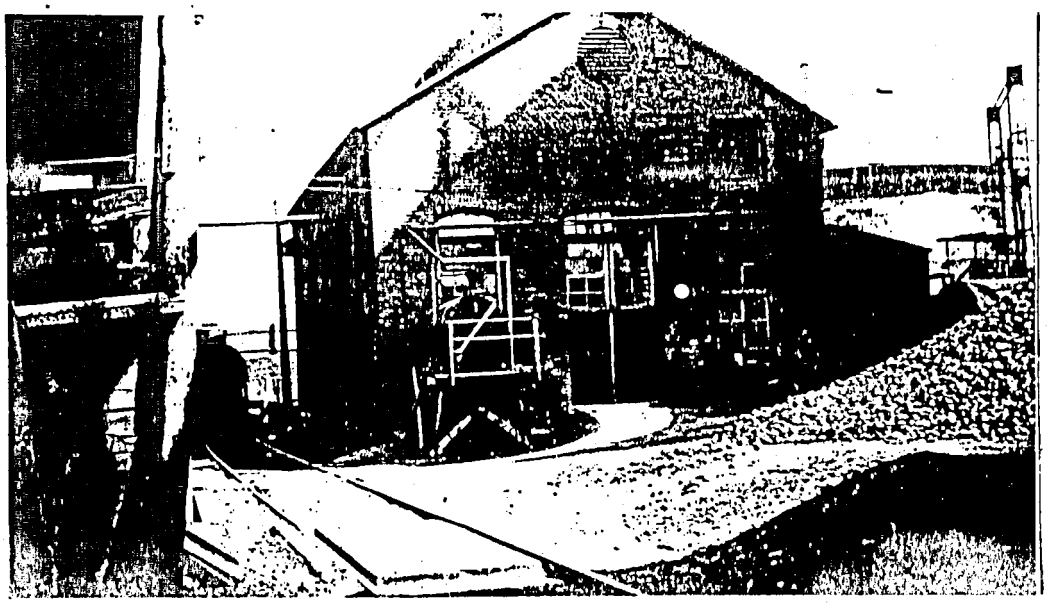
MECHANICVILLE CITY
MECHANICVILLE OPERATIONS CTR.

Date: APRIL 1951

Assured: NEW YORK STATE ELECTRIC & GAS CORPORATION

Subject:

Location: MECHANICVILLE, N. Y.



GAS GENERATOR HOUSE 29
LOOKING EAST



GAS PLANT, COAL SHED & BOILER HOUSE 26
LOOKING NORTH

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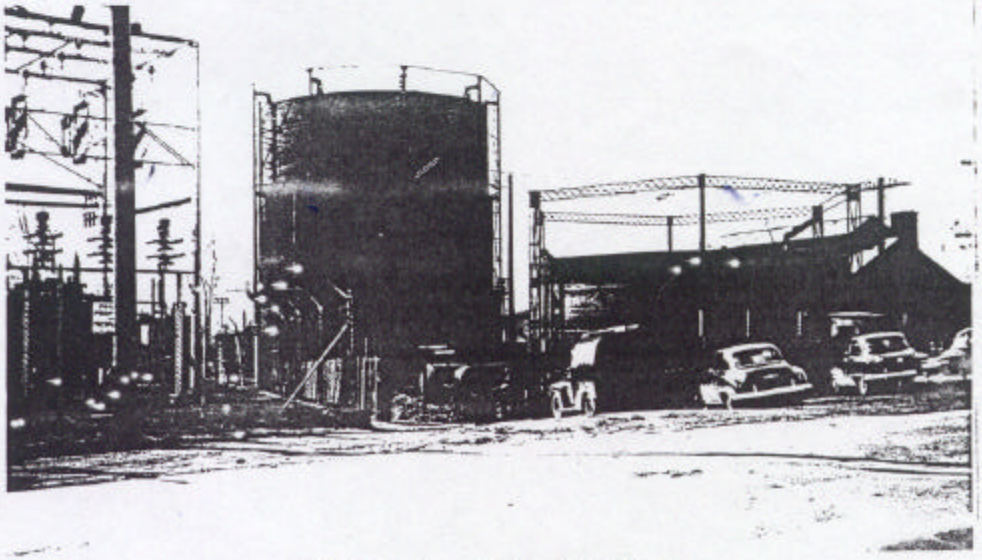
MECHANICVILLE CITY
MECHANICVILLE OPERATIONS CTR.
MECHANICVILLE BOILER HOUSE & COAL SHED
#E 26

Date: APRIL 1951

Assured: NEW YORK STATE ELECTRIC & GAS CORPORATION

Subject:

Location: MECHANICVILLE, N. Y.



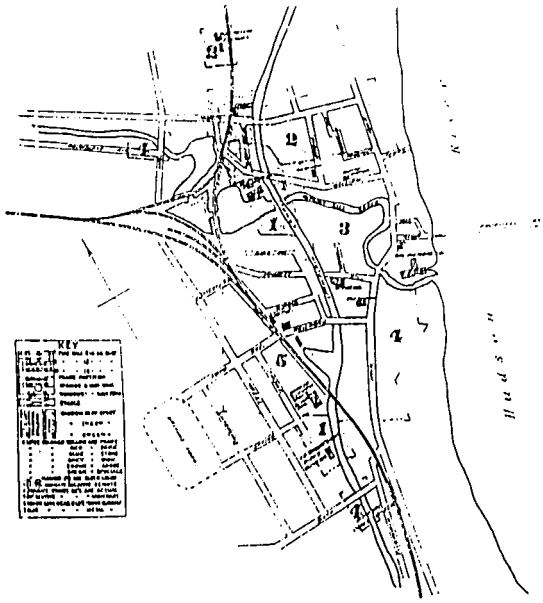
GAS PLANT - LOOKING WEST



COAL STORAGE)
BOILER HOUSE)
SUBSTATION) #26 - LOOKING EAST

1

SANBORN MAP & PUBLISHING CO. LIMITED
MECHANICVILLE
NOV. 1887 N.Y.

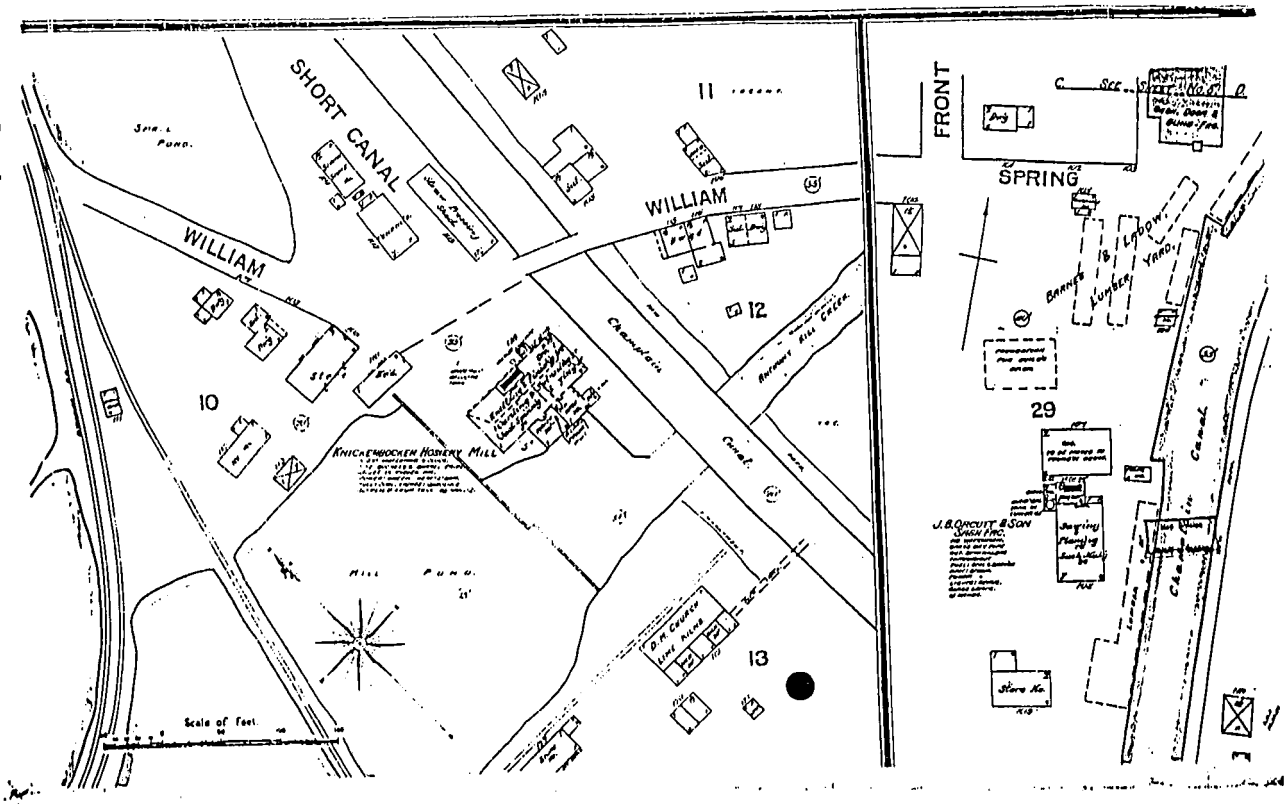


INDEX.

STREETS.

SPECIALS.

a Indicates only one side of Street shown.

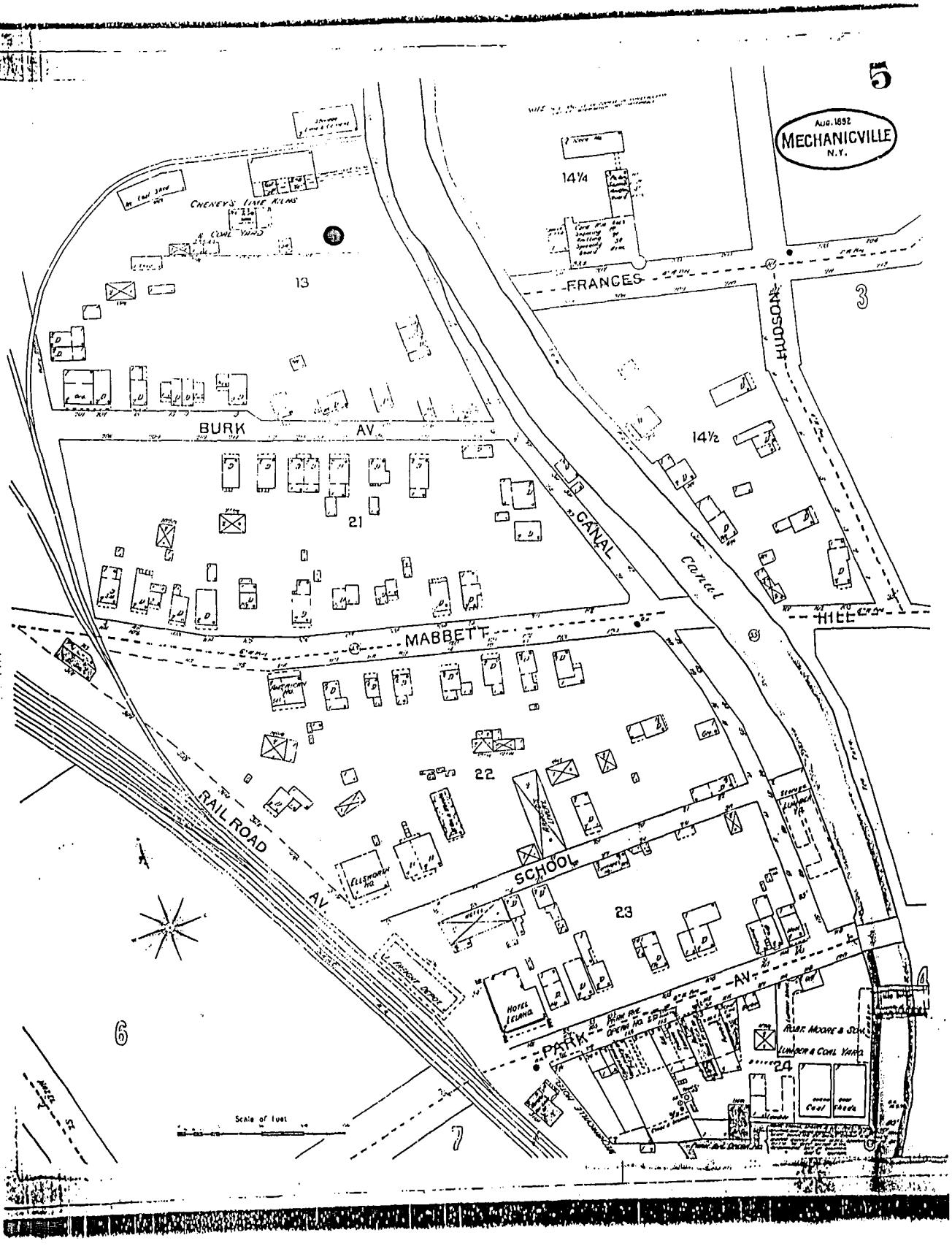


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1997

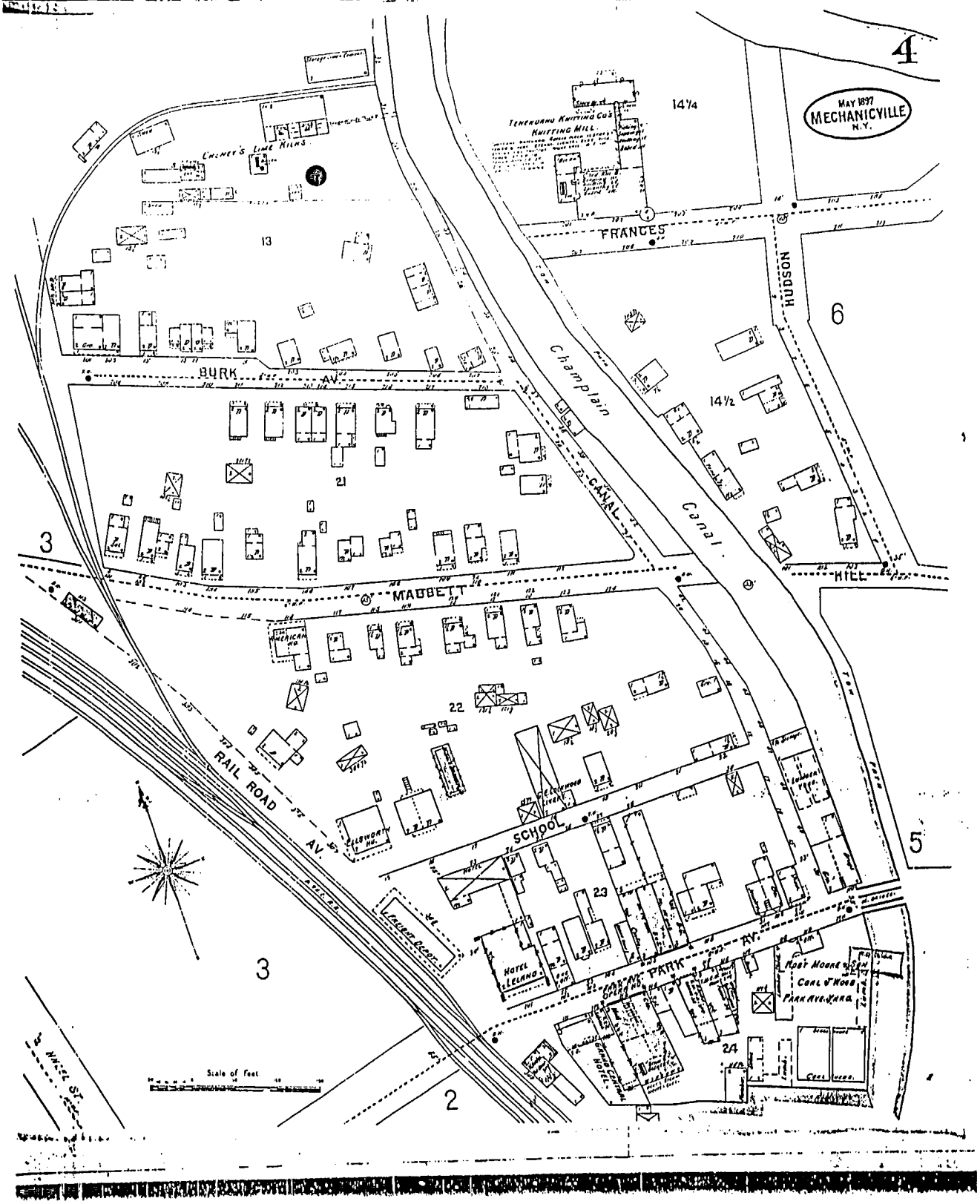


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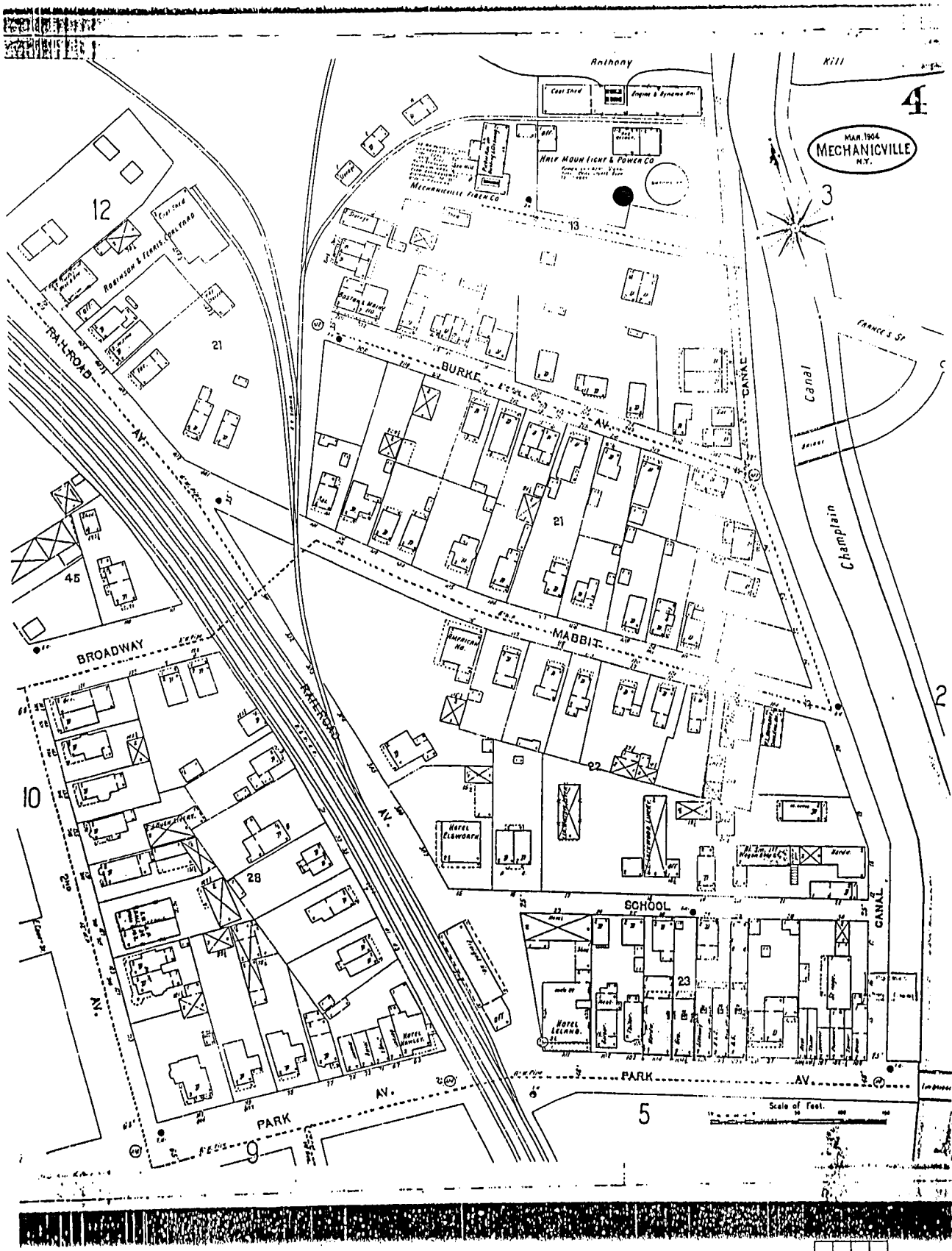
1992



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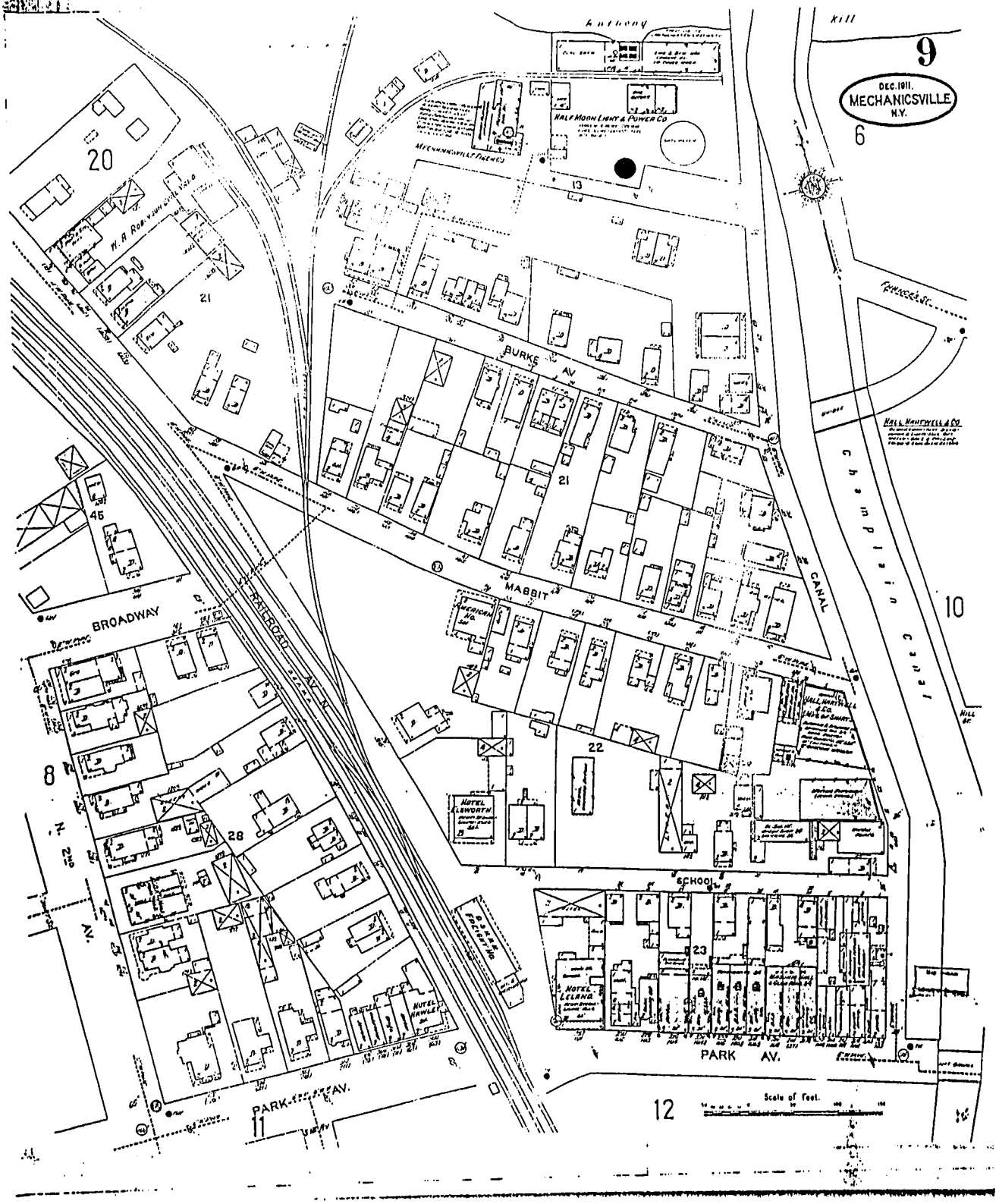
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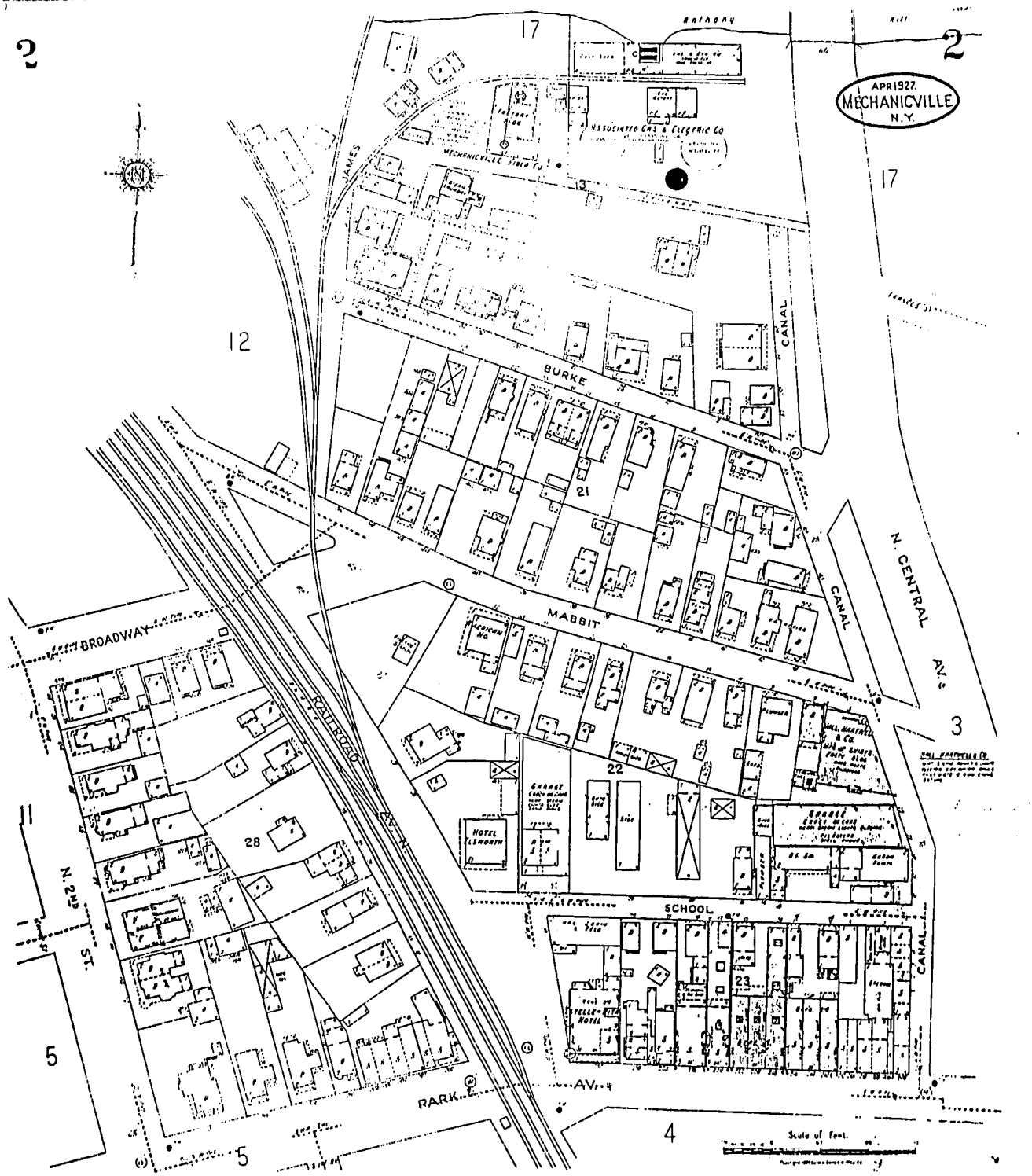
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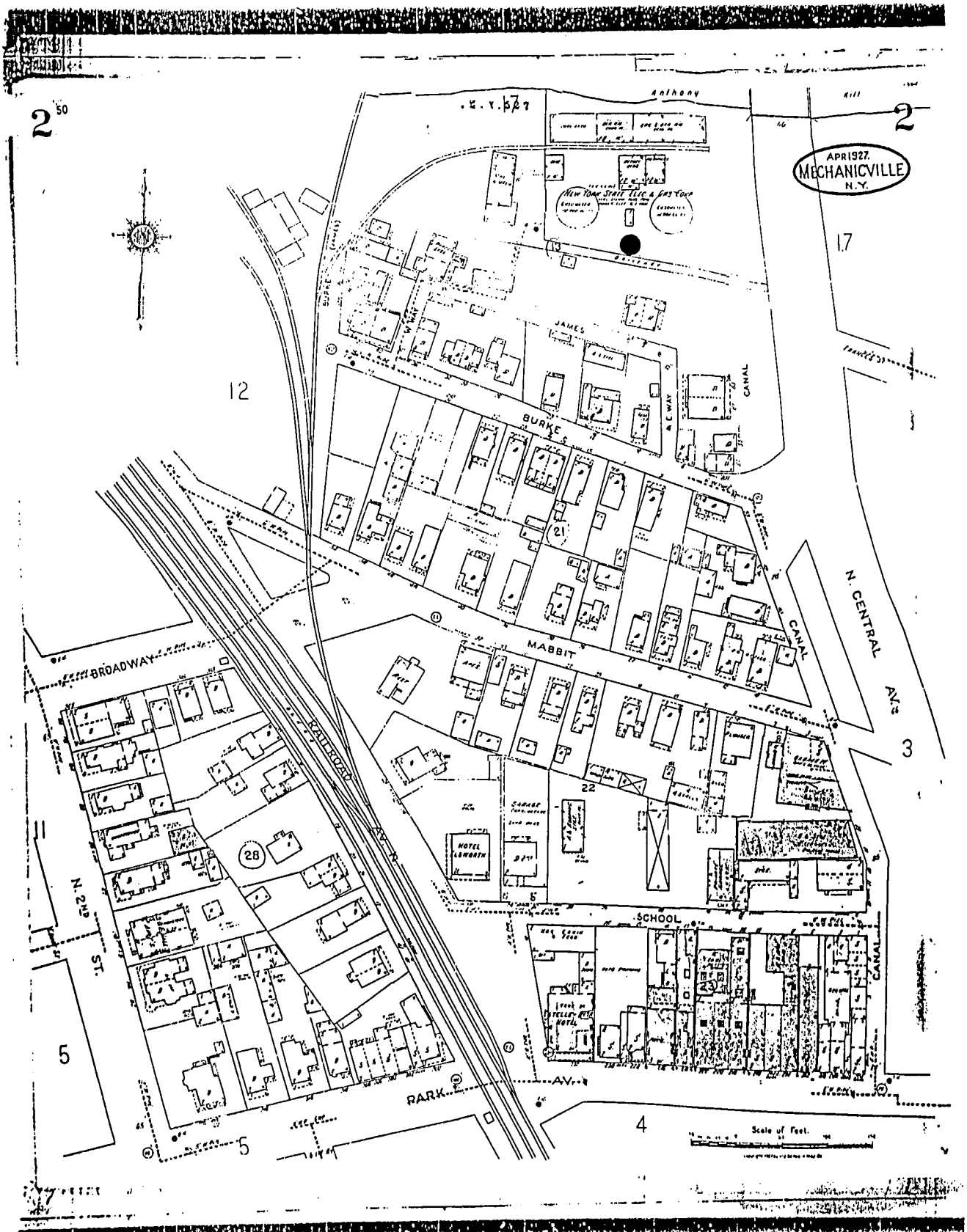
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1927

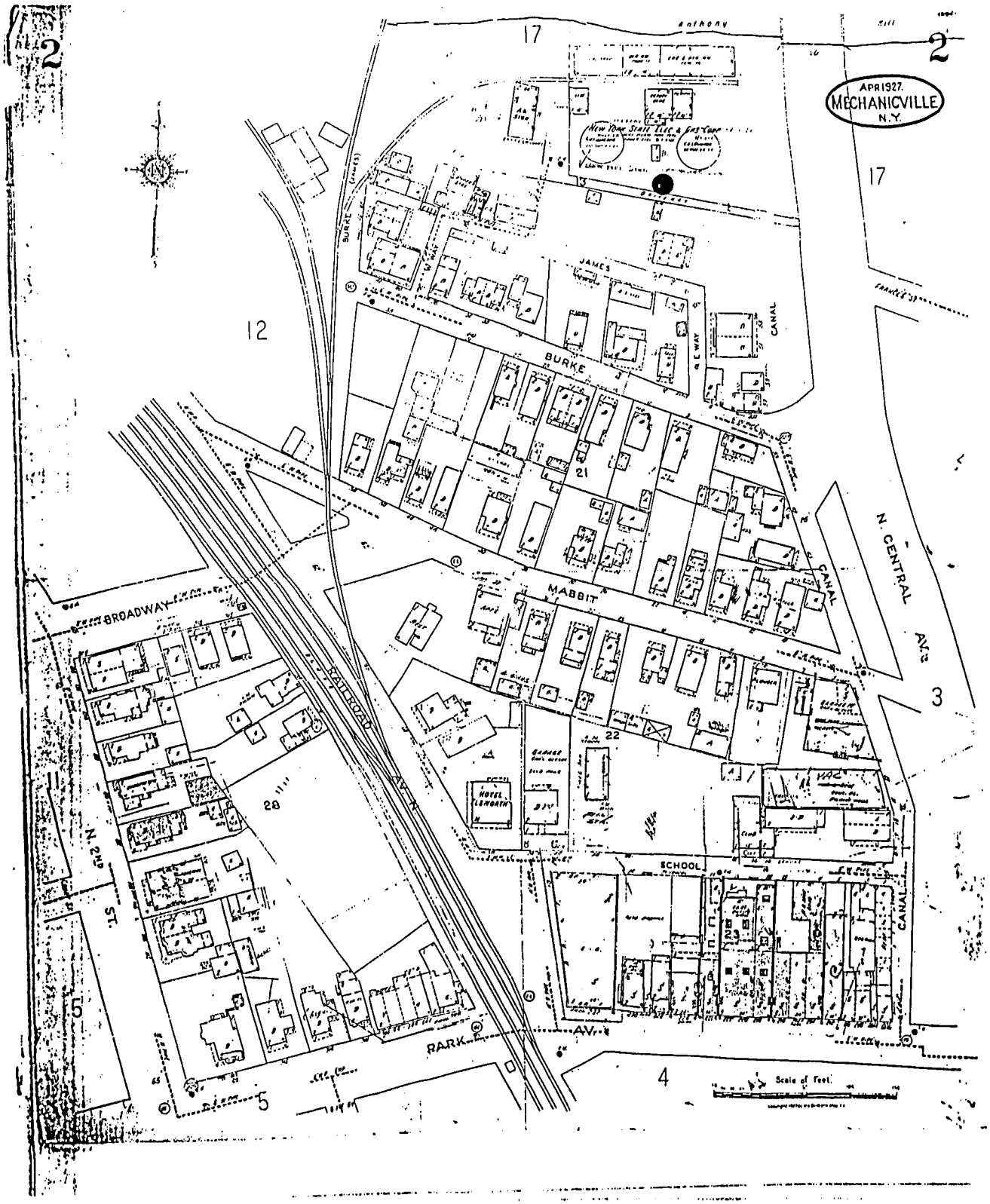


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1949



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1962

APPENDIX B
PREVIOUS INVESTIGATION REPORTS AND ANALYTICAL RESULTS

INVESTIGATION OF THE FORMER COAL GASIFICATION SITE AT MECHANICVILLE, NEW YORK

TASK 1 REPORT
PRELIMINARY SITE EVALUATION

Prepared for

New York State Electric and Gas Corp.
4500 Vestal Parkway East
Binghamton, New York 13903-1082

By

E.C. Jordan Co.
P.O. Box 7050, DTS
Portland, ME 04112

AUGUST 1986

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INVESTIGATION OF THE FORMER COAL GASIFICATION SITE AT MECHANICVILLE, NEW YORK TASK 1 REPORT PRELIMINARY SITE EVALUATION

1.0 INTRODUCTION

1.1 Purpose

The former coal gasification site at Mechanicville, New York is currently being investigated by the E.C. Jordan Co. under contract to the New York State Electric and Gas Corporation (NYSEG). The investigation is divided into five tasks which will be conducted using a phased approach: (1) preliminary site evaluation; (2) initial field investigation program; (3) expanded problem definition program; (4) risk assessment; and (5) conceptual design.

The purpose of Task 1 is to develop an understanding of the site's history, environmental setting, and current condition based on available information and direct observation. The information gathered in Task 1 is then used to better define the nature and scope of Task 2 activities. This report summarizes the findings of Task 1 and provides justification and recommendations for activities to be undertaken during Task 2.

1.2 Scope

The scope of work completed for Task 1 included:

1. A historical review of the site to develop an understanding of the former gasification plant layout, operations, and surrounding land uses.

2. An air assessment of existing site conditions and a preliminary prediction of airborne contaminant concentrations expected during the site investigation.

3. A detailed site reconnaissance to become familiar with the area and identify locations for explorations, access requirements, and potential conflicts with above and below ground utilities.

4. A geophysical investigation utilizing seismic refraction, terrain conductivity, and ground penetrating radar (GPR) to: delineate the bedrock surface; determine vertical stratigraphy of geologic materials; map the migration route of any conductive groundwater contaminant plume; and, identify subsurface anomalies which may warrant further investigation.

5. Preparation of a report presenting the findings of Task 1 including a plan showing significant natural and man-made features at the site and formulation of recommendations to address any suspected problems before proceeding with the Task 2 investigation.

Task 1 activities included a detailed site reconnaissance, interviews, and file searches. The site was visited by E.C. Jordan personnel on January 21, 1986 and May 5, 6, and 7, 1986. The current conditions at the site were documented with field notes and photographs. Interviews were held on May 5, 6, and 7, 1986 with the following persons:

- Art Elvins, retired NYSEG employee, Mechanicville, New York.
- John McBride, Mike Gilbert, and John McNeil current NYSEG employees, Mechanicville service center.
- Louie Fasoli, current NYSEG employee, Granville office.
- Lucille Bevis, Supervisor of Real Estate for NYSEG, Mechanicville office.
- Harold Sheehan, Local Historian.
- Vincent Barber, Plant Manager, Mechanicville Water Department.
- Michael Renaldi, Commissioner of Public Works, City of Mechanicville.

The following people were also contacted for information about the site and surrounding area:

- John Hamilton, Manager, Saratoga County Soil and Water Conservation District, Ballston Spa, New York.
- Lloyd Wagner, Water Resources Division, U.S. Geological Survey, Albany, New York.
- Robert Dineen, Senior Scientist, New York State Geological Survey, Albany, New York.
- George Hodgson, Environmental Coordinator, Saratoga County Environmental Management Council, Ballston Spa, New York.
- Dick Ferraioli, Well Driller, Altamont, New York.

Records and documents on file at the following locations were reviewed:

- NYSEG, Corporate Headquarters in Binghamton and the regional office in Mechanicville (James Marean and Robert Badertscher).
- Real Property Tax Services, Saratoga County Office, Ballston Spa, New York.
- Agricultural Stabilization and Conservation Service, Saratoga County Office, Ballston Spa, New York.

2.0 SITE DESCRIPTION

2.1 Location

The Mechanicville site is located in Saratoga County in the City of Mechanicville, New York (Figure 1). The coal gasification plant was located near the intersection of North Central Avenue and Ferris Lane. Two of the original gas plant structures are still standing at the site. The nearest surface water body is the Anthony Kill, a stream which borders the site on the north.

2.2 History of Gas Production

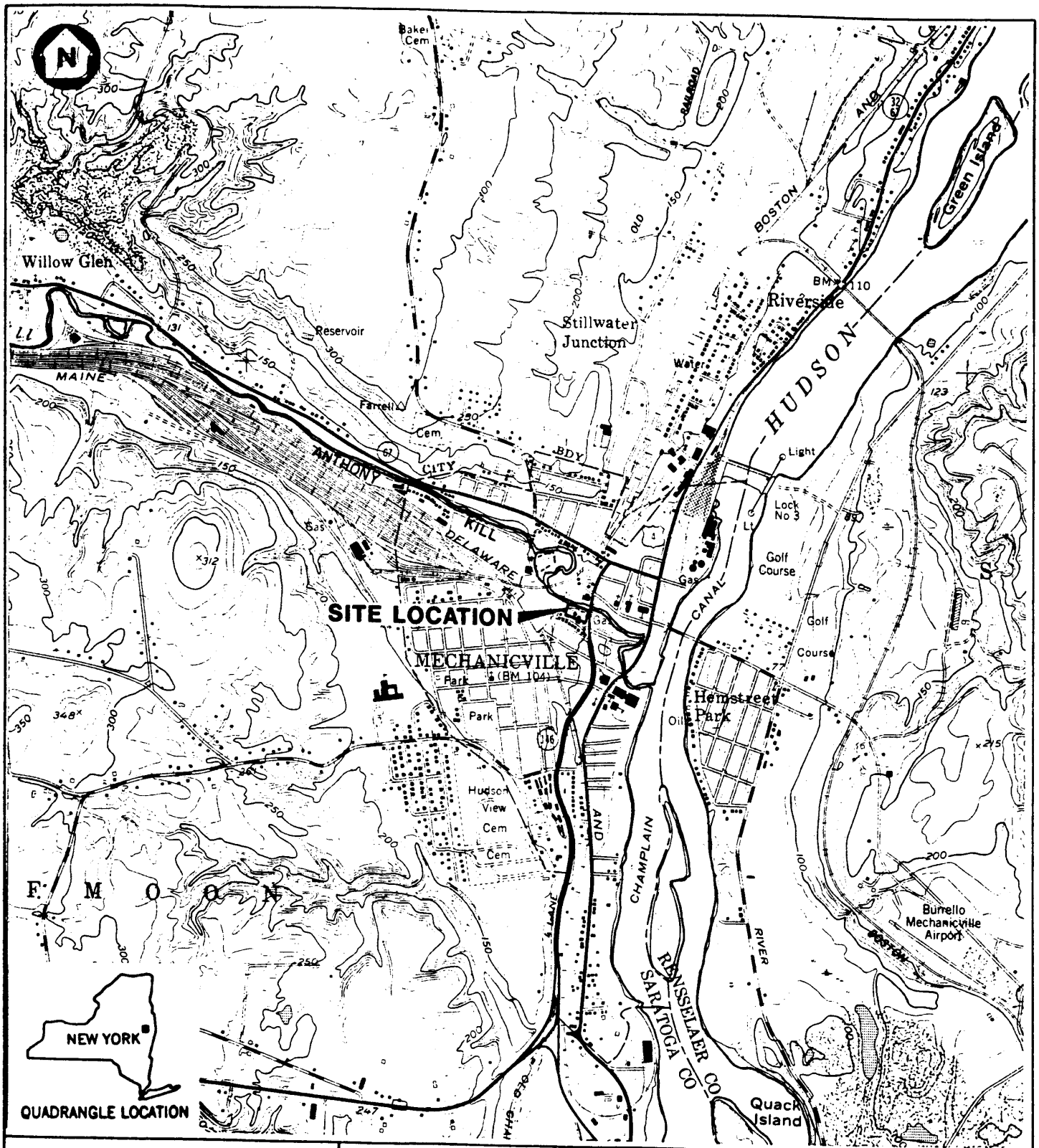
The history of coal gas production at the Mechanicville site dates from 1901. In that year, the Halfmoon Light, Heat & Power Co., founded in 1900, began distributing gas to the citizens of Mechanicville (Reference 1). Figure 2 shows the layout of the gas plant in its first years of operation, circa 1910 (Ref.2).

The plant was expanded circa 1911 when a $3\frac{1}{2}$-foot water gas set was added to the original 5-foot set. A set consisted of a gas generator and associated apparatus; the dimensions refer to the inside diameter of the generator (Ref. 3). A second gas holder was also added during the expansion. The new gas holder had a 100,000 cubic feet capacity while the original holder held only 40,000 cubic feet of gas. In 1910, the company served approximately 325 gas customers (Ref.1).

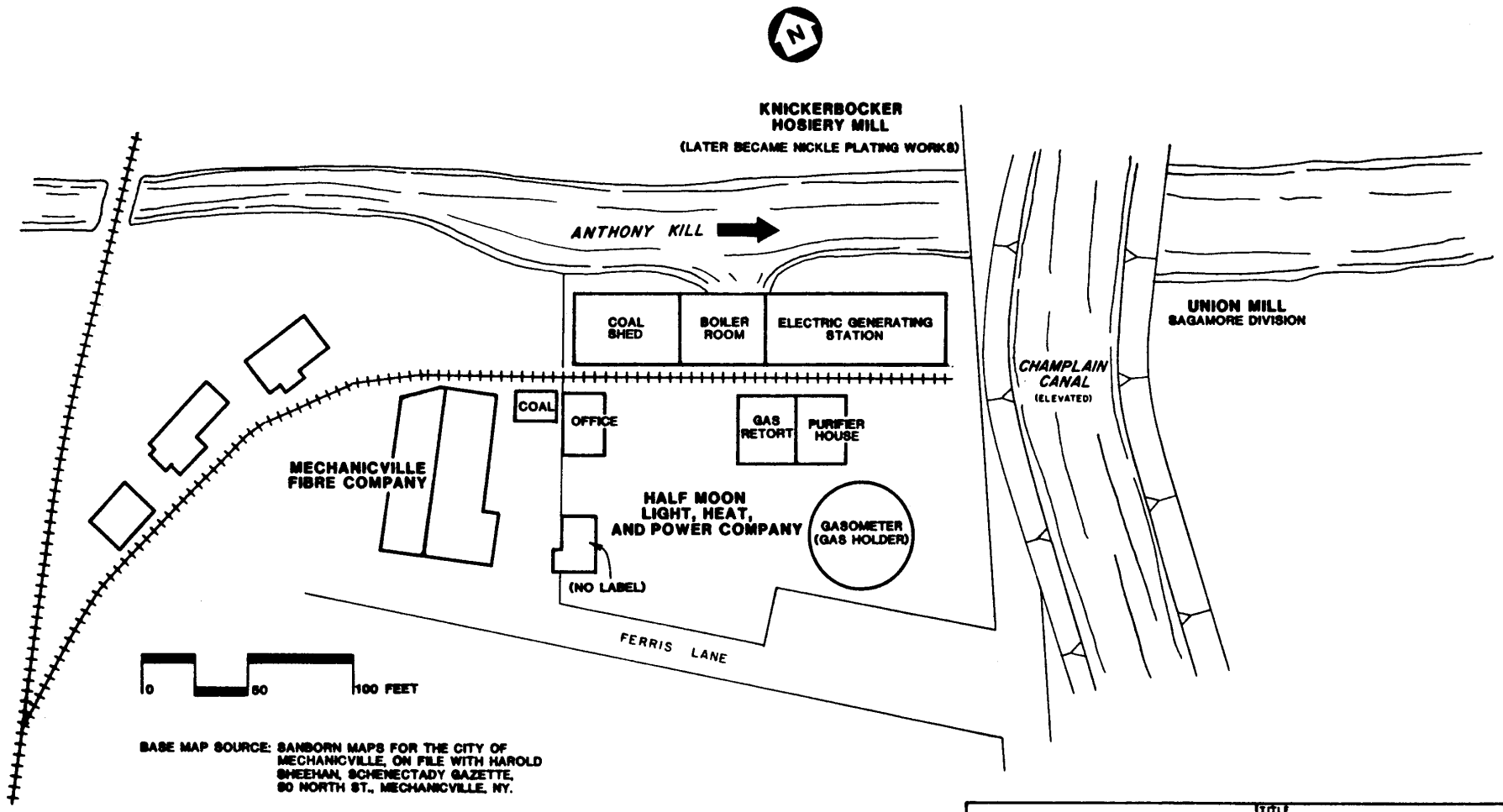
In 1924, the Halfmoon Light, Heat & Power Co. was acquired by the Associated Gas and Electric System and in 1928 it became part of the New York State Electric and Gas Corporation (NYSEG) (Ref.1). The plant layout in 1951 is depicted in Figure 3. Coal gas production continued at the site until 1955 (Ref. 4). NYSEG still owns the site which is now a natural gas and electric service center.

During the years of coal gas production, Pennsylvania coal was delivered to the site by rail along the spur depicted in Figures 2 and 3. Anthracite coal was used to make gas and was stored outside adjacent to the gas house. Soft bituminous coal which was fed to the boilers was stored in the coal shed (Ref. 4).

The process used to manufacture gas at the site was the water gas process (Ref.1). There are two types of water gas: blue gas and carburetted water gas (Ref. 3). NYSEG employees who worked at the gas plant in the 1950's described using the carburetted water gas process to produce a gas with 850 Btu per cubic foot (Refs. 5, 6). It is likely that the blue gas process, which produced a gas with a heating value of just below 300 Btu per cubic foot, was used in the earlier years of operation. The two processes are quite similar. Blue gas was produced by passing steam over incandescent coke to aid in the recovery of hydrogen and other gases by reacting with the carbon. Because the steam lowered the temperature of the fuel bed, air blasts were needed periodically to restore the temperature. Thus, the process involved alternating cycles of steam injection and air blasts. The carburetted water gas process was

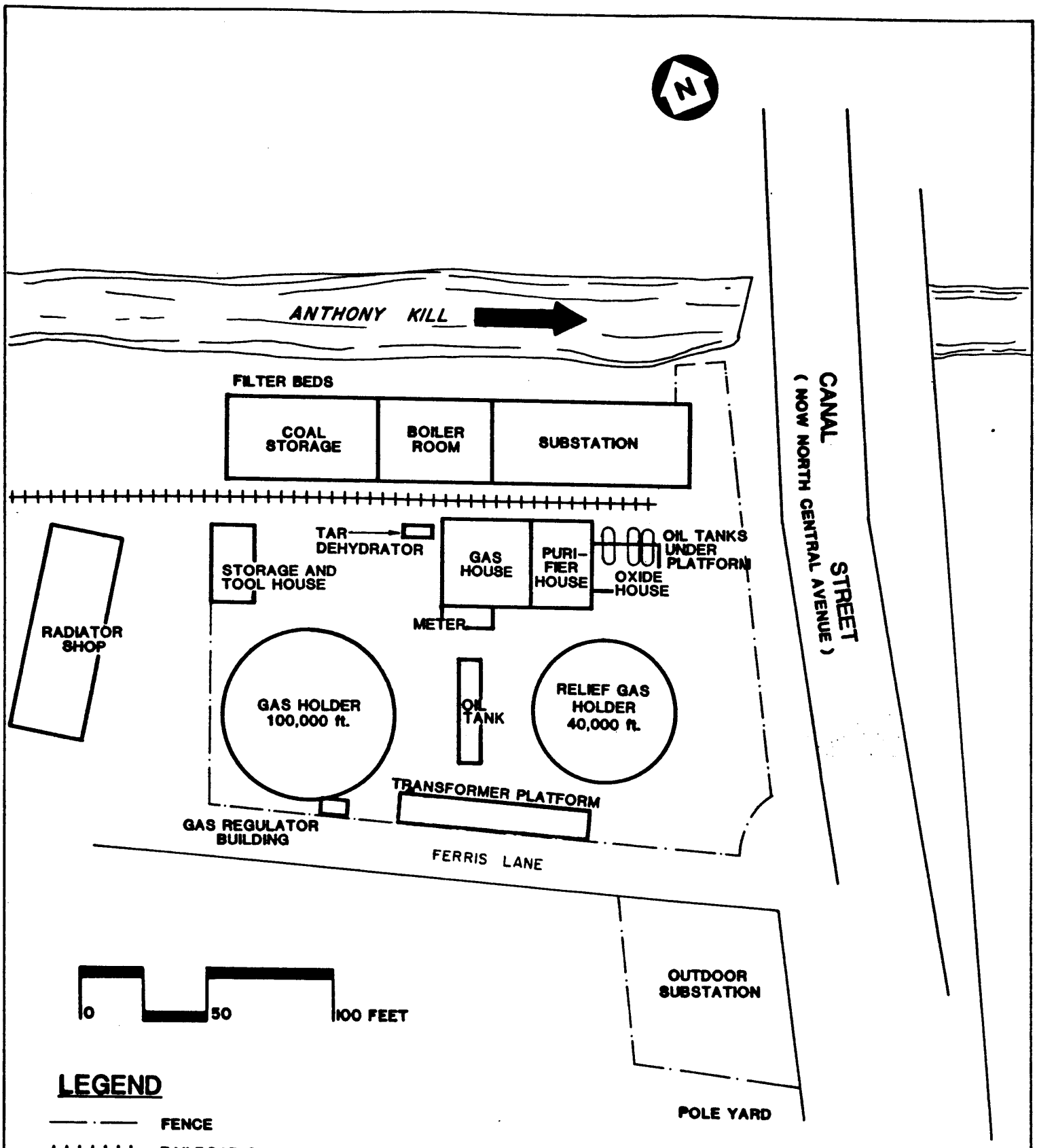


BASE MAP SOURCE: USGS QUADRANGLE MECHANICVILLE (1980)	E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: MECHANICVILLE SITE LOCATION MAP
SCALE IN FEET: 0 — 2000 — 4000	CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
		PROJECT NO. 4945-01 FIGURE 1



BASE MAP SOURCE: SANBORN MAPS FOR THE CITY OF MECHANICVILLE, ON FILE WITH HAROLD SHEEHAN, SCHENECTADY GAZETTE, 80 NORTH ST., MECHANICVILLE, NY.

E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1910
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-01 FIGURE 2



BASE MAP PREPARED BY BROWN, CROSBY, & CO., INC., ENGINEERING DEPARTMENT, 96 WALL ST. NEW YORK, APRIL 1951.

E.C. JORDAN CO.
CONSULTING ENGINEERS

PLAN OF THE MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1951

NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

JOB NO. 4946-01

FIGURE 3

developed to raise the Btu content of blue gas. This was done by passing blue gas through a carburetor where a spray of oil was added and then thermally cracking the oil in a superheater (Ref. 3).

At the Mechanicville plant, gas reportedly flowed from the gas house to the purifier house to the relief holder, and from there to the larger distribution holder. All piping was located underground (Refs. 4, 5, 6). This flow path differs from the typical water gas plant where the gas was stored in the relief holder prior to being purified (Ref. 3). The oxide house was apparently used for storage of spent and/or fresh oxide material used to purify the gas.

The oil used in the carburetted water gas process was stored in three above-ground oil tanks underneath a platform supporting the oxide house. Because of the sharp grade at the site, there was room to fit these tanks under the building next to the tracks. A fourth above ground oil tank (10,000 gallons) was located between the two gas holders as shown in Figure 3 (Refs. 4, 5, 6).

The following byproducts were generated at the Mechanicville gas plant: ash and condensate from the gas house; wood chips from the purifier house; and coal tar and oily sludges. No information was found concerning the methods employed to handle these materials in the early days of gas production at Mechanicville. However, it was common practice to dispose of ashes and spent oxide material on-site. Also, the tars produced in gas plants were an important raw material for the flourishing tar distillation industry in the early 1900s (Ref. 3). NYSEG employees provided the following information about waste disposal in the 1940's and 1950's (Refs. 4, 5, 6).

The ashes and clinkers (chunks of uncombusted material) were shoveled out of the generator at night and spread in the area between the relief holder and Ferris Lane. From there, they were picked up by anyone who had a use for them. During Mr. Elvins' employment at the plant (1946 to 1956), for example, they were used to stabilize the banks of the Hudson River (Ref. 4).

The condensate from the water gas process was treated in the tar dehydrator (tar separator) (Figure 3). This was a 1,000-gallon tank used to separate the oil in the condensate from the water (Ref. 5). The oil was subsequently used for fuel and the water was piped through three filter beds in series located behind the coal storage building for treatment (Figure 3). The beds were described as being made of wood and approximately 10 feet long, 6 feet wide, and 4 feet deep. These wooden troughs were set into the ground and filled with coke. Baffles directed the flow through coke which filtered out residual oil. After passing through the filter beds, the water was discharged to the Anthony Kill. The oily coke in the beds was collected periodically and burned in the gas house (Refs. 5, 6).

Wood chips treated with iron oxide were used to remove hydrogen sulfide from the gas in the purifier house (Refs. 3, 5). As the iron oxide absorbed the sulfur from the hydrogen sulfide gas and formed iron sulfides, the wood chips became inactive and required regeneration. This was accomplished by exposing them to air. The oxygen in the air converted the sulfide to free sulfur and restored the iron to active iron oxide. The iron also reacted with cyanide to produce ferrocyanides which could not be regenerated and did not react with

hydrogen sulfide. When free sulfur accumulated to about 50 percent of the mass and much of the iron was tied up in the ferrocyanides, the spent wood chips were replaced by fresh ones. NYSEG employees recalled several different methods of disposing of spent wood chips at the Mechanicville plant. Spent chips were: (1) incinerated by the City of Mechanicville from 1951 to 1955 (Ref. 5); (2) piled along the road until someone came and hauled them away (Ref. 5); and (3) spread on the lot just west of the active plant area (Ref. 6). It is known that several truckloads of spent wood chips were dumped at a NYSEG substation on Route 67 near Coons Crossing in the mid-1950's (Ref. 7). This site is currently under investigation by E.C. Jordan for NYSEG (Ref. 8).

The purified gas still contained some residual coal tar. The coal tar would settle out of the gas in the relief holder and mix with water in the bottom of the holder. This coal tar/water mixture was reportedly pumped into a truck and hauled off-site periodically. According to plant employees, coal tar did not accumulate in the base of the larger distribution holder (Refs. 4, 6).

Gas production at the Mechanicville plant ended in 1955 when natural gas became available (Ref. 4). Most of the above-ground structures including the coal storage shed, gas house, purifier and oxide house, gas holders, oil tanks, and tar dehydrator were demolished. The boiler house, indoor substation, and old office building were left standing. Mr. Elvins reported that the purifier house was cleaned out after plant shutdown but that the accumulated tar was left in the base of the relief holder. Gravel was used to fill in the below grade portions of both gas holders (Ref. 4). The filter beds were covered with soil, apparently without prior removal of the coke (Ref. 5).

NYSEG collected soil samples from the filter beds area and the relief gas holder foundation in November 1981 (Ref. 7). Petroleum odors and tar residues were encountered at depths of 3 to 5 feet at both locations. The samples were analyzed for the four characteristics of hazardous wastes (as defined by 40 CFR Part 261 Subpart C): corrosivity, reactivity, ignitability, and EP toxicity. The samples did not exhibit any of the characteristics of hazardous waste, but the sample from the filter tanks had a high level of sulfides (1,300 mg/kg) and the relief holder sample contained 40 mg/ℓ of total phenols (Ref. 7).

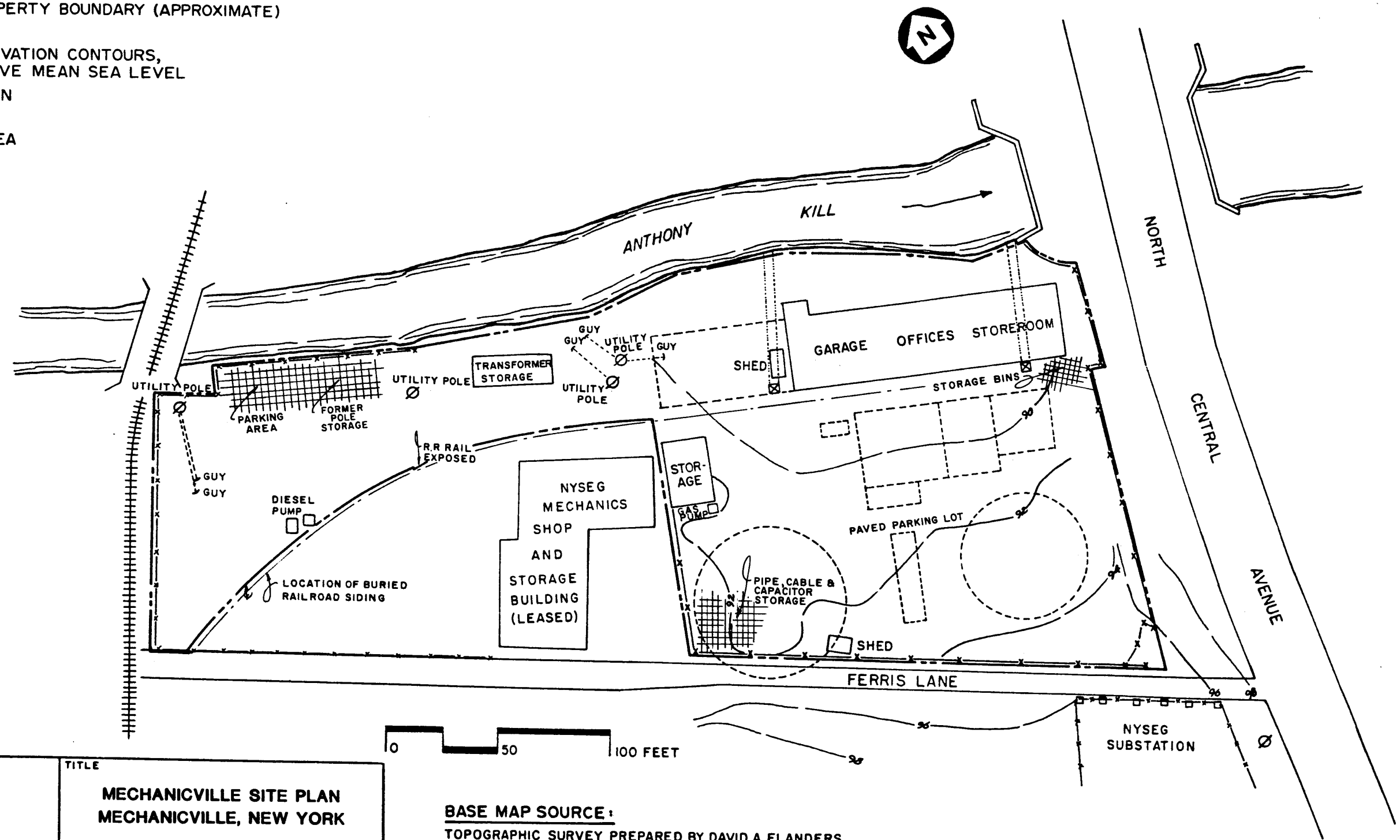
2.3 Recent Site Use History

The Mechanicville site, as it appears today, is depicted in Figure 4. The approximate locations of the gas plant structures that have been removed are superimposed on the present day plan.

After the closure of the Mechanicville gas plant in 1955, NYSEG converted the site to a natural gas and electric service center. A natural gas distribution shed was constructed over a portion of the old distribution gas holder. The former boiler room/substation building was converted to offices, a garage, and a supply storage maintenance shop. The old office is now used as a storage shed and toolhouse. There is a buried gasoline storage tank containing unleaded fuel just off of the southeast corner of the old office. The 2,000-gallon tank, installed around 1980, replaced an older tank which was reportedly taking in water. No gasoline leaks were reported (Ref. 6).

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE MEAN SEA LEVEL
- STORM DRAIN
- CULVERT
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE
MECHANICVILLE SITE PLAN
MECHANICVILLE, NEW YORK

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-01 FIGURE 4

The remaining developed portion of the site is a paved parking lot. The pavement covers the old railroad siding. At the time of the site visit, there were pipes, cables on spools, and capacitors stored in the southwest corner of the site near the natural gas distribution shed. There were also large metal bins filled with cables and scrap metal in the northeast portion of the site, near the intake to the storm drainage culvert (Figure 4).

In 1922, NYSEG purchased a 0.25 acre lot on the corner of Ferris Lane and North Central Street. This property was vacant during most of the years the coal gas plant was operating. NYSEG built the electrical substation which now stands on the lot in 1953. NYSEG also owns property on the west side of the site (see Figure 4). The land between the railroad tracks and the Anthony Kill was purchased by NYSEG in 1952 (Ref. 9). As shown in Figure 4, portions of it have been used for pole and transformer storage and vehicle parking. The top 8 to 12 inches of soil beneath the transformer storage area were removed by NYSEG in August 1984 due to observed oil stains. Twelve drums of excavated soil were hauled to an approved disposal facility in Ohio and the excavated area was refilled with gravel. The soil was not tested for contamination prior to disposal (Ref. 10). There is also an active underground diesel fuel tank with a fuel pump on the west side of the lot. The railroad siding is buried under the blacktop which covers most of the lot.

2.4 Surrounding Land Use

2.4.1 Gas Production Years. In the early 1900's, the land use surrounding the Mechanicville gas plant site was closely linked with two water bodies: the Anthony Kill, also known as Tenandeho Creek, and the Champlain Canal. A head drop of 34 feet between Round Lake and the Hudson River fostered heavy industrialization along the banks of the Anthony Kill in the late 1800's and early 1900's. An article by Hal Sheehan, the local historian, lists numerous industries in the vicinity of the site including a brewery, nickel plating works, lumber yard, foundry, bedding company, and mills (e.g., knitting, hosier, planing, flax, grist, saw, and cotton) (Ref. 1). The locations of a few of these industries are depicted in Figure 2. A map dating from 1911 shows a residential neighborhood became established south of the plant site, between Ferris Lane and Burke Avenue. (Ref. 2).

The heavy industrialization of the Anthony Kill ended as electricity replaced the water wheel. The land use in the area changed from industrial in the early gas plant years to commercial in the later years. For example, the Mechanicville Fiber Co., located just west of the site, became a radiator shop and distributor of bottled LP gas.

The other important surface water body in the plant vicinity was the Champlain Canal. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) with Lake Champlain. The canal flowed through Mechanicville along what is now Central Avenue (Figure 2). Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. The canal, which was hand dug, was approximately 30 feet wide and 12 feet deep. Potatoes were the primary product shipped on the canal from Mechanicville. Hal Sheehan reports the typical land uses along the canal were shops, inns, manufacturers, mills, saloons, and brothels (Ref. 1).

The Champlain Canal was abandoned in 1916 when the Barge Canal was opened. The empty canal became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the State dug up the canal, removed the trash and debris, and prepared the road bed for Central Avenue (Ref. 1).

2.4.2 Present Day. The gas plant site is in a mixed commercial/residential section of Mechanicville. The former nickel plating mill, located to the north across the Anthony Kill from the plant, is now used by a car dealer as an overflow lot. A supermarket and gas station occupy the property adjacent to the site on North Central Avenue and there are private residences along Ferris Lane to the south. NYSEG leases the former radiator shop just west of the site and uses the building as a mechanics shop and storage area. Except for the car lot, the adjacent property north of the Anthony Kill is undeveloped.

3.0 ENVIRONMENTAL SETTING

3.1 Climate

The Hudson Valley Region is divided by two climatic divisions (Ref. 11). The southeast portion has a warm, temperate, rainy climate with no dry season but warm summers. The northwestern portion has a cool or snow forest climate with no dry season but hot summers. The climate in this region can change rather suddenly from season to season and at times from day to day (Ref. 12). Mean monthly temperatures at Stillwater, New York, 3 miles north of Mechanicville, range from 56°F to 65°F from June through September and 13°F to 25°F from December through March. The average annual precipitation is approximately 45 inches with snowfall averaging 179 inches per year (Ref. 13).

Wind data reported for the Albany County Airport, which is 10 to 12 miles south of the Mechanicville site, indicate that the wind is from the south from May through June. The prevailing wind for the remainder of the year is from the west-northwest. Wind velocities are generally moderate over the Hudson Valley Region with an average annual wind speed reported at the Albany County Airport of 8.8 miles per hour (mph), with monthly averages ranging from 6.9 to 10.4 mph (Ref. 14). This information is corroborated by five year wind rose data supplied by the New York State Department of Environmental Conservation (NYSDEC) (Ref. 15). The Albany County Airport monitors are located at an elevation of 292 feet above mean sea level (MSL) compared to the approximate 95 feet MSL elevation of the Mechanicville site. The airport data are likely to be representative of the general wind conditions in the Albany County area, however, local micrometeorological conditions may be different. Local topography would favor a prevailing northwesterly wind direction for Mechanicville, New York (Ref. 16).

3.2 Physiography

Saratoga County is located in the Valley and Ridge Physiographic Province, in the east-cental part of New York (Ref. 17, 18). The area is characterized by the Hudson River and its tributaries which fill pre-glacial valleys carved into

the bedrock. The Hudson River forms the northeastern and eastern boundary of Saratoga County and the Mohawk River, which is the largest tributary to the Hudson, forms the southeastern boundary. The Anthony Kill, a small tributary, flows into the Hudson River at Mechanicville. The Mechanicville site is located along the southern border of the Anthony Kill, one-quarter of a mile upstream of the confluence of the Anthony Kill and the Hudson River. The site lies in an outwash plain, at approximately 95 feet above MSL. Topographic terraces to the north and south of Mechanicville are over 300 feet above MSL (Ref. 19).

3.3 Geology and Soils

3.3.1 Regional. The Hudson River Valley and its tributaries overlie highly folded and faulted shales which were originally deposited as sediments along the continental margin during the Ordovician Period, approximately 500 million years ago. The preglacial Hudson River Valley and its drainage system were probably similar to their present configuration, however the valleys may have been widened or deepened by subglacial erosion when the Laurentide Ice Sheet flowed south from Canada, covering the area.

As the ice sheet began its northward retreat from the area approximately 10,000 to 15,000 years ago, sediment-laden meltwater streams flowed through the Anthony Kill Valley, depositing sands and gravels in higher energy zones, and clays and silts in quieter water. These glacial fluvial deposits form the terraces which lie along the southern border of Mechanicville. Kettle holes, such as Round Lake, formed where blocks of ice were embedded in the glacial drift. (Ref. 20). As the glaciers receded, a postglacial lake filled the Hudson River Valley for several hundred years, leaving glacial lacustrine beach deposits at different elevations which mark the different lake levels. (Refs. 17, 19, 21). Meltwater drainage slowed, leaving a now much undersized stream flowing through the Anthony Kill Valley.

3.3.2 Local. Boring logs from the lowlands section of the Mechanicville area and mapping by the New York State Geological Survey indicate that the underlying shale bedrock formation is very shallow, approximately 0 to 15 feet below ground surface (Refs. 22, 23, 24). Borings drilled less than 1,000 feet southeast of the Mechanicville site encountered bedrock at approximately 12 feet. At this location, a thin zone of weathered rock or till overlies the bedrock and the till is overlain by brown sand and silt (Ref. 23). In some locations, a clay layer is found overlying bedrock. According to local well drillers, the bedrock is highly fractured and folded (Ref. 25). Bedrock outcrops have been mapped beneath the Hudson River from Stillwater south to Mechanicville, along the Anthony Kill Valley from Mechanicville to Coons Crossing, and throughout the City of Mechanicville (Ref. 26). West of Mechanicville, the unconsolidated deposits thicken and the shale is interbedded with sandstone. East of the site, limestone underlies the shale. A well drilled in 1916 for the West Virginia Pulp and Paper Co., which was located one-half mile northeast of the site, encountered shale from the ground surface to 1,000 feet, underlain by at least 1,000 feet of limestone (Ref. 17).

3.4 Groundwater

Because of the thin veneer of unconsolidated deposits and the relatively impermeable bedrock, there are no major identified aquifers in the Mechanicville area. Pockets of unconsolidated sands and gravels, which are exposed along the stream valleys, represent localized sources of groundwater. Stratified silts and clays overlying the till and bedrock in some areas act as impermeable barriers between the overlying sands and gravels and the underlying bedrock. This discontinuous confining layer has created some low yield artesian conditions in the water-bearing rock of the stream valleys. Yields from the faults and joints in the rock range from 0.5 to 80 gallons per minute (gpm) with the average yield being 10 gpm. The water is reported to be highly mineralized (Ref. 17).

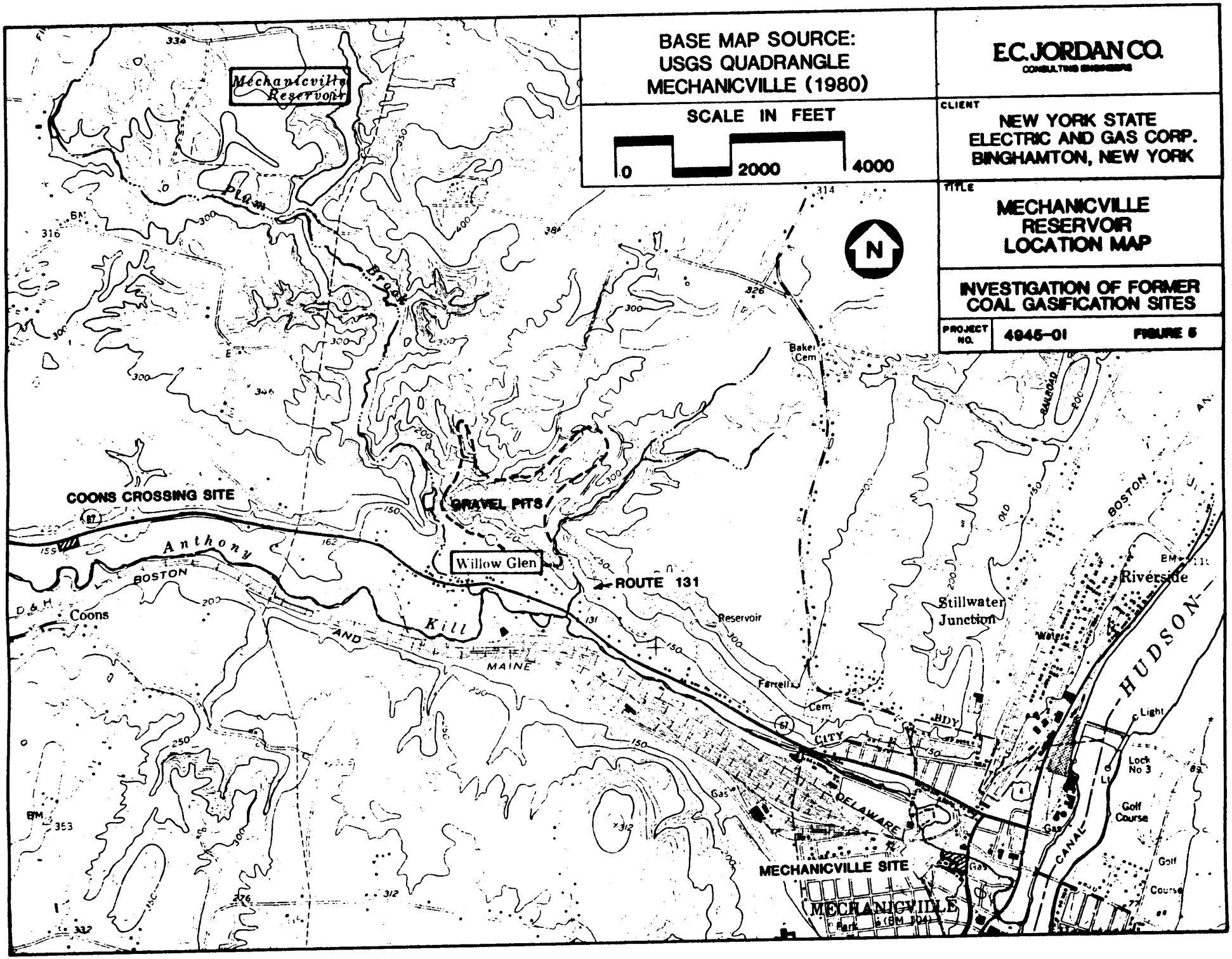
The groundwater surface at the site is expected to occur between the soil layer and the shallow bedrock formation (Ref. 7). However, a perched water table may occur above the sand/clay interface (Ref. 26). Based on the topographic setting and location of the Anthony Kill and the Hudson River, groundwater is anticipated to be moving to the north, discharging to the Anthony Kill. Groundwater flow directions on-site, however, may be locally controlled by subsurface conditions.

The City of Mechanicville has historically used surface water supplies for a drinking water source. A few residences outside of the city limits, however, use groundwater for drinking water (Ref. 27). The closest domestic wells are nearly a mile southwest of the site in the Town of Halfmoon. Based on information obtained during the records search, there are no active industrial wells in the Mechanicville area. There are two abandoned industrial wells: the West Virginia Pulp and Paper Co. well (2,157-feet deep), described previously; and, a well drilled into the shale which was used by the former Mintzer Petroleum Co. (29-feet deep). The latter is located one and a half miles south of the site (Ref. 17). The former yields of these wells were not reported.

3.5 Surface Water

The Anthony Kill and the Hudson River are the closest surface water bodies to the site. The Anthony Kill borders the site to the north and the Hudson River is 1,500 feet to the east. The Anthony Kill flows out of Ballston Lake in a northeast direction, then bends sharply southeast and flows through Round Lake before flowing past the site and emptying into the Hudson River at Mechanicville. Plumb and Baker Brooks are smaller streams which flow south out of the hills to the north and join the Anthony Kill near Willow Glen, almost 2 miles upstream of the Mechanicville site.

Surface water is used to supply drinking water to the City of Mechanicville. The surface water reservoir, known as the Mechanicville Reservoir, and a primary water treatment plant are located two miles northwest of Mechanicville, north of Willow Glen (Figure 5). The reservoir is at an elevation of 263 feet above MSL. Approximately 750,000 gallons per day (gpd) of water are pumped from the reservoir to 10,000 people in Mechanicville, including some areas in Stillwater and Halfmoon located east of Willow Glen. Some residents may use


BASE MAP SOURCE:
USGS QUADRANGLE
MECHANICVILLE (1980)
SCALE IN FEET
0
2000
4000
E.C. JORDAN CO.
CONSULTING ENGINEERS
CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK
TITLE
MECHANICVILLE
RESERVOIR
LOCATION MAP
INVESTIGATION OF FORMER
COAL GASIFICATION SITES
PROJECT NO.
4945-01
FIGURE 5
N
Mechanicville Reservoir
COONS CROSSING SITE
GRAVEL PITS
Willow Glen
ROUTE 131
Anthony
BOSTON
Coons
Kill
AND
MAINE
Reservoir
Stillwater Junction
Riverside
HUDSON
DELAWARE
CANAL
MECHANICVILLE SITE
MECHANICVILLE
Bakel Cem
Farrell Cem
Lock No 3
Golf Course
Light
Gas
BM 353
BM 1004

private wells (groundwater) or the Anthony Kill (surface water) for other purposes such as lawn watering or washing cars. A town sewer system serves a majority of the homes in Mechanicville (Ref. 28).

The buildings at the Mechanicville site are supplied with town water and sewer. The exact locations of the water and sewer lines under the site are unknown, however, according to workers at the site and Department of Public Works officials, the water line probably extends from Ferris Lane between the former distribution gas holder and the radiator shop to the boiler house (Refs. 5, 6, 27). The sewer line probably extends from North Central Avenue to the substation and boiler house building. Surface runoff from the site flows into two on-site drainage catch basins which empty via underground culverts into the Anthony Kill. The locations of the drainage culverts are shown in Figure 4.

The section of the Anthony Kill from the Mechanicville city line to the Hudson River is a Class D stream in the New York State Stream Classification System. Class D waters are designated for secondary contact recreation but no higher uses because of intermittent flow or water conditions which are not conducive to the propagation of game fish. Further upstream, between Coons Crossing and Mechanicville, the Anthony Kill is designated Class C (t). Class C waters are suitable for fishing and all other uses except as a source of water supply for drinking, culinary, or food processing purposes and primary contact recreation. The "(t)" denotes that this section is a trout stream (Ref. 29). NYSDEC has conducted water quality testing downstream of Mechanicville at the Hudson River, and 2 miles upstream at Plumb and Baker Brooks (Ref. 30). Water quality testing of several locations along the Hudson River in Saratoga County in 1981 cited water quality impairment from coliform bacteria, heavy metals, and PCB's. The water quality in Plumb Brook and Baker Brook is Class A, suitable for use as a water supply (Ref. 30).

The U.S. Geological Survey maintains a full-time gauging station on the Hudson River at Mechanicville (Station #01335500). The drainage area upstream of the gauging station is 4,500 square miles. The minimum average 7-day 10-year discharge for the water years 1931-1956 for the Hudson River at this station was 1,900 cubic feet per second (cfs). There are no full-time gauging stations on the Anthony Kill. The U.S. Geological Survey has periodically taken baseflow measurements at the Anthony Kill station at Mechanicville (Station #01335700). The estimated low flow discharge at this station is 17 cfs for a drainage basin of 62.4 square miles (Ref. 31).

3.6 Air

Mechanicville was once a control station within the statewide ambient air monitoring network operated by the NYSDEC Bureau of Air Quality Surveillance. Budgetary constraints contributed to the deactivation of this control station in recent years. The station consisted of a high-volume air sampler operated monthly for the monitoring of total suspended particulates (TSP). The sampler was located on the roof of the High School at 10 North Main Street in the center of Mechanicville, at an elevation of 60 feet above grade. This location is about 1 to 2 miles south of the Mechanicville site. The TSP results collected at this location from 1976 to 1982 range from 39 to 47 $\mu g/m^3$. This range is below Federal Ambient Air Quality Standards of 75 $\mu g/m^3$. The value of

47 $\mu g/m^3$ was reported for 1981 and is the only year with a reading slightly above the pertinent New York State Ambient Air Standard of 45 $\mu g/m^3$. This increase in 1981 was believed to be due to local construction activities near the sampler location (Refs. 32, 33).

The air quality in Mechanicville is considered good by the NYSDEC Director of Air Quality for New York Region V. No volatile organic monitoring is known to have been conducted in the area. Poorer air quality was associated with the Tagson Paper Company and the local sewage treatment facility in the vicinity of Mechanicville (Refs. 34, 35, 36). Although no odor complaints have been recorded, minor odors have been detected from these facilities. Both of the facilities incinerate waste sludge intermittently. The facilities are both located approximately one-half mile south of the Mechanicville city line in the small town of Halfmoon, New York. The general southerly winds would most likely carry any plume from these facilities to the east of the Mechanicville site environs, therefore no significant effects at the Mechanicville site are anticipated. A Boston and Maine railroad line also runs near the northwest corner of the site. Diesel locomotive exhausts could impact the ambient air at the site. However, the difference between the coal tar materials and the diesel exhaust fumes will serve to eliminate any interference in the collected air samples. Also the intermittent nature of these diesel exhausts will further serve to minimize any effect from this source.

The most significant airborne migration pathway for coal gasification residues would be as absorbed organics on suspended particulate material. Although these compounds have a low odor threshold, their low vapor pressure suggests that volatilization is not a major concern. The Mechanicville site has been extensively modified since the coal gasification process ceased operation. A paved parking lot covers the areas where the gas holders, gas house, purifier, and oxide house were located. No significant air emissions are anticipated at these locations due to the paved surface.

Exposed surface soils exist only in small areas of the site, one of which is the transformer storage area west of the present main office building. The transformers currently stored in this area may contain polychlorinated biphenols (PCBs). In the past, transformers known to contain PCBs were stored at this site. As previously discussed, surface soils from this area were removed in August 1984. The soil over the former filter beds is also exposed. While sampling there in 1981, NYSEG employees encountered tar residues at depths of 5 to 6 feet. No coal tar residue-contaminated particulate emissions are expected from these small surface soil areas.

The northern boundary of the site is a steep bank which drops about 10 feet down to the Anthony Kill. This bank is covered with heavy vegetation with little exposed soil. Since contaminated groundwater could be released from seeps on this bank, vapor phase air emissions are possible. Due to the low vapor pressure of the coal tar components, this type of emission is likely to be insignificant.

4.0 GEOPHYSICAL INVESTIGATION

4.1 Introduction

A geophysical survey was conducted at the Mechanicville former coal gasification site between June 2 and June 5, 1986. The purpose for this work was to:

- o delineate the bedrock surface, which may direct the flow of any subsurface contaminants associated with past site activities;
- o determine the vertical stratigraphy of geologic materials underlying the site and the way in which these materials may vary laterally;
- o map the migration route(s) of any conductive groundwater contaminant plume(s) (if present) which may be related to past site activities;
- o map the presence of any buried structures (tanks, utilities, etc.) which will be important to avoid in future exploration activities.

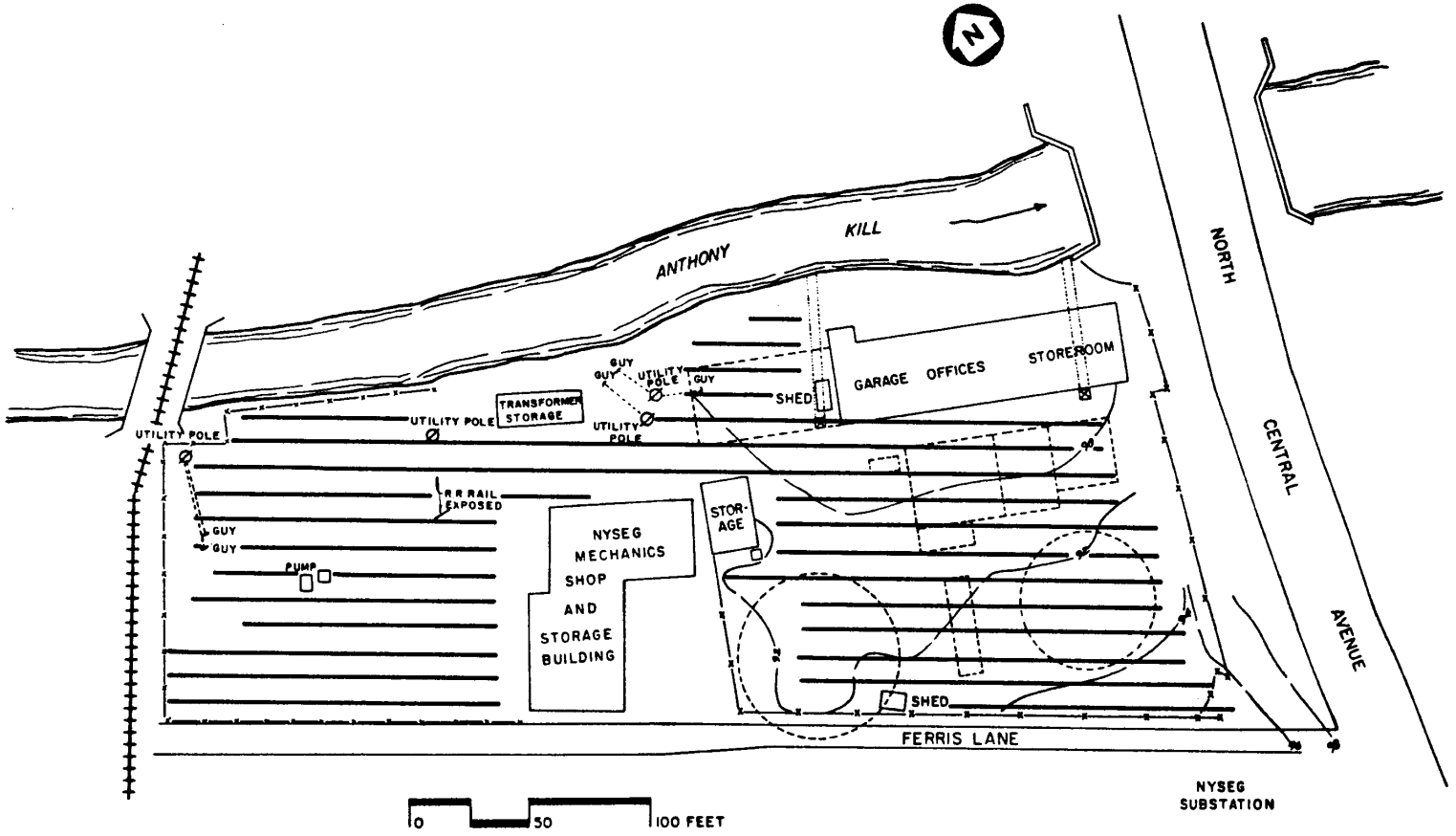
The geophysical survey used three exploration techniques. These were ground-penetrating radar (GPR), continuous seismic refraction profiling, and terrain conductivity profiling, also referred to as electromagnetic (EM) profiling. Other techniques were evaluated, but these three were selected as being the most appropriate, given the geologic setting and field conditions.

4.2 Methodology

The geophysical survey at the Mechanicville site was conducted within the two parking lots of the NYSEG facility on North Central Avenue (Figure 4). The survey area is approximately one acre in size.

The ground-penetrating radar and seismic refraction surveys were conducted along the traverse lines indicated on Figures 6 and 7. A 10-foot grid was established throughout the area of investigation with a compass and cloth tape prior to the start of the survey.

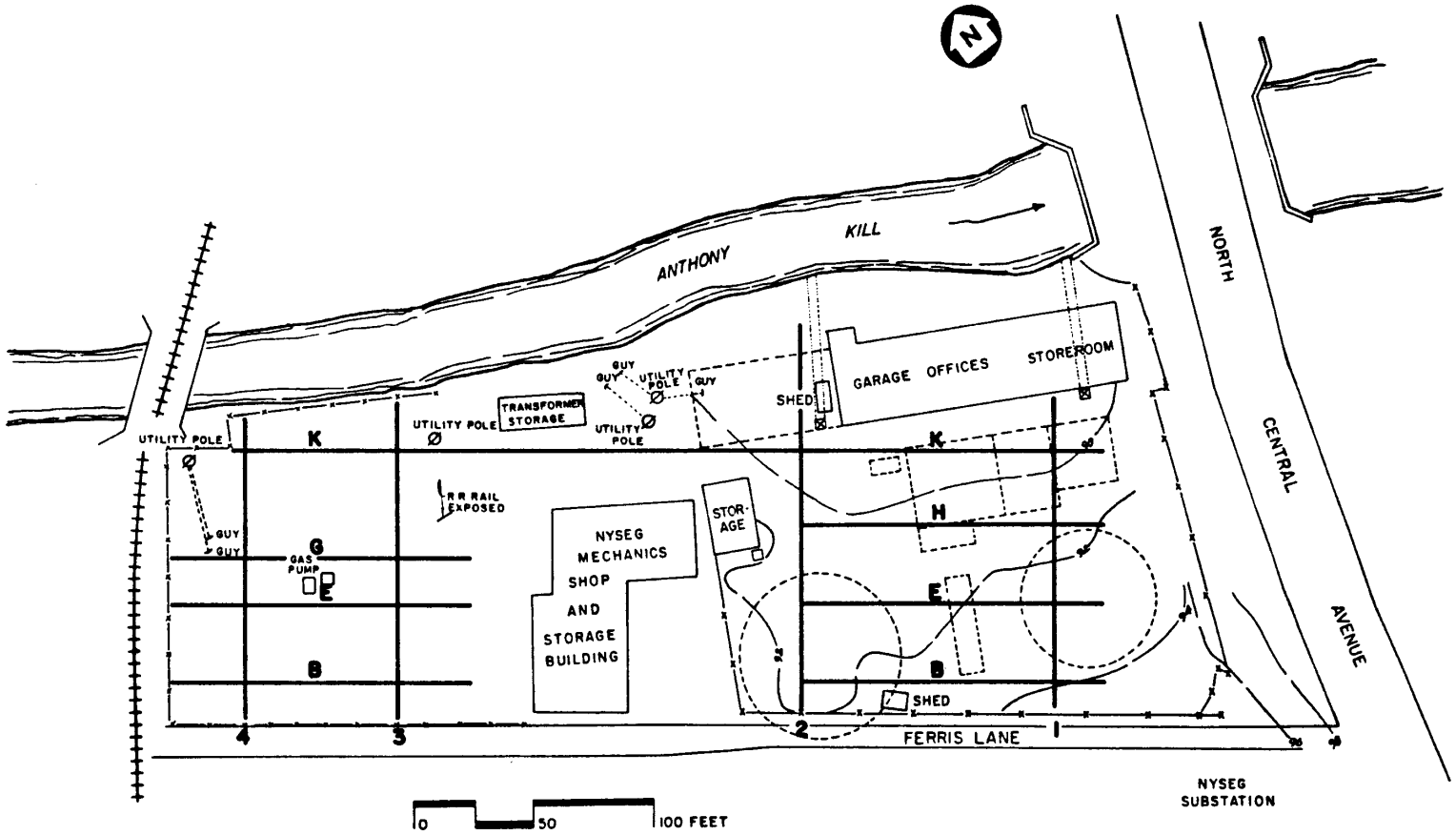
The GPR survey utilized a Geophysical Survey Systems, Inc. Subsurface Interface Radar (SIR) System 8. This is a microprocessor-equipped system with a 300 MHz transducer. Because the soil at the site was saturated with water in some areas, it produced "ringing" in the radar records. A real-time digital filter with a background removal algorithm was used to minimize this extraneous "noise" and thereby facilitate interpretation of the GPR data. The depth of penetration of the radar system was set at two different levels. The primary target of the first setting was the bedrock surface, predicted to be up to 15 feet below the ground surface. The instrument was set at 140 nanoseconds (two-way travel time), equivalent to a penetration depth of approximately 20 feet. The second instrument setting of 70 nanoseconds, or roughly 10 feet of penetration, was used to obtain enhanced resolution of shallower features such as buried utilities. Approximately 3575 lineal feet of GPR profiling at each level of penetration were covered during the survey (Figure 6).



E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE	GEOPHYSICAL SURVEY GROUND PENETRATING RADAR COVERAGE MECHANICVILLE, NEW YORK
CLIENT NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK		INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-01	FIGURE 6

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).



E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: GEOPHYSICAL SURVEY SEISMIC REFRACTION COVERAGE MECHANICVILLE, NEW YORK	
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES	
	PROJECT NO. 4945-01	FIGURE 7

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

Seismic refraction profiling was accomplished with a Geometrics ES-2415F Signal Enhancement Seismograph. Individual seismometers (geophones) were separated by 10 feet, and multiple impacts (up to 12) of a 10-pound sledgehammer were used for an energy source. Five impact points were utilized for each seismic spread. Due to the limited size of the site, the length of most of the seismic spreads was 120 feet, although one of the spreads was 240 feet in length. A total of 1,590 lineal feet of seismic refraction profiling was completed during this portion of the survey (Figure 7).

Terrain conductivity measurements were attempted on two different occasions during the field effort with a Geonics EM 31 terrain conductivity meter. It was determined during these brief site walkovers that there was too much electrical interference to obtain reliable terrain conductivity data and this portion of the field program was curtailed.

4.3 Results

The data from the GPR survey were generally of very good quality. The features which were noted on the radar records include the bedrock surface and various subsurface anomalies. Features which have been noted and which are mapped on Figure 8 include:

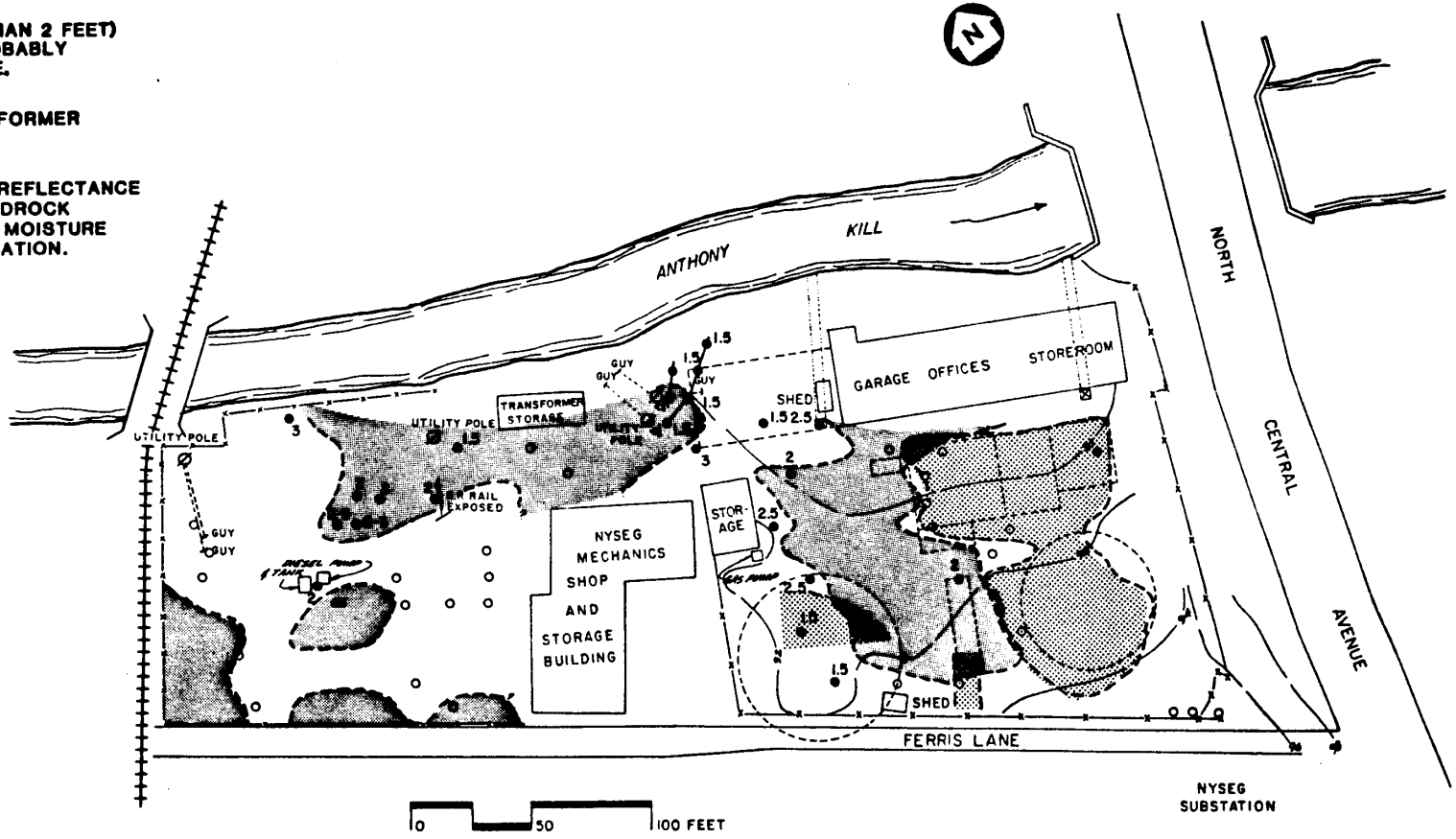
- shallow subsurface features (and their approximate depth in feet) which may represent buried utilities;
- other shallow features (less than 2 feet) of probable minor importance;
- the locations of two buried gasoline tanks;
- the limits of excavations for former structures which were associated with the coal gasification facility; and
- zones of higher reflectance in overburden/bedrock which indicate higher moisture content or saturation.

The GPR survey reveals that the bedrock is from 8 to 17 feet deep. These depths are based on an assumed velocity of the radar wave through overburden materials. If the assumed velocity value is different from the actual velocity, the bedrock depths will vary accordingly. Test borings in several locations will be helpful in establishing what corrections, if any, should be made to the reported values.

The results of the seismic refraction survey are presented on Figure 9. The seismic profiles can be thought of as pseudo-geologic sections with two layers: overburden (including natural soils, fill and demolition materials) and bedrock. The seismic velocity value of the overburden varies through a fairly wide range, from 1,200 to 4,000 feet per second (fps). These velocity differences probably reflect to some degree the moisture content of the overburden materials, but undoubtedly also reflect the complex variety of various fill materials which now blanket the site and which are associated with past site activities.

LEGEND

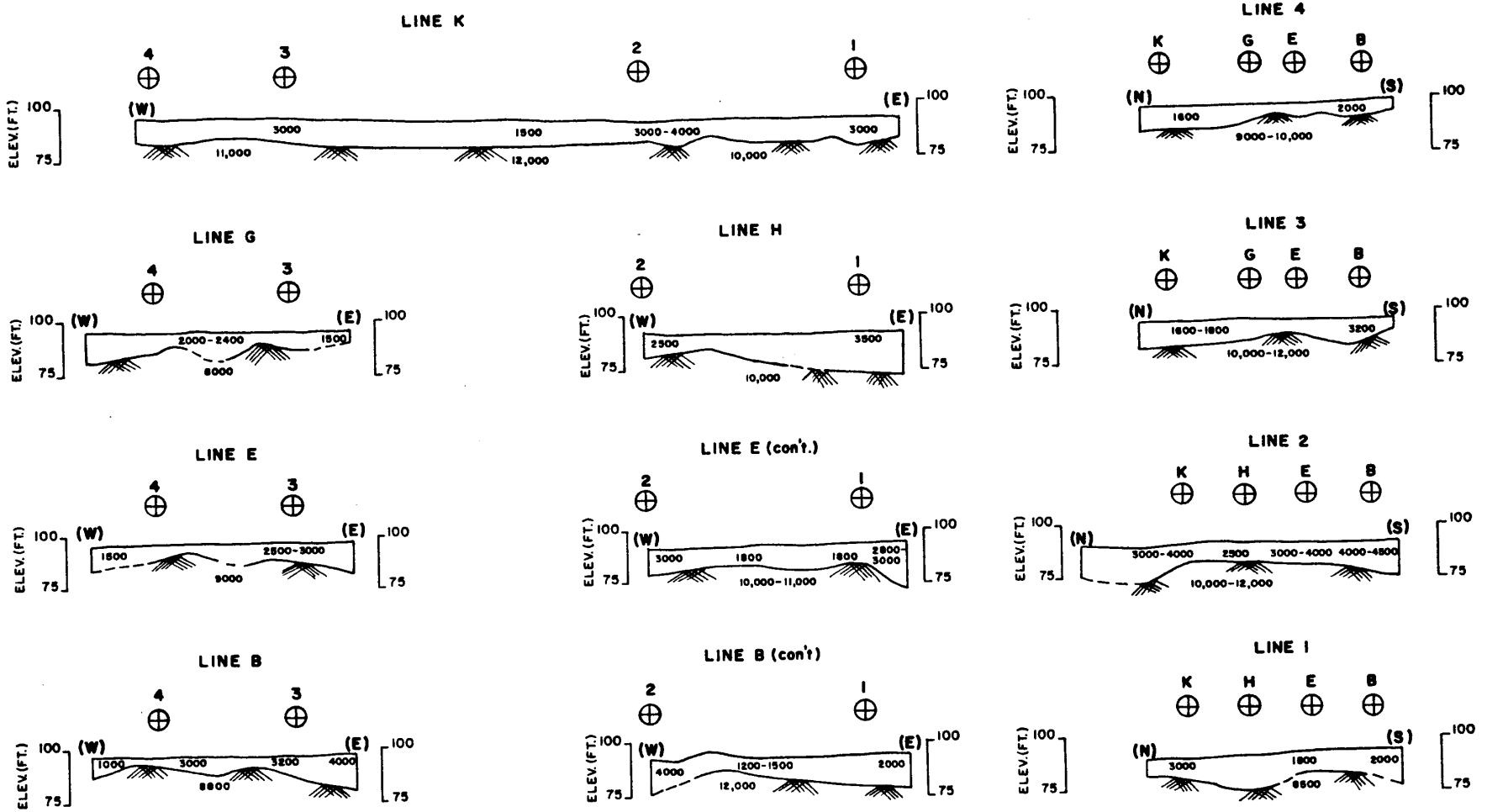
- ● SUBSURFACE ANOMALIES AND DEPTH(FT) - POSSIBLE BURIED UTILITIES.
- ○ SHALLOW(LESS THAN 2 FEET) ANOMALIES OF PROBABLY MINOR IMPORTANCE.
- EXCAVATIONS FOR FORMER STRUCTURE.
- ZONES OF HIGHER REFLECTANCE IN OVERBURDEN/BEDROCK INDICATING HIGHER MOISTURE CONTENT OR SATURATION.



E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE	SCHEMATIC OF RESULTS OF GPR INVESTIGATION MECHANICVILLE SITE
CLIENT NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK		INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-01	FIGURE 8

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).



NOTES: 1. SEISMIC VELOCITY VALUES ARE IN FEET PER SECOND.

2. ELEVATIONS ALONG TRAVERSES ARE BASED ON SURVEY MAPS PROVIDED BY DAVID A. FLANDERS ASSOC.

3. SEE TEXT FOR A DISCUSSION OF THE RESULTS OF SEISMIC SURVEY.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
SEISMIC REFRACTION PROFILES
MECHANICVILLE SITE
MECHANICVILLE, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4946-01 FIGURE 9

Bedrock velocity values measured during the seismic survey vary from 8,000 to 12,000 fps, a typical range of values for a shale deposit. The lower end of the range of values probably reflects a higher degree of fracturing occurring locally in the shale bedrock.

The correlation between bedrock elevations derived from GPR, seismic refraction, and preliminary field data is generally quite good, particularly on the eastern portion of the site. A generalized bedrock contour map has been constructed from the data (Figure 10). The map depicts the surface of the competent rock, not that of the moderately to highly weathered shale which lies above the competent rock and which is several feet thick. The seismic data have been weighed more heavily in the construction of this map. This is because the complex and highly variable subsurface conditions may affect the transmission velocity of the radar waves to an extent that is not adequately accounted for by the assumption of a single velocity value for the site.

5.0 FURTHER INVESTIGATIONS

5.1 Summary of Available Data on Coal Gasification Wastes

Jordan recommends that further investigations into possible environmental contamination problems at the Mechanicville site be conducted. This recommendation is based on the following historical information and direct observations. The information suggests that coal gasification-related residues are likely to be present in the subsurface environment at the site. From the site reconnaissance, interviews, and file reviews, it was learned that:

1. Coal gas was produced at the site for a period of 54 years, from 1901 until 1955.

2. Coal tar residues accumulated in the base of the relief gas holder. The coal tar was reportedly left in the holder when it was demolished in 1955. During collection of a sample from the relief holder in November 1981, NYSEG employees reported petroleum odors and visible coal tar residues in the soil at depths of 3 to 5 feet. A sample of the tar contained 40 mg/ℓ of total phenols.

3. Condensate from the water gas process was treated in a tar dehydrator and filter bed system before discharge to the Anthony Kill. NYSEG employees noted petroleum odors and tar residues in the filter bed area during collection of a sample in November 1981. The sample contained 1,300 mg/kg of sulfide.

4. Residual ash from the gas generator was reportedly stored on the site before removal by various users.

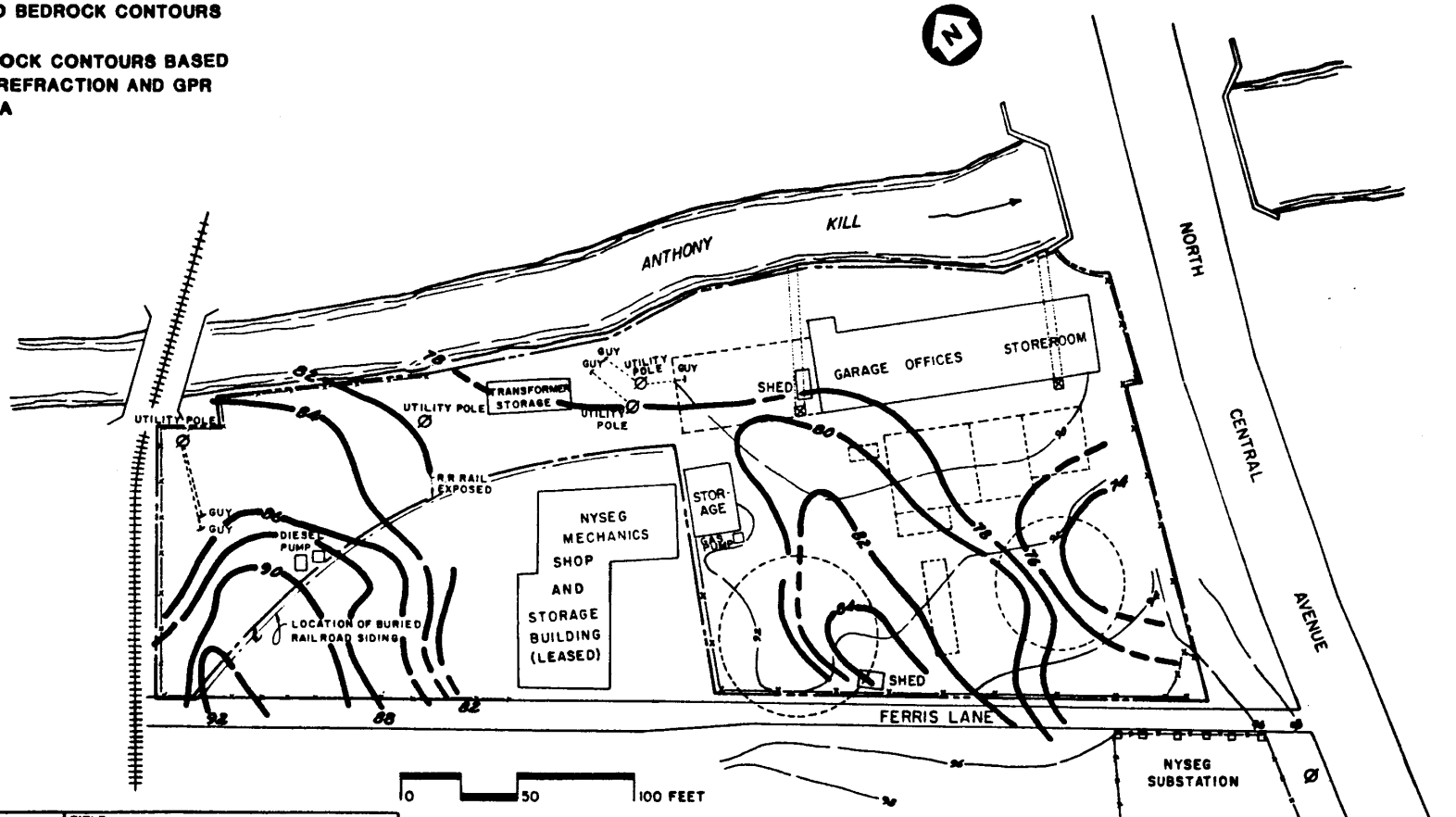
5. Wood chips and oxide wastes from the purifying house were hauled off-site for final disposal. Some spent chips may have been spread on the lot just west of the active plant area.

LEGEND

GROUND ELEVATION CONTOURS, IN FEET ABOVE MEAN SEA LEVEL

GENERALIZED BEDROCK CONTOURS

NOTE: BEDROCK CONTOURS BASED ON SEISMIC REFRACTION AND GPR SURVEY DATA



E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: GENERALIZED BEDROCK CONTOURS MECHANICVILLE SITE	
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES	
	PROJECT NO. 4946-01	FIGURE 10

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

5.2 Preinvestigative Evaluation

The objectives of the Task 2 and Task 3 investigations for the Mechanicville site are to obtain sufficient site specific field data to determine if there is an environmental problem at the site and to allow site characterization, risk assessment, and identification of appropriate remedial alternatives. The preinvestigative evaluation is undertaken to assure that the investigation will develop the necessary data. Potential remedial technologies are identified and the work plan is reviewed to verify that the field program will develop sufficient data to enable the specific remedial technologies to be evaluated. As the project progresses and our understanding of the site increases, these technologies will be reviewed and refined as necessary. Additional data needs which may be identified in Task 2 will be satisfied in Task 3.

Table 1 summarizes the potential environmental problems existing at the Mechanicville site. The media addressed in Table 1 are soils, groundwater, surface water, and air. The potential environmental problems have been summarized for these media based on a number of technical factors including the chemicals present at the site, the chemical transport mechanisms, the expected persistence of chemicals in the environment, and existing or potential receptors of those chemicals.

Based on the environmental problems which may be identified at the site, several remedial technologies have been considered for each media. These technologies are identified in Table 2. Comments are provided for each of the remedial technologies considered.

5.2.1 Data Needs. The data requirements fall into four general categories:

1. Establishment of background conditions.
2. Characterization of contamination sources.
3. Determination of transport routes.
4. Identification of potential receptors.

Table 3 lists specific data requirements in each of these categories for the Mechanicville site.

5.2.2 Data Quality Requirements. In order to investigate the presence or absence of coal gasification wastes at the Mechanicville site, the following parameters will be included in the soil and water analytical program: volatile organics, semi-volatile organics, total cyanide, ferro-ferri cyanide, total organic carbon, total recoverable phenolics, iron and zinc. Air samples will be analyzed for polynuclear aromatic hydrocarbons (PAHs), iron, and volatile organic compounds.

The primary use of the Task 2 data is for problem identification, preliminary risk assessment, and preliminary in-house engineering rather than final engineering determinations. The methods used to analyze for the above parameters must be appropriate for this use. In addition, analytical methods for air, soil, and water samples must generate data that are comparable so that rela-

TABLE 1

SUMMARY OF POTENTIAL ENVIRONMENTAL CONCERNS AT THE MECHANICVILLE SITE

TECHNICAL FACTORS	ON-SITE SOILS	GROUNDWATER	SURFACE WATER	AIR
Chemicals Present	The samples collected by NYSEG at the site appeared to contain coal gasification wastes. The following chemicals may be present in the soils: - benzene - toluene - ethylbenzene - xylenes - naphthalene - polynuclear aromatic hydrocarbons - heavy metals - phenols - cyanides - sulfides	There are no groundwater wells at the site and no groundwater samples have been collected. Chemicals that may be expected in groundwater if coal gasification wastes were deposited on site are: - benzene - toluene - ethylbenzene - xylenes - naphthalene - phenols - cyanide Low concentrations of polynuclear aromatic hydrocarbons may also be found in the groundwater.	The Anthony Kill borders the site on the north. No surface water or sediment samples have been collected. Chemicals that may be expected in these media if coal gasification wastes were deposited on-site are: - benzene - toluene - ethylbenzene - xylenes - naphthalene - polynuclear aromatic hydrocarbons - heavy metals - phenols - cyanides - sulfides	No air samples have been collected at the site. Because the site is paved, the probability that volatile chemicals present in the soil may also be present in the air is low as long as the paved surface is undisturbed. Volatile chemicals would be expected to be released during drilling or test pitting activities.
Chemical Transport Mechanism	Volatilization to air and/or seepage and leaching of soluble or free liquid wastes to groundwater.	The groundwater surface is expected to be within 10 feet of the ground surface, between the till and the shallow shale bedrock. Shallow groundwater movement is anticipated to be to the north with discharge to the Anthony Kill. There are no identified aquifers in the Mechanicville area.	Surface water drainage from the site is to the north into the Anthony Kill. Runoff is channeled to the stream through 2 culverts. Subsurface contaminants could be carried to the stream via groundwater discharge.	Volatilization and particulate migration occur via wind scour; however, most of the site is paved. Volatilization is the primary route when materials are exposed. Winds in the area are generally from the northwest.

TABLE 1 (Cont.)

SUMMARY OF POTENTIAL ENVIRONMENTAL CONCERNS AT THE MECHANICVILLE SITE

TECHNICAL FACTORS	ON-SITE SOILS	GROUNDWATER	SURFACE WATER	AIR
Expected Persistence of Chemicals in the Environment	Biodegration of coal tar present in the soils is very slow or nonexistent. The volatile fraction of the coal tar (benzene, toluene, ethylbenzene, and xylenes) is expected to leach slowly into groundwater or vaporize slowly into the air. Naphthalene, phenols, and cyanides are also expected to leach into the groundwater slowly. The polynuclear aromatic hydrocarbons and the heavy metals are not expected to vaporize or leach into the groundwater at any significant rate.	Any constituent of coal tar present in the groundwater is not expected to biodegrade very rapidly except perhaps the phenols. These constituents are expected to remain in groundwater until it discharges to a surface water body where vaporization will eventually occur.	Any constituents of coal tar present in the surface water are expected to move through the environment with the water. Coal tar constituents in the sediments are expected to remain for a long period of time. Biodegradation of these chemicals is predicted to be very slow.	Contaminants are rapidly dispersed and susceptible to photo-oxidation.
Existing or Potential Receptors of Chemicals	The probability of direct contact to humans or animals is low since the site is paved. However, leaching and volatilization may transport these chemicals to other media such as groundwater and expose humans and animals off-site.	Groundwater may discharge to the Anthony Kill. There are no active domestic or industrial water wells in Mechanicville. Residents of Halfmoon, west of Mechanicville, use well water. The closest domestic water wells are nearly a mile from the site in the southwest direction.	Direct contact with the surface water by humans is probable since the Anthony Kill is used for recreational boating during the warmer months of the year. There is a higher probability of contact by animals since they use the stream for a longer period during the year. The movement of surface water away from the site may expose humans and animals downstream. However, chemical concentrations will be rapidly diluted as the stream enters the Hudson River.	Humans or animals in the vicinity of the site are potential receptors of any chemicals present in the air.

TABLE 2

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
FOR THE MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Soils	Removal	Excavation and Disposal - contaminated soils - waste deposits	Off-site disposal will involve excavation and removal of contaminated soils and waste deposits with subsequent transportation to another location. Potential impact on air quality during excavation.
	Containment	Capping, Grading, Revegetation - wastes - contaminated soils	Commonly implemented together, they will prevent the movement of wastes and contaminated soils into the environment from erosion. The cap will also reduce infiltration and, therefore, the rate of leaching of chemicals from the soils into the groundwater. At the same time, volatilization of chemicals to the air is reduced.
		Slurry Wall	Generally used in conjunction with extraction and treatment of groundwater.
	Treatment	Solidification	Large quantity of soils would be involved. Potential impact on air quality during excavation.
		Extraction (soil flushing)	Not applicable for large quantities of material with diverse compositions. A variety of treatment technologies are potentially applicable to extracted wastes. Extracted soils may still contain much contamination.
		Land Treatment	Generally not effective for high molecular weight organic or metallic contaminated materials. Requires suitable land be available. Surface application will require revegetation to control erosion and periodic cultivation to stimulate biological activity.
	Access Control	Posting Fencing Land Restrictions	May not be applicable for a complete remedial action plan, but may be used as an element of a comprehensive plan. Will be considered in conjunction with other technologies.
	No Action		To be considered in conjunction with other technologies.
Groundwater	Removal/Treatment	Extraction of Groundwater via Pumping	If large volumes of water are to be extracted, on-site treatment may be appropriate. May include recharge or discharge to surface drainage. Extent of contamination and required operating period is not known. May require years of operation.
		Stripping or Carbon Adsorption	Stripping may cause air contamination without proper and expensive controls applicable to organic constituents; contaminated carbon filters require appropriate disposal.

TABLE 2 (Cont.)

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
FOR THE MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Groundwater (continued)	In-situ Treatment	Biostimulation	Analysis/culture of the contaminated water to determine the present activity and nutrient levels needed to stimulate hydrocarbon-utilizing bacteria.
		Aquifer Flushing	May include the use of chemical additives. Often used in conjunction with groundwater removal.
		Other Technologies	Cost-effectiveness is dependent on concentration and types of contamination. Physical or physical/chemical technologies such as oxidation, precipitation, etc. may be applicable to highly contaminated waters.
	Containment	Slurry Wall Capping	Generally used in conjunction with extraction and treatment of groundwater. See Soils.
	Diversion	Low Permeable Barriers	Prevent chemical migration within shallow aquifer.
		Injection Wells/Interceptor Trenches	Control groundwater flow direction. Generally used in conjunction with groundwater extraction.
	No Action		To be considered in conjunction with other technologies.
Surface Water	Containment	Capping - wastes - contaminated soil - sediments	Capping will prevent surficial contamination from eroding into surface waters.
	Removal/Treatment	Extraction of Surface Water via Pumping	Ponded water on the site could be handled in conjunction with groundwater treatment.
	No Action		To be considered in conjunction with other technologies.
Air	Removal of Source	Excavation	Major excavation to remove source of volatilizing chemicals may result in short-term degradation of air quality when soils are exposed to the atmosphere.
	Control	Capping - clay liner - synthetic liner	The addition of a cover will considerably reduce the release of volatilized chemicals and may require collection and removal of contained vapors.
	No Action		To be considered in conjunction with other technologies.

TABLE 3
TASK 2 DATA REQUIREMENTS
MECHANICVILLE SITE

GENERAL DATA REQUIREMENT	SPECIFIC DATA REQUIREMENT	RELATED TASK 2 ACTIVITY*
A. Establishment of Background Conditions	Analytical data from soil, groundwater, surface water, sediment, and air samples collected from areas not expected to be influenced by former coal gasification plant activities.	Samples collected and analyzed from boring B-1, monitoring well MW-1, surface water station SW-1, sediment station SED-1, and air station A-1.
B. Characterization of Contaminant Sources		
1. Location	Confirmation of location of gas holder foundations.	Borings B-7 and B-8.
	Soil conditions adjacent to former coal gasification structures.	Test pits TP-2 through TP-5; borings B-2 through B-5.
	Soil conditions in area of reported ash and oxide waste disposal.	Test pit TP-1.
2. Chemical nature	Analytical data from soil, groundwater, surface water, sediment, and air samples collected from areas potentially impacted by former coal gasification activities.	Analyses of samples from TP-1 through TP-5, B-2 through B-8, MW-2 through MW-6, SW-2, SED-2, and air stations A-2 and A-3.
	Chemical data which will allow confirmation of HPLC data and differentiation between coal gasification-related contamination and and other contaminant sources.	Use of GC/MS analysis on samples from 2 monitoring wells and 2 borings or test pits, and all air stations.
C. Determination of Potential Transport Routes		
1. Airborne transport	Meteorological data (wind speed, wind direction, ambient temperature, humidity)	Meteorological monitoring during air sampling.
	Air quality data downwind of site.	Sampling and analysis at A-4.
2. Groundwater transport	Site stratigraphy; identification of changes in soil permeability.	All borings and test pits; permeability and packer tests.
	Groundwater gradient.	Water level measurements in monitoring wells and piezometers. Vertical gradient from nested wells (MW-4 and MW-6).
	Quality of groundwater downgradient of potential sources of contamination.	Sampling and analysis at MW-2 through MW-6.
3. Surface water transport	Quality of surface water and sediment downstream of the site.	Sampling and analysis at SW-3 and SED-3.
D. Identification of Potential Receptors	Identification of potentially sensitive land uses.	Land use survey within ½-mile of site boundaries.
	Evaluation of groundwater discharge points and potentially impacted surface water bodies (Anthony Kill).	Water level measurements in wells and plotting of groundwater contours; surface water studies of the Anthony Kill, including water use and determination of MA7CD/10 and MA30CD/10.**
	Evaluation of potential for direct human contact with waste.	Identifying surface/near surface sources of contamination.

* See Figure 11 for locations.
** Minimum annual 7-consecutive-day flow over a 10-year period and minimum annual 30-consecutive-day flow over a 10-year period.

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tionships between contaminants in different media can be examined. The data must also be of a quality which will allow comparison between site conditions and regulatory criteria. Where sources of contamination not related to past use of the site for coal gasification are present, the analytical methods must provide sufficient information to allow contaminant source identification.

5.3 Task 2 Activities

The explorations recommended for Task 2 are designed to meet the data requirements described above, as shown in Table 3. They will consist of test pits, soil borings, and monitoring well installations; air, soil, groundwater, surface water, and sediment sampling; laboratory chemical analyses; and a preliminary land use investigation. The proposed test pit, boring, monitoring well, and sampling locations are shown in Figure 11.

Similarly, the analytical program is designed to fulfill the data quality requirements discussed previously. The organic analyses for soil, groundwater, surface water, and sediment will be done by GC/PID, with GC/MS confirmation on two soil samples and two groundwater samples from each of the first two sampling rounds. This program will allow comparison of data from different media and will yield concentrations at the practical quantitative level which is sufficient for comparison with regulatory and health criteria. The air analytical program proposed in the work plan calls for GC/PID analysis without GC/MS confirmation. It has been our experience that there is a strong potential for false positives and positive bias using the proposed method. We recommend that a more specific detector be used on all air samples collected at Mechanicville. The recommended method for PAH analysis is GC/MS (Method 8270).

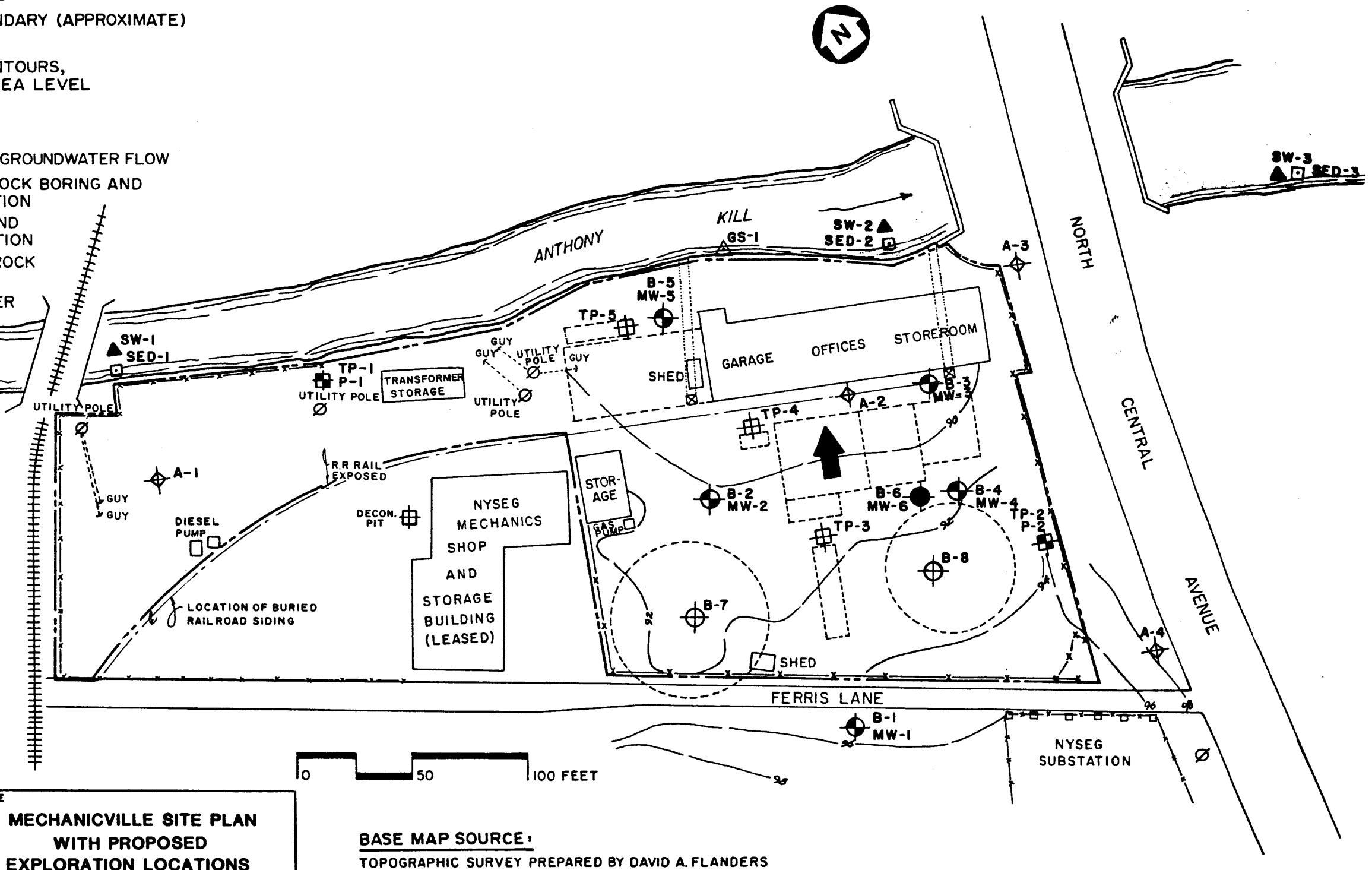
A report will be prepared to assess the data obtained in Task 2 in conjunction with the site information developed in Task 1. On the basis of the Task 2 findings, a preliminary risk assessment will be performed and recommendations will be provided where appropriate. The recommendation may include continued investigation (Task 3), monitoring the existing situation, or discontinuing the program.

The detailed scope of work for Task 2 is described in the Work Plan for the Mechanicville site, submitted to NYSEG in April, 1986. The following modifications to the scope of work are recommended based on information developed in Task 1.

Test pit TP-1 should be moved from the active site boundary to the area of the adjacent lot on the west where ash and spent wood chips may have been spread. The test pit will also be used to explore the zone of higher reflectance identified during the GPR survey. As previously planned, a piezometer should be installed in the test pit to obtain additional groundwater level data, provided appropriate conditions exist. The locations of two other explorations have been adjusted as a result of the geophysical survey. Boring B-8 has been moved slightly to the west where anomalies related to former construction

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- 90 GROUND ELEVATION CONTOURS, IN FEET ABOVE MEAN SEA LEVEL
- STORM DRAIN
- CULVERT
- EXPECTED DIRECTION OF GROUNDWATER FLOW
- B-1 to B-5, MW-1 to MW-5 — SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION
- B-6, MW-6 — DEEP BEDROCK BORING AND MONITORING WELL LOCATION
- B-7, B-8 — SOIL AND SHALLOW BEDROCK BORING LOCATION
- TP-1, TP-2, P-1, P-2 — TEST PIT AND PIEZOMETER LOCATION
- TP-3 to TP-5 — TEST PIT LOCATION
- SW-1 to SW-3 — SURFACE WATER SAMPLE LOCATION
- SED-1 to SED-3 — SEDIMENT SAMPLE LOCATION
- A-1 to A-4 — AIR SAMPLE LOCATION
- GS-1 — GROUNDWATER SEEP SAMPLE LOCATION



E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
MECHANICVILLE SITE PLAN WITH PROPOSED EXPLORATION LOCATIONS

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-01 **FIGURE 11**

BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

activities were detected with GPR. TP-5 has been moved to the east end of the filter bed area away from what may be an underground cable. No change in cost is anticipated.

The likelihood that sampling of groundwater seeps at two locations along the banks of the Anthony Kill will be possible is remote. Seeps were not observed during the site reconnaissance in early May and therefore are not likely to be present at other times of the year at the site. Therefore, for budgetary purposes, the number of seep samples has been reduced from 8 to 2. This modification would result in a reduction in analytical costs.

A third sediment sample should be collected at the downstream location. This sample would provide necessary information on the movement of contaminants downstream. An increase in analytical costs would result.

Finally, air samples should be analyzed using the GC/MS method as discussed above. This modification would increase the analytical costs of the program. With the use of GC/MS, however, the number of samples analyzed could be reduced from 12 (2 rounds) to 6 (1 round). Throat preparation for all three rounds of sampling would still be necessary. Since the work plan was written, GCA has taken over the task of throat preparation for High-Vol samplers at a higher cost than that previously charged by ERCO. (ERCO no longer performs this work.) The net impact of all these changes on the air analytical budget would be an increase.

As shown in Table 4, the net impact of these modifications is to increase the cost of the Task 2 program.

6.0 SCHEDULE

Jordan will begin the Task 2 investigation program the week of July 21, 1986. A site-specific Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP) will be prepared before starting the field program. A generic QAPP and HASP have already been submitted to NYSEG. A tentative schedule for field activities is shown in Table 5.

Jordan intends to keep NYSEG informed of findings and progress of the test pit and drilling programs at least twice per week and immediately if any unexpected conditions are encountered. During other field activities, Jordan plans at least weekly contact with NYSEG.

TABLE 4

IMPACT OF PROGRAM MODIFICATIONS
ON TASK 2 BUDGET

Modification	Cost Impact	Change In Cost
1. Move locations of TP-1 TP-5, and B-8	None.	None.
2. Reduce number of groundwater seep samples collected	6 samples eliminated - Decrease in analytical costs.	-$3,145
3. Add 1 more sediment sampling location	4 samples added - Increase in analytical costs.	+$2,525
4. Use GC/MS analysis on all air samples; analyze only 1 round of samples; add in cost of throat preparation	6 samples affected - Increase in analytical costs.	+$3,070
	Net Cost Impact	+$2,450

TABLE 5

TENTATIVE SCHEDULE FOR TASK 2 FIELD ACTIVITIES AT
THE MECHANICVILLE SITE

Activity	Schedule
Exploratory Borings/Monitoring Well Installation/Test Pits	July 1986
Elevation Survey	September 1986
Air Sampling	September 1986
Groundwater/Surface Water/ Sediment Sampling	Sept. and Dec., 1986; March and June, 1987
Land Use Survey	August 1986

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26. Interview on May 6, 1986 with Robert Dineen of the New York State Geological Survey, Albany, NY (518-473-8056).

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28. Interview on May 7, 1986 with Vincent Barber, Mechanicville Water Department, 36 North Main St., Mechanicville, NY 12118 (518-664-3751).

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30. NYSDEC, 1981. Saratoga County Stressed Segment Analysis. For segments in Moreau, Northumberland, Saratoga, Stillwater, Halfmoon, Waterford, Mechanicville, and Malta.

31. U.S. Geological Survey, 1979. Low Flow Frequency Analysis of Streams in New York. In cooperation with NYSDEC, Bulletin 74, Albany, New York.

32. NYSDEC, "New York State Air Quality Report, Ambient Air Monitoring System, Annual 1984," DAR-85-1, Division of Air Resources.

33. Phone conversation with Mr. Bill Delaware, NYSDEC, Albany, NY, on May 30, 1986.

34. Phone conversation with Mr. George Hodgson, Saratoga County Environmental Management Counsel, Ballston Spa, NY, on May 16, 1986.

35. Phone conversation with Mr. Mike Stawarz, NYSDEC, Region V, on May 18, 1986.

36. Phone conversation with Mr. Ed Savoys, NYSDEC, Region V, on May 19, 1986.

INVESTIGATION OF THE FORMER COAL GASIFICATION SITE AT MECHANICVILLE, NEW YORK

TASK 2 REPORT
INITIAL FIELD INVESTIGATION PROGRAM

Prepared for:

New York State Electric and Gas Corporation
4500 Vestal Parkway East
Binghamton, New York 13903-1082

Prepared by:

E.C. Jordan Co.
P.O. Box 7050, DTS
Portland, Maine 04112
Job No. 4945-02

DECEMBER 1987

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1.0 INTRODUCTION

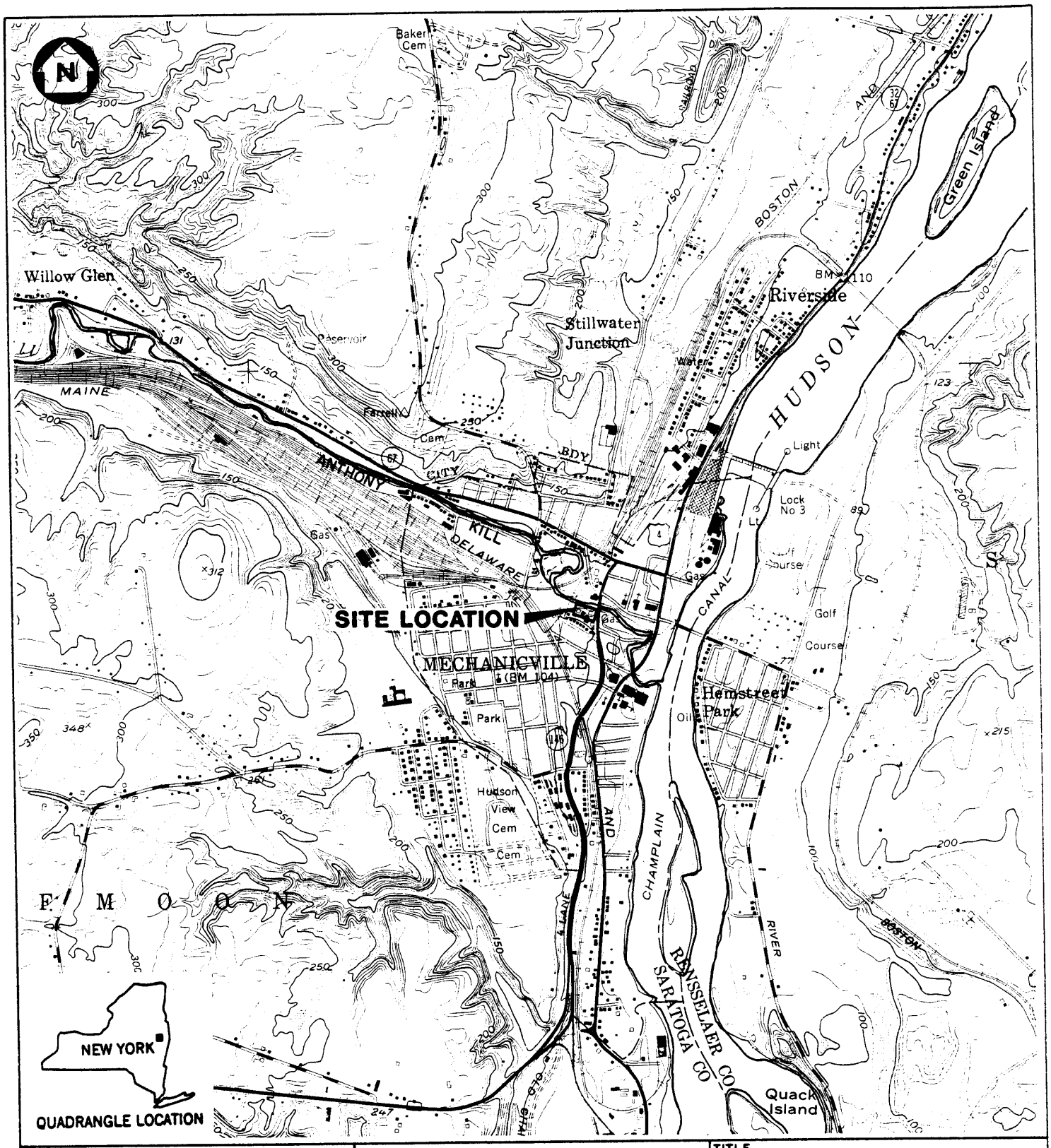
This report was prepared by E.C. Jordan Co. (Jordan) for the New York State Electric and Gas Corporation (NYSEG) under Contract No. 85S-159, Investigation of Former Coal Gasification Sites. It describes the results of Task 2, the Initial Field Investigation Program, at the Mechanicville site, where coal gas was produced from 1901 to 1955. The Preliminary Site Evaluation (Task 1) at this site was completed in August 1986 and the results are summarized in the Task 1 Report (Jordan, 1986a). As part of the site investigation, the contract requires the completion of three additional tasks, as necessary: Task 3 - Expanded Problem Definition Program; Task 4 - Risk Assessment; and Task 5 - Conceptual Design. The need for subsequent tasks is evaluated at the completion of each task. Recommendations for the conduct of future work at the site are included in this report.

1.1 PROBLEM SUMMARY

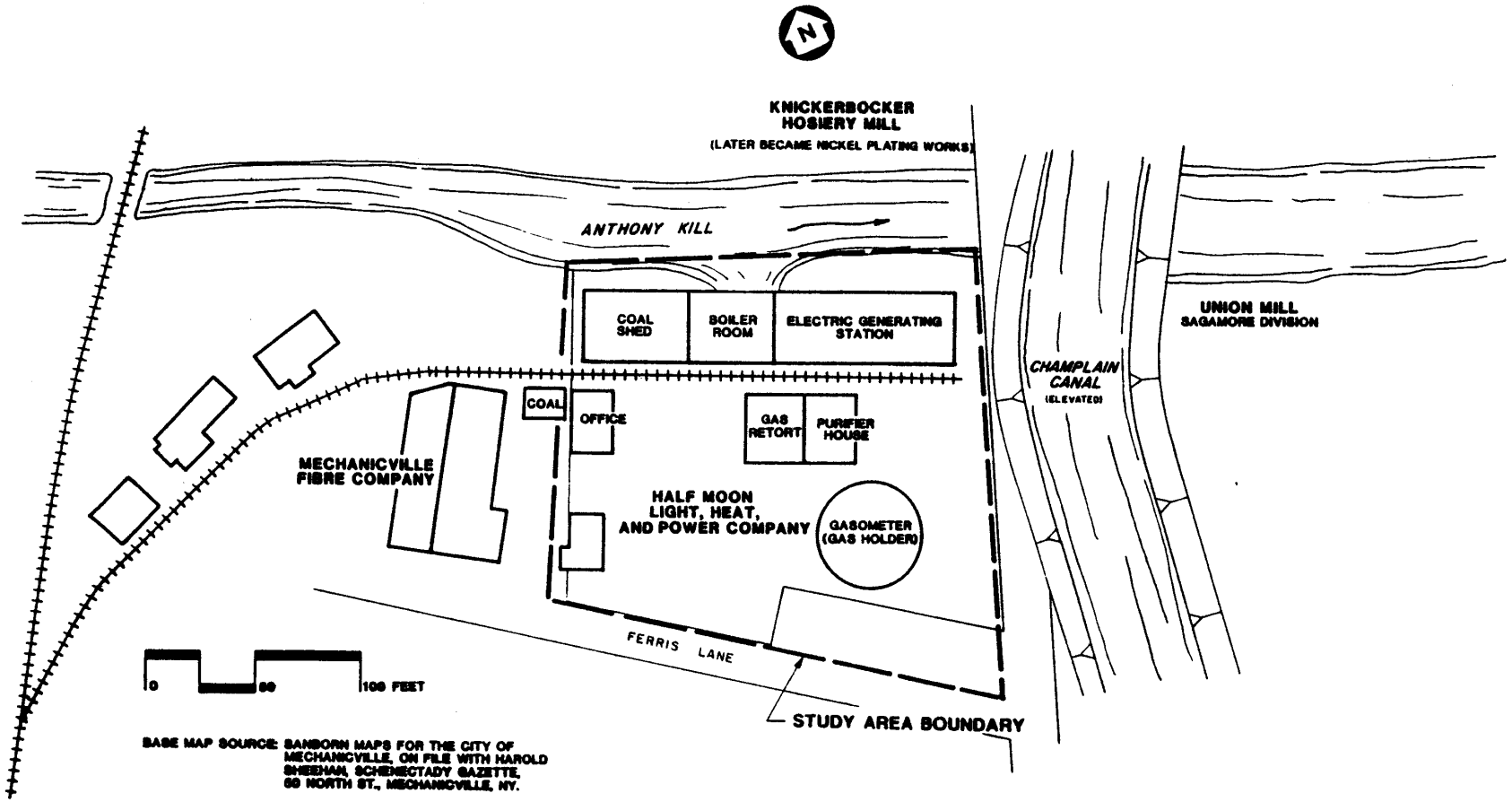
The site is located in Mechanicville, Saratoga County, New York (Figure 1). Saratoga County is in the Valley and Ridge Physiographic Province in east-central New York (Heath, et. al., 1963). The Hudson River forms the north-eastern and eastern boundaries of Saratoga County; the Mohawk River, which is the largest tributary to the Hudson, forms the southeastern boundary. The Anthony Kill, a small tributary, flows into the Hudson River at Mechanicville. The Mechanicville site is adjacent to the Anthony Kill, one-quarter mile upstream from the confluence with the Hudson River. The site lies in an outwash plain, at approximately 95 feet above mean sea level (MSL).

The Champlain Canal once bordered the site on the east. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) to Lake Champlain. The canal flowed through Mechanicville along what is now Central Avenue (Figure 2). Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. The hand-dug canal was approximately 12 feet deep and 30 feet wide. The Champlain Canal was abandoned in 1916 when the Barge Canal opened. The empty canal became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the state dug up the canal, removed the trash and debris, and prepared the roadbed for Central Avenue (Sheehan, Records).

The history of coal gas production at the site, presented in the Task 1 Report, is summarized in the following paragraphs. It was reconstructed from old maps and newspaper articles, NYSEG records, and interviews with NYSEG employees (Elvins, 1986; McBride, et. al., 1986). The site housed a water gas plant (Figures 2 and 3) owned by NYSEG and its predecessor companies from 1901 until 1955, at which time coal gas production ended due to the availability of natural gas. Most of the aboveground structures were demolished at the time of closure, including the coal storage shed, gas house, purifier and oxide houses, gas holders, oil tanks, and tar dehydrator. Only the boiler house, indoor substation, and old office building now remain on-site. The filter beds, which are coke-filled wooden troughs set into the ground, were left in

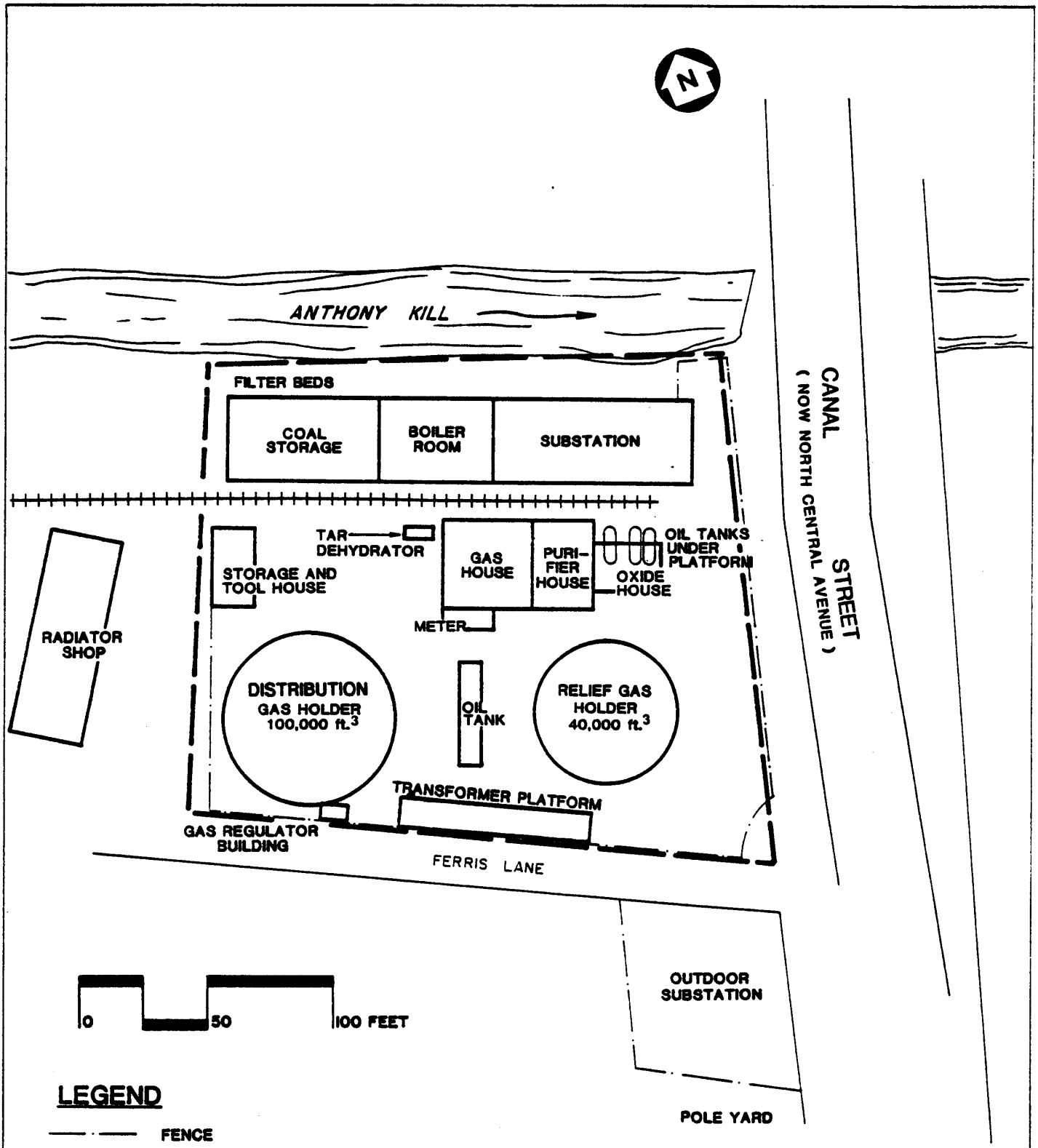


BASE MAP SOURCE: USGS QUADRANGLE MECHANICVILLE (1980)	E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: MECHANICVILLE SITE LOCATION MAP
SCALE IN FEET: 0 — 2000 — 4000	CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
		PROJECT NO. 4945-02 FIGURE 1



BASE MAP SOURCE: SANBORN MAPS FOR THE CITY OF MECHANICVILLE, ON FILE WITH HAROLD SHEEHAN, SCHENECTADY GAZETTE, 69 NORTH ST., MECHANICVILLE, NY.

E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1910
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4946-02 FIGURE 2



BASE MAP PREPARED BY BROWN, CROSBY, & CO., INC., ENGINEERING DEPARTMENT, 96 WALL ST., NEW YORK, APRIL 1951.

E.C. JORDAN CO.
CONSULTING ENGINEERS

PLAN OF THE MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1951

NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

JOB NO. 4945-02

FIGURE 3

the ground and covered with soil after the gas plant closed. These beds had been used to filter residual oil and tar from the gas house condensate before discharge to the Anthony Kill.

By-products of the coal gasification process included ash and condensate material from the gas house; wood chips from the purifier house; and coal tar and oil sludges. It was common practice at coal gas plants to dispose of ashes and spent oxide material on-site. Ashes and clinkers were shoveled out of the generator at night and spread in the area between the relief holder and Ferris Lane. Some of the spent wood chips were piled alongside the road to be hauled away. The purifier house was cleaned out after plant shutdown; however, accumulated tar was left in the base of the relief holder and coke was left in the filter beds.

Ash and cinders are relatively free of organics, but may leach traces of various heavy metals and salts. Spent oxide wastes contain high concentrations of free sulfur, sulfate and sulfide compounds, cyanide compounds, and iron compounds. Coal tar is a complex mixture of organic compounds, composed primarily of polynuclear aromatic hydrocarbons (PAHs), with smaller amounts of phenolics and light aromatic compounds (USWAG, 1984).

After closure of the Mechanicville gas plant in 1955, NYSEG converted the site to a natural gas and electric service center (Figure 4). A small natural gas distribution shed was constructed over a portion of the old distribution gas holder. The former boiler room/substation building was converted to offices, a garage, and a supply storage maintenance shop. The old office is now used as a storage shed and tool house. A buried gasoline storage tank, containing unleaded fuel, is located adjacent to the southeastern corner of the old office. The 2,000-gallon tank, installed around 1980, replaced an older tank that was reportedly taking in water. No gasoline leaks were reported (McBride, et. al., 1986). The remaining developed portion of the site is a paved parking lot. NYSEG has extended its property boundaries over the years by filling in the Anthony Kill embankment with debris. Thus, the stream appears wider in Figure 3 than in Figure 4.

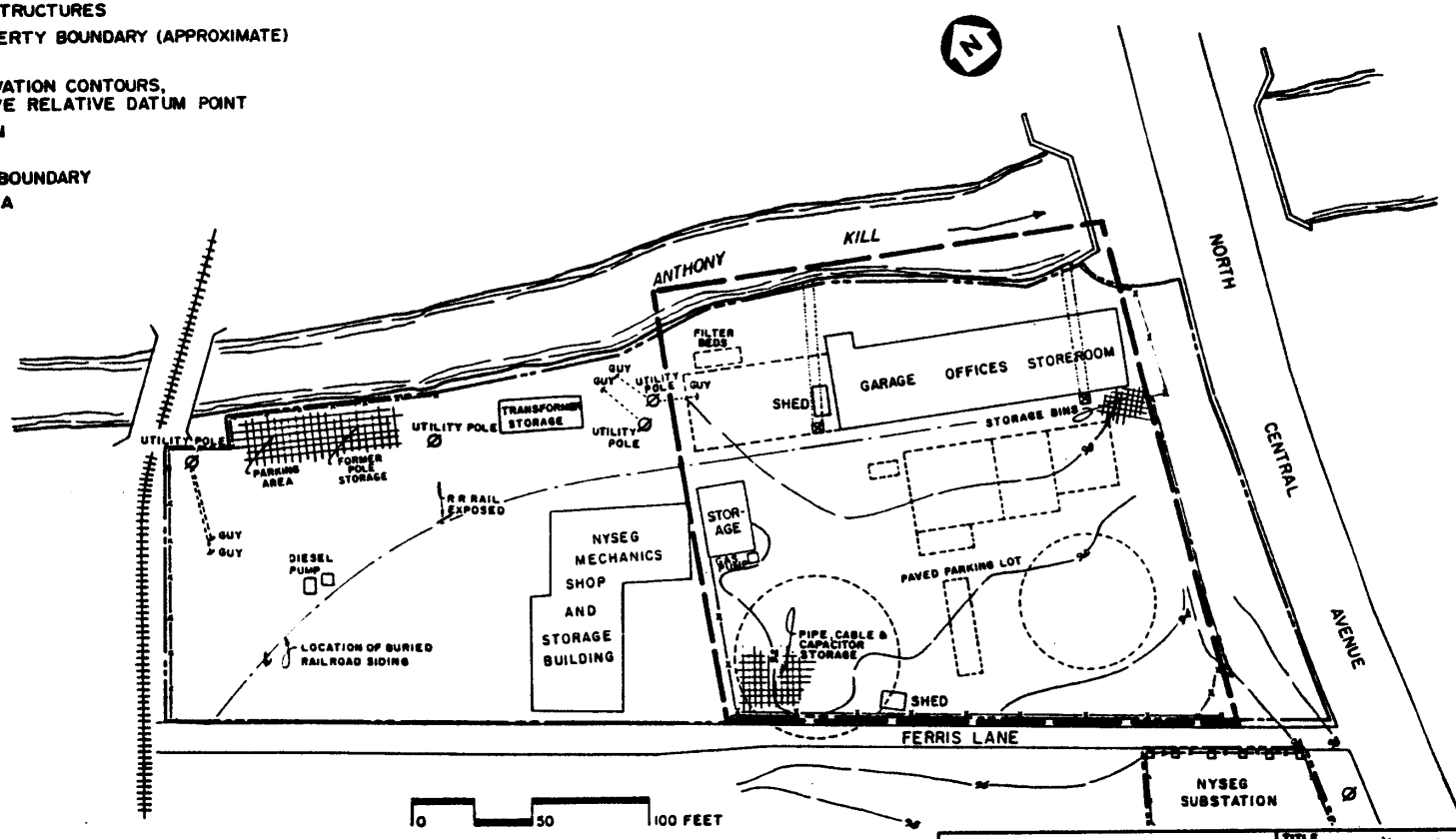
In 1922, NYSEG purchased a quarter-acre lot on the corner of Ferris Lane and North Central Street (Bevis, 1986). This property was mostly vacant during the years the coal gas plant was operating. In 1953, NYSEG built the electrical substation that currently stands on the lot. NYSEG also owns the land on the west side of the site. The portion between the railroad tracks and the Anthony Kill (see Figure 4) was purchased by NYSEG in 1952 (Bevis, 1986) and the parcel between the tracks and Ferris Lane was acquired in October 1987. Jordan's Task 2 investigation focused on the eastern portion of the site (approximately one acre) where coal gas production activities occurred.

1.2 PURPOSE

In the Preliminary Site Evaluation (Task 1), Jordan developed an understanding of the site's history, environmental setting, and current conditions from available information and site reconnaissance. The Task 1 findings are presented in the Task 1 Report for Mechanicville submitted to NYSEG in August 1986 (Jordan, 1986a). Based on Task 1 findings, the scope of Task 2 (Initial Field Investigation) was developed.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
MECHANICVILLE SITE PLAN - 1987
MECHANICVILLE, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4045-02 FIGURE 4

Task 2 was designed to: (1) develop an understanding of the site hydrogeologic setting; (2) determine the identity and concentrations of chemicals present in the soils, groundwater, surface water, and sediments; and (3) perform a preliminary risk assessment of the possible risks of those chemicals to human and environmental receptors. This report summarizes the findings of Task 2 and provides recommendations for future activities. Task 2 and any future investigations will be the technical foundation for subsequent tasks.

1.3 SCOPE OF TASK 2

The scope of work required to complete Task 2 objectives is described in the Mechanicville Site Work Plan submitted to NYSEG in April 1986 (Jordan, 1986b). The completed subtasks are summarized below.

1. Prepared a site-specific Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP).

2. Excavated five test pits for characterization of the subsurface geology at the site; installed piezometers in two of the test pits to obtain groundwater level data; collected six soil samples for laboratory chemical analysis; and prepared test pit logs.

3. Drilled eight soil borings and obtained eight soil samples for laboratory chemical analysis and site characterization; installed six monitoring wells and one piezometer; and prepared boring logs and well installation diagrams.

4. Performed in-situ permeability tests at all wells and obtained five rounds of groundwater level data from monitoring wells and piezometers.

5. Collected groundwater samples from six monitoring wells on a quarterly basis for laboratory chemical analysis (four sampling rounds completed between September 1986 and June 1987).

6. Collected surface water and sediment samples at three locations along the Anthony Kill on a quarterly basis for laboratory chemical analysis (four sampling rounds completed between September 1986 and June 1987).

7. Performed laboratory analysis of soil, groundwater, surface water, and sediment samples.

8. Conducted a topographic survey to identify relative locations and elevations of test pits, borings, monitoring wells, piezometers, and other pertinent features at the site.

9. Conducted a preliminary land use survey within a half-mile radius of the site.

10. Evaluated the geologic, hydrogeologic, and chemical data to develop an understanding of site conditions and chemical distribution.

11. Performed a preliminary assessment of the potential health and environmental risks posed by chemical constituents found at the site, and identified remedial alternatives to control the effects and risks.

12. Identified additional data requirements and proposed a Task 3 program (including schedule and costs) for obtaining the necessary data.

2.0 FIELD ACTIVITIES

Field activities undertaken during Task 2 are described in this section. The accomplishments of the program and the rationale for the explorations are discussed. Field logs, well diagrams, and descriptions of procedures used during field activities are presented in Appendix A. Exploration and sampling procedures are further documented in the QAPP (Jordan, 1985).

2.1 TEST PITS

On July 21, 1986, J.H. Maloy Co., contracted through Empire Soils Investigations, Inc. (Empire), excavated six backhoe-dug test pits at the Mechanicville site. Test pit depths ranged from 3 to 7.7 feet below ground surface. One test pit, labelled "Decon Pit" in Figure 5, was used to capture fluids from decontamination (i.e., steam-cleaning) of equipment. The remaining test pits, TP-1 through TP-5, were used to investigate subsurface geology, distribution of coal gasification wastes, and depth to groundwater. These test pits are shown in Figure 5.

Test pit completion was observed by a Jordan field geologist. Test pit logs describing the soil layers and field observations are summarized in Appendix A-1. A total of six soil samples was obtained for laboratory chemical analysis and forwarded to ERCO Laboratories, a division of ENSECO, Inc., in Cambridge, Massachusetts. One sample each was collected from TP-1, TP-2, and TP-4; two samples and one duplicate were taken from TP-5. No samples were obtained from TP-3 or the decontamination pit. The analytical samples were selected from soil layers that: (1) contained visual signs of coal gasification wastes; (2) had a coal tar odor; or (3) showed detectable levels of organic vapors as measured with a photoionization detector (PID). Thus, the test pit samples were targeted for waste material in shallow soil, where present. Results of the soil analyses are discussed in Section 3.5.1.

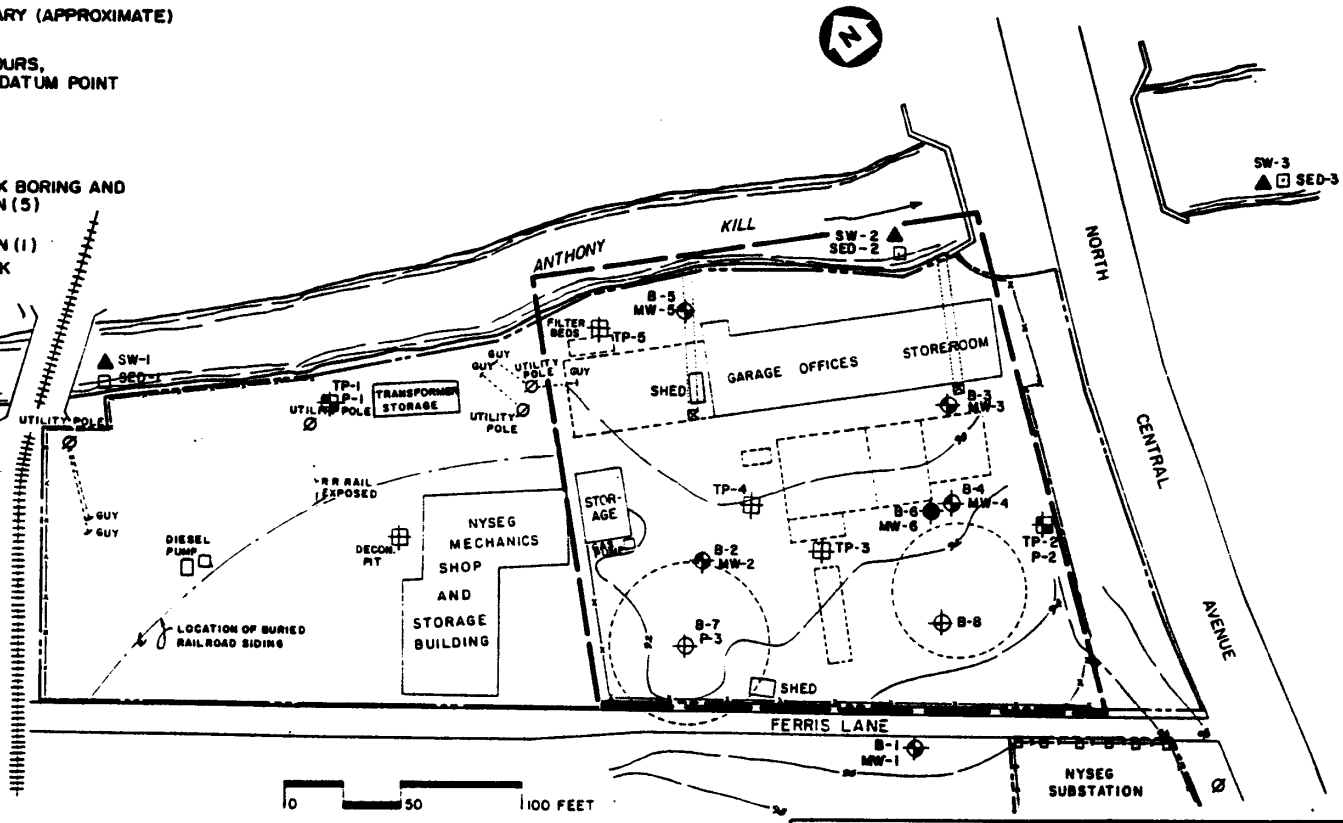
2.2 BORINGS

Eight borings (B-1 through B-8) were drilled at the site by Empire between July 23 and August 6, 1986 (see Figure 5). The borings were drilled to: (1) investigate the subsurface geology; (2) evaluate the effects of former coal gasification activities on subsurface soils; (3) investigate the foundations of the former gas holders; and (4) permit installation of monitoring wells. Boring locations were selected following consideration of former coal gasification activities, the test pit observations, the anticipated direction of groundwater flow, and the results of the ground-penetrating radar (GPR) survey, described in the Mechanicville Task 1 Report (Jordan, 1986a).

Borings were drilled to bedrock using hollow-stem augers; NX-sized cores (3-inch diameter) were used to drill into the shale bedrock at four borings (B-1, B-2, B-5, and B-6). Total boring depths ranged from 9 to 32 feet below ground surface. Continuous split-spoon samples (2-foot) were collected above the bedrock and continuous core samples (5-foot) were taken in the bedrock. All samples were scanned with a PID for organic vapors. Reference soil samples (for physical characteristics) and analytical soil samples (for laboratory

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
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- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TASK 2 EXPLORATION LOCATIONS
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02 FIGURE 9

chemical analysis by ERCO) were collected from each boring except B-6. Soil sampling was not conducted at B-6 because of its close proximity to B-4. Core samples collected at B-1, B-2, B-5, and B-6 were logged and placed in core boxes stored at the site. Boring logs completed by Jordan field geologists are presented in Appendix A-2, along with a table summarizing field observations. Results of the chemical analysis of soil samples are described in Section 3.5.1.

2.3 MONITORING WELLS AND PIEZOMETERS

Six monitoring wells were installed in six of the eight boreholes between July 23 and August 14, 1986. Each monitoring well number (i.e., MW-1 through MW-6) corresponds to the number of the borehole in which it was installed; monitoring well locations are shown in Figure 5. The purpose of the monitoring wells was to obtain water level measurements, permeability data, and water samples for laboratory chemical analyses. MW-1 was installed to provide groundwater information upgradient of the site; MW-2 through MW-5 were installed in locations anticipated to be downgradient of former coal gasification structures. The screened zone (including the sand backfill) for these five wells coincided approximately with the top 10 feet of the water table, and spanned both soil and bedrock strata (see Appendix A-3). The sixth well, MW-6, was installed to provide data on water levels, water quality, fracture patterns, and permeability in the bedrock. The top of the screened zone for this well was positioned 5 feet below the bedrock surface and extended 10 feet into the bedrock, to a depth of 31 feet below ground surface.

Monitoring wells were constructed of 2-inch diameter, stainless steel pipe; flush-mounted protective casings were used on all wells except MW-1 where the casing was above ground. A 5-foot stainless steel well screen with 0.01-foot slots was used in each monitoring well. Wells were backfilled with clean Jersey sand and sealed with a minimum of 2 feet of bentonite pellets. Well installation diagrams appear in Appendix A-3.

MW-1 through MW-3 were developed using a hydraulic pump. The remaining wells, MW-4 through MW-6, were flushed out with an air compressor system. Rising-head permeability tests were initially started on MW-1, MW-2, and MW-5, but were halted when contamination was encountered during development. As an alternative to pumping contaminated water, falling-head permeability tests were performed on MW-1 through MW-5 after well development. A packer test was conducted at MW-6 to characterize the permeability of bedrock at the site. Methods and results for both falling-head and packer tests are provided in Appendix A-4.

To augment the well measurements, three piezometers were installed at the Mechanicville site to provide water level data. Two of the piezometers (P-1 and P-2) were installed in TP-1 and TP-2, respectively, to give groundwater information on the eastern and western portions of the site. The third piezometer (P-3) was placed in B-7 (inside the perimeter of the former gas distribution holder) to allow water level measurements in this region. Locations of these piezometers are shown in Figure 5. The piezometers were constructed of a single section of 1/2-inch ID PVC piping with 1- to 3-foot hand-slotted

screens. Although the piezometers were capped, protective casings were not installed.

2.4 GROUNDWATER SAMPLING

Four rounds of groundwater sampling were conducted at the site: September and December of 1986, and March and June of 1987. During each round, water level measurements were taken at each well and piezometer; these data are presented in Appendix A-5. Using dedicated bailers, groundwater samples were collected from each well, and quality assurance/quality control (QA/QC) samples (i.e., duplicates, trip blanks, sampler blanks, and filtration blanks) were obtained. Monitoring well sampling procedures were followed as detailed in Appendix A-6. Round 1 laboratory chemical analyses were completed by ERCO. The remaining three rounds of samples were analyzed by NYSEG. Results of the groundwater analysis are discussed in Section 3.5.2.

2.5 SURFACE WATER/SEDIMENT SAMPLING

Three surface water and three sediment sampling stations were selected to determine the distribution of organic and inorganic compounds along the Anthony Kill (see Figure 5). The sampling stations were upstream of the site, adjacent to the site near the outfall of the easternmost drainage culvert, and downstream of the site on the eastern side of the North Central Avenue Bridge. Four rounds of surface water/sediment samples were collected in September and December of 1986, and March and June of 1987. During each round, one sample from each medium was collected at each sampling station; a duplicate sample from each medium was also collected in each round. Round 1 laboratory chemical analyses were completed by ERCO. The remaining three rounds of samples were sent to NYSEG. NYSEG analyzed the surface water samples, but sent the sediment samples to ERCO. Results of the surface water and sediment analyses are discussed in Sections 3.5.3 and 3.5.4, respectively.

2.6 SITE SURVEY

Topography and subsurface explorations (i.e., test pits, borings, monitoring wells, and piezometers) were surveyed by David A. Flanders Associates of Ballston Lake, New York, in late June of 1986. The surveyor determined exploration locations and ground elevations to the nearest 0.1 foot, and the uncapped riser elevations of the monitoring wells and piezometers to the nearest 0.01 foot. The reference datum used was an assumed datum of 100 feet taken from a railroad spike in the utility pole located between the NYSEG substation and North Central Avenue, south of the site. Exploration locations were mapped on the base map developed in Task 1 (at a scale of 1 inch equals 50 feet) (see Appendix A-7).

2.7 PRELIMINARY LAND USE SURVEY

General land uses and cover types were surveyed for the area within a half-mile radius of the Mechanicville site. Existing land use maps, street maps, and aerial photographs were used for the survey, along with field checking. Potentially sensitive land uses, identified with the assistance of local

officials and published data, included facilities for the very young, the elderly, and the infirmed; that is, populations particularly sensitive to contaminants.

Potential contributors of chemicals to groundwater and surface water were identified from aerial photographs and during field checking. Potential contributors include locations where chemical substances are typically used and/or disposed of. The land use survey results are presented in Section 3.4.

3.0 SITE CHARACTERIZATION

The geology and hydrogeology of the Mechanicville site, as interpreted from data gathered in Tasks 1 and 2, are described in this section. Results of the land use survey and the laboratory chemical analyses of samples collected during Task 2 are also discussed.

3.1 GEOLOGY AND SOILS

The Saratoga County area is drained by the Hudson River and its tributaries. The Hudson River Valley is formed by highly folded and faulted shales originally deposited as sediments along the continental margin during the Ordovician Period, approximately 500 million years ago. The pre-glacial Hudson River Valley and its drainage system were probably similar to their present configuration. However, the valleys may have been widened or deepened by sub-glacial erosion when the Laurentide Ice Sheet flowed south from Canada over this area.

As the ice sheet began its northward retreat, sediment-laden meltwater streams flowed through the Anthony Kill Valley, depositing sands and gravels in the higher energy zones, and clays and silts in quieter water. These glaciofluvial deposits form the terraces that lie along the southern border of Mechanicville.

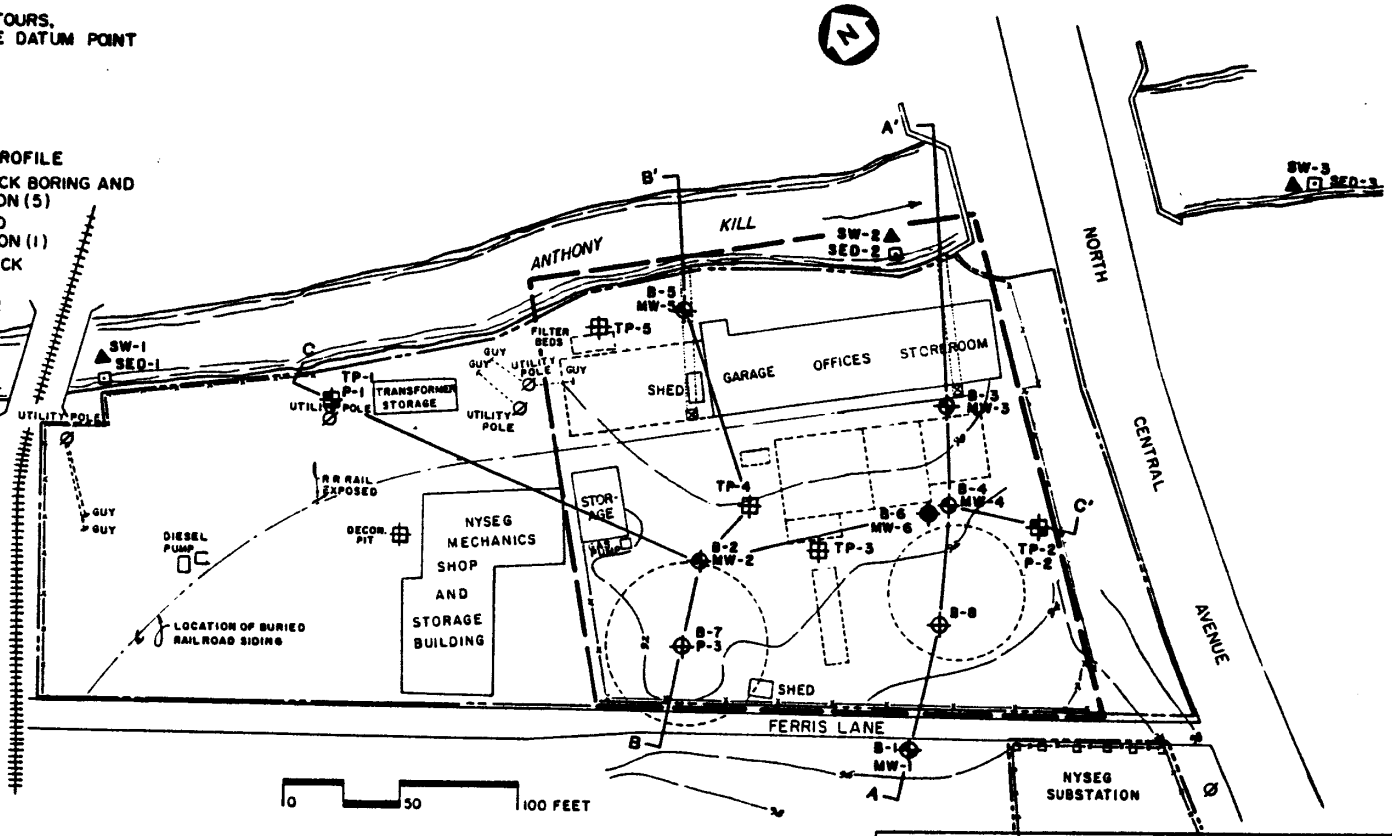
Subsurface conditions at the Mechanicville site were explored during the Task 2 field investigation by means of test pit and boring explorations. The shallow geology consists of up to 18 feet of soil overlying a fractured shale bedrock. The bedrock surface is deepest in the southeastern portion of the site. An interpretation of site stratigraphy is illustrated through geologic profiles located on a plan view of the site (Figure 6). The profiles, shown in Figures 7 through 9, are constructed with a 10:1 vertical scale exaggeration.

The unconsolidated deposits encountered at the site include a combination of both fill and natural soils. Fill, including a silty sand and gravel and a clayey silt and fractured shale, forms the upper 8-10 feet of the site. In the southeast portion of the site, where excavation for the relief gas holder occurred, and in the area between the building and the Anthony Kill, a silty shale unit underlies the fill deposits. The silty shale unit is 8 to 9 feet thick in borings B-4 and B-8. This silty shale unit is loose, moist, and lacks structure, and is interpreted to represent fill material, possibly disturbed weathered bedrock from on-site. Isolated gravelly sand and silty clay till units were also encountered at the site. The unconsolidated deposits overlie a shale bedrock which is severely weathered in its upper 1 to 2 feet, and highly fractured in the upper 5 to 10 feet. Descriptions of the subsurface geologic conditions investigated at the site are presented in the following paragraphs.

Fill. The uppermost fill consists primarily of brown to black silty sand and gravel with organic matter, ash, brick fragments, glass, and wood chips. Within the fill, there is considerable heterogeneity, including zones of clayey silt and fractured shale. This uppermost fill, encountered in all borings, varied in depth from 2 to 10 feet below ground surface. The fill averages 8 to 10 feet thick across the site, but thins at the Anthony Kill (see Profiles A-A' and B-B'). The off-site lateral extent of the fill is unknown, but is expected

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- LOCATION OF GEOLOGIC PROFILE
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3).



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

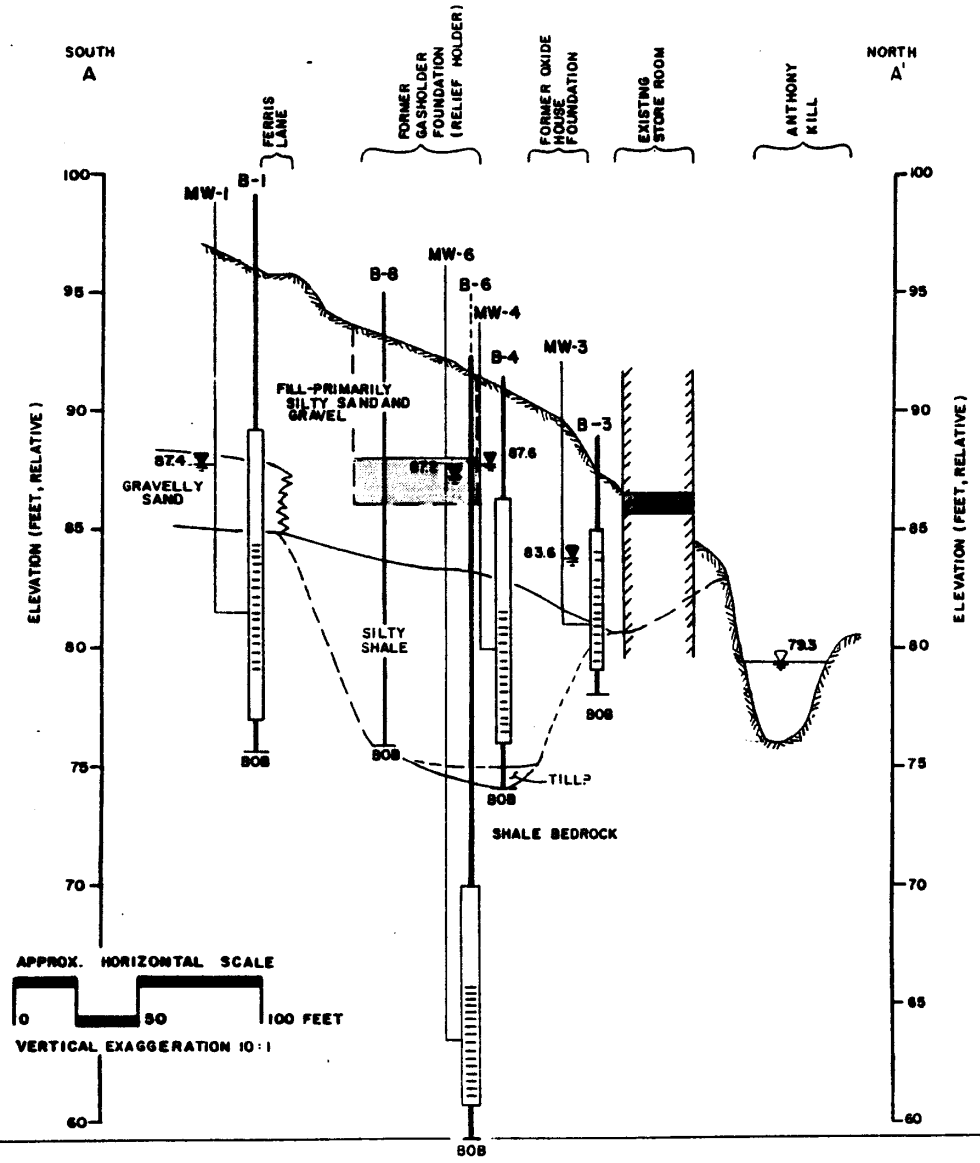
E.C. JORDAN CO.
CONSULTING ENGINEERS

GEOLOGIC PROFILE LOCATIONS
MECHANICVILLE SITE

NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

JOB NO. 4945-02 FIGURE 6



GEOLOGIC DESCRIPTIONS

FILL : PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND : DISCONTINUOUS BROWN TO DARK GREY SAND AND GRAVEL.

SILTY SHALE : BLACK TO GREY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL : DISCONTINUOUS TAN TO LIGHT GREY SILT CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK : LAMINATED, BROKEN, DARK GREY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

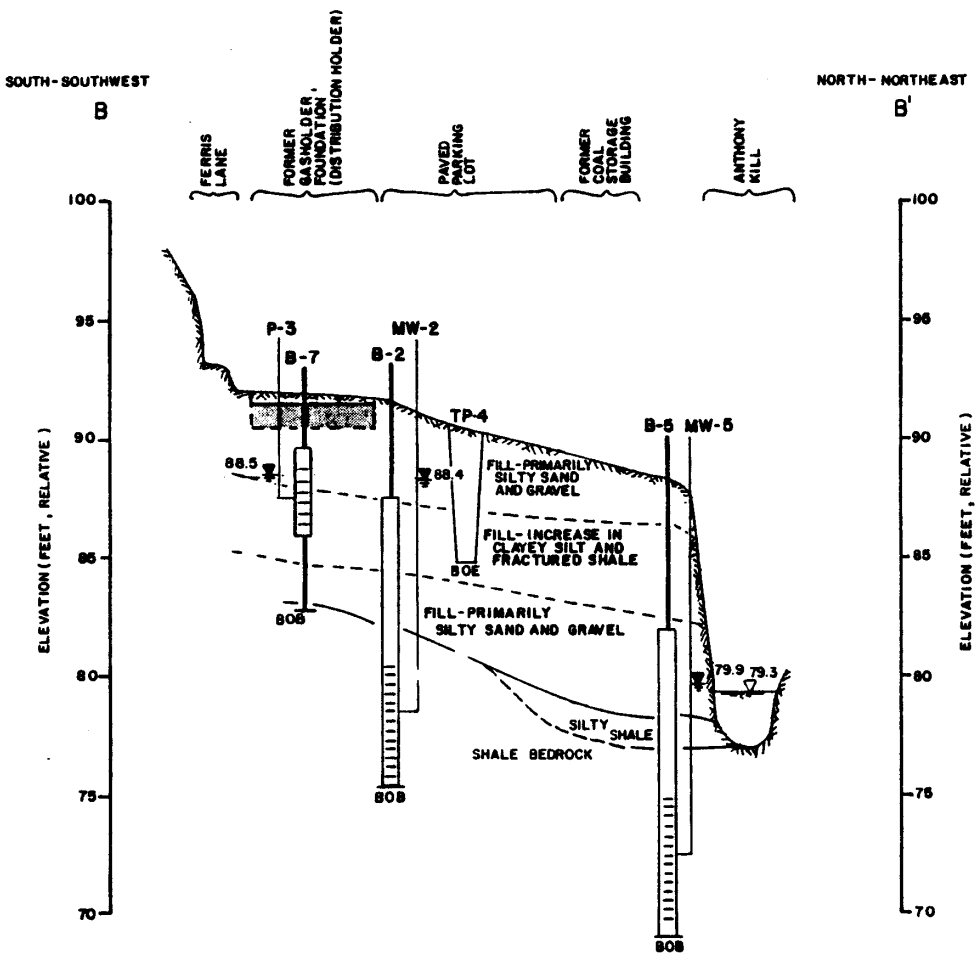
EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

BOTTOM OF BORING

79.3 OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

NOTES:
1. SEE FIGURE 6 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURES ARE SHOWN AS APPROXIMATE

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE A-A' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	JOB NO. 4945-02 FIGURE 7



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

FILL : PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND : DISCONTINUOUS BROWN TO DARK GREY SAND AND GRAVEL.

SILTY SHALE : BLACK TO GREY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

SHALE BEDROCK : LAMINATED, BROKEN, DARK GREY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERLY WEATHERED.

LEGEND

MW-1 / B-1 — BORING AND MONITORING WELL LOCATION

88.4 — OBSERVED WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▭)

BOB — BOTTOM OF BORING

TP-1 / P-1 — TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

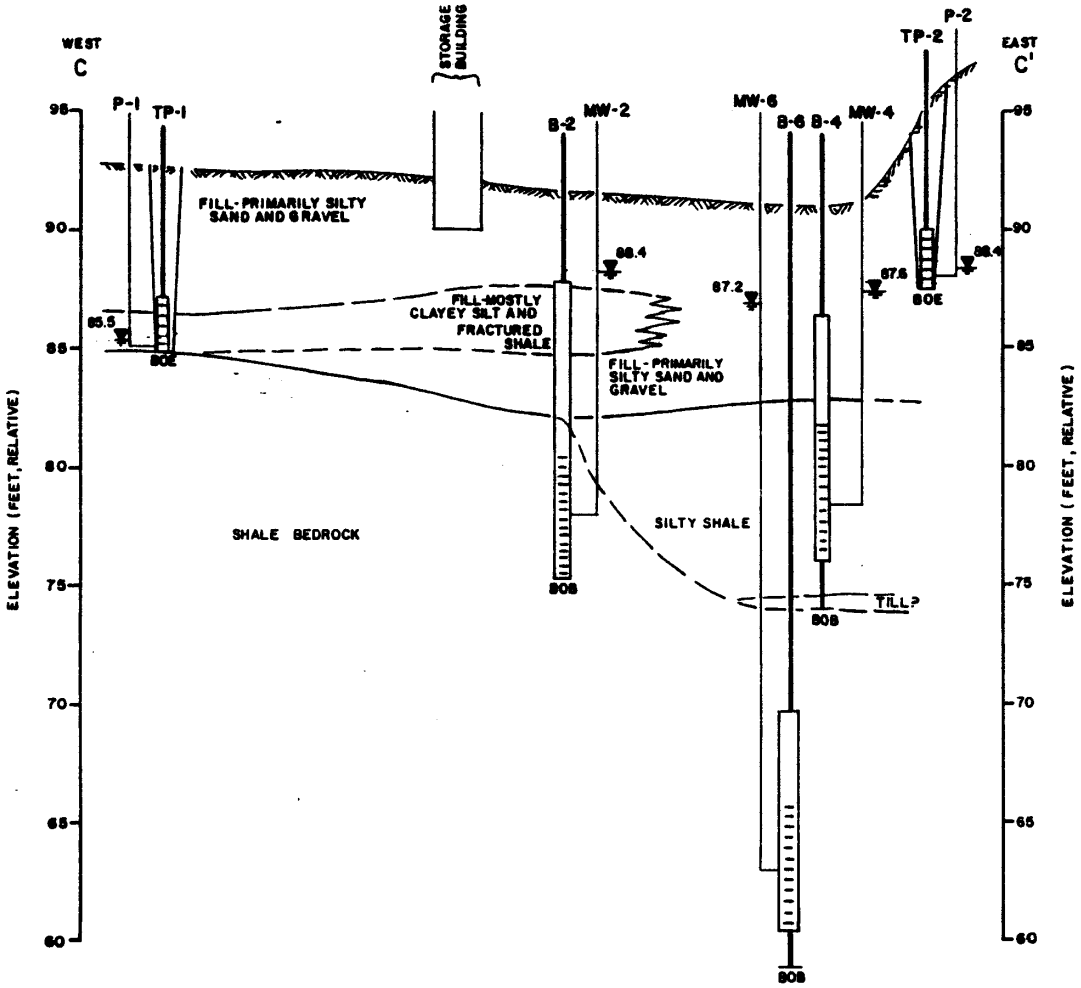
88.5 — PIEZOMETER SCREEN

BOE — BOTTOM OF EXPLORATION

79.3 — OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

NOTES:
1. SEE FIGURE 6 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURES ARE SHOWN AS APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE B-B' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	JOB NO. 4945-02 FIGURE 8



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

FILL : PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND : DISCONTINUOUS BROWN TO DARK GREY SAND AND GRAVEL.

SILTY SHALE : BLACK TO GREY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL : DISCONTINUOUS TAN TO LIGHT GREY SILT CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK : LAMINATED, BROKEN, DARK GREY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERLY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▭)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON JUNE 2, 1987.

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

NOTES:
1. SEE FIGURE 6 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURES ARE SHOWN AS APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE C-C' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	JOB NO. 4945-02 FIGURE 9

to occur east of the site along North Central Avenue where the old Champlain Canal was filled. Due to the heterogeneous nature of the uppermost fill, the hydraulic conductivity is likely to be highly variable across the site.

Gravelly Sand. A brown, dense, gravelly sand was encountered in only one boring (B-1) at a depth of 8 feet below ground surface (see profile A-A'). The gravelly sand unit is 1.5 to 4 feet thick. Where it exists, the gravelly sand overlies weathered bedrock. The gravelly sand may represent fill.

Silty Shale. In the southeast portion of the site, and between the building and the Anthony Kill, a silty shale unit overlies the bedrock. This unit consists of black to grey platy shale fragments with interstitial silt. The silty shale is loose, saturated, and lacks a consistent structure. These properties indicate that this area may have been disturbed by excavation, backfilling, and grading during construction of the gas plant. The silty shale in these areas is interpreted to be fill material. The silty shale unit varies in thickness across the site from 1 to 9 feet. It is thickest in the area of the former relief gas holder, near B-4, B-6 and B-8 (see Profile A-A'). This unit has a relatively high hydraulic conductivity. The off-site lateral extent of the silty shale layer is unknown.

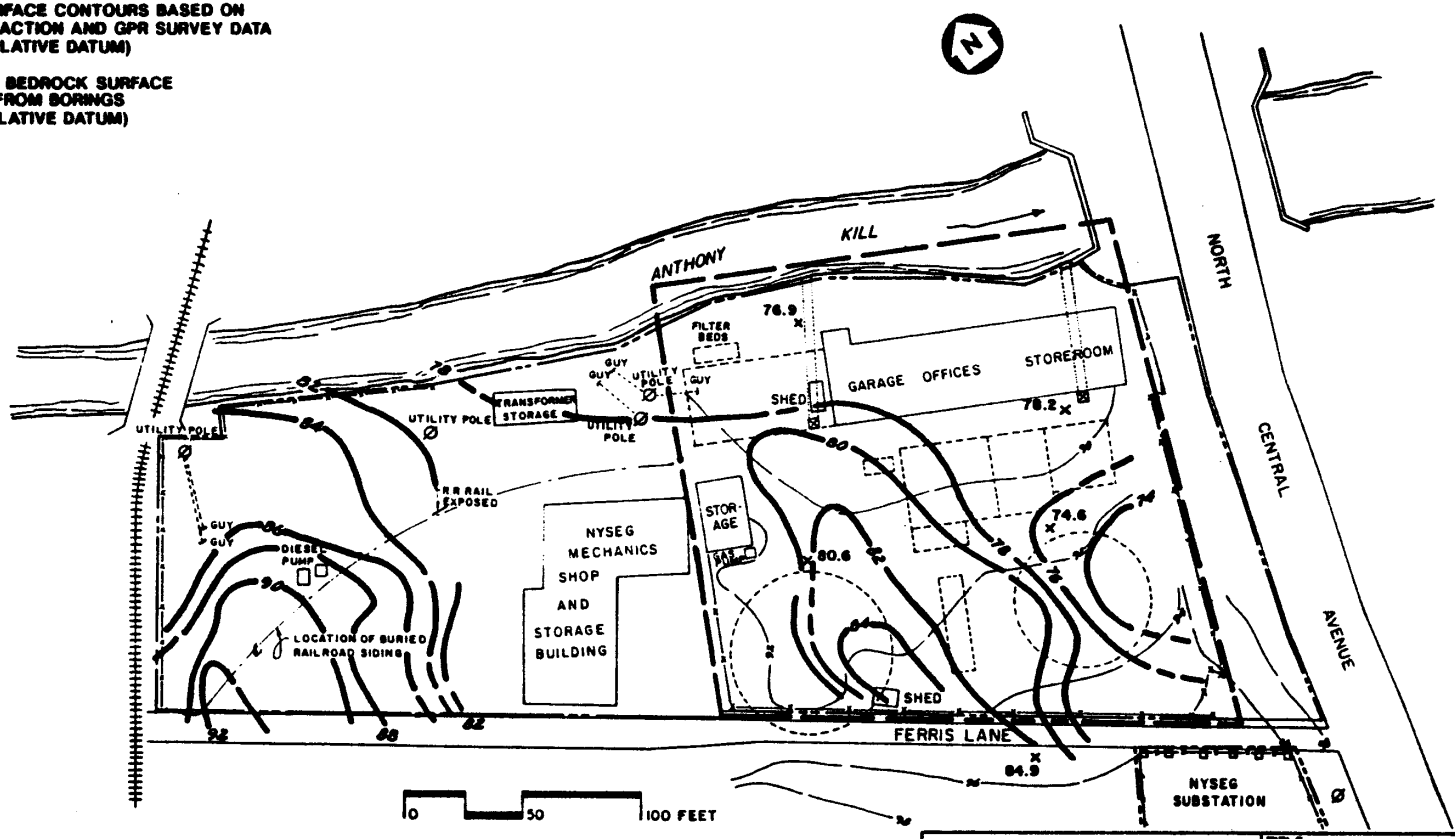
Till. A thin, discontinuous tan to light grey silty clay till with fine gravel was encountered at the top of the bedrock surface in one boring, B-4. The pocket of till is less than one foot thick and is located along the northern edge of a small bedrock trough. The till contained some natural organic matter, suggesting that this remnant till was the original post-glacial topsoil at the site. Because the till appears to be laterally discontinuous, it is not anticipated to significantly influence groundwater flow at the site.

Shale Bedrock. The bedrock at the Mechanicville site is a laminated gray shale with calcite inclusions. The upper 1 to 2 feet of the bedrock is severely weathered and contains interstitial silt and dry platy shale fragments. Bedrock outcrops in several places along the south bank of the Anthony Kill. Based on measurements taken from these outcrops, the bedrock strike trends east to west and bedding dips to the south approximately 30 degrees from horizontal. Bedrock core was obtained in four borings beneath the highly weathered zone. The rock core is very broken to broken, with fractures every 2 inches to a foot. The primary fractures are parallel to the bedding and secondary hairline fractures exist at an angle of up to 90 degrees to the primary fractures. Some weathering has occurred along the fracture faces. Groundwater movement in the shale bedrock occurs primarily through the fractures in response to the hydraulic gradient. The permeability of the bedrock is equivalent to, if not greater than, the overlying soils.

A bedrock contour map interpreted from the GPR and seismic refraction data collected in Task 1 is shown in Figure 10. The map depicts the surface of the weathered rock; the competent rock is 1 to 2 feet below the weathered rock surface. Depths to the competent bedrock measured during the drilling program correlate well with the geophysical data, as shown in Figure 10. There is a bedrock high near the former distribution holder. Bedrock appears to slope downward from this high, toward both the Anthony Kill (north) and North Central Avenue (east). A small east-trending bedrock depression, approximately 5 feet

LEGEND

- GROUND ELEVATION CONTOURS. IN FEET ABOVE RELATIVE DATUM POINT
- 82 — BEDROCK SURFACE CONTOURS BASED ON SEISMIC REFRACTION AND GPR SURVEY DATA (FT ABOVE RELATIVE DATUM)
- X 76.9 — ELEVATION OF BEDROCK SURFACE DETERMINED FROM BORINGS (FT ABOVE RELATIVE DATUM)



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
BEDROCK SURFACE CONTOURS
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-62 **FIGURE 10**

deep, occurs in the center of the site near the former relief holder (B-4 and B-6). This small depression may represent a relic post-glacial stream channel.

3.2 HYDROGEOLOGY

The interpretation of hydrogeologic conditions at the site is based on field and laboratory permeability data and water level observations presented in Appendices A-4 and A-5, respectively.

3.2.1 Groundwater Flow Conditions

Based on observations made during the excavations of borings and test pits, and groundwater measurements from piezometers and monitoring wells, the water table at the site exists at an approximate depth of 2 to 10 feet below ground surface. There was a measured seasonal groundwater fluctuation of approximately 1 to 3 feet, with the highest water table levels occurring in March 1987, and the lowest in September 1986 and June 1987. The water table occurs principally in the fill during both high and low water table conditions. The saturated thickness of soils at the site range from approximately 3 to 13 feet, with the greatest saturated thicknesses coincident with the areas of greatest depth to bedrock.

The groundwater surface contour map for the site is shown in Figure 11. The contours were interpreted using groundwater levels observed on June 2, 1987, from monitoring wells MW-1 through MW-5 and piezometers P-1, P-2, and P-3. Water level data collected in August, September, and December of 1986, and March of 1987 result in a similar interpretation of contours. The effective screens of MW-1, MW-2, and MW-5 intercept groundwater in the fill and shallow bedrock. MW-3, MW-4, and the three piezometers monitor groundwater levels in the fill, and MW-6 monitors groundwater levels at depth in the fractured bedrock.

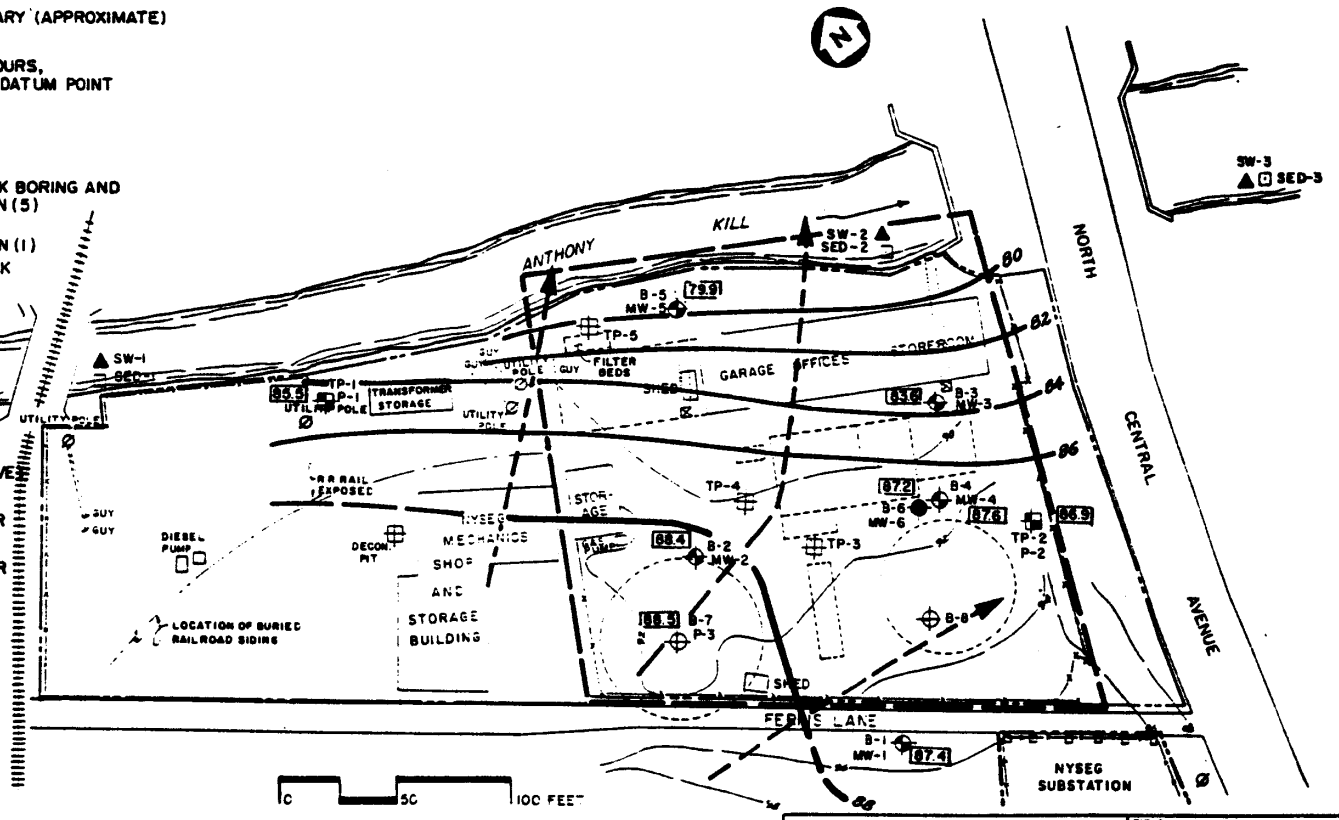
As illustrated in Figure 11, the groundwater surface slopes north-northeast, toward the Anthony Kill. The average horizontal gradient of the groundwater surface is calculated to be 0.05 ft/ft across the site. Because groundwater moves from areas of high elevation to areas of low elevation, the interpreted direction of flow is north-northeast. Groundwater flow direction in the southeastern corner of the site, near the former relief gas holder, appears to be more easterly, toward North Central Avenue. The easterly flow appears to be controlled by the thick unit of silty shale, the bedrock depression, and shallow bedrock fractures due to the permeable nature of these units. Additional off-site groundwater level information is required to confirm groundwater flow direction east of the site.

Groundwater flow is primarily horizontal through the system; however, a downward gradient was observed in the MW-4/MW-6 multilevel well cluster. The calculated average vertical groundwater gradient at MW-4/MW-6 was 0.03 ft/ft downward from the fill into the bedrock formation.

Groundwater flow within the fractured rock is controlled by the orientation, size, and interconnection of the fractures. Based on visual observations of

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)
- 88.5 WATER LEVEL (FEET, RELATIVE) OBSERVED ON 6/2/87
- INTERPRETED GROUNDWATER SURFACE CONTOUR.
- INTERPRETED GROUNDWATER FLOW DIRECTION.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: GROUNDWATER SURFACE CONTOURS MECHANICVILLE SITE
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-02 FIGURE 11

rock core from the upper 5 to 15 feet of the bedrock formation at four borings, the primary fractures are oriented 30 to 45 degrees from horizontal. Groundwater movement occurs primarily along these fractures. The directional orientation of the fractures is unknown; however, based on the orientation of regional tectonic fracture patterns (Isachsen and McKendree, 1977) it is likely that the primary bedrock fractures are oriented to the north and northeast. Given this orientation, groundwater in the shallow rock fractures on-site would discharge to the Anthony Kill.

The impervious asphalt paving and buildings that cover most of the site presently limit direct infiltration by precipitation. Two storm drains located in the northern portion of the site collect surface runoff and discharge to the Anthony Kill. Limited infiltration into the site over the years has minimized the potential for waste constituents to be flushed downward into the groundwater flow system. However, during the coal gas production years, the site was not paved and conditions were more favorable for the mobilization of waste constituents. The date of paving is not known.

In-situ permeability and packer tests were conducted in the monitoring wells to estimate hydraulic conductivities and groundwater flow rates in soil and shallow bedrock. The results of in-situ, falling-head permeability tests on the shallow wells screened primarily in the silty shale (MW-3 and MW-4) produced an average hydraulic conductivity of 1.8×10^{-4} cm/sec (0.5 ft/day). In-situ permeability tests in the wells screened primarily in shallow bedrock (MW-1, MW-2 and MW-5) had a hydraulic conductivity ranging from 5.4×10^{-4} to 1.1×10^{-3} cm/sec (1.5 to 3.1 ft/day), with the average hydraulic conductivity for these shallow bedrock wells being 8.6×10^{-4} cm/sec (2.4 ft/day). The in-situ permeability and packer tests conducted in the deeper bedrock well (MW-6) produced hydraulic conductivities of 7.5×10^{-5} cm/sec and 1.9×10^{-4} cm/sec, respectively.

As discussed previously, the upper fill consists of a heterogeneous mixture of materials and likely exhibits a broad range in permeability. Since the saturated thickness of fill is limited at the site and wells were installed predominantly below the upper fill to monitor groundwater flow, in-situ permeability data for the fill are not available. However, a laboratory permeability test was performed on a sample collected from TP-1. Since it is not uncommon to find laboratory and in-situ permeabilities varying by an order of magnitude for the same soil conditions, it is possible that the fill hydraulic conductivities are higher than that measured by the laboratory test. The laboratory permeability test showed hydraulic conductivity of 2.7×10^{-8} cm/sec (7.5×10^{-5} ft/day).

Groundwater velocity is a function of hydraulic conductivity, effective porosity, and the groundwater gradient. The horizontal groundwater flow rate for the silty shale is calculated to be approximately 30 to 50 ft/yr, assuming a porosity of 0.25. The horizontal gradient used to calculate these flow rates is 0.05 ft/ft. The horizontal groundwater flow rate for the shallow bedrock system is calculated to be approximately 280 to 570 ft/yr, assuming a porosity of 0.10. Groundwater flow rates within the deeper bedrock system were not calculated because an insufficient number of wells exist to determine the

hydraulic gradient for the deeper bedrock system. If the hydraulic gradient is similar to the shallow bedrock seepage gradient, groundwater movement is expected to be somewhat slower at depth in the bedrock. However, higher flow rates may exist preferentially along zones where bedrock is more extensively fractured.

In summary, based on the available permeability data and seepage gradients, the principal zone of groundwater movement at the site is interpreted to exist within the silty shale and fractured zones of the bedrock formation. Additional permeability data for the soil and bedrock, and seepage gradients for the deeper bedrock formation are needed to further evaluate groundwater flow at the site.

3.2.2 Groundwater Usage

Historically, the City of Mechanicville used surface water supplies for a drinking water source. The Mechanicville reservoir is approximately three miles northwest of the site at an elevation approximately 160 feet higher than the site. The reservoir is drained by Plum Brook, which flows into the Anthony Kill a few miles upstream of the site. A few residences outside the city limits, however, use groundwater for drinking water (Renaldi, 1986). The closest domestic wells are nearly a mile southwest (upgradient) of the site in the Town of Halfmoon. Based on information obtained during the records search, there are no active industrial wells in the Mechanicville area. There are two abandoned industrial wells: the West Virginia Pulp and Paper Co. well (2,157 feet deep), and a bedrock well used by the former Mintzer Petroleum Co. (29 feet deep). The latter is located 1.5 miles south (upgradient) of the site (Heath, et. al., 1963). The records examined did not report the former yields of these wells.

3.3 SURFACE WATER HYDROLOGY

The Anthony Kill and Hudson River are two major surface water bodies near the site. The Anthony Kill flows out of Round Lake in a southeastern direction, then bends eastward, flowing past the site and emptying into the Hudson River at Mechanicville. The Hudson River is located approximately 1,500 feet east of the site.

Surface runoff from the site flows into two drainage catch basins that empty via underground culverts into the Anthony Kill. Locations of the culverts are shown in Figure 4.

3.3.1 Discharge

There are no continuous-record gauging stations on the Anthony Kill. The U.S. Geological Survey (USGS) has periodically taken base-flow measurements at the partial-record stations on the Anthony Kill at Mechanicville (Station No. 01335700, latitude 42°55'05" and longitude 73°42'53") and Coons Crossing (Station No. 01335698, latitude 42°55'13" and longitude 73°44'50"). The estimated low flow discharge at the Mechanicville Station is 17 cubic feet per second (cfs) for a drainage basin of 62.4 square miles. The average low flow at the Coons Crossing Station is estimated at 15 cfs for a drainage basin of

52.9 square miles (USGS, 1979). The USGS maintains a partial-record gauging station on the Hudson River at Mechanicville (Station No. 01335500, latitude 42°54'45" and longitude 73°40'45"). The drainage area upstream of this station is 4,500 square miles. The minimum average 7-day, 10-year discharge for the water years 1931 to 1956 of the Hudson River at this station was 1,900 cfs (USGS, 1979).

3.3.2 Water Quality

The New York State Department of Environmental Conservation (NYSDEC) has assigned a Class D stream classification to the section of the Anthony Kill from the Mechanicville city line to the Hudson River (Hodgson, 1986). Class D waters are designated by NYSDEC for secondary contact recreation, but no higher uses because of intermittent flow or water quality conditions that are not conducive to the propagation of game fish. Farther upstream, between Coons Crossing and Mechanicville, the Anthony Kill is designated Class C(t). Class C waters are suitable for fishing and all other uses, except primary contact recreation or as a source of water for drinking, culinary, or food processing purposes. The "(t)" denotes that the water body is a trout stream (NYSDEC, 1981).

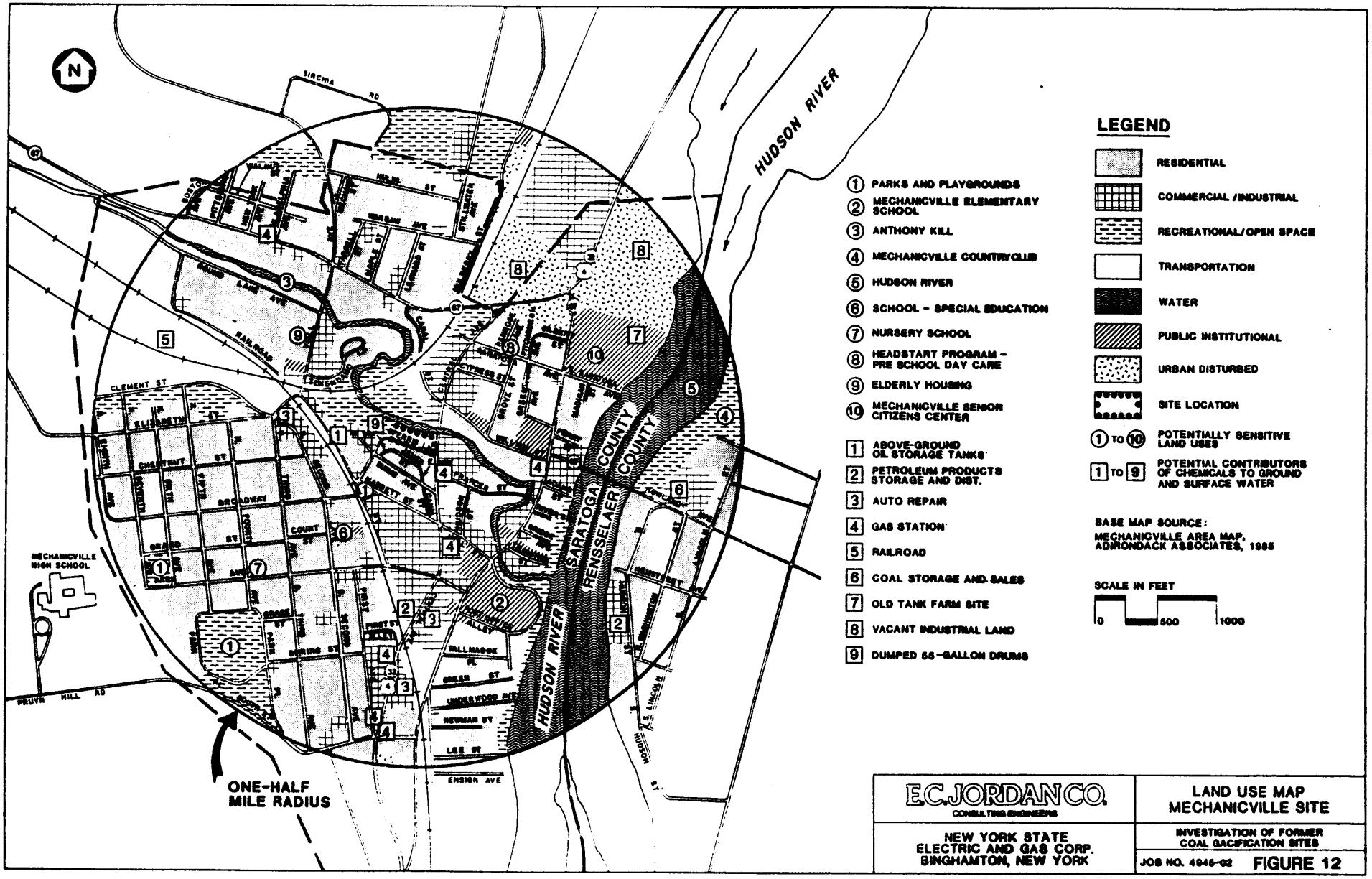
NYSDEC has conducted water quality testing downstream of Mechanicville on the Hudson River, and two miles upstream of the site at Plum Brook (which drains the water supply reservoir) (NYSDEC, 1981). The Hudson River test results (1981) showed water quality impairment from coliform bacteria, heavy metals, and PCBs. No impairment was evident at Plum Brook, which has a Class A designation (suitable for use as a water supply source) (NYSDEC, 1981).

3.4 LAND USE

General land uses and cover types were surveyed for the area within a half-mile radius of the site (Figure 12). Existing land use maps, street maps, and aerial photographs, combined with field checking, were utilized to determine general land uses. Potentially sensitive land uses were identified with the assistance of local officials and published data. Potential contributors of chemicals to groundwater and surface water were identified from aerial photographs and during field inspection. Current land uses around the site are described in the following sections.

3.4.1 General Land Use

Figure 12 depicts present land use and cover types for the area within a half-mile radius of the site. Land uses in the immediate vicinity of the site include both residential and commercial. The central business district of the city, located east and south of the site, is characterized by a mixture of commercial, residential, public, and semi-public land uses. Included are retail stores, offices, municipal buildings (i.e., city hall, fire station, library, and community services), the post office, and several churches. The central business district is bounded on the east by the Hudson River. The portion of the land use study area on the east side of the Hudson River in Schagticoke is predominantly residential.



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BINGHAMTON, NEW YORK

LAND USE MAP
MECHANICVILLE SITE

INVESTIGATION OF FORMER
COAL GACIFICATION SITES

JOB NO. 4946-02 FIGURE 12

Southwest of the site, land uses are primarily residential with a few interspersed commercial sites and parks. Railyards of the Delaware and Hudson, and Boston and Maine railroads are located west of the site. Land northwest and north of the site is primarily open space, with a few private residences and commercial facilities. The area northeast of the site is a mixture of commercial, residential, and industrial properties.

3.4.2 Potentially Sensitive Land Use

Segments of the human population particularly sensitive to contaminants include the very young, the elderly, and the infirmed. The young are particularly sensitive because a given dose of a harmful material will have a greater effect on a smaller, lighter child than on a larger, heavier adult. A child's immune system is also more susceptible to negative impacts as the physiological systems develop. The elderly and infirmed typically suffer from other medical problems that decrease the body's ability to fight chemical intake. Additionally, the elderly and the infirmed may take medication for other health problems; effects of chemicals on the body may be exacerbated by these drugs.

Therefore, land uses that foster concentrations of these populations are of particular concern in conducting a risk assessment. At the Mechanicville site, these uses include day care centers, schools, recreational areas, nursing homes, and elderly housing projects. Figure 12 shows the proximity of these land uses to the site.

3.4.3 Potential Contributors of Chemicals to Groundwater and Surface Water

Potential sources of chemicals in groundwater and surface water near the site include aboveground and belowground tanks used for storing petroleum products, vehicle maintenance yards, a railroad yard, a coal storage and sales facility, vacant industrial property, and a drum disposal area. The drums were observed on the vacant lot just west of the site. There are about a dozen 55-gallon drums in poor condition lying on their sides in the grass. The contents and origin of these drums are not known. The location of the potential contributors identified in the land use survey are depicted in Figure 12.

3.5 DISTRIBUTION OF CHEMICALS

Task 2 chemical analyses of samples from Mechanicville were conducted by two laboratories. ERCO completed analyses on soil, groundwater, and surface water samples for Round 1 sampling, and sediment samples for all four rounds. The NYSEG laboratory performed the water analyses (groundwater and surface water) for Round 2 through Round 4 samples. The analytical parameters and methods are listed in Appendix B-1 and discussed briefly herein. The analytical program was designed to measure constituents of coal tar and coal gas purification wastes, if present. Appendix B-1 also provides representative waste characterizations for coal tar and spent oxide wastes.

Organic analyses of most soil and sediment samples and the first round of groundwater and surface water samples were performed using high performance liquid chromatography (HPLC) with an ultraviolet (UV) detector. Confirmatory analyses were performed on several replicate soil and Round 1 groundwater

samples using gas chromatography (GC) and a mass spectrometer (MS) detector. The GC/MS method is more specific than the HPLC/UV method in identification of organic compounds, and more accurate in quantitation. Typically, non-specific detectors (e.g., the UV detector) tend to yield higher concentrations of chemicals than the MS for a given sample. The NYSEG laboratory used GC/MS methods exclusively for organic analyses of water samples from Rounds 2, 3, and 4. Analytical results are described by media in the following sections.

3.5.1 Soil

Soil samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), selected trace metals (i.e., iron and zinc), cyanide, total recoverable phenolics (phenolics), and total organic carbon (TOC). The six test pit samples were collected from depths of 3 to 7.5 feet below ground surface, and the eight boring samples were collected from 4- to 17.5-foot depths. The test pit samples were taken from the silty sand and gravel and clayey silt fill soils. Samples from B-2, B-3, B-4, and B-7 were from the silty sand and gravel fill, just above the silty shale. Samples from B-5 and B-8 were collected from within the silty shale and the B-1 sample was from a gravelly sand stratum observed only at that boring. Tables 1 and 2 present analytical results of these soil samples. Concentrations of the chemicals detected are expressed in mg/kg (ppm). Figure 13 illustrates the distribution of selected chemicals in soil in the study area.

Organic chemicals associated with coal tar were found at the site. The analyses of samples B-3 and B-8 indicated the highest levels of VOCs and PAHs present in subsurface soil samples. B-8 was drilled into the former relief gas holder itself, while B-3 was downgradient of both the gas holder and the former purifier and oxide houses. The samples from B-8 contained visible coal tar, which had been left in the holder when the plant closed. B-8 had the highest total VOC concentration (3,800 mg/kg), while the highest total PAH level was obtained at B-3 (9,310 mg/kg). The confirmatory GC/MS analysis performed on B-8 indicated comparable results at generally lower concentrations than those reported by the HPLC analysis. Methylene chloride and carbon disulfide were detected in the GC/MS analysis of sample TP-5. Both of these compounds were detected at concentrations at or below 1 mg/kg and may be indicative of laboratory contamination.

The samples from TP-5 and B-5, collected near the former filter beds, were the most downgradient sampling locations relative to site activities. The samples were similar in VOC and PAH concentrations: 16 and 4,654 mg/kg at B-5, and 24 and 4,630 mg/kg at TP-5, respectively. The duplicate HPLC analytical results for TP-5 were comparable for VOCs, but relatively dissimilar for PAHs. The differences in PAH concentrations may be attributable to the inherent heterogeneity of soil samples. A confirmatory GC/MS analysis was also performed on a sample from TP-5; the concentrations of compounds detected by GC/MS were generally lower than HPLC results. Total VOC and PAH concentrations in the GC/MS sample were 13.84 mg/kg and 1,137 mg/kg, respectively.

Analysis of sample B-7, collected from beneath the former distribution holder, indicated the presence of several VOCs and PAHs. A total VOC concentration of 4.3 mg/kg and total PAH concentration of 11.21 mg/kg were found at B-7. Higher

12/17/87

TABLE 1
CHEMICALS FOUND IN SOIL BORING SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	GC/MS
DATE OF SAMPLE COLLECTION	7/23/86	8/1/86	8/5/86	7/29/86	8/4/86	7/31/86	8/6/86	8/6/86
SAMPLE DEPTH (FT)	8.0-10.0	8.0-9.5	4.0-6.0	6.0-8.0	10.0-11.0	7.0-9.0	13.5-15.5	15.5-17.5
ZONE SAMPLED	GRAVELLY SAND	FILL	FILL AND SILTY SHALE	FILL AND SILTY SHALE	SILTY SHALE	FILL	SILTY SHALE	SILTY SHALE
$$VOLATILE ORGANICS (MG/KG)$$								
-VOLATILE AROMATICS-								
BENZENE	ND (2)	ND	13.000	ND	0.880	2.400	640.000	380.000
TOLUENE	ND	ND	8.600	0.310	1.600	1.300	840.000	660.000
ETHYLBENZENE	ND	ND	120.000	2.300	6.300	0.170	440.000	250.000
STYRENE	ND	ND	ND	ND	ND	0.180	780.000	720.000
TOTAL XYLENES	-- (3)	--	--	--	--	--	--	1400.000
m-XYLENE	ND	ND	25.000	0.640	1.500	0.180	400.000	--
o-XYLENE	ND	ND	44.000	2.400	ND	ND	320.000	--
p-XYLENE	ND	ND	25.000	0.870	1.500	0.075	210.000	--
TRIMETHYLBENZENE	ND	ND	35.000	3.800	4.200	ND	170.000	--
n-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
ACETONE	--	--	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	--	--	ND
CARBON DISULFIDE	--	--	--	--	--	--	--	ND
TOTAL VOLATILE AROMATICS	ND	ND	270.600	10.320	15.980	4.305	3800.000	3410.000
$$SEMIVOLATILE ORGANICS (MG/KG)$$								
-PAH-								
ACENAPHTHENE	9.000	(4)	380.000	42.000	250.000	(4)	600.000	(4)
ACENAPHTHYLENE	ND	(5)	(5)	(5)	(5)	(5)	(5)	670.000
ANTHRACENE	8.000	(4)	670.000	80.000	450.000	(4)	550.000	270.000
BENZO(b)FLUORANTHENE	5.700	ND	(4)	ND	120.000	(4)	200.000	(4)
BENZO(k)FLUORANTHENE	(4)	ND	240.000	ND	ND	0.980	ND	(4)
BENZO(g,h,i)PERYLENE	(4)	ND	(4)	ND	ND	1.400	140.000	(4)
BENZO(a)ANTHRACENE	(6)	(6)	(6)	(6)	ND	(6)	(6)	(4)
BENZO(a)PYRENE	6.200	ND	200.000	(4)	94.000	1.100	140.000	(4)
CHRYSENE	17.000	(4)	780.000	100.000	ND	0.800	480.000	(4)
DIBENZO(a,h)ANTHRACENE	6.300	ND	ND	ND	ND	1.300	ND	ND
FLUORANTHENE	44.000	(4)	1100.000	130.000	750.000	0.890	850.000	290.000
FLUORENE	34.000	(4)	1300.000	120.000	620.000	1.100	2100.000	380.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND	ND	(4)
NAPHTHALENE	ND	(4)	2300.000	44.000	760.000	1.900	1500.000	2500.000
PHENANTHRENE	13.000	(4)	940.000	110.000	630.000	0.870	760.000	870.000
PYRENE	11.000	(4)	1400.000	170.000	980.000	0.870	1400.000	460.000
-OTHER-								
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	ND
TOTAL PAH	154.200	(4)	9310.000	796.000	4654.000	11.210	8720.000	5440.000
$$OTHER CHEMICALS (MG/KG)$$								
-METALS-								
IRON	34000	30000	31000	35000	27000	26000	19000	--
ZINC	190	75	130	80	1600	320	61	--
-CYANIDE-								
TOTAL CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
TOTAL RECOVERABLE PHENOLICS	ND	ND	3.6	ND	2.6	ND	ND	--
TOTAL ORGANIC CARBON	110000	6800	100000	23000	110000	76000	190000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

12/17/87

TABLE 2
CHEMICALS FOUND IN TEST PIT SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-3/S-1	TP-5/S-1	TP-5/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC DUP	GC/MS
DATE OF SAMPLE COLLECTION	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86
SAMPLE DEPTH (FT)	6.5-7.0	7.0-7.5	3.0-4.0	3.0-4.0	3.0-4.0	4.0-6.0
ZONE SAMPLED	FILL	FILL	FILL	FILL	FILL	FILL
VOLATILE ORGANICS (MG/KG)						
-VOLATILE AROMATICS-						
BENZENE	ND (2)	ND	0.220	ND	ND	ND
TOLUENE	ND	ND	0.160	1.000	0.750	0.640
ETHYLBENZENE	ND	ND	0.150	6.600	6.100	2.200
STYRENE	ND	ND	ND	ND	ND	ND
TOTAL XYLENES	-- (3)	--	--	--	--	11.000
m-XYLENE	ND	ND	0.091	4.100	3.100	--
o-XYLENE	ND	ND	0.082	3.900	3.000	--
p-XYLENE	ND	ND	0.062	2.100	1.600	--
TRIMETHYLBENZENE	ND	ND	ND	4.600	5.100	--
n-PROPYLBENZENE	ND	ND	0.083	2.100	2.000	--
-OTHER-						
ACETONE	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	1.000
CARBON DISULFIDE	--	--	--	--	--	0.110
TOTAL VOLATILE AROMATICS	ND	ND	0.848	24.400	21.650	13.840
SEMIVOLATILE ORGANICS (MG/KG)						
-PAH-						
ACENAPHTHENE	ND	(4)	ND	290.000	(4)	140.000
ACENAPHTHYLENE	ND	ND	(5)	(5)	(5)	33.000
ANTHRACENE	ND	ND	25.000	470.000	220.000	67.000
BENZO(b)FLUORANTHENE	ND	ND	23.000	ND	ND	13.000
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	21.000
BENZO(g,h,i)PERYLENE	ND	ND	18.000	ND	ND	13.000
BENZO(a)ANTHRACENE	ND	ND	(6)	(6)	ND	35.000
BENZO(a)PYRENE	ND	(4)	13.000	(4)	ND	36.000
CHRYSENE	ND	ND	59.000	110.000	ND	32.000
DIBENZO(a,h)ANTHRACENE	ND	ND	13.000	ND	ND	(4)
FLUORANTHENE	ND	45.000	84.000	880.000	220.000	78.000
FLUORENE	ND	18.000	31.000	620.000	2600.000	89.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	19.000	350.000	5200.000	120.000
PHENANTHRENE	ND	12.000	31.000	810.000	260.000	210.000
PYRENE	ND	45.000	96.000	1100.000	ND	250.000
-OTHER-						
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	ND
TOTAL PAH	ND	120.000	412.000	4630.000	8500.000	1137.000
OTHER CHEMICALS (MG/KG)						
-METALS-						
IRON	27000	35000	27000	31000	35000	--
ZINC	260	120	87	79	220	--
-CYANIDE-						
TOTAL CYANIDE	ND	2.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	2.0	ND	ND	ND	--
-OTHER-						
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	ND	--
TOTAL ORGANIC CARBON	8300	1400	10000	30000	26000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED OR NOT APPLICABLE.
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

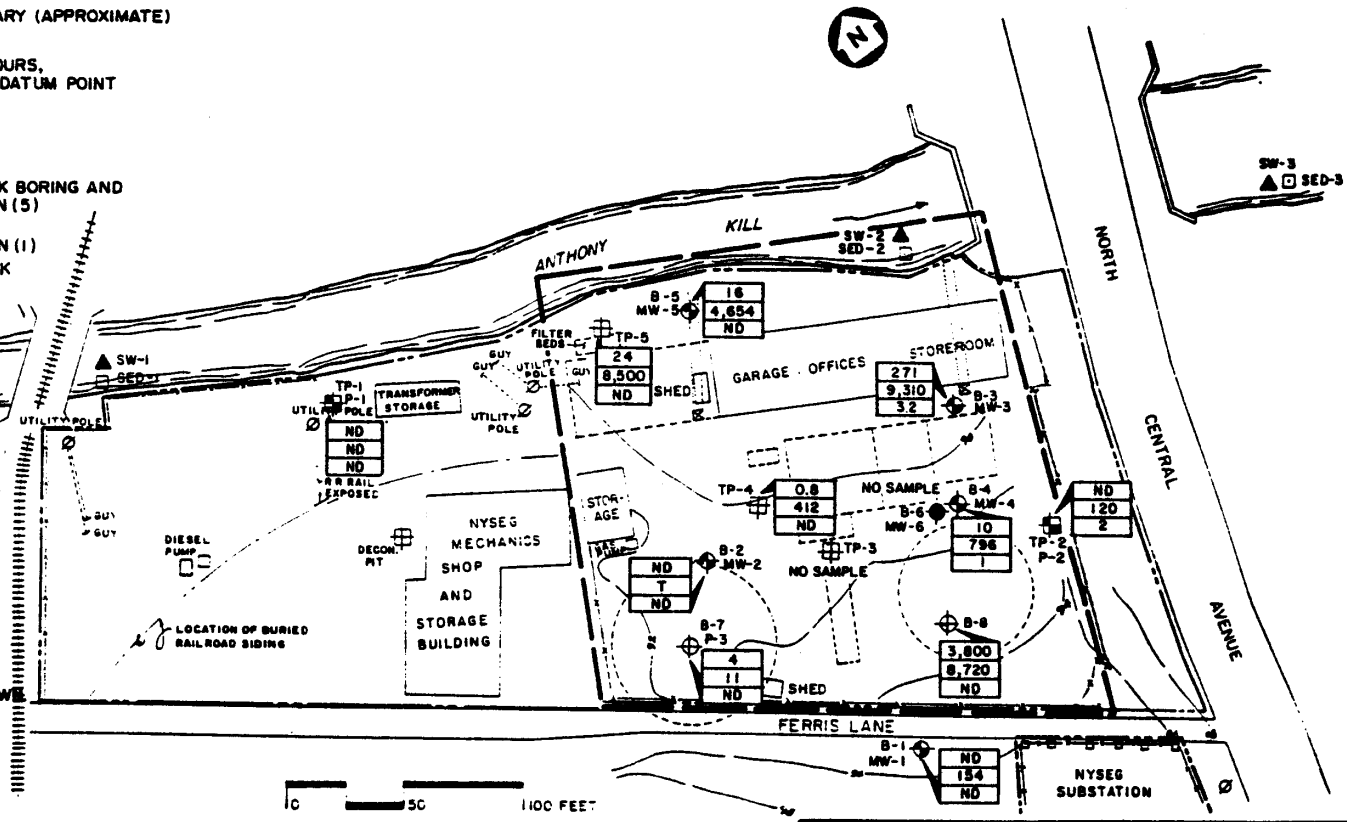
LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TOTAL VOCs	CONCENTRATIONS DETECTED IN SOIL SAMPLES IN mg/kg. DURING JULY/AUGUST 1986 SAMPLING EVENT.
TOTAL PAHs	
TOTAL CN	

NOTES:

1. FOR CONSISTENCY, ONLY HPLC ORGANIC ANALYSES RESULTS ARE SHOWN.
2. WHERE DUPLICATE SAMPLES WERE ANALYZED, THE HIGHER VALUE IS SHOWN.
3. SAMPLES WERE COLLECTED AT DEPTHS BETWEEN 3 AND 11 FEET BELOW GROUND SURFACE WITH THE EXCEPTION OF B-8 WHICH WAS 13.5 TO 15.5 FEET DEEP.
4. ALL SAMPLES EXCEPT TP-5 WERE COLLECTED BELOW THE HIGHEST OBSERVED WATER TABLE LEVEL.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
DISTRIBUTION OF SELECTED CHEMICALS IN SOIL
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02 FIGURE 13

PAH concentrations were detected in samples B-4 (796 mg/kg) and TP-4 (412 mg/kg), located downgradient of the former relief holder and the former tar dehydrator, respectively. The VOC concentrations in these samples were 10.32 mg/kg in B-4 and 0.848 mg/kg in TP-4.

No VOCs were found in four of the subsurface soil samples: TP-1, TP-2, B-1, and B-2. PAHs were detected in TP-2 (120 mg/kg), B-1 (154.2 mg/kg), and B-2 (trace concentrations); no PAHs were found in TP-1. Three of the samples (TP-1, TP-2, and B-1) were collected near the site boundaries, away from the former on-site coal gasification activities. The fourth sample (B-2) was collected near the center of the site, downgradient from the former gas distribution holder.

The results of the metal analyses at TP-1, considered to be a background sample, were 27,000 mg/kg for iron and 260 mg/kg for zinc. Iron and zinc concentrations in the remaining soil samples were close to the background levels with one exception: the sample from B-5, located near the former filter beds, contained an elevated concentration of zinc (1,600 mg/kg). Sample B-5 was taken from the silty shale, 10 to 11 feet below ground surface. The sample from nearby TP-5, which was taken at a shallower depth (3 to 4 feet below ground surface and above the water table), contained only 79 mg/kg zinc. One possible source of zinc at former coal gas plant sites is zinc acetate, which was commonly used as a corrosion inhibitor in gas holder sealing waters (Wilson and Stevens, 1981).

Laboratory results indicate the presence of cyanide in three of the soil samples (TP-2, B-3, and B-4), all of which were collected near the former purifier and oxide houses. As noted in Section 1.1 and Appendix B-1, cyanide compounds are major constituents of spent oxide wastes; their presence in these samples is most likely attributable to spillage during cleaning of the purifier house (Wilson and Stevens, 1981). The sample from TP-2 contained ferro-ferricyanide, and the samples from B-3 and B-4 contained amenable cyanide. The total cyanide concentrations in these samples ranged from 1.0 to 3.2 mg/kg.

Phenolics were detected in only two soil samples, B-3 (3.6 mg/kg) and B-5 (2.6 mg/kg), both of which were collected in areas near former site activities. Phenolics are widely distributed in the environment, due to both natural (i.e., vegetative decomposition) and manmade processes. Tars and wastewater are the sources of phenolics at coal gas plants, although tars produced by water gas plants, such as the one at Mechanicville, typically contain only negligible amounts of phenolics (USWAG, 1984).

TOC analysis is a generic test for organic material and measures VOCs and SVOCs, as well as naturally occurring biological material. The concentration of TOC in the background soil sample (TP-1) was 8,300 mg/kg. Only two other subsurface samples (TP-2 and B-2) contained lower TOC levels than the background sample. TOC values in the remaining soil samples ranged from 10,000 to 190,000 mg/kg. TOC results were predictable, given the site use history and results of the VOC and SVOC analyses, with one exception: the TOC concentration of 110,000 mg/ℓ at B-1 was higher than expected. While samples B-1 and TP-2 contained comparable concentrations of PAHs and no VOCs, the TOC concentration was two orders of magnitude higher at B-1. This seems to

indicate that the gravelly sand at B-1 is higher in organic content than the silty sand and gravel fill which covers the site.

Based on results of the soil samples analyzed, it appears that coal-tar and coal-gasification-related chemicals (i.e., VOCs, PAHs, and cyanide) are present in the subsurface environment in the study area of the site. Coal tar was observed beneath the base of the relief gas holder where the highest concentrations of organic chemicals were found. Significant levels of organic compounds were also found downgradient of this holder and adjacent to the former filter beds. Coal tar was also observed in the silty shale during drilling at B-3, B-4, B-5, and B-6, and in the overlying sand and gravel fill soils during test pit excavation at TP-4 and TP-5.

3.5.2 Groundwater

Groundwater samples were collected from each of the six Mechanicville monitoring wells on four separate occasions (September and December of 1986 and March and June of 1987). These samples, plus duplicates and blanks, were analyzed for VOCs, SVOCs, selected metals (i.e., iron and zinc), cyanide, phenolics, TOC, and sulfate. Conductivity, pH, and temperature were also measured in the field. Quality assurance samples included (1) sampler blanks prepared in the field and analyzed for the same parameters as groundwater samples; (2) trip blanks prepared prior to the field work and analyzed for VOCs only; and (3) filtration blanks prepared in the field by running deionized water through the filter apparatus and analyzed for selected inorganics.

Results of the groundwater analyses are presented in Table 3 (expressed in mg/ℓ [ppm]) and the quality assurance sample results are in Appendix B-2. The distribution of selected chemicals detected in two sampling rounds in groundwater is depicted in Figure 14: December 1986 and June 1987. These two rounds were selected to illustrate seasonal variations in the data, with December representing a wet season (high water table) and June representing a dry season (low water table).

Volatile aromatic compounds, a subset of VOCs, were detected in groundwater from each of the wells except MW-2, located downgradient of the former gas distribution holder. However, low concentrations of volatile aromatics (0.015 mg/ℓ) were found in only one sample from MW-1, located upgradient of the site. VOCs were detected in samples from the four remaining wells in all four sampling rounds. The highest levels of volatile aromatics were detected in samples from MW-6, the deepest of the six wells. Excluding the Round 1 HPLC results (which are typically overestimations), the volatile aromatic concentrations at MW-6 were between 4 and 6 mg/ℓ. At MW-4, the shallow well adjacent to MW-6, the aromatics totalled between 2 and 4 mg/ℓ (again, excluding the HPLC results). Both MW-4 and MW-6 are downgradient of the former gas relief holder. At MW-3 and MW-5, the total volatile aromatic concentrations were generally below 2 mg/ℓ.

Other VOCs detected in the groundwater included acetone and methylene chloride, which were found sporadically in samples from three of the wells: MW-1, MW-2, and MW-6. With the exception of one acetone concentration of 3.78 mg/ℓ (MW-1),

TABLE 3
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)															
-VOLATILE AROMATICS-															
BENZENE	ND (2)	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	0.530	0.560	0.608	0.429	0.230
TOLUENE	ND	ND	(4)	ND	ND	ND	ND	ND	ND	ND	0.100	0.120	(4)	0.0576	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.640	0.910	0.719	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	0.010	ND	ND	--	ND	ND	ND	ND	--	0.770	0.640	0.0329	0.379
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.110	--	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.300	--	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.140	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--
-OTHER-															
ACETONE	--	0.220	3.780	0.059	ND	--	ND	ND	0.0536	ND	--	ND	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	ND	--	ND	ND	0.0086	ND	--	ND	ND	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	0.0155	ND	ND	ND	ND	ND	ND	ND	1.820	2.360	1.967	0.5195	0.609
SEMIVOLATILE ORGANICS (MG/L)															
-PAH-															
ACENAPHTHENE	0.110	0.022	0.012	ND	ND	ND	ND	ND	1.030	0.902	ND	0.420	ND	0.537	0.524
ACENAPHTHYLENE	0.250	0.048	0.018	ND	ND	ND	ND	ND	ND	0.084	2.500	(4)	ND	ND	ND
ANTHRACENE	(4)	(4)	0.031	ND	ND	ND	ND	ND	ND	ND	0.300	(4)	ND	0.226	0.140
BENZO(b)FLUORANTHENE	ND	(4,5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	(5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	(6)	(4)	ND	0.102	ND
BENZO(a)PYRENE	(4)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.280	(4)	ND	ND	ND
CHRYSENE	0.024	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.880	(4)	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.061	0.024	ND	ND	ND	ND	ND	ND	0.930	ND	2.700	(4)	0.680	0.223	0.174
FLUORENE	0.240	0.026	0.010	ND	ND	ND	ND	ND	ND	ND	4.700	(4)	0.660	0.197	0.198
INDENO(1,2,3,-cd)PYRENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	(4)	ND	ND	ND
NAPHTHALENE	1.200	0.260	0.136	ND	ND	ND	ND	ND	6.034	0.445	13.000	2.600	4.130	2.480	1.914
PHENANTHRENE	0.051	0.039	0.028	ND	ND	ND	ND	ND	1.700	ND	1.300	0.440	ND	0.624	0.140
PYRENE	0.044	0.025	0.017	(4)	ND	ND	ND	ND	ND	ND	0.660	0.200	0.690	0.431	0.264
-OTHER-															
BIS(2-ETHYLHEXYL)PHTHALATE	--	0.073	0.016	(4)	0.040	--	0.016	0.018	1.710	ND	--	0.250	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.144	--	ND	ND	ND	0.856
TOTAL PAH	1.980	0.444	0.252	(4)	ND	ND	ND	ND	9.694	1.431	26.320	3.660	6.160	4.820	3.354

TABLE 3 (CON'T)
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS DUP	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)															
-METALS-															
IRON	ND	--	ND	ND	0.05	0.50	0.07	0.06	ND	0.10	20.00	--	6.60	9.70	4.90
ZINC	ND	--	0.007	ND	ND	ND	0.072	0.005	ND	0.09	0.11	--	0.008	0.03	0.02
-CYANIDE-															
TOTAL CYANIDE	ND	--	0.01	ND	0.01	ND	ND	ND	ND	0.01	0.46	--	ND	0.320	0.42
AMENABLE CYANIDE	ND	--	--	ND	ND	ND	ND	--	ND	ND	ND	--	--	ND	ND
FERRO-FERRI CYANIDE	ND	--	0.03	ND	0.01	ND	ND	0.02	ND	0.01	0.46	--	0.05	0.320	0.42
-OTHER-															
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	ND	ND	--	--	--	0.008	0.020	--	--	--	0.015
TOTAL ORGANIC CARBON	4.1	--	14	3.2	4.2	4.6	9	6	3.7	4.1	11	--	24	15.3	11
SULFATE	--	--	74.6	--	--	--	65.2	60.6	--	--	--	--	17.7	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	1.730	0.396	0.250	0.000	ND	ND	ND	ND	9.694	1.355	25.660	6.020	8.127	5.340	3.978
FIELD MEASUREMENTS															
pH (8)	5.3	5.3	6.7	7.5	6.6	6.0	6.4	6.4	7.6	6.8	(11)	(11)	(11)	(11)	(11)
CONDUCTIVITY (9)	1830	1830	370	2040	1315	1680	786	786	1890	1225	(11)	(11)	(11)	(11)	(11)
TEMPERATURE (10)	11.2	11.2	8.4	5.9	10.0	17.8	13.3	13.3	3.2	12.6	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.

TABLE 3 (CON'T)
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
##VOLATILE ORGANICS (MG/L)##														
-VOLATILE AROMATICS-														
BENZENE	0.950	0.673	0.482	0.494	0.240	0.298	0.412	0.440	1.900	1.600	1.690	1.520	1.630	1.613
TOLUENE	0.760	0.487	0.335	0.409	0.200	0.295	0.400	0.362	1.600	1.200	0.815	0.353	0.353	0.616
ETHYLBENZENE	2.300	0.803	1.140	0.378	0.071	0.270	0.541	0.464	1.700	1.300	0.855	0.943	1.500	1.956
STYRENE	ND	ND	0.051	ND	ND	ND	ND	ND	0.920	0.610	ND	ND	1.370	ND
TOTAL XYLENE	--	1.230	1.440	1.347	--	ND	0.273	0.227	--	--	1.220	1.270	ND	1.452
m - XYLENE	0.850	--	--	--	0.065	--	--	--	1.200	1.000	--	--	--	--
o - XYLENE	0.810	--	--	--	0.120	--	--	--	0.940	0.770	--	--	--	--
p - XYLENE	0.430	--	--	--	0.058	--	--	--	0.570	0.450	--	--	--	--
TRIMETHYLBENZENE	0.088	--	--	--	0.046	--	--	--	0.120	0.100	--	--	--	--
-OTHER-														
ACETONE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.850	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.350	ND	ND	ND
TOTAL VOLATILE AROMATICS	6.188	3.193	3.448	2.628	0.800	0.863	1.626	1.493	8.950	7.030	4.580	4.086	4.853	5.637
##SEMIVOLATILE ORGANICS (MG/L)##														
-PAH-														
ACENAPHTHENE	0.980	0.240	0.187	0.218	0.260	17.300	150.280	195.500	37.000	48.000	ND	0.890	1.200	3.580
ACENAPHTHYLENE	8.300	ND	0.041	0.218	2.400	ND	150.280	197.200	26.000	59.000	ND	ND	ND	3.300
ANTHRACENE	0.510	ND	ND	ND	ND	7.600	178.330	227.800	11.000	16.000	ND	ND	ND	5.290
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	4.000	6.600	ND	ND	ND	0.540
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	7.200	4.100	ND	ND	ND	0.580
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	ND	ND	ND	ND	ND	18.360	23.970	(6)	(6)	ND	ND	ND	ND
BENZO(a)PYRENE	0.290	ND	ND	ND	ND	ND	ND	ND	4.800	6.500	ND	ND	ND	0.560
CHRYSENE	1.400	ND	ND	ND	ND	ND	ND	26.350	25.000	17.000	ND	ND	ND	0.680
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	4.200	ND	0.014	ND	0.150	6.300	43.860	59.500	93.000	74.000	ND	ND	1.310	2.510
FLUORENE	13.000	ND	0.026	0.100	3.900	7.600	62.220	80.920	120.000	140.000	ND	ND	ND	1.980
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	33.000	6.120	3.970	2.392	11.000	39.400	331.500	413.100	280.000	300.000	6.980	5.040	5.910	18.760
PHENANTHRENE	2.000	ND	ND	ND	ND	6.700	178.330	227.800	36.000	45.000	ND	1.340	1.530	5.290
PYRENE	1.000	ND	0.027	ND	(4)	8.100	93.450	112.370	36.000	30.000	ND	0.843	ND	ND
-OTHER-														
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	0.013	ND	--	ND	ND	ND	--	--	ND	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	0.580	--	ND	197.200	247.690	--	--	ND	ND	ND	7.170
TOTAL PAH	64.680	6.360	4.265	2.928	17.710	93.000	1206.610	1564.510	680.000	746.200	6.980	8.113	9.950	43.070

TABLE 3 (CON'T)
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)														
-METALS-														
IRON	61.00	6.50	3.86	5.10	1.10	7.50	5.10	9.40	5.50	14.00	7.60	10.10	9.70	4.80
ZINC	0.29	0.02	0.02	0.01	ND	0.021	0.16	0.33	ND	ND	ND	0.01	0.01	0.03
-CYANIDE-														
TOTAL CYANIDE	0.072	0.06	0.050	0.06	0.013	0.02	0.01	ND	0.075	0.081	0.12	0.060	0.050	0.07
AMENABLE CYANIDE	ND	0.04	ND	ND	0.013	--	ND	ND	0.026	0.024	0.10	ND	ND	ND
FERRO-FERRI CYANIDE	0.072	0.02	0.050	0.06	ND	0.06	0.01	0.01	0.049	0.057	0.02	0.060	0.050	0.07
-OTHER-														
TOTAL RECOVERABLE PHENOLICS	0.043	--	--	0.014	0.019	--	0.43	0.017	0.050	0.043	--	--	--	0.031
TOTAL ORGANIC CARBON	12	20	5.2	9.4	7.4	30	16	12	16	16	28	12.5	13.7	14
SULFATE	--	30.9	--	--	--	84.0	--	--	--	--	14.5	--	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	62.611	9.553	7.621	5.352	16.129	93.863	1058.386	1368.820	662.080	693.663	11.910	12.199	13.433	45.438
FIELD MEASUREMENTS														
pH (8)	(11)	(11)	(11)	(11)	5.8	6.4	(11)	(11)	5.7	5.7	6.9	7.7	7.7	6.7
CONDUCTIVITY (9)	(11)	(11)	(11)	(11)	1640	680	(11)	(11)	1930	1930	1138	2300	2300	1385
TEMPERATURE (10)	(11)	(11)	(11)	(11)	12.7	12.0	(11)	(11)	16.0	16.0	14.3	6.0	6.0	13.1

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) MW-5 ROUND 3 SAMPLING WAS NOT CONDUCTED DUE TO WEATHER OBSTRUCTIONS.

LEGEND

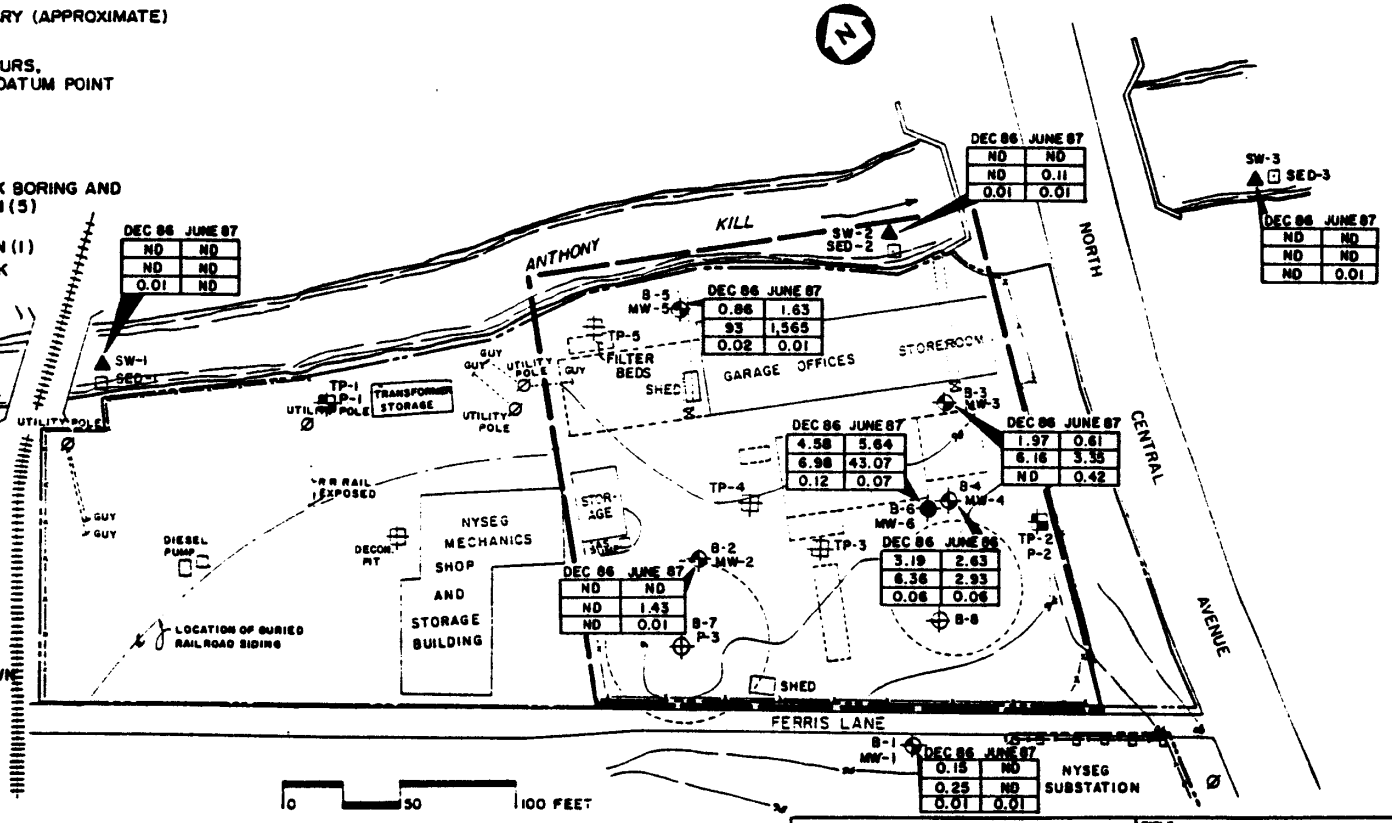
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TOTAL VOCs
TOTAL PAHs
TOTAL CN

CONCENTRATIONS DETECTED IN GROUNDWATER SAMPLES IN mg/l.

NOTES:

1. ALL ORGANIC CONCENTRATIONS ARE FROM GC/MS ANALYSES.
2. WHERE DUPLICATE SAMPLES WERE ANALYZED, THE HIGHER VALUE IS SHOWN.
3. RESULTS ARE SHOWN FOR TWO SAMPLING EVENTS: DECEMBER 1986 AND JUNE 1987, AS LABELLED.
4. B-6 IS THE ONLY BEDROCK WELL; THE REMAINING WELLS SPAN BOTH SOIL AND BEDROCK ZONES.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
DISTRIBUTION OF SELECTED CHEMICALS IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02 FIGURE 14

the detected concentrations were below 1 mg/ℓ. Acetone was detected in the Round 2 sampler blank and the Round 3 trip blank, at concentrations lower than those detected in the environment samples (less than 0.1 mg/ℓ). Methylene chloride was also found in the Round 3 trip blank and the Round 4 sampler blank (less than 0.01 mg/ℓ). Both of these compounds are common laboratory contaminants which are often reported in environmental sampling results and which are not typically associated with coal gasification wastes. Therefore, they are not believed to be site-derived chemicals.

Laboratory analyses indicate the presence of PAHs in all wells. The highest PAH readings were obtained from MW-5, where concentrations were between 17 and 1,565 mg/ℓ over three sampling rounds. (MW-5 was not sampled during Round 3 because of snow cover.) Between the first and fourth sampling rounds, the PAH concentrations in the groundwater at MW-5 increased by two orders of magnitude. This phenomenon was not observed at any of the other wells at the site. In fact, at MW-1, MW-4, and MW-6, total PAH concentrations decreased over this period. Based on Jordan's current understanding of the site, the increase at MW-5 cannot be explained. However, the decrease in PAHs at the other wells may be attributable to disturbances caused during well installation and development, and to the fact that the Round 1 data were HPLC, as opposed to GC/MS. Excluding the HPLC results, total PAH concentrations ranged from "not detected" (ND) to 0.44 mg/ℓ at MW-1; ND to 9.69 mg/ℓ at MW-2; 3.35 to 6.16 mg/ℓ at MW-3; 2.93 to 6.36 mg/ℓ at MW-4; and 6.98 to 43.07 mg/ℓ at MW-6.

Bis(2-ethylhexyl)phthalate was detected in low concentrations (generally less than 0.1 mg/ℓ) in samples from four of the six wells; none was found in MW-5 or MW-6. This compound is often detected in environmental samples, is not a typical constituent of coal gasification wastes, and may be a laboratory contaminant. The compound was also detected in two of the three GC/MS sampler blanks, also at low levels (less than 0.1 mg/ℓ). Therefore, it is not believed to be a site-derived chemical. On the other hand, the compound 2-methylnaphthalene is a constituent of coal tar (USWAG, 1984). It was detected in all downgradient wells in Round 4 samples. The concentrations reported at MW-5 (197 to 247 mg/ℓ) were significantly higher than those reported for the other four wells (0.14 to 7.17 mg/ℓ).

Iron and zinc are natural constituents of groundwater (Todd, 1980). Iron was reported in samples from all wells. Low concentrations of iron were found at MW-1 and MW-2 (less than or equal to 0.5 mg/ℓ), with much higher concentrations detected at the other four wells (1 to 61 mg/ℓ). Therefore, the iron content of the groundwater on-site appears to have been elevated by site activities. Zinc concentrations do not vary significantly between the upgradient and downgradient wells. The highest reported zinc concentration was 0.33 mg/ℓ at MW-5 (Round 4). The remaining values were almost all at or below 0.1 mg/ℓ.

Cyanide is not a natural component of groundwater. Both amenable (free) cyanide and ferro-ferricyanide were detected in the Mechanicville groundwater samples. At MW-1, MW-2, and MW-5, the concentrations of total cyanide were always less than 0.03 mg/ℓ. At the remaining three wells, located next to the former purifier/oxide house, total cyanide concentrations ranged from 0.05 to 0.46 mg/ℓ, predominantly in the complex form (i.e., ferro-ferricyanide).

Predictably, the highest cyanide concentrations were found at MW-3, which is downgradient of the former purifier/oxide structures.

Phenolics, which were only included in the Round 1 and 4 analytical programs, were not detected in the upgradient samples, and were found in only one sample from MW-2 at 0.008 mg/ℓ. Elevated concentrations of phenolics were present in samples from the four remaining downgradient wells. The range of phenolic concentrations at these wells was from 0.014 to 0.43 mg/ℓ.

Sulfate analysis was requested during Round 2 only. Sulfate was present in all wells at concentrations ranging from 14.5 to 84 mg/ℓ (74.6 mg/ℓ was detected at the upgradient well, MW-1). Sulfate is a natural constituent of groundwater resulting from the oxidation of sulfide ores, gypsum, and anhydrite. Concentrations up to 300 mg/ℓ are common in natural waters (Todd, 1980).

Finally, TOC concentrations in the groundwater samples all fell within a relatively small range: 3.2 to 30 mg/ℓ. Samples from MW-1 and MW-2 generally contained less than 10 mg/ℓ TOC, while those from MW-3 through MW-6 generally contained greater than 10 mg/ℓ. The TOC results provide further evidence of the impact of site activities on organics in groundwater.

To summarize, coal gasification waste-related chemicals (i.e., VOCs, PAHs, iron, cyanide, and phenolics) are present in elevated concentrations in groundwater within the study area of the site. These chemicals were found in the highest concentrations near the former locations of the relief gas holder, the purifier and oxide houses, and the filter beds. They were detected not only in the wells spanning the fill soils and shallow bedrock, but also in the deep bedrock well (MW-6).

3.5.3 Surface Water

Surface water samples were collected from three locations along the Anthony Kill during four sampling episodes (September and December of 1986 and March and June of 1987). Samples were collected from stations located upstream (SW-1), adjacent (SW-2), and downstream (SW-3) relative to the site. Samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, phenolics, TOC, oil and grease, and sulfate. The analytical results are presented in Table 4 with concentrations expressed in mg/ℓ (ppm). Quality assurance water samples included sampler blanks and trip blanks (see Section 3.5.2); results are presented in Appendix B-2.

No volatile aromatics were detected in any surface water samples. PAHs were detected only at SW-2 in Round 4, with a total PAH concentration of 0.105 mg/ℓ. Other organics detected in surface water included acetone (SW-2), methylene chloride (SW-1), and bis(2-ethylhexyl)phthalate (all three stations). Since these compounds were found at low levels (less than 0.1 mg/ℓ) and were also found in some sampler and trip blanks, their presence appears to be due to laboratory contamination. It is unlikely, then, that acetone, methylene chloride, and bis(2-ethylhexyl)phthalate are site-derived chemicals.

The metals analyses indicate the presence of iron in samples from all three stations at comparable levels (0.037 to 1.09 mg/ℓ). The highest concentration

TABLE 4
CHEMICALS FOUND IN SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301	SW-401	SW-102	SW-202	SW-202	SW-302	SW-402	SW-402	SW-103	SW-103	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS DUP	GC/MS	HPLC	GC/MS	GC/MS DUP	GC/MS	GC/MS	GC/MS DUP	HPLC	HPLC DUP	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	--	--	ND	ND	ND
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
-OTHER-																
ACETONE	--	ND	ND	ND	ND	--	ND	0.010	ND	ND	ND	--	--	ND	ND	ND
METHYLENE CHLORIDE	--	--	0.0054	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANICS (MG/L)																
-PAH-																
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(a.h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	ND	ND	0.016	--	ND	ND	ND	ND	0.012	--	--	0.025	ND	0.030
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.069	ND	--	--	ND	ND	ND
TOTAL PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.105	ND	ND	ND	ND	ND	ND

TABLE 4 (CON'T)
CHEMICALS FOUND IN SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
						##OTHER CHEMICALS (MG/L)##										
-METALS-																
IRON	0.23	0.47	1.09	0.99	0.037	0.23	0.40	0.45	0.79	0.36	0.33	0.22	0.24	0.41	0.78	0.33
ZINC	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	0.01
-CYANIDE-																
TOTAL CYANIDE	ND	0.01	ND	ND	ND	ND	0.01	ND	ND	0.01	ND	ND	ND	ND	ND	0.01
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	ND
FERRO-FERRI CYANIDE	ND	0.01	ND	ND	ND	ND	0.02	0.03	ND	0.01	ND	ND	ND	0.01	ND	0.01
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	0.24	ND	--	--	--	0.013	0.005	ND	0.037	--	--	ND
TOTAL ORGANIC CARBON	5.5	11	11.9	7.3	6.4	ND	10	9	7.5	6.0	6.0	5.0	5.4	10.0	6.2	5.5
OIL AND GREASE	11	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
SULFATE	--	16.4	--	--	--	--	19.3	18.6	--	--	--	--	--	18.4	--	--

NOTES:
(1) INDICATES SAMPLE VALUES WERE OBTAINED BY GC/MS (EPA METHODS 624 AND 625) OR BY HPLC (EPA METHODS 602 AND 610).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED

of iron was found at the upstream location (SW-1). Zinc was detected only in the Round 4 samples, and measured 0.01 mg/ℓ at all three stations. Ferro-ferricyanide was found in Round 2 samples from each station (0.01 to 0.03 mg/ℓ) and in Round 4 samples taken at SW-2 and SW-3 (0.01 mg/ℓ). Phenolics were detected at the downstream sample (SW-3), in Round 1, and at SW-1 and SW-2 in Round 4. These results show no clear pattern of site contributions of these chemicals to the Anthony Kill.

Oil and grease analysis was performed at SW-1 and SW-3 during Round 1. This analysis was requested after an oily sheen originating upstream of the site was observed by Jordan samplers. The upstream sample contained 11 mg/ℓ of oil and grease, but none was detected at the downstream station. This finding demonstrates that the source of the sheen was indeed upstream of the site.

Sulfate was analyzed during Round 2 only and was detected at similar concentrations in all three surface water samples (16.4 to 19.3 mg/ℓ).

In summary, results of the analysis of surface water samples collected from the Anthony Kill do not show an adverse impact attributable to site activities. Even though it is likely that chemicals dissolved in groundwater are being discharged from the site to the stream, the resulting concentrations would be expected to be below detection limits due to volatilization and dilution. Compared to the low flow discharge of 17 cfs for the Anthony Kill, the site groundwater discharge is estimated to be less than 0.05 cfs (based on the average hydraulic conductivity of 1.9 ft/day for the unconsolidated soils and shallow bedrock). The Task 2 samples did provide evidence of chemical contributions to the Anthony Kill from upstream sources.

3.5.4 Sediment

Sediment samples were collected during four sampling episodes (September and December of 1986 and March and June of 1987) from the same locations along the Anthony Kill as surface water samples. The samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, phenolics, TOC, and sulfate. The analytical results are presented in Table 5 with concentrations expressed in mg/kg (ppm).

No volatile aromatic compounds were detected in any samples collected from SED-1, the upstream location. The only volatile aromatics detected at the other stations were during Round 3: benzene was detected at SED-2 (0.07 mg/ℓ), the midstream location; and toluene was found at SED-3 (0.07 mg/ℓ), the downstream location. Acetone and methylene chloride were found in all of the Round 4 sediment samples in similar concentrations. These VOCs are common contaminants not typically associated with coal tar wastes.

Several PAHs were detected at all three sampling locations. PAHs were detected at the upstream location (SED-1) during the first and second rounds of sampling only (7.3 to 8.6 mg/ℓ). At SED-2 adjacent to the site, PAHs were detected during all four rounds of sampling. The first and second rounds of samples at SED-3 contained PAHs (16.78 to 45.64 mg/kg), while only trace amounts were detected in Round 3 and no PAHs were found in Round 4. The Round 2 sample from SED-2 contained the highest concentration of total PAHs found in any of the

TABLE 5
CHEMICALS FOUND IN SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301	SED-401	SED-102	SED-202	SED-202	SED-302	SED-402	SED-402	SED-103	SED-103	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS DUP	GC/MS	HPLC	HPLC	HPLC DUP	GC/MS	GC/MS	GC/MS DUP	HPLC	HPLC DUP	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
$$VOLATILE ORGANICS (MG/KG)$$																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.070	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
m - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
o - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
p - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
-OTHER-																
ACETONE	--	--	ND	ND	5.300	--	--	--	ND	6.600	3.800	--	--	--	ND	4.000
METHYLENE CHLORIDE	--	--	ND	ND	2.400	--	--	--	ND	3.000	2.900	--	--	--	ND	2.300
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	0.07	ND
$$SEMIVOLATILE ORGANICS (MG/KG)$$																
-PAH-																
ACENAPHTHENE	(4)	ND	ND	ND	ND	(4)	ND	ND	ND	0.700	1.600	0.910	1.100	(4)	ND	ND
ACENAPHTHYLENE	0.740	ND	ND	ND	ND	0.900	ND	ND	ND	ND	1.300	2.700	3.500	8.800	ND	ND
ANTHRACENE	(4)	(4)	ND	ND	ND	(4)	(4)	(4)	(4)	ND	ND	1.100	1.200	(4)	(4)	ND
BENZO(b)FLUORANTHENE	(4)	0.580	ND	ND	ND	(4)	(4)	2.000	(4,5)	ND	ND	1.000	0.940	0.630	(4,5)	ND
BENZO(k)FLUORANTHENE	(4)	(5)	ND	ND	ND	(4)	(5)	4.800	(4,5)	ND	ND	0.930	1.000	(5)	(4,5)	ND
BENZO(g,h,i)PERYLENE	ND	3.100	ND	ND	ND	ND	(4)	15.000	ND	ND	ND	ND	ND	4.400	(4)	ND
BENZO(a)ANTHRACENE	(6)	(6)	ND	ND	ND	(6)	(6)	(6)	(4)	ND	ND	(6)	(6)	(6)	(4)	ND
BENZO(a)PYRENE	(4)	0.450	ND	ND	ND	(4)	(4)	6.100	(4)	ND	ND	0.740	0.800	0.650	(4)	ND
CHRYSENE	0.520	0.610	ND	ND	ND	0.460	(4)	8.500	(4)	ND	ND	2.000	2.100	(4)	(4)	ND
DIBENZO(a.h)ANTHRACENE	ND	0.930	ND	ND	ND	(4)	ND	7.100	ND	ND	ND	ND	1.600	2.300	ND	ND
FLUORANTHENE	0.960	0.470	ND	ND	ND	0.920	(4)	5.600	(4)	ND	ND	2.200	4.700	(4)	(4)	ND
FLUORENE	1.500	ND	ND	ND	ND	1.400	ND	ND	ND	ND	0.500	4.000	4.300	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	(7)	ND	ND	ND	(4)	ND	(7)	ND	ND	ND	(4)	(4)	(7)	(4)	ND
NAPHTHALENE	3.600	ND	ND	ND	ND	3.300	ND	19.000	(4)	4.400	13.000	10.000	19.000	ND	ND	ND
PHENANTHRENE	0.570	0.390	ND	ND	ND	(4)	(4)	1.800	(4)	ND	ND	2.000	2.300	(4)	(4)	ND
PYRENE	0.690	0.770	ND	ND	ND	0.960	(4)	5.900	(4)	ND	ND	1.900	3.100	(4)	(4)	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	(4)	ND	ND	--	--	--	(4)	ND	ND	--	--	--	(4)	ND
2-METHYLNAPHTHALENE	--	--	ND	ND	ND	--	--	--	ND	0.900	ND	--	--	--	ND	ND
DI-N-BUTYL PHTHALATE	--	--	--	--	2.100	--	--	--	--	ND	4.000	--	--	--	--	3.200
TOTAL PAH	8.580	7.300	ND	ND	ND	7.940	(3)	75.800	(4)	5.100	16.400	29.480	45.640	16.780	(4)	ND

TABLE 5 (CON'T)
CHEMICALS FOUND IN SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301 DUP	SED-401	SED-102	SED-202	SED-202 DUP	SED-302	SED-402	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
‡‡OTHER CHEMICALS (MG/KG)‡‡																
-METALS-																
IRON	16000	9200	10800	8320	15600	21000	19000	16000	9980	30800	23600	13000	13000	20000	13000	33100
ZINC	47	36	37	31	--	51	69	100	46	--	--	65	60	88	76	--
-CYANIDE-																
TOTAL CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	3.1	ND	ND	ND	ND	6.1	3.1	ND	ND	ND	ND	1.8
TOTAL ORGANIC CARBON	3000	4600	4790	3320	9700	7700	3500	7600	16100	11000	22000	4500	4600	4600	9350	15000
SULFATE	--	ND	--	--	--	--	60	40	--	--	--	--	--	30	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE REPORTING LIMIT.
(5) BENZO(b)FLUORANTHENE AND BENZO(k)FLUORANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) INDENO(1,2,3-cd)PYRENE AND BENZO(g,h,i)PERYLENE, COELUTED.

sediment samples (75.8 mg/kg). It is important to note that data for Rounds 1 and 2 were obtained by HPLC. Looking just at the GC/MS analytical results from Rounds 3 and 4, it appears that PAH concentrations in Anthony Kill sediment directly adjacent to the site are elevated compared to concentrations measured at the upstream and downstream sampling locations.

All three sediment samples contained iron and zinc in fairly consistent concentrations. Iron levels ranged from 8,320 to 33,100 mg/kg, while zinc concentrations ranged from 31 to 100 mg/kg. Cyanide compounds were not detected in any sediment samples. Phenolics were detected in Round 4 samples at all three stations at comparable levels (1.8 to 6.1 mg/kg). Sulfate was detected at the midstream (SED-2) and downstream (SED-3) locations, in concentrations of 30 to 60 mg/kg. Thus, there is evidence that sulfate concentrations of the Anthony Kill sediments are elevated above background levels (upstream) due to site activities.

4.0 SITE ASSESSMENT

This section focuses on the significance of the findings of the Task 2 investigation at the Mechanicville site. Chemicals related to coal gasification wastes were detected in the soil, groundwater, surface water, and sediment at or near the site. The analytical results are compared to relevant criteria (where available) in Section 4.1. Sections 4.2 and 4.3 contain a preliminary identification of exposure risks and potentially applicable remedial alternatives that will be refined in subsequent tasks.

4.1 COMPARISON OF ANALYTICAL RESULTS TO REGULATORY CRITERIA

Analytical results are compared to relevant state criteria (where available) in this section. As part of the site assessment process, environmental and health criteria that may be relevant at the site were reviewed. The review covered regulatory standards and guidelines included in the following: (1) New York State Regulations; (2) National Drinking Water Regulations; (3) USEPA Ambient Water Quality Criteria (AWQC); and (4) USEPA Health Advisories. Relevant criteria are shown in Table 6.

Criteria are not available for the chemicals of interest in soils and sediments. A qualitative assessment of risks associated with chemicals in these media is provided in Section 4.2.1. Criteria are also lacking for some of the detected chemicals in groundwater and surface water. New York State has established criteria for all the chemicals regulated at the federal level, plus some that are not. Furthermore, where both federal and state criteria exist for a given chemical, the New York State standard is generally more stringent. For these reasons, New York State standards and guidance values are used in this assessment. State standards are enforced by regulation, while guidance values are not enforceable by law.

4.1.1 Groundwater

The relevant federal and state criteria for groundwater identified in the review are listed in Table 6. Most of the criteria are based on the assumption that the groundwater will be used as a drinking water supply. As previously noted, the Mechanicville site is not located over a water supply aquifer. The nearest water supply wells are about one mile southwest of the site (i.e., upgradient) in the Town of Halfmoon. Drinking water standards, therefore, are not presently applicable at this site; they are included in this assessment for hypothetical comparison purposes only.

The New York State standards and guidelines are for fresh groundwater used as a source of potable water. The federal maximum contaminant levels (MCLs) are enforceable standards for water supply systems promulgated under the National Primary Drinking Water Act. Maximum contaminant level goals (MCLGs) are non-enforceable health goals designed to prevent any adverse health effects or risks and were established under the Safe Drinking Water Act (SDWA) without considering the cost or feasibility of attainment. USEPA Health Advisories, established by the Office of Drinking Water, are set at levels where adverse health effects are not expected. Carcinogenic risks are not taken into

TABLE 6
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)				
	CLASS D --SURFACE WATER--		CLASS GA --GROUNDWATER--					--AQUATIC LIFE(6)--		--HUMAN HEALTH(9)--		
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION
VOLATILE ORGANICS (MG/L)												
-VOLATILE AROMATICS-												
BENZENE	----	0.006	ND (11)	----	0.005 (12)	0	----	5.3	----	0.00067	----	0.00066
TOLUENE	----	----	----	0.05	----	2 (12)	11	17.5	----	15	424	14.3
ETHYLBENZENE	----	----	----	0.05	----	0.68 (12)	3.40	32	----	2.40	3.28	1.4
STYRENE	----	----	0.931	----	----	0.140 (12)	----	----	----	----	----	----
TOTAL XYLENE	----	----	----	0.05	----	0.44 (12)	2.20	----	----	----	----	----
m-XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
o-XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
p-XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
TRIMETHYLBENZENE	----	----	----	0.05	----	----	----	----	----	----	----	----
-OTHER-												
ACETONE	----	----	----	----	----	----	----	----	----	----	----	----
METHYLENE CHLORIDE	----	----	----	0.05	----	----	----	12	----	----	----	----
SEMIVOLATILE ORGANICS (MG/L)												
-PAH-												
ACENAPHTHENE	----	----	----	0.02	----	----	----	0.52	----	0.02 (13)	----	0.02 (13)
ACENAPHTHYLENE	----	----	----	----	----	----	----	----	----	----	----	----
ANTHRACENE	----	----	----	0.05	----	----	----	----	----	----	----	----
BENZO(b)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
BENZO(k)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
BENZO(g,h,i)PERYLENE	----	----	----	----	----	----	----	----	----	----	----	----
BENZO(a)ANTHRACENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
BENZO(a)PYRENE	----	0.0000012	ND	----	----	----	----	----	----	0.0000031	----	0.0000028
CHRYSENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
DIBENZO(a,h)ANTHRACENE	----	----	----	----	----	----	----	----	----	----	----	----
FLUORANTHENE	----	----	----	0.05	----	----	----	3.98	----	0.19	0.054	0.042
FLUORENE	----	----	----	0.05	----	----	----	----	----	----	----	----
INDENO(1,2,3,-cd)PYRENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
NAPHTHALENE	----	----	----	0.01	----	----	----	2.3	0.62	----	----	----
PHENANTHRENE	----	----	----	0.05	----	----	----	----	----	----	----	----
PYRENE	----	----	----	0.05	----	----	----	----	----	----	----	----
TOTAL CARCINOGENIC PAH	----	----	----	----	----	----	----	----	----	0.0000031	----	0.0000028
-OTHER-												
BIS(2-ETHYLHEXYL)PHTHALATE	----	----	4.2	----	----	----	----	0.94	0.003	21	50	15
TOTAL NEW YORK STATE REGULATED ORGANICS (14)	----	----	0.1	----	----	----	----	----	----	----	----	----

TABLE 6 (CONT.)
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)				
	CLASS D --SURFACE WATER--		CLASS GA --GROUNDWATER--					--AQUATIC LIFE(6)--		--HUMAN HEALTH(9)--		
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION
OTHER CHEMICALS (MG/L)												
-METALS-												
IRON	0.3	----	0.3	----	----	0.3 (15)	----	----	----	----	----	----
ZINC	(16)	----	5	----	----	5 (15)	----	----	----	5 (13)	----	5 (13)
-CYANIDE-												
TOTAL CYANIDE	----	----	0.2	----	----	----	0.75	----	----	----	----	----
FERRO-FERRI CYANIDE	----	----	----	----	----	----	----	----	----	----	----	----
FREE CYANIDE	0.022	----	----	----	----	----	----	0.0035	0.052	0.2	----	0.2
-OTHER-												
TOTAL RECOVERABLE PHENOLICS (17)	----	----	0.001	----	----	----	----	----	----	3.5	----	3.5
TOTAL ORGANIC CARBON	----	----	----	----	----	----	----	----	----	----	----	----
SULFATE	----	----	250.0	----	----	----	----	----	----	----	----	----

NOTES:

(1) NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES 85-W-38 AS REVISED APRIL 1, 1987. CLASS D SURFACE WATERS ARE SUITABLE FOR SECONDARY CONTACT RECREATION; CLASS GA DENOTES FRESH GROUNDWATER WHICH IS A SOURCE OF POTABLE WATER SUPPLY.

(2) MCLs (MAXIMUM CONTAMINANT LEVELS) ARE ENFORCEABLE STANDARDS FOR PUBLIC WATER SUPPLY SYSTEMS PROMULGATED UNDER THE SAFE DRINKING WATER ACT (40 CFR PART 141).

(3) MCLGs (MAXIMUM CONTAMINANT LEVEL GOALS) ARE PROPOSED NON-ENFORCEABLE HEALTH GOALS AND HAVE BEEN SET AT A LEVEL OF NO KNOWN OR ANTICIPATED HEALTH EFFECTS.

(4) EPA HEALTH ADVISORIES (FORMERLY SNARLs) ARE NON-ENFORCEABLE CRITERIA ESTABLISHED BY THE OFFICE OF DRINKING WATER. THEY ARE SET AT LEVELS WHERE ADVERSE HEALTH EFFECTS ARE NOT EXPECTED.

(5) WATER QUALITY CRITERIA WERE FORMULATED TO PROTECT AQUATIC LIFE AND HUMAN HEALTH FROM POLLUTANTS IN SURFACE WATERS. (40 CFR SUMMARY, FRI. NOV. 28, 1980, P. 79318-79379). WATER QUALITY CRITERIA HAVE NO REGULATORY IMPACT, BUT ARE USEFUL IN ESTABLISHING WATER QUALITY-BASED EFFLUENT LIMITATIONS, WATER QUALITY STANDARDS, AND TOXIC POLLUTANT EFFLUENT STANDARDS.

(6) GUIDANCE CRITERIA FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE. CONCENTRATIONS SPECIFIED SHOULD PROTECT MOST (BUT NOT NECESSARILY ALL) AQUATIC FRESHWATER LIFE AND ITS USES.

(7) THE ACUTE TOXICITY LEVEL IS THE MAXIMUM TO WHICH ORGANISMS CAN BE EXPOSED WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.

(8) CHRONIC TOXICITY LEVEL IS THE 24-HOUR AVERAGE VALUE THAT ORGANISMS CAN BE EXPOSED TO WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.

(9) HUMAN HEALTH GUIDELINES WERE DERIVED BASED ON "GUIDELINES AND METHODOLOGY USED IN THE PREPARATION OF HEALTH EFFECT ASSESSMENT CHAPTERS OF THE CONSENT DECREE WATER CRITERIA DOCUMENTS" DEVELOPED BY EPA'S OFFICE OF RESEARCH AND DEVELOPMENT.

(10) THESE ADJUSTED CRITERIA, FOR DRINKING WATER INGESTION ONLY, WERE DERIVED FROM PUBLISHED EPA AWQC FOR COMBINED FISH AND DRINKING WATER INGESTION AND FOR FISH INGESTION ALONE. THESE ADJUSTED VALUES ARE NOT OFFICIAL EPA AWQC, BUT MAY BE APPROPRIATE FOR SUPERFUND SITES WITH CONTAMINATED GROUNDWATER. (USEPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, OCTOBER 1986, PAGES 61-64).

(11) ND = NOT DETECTABLE BY USEPA METHODS 602 OR 624 (BENZENE) OR METHODS 610 OR 625 (BENZO(a)PYRENE).

(12) PROPOSED

(13) TO PROTECT AGAINST TASTE AND ODOR EFFECTS; NOT HEALTH BASED.

(14) NEW YORK STATE HAS A MAXIMUM WATER QUALITY VALUE OF 0.1 MG/L OF DESIGNATED ORGANIC CHEMICALS FOR SURFACE WATER AND GROUNDWATER DISCHARGES REQUIRING PERMITS. THE DESIGNATED ORGANICS INCLUDE ALL OF THE ORGANIC CHEMICALS LISTED EXCEPT ACENAPHTHYLENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND STYRENE.

(15) SECONDARY MAXIMUM CONTAMINANT LEVELS WHICH APPLY TO PUBLIC WATER SYSTEMS. THESE REGULATIONS CONTROL CONTAMINANTS IN DRINKING WATER THAT PRIMARILY AFFECT THE AESTHETIC QUALITIES RELATING TO THE PUBLIC ACCEPTANCE OF DRINKING WATER (40 CFR PART 143).

(16) ZINC STANDARD FOR CLASS D WATERS IS DETERMINED BY THE FORMULA EXP(0.83[LN(PPM HARDNESS)]+1.95) AND APPLIES TO THE ACID SOLUBLE FORM.

(17) AS MEASURED BY APHA METHOD 510.B WHICH IS EQUIVALENT TO EPA METHOD 420.1 (SEE APHA, 1985; USEPA, 1983).

consideration in setting USEPA Health Advisories. These advisories do, however, take into account the length of exposure to the chemical in drinking water.

As shown in Table 6, standards have been promulgated by the State of New York for 10 of the chemicals detected in groundwater at the site: benzene, styrene, benzo(a)pyrene, bis(2-ethylhexyl)phthalate, total regulated organics, iron, zinc, cyanide, phenolic compounds, and sulfate. Concentrations in excess of the standard for each of these chemicals (except bis(2-ethylhexyl)phthalate, zinc, and sulfate) were measured during Task 2.

The benzene standard (non-detectable levels) was exceeded at MW-3, MW-4, MW-5, and MW-6 in each sampling round (Figure 15). Benzene was not detected at MW-2, and detected at MW-1 only in Round 2. The standard for benzo(a)pyrene (non-detectable levels) was exceeded at MW-3, MW-4, and MW-6 in at least one sampling round (see Figure 15). All but one of these exceedances occurred during Round 1 when HPLC analysis was used.

The styrene groundwater standard (i.e., 0.931 mg/ℓ) was nearly equaled at MW-6 in Round 1, but was exceeded only in the MW-6 Round 3 duplicate sample; this compound was detected only at MW-6 (Figure 16). The New York State Class GA groundwater standard for regulated organics (i.e., 0.1 mg/ℓ) was exceeded in all sampling rounds at MW-3, MW-4, MW-5, and MW-6. The same standard was exceeded at MW-1 and MW-2 in two of the four sampling events (see Figure 16).

Iron concentrations above 0.3 mg/ℓ were detected at MW-3, MW-4, MW-5, and MW-6 in all sampling rounds (Figure 17). This iron standard was also exceeded in the Round 1 sample from MW-2; iron was not detected in samples from MW-1. Total cyanide concentrations above the 0.2 mg/ℓ standard were found only at MW-3 (three of four sampling rounds). While cyanide was detected at each of the other monitoring wells, the 0.2-mg/ℓ standard was not exceeded (see Figure 17). Total phenolics concentrations exceeded the groundwater standard (i.e., 0.001 mg/ℓ) at MW-3, MW-4, MW-5, and MW-6 in both sampling rounds in which the analysis was included. Phenolic compounds exceeded the standard at MW-2 in Round 4, but were not detected in the upgradient well (see Figure 17).

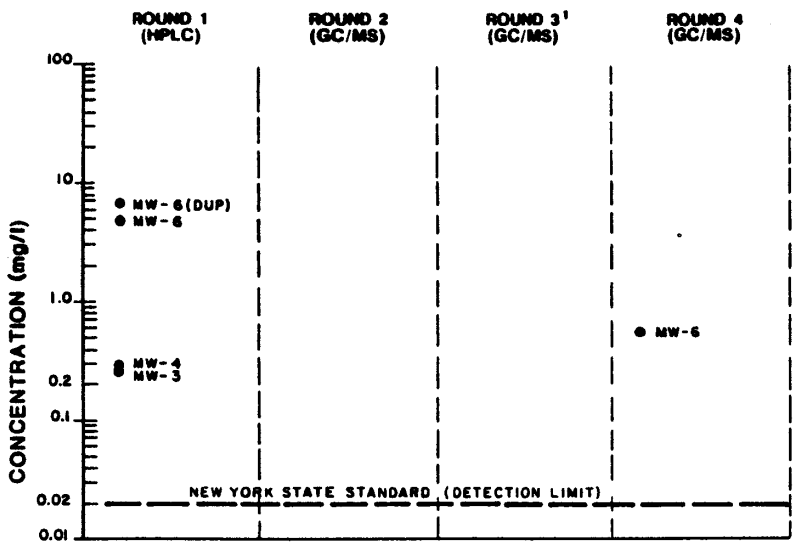
New York State has guidance values for 16 chemicals detected at Mechanicville, all of which were exceeded at one or more monitoring wells. Groundwater samples that contained chemicals in excess of the New York State guidance values are listed in Table 7. The frequency of guidance value exceedances at the wells increased in the following order: MW-2 (6 exceedances), MW-1 (7), MW-4 and MW-5 (28), MW-3 (34), and MW-6 (39). Note that fewer samples were collected from MW-5 than from the other wells (no Round 3 samples).

4.1.2 Surface Water

Table 6 also contains relevant federal and state criteria for surface water. The listed New York State criteria are for Class D waters, which is the classification of the Anthony Kill near the Mechanicville site. USEPA AWQC for aquatic life and human health are also listed.

New York State has Class D standards for one chemical detected in the Anthony Kill surface water samples: iron. The iron standard of 0.3 mg/ℓ was exceeded

BENZO (a) PYRENE IN GROUNDWATER

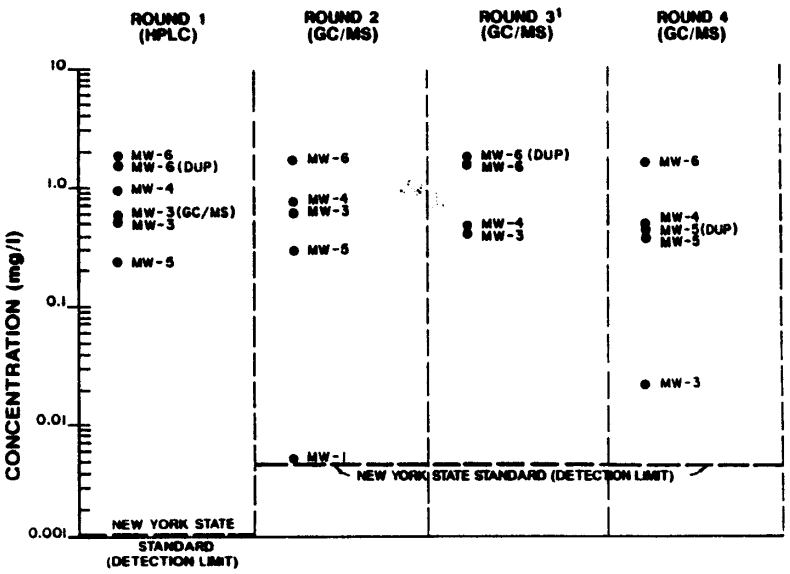


SAMPLES IN WHICH BENZO (a) PYRENE WAS NOT DETECTED

ROUND 1 (HPLC)	ROUND 2 (GC/MS)	ROUND 3[1] (GC/MS)	ROUND 4 (GC/MS)
MW-1[2]	MW-1	MW-1	MW-1
MW-1(GC/MS)[2]	MW-2	MW-2	MW-2
MW-2	MW-2(DUP)	MW-3	MW-3
MW-3(GC/MS)[2]	MW-3	MW-4	MW-4
MW-5	MW-4	MW-6	MW-5
	MW-5	MW-6(DUP)	MW-5(DUP)
	MW-6		

[1] MW-5 WAS NOT SAMPLED IN ROUND 3.
[2] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT

BENZENE IN GROUNDWATER



SAMPLES IN WHICH BENZENE WAS NOT DETECTED

ROUND 1 (HPLC)	ROUND 2 (GC/MS)	ROUND 3[1] (GC/MS)	ROUND 4 (GC/MS)
MW-1	MW-2	MW-1	MW-1
MW-1(GC/MS)	MW-2(DUP)	MW-2	MW-2
MW-2			

[1] MW-5 WAS NOT SAMPLED IN ROUND 3.

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TITLE
BENZO (a) PYRENE AND BENZENE IN GROUNDWATER MECHANICVILLE SITE

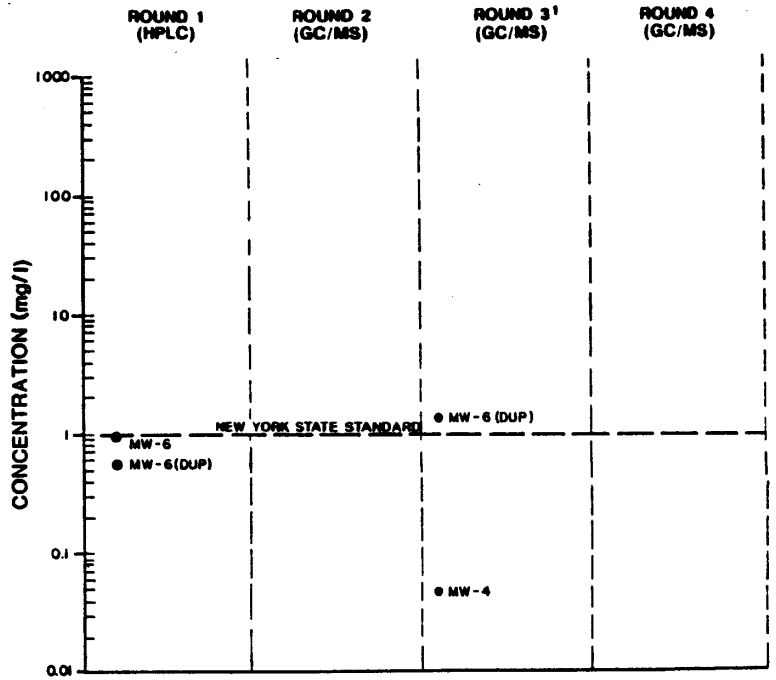
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4946-02

FIGURE 15

STYRENE IN GROUNDWATER

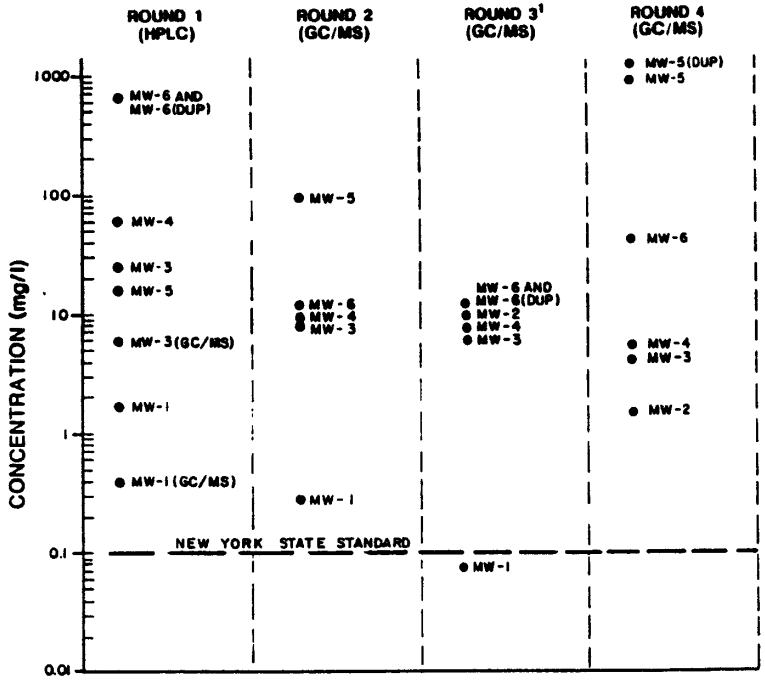


SAMPLES IN WHICH STYRENE WAS NOT DETECTED.

ROUND 1 (HPLC)	ROUND 2 (GC/MS)	ROUND 3[1] (GC/MS)	ROUND 4 (GC/MS)
MW-1	MW-1	MW-1	MW-1
MW-1(GC/MS)	MW-2	MW-2	MW-2
MW-2	MW-2(DUP)	MW-3	MW-3
MW-3	MW-3	MW-6	MW-4
MW-3(GC/MS)	MW-4		MW-5
MW-4	MW-5		MW-5(DUP)
MW-5	MW-6		MW-6

[1]MW-5 WAS NOT SAMPLED ON ROUND 3.

TOTAL NEW YORK STATE REGULATED ORGANICS IN GROUNDWATER



SAMPLES IN WHICH REGULATED ORGANICS WERE NOT DETECTED

ROUND 1 (HPLC)	ROUND 2 (GC/MS)	ROUND 3[1] (GC/MS)	ROUND 4 (GC/MS)
MW-2	MW-2		MW-1
	MW-2(DUP)		

[1]MW-5 WAS NOT SAMPLED ON ROUND 3.

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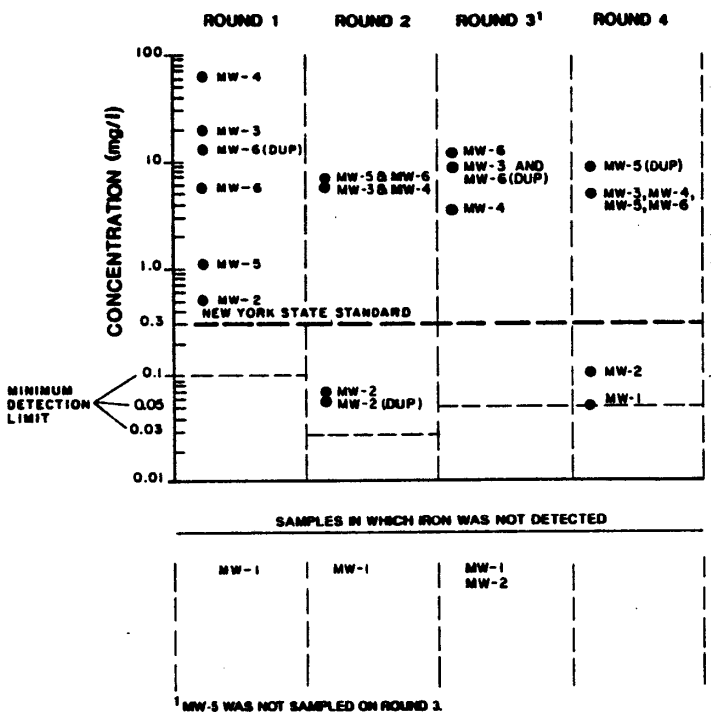
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
STYRENE AND TOTAL NEW YORK STATE REGULATED ORGANICS IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

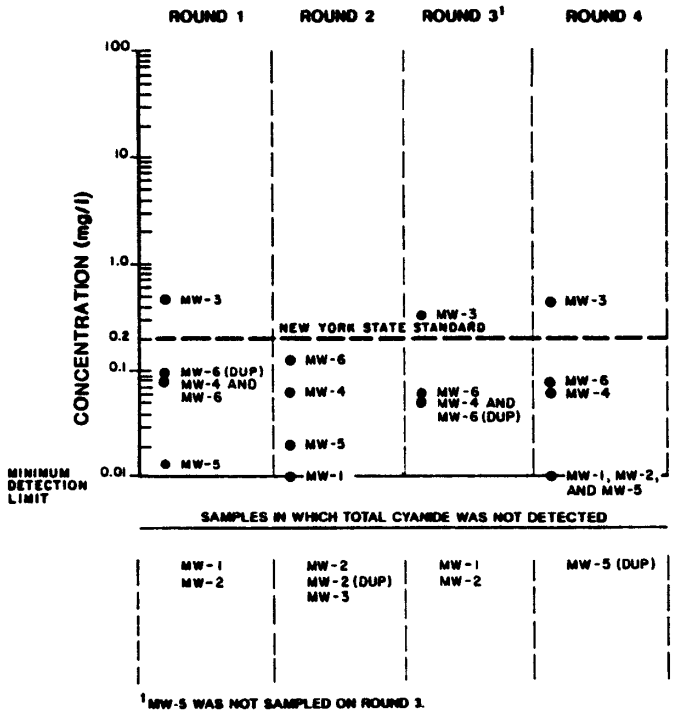
PROJECT NO. 4948-02 FIGURE 16

IRON IN GROUNDWATER



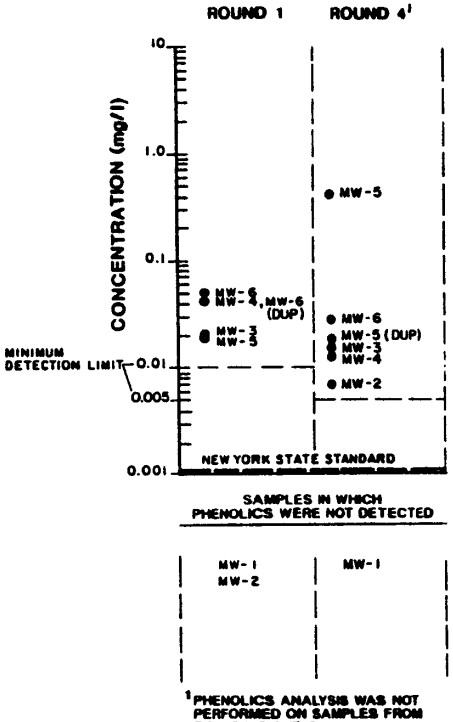
[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

TOTAL CYANIDE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

PHENOLICS IN GROUNDWATER



[1] PHENOLICS ANALYSIS WAS NOT PERFORMED ON SAMPLES FROM ROUNDS 2 AND 3.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
IRON, TOTAL CYANIDE, AND PHENOLICS IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02

FIGURE 17

TABLE 7

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

Chemical	Guidance Value (mg/ℓ)[1]	Well Number	Round Number
Volatile Aromatics			
Toluene	0.05	MW-3	1,3
		MW-4	1,2,3,4
		MW-5[2]	1,2,4
		MW-6	1,2,3,4
Ethylbenzene	0.05	MW-3	1,2
		MW-4	1,2,3,4
		MW-5[2]	1,2,4
		MW-6	1,2,3,4
Total Xylene	0.05	MW-3	1,2,4
		MW-4	1,2,3,4
		MW-5[2]	1,4
		MW-6	1,2,3,4
Trimethylbenzene[3]	0.05	MW-4	1
		MW-6	1
Methylene Chloride[4]	0.05	MW-6	2
PAHs			
Acenaphthene	0.02	MW-1	1
		MW-2	3,4
		MW-3	1,3,4
		MW-4	1,2,3,4
		MW-5[2]	1,2,4
		MW-6	1,3,4
Anthracene	0.05	MW-3	1,3,4
		MW-4	1
		MW-5[2]	2,4
		MW-6	1,4
Benzo(b)fluoranthene	0.000002	MW-6	1,4
Benzo(k)fluoranthene	0.000002	MW-6	1,4
Benzo(a)anthracene	0.000002	MW-3	3
		MW-5[2]	4

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0006.0.0

TABLE 7 (continued)

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

Chemical	Guidance Value (mg/ℓ)[1]	Well Number	Round Number
Chrysene	0.000002	MW-1	1
		MW-3	1
		MW-4	1
		MW-5[2]	4
		MW-6	1,4
Fluoranthene	0.05	MW-1	1
		MW-2	3
		MW-3	1,2,3,4
		MW-4	1
		MW-5[2]	1,2,4
		MW-6	1,3,4
Fluorene	0.05	MW-1	1
		MW-3	1,2,3,4
		MW-4	1,4
		MW-5[2]	1,2,4
		MW-6	1,4
Naphthalene	0.01	MW-1	1,2
		MW-2	3,4
		MW-3	1,2,3,4
		MW-4	1,2,3,4
		MW-5[2]	1,2,4
		MW-6	1,2,3,4
Phenanthrene	0.05	MW-1	1
		MW-2	3
		MW-3	1,3,4
		MW-4	1
		MW-5[2]	2,4
		MW-6	1,3,4
Pyrene	0.05	MW-3	1,2,3,4
		MW-4	1
		MW-5[2]	2,4
		MW-6	1,3

[1] NYSDEC, Division of Water, Technical and Operational Guidance Series 85-W-38, Revised April 1, 1987.

[2] No Round 3 samples collected from MW-5 due to snow cover.

[3] Detected by HPLC analysis only.

[4] Detected by GC/MS analysis only.

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0007.0.0

at all three stations in Rounds 2 and 3, and at SW-2 and SW-3 in Round 4. USEPA AWQC for acenaphthene (0.02 mg/ℓ) and total PAHs (0 mg/ℓ) were exceeded in one sample from SW-2 (Round 4). Neither acenaphthene nor any other PAHs were detected in the duplicate of this sample.

4.2 PRELIMINARY IDENTIFICATION OF EXPOSURE RISKS

Environmental conditions at the Mechanicville site are summarized in Table 8, and the potential toxicological effects of prolonged exposure to chemicals detected at the site are summarized in Table 9. The purpose of this section is to identify exposure risks posed by detected chemicals to determine whether further explorations are warranted at this site. Air samples were not collected at the Mechanicville site during the Task 2 investigation; hence, risks associated with air emissions have not been evaluated. A complete risk assessment will be conducted during Task 4.

4.2.1 Soil and Sediment

As previously stated, the review of criteria did not uncover any regulations or guidelines pertaining to the detected chemicals in soil or sediment, at either the federal or state level. In lieu of such criteria, a qualitative assessment based on total PAHs is provided. PAHs were selected for this assessment because of their prevalence in coal gasification wastes and their expected persistence in the soil/sediment environment (see Table 8).

PAHs are a diverse group of compounds of varying toxicity. They are highly lipid-soluble and are absorbed through the gastrointestinal and respiratory tracts and, to a lesser degree, through the skin. Many PAHs have been shown to have carcinogenic potential, while others do not exhibit carcinogenicity (see Table 9). In developing AWQC, NYSDEC classified the following PAHs as carcinogenic: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, and indeno(1,2,3-cd)pyrene (NYSDEC, 1985). In addition, many PAHs are skin and eye irritants (NIOSH, 1980).

Under present site conditions and in the absence of excavations, the PAHs detected in subsurface soils at the Mechanicville site pose little risk of human contact or ingestion. Much of the site is paved and buildings cover additional areas. Access is limited by the fence surrounding the site; the main gate is locked at night. Additionally, the chemicals detected were at least 3 feet below ground surface.

However, it is possible that soils containing coal tar and its constituents may be uncovered and exposed during future excavations. Such excavations would present chemical exposure risks to excavators, site workers, and passers-by. The possible exposure routes to chemicals in the soil during excavations include direct contact, ingestion, and inhalation. PAHs were also detected in the Anthony Kill sediment samples, primarily in samples collected adjacent to the site (SED-2). This section of the Anthony Kill is used for secondary contact recreation (such as boating) and contact with sediment is possible during these activities. Because of the toxicological properties of PAHs and the potential for exposure, their presence in the soil and sediment at the site is cause for concern and evaluation in Task 4.

TABLE 8

SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE SITE

Technical Factors	Subsurface Soils	Groundwater	Surface Water	Sediment
Chemicals Present	The following chemicals have been detected in the subsurface soils near former coal gasification structures: - VOCs - PAHs - iron and zinc - cyanide compounds - phenolic compounds These chemicals were found primarily in samples collected from the fill soils.	The following chemicals have been detected in groundwater at the site: - VOCs - PAHs - iron and zinc - cyanide compounds - phenolic compounds - sulfate These chemicals were found in samples collected from roughly the top 10 feet of the water table and from the deeper bedrock.	The following chemicals have been found in the Anthony Kill, adjacent to the site: - iron - cyanide compounds - phenolic compounds - sulfate These chemicals were found upstream of, adjacent to, and downstream of the site.	The following chemicals have been detected in sediments from the Anthony Kill, adjacent to the site: - benzene and toluene - PAHs - iron and zinc - sulfate Benzene, toluene, and sulfate were found in samples adjacent to and/or downstream of the site. PAHs, iron, and zinc were detected at all three sampling locations.
Chemical Transport Mechanism	Because chemicals were detected below the water table, transport of soluble chemicals (VOCs, metals, phenolics) in shallow groundwater is likely. Both PAHs and complex cyanides are highly insoluble in water and therefore fairly immobile in the soil environment.	The interpreted direction of shallow groundwater flow is to the north-northeast, with an easterly component in the southeast corner of the site. Shallow groundwater is likely to discharge to the Anthony Kill. Groundwater flow within the fractured rock is controlled by the orientation, size, and interconnection of the fractures. A downward gradient was observed at the multi-level well cluster.	Dissolved and sediment-attached chemicals in the Anthony Kill are likely to be transported downstream to the Hudson River (approximately one-quarter mile).	Sediments deposited in the Anthony Kill may be resuspended during high flow/high energy conditions and carried further downstream of the site.

TABLE 8 (Cont.)

SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE SITE

Technical Factors	Subsurface Soils	Groundwater	Surface Water	Sediment
Expected Persistence of Chemicals in the Environment	There is only a slight tendency for most VOCs to adsorb to soil particles and they are expected to leach readily into the groundwater or slowly volatilize. They also are easily biodegradable by soil bacteria. PAHs strongly adsorb to soil particles, especially soils high in organic content. PAHs undergo microbial degradation and are readily metabolized by multicellular organisms. The lower molecular weight PAHs (e.g., naphthalene, acenaphthene, fluorene) are degraded more rapidly than the higher molecular weight compounds (benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene). Trace metals are nonvolatile. Their environmental fate depends on soil/water interactions which are controlled by pH, cation exchange capacity, and organic matter content, among other factors. Amenable cyanide is soluble and biodegradable. Ferro-ferricyanides are stable compounds which are difficult to degrade. Therefore, they will persist in the soil environment. Under highly acidic conditions, ferro-ferricyanides can be transformed to amenable cyanide and hydrogen cyanide gas. They are somewhat soluble and will leach to groundwater and surface water. Phenolic compounds have a relatively low volatility and high solubility.	VOCs in groundwater are expected to biodegrade over time. PAHs are relatively insoluble in water, but leaching to groundwater does occur. Dissolved PAHs in groundwater are subject to microbial degradation. However, biodegradation probably occurs more slowly in aquatic systems than in soil. Dissolved PAHs may also undergo rapid, direct photolysis when oxidants are available. The volatility of PAH compounds is low. The behavior of trace metals in groundwater is complex. However, their mobility in groundwater can be significantly retarded by adsorption and precipitation reactions. Amenable cyanide forms a single anion in water which is biodegradable. Ferro-ferricyanides in water form a metal cyanide radical which is difficult to degrade and likely to persist. Phenolic compounds are soluble and biodegradable.	See Groundwater	See Soil

TABLE 8 (Cont.)

SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE SITE

Technical Factors	Subsurface Soils	Groundwater	Surface Water	Sediment
Existing or Potential Receptors of Chemicals	The probability of direct exposure of humans or animals to chemicals in the soil is low since the site is paved. If excavations were made at the site, however, workers and area residents could be exposed to these chemicals.	Exposure to chemicals in the shallow groundwater may occur in building and utility excavations in the site vicinity. The only direct groundwater usage in the area is at a few domestic wells nearly one mile southwest of the site. Because shallow groundwater appears to flow north-northeast from the site, these wells are unlikely to be receptors of site-derived chemicals.	Direct contact with the surface water by humans is likely in this highly populated area, even though this section of the Anthony Kill is designated for secondary contact recreation only (Class D). Aquatic organisms in the stream are also potential receptors of chemicals.	As with surface water, direct contact with chemicals in sediments is a concern in this urban area, especially for recreational users of the Anthony Kill.

TABLE 9

TOXICOLOGICAL PROPERTIES OF COMPOUNDS IDENTIFIED
IN VARIOUS MEDIA
MECHANICVILLE SITE

Compound Class	Media Identified In	Specific Compounds	Toxicological Properties[1]
Volatile Organic Compounds	Groundwater	Toluene, benzene, xylenes, ethylbenzene, trimethylbenzene, styrene	These aromatic compounds are absorbed readily through the respiratory and gastrointestinal (GI) tracts and can also be absorbed through the skin. Benzene has the potential to cause cancer. Depending on the dose received, the other compounds can exert toxic effects on the liver and kidneys; they can also act as central nervous system (CNS) depressants and respiratory irritants.
	Subsurface Soil	All of the above plus n-propylbenzene	
	Sediment	Toluene, benzene	
Semivolatile Compounds			
o PAHs	Groundwater	Acenaphthene, acenaphtylene, anthracene, benzofluoranthenes, benzo(a)anthracene, benzo(a) pyrene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene.	PAHs are a diverse group of compounds of varying toxicity. They are highly lipid-soluble and are absorbed through the GI and respiratory tracts, and to a lesser degree, through the skin. Many PAHs have been shown to be potentially carcinogenic. Other PAHs are thought to be noncarcinogenic; these include fluorene, anthracene, pyrene, naphthalene, phenanthrene, and fluoranthene. The acute toxicity and chronic toxicity of low level exposure are not well understood.
	Subsurface soil Sediment	All of the above plus benzo-(g,h,i)perylene and dibenzo-(a,h)anthracene	
o Phenolic compounds	Groundwater Subsurface soil Surface water	Total recoverable phenolics	Depending on the dose, these compounds can produce liver and kidney toxicity and CNS effects. They can act as respiratory and skin irritants.
Inorganic Compounds	Groundwater	Iron, zinc, cyanide, sulfate	Iron and zinc are essential nutrients. However, they can produce objectionable effects such as staining, bad taste, and GI irritation at high levels. Cyanide that is bioavailable can exert toxic effects on the liver, kidneys, CNS, and cardiovascular system at high enough levels. Sulfate is a natural constituent of groundwater which effects taste in high concentrations (500 mg/ℓ).
	Subsurface soil	Iron, zinc, cyanide	
	Surface water	Iron, cyanide, sulfate	
	Sediment	Iron, zinc, sulfate	

[1] In assessing the risks to human health and the environment posed by these chemicals, not only toxicological properties but also potential receptors and probable exposure conditions must be considered. These factors will be addressed in the Task 4 risk assessment.

Coal tar was observed at several locations at the site, primarily in the silty shale. Pockets of coal tar are likely to persist at former coal gas plant sites because biodegradation processes work very slowly on this concentrated material (USWAG, 1984). Coal tar is heavier than water and migrates downward through the soil and groundwater under the influence of gravity. At the Mechanicville site, movement of tar along the bedrock surface and into fractures is likely. The bedrock surface slopes generally downward towards the Anthony Kill except beneath the former relief holder where a trough (possibly a former stream bed or fault zone) slopes eastward toward North Central Avenue.

4.2.2 Groundwater and Surface Water

The chemical data obtained during Task 2 show that groundwater criteria are exceeded at the site. Groundwater exists under unconfined conditions within the shale bedrock and overlying soils. Based on the recorded groundwater surface elevations, the interpreted direction of flow in the unconfined system is generally north-northeast, with easterly flow in the southeast corner of the site. The flow rate in the unconsolidated soils is estimated to be 30 to 50 ft/yr; the flow rate within the shallow bedrock is calculated to be approximately 170 to 180 ft/yr.

Shallow groundwater appears to be discharging to the Anthony Kill. The groundwater beneath the relief gas holder may flow eastward beneath North Central Avenue and discharge to the Anthony Kill downstream of SW-3/SED-3. Groundwater flow in this area of the site may also be influenced by the old Champlain Canal bed. If the soils used to fill the canal and prepare the present roadbed are more permeable than the surrounding soils and if they extend below the groundwater table, the canal/roadbed could be a preferential flowpath for groundwater and chemical migration.

The Anthony Kill is expected to be the primary receptor for chemicals detected in groundwater. There are no water supply wells (public or private) near the Mechanicville site. The closest domestic wells are nearly a mile southwest (i.e., upgradient) of the site. Exposures to chemicals in shallow groundwater might occur during excavations for utility repair or new construction in the site vicinity or through seepage of groundwater into basements.

Surface water data collected from the Anthony Kill do not indicate an exposure risk associated with surface water at the present time. However, there is evidence that groundwater from the southeastern portion of the site may be discharging to the stream below the downstream monitoring point (SW-3).

4.2.3 Summary

The chemicals detected in soil, groundwater, and sediment at Mechanicville do not present immediate exposure risks to humans. However, there is potential for degradation of the quality of the Anthony Kill water and sediments and for contact with chemicals in sediments by recreational users of the stream. In addition, human exposures to chemicals in soil and groundwater are possible during future excavations. To fully evaluate these exposure risks and design remedial alternatives (if necessary), further explorations are needed at the site.

4.3 PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES

A list of remedial alternatives that could be used to address the environmental concerns at Mechanicville identified during Task 2 is presented in Table 10. This list has been revised since completion of Task 1 to reflect knowledge of the site gained from the Task 2 investigations, and will be further refined when field investigations are completed. The final selection of alternatives will be made after completion of the risk assessment (Task 4).

TABLE 10

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Soil/Sediment	Containment	Capping	Much of the site is presently covered with asphalt and structures. An impervious cap could further reduce infiltration and, therefore, the rate of leaching of chemicals from the soils into the groundwater. A cap would also reduce contact potential. Not applicable to sediment.
	Removal	Excavation and Transport	Involves excavation and removal with subsequent transportation to another location. Potential impact on air quality during excavation and long-term liability at disposal site should be considered. Dredging is also an option for sediment.
	Disposal	Landfilling	Landfill selection depends on whether wastes are hazardous or non-hazardous. If hazardous, they must be disposed of in a properly licensed RCRA landfill.
	Treatment	Incineration	Proven technology, effective in destroying organics. On-site units require test burns prior to full scale use.
		Biodegradation	Several recent applications of this technology to coal tar and coal tar-contaminated soils have been reported in literature. This treatment requires experimentation to determine the proper organisms and optimal operating conditions. It can be applied in situ, through land farming, or by use of a batch reactor vessel.
		Solidification	Involves mixing the waste with cement or similar additives to incorporate the waste into the cement matrix. Process improves waste handling and is inexpensive. Does not destroy compounds but reduces toxicity by reducing contaminant mobility and availability to biota. Method is currently commercially available.
		Soil Aeration	This process removes organic contaminants from soil/sediment by partitioning. Some further treatment system may be required to treat the air, and potential impacts on air quality must be evaluated. The effect of this process on semivolatile contaminants would have to be evaluated prior to implementation.
		Vacuum Extraction	Underground wells are operated under a vacuum to volatilize and extract soil gases. Vacuum system is constructed on-site to remove and collect volatile and semivolatile compounds from the unsaturated soil zone. May require extensive carbon air treatment system to treat the off-gases. Effectiveness on semivolatile compounds would have to be evaluated prior to implementation. Not applicable to sediment.
	Access Control	Posting Fencing Land Restrictions	Prevents contact with hazardous constituents. Will be considered in conjunction with other technologies. Not applicable to sediment.
	No Action		To be considered in conjunction with other technologies.

TABLE 10 (Cont.)

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Groundwater	Containment	Capping	See soils.
	Diversion	Low Permeable Barriers	Retard lateral chemical migration within the soil and weathered bedrock zone by positioning on the competent bedrock surface. Would not retard vertical migration or chemical movement in bedrock fractures.
		Injection Wells/Interceptor Trenches	Control groundwater flow direction. Generally used in conjunction with groundwater extraction.
	In Situ Treatment	Biodegradation	Analysis/culture of the contaminated water to determine the present activity and nutrient levels needed to stimulate hydrocarbon-utilizing bacteria.
		Aquifer Flushing	May include the use of chemical additives. Often used in conjunction with groundwater removal.
		Other Technologies	Cost-effectiveness is dependent on concentration and types of contamination. Physical or physical/chemical technologies such as oxidation and precipitation may be applicable to highly contaminated waters.
	Removal	Extraction of Groundwater via Pumping	If large volumes of water are to be extracted, on-site treatment may be appropriate. May include recharge or discharge to surface drainage. Distribution of contamination and required operating period is not known. May require years of operation.
	Treatment	Carbon Adsorption	Contaminated carbon filters require appropriate disposal or regeneration. Data regarding process efficiency and applicability are available.
		Biodegradation	On-site biological treatment may be considered if large volumes of groundwater require treatment. Extracted groundwater may also be released to publicly owned treatment works for secondary biological treatment depending on present plant capacity, waste characteristics, and feasibility.
		Steam Stripping	Steam stripping is essentially a continuous fractional distillation process using steam to remove organics from aqueous wastes. Residuals, including steam condensate, recovered solvents, and "stripped" effluent must be disposed or treated.
		Incineration	Likely to destroy organic wastes in groundwater, but process cost is expected to be high.
		Ozonation/UV Photolysis	Ultraviolet light is used to enhance the reactivity of ozone and achieve oxidation of organic compounds. UV light cannot effectively destroy pollutants in opaque solutions, however. Process by-products are also a concern.
	No Action		To be considered in conjunction with other technologies.

5.0 CONCLUSIONS AND RECOMMENDATIONS

In this section, the findings of the Task 2 initial field investigation program are summarized. Based on these findings, additional data needs for risk assessment and conceptual design are identified. A Task 3 program to satisfy the data requirements is recommended.

5.1 SUMMARY OF TASK 2 FINDINGS

Significant findings from the Task 2 field investigation at the Mechanicville site are summarized as follows:

1. The unconsolidated deposits at the site consist primarily of fill soils of varying composition overlying a fractured shale bedrock. Up to 9 feet of silty shale fill exist in the southeast portion of the site.

2. The bedrock is laminated gray shale with calcite inclusions and was encountered 9 to 18 feet below ground surface. The upper 1 to 2 feet of the bedrock is highly weathered. The bedrock surface slopes to the north and east. A small east-trending bedrock depression was mapped near the former relief gas holder.

3. Groundwater flow appears to be north-northeast across the site; groundwater flow near the former relief gas holder may be more easterly, toward North Central Avenue. Groundwater in the soil and shallow bedrock system likely discharges to the Anthony Kill, either adjacent to the site or further downstream. The silty shale and fractured bedrock formation are interpreted to represent the principal zones of groundwater movement.

4. Land surrounding the site is predominantly residential and commercial, with the central business district of the city located east and south of the site. There are sensitive land uses (i.e., schools, recreation areas, nursing homes) and potential contributors of chemicals to groundwater and surface water (i.e., tanks, drums, a railroad yard, and other industrial property) within a half-mile radius of the site.

5. VOCs and PAHs were detected in soils throughout the site study area. Concentrations were highest near the former relief holder and the filter beds.

6. VOCs and PAHs were detected in groundwater on-site. Contaminant concentrations in groundwater exceeded relevant federal and/or state criteria for public water supply systems in both bedrock and overburden monitoring wells. The highest concentrations of PAHs and VOCs were found at MW-4 and MW-6 (downgradient of the relief gas holder), MW-3 (downgradient of the oxide house), and MW-5 (downgradient of the coal storage shed and filter beds).

7. Organic compounds typically associated with coal gasification wastes were found in only one surface water sample from the Anthony Kill.

8. PAHs were detected in sediments taken from the Anthony Kill adjacent to the site, but not upstream or downstream of the site using GC/MS analytical techniques. The HPLC results showed PAHs at all three locations.

9. There are no water supply wells within a one-mile radius of the site. Potential risks associated with excavations at the site and discharge of site-derived chemicals to the Anthony Kill were identified.

From these findings, the following preliminary conclusions can be drawn:

1. The fill soils and groundwater in the fill and shallow bedrock contain chemicals related to the coal gasification process.

2. There are coal gasification wastes in the subsurface environment which are a continuing source of chemicals to soil and groundwater.

3. Coal tar constituents travel along the bedrock surface as well as through bedrock fractures. There are no natural geologic barriers to the migration of dissolved chemicals in groundwater.

4. Chemical data on groundwater in the deep bedrock and in soil and bedrock off-site are lacking.

5. The preliminary exposure assessment suggests no immediate threat to the public is posed by on-site soils and groundwater.

5.2 DATA NEEDS

The goal of the Task 3 expanded problem definition program is to further define distribution of contamination so that a detailed risk assessment can be performed (Task 4) and remedial measures can be developed and evaluated (Task 5). To meet this goal, the Task 3 program must be designed to:

- more specifically identify and quantify chemicals, particularly in soil;
- increase the understanding of the distribution of chemicals detected; and
- further evaluate chemical migration pathways and potential receptors.

Data requirements in each of these categories are listed in Table 11 and discussed in the following paragraphs.

Most of the soil samples collected during Task 2 from the Mechanicville site were analyzed using HPLC/UV methods. For risk assessment purposes, data generated by a more specific detection method (e.g., GC/MS) are needed. It is especially important that PAH results be confirmed by GC/MS analysis before the risks associated with these chemicals are further assessed.

TABLE 11

DATA REQUIREMENTS AND RECOMMENDED ACTIVITIES
MECHANICVILLE SITE

General Category	Specific Data Requirement	Recommended Task 3 Activity*
Specific Identification and Quantification of Chemicals	Confirmation of Task 2 analytical results obtained with HPLC/UV methods.	Use of GC/MS methods for all organic analyses.
Chemical Distribution		
Soil	Chemical data from soil in the study area at previously unsampled locations and depths.	Sampling and analysis of soil at B-9 through B-12.
Groundwater	Chemical data from groundwater upgradient of, adjacent to, and downgradient of former coal gasification structures.	Installation of MW-10 through MW-15. Sampling and analysis of groundwater from existing and new wells.
Chemical Migration	Evaluation of the former canal bed as a preferential flowpath.	Investigation of canal construction and closure procedures.
	Interpretation of bedrock surface contours at site boundaries.	GPR and seismic refraction surveys east and north of the site boundaries.
	Chemical data from soil and at soil/bedrock interface in areas of potential off-site migration.	Sampling and analysis of soil samples from B-10, B-11, and B-12.
	Data on fracture patterns of deeper bedrock.	Coring up to 30 feet of bedrock at B-13, B-14, and B-15.
	Increased understanding of groundwater flow direction and groundwater quality at downgradient locations.	Installation, in-situ permeability testing, and sampling of MW-11, MW-12, MW-13, MW-14, and MW-15 and water level measurements from all wells.

TABLE 11 (cont.)

DATA REQUIREMENTS AND RECOMMENDED ACTIVITIES
MECHANICVILLE SITE

General Category	Specific Data Requirement	Recommended Task 3 Activity*
	Further definition of vertical seepage gradients.	Water level data from multi-level well nests at three locations (MW-4/M-6, MW-12/MW-13, and MW-5/MW-15).
	Evaluation of water and sediment in the Anthony Kill at possible groundwater discharge points adjacent to the site and downstream of SW-3/SED-3.	Sampling and analysis of surface water and sediment samples collected at SW-2/SED-2 and SW-4/SED-4. Samples from SW-1/SED-1 should also be collected for background comparison purposes.
Potential Receptors	Determination of human and environmental receptors for site-derived chemicals.	Survey of current and potential use of groundwater and surface water along chemical migration pathways and further evaluation of other chemical exposure routes (e.g., basement seepage, excavations).

* Exploration locations are shown in Figure 18.

Task 2 data confirmed the presence of VOCs and PAHs in soils in the former active plant area on-site. Additional soil sampling at the site boundaries is needed to increase understanding of the distribution of these chemicals. The vertical and horizontal distribution of PAHs and VOCs in soils is important for risk assessment and conceptual design.

Task 2 data confirmed that groundwater quality on-site has been impacted by past coal gasification activities. Additional groundwater quality data upgradient and downgradient of former coal gasification structures are necessary to assess the distribution of contaminants in the overburden and in bedrock fractures. This will require several new wells screened in the overburden and bedrock, as well as continued sampling of existing wells. New wells are also needed to evaluate potential routes for chemical migration and to verify the direction of groundwater flow east of the site.

Additional data are needed to assess the migration of chemicals off-site. During Task 2, a bedrock surface contour map was developed at the site. This map needs to be extended to the north and east of the site so that the potential for coal tar movement off-site along the bedrock surface can be evaluated. Similarly, additional data on the construction and decommissioning of the Champlain Canal are required to evaluate migration pathways east of the site. In-situ permeability data in the fill soils, shallow bedrock, and deeper bedrock are also needed to further evaluate groundwater flow at the site.

Based on the Task 2 investigation, there are no natural geologic barriers to the movement of contaminants in the subsurface. There are no confining soil layers, a downward seepage gradient was observed, and the shale bedrock is fractured. Knowledge of the nature of the bedrock is limited because only one of the Task 2 borings went more than 5 feet into the bedrock (15 feet were cored at B-6). To meet the Task 3 goal of defining the distribution of contamination related to this site, data would be needed on the condition of the deeper bedrock both on- and off-site. However, an extensive bedrock drilling and monitoring well installation program would be required to explore chemical migration in the deep bedrock. Until receptors for chemicals in the bedrock are clearly identified, such an extensive investigation is not recommended.

5.3 TASK 3 RECOMMENDATIONS

A scope of work for Task 3 is described in the Work Plan for the Mechanicville site, completed in April 1986 (Jordan, 1986b). Because the specific elements of the Task 3 program could not be defined at that time, a general program representing the anticipated maximum level of effort that would be required at Mechanicville was presented and costed. Based on the Task 2 findings, changes to the proposed program and corresponding budget are recommended. The new program is presented in the following paragraphs. The proposed Task 3 schedule and budget are discussed in Section 6.0.

The proposed program is designed to increase Jordan's understanding of chemical distribution in the soil and shallow bedrock at the site and site boundaries. It will allow comparisons to be made between chemical concentrations in the

fill soils and the upper bedrock, but will not define a lower boundary of contamination. Similarly, the program will provide data on the lateral movement of chemicals on-site and at the site boundaries, but may not define the lateral extent of chemical migration off-site. The scope of work required to meet these objectives consists of the following elements:

1. Preparation of a bedrock surface contour map for areas adjacent to the site on the north and east using GPR and seismic refraction geophysical techniques.

2. Drilling of up to seven borings and collection of at least one soil sample from each boring for laboratory chemical analysis.

3. Coring up to 30 feet of bedrock in each of three borings to evaluate the extent of fracturing at depth and enable sampling of deeper groundwater.

4. Installation of monitoring wells in six of the borings.

5. Conducting additional in-situ permeability tests in shallow and deep boreholes.

6. Collection of two rounds of groundwater samples and water level measurements from new and existing wells.

7. Collection of two rounds of surface water/sediment samples at one upstream, one adjacent, and one downstream sampling location for analysis.

8. Analysis of soil, groundwater, surface water, and sediment samples for the same chemical parameters and methods included in the Task 2 program with one exception: Organic analyses will be conducted exclusively using GC/MS methods.

9. Surveying of the elevations of geophysical survey reference points, new borings, and wells; and plotting locations on the base map.

10. Additional land and water use assessment to identify potential receptors.

11. Evaluation of the data and preparation of a Task 3 report.

Proposed Task 3 exploration locations are shown in Figure 18. The rationale for locations of these explorations is presented in Table 12. Specific information on how these activities will be conducted is outlined in the following sections. Jordan plans to use North Star Drilling Co. of Cortland, New York, for drilling services.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY

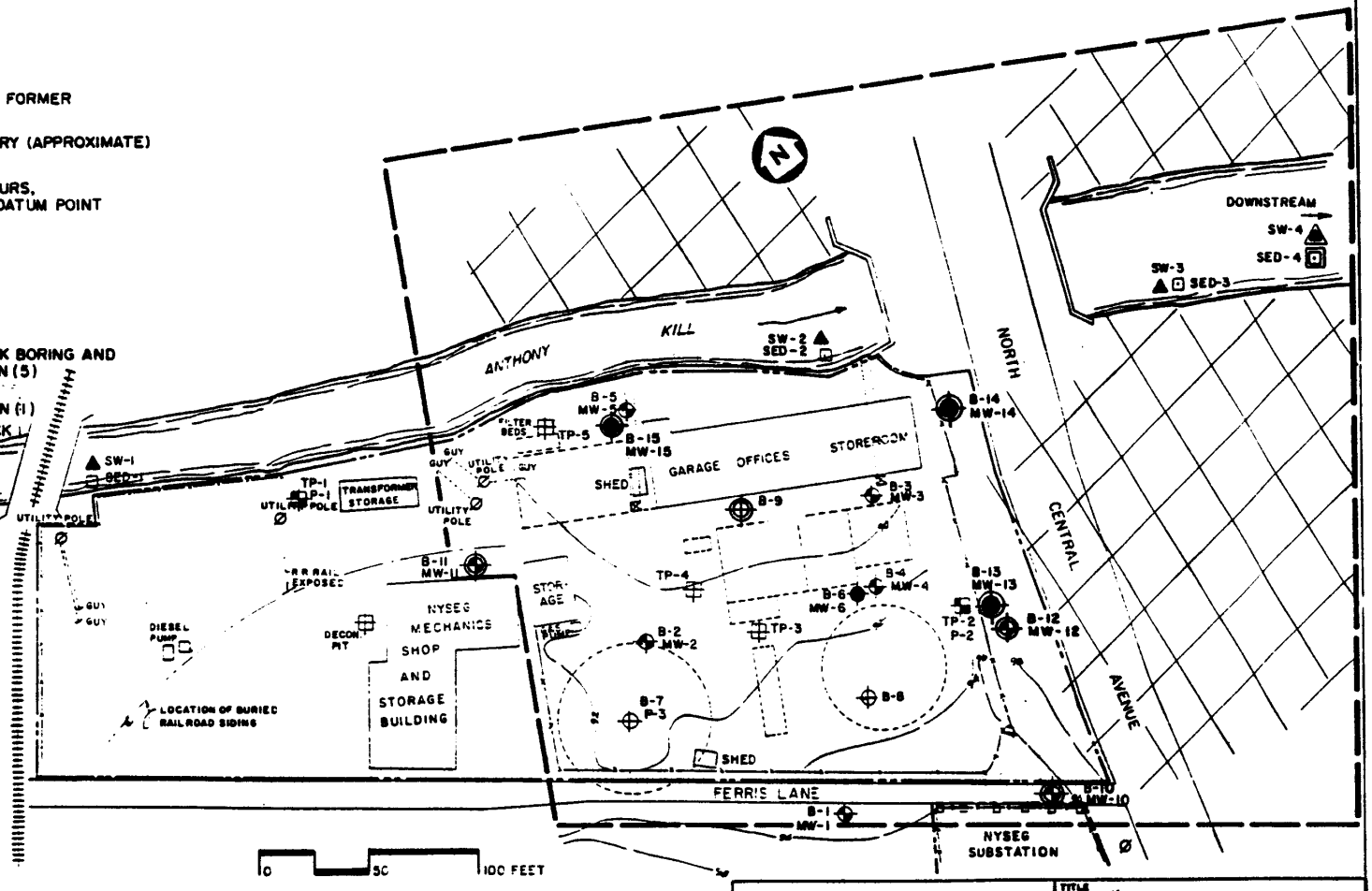
TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

- APPROXIMATE GEOPHYSICAL SURVEY LOCATION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
PROPOSED TASK 3 EXPLORATION LOCATIONS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02 FIGURE 18

TABLE 12

RATIONALE FOR TASK 3 EXPLORATION LOCATIONS
MECHANICVILLE SITE

Exploration	Rationale
Geophysical Survey	GPR and seismic refraction will be used to estimate depth to bedrock east and north of the site so that an extended bedrock surface contour map can be constructed, and off-site coal tar migration potential can be evaluated. Approximate Cost: $ 9,622 GPR survey $ 5,001 seismic survey
Shallow Borings and Monitoring Wells	Shallow borings will be drilled through the fill soils to the bedrock surface. Where the overburden is shallow, the borehole will be drilled into the shallow bedrock. Boring depths are expected to be between 15 and 20 feet. These borings will be used to characterize subsurface conditions in the soil and shallow bedrock. One analytical sample is scheduled for each boring. Approximate Cost: $ 683 per boring Sample analyses performed by NYSEG Shallow monitoring wells will be screened in the unconsolidated deposits and shallow bedrock to characterize shallow groundwater flow conditions. Two rounds of analytical samples are scheduled for each well. Approximate Cost: $ 1,640 per well Sample analyses performed by NYSEG
B-9	Located in the central portion of the site where chemicals are anticipated to be present in significant concentrations; will provide data on the distribution of chemicals in soil on-site.
B-10, MW-10	Located in the southeastern corner of the site where site-derived chemicals are not anticipated; MW-10 will provide important groundwater level data.

TABLE 12 (cont.)

RATIONALE FOR TASK 3 EXPLORATION LOCATIONS
MECHANICVILLE SITE

Exploration	Rationale
B-11, MW-11	Located on the western boundary of the study area, downgradient of B-7 and B-2/MW-2. Samples collected here will aid in delineating chemical distribution on the western side of the site.
B-12, MW-12	Located in the middle of the bedrock trough (as determined by the Task 2 geophysical survey) on the east side of the site to provide data on chemical migration in shallow groundwater and along the bedrock surface; one of two paired wells.
Deeper Borings and Monitoring Wells	Deeper borings will be drilled approximately 30 feet into the bedrock. Boring depths are expected to be between 45 and 60 feet. The borings will be used to further characterize bedrock at the site. One analytical sample is scheduled for each boring. Approximate Cost: $ 5,054 per boring Sample analyses performed by NYSEG Bedrock monitoring wells will be screened in the bedrock to monitor flow conditions in this system. Two rounds of analytical samples are scheduled for each well. Approximate Cost: $ 3,537 per well Sample analyses performed by NYSEG
B-13, MW-13	Located adjacent to B-12/MW-12 in the bedrock trough on the eastern side of the site; this pair of wells will provide multilevel data.
B-14, MW-14	Located near the northeast boundary of the site to provide data on chemical migration in the bedrock.
B-15, MW-15	Located adjacent to B-5/MW-5 on the banks of the Anthony Kill; this pair of wells will provide multilevel data.

6.87.14T
0024.0.0

TABLE 12 (cont.)

RATIONALE FOR TASK 3 EXPLORATION LOCATIONS
MECHANICVILLE SITE

Exploration	Rationale
Surface Water and Sediment Samples	Surface water and sediment samples will be collected adjacent to the site and at a yet-to-be-determined downstream sampling location on the Anthony Kill where groundwater from the site may be discharging. Upstream samples will be collected at the same time for background characterization purposes. Two rounds of analytical samples are scheduled for each sampling location. Approximate Cost: $ 295 per surface water/sediment sample (collection) Sample analyses performed by NYSEG.

5.3.1 Geophysical Survey

During Task 1, GPR and seismic refraction results were used to prepare a bedrock surface contour map of the site (see Figure 10). The interpreted results correlated well with depths to bedrock observed during the boring program. It is recommended that these two geophysical exploration techniques be used to extend the bedrock surface contour map east and north of the site, provided access can be obtained from adjacent landowners (see Figure 18). The GPR survey will utilize a Geophysical Survey Systems, Inc., Subsurface Interface Radar (SIR) System 8. Seismic refraction profiling will be accomplished with a Geometrics ES-2415F Signal Enhancement Seismograph. A 10-foot grid will be established throughout the area of GPR investigation with a compass and cloth tape. Seismic refraction will be conducted along 50-foot grid lines.

5.3.2 Borings

Four shallow soil borings (B-9, B-10, B-11, and B-12, each 15 to 20 feet deep) and three deeper bedrock borings (B-13, B-14, and B-15, each approximately 50 feet deep) are recommended for soil characterization and monitoring well installation. Borings will be drilled to bedrock using hollow-stem augers; NX-sized cores (3-inch diameter) will be used to drill into the bedrock. Boring procedures outlined in the Work Plan will be followed. Continuous split-spoon samples will be collected in the unconsolidated deposits and continuous core samples will be taken in the bedrock. One sample from each boring (plus one duplicate) will be collected for laboratory chemical analysis.

The borings are positioned to fill data gaps identified in Task 2. B-9, B-10, B-11, and B-12 will provide information on conditions in the fill soils and at the soil/bedrock interface in previously unexplored areas of the site. These borings will be placed near the bedrock surface to sample the fill soils and fill/bedrock interface. B-10 and B-11 are expected to be clean and will be useful in establishing the boundaries of contaminated soil. It is unclear from the Task 2 results whether the chemicals detected at B-5 were associated with the filter beds alone or whether the coal tar left in the relief gas holder might also be impacting this area. B-9 will aid in defining the extent of coal tar migration across the site. B-13, B-14, and B-15 are bedrock borings that will provide information on chemical migration in the bedrock at two critical locations: at the edge of the Anthony Kill and at the eastern boundary of the site.

5.3.3 Monitoring Wells

Monitoring wells are recommended at six of the boring locations. The standard well installation procedures in the Work Plan will be followed. MW-10, MW-11, and MW-12 will be screened to monitor the fill soils and the fill/bedrock interface. MW-13, MW-14, and MW-15 will be screened entirely within the bedrock.

The monitoring wells will provide needed water level and water quality data. MW-10, MW-12, and MW-13 will aid in the interpretation of groundwater flow direction in the southeastern portion of the site. The new multilevel well

pairs, MW-12/MW-13 and MW-5/MW-15, will provide information on vertical seepage gradients at the bedrock trough and adjacent to the Anthony Kill.

Water quality data from the new and existing wells will enhance the understanding of chemical concentrations in the fill soils and in the shallow bedrock, both on-site and at the eastern and northern site boundaries. As previously discussed, the need to investigate other potential migration routes, such as the deep bedrock, will be reassessed after completion of the detailed risk assessment (Task 4).

5.3.4 Groundwater Sampling

Two rounds of groundwater samples are recommended in Task 3, as originally proposed. Each round will include sampling of all Task 2 and Task 3 wells (12 total) plus two duplicates and three blanks (sampler, trip, and filtration).

5.3.5 Surface Water and Sediment Sampling

The surface water samples analyzed in Task 2 generally did not contain measurable levels of coal-tar-related chemicals. However, sediment samples collected from the Anthony Kill at SED-2 (adjacent to the site) contained several PAHs. Therefore, it is recommended that surface water/sediment sampling adjacent to the site (SW-2/SED-2) be included in the Task 3 program.

Because of the potential for groundwater flow in an easterly direction with eventual discharge to the Anthony Kill, sampling of surface water and sediment at a new downstream location (SW-4/SED-4) is also recommended in Task 3. The sampling location will be determined based on results of the geophysical survey and the revised interpretation of groundwater flow direction east of the site. Two rounds of sampling of each media are proposed at SW-4/SED-4. Samples of each media will also be collected at SW-1/SED-1 for background comparison purposes.

5.3.6 Air Sampling

No air sampling was done during Task 2, and none is recommended for Task 3 for the following reasons. The chemicals detected in soil and groundwater at the site are beneath the ground surface, which is paved. Volatilization of these chemicals, therefore, is unlikely under present site use conditions. Furthermore, because the site is used for parking and maintenance of trucks and automobiles and is located on a heavily trafficked street, any air samples collected would likely contain contaminants more related to current site uses than previous ones. Air sampling may be required if an excavation in the former active plant area is planned to design appropriate safety measures. However, this sampling should be part of a pilot study to assess impacts from a specific activity rather than a more general study.

5.3.7 Analytical Program

Soil, water, and sediment samples will be analyzed for the same set of parameters selected for the Task 2 program: All organic analyses will be performed using GC/MS methods and all samples will be analyzed by NYSEG.

5.3.8 Elevation Survey

At the completion of the field program, locations and elevations of Task 3 geophysical survey reference points, borings, monitoring wells, and sampling stations will be determined by a surveyor, relative to the previously established datum. The site plan developed in Task 2 will be updated to include Task 3 exploration points.

5.3.9 Receptor Analysis

Jordan will further assess current and potential receptors of site-derived chemicals on a media-specific basis (e.g., soil, groundwater, surface water, sediment). The receptor analysis will be expanded to a one-mile radius to identify and characterize both human populations and environmental systems which could be impacted given observed contamination distribution data and potential migration pathways. More detailed information on population, recreational water use, and groundwater use will be gathered from local and state agencies. If groundwater usage data are unavailable from public sources, a survey of residents in the site vicinity may be necessary to confirm the Task 2 findings that there are no wells within a one-mile radius of the site. Receptor analysis data will be used in the Task 4 risk assessment.

5.3.10 Data Evaluation and Report Preparation

Jordan will evaluate the geologic, hydrogeologic, chemical, and receptor analysis data collected in Task 3 and prepare a report containing data interpretation, findings, and recommendations for further work. The Task 3 report will include a summary of the findings of Tasks 1 and 2.

6.0 TASK 3 SCHEDULE AND COSTS

6.1 SCHEDULE

An attempt will be made to coordinate the Task 3 field program at Mechanicville with the field program at the Mechanicville/Coons Crossing site, and both will begin within two weeks of receipt of authorization to proceed from NYSEG. The site-specific QAPP and HASP will be updated first. A tentative schedule for Task 3 activities is shown in Table 13. The geophysical survey, boring, and monitoring well installation program is expected to begin on November 2, 1987, and take approximately three weeks to complete.

Jordan intends to keep NYSEG informed of progress of the exploration program at least twice per week, and immediately if any unexpected conditions are encountered. During sampling activities, weekly contact with NYSEG is planned.

6.2 COSTS

The costs of the expanded problem definition program (Task 3) were originally submitted to NYSEG in the Mechanicville Work Plan (Jordan, 1986b). These costs have been modified to reflect the program recommended in Section 5.3 of this report. New program costs are presented in Table 14. Manpower estimates in Table 14 do not include hours for response to NYSDEC review comments, if required.

TABLE 13

SCHEDULE FOR TASK 3 FIELD ACTIVITIES
MECHANICVILLE SITE

Activity	Proposed Start Date
Geophysical Survey	November 2, 1987
Exploratory Borings/Monitoring Well Installations	November 9, 1987
Elevation Survey	November 18, 1987
Groundwater, Surface Water, and Sediment Sampling	December 1987 and March 1988

10/29/87

TABLE 14 (REVISED)
COSTS OF EXPANDED PROBLEM DEFINITION PROGRAM (TASK 3)
MECHANICVILLE SITE

Discipline/Task	Hours	$Cost
Manpower		
Project Management	150	$12,125.40
Data Analysis/Report Prep.	700	$32,977.84
Field work	818	$31,301.76
Drafting	110	$3,246.32
Secretarial	90	$1,771.56
Total Manpower Costs	1868	$81,422.88
Geophysical Survey w/Fee		$3,891.50
Mobilization w/Fee (Drill Rig)		$1,075.00
HSA Borings & Split-Spoon Samples		
Cost per Foot	$19.00	
Total Footage	140	
Boring Cost w/Fee		$2,859.50
Double-cased Borings		
Cost per Foot	$40.00	
Total Footage	60	
Boring Cost w/Fee		$2,580.00
Rock Coring (Including Reaming)		
Cost per Foot	$65.00	
Total Footage	90	
Coring Cost w/Fee		$6,288.75
Shallow Monitoring Well Installation		
Number	3	
Cost per Well	$1,200.00	
Well Cost W/Fee		$3,870.00
Deep Monitoring Well Installation		
Number	3	
Cost per Well	$2,400.00	
Well Cost W/Fee		$7,740.00
Packer Tests		
Number	3	
Cost per Test	$200.00	
Test Cost w/Fee		$645.00
Decontamination and Drums w/Fee		$4,085.00
Elevation Survey w/Fee		$650.00
Equipment and Supplies		$14,895.00
Travel		$7,250.00
Per Diem		$5,600.00
Other: Word Processing, Mailing, Copying		$2,500.00
TOTAL		$145,352.63

GLOSSARY OF ACRONYMS

AWQC	Ambient Water Quality Criteria
cfs	cubic feet per second
GC	gas chromatography
GPR	ground-penetrating radar
HASP	Health and Safety Plan
HPLC	High Performance Liquid Chromatography
MCLs	Maximum Contaminant Levels
MCLGs	Maximum Contaminant Level Goals
MS	Mass Spectrometer
MSL	Mean Sea Level
ND	not detected
NYSDEC	New York State Department of Environmental Conservation
NYSEG	New York State Electric and Gas Corporation
PAHs	polynuclear aromatic hydrocarbons
PID	photoionization detector
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
SDWA	Safe Drinking Water Act
SIR	Subsurface Interface Radar
SVOCs	semivolatile organic compounds
TOC	total organic carbon
USGS	U.S. Geological Survey
UV	ultraviolet
VOCs	volatile organic compounds

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APPENDIX A

FIELD DATA

APPENDIX A-1

TEST PIT LOGS
AND
FIELD OBSERVATIONS

TEST PIT OBSERVATIONS
MECHANICVILLE SITE

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
TP-1	7.7	Brown fill with cobbles from 0 to 0.8 ft. and black ash with clinkers and cinders from 0.8 to 2.0 ft. Reddish brown fine sandy silt, small cobbles, large boulders, organic material, bricks clinkers from 2.0 to 3.0 ft. and brown sandy silt with cobbles, clinkers, glass, wood, bricks from 3.0 to 6.0 ft. From 6.0 to 7.7 ft., light brown clayey silt with dark stains in root channels and highly fractured shale fragments. Wet oily sheen at 7.7 ft. No visible coal tar.	Slight odor in black ash layer from 0.8 to 2.0 ft. Slight odor in light brown clayey silt layer from 6.0 to 7.7 ft. PID-background levels.**	Sample TP-1/S-1 at 6.5 to 7.0 ft.*
TP-2	7.5	Brown to dark brown silty sand with sharp angular cobbles from 0 to 1.3 ft. Brown sandy fill with bricks from 1.3 to 2.6 ft. Angular cobbles and boulders from 2.6 to 5.5 ft. with less weathered angular rocks in sand matrix from 5.5 to 7.0 ft. Angular cobbles (>50%) with gray clayey silt and brown sandy silt lenses from 7.0 to 7.5 ft. No visual signs of coal tar wastes.	PID readings of background levels in ambient air. Readings of 10 ppm from sampled material.	Sample TP-2/S-1 at 7.0 to 7.5 ft.*

TEST PIT OBSERVATIONS (continued)

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
TP-3	3.0	Light brown sandy silt with cobbles from 0.2 to 1.0 ft., and dark brown silty fill with cobbles, bricks, concrete from 1.0 to 3.0 ft. Concrete obstruction at 3.0 ft. No visible signs of coal tar or other contamination encountered.	PID readings at background level in ambient air and at soil.	No samples collected due to concrete obstruction.
TP-4	5.5	Light brown sandy silt with cobbles from 0.1 to 0.3 ft. and dark brown sandy silt with cobbles from 0.3 to 1.0 ft. Bricks from 1.0 to 1.5 ft. Light brown sand from 1.5 to 3.0 ft. Angular shale saturated with coal tar from 3.0 to 4.5 ft. and larger angular shale fragments from 4.75 to 5.5 ft. saturated with coal tar.	PID readings of 30-40 ppm near sampled soil (3 to 4 feet below ground surface).	TP-4/S-1 at 3.0 4.0 ft. *
TP-5	6.5	Light brown sandy silt with cobbles from 0 to 1.3 ft and dark brown sandy silt with angular cobbles from 1.3 to 3.0 ft. Highly fractured shale, silt and clay soil, wood chips, and coke fragments saturated with coal tar from 3.0 to 6.5 ft. At 6.5 ft., silt and fractured shale saturated with coal tar.	PID reading of 50 ppm over saturated soil.	TP-5/S-1 from 3.0 to 4.0 ft.* TP-5/S-2 from 4.0 to 6.0 ft.* Duplicate sample TP-5/S-1 Dup.*

* Samples analyzed by ERCO.

** Background PID levels represent ambient air levels obtained outside and upwind of the site boundaries. At the Mechanicville site, background levels were generally less than 5 ppm.

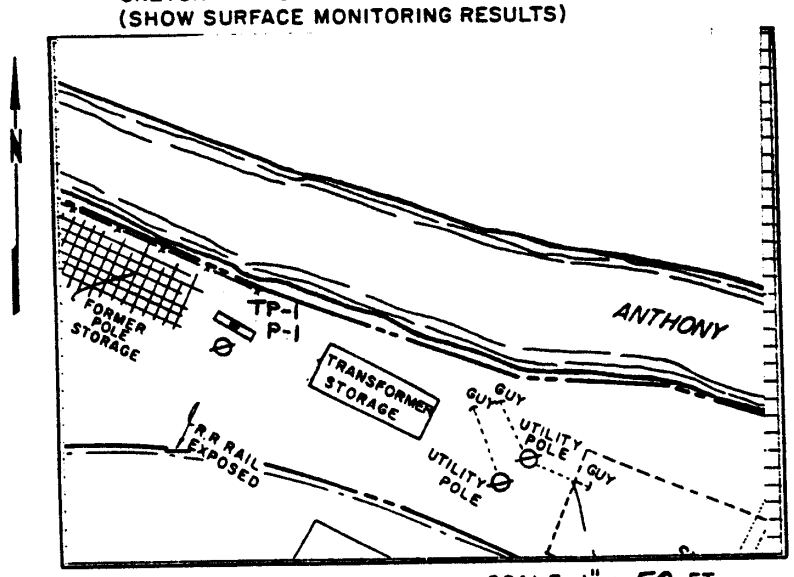
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-1 DATE 7/21/86 TIME ST. 10:50 END 11:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Wibby
2. C. Moore
3. P. Tierney } Maloy (Empire)
4. R. Ciccateri }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE 1

NOTES

FILL

0'-0.8' Brown sandy fill with cobbles loose, dry

0.8'-2.0' Black ash with clinkers and cinders. Oxidized, loose, dry. Slight odor.

2.0'-3.0' Reddish brown fine sandy silt with small cobbles, large rounded boulders, organic material (roots), bricks and clinkers

3.0'-6.0' Brown sandy silt with cobbles, clinkers glass, wood bricks. Dry and loose.

6.0'-7.7' Light brown clayey silt, cohesive, moist with mottling and slight odor. Dark stains in root channels.

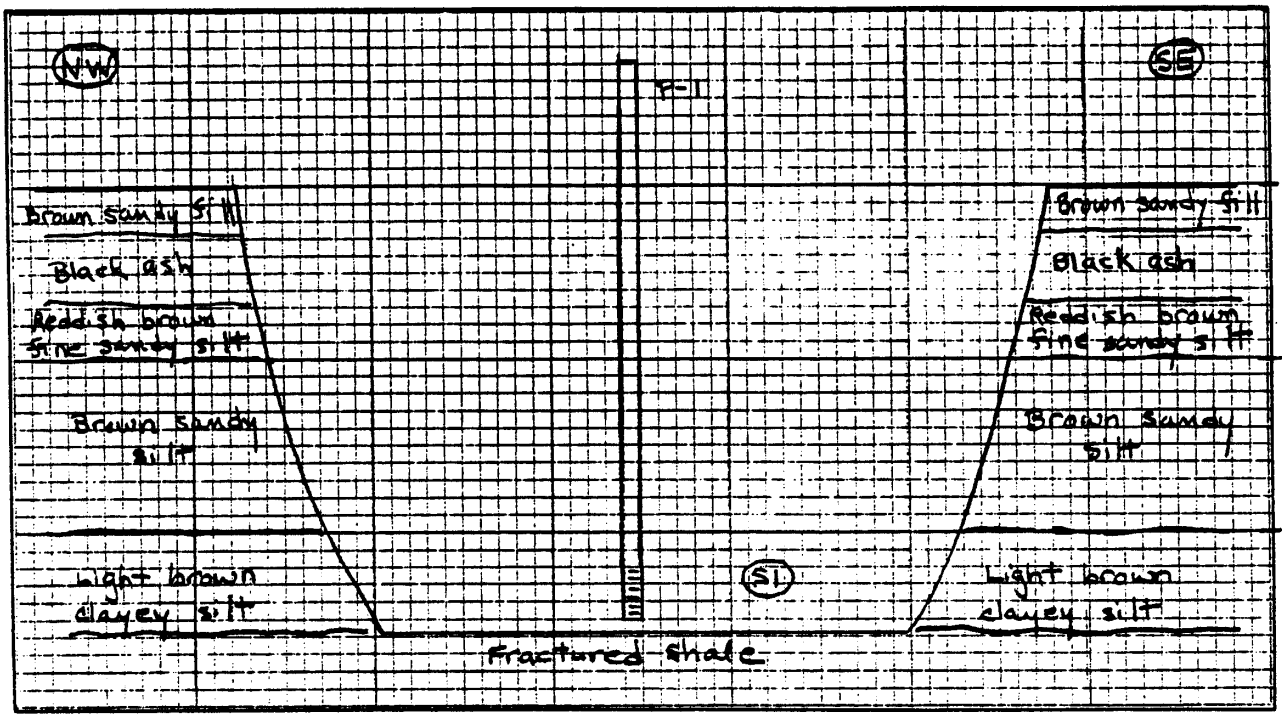
7.7 Bedrock. Highly fractured shale, wet oily sheen. No groundwater seepage.

EC JORDAN CO

TEST PIT RECORD
PROFILE ALONG TEST PIT- 1

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (L x W x D)
14' x 1.5' x 7.7'
No groundwater seepage.
PI readings at background level.
No visible coal tar but ash & clinkers present.
Piezometer (P-1) installed behind utility pole - screened from 6.5' to 7.5'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	6.5'-7.0'	MEEXTPXX01/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			
	Collected soil for		
	lab permeability test.		

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

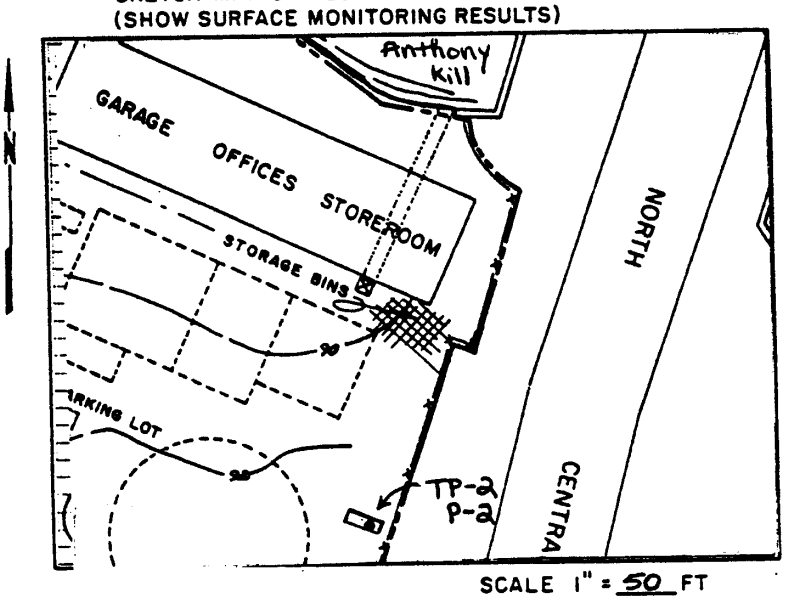
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT TP-2 DATE 7/21/86 TIME ST. 15:30 END 16:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C.Moore
2. S.Wibby
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #9, #10

NOTES 0'-1.3' Brown to dark brown silty sand with sharp angular cobbles (>50%)

1.3'-2.6' Brown sandy fill with bricks, oxidized

2.6'-5.5' Angular cobbles and boulders with some sandy fill. Highly weathered. (75% rock material)

5.5'-7.0' Angular rocks, less weathered, with sand matrix

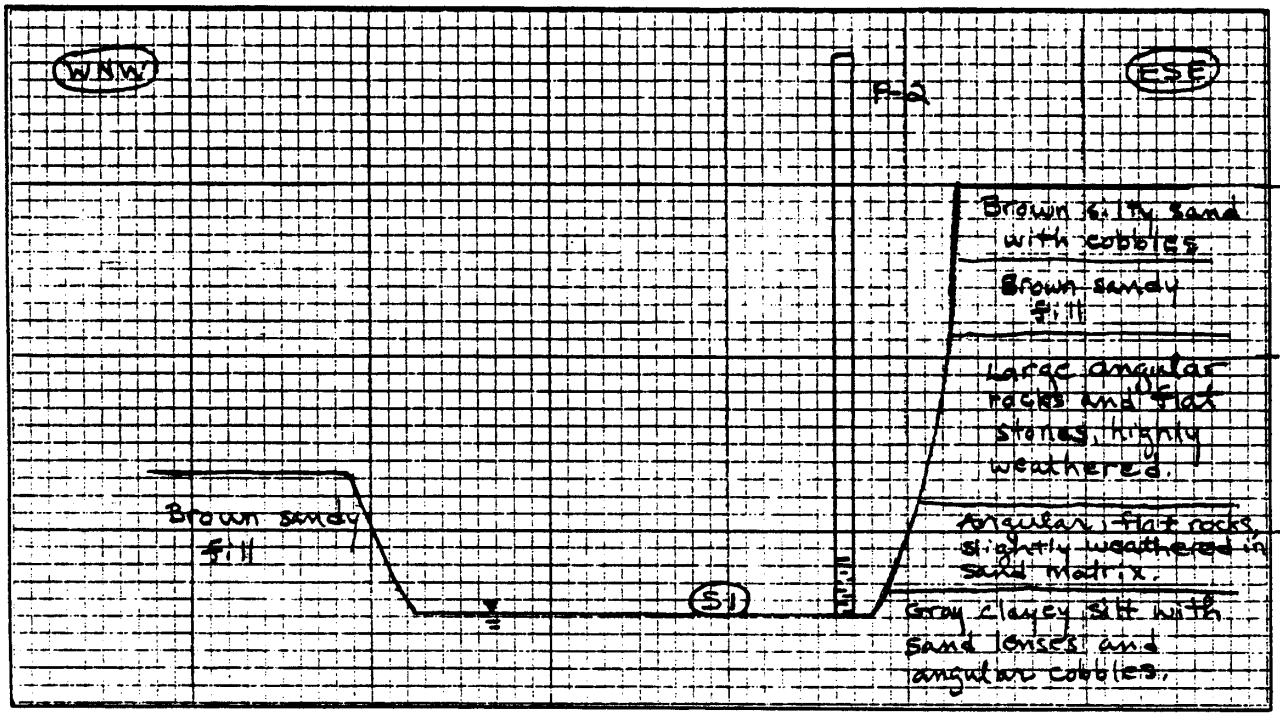
7.0'-7.5' & light gray clayey silt matrix with brown sandy silt lenses with angular cobbles (>50%). Mottling

▽ 7.5'

TEST PIT RECORD
PROFILE ALONG TEST PIT- 2

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 11' x 2' x 7.5'

PI readings at background level in ambient air - 10 ppm from sampled material.

No visible coal tar.

Piezometer (P-2) installed on bank - screened from 6.5'-7.5'.

Test pit was dug into the bank.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	7.0'-7.5'	MEEXTPXX02/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

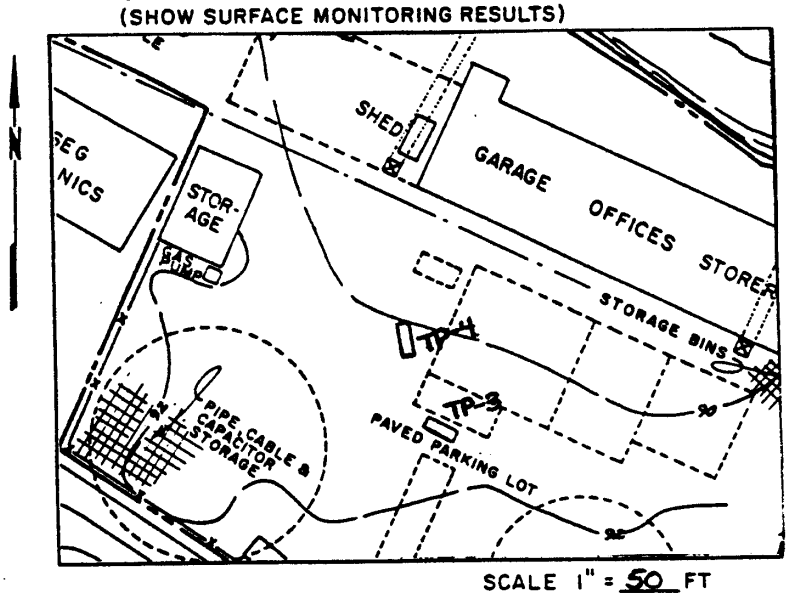
TEST PIT RECORD

SITE Mechanicville NYSE G 4945-02

TEST PIT TP-3 DATE 7/21 TIME ST. 14:15 END 14:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C Moore
2. S Wibby
3. PT } Maloy (empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y) N	Background
EXPLOSIVE GAS	(Y) N	
AVAIL. OXYGEN	(Y) N	
OVA	Y (N)	

OTHER Radiation meter

PHOTOGRAPHS, ROLL —

EXPOSURE —

NOTES 0.2'-1' Light brown sandy silt with cobbles loose, granular, dry.

FILL

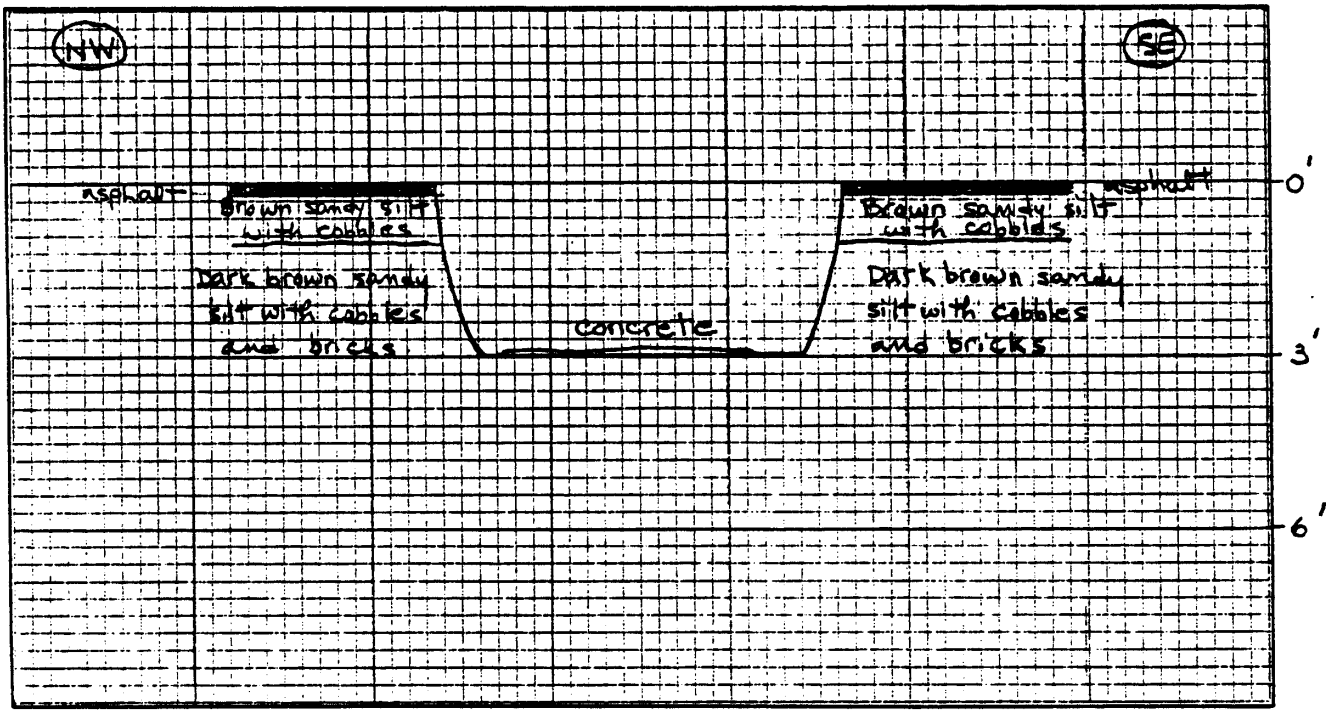
1'-3' Dark brown silty fill with cobbles, bricks, and concrete. loose, dry. and granular.

3' Concrete obstruction - refusal.

TEST PIT RECORD
PROFILE ALONG TEST PIT- 3

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (L x W x D): 7' x 2' x 3'

PI meter readings at background in ambient air and at soil. No visible signs of coal tar or other contamination. Test pit was abandoned after numerous attempts to break through a concrete obstruction encountered at 6.0'. No groundwater seepage

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4		No Samples	
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

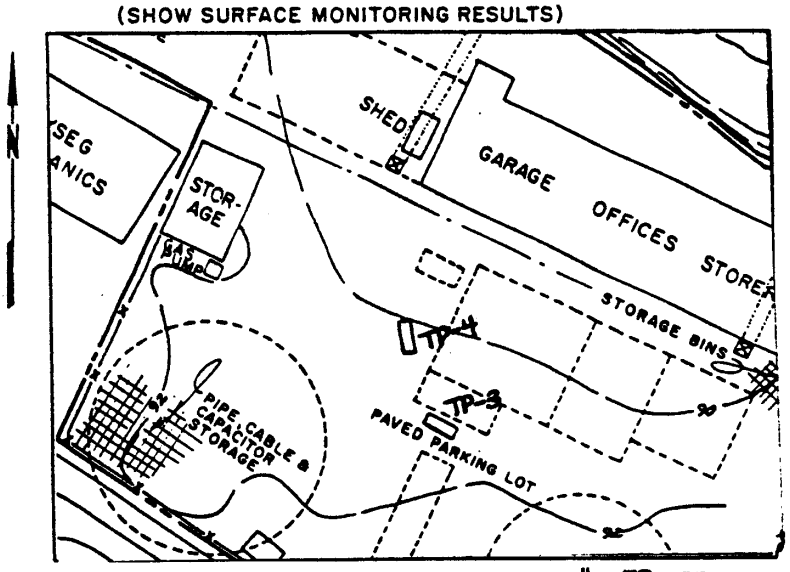
TEST PIT RECORD

SITE Mechanicville NYSEG

TEST PIT TP-4 DATE 7/21/86 TIME ST. 14:40 END 15:00

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #6, 7, 8

NOTES 0.1' – 0.3' Light brown sandy silt w/ cobbles loose and dry

0.3' - 1.0' Dark brown sandy silt w/ cobbles. Loose, dry.

1.0' - 1.5' Bricks

▽ 2.75' 1.5' - 3.0' Light brown sand, medium to fine

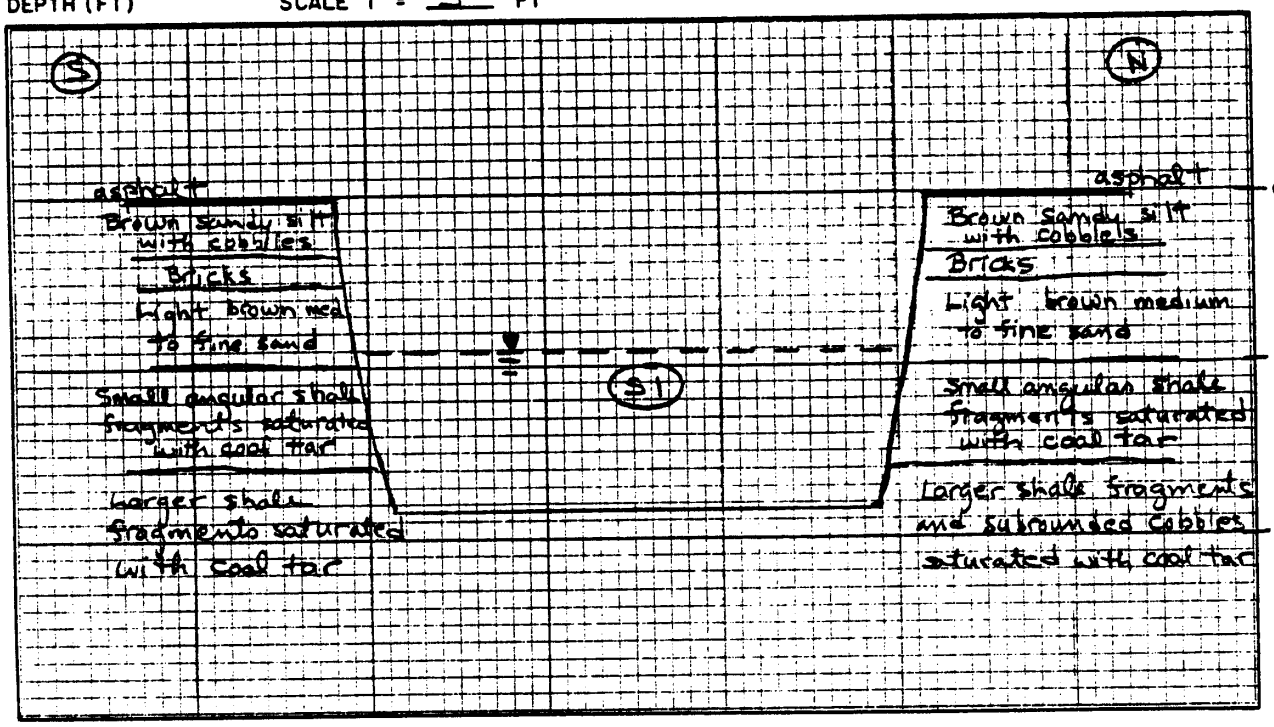
PI - 30 → 40ppm 3.0' - 4.75' angular shale rock fragments saturated with coal tar

4.75' - 5.6 Larger angular shale fragments and subrounded cobbles within clayey silt matrix. Saturated with coal tar

TEST PIT RECORD
PROFILE ALONG TEST PIT- 4

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 10' x 2' x 5.5'

PI meter readings of 30-40 ppm near sampled soil.

Coal tar observed from 3' to bottom of pit.

Water flowed rapidly into the pit from the SE corner

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEITPXX04/1	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

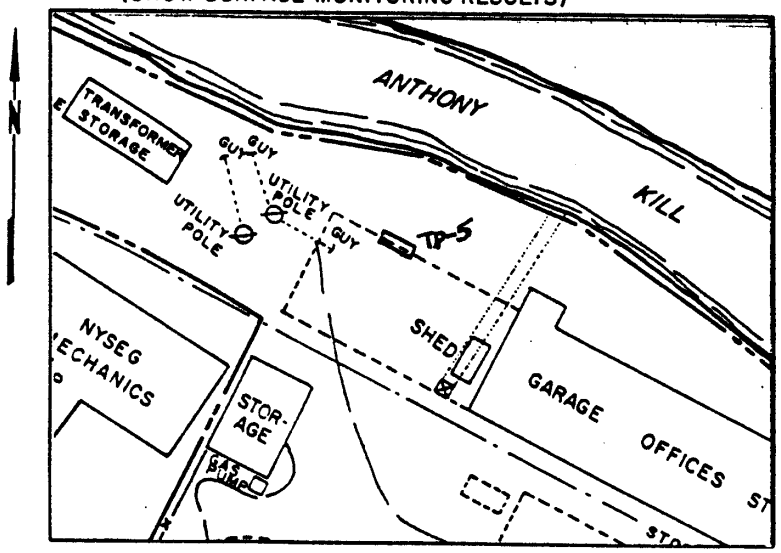
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-5 DATE 7/21/86 TIME ST. 12:50 END 13:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE #2,3,4,5

NOTES 0'-1.3' Light brown sandy silt with cobbles

1.3'-3.0' Dark brown sandy silt with angular cobbles (exposed tile drain at approx. 2')

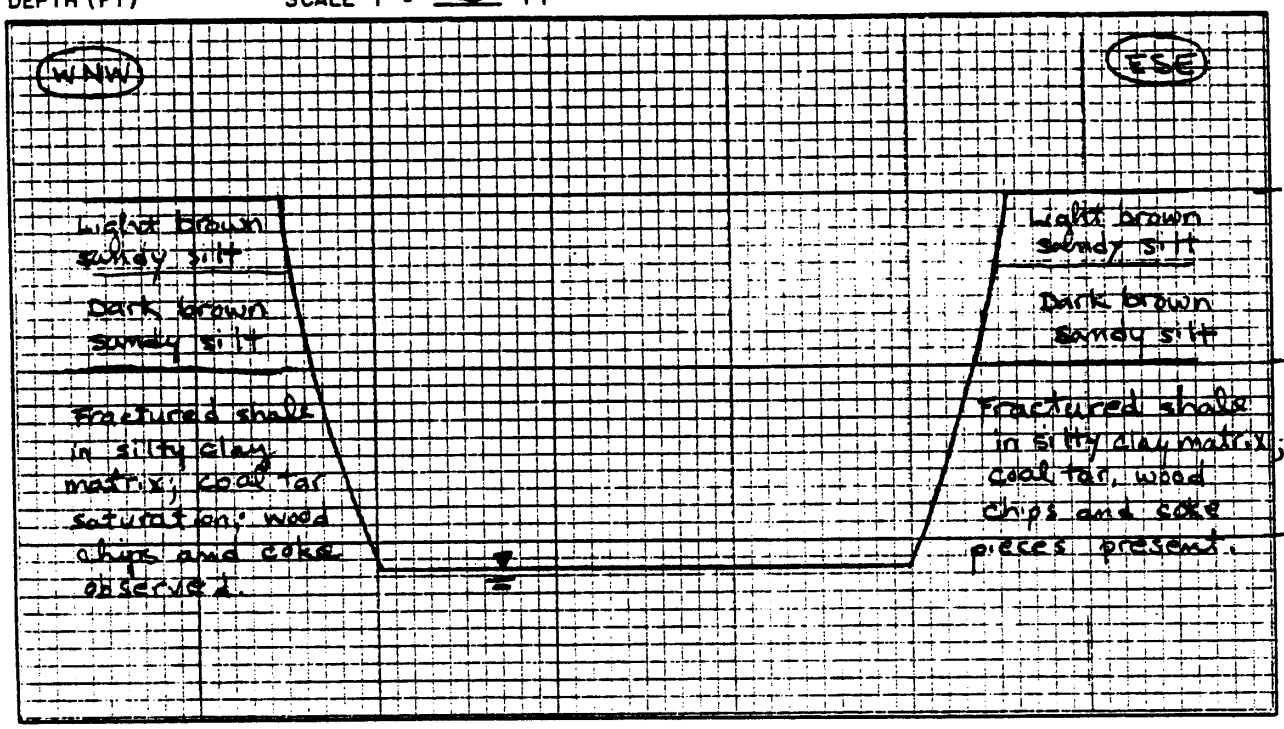
3.0-6.5' Highly fractured shale, weathered with silt and clay soil, loose. Wood chips and coke fragments present, saturated with coal tar.

▽ 6.5' Fractured bedrock surface; coal tar saturation; groundwater seepage.

TEST PIT RECORD
PROFILE ALONG TEST PIT- S

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 12.5' x 2' x 6.5'

Coal tar saturation from 3' to bottom of pit.

PI meter reading of 50 ppm over saturated soil.

Groundwater seepage observed at bottom of pit.

Tile drain uncovered at approx 2'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEXTPXX05/1	
S-2	4.0'-6.0'	MEEITPXX05/2 1	
S-3		(QC/MS)	
S-4			
S-5			
S-6			
S-7			
S-8			
Dup of S1	3.0'-4.0'	MEEXTPXX04/11	

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

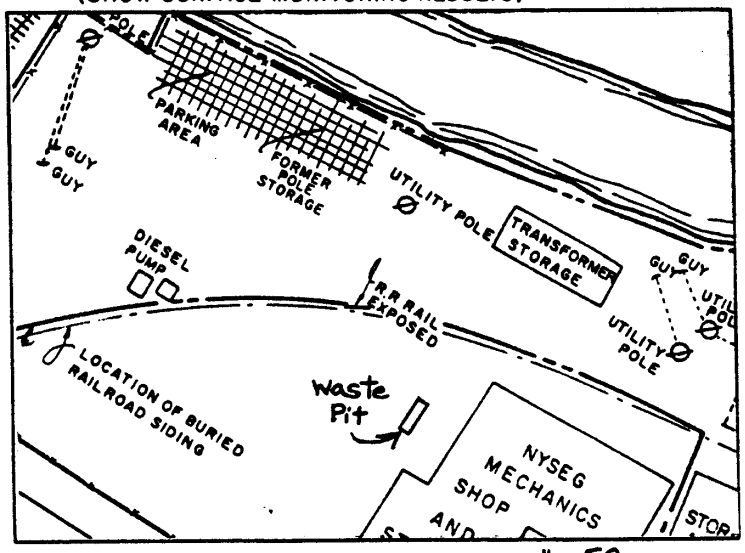
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT Waste Pit DATE 7/21/86 TIME ST. 1000 END 1030

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Wibby
2. C. Moore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation Meter

PHOTOGRAPHS, ROLL #1

EXPOSURE # 0

NOTES

0' – 0.3' Brown, sandy fill with cobbles.

0.3' - 0.7' Asphalt

0.7' - 1.2' Brown sandy fill with cobbles

1.2' - 4.0' Brown to black sandy fill with clinkers, cobbles brick fragments, cobbles, and white/gray ash.

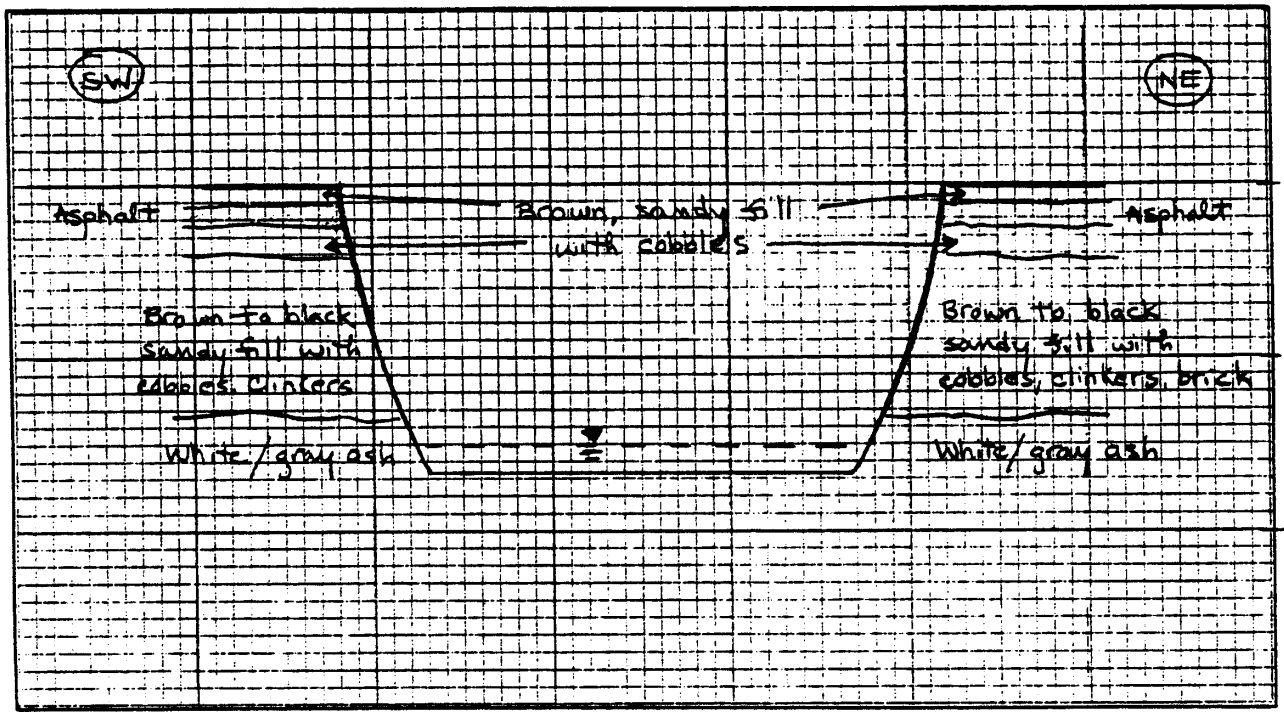
4.0' - 5.0' White/gray ash containing coke, clinkers, some wood, cobbles, and cinders grading back into cobbly brown fill.

$\bar{x}$ at 4.5'

TEST PIT RECORD
PROFILE ALONG TEST PIT– Waste Pit

SITE Mechanicsville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

W × L × D

Test pit dimensions: 2.5'x10'x5'

No visible coal tar but ash, coke and clinkers present.

PI readings at background level.

SAMPLES OBTAINED No Samples

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

APPENDIX A-2

BORING LOGS
AND
FIELD OBSERVATIONS

DRILLING OBSERVATIONS
MECHANICVILLE SITE

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-1	20.2	Black coke ash up to 3mm diameter, from 3.5 to 4.0 ft. Brick fragments and glass encountered from surface to 8.0 ft. Dark gray shale bedrock at 12.2 ft.	No unusual odors. PID-background levels.**	Sample B-1/S-1 from 8.0 to 10.0 ft.*
B-2	16.2	Sandy to gravelly fill with shale fragments from 0.5 to 6.0 ft. weathered shale bedrock at 9.4 feet. No visual signs of coal tar wastes encountered in boring.	No unusual odors. PID-headspace reading of 13 ppm on soil from 4.0 to 6.0 feet. Background levels elsewhere.	Sample B-2/S-1 from 8.0 to 9.5 ft.*
B-3	9.2	Black stained wood chips from 2.0 to 4.0 ft. Trace coal tar-stained organics and fly ash from 4.0 to 6.0 ft., and coal tar staining in sandy silt and shale chips from 6.0 to 8.0 ft. Coal tar stains from 8.0 to 9.2 ft. on weathered bedrock with little silt and fine sand.	PID headspace readings of 270 ppm and 250 ppm from 4.0 to 6.0 ft. and 6.0 to 8.0 ft., respectively.	Sample B-3/S-1 from 4.0 to 6.0 ft.* Sample B-3/S-2 from 6.0 to 8.0
B-4	16.8	Brick chips from 4.0 to 6.0 ft. Coal tar staining noted from 6.0 to 14.0 ft. and 16 to 16.8 ft. Weathered bedrock and shale fragments predominant from 8 to 16 ft.	Coal tar odor from 4.0 - 6.0 ft. PID-ambient air readings of 10 ppm and 2 ppm at 6.0 to 8.0 ft. and 8.0 to 12.0 ft. PID-headspace readings of 10 to 70 ppm from depths of 4.0 to 12.0 ft.	Sample B-4/S-1 from 6.0 to 8.0 ft.*

DRILLING OBSERVATIONS (continued)

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-5	19.4	Fill material with brick, coal clinkers, fly ash and shale chips from 6.0 to 8.0 ft. Predominantly sand and gravel with organics, coal clinkers, and wood chips from 8.0 to 9.6 ft. Coal tar sheen on brown silt with shale chips from 10.5 to 11.5 ft. Bedrock at 11.5 ft.	PID background levels for ambient air. PID-headspace readings of 22 ppm and 175 ppm from 10.0 to 10.9 ft and 10.5 to 11.5 ft., respectively.	Sample B-5/S-1 from 10.0 to 10.9 ft.* Sample B-5/S-2 from 10.5 to 11.5 ft.
B-6	32.0	Casing driven to bedrock at 17 ft. Dark gray shale bedrock thinly laminated, hard, broken, and unweathered.	PID-ambient background levels. 250 - 450 ppm off of augers at 1.5 to 2.5 ft. PID-headspace readings of 300 ppm at 9.2 ft. and background levels from 17.0 to 22.0 ft.	No samples collected.
B-7	9.0	Casing spun through concrete pad (0 to 3.0 ft) and spoon pounded to 7.0 ft. Coarse sandy fill with pebbles and shale fragments from 7.0 to 9.0 ft.	No ambient air or headspace readings taken.	Sample B-7/S-1 from 7.0 to 9.0 ft.*
B-8	17.4	Trace organics from 4.0 to 5.2 ft. Black stains on silt fill and shale fragments from 6 to 6.3 ft. Some coal tar visible on silt with cobbles from 9.5 to 13.5 ft. Extensive coal tar from 13.5 to 15.5 ft. on silty fill and shale fragments. Black stained silty sand from 15.5 to 17.4 ft.	Slight odor from 4.0 to 6.3 ft. and 9.5 to 11.5 ft. PID-ambient air readings of 1-2 ppm from 4.0 to 5.2 ft. PID-headspace readings of 1-2 ppm, 20 ppm, and 30 ppm from 4.0 to 5.2 ft., 6 to 6.3 ft, and 7.5 to 9.5 ft, respectively.	Sample B-8/S-1 from 9.5 to 11.5 ft. Sample B-8/S-2 from 13.5 to 15.5 ft.* Sample B-8/S-3 from 15.5 to 17.5 ft.*

* Samples analyzed by ERCO.

** Background PID levels represent ambient air levels obtained outside and upwind of the site boundaries. At the Mechanicville site, background levels were generally less than 5 ppm.

6.87.14T
0004.0.0

MECHANICVILLE BORING LOG

BORING NO. B-1

PROJECT NO. 4945-02

CLIENT NYSEG			
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/23/86	COMPLETED 7/24/86	
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (1.7) / 10.2	PROTECTION LEVEL D
GROUND EL. 95.9 Rel.	SOIL DRILLED 11.0'	ROCK DRILLED 9.2'	TOTAL DEPTH 20.2'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 8.65' 7-25-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA ELEV
0	Bkgd.	D.J. S-1					Bkgd.	0-2.0' Light brown sandy FILL with trace clay, loose, dry. Some glass, moderate amount of roots, and organics. Iron staining on surface. Recovery: .5/2.0	FILL	3 6 7 10	
2.5	Bkgd	D.J. S-2					Bkgd	2-3.5' Brown FILL some as above. 3.5-4.0' Black coke ASH, up to 3mm diameter, loose, dry. Highly oxidized from 3.75' to 3.8'. .7/2.0	FILL	7 4 3 3	
5.0	Bkgd.	D.J. S-3					Bkgd.	4-6.0' Dark brown to black silty FILL with up to 1" diameter gravel, some organics, brick fragments and glass, dense, moist, some iron staining. .6/2.0	FILL	4 3 2 3	
7.5	Bkgd.	D.J. S-4					Bkgd.	6-8.0' Brown, silty FILL grading upwards to dark brown silty FILL, some gravel and glass, loose, very moist. .2/2.0	FILL	5 5 3 3	
10		ANYL S-1 D.J. S-5					Bkgd.	8-10.0' Brown, gravelly SAND, up to 4 mm diameter, somewhat dense, dry. 9.4-9.6' - Black, organic matter with grass 1.0/2.0	SAND	5 5 4 4	
12.5	Bkgd.	R-1					Bkgd.	10-11.9' Brown, gravelly SAND with dry shale fragments up to 1 inch throughout, dense to very dense, dry. 11-11.9' - weathered shale with some silt, little oxidation. Refusal at 11.9' 1.5/2.0	SAND	12 32 77 100/.4	
								BEDROCK AT 12.2'			
								R-1 12.2-13.6' 308 12.2'. SPIN CASING TO 12.6'. Recovery = 0/1.4' = 0%	SHALE		
15.0	Bkgd.	R-2					Bkgd.	R-2 13.6-17.2' Dark grey SHALE, laminated (1/8" bedding units), hard, very broken, weathering (staining) along bedding planes only. Bedding dips 30°. Primary fractures along bedding planes, secondary, hairline, fractures perpendicular to primary fractures and 1/2" in length. Recovery = 85% RQD = .7'/3.6' = 19%	SHALE	19%	
17.5	Bkgd.	R-3					Bkgd.	R-3 17.0-20.2' (1.1 Ft. CAVE-IN) Dark grey SHALE, same as above. Recovery = 95% RQD = 23%	SHALE	23%	CAVE-IN
20.0											

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

BORING NO. B-1

MECHANICVILLE BORING LOG

PROJECT NO. 4945-73

CLIENT NYSEG

CONTRACTOR EMPIRE SOILS | DATE STARTED 7/23/86 | COMPLETED 7/24/86

METHOD HSA/NX CORE | CASING SIZE 4.25 I.D. | HNU (LT) 10.2 | PROTECTION LEVEL D

GROUND EL. 95.9 Rel. | SOIL DRILLED 11.0' | ROCK DRILLED 9.2' | TOTAL DEPTH 20.2'

LOGGED BY L. ESPY | CHECKED BY CM | DATE 9/22/86 | ▽ BELOW GROUND 8.65' 7-25 86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR	QC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
20.0		R-3					R-3 Cont.	SHALE		CAVE-IN
							BOB 20.2 FT. CAVE-IN TO 18.9			
22.5										

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

FIELD LOG FOR BORING IN ROCK - A.

CONVENTIONAL ROCK DRILLING

PROJECT NO. 4945-02
BORING NO. B-1 (M)
PAGE 1 OF 1
DATE 7/23/86 /7/24/86

LOGGED BY L. ESPY
CHECKED BY JWP DATE 9/22/86

BIT USE
N - NEW
R - RESET
U - USED

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT IN.	RECOVERY FT IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
	R-1	12.2'	1.4'	0	0	0	0	U	-	NA	1.4 FEET OF Granular material caved in. Washed out bit. R-2. Redrilled 12.2 - 13.6'.
	R-2	13.6'	3.6'	3.06'	85%	.7'	19%	U	Approx. 8 min/ft.	NA	Return water muddy brown color.
			RQD FOR R-2 - 2 PIECES								
	R-3	17.2	3.0'	2.9'	95%	.7'	23%	U	6-7 min/ft	NA	1.1 FT. CAVE-IN BEFORE STARTING 17.2.
			RQD FOR R-3 - 1 PIECE								
	BOB	20.2									

MECHANICVILLE BORING LOG

BORING NO. B-2

CLIENT NYSEG — PROJECT NO. 4945-[illegible]

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/1/86 — COMPLETED 8/1/86

METHOD HSA/NX CORE — CASING SIZE 4.25 I.D. — HNU (11.7)/10.2 — PROTECTION LEVEL D

GROUND EL. 91.6 Ref. — SOIL DRILLED 9.5' — ROCK DRILLED 6.7' — TOTAL DEPTH 16.2

LOGGED BY VL. ESPY — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 5.94' 8-1-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)
0	Bkgd.	D.J. S-1		Bkgd.	0.5-2.0' Black, sandy to gravelly FILL, with rounded pebbles, loose, dry.	FILL	12 | 14 | 8
2.5	Bkgd.	D.J. S-2		Bkgd.	2-4' FILL, with 3 discrete layers: 2-3.4' Calcite, blocky (2" dia.) dry, angular chunks 3.4-3.9' Brown silty SAND, loose, dry 3.9-4.0' - Dark grey SHALE fragments in moist silty matrix. Very Wet at 3.8". REC. 55%	FILL	6 | 10 | 3 | 4
5.0	Bkgd.	D.J. S-3		13 ppm	4-6' Sandy to gravelly FILL with 2" pebbles, subrounded to 5.7'. 5.7-6.0'-Greenish-grey SILT to clayey SILT with some iron staining, trace organics, dense, moist. Recovery 35%	FILL / SILT	3 | 3 | 1 | 2
7.5'	Bkgd.	D.J. S-4		Bkgd.	6-8' Orangish-grey clayey SILT with subrounded pebbles, dense, moist grading downwards to orangish grey silty coarse SAND with angular SHALE fragments, dense, damp. REC. 50%	SILT	3 | 12 | 6 | 14
10.0	Bkgd.	D.J S-5 ANY S-1		Bkgd.	8-9.5' Dark grey silty coarse SAND, angular to 9.4' At 9.4' - Dark grey angular SHALE fragments, very thinly bedded, dry. REC. 45%	SAND	12 | 40 | 100/5
12.5	Bkgd.	R-1		Bkgd.	Weathered BEDROCK AT 9.4' SET CASING AT 10.6 WASH OUT HOLE. BEGIN CORING R-1 9.5-13.5' Dark grey SHALE with 25% calcite in top 2/10 ft., V. thinly bedded (1/4-1"), hard, V. broken to broken, some weathering along bedding fractures (staining), calcite veins along bedding planes, bedding dips 30°. Recovery = 4.5/4.0' (CAVE-IN) RQD = 54%	SHALE	
15.0	Bkgd.	R-2		Bkgd.	R-2 13.5-16.2' Dark grey SHALE, massive, hard, unweathered, only 2 mechanical breaks which are along bedding planes. Recovery = 100% RQD = 100%	SHALE	
17.5					BOB 16.2'		
20.0'							

WELL DATA

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

ECJORDANCO

FIELD LOG FOR BORING IN ROCK - A.

NYSEG Mechanicville, NY

PROJECT NO. 4945-02
BORING NO. B-2
PAGE 1 OF 1
LOGGED BY L. ESPY DATE 8/1/86
CHECKED BY JWP DATE 9/22/86

BIT USE
N - NEW
R - RESET
U - USED

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT. IN.	RECOVERY FT. IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
9.5	R-1	9.5'	4'	4.5'	100+	NA	54%	U	6/Ft	NA	4' RUN.
	R-2	13.5'	2.7'	2.5	93%	NA	100%	U	6/FT	NA	2.7' Run
		16.2									

MECHANICVILLE BORING LOG

BORING NO. B-3

CLIENT NYSEG — PROJECT NO. 4995-02

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/5/86 — COMPLETED 8/6/86

METHOD H.S. AUGER — CASING SIZE 4.25' ID — HNU (11.7)/10.2 — PROTECTION LEVEL C

GROUND EL. 87.4 Rel. — SOIL DRILLED 9.2' — ROCK DRILLED N/A — TOTAL DEPTH 9.2'

LOGGED BY SNW — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 2.5' 8/14/86

PE MASTER MALFUNCTIONING
SUSPECT AMBIENT AIR DATA

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA	ELEV. (FT)
0		DJ S-1					0.5' Asphalt 0.5'-2.0' Black, fn-cs sand, some gravel and angular shale chips, grading to sandy silt and shale chips; Dry; med. dense .75'/1.5	Fill	5 4 3		
		DJ S-2					2.0'-4.0' Tan to gray silty sand w/ angular shale chips; some black stained wood chips. loose; moist. 30% shale chips. Recovery .8'/2.0'	Fill	5 4 3 3		
5		Anly S-1				270 (8/11)	4.0'-6.0' Black silt (75%) w/ little angular shale chips grading to silt w/ some shale chips; trace coal tar stained org., wood and fly ash; loose; wet. 1.8'/2.0'	Fill	1 1 1 1		
		Anly S-2				250 (8/11)	6.0'-8.0' Black sandy silt w/ shale chips and wood fragments; loose; wet; friable; Coal tar stained; dry very fractured shale in the end of the sample; iron stained; horiz. and vertical fractures (Rec. 1.3'/2.0')	Fill & WX Bdk			
							8.0-9.2' Weathered bedrock w/ little silt and fine sand; Horiz. and vert. fractures; platy and angular rock fragments; Coal tar stains, loose and wet at 8.0-8.3'; Tan, dry and dense at 8.3'-9.2'	WX Bdk	15 72 100/.2		
10											
							Bottom of boring at 9.2' Weathered bedrock at 8.0'-9.2' Bedrock at 9.2'				
15											
20											

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

FORM A (HAZMAT)

MECHANICVILLE BORING LOG

BORING NO. B-4

PROJECT NO. 4945-02

CLIENT NYSEG			
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/29/86	COMPLETED 7/30/86	
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU 11.7/10.2	PROTECTION LEVEL D/C
GROUND EL. 91.0 Rel.	SOIL DRILLED 16.8	ROCK DRILLED NONE	TOTAL DEPTH 16.8
LOGGED BY SNW	CHECKED BY CM	DATE 9/22/86	BELOW GROUND 3.2' (7-29-86)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO. SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	Bkgd						Auger through Pavement to .5			
	Bkgd	D.J. S-1				Bkgd	.5-2.0' Light Brown Sand Fill w/ angular to sub-rounded gravel. Ash, brick chips, Black staining at 1.2' below G.S. Loose and dry. .7/1.5	Fill	13 9 6	
2.5	Bkgd	N.R.				Bkgd.	2.0-4.0' NO Recovery Boulder was dug out by hand. 0/2.0	Fill	13 12 7 3	
5.0	Bkgd	D.J. S-2				10	4.0-6.0' Black to Dark Gray Sandy Silt Fill w/ sub rounded Fine gravel and brick chips. Coal tar odor. Loose and Friable. Dry. 1.5/2.0	Fill	2 4 2 2	
7.5	10ppm	D.J. S-3 Anly G.C. Gas/Vap				70+	6.0-8.0' Black to Brown Sandy Fill w/ small sub rounded to angular gravel, brick chips, loose - wet. grades into - Silty weathered bedrock w/ shale fragments, heavily coal tar stained and moderatly oxidized. 1.5/2.0	Fill	4 8 11 14	
10.0	2	D.J. S-4				20+	8.0-10.0' Black to Brown Silty Weathered Bedrock (50% silt), angular gravel (shale). grading into less Silty Clay weathered bedrock, coal tar present throughout - 85% Rock Material 2.0/2.0	Fill	14 19 21 31	
		D.J. S-5				70+	10-12' Clayey Silt weathered Bedrock, 75% angular gravel (shale), Coal tar stained loose, wet. 1.5/2.0	Fill	11 12 12 3	
12.5	Bkgd.	D.J. S-6				Bkgd.	12'-14' Gray Broken Shale Fragments w/ Silt, heavily stained w/ Coal tar. Loose. wet. 1.0/2.0	Fill	1 1 30 47	
15.0	Bkgd.	D.J. S-7				Bkgd.	14-16' Black Silt w/ angular shale chips gravel size. Loose. Wet 50% silt 50% Rck .2/2.0	Fill	2 1 0 2	
17.5	Bkgd.	D.J. S-8				Bkgd.	16-16.8 Tan to Lgt Gray Silt Clay Till w/ small sub rounded pebbles + Fine gravel in the till matrix. Organics w/ Coal tar staining in root canals. Dry. Dessicated. Tight .6/1.1	Till	2 1 100/ 1.1	
20.0							Refusal @ 16.8' BOR - 16.8'			

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

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FORM A (HAZMAT)

MECHANICVILLE BORING LOG

BORING NO. B-5

CLIENT NYSEG — PROJECT NO. 4945-02

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/4/86 — COMPLETED 8/5/86

METHOD HSA/NX CORE — CASING SIZE 4.25 I.D. /NX-D — HNU 11.7/10.2 — PROTECTION LEVEL D/C

GROUND EL. 88.4 Rel. — SOIL DRILLED 11.5' — ROCK DRILLED 7.9' — TOTAL DEPTH 19.4

LOGGED BY SNW — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 10.0' 8/5/86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA	ELEV
	Bkgd	D.J. S-1				Bkgd	0-2.0 Dk. Brown Silty Sand Fill w/angular gravel, organics, loose, moist. Rec. 1.6/2.0	Fill	3 6 6 4		
2.5	Bkgd	D.J. S-2				Bkgd	2.0-4.0 Lgt. Brown angular gravel Fill w/ sand and silt interbedded, Oxidation Staining on shale chips. Loose. Dry. 80% Rock Material. 1.0/2.0	Fill	3 3 3 2		
5.0	Bkgd	D.J. S-3				Bkgd	4.0-6.0 Dk. Brown to Brown Silty Gravel Fill w/ Fine Sand w/some Black Stained lenses. Loose. Moist. 65% angular Shale gravel. 1.2/2.0	Fill	4 2 2 3		
7.5		P.I. MALFUNCTIONING D.J. S-4					6.0-8.0' Fill - Brick, Coal Clinkers, Brown Sandy Silt, fly ash, shale chips. Mostly Brick (75%) 1.0/2.0	Fill	4 7 11 7		
		D.J S-5					8-9.6' Dk. Brown to Brown Sand Silt Fill w/ gravel, organics, coal clinkers, wood chips. predominately sand + gravel. 9/1.6	Fill	7 12 19 100/1"		
10.0							Auger to 10'				
		Anly S-1				22	10.0-10.9' Dk. Brown Silt w/ Rck (shale) chips-gravel size organics, Mod. Loose, wet .5/.9	SILT	15 100/4		
		Anly S-2				175	10.5-11.5 Dk. Brown silt w/ angular shale chips (gravel) Coal tar sheen, loose, wet .9/1.0	SILT	21 52 100/0		
							Bedrock at 11.5				
12.5							R-1 10.6-11.6 Metasedimentary Erratic Boulder 11.6-12.4 - Void Space - Sediment, wood chips shale fragments 12.4-15.3 - Gray shale, thin darker laminations (1-2 mm thick spaced every 1/2" to 1", Hard, Massive Calcite inclusions. Unweathered to trace weathering, 30-90° Bedding planes. Fractures occur at 60° across bedding planes. Rec. 4.45/5.0 = 89%	SHALE			
15.0							R-2 15.34-16.1 Gray Shale same as above No Natural Fractures Rec. 76%	SHALE	Not Determinable Due to Coring Problems		
17.5							R-3 16.1-19.5 Gray shale same as above, No Natural Fractures. Rec. = 100% RQD = 86%	SHALE			
20.0							BOB - 19.4				

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

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FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

PROJECT NO. 4945-02
BORING NO. B-5
PAGE 1 OF 1
LOGGED BY SNW DATE 8/4/86 - 8/5/86
CHECKED BY JWD DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
	R-1	10	6	5.0	4.45	89%		89%	U	9/ft		
	R-2	15	34	1.3	1.0	76%		NA*	U	*		* Due to mechanical problems RQD cannot be accurately interpreted
	R-3	16	1	3.4	3.5	100%		86%	U	9/ft		

MECHANICVILLE BORING LOG

BORING NO. B-6

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (1.7) 10.2	PROTECTION LEVEL C/D
GROUND EL. 91.0 Ref.	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	BELOW GROUND Unknown

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR	QC	OTHER	CASING BLOW COUNTS/FT.	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0								DRIVING CASING TO BDRK. NO SAMPLING.			
								AUGER TOP 0.5' ASPHALT & FILL			
								DIFFICULT TO KEEP CASING STRAIGHT.			
	Bkgd.					47	250-450 ppm off Augers				
2.5'						48					
						49					
						30		3.5' Standing water			
5.0'								BLOWS NOT RECORDED			
	Bkgd.										
7.5						11					
						12					
								BLOWS NOT RECORDED			
	Bkgd.						300 ppm	9.2' - DRIVING DIFFICULT AT 9.2'. CASING KICKED OUT AT ANGLE, POSSIBLE COBBLE.			
10.0'						17					
						19					
						25					
12.5						43					
						18					
15.0'						35		14.3' CUTTINGS IN RINSEWATER LOOK LIKE WEATHERED ROCK.			
								16.4' DRIVING DIFFICULT. ROLLER-BIT FROM 16.4-17.0' TO REAM & WASH HOLE.			
17.5	Bkgd.	R-1					Bkgd	R-1 17.0-22.0' Dark grey SHALE, very thinly bedded (30° dip), hard, broken. Un-weathered except along bedding planes. Recovery - 90% RQD - 71%			
20.0'											

NO MONITORING WELL INSTALLATION

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO.

MECHANICVILLE BORING LOG

BORING NO. B-6

PROJECT NO. 4945-01

CLIENT NYSEG			
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86	COMPLETED 7/29/86	
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (BZ) 10.2	PROTECTION LEVEL C/D
GROUND EL 91.0 Rel.	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND Unknown

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR.	OC	OTHER	HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
20.0		R-1 (cont)					R-1 (con't) See page 1 for description.	SHALE BDRY		
22.5	Bkgd	R-2			Bkgd.		R-2 22.0-27.0' Dark grey SHALE, thinly laminated (.03-.1"), hard, broken, unweathered. Iron oxidation staining in upper (17-18) fractures. Bedding laminae offset by vertical, discontinuous fractures and foldmy. Fractures occur along calcite (30-40°) inclusions. Minor amount of inclusions, concoidal in shape. Recovery - 102% RQD - 80%	SHALE 24.7		
25.0										
30.0	Bkgd.	R-3			Bkgd.		R-3 27.0-32.0' Dark grey SHALE, same as above except fewer inclusions than in R-2. Fractures perpendicular to beddmy at 45-90°. Some evidence of deformation. Recovery = 100% RQD = 83%	SHALE		
35.0							BOB 32.0'			

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

PROJECT NO. 4995-02
BORING NO. B-6
PAGE 1 OF 1
LOGGED BY SNW/L.ESPY DATE 7/28/86 - 7/29/86
CHECKED BY JWP DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
17.0'	R-1	17.	0	5'	4.5'	90%	NA	71%	U	NA	NA	MANY MECHANICAL Breaks in Rock, Few Natural
22.0	R-2	22.	0	5'	5.0	102%	NA	80%	U	9/ft	NA	Mechanical breaks, fractures along calcite inclusions
32.0	R-3	32.	0	5'	5.0	100%	NA	83%	U	8/ft.	NA	Vertiele to Near Vertiele discontinuous fractures present.

MECHANICVILLE BORING LOG

BORING NO. B-7

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/31/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25" ID	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL 911.8 Rel.	SOIL DRILLED 8.8'	ROCK DRILLED NONE	TOTAL DEPTH 9.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 3.9

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0						SPIN CASING THRU CONCRETE PAD.	ASPHALT		
						0-.3 - ASPHALT	CONCRETE		
						.3-1.2 CONCRETE PAD	VOID		
						1.2-2.1 VOID			
2.5					3.0 ▽	2.1-3.0 BOULDER FILL	FILL		
		NO RECOVERY				3-5' Pound spoon. 0% Recovery	3.9 ▽	2 2 2 2	
5.0						5-7' Pound spoon. Recovery 5% - all wash		8 5 3 3	
7.5		ANYL. S-1 DJ S-1				7-9' Dark grey coarse sandy FILL with some 1-2" pebbles, trace clay. Trace wood (may have fallen into hole), calcite piece (1" diam), weathered shale fragments at 8.8-9' - Dark grey, thinly bedded 1" long.	FILL	7 15 53 85	CAVE-IN
10.0						BOB 9.0'	Bdrk.		
15.0									
20.0									

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

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BORING NO. B-8

MECHANICVILLE BORING LOG

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/6/86		COMPLETED 8/6/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (1.7)/10.2" TIP- 11.7 HNU- 10.7	PROTECTION LEVEL D/C
GROUND EL. 93.2 Rel.	SOIL DRILLED 17.4'	ROCK DRILLED NONE	TOTAL DEPTH / 17.4'
LOGGED BY SNW	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 9.5-13.5' (APPROX)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0							AUGER THRU ASPHALT TO 0.5'			
.5	Bkgd	D.J. S-1				Bkgd.	.5-2' Lgt. brown to brown Sandy FILL with cobbles and pebbles, platey to rounded, loose, dry, oxidized sediments. Broken rock Rec. 1.0/1.5	FILL	10 12 8	
2.5	Bkgd	D.J. S-2				Bkgd.	2-4' Lgt. brown to brown sandy SILT FILL w/ coal clinkers (oxidized). and trace subrounded brick and cobbles. Platey shale chips, loose to compact, dry. REC. 1.3/2.0	FILL	12 29 13 14	
5.0	1-2 ppm	D.J. S-3				1-2 ppm	4-5.2' Brown sandy FILL grading to silt Fill with depth, with concrete chips, dry, oxidized shale fragments, subrounded boulder pebbles at 4.7'. Trace organics. Compact, moist. Slight, coal tar odor throuout .9/1.2	FILL	10 20 100/2	
	Bkgd.	D.J. S-4				20ppm (shoe)	6-6.3' Brown silt FILL w/ rounded cobbles, platey shale fragments, and brick shards. Coal tar odor and black stains. Loose and moist. Obstruction from 5.2 - 7.2. Augered thru. .3/.3	FILL	100/.3	
7.5	Bkgd.	D.J. S-5 NO REC.				30 ppm (shoe)	7.5 - 9.5' Brown silt on outside of spoon. No Recovery. 30 ppm off spoon, no staining. Rec. 0/2.0	UNK.	3 2 3 3	
10.0	Bkgd	ANYL. S-1 D.J. S-6				Bkgd	9.5 - 11.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Slight coal tar odor, Some coal tar present. REC. 2.0/2.0	SILT FILL	4 6 7 9	
12.5		D.J. S-7 (wood) S-8 (soil)				Bkgd.	11.5 - 13.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Coal tar present at 13.3 - 13.5'. Wood fibers at 13.0' Rec. .9/2.0	SILT FILL	9 12 32 8	
15.0		ANYL. S-2				Bkgd.	13.5 - 15.5' - Silty FILL w/ shale fragments and subrounded cobbles, loose, saturated. Extensive COAL TAR. REC. 1.2/2.0	FILL	6 2 2 3	
17.5	Bkgd.	GC/MS ANYL. S-3				50-100 ppm	15.5 - 17.4' Black stained silty SAND with subrounded cobbles, pebbles and shale chips, loose, saturated. REFUSAL AT 17.4'. REC. 1.3/2.0	SILTY SAND	3 3 2 100/.4	NO MONITORING WELL INSTALLATION
20.0							BOB 17.4'			

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

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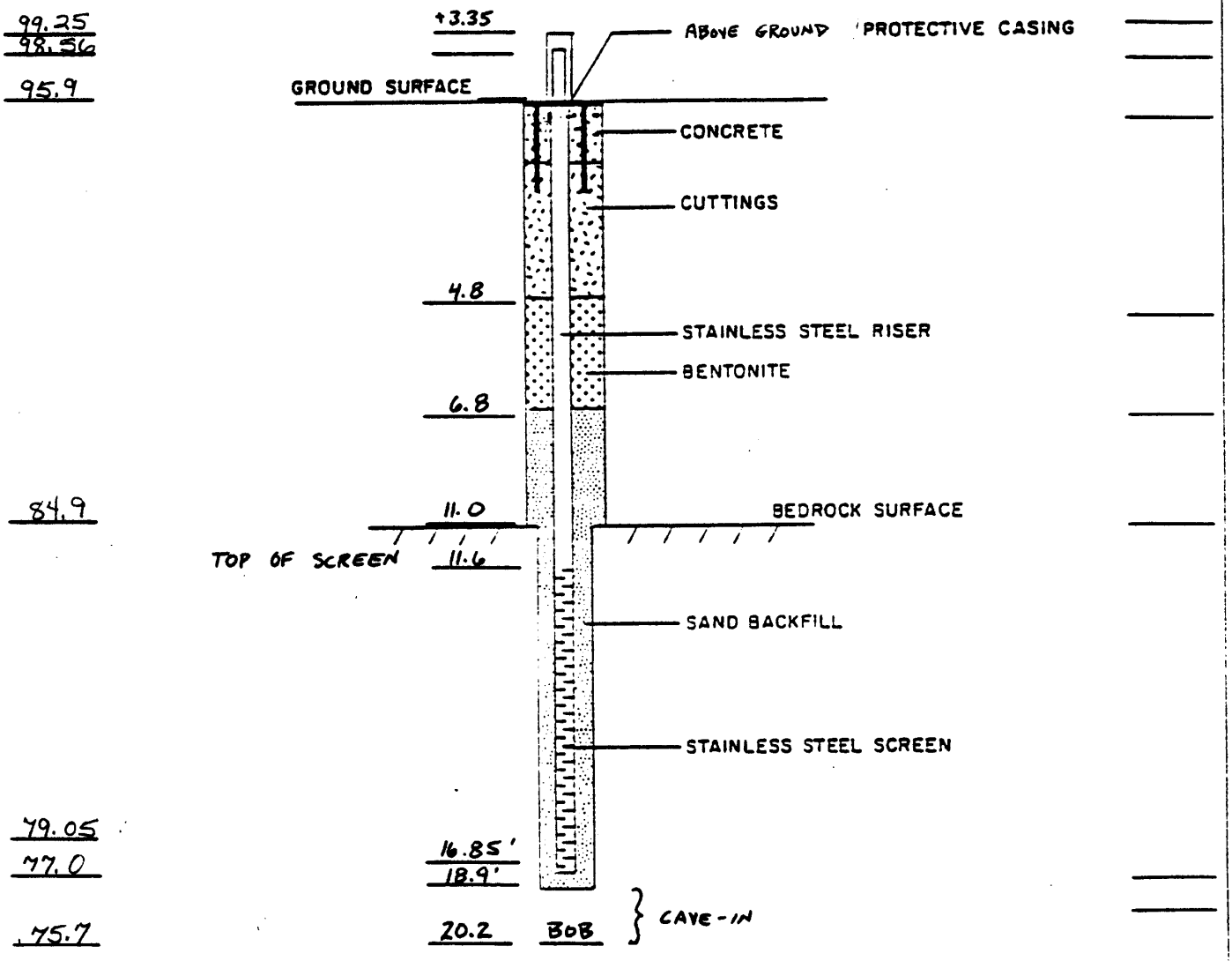
APPENDIX A-3

MONITORING WELL INSTALLATION DIAGRAMS

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME NYSEG	WELL NO.
4945-02	MECHANICVILLE	MW-1
INSTALLED BY L. ESPY, S. WIBBY	**DATE INSTALLED** 8/1/86	**BORING DIAMETER** 8.75"
WELL DIAMETER 2.0"	**WELL MATERIAL** SS	**BACKFILL MATERIAL** #3 JERSEY SAND

ELEV., FT. DEPTH, FT.

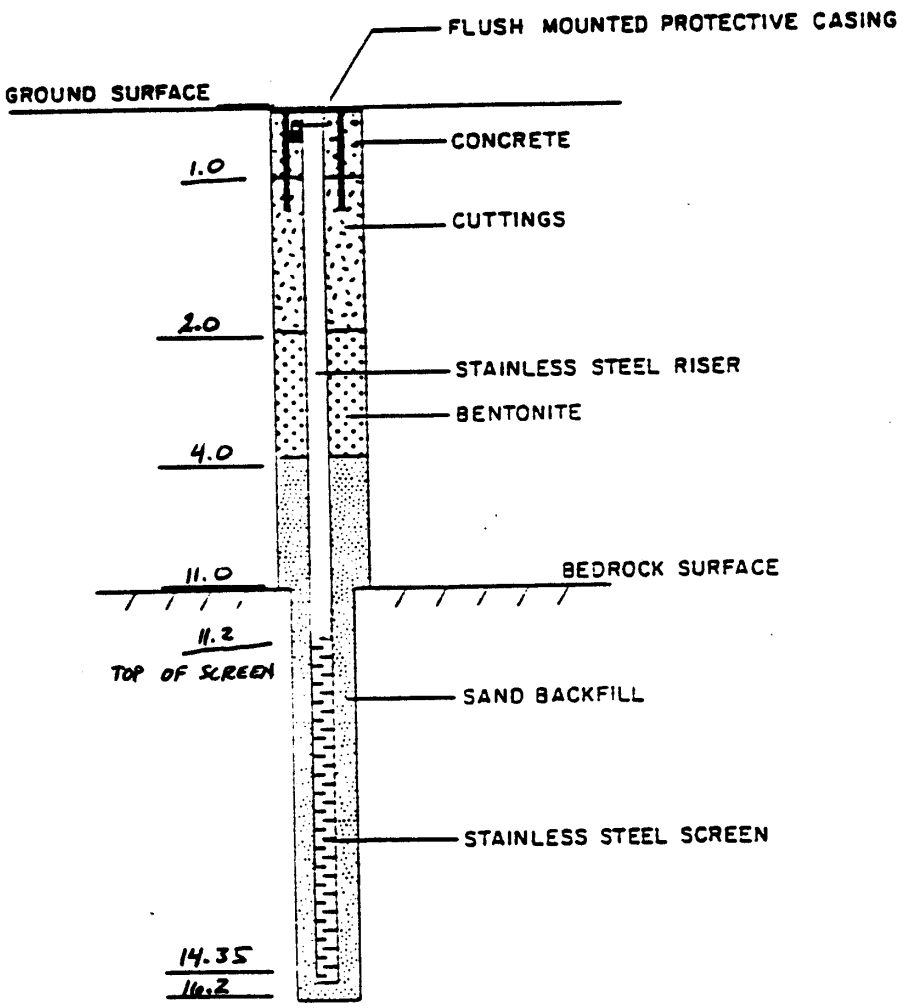


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MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-2
INSTALLED BY L. ESPY S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

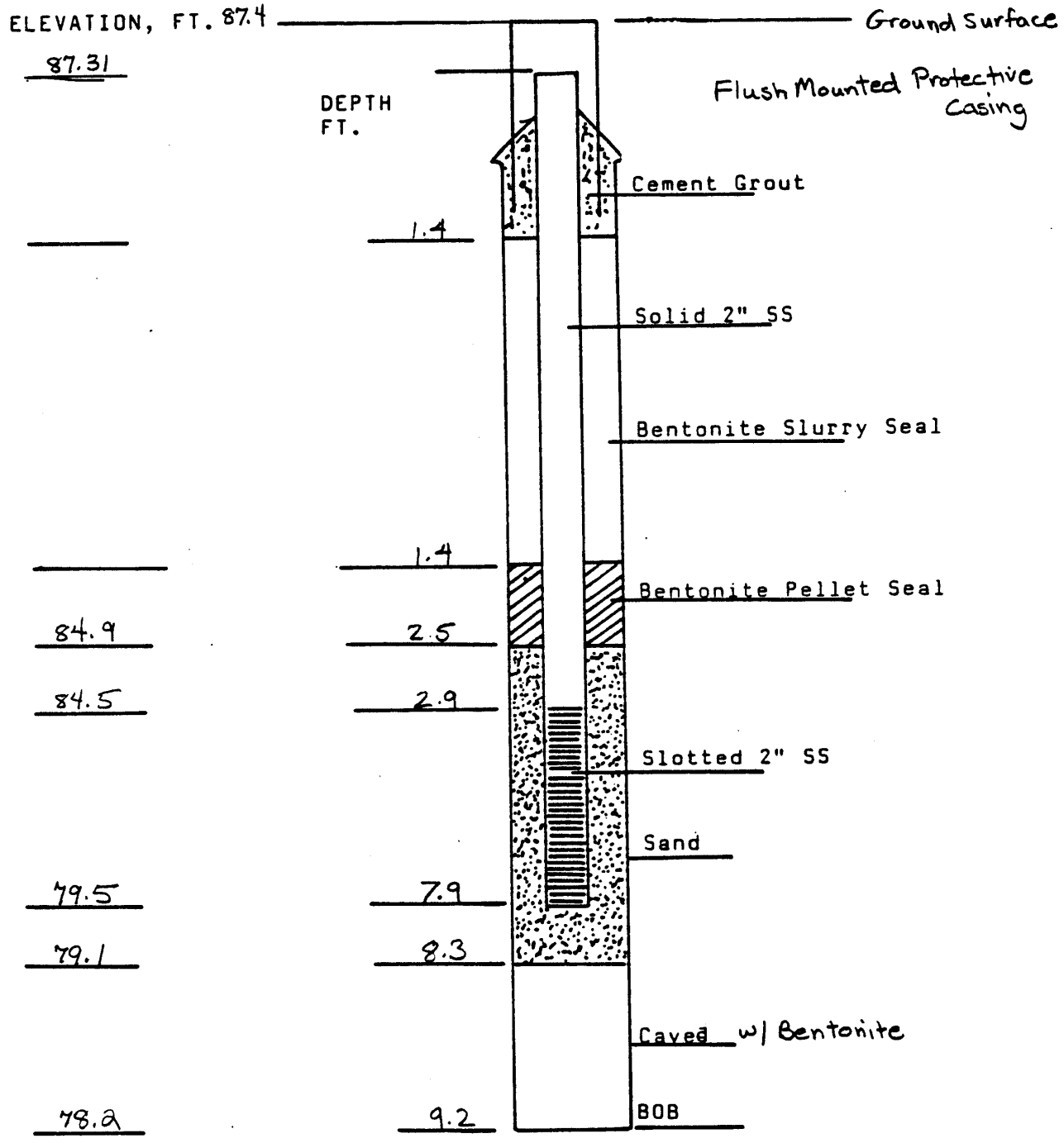
ELEV, FT. DEPTH, FT.



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WELL INSTALLATION DETAILS

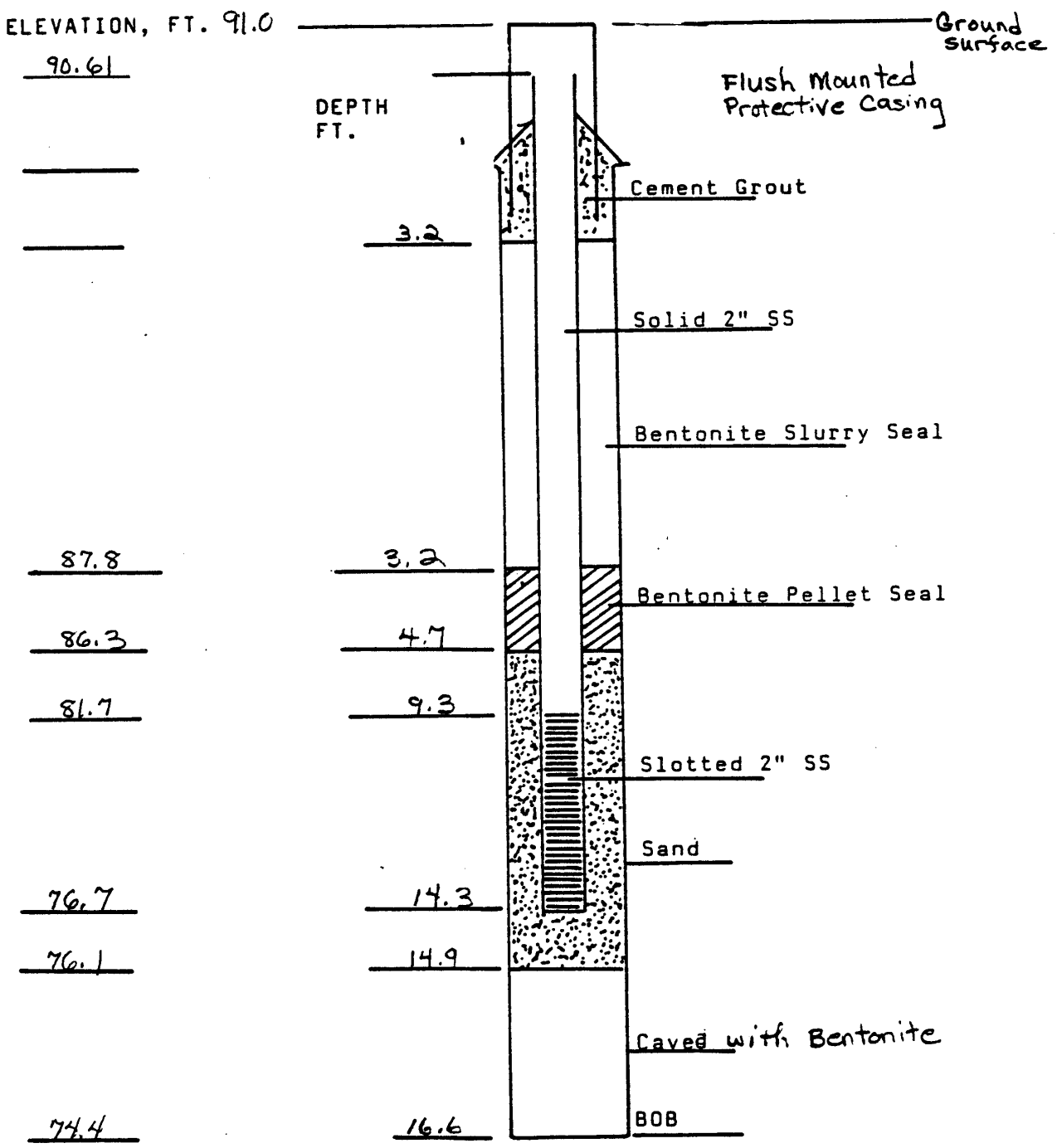
Project No. 4945-02	Project Name NYSEG MECHANICVILLE	Well No. MW-3
Installed By SNW/JWP	Date Installed 8/6/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material SS	Backfill Material #3 Jersey Sand



EC JORDAN CO

WELL INSTALLATION DETAILS

Project No. 4945-02	Project Name NYSEG Mechanicville	Well No. MW-4
Installed By SNW, LWE, ICM	Date Installed 7/30/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material Stainless Steel	Backfill Material #3 Jersey sand

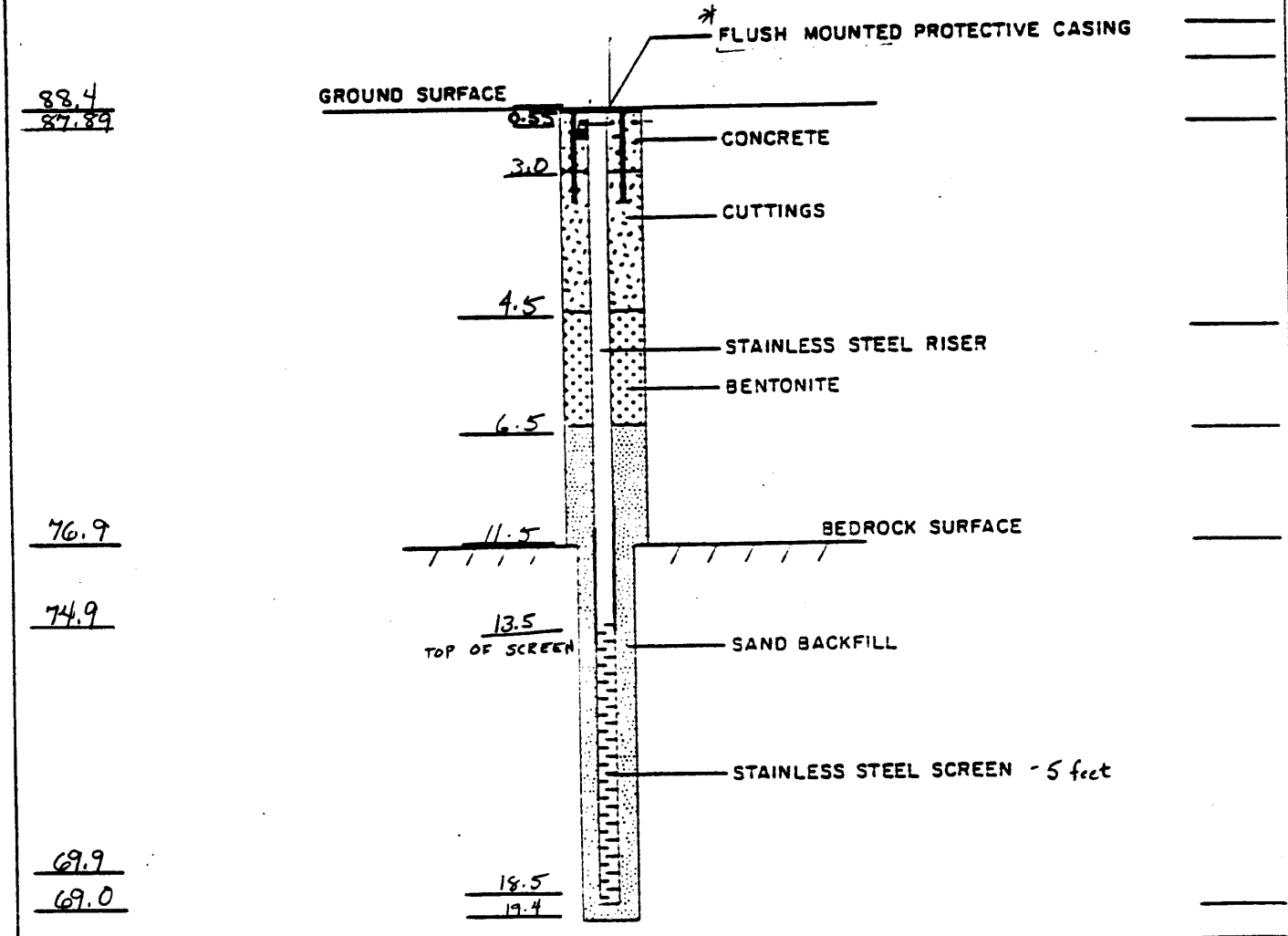


EC JORDAN CO

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-5
INSTALLED BY SNW ; JWP	DATE INSTALLED 8/5/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 Jersey Sand

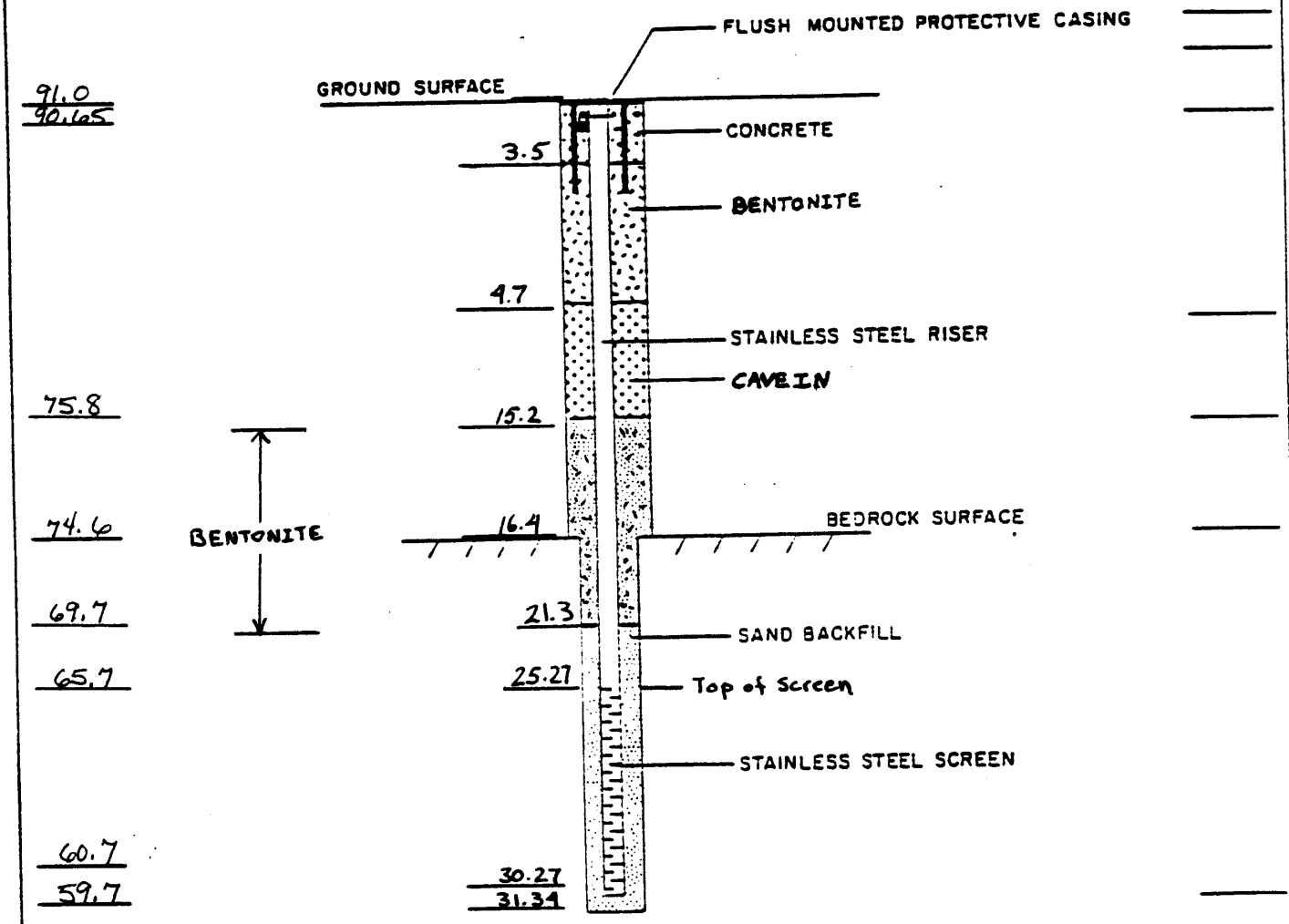
ELEV, FT. DEPTH, FT.



EC JORDAN CO

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-6
INSTALLED BY	**DATE INSTALLED**	**BORING DIAMETER**
SNW	7-29-86	4.0"
WELL DIAMETER	**WELL MATERIAL**	**BACKFILL MATERIAL**
2.0"	SS	#3 JERSEY SAND



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APPENDIX A-4

PERMEABILITY TEST METHODS AND CALCULATIONS

PERMEABILITY TEST METHODS

FALLING HEAD METHOD

In this method the monitoring well/piezometer is filled with water which is then allowed to seep into the soil. Measurements are made of the water level in the monitoring well/piezometer over a give period time. These measurements are continued until the rate of decrease becomes negligible or until sufficient readings have been obtained to satisfactorily determine the permeability.

PACKER TEST

This method is used to test the permeability of the bedrock. Water is introduced under pressure to the monitoring well/piezometer through tubing that discharges the water into a packed area which allows water to seep only within the bedrock layer. The rest of the test follows the principle of the falling head test.

PERMEABILITY TEST RESULTS
MECHANICVILLE SITE

STRATA TESTED	TEST LOCATION	TYPE TEST	PERMEABILITY cm/sec	PERMEABILITY ft/day	REMARKS
Soil and Rock	MW-1	In Situ	9.5×10^{-4}	2.7	Falling Head
Soil and Rock	MW-2	In Situ	1.1×10^{-3}	3.1	Falling Head
Soil	MW-3	In Situ	1.6×10^{-4}	0.45	Falling Head
Soil and Rock	MW-4	In Situ	1.9×10^{-4}	0.54	Falling Head
Soil and Rock	MW-5	In Situ	5.4×10^{-4}	1.5	Falling Head
Soil and Rock	MW-6	In Situ	7.5×10^{-5}	0.21	Falling Head
Rock	MW-6	In Situ	(1) 1.8×10^{-4} (2) 2.0×10^{-4}	0.51 0.57	Packer Test (15 psi) Packer Test (30 psi)

PERMEABILITY DATA SHEET
MECHANICVILLE SITE
EXAMPLE CALCULATION

WELL NO.: MECHANICVILLE MW-1

Permeability determined by falling head test

Equation:
$$K_h = \frac{(d^2)\ \ln\ (4mL/D)}{(8)(L)(t_1 - t_2)} \cdot \ln\ (H_1/H_2)$$

m = transformation ratio = 1
L = length of monitored zone = 12.1 feet
D = diameter of boringhole = 7.5 inches
d = diameter of well pipe = 2 inches

t_1 = time when flow rate begins to stabilize = 50 seconds
H_1 = head at t_1 = 0.61 feet
t_2 = time when flow rate stabilization drops = 180 seconds
H_2 = head at t_2 = .03 feet

APPENDIX A-5

GROUNDWATER LEVEL DATA

GROUNDWATER LEVEL DATA
MECHANICVILLE SITE

LOCATION	GROUND ELEVATION (FT. - RELATIVE)	RISER ELEVATION (FT. - RELATIVE)	-WATER ELEVATION (FT. - RELATIVE)- 8/5/86	9/9/86	12/2/86	3/10/87	6/2/87
MW-1	95.9	98.6	87.3	87.3	87.6	88.4	87.4
MW-2	91.6	91.3	88.1	88.9	89.0	89.0	88.4
MW-3	87.4	87.3	NA	84.6	85.1	85.7	83.6
MW-4	91.0	90.6	86.8	87.1	88.1	88.1	87.6
MW-5	88.4	87.9	78.4	78.2	78.9	NA	79.9
MW-6	91.0	90.7	86.8	86.9	86.9	87.7	87.2
P-1	92.5	95.0	85.7	85.5	86.7	86.40	85.5
P-2	95.2	98.8	87.1	86.9	87.6	89.70	86.9
P-3	91.8	91.8	88.6	89.7	91.8	89.30	88.5

APPENDIX A-6

MONITORING WELL SAMPLING PROCEDURES

MONITORING OF GROUNDWATER WELLS

1. Check the well for proper identification and location.

2. Measure and record the height of protective casing.

3. After unlocking the well and removing any well caps, measure and record the ambient and well-mouth organic vapor levels using the photoionization meter. If the ambient air quality at breathing level reaches 5 ppm, the sampler shall utilize the appropriate safety equipment as described in the Health and Safety Plan.

4. Using the electronic water level meter, measure and record the static water level in the well to the nearest 0.01 foot. Measure also the depth to the well bottom from a constant reference point on the top of the well riser. Upon removing the water level wire, rinse it with laboratory-grade isopropanol or ethanol and then distilled water.

5. Calculate the volume of stagnant water in the well casing. Volume in liters equals 0.154 times the square of the inside diameter of the casing (in inches) times the depth of water (in feet).

SAMPLING OF GROUNDWATER MONITORING WELLS

Following the measurements and calculations described above, sampling will commence in the sequence below:

1. Lower the submersible pump or peristaltic pump intake into the well. For shallow groundwater situations, the intake of the suction tubing or of the submersible pump will be lowered to the top of the well screen and the well purged three to five times the calculated volume. Alternatives to this procedure may be necessary if one of the following conditions exist:

   a. If the well screen is very large, making pumping from the top impractical, the suction line or submersible pump should be lowered to the approximate mid-point of the screened portion of the well.

   b. If the well is situated in tight formations such as tills, clays or rock, the purging of the well should be performed from very near the bottom of the well screen. This will facilitate complete removal of standing well water.

2. Connect the instrumentation header to the pump discharge and begin flushing the well. Monitor the in situ parameters (pH, Eh, temperature, and specific conductivity) and measure the volume of groundwater being pumped. Alternately, in situ parameters may be monitored in a beaker filled from the pump discharge. Purging of the standing well water is considered complete when one of the following is achieved:

   a. at least three well volumes have been purged and in situ parameters stabilized, or

b. five well volumes have been purged, or

c. the well has been pumped dry.

3. Record the in situ parameters.

4. After purging, lower the pump intake or bailer, as appropriate for the parameters of concern (i.e. bailer for volatiles; and bailer, peristaltic or submersible pump for all other parameters) to the middle of the screened interval. If the analysis to be performed is for lighter-than-water chemical species, then the pump or bailer should be lowered to the top of the water column for sample collection.

5. Collect the sample(s).

   Volatile and semi-volatile samples are filled directly from the bailer with as little agitation as possible.

   Other samples will be placed directly into the appropriate container from the discharge tubing of the pump or bailer. Where filtration is required, an in-line filter should be used, if possible. Vacuum filtration is an alternative to an in-line device (see attached Table).

6. Remove the pump from the well and decontaminate the pump and tubing by flushing with isopropanol; up to one gallon of the solvent is used as needed. Rinse the pump and tubing with one liter of distilled water for every 40 feet of tubing.

7. Complete sample data records after each well is sampled.

8. Secure the well cap and lock.

STANDARD FIELD FILTRATION PROCEDURES

A. IN-LINE FILTRATION

EQUIPMENT

1. A portable 102-mm acrylic backflushing filter unit
2. 102-mm diameter filter papers, 0.45 µm membrane filters
3. Reagent rinse water (ASTM Type II or better)
4. 20% v/v nitric acid rinse solution

PROCEDURES

1. Attach in-line filter assembly, after assembling filter paper into filter holder, to discharge line of sampling pump. Open by-pass valve completely.
2. Turn sampling pump on, slowly turn by-pass valve closed, allowing flow into the filter. Remove trapped air through the filter bleed valve, if necessary.
3. Discard the initial 100 mℓ ± of filtrate. Collect subsequent filtrate into sample bottle.
4. Rinse barrel and filter holder assembly between samples with three rinses of reagent water. The rinse sequence when elemental parameters will be analyzed is: reagent water - 20% v/v nitric acid - reagent water.

B. VACUUM FILTRATION

EQUIPMENT

1. Two sets of either glass funnel type or self-contained polysulfone filters with sintered glass discs or polysulfone filter plates
2. 47-mm diameter filter papers, 0.45 µm membrane filters
3. Vacuum pump or ISCO peristaltic pump with silicone tubing
4. Reagent rinse water (ASTM Type II or better)
5. 20% v/v nitric acid rinse solution

PROCEDURES

1. Thoroughly rinse sintered glass disc, filter funnel, and stem or polysulfone filter units with reagent water.
2. On the basis of visual clarity of sample, prefiltering with larger pore filters may be required. If sample has a heavy clay content, organics, or suspended matter, prefiltration through a 3.0- or 5.0-µm membrane filter may be necessary.
3. Place membrane filter on filter holder with minimum handling.
4. Attach filter holder with filter to filter funnel and receiver.
5. Swirl and slowly pour sample bottle into filter funnel.
6. Attach suction tubing to filter flask and vacuum pump (or ISCO pump). Pump is turned on in the vacuum mode.
7. Filter a small portion of the sample and discard filtrate after rinsing flask with sample filtrate.
8. If prefiltering was required, pass sample through a 0.45-µm membrane filter using another filtering apparatus.
9. Transfer filtered sample to appropriate bottles.
10. Rinse filtration equipment between samples with at least three rinses of reagent water. The rinse sequence, when elemental parameters are to be analyzed, is: reagent water - 20% v/v nitric acid - reagent water.

C. PRESSURE FILTRATION

EQUIPMENT

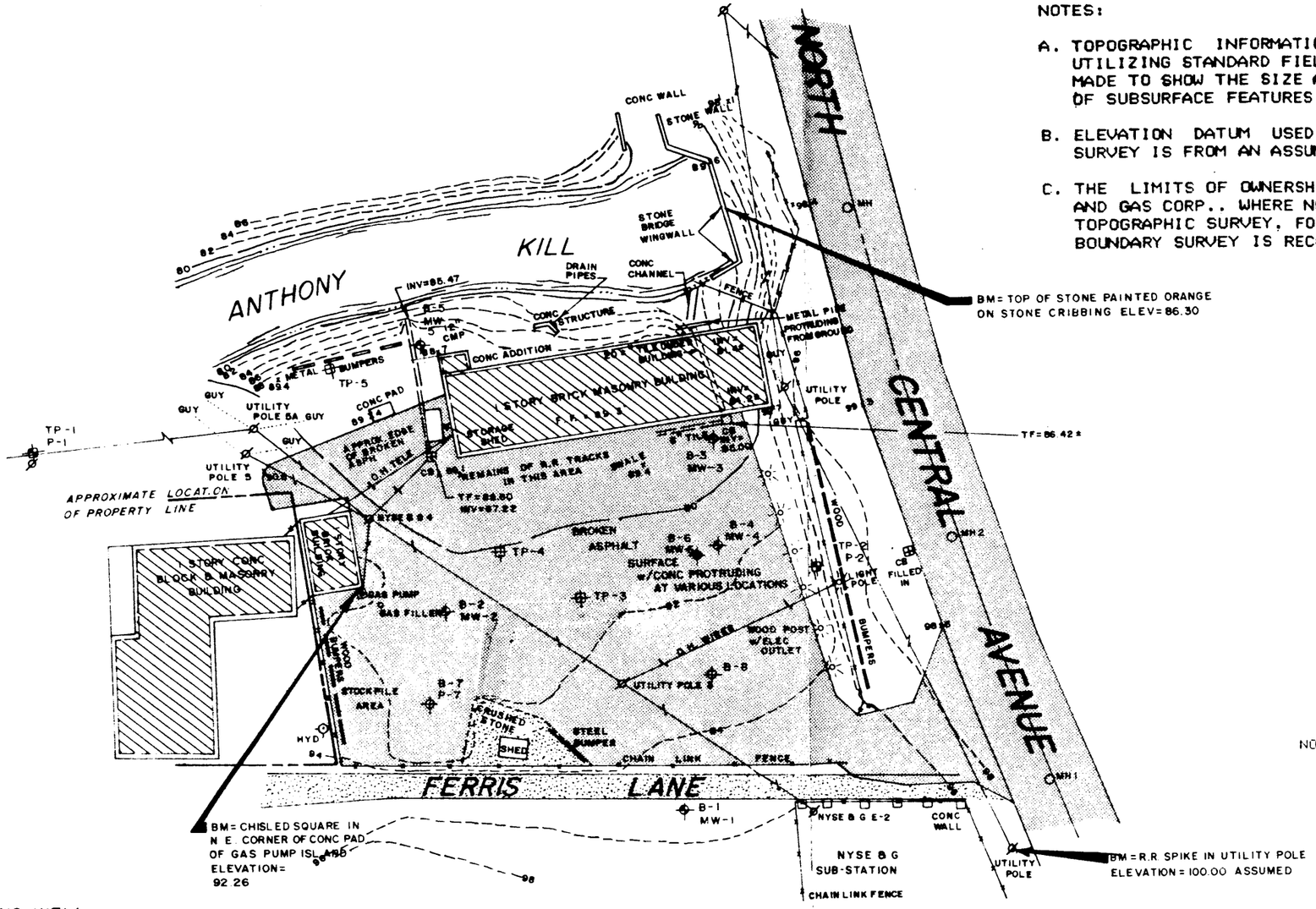
1. Pressure filter apparatus consisting of 1 liter barrel filter, filter holder and pressure hose connectors
2. Source of pressurized gas, i.e., tank of nitrogen, argon, etc.
3. 147 mm filter papers, 0.45 µm membrane filter
4. Reagent rinse water (ASTM Type II or better)
5. 20% v/v nitric acid rinse solution

PROCEDURES

1. If filter barrel has sample valve, assemble filter assembly with 0.45 µm membrane filter and attach pressure hose.
2. If filter barrel does not have a sample valve, assemble filter paper on filter holder.
3. Turn barrel upside down and pour sample into barrel.
4. Place filter holder and filter onto barrel assembly, making sure to align O-ring for a positive seal.
5. Attach swing-away bolts and tighten hand-tight.
6. Turn over filter assembly and attach pressure hose assembly.
7. Slowly turn on pressurized gas and increase pressure regulator to a maximum of 20 psi.
8. Collect filtrate from bottom of barrel assembly.
9. Rinse barrel and filter holder assembly between samples with three rinses of reagent water. The rinse sequence when elemental parameters will be determined is: reagent water - 20% v/v nitric acid - reagent water.

APPENDIX A-7

SITE SURVEY MAP



NOTES:

A. TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN COMPILED UTILIZING STANDARD FIELD SURVEY PROCEDURES. NO ATTEMPT HAS BEEN MADE TO SHOW THE SIZE AND LOCATION OF ANY UNDERGROUND UTILITIES OF SUBSURFACE FEATURES WHICH MAY EXIST.

B. ELEVATION DATUM USED IN CONNECTION WITH THE PREPARATION OF SURVEY IS FROM AN ASSUMED DATUM.

C. THE LIMITS OF OWNERSHIP OF LANDS OF NEW YORK STATE ELECTRIC AND GAS CORP.. WHERE NOT READILY APPARENT AT THE TIME OF THIS TOPOGRAPHIC SURVEY, FOR LOCATION OF PERTINENT PROPERTY LINES A BOUNDARY SURVEY IS RECOMMENDED.

MONITORING DEVICE			ELEVATION
MONITORING WELL		#1	98.56
"	"	#2	91.31
"	"	#3	87.31
"	"	#4	90.61
"	"	#5	87.89
"	"	#6	90.68
BORING	#1	GROUND	95.9
"	#2	"	91.6
"	#3	"	87.4
"	#4	"	91.0
"	#5	"	88.4
"	#6	"	91.0
"	#7	"	91.8
"	#8	"	93.2
PIEZOMETER		#1	95.02
"		#2	98.89
"		#7	91.76
TEST PIT		#1	92.5
"	"	#2	95.2
"	"	#3	91.4
"	"	#4	90.3
"	"	#5	89.1

NOTE: ELEVATION OF MONITORING WELLS AND PIEZOMETERS TAKEN AT TOP OF EXISTING NOTCH CUT IN TOP OF P.V.C. PIPE.

ABBREVIATIONS

M.W. = MONITORING WELL
P = PIEZOMETER
T.P. = TEST PIT
B = BORING

NOTE: MONITORING DEVICE SYMBOLS SHOWN HERE ON ARE FROM SITE PLAN SHOWING PROPOSED EXPLORATION LOCATIONS PREPARED BY E C JORDAN CO.

RECORD OF WORK	DATE		
	6-26-86	PREPARED FOR E C JORDAN CO	D A F
	10 7 86	MONITORING LOCATIONS & DATA ADDED E C JORDAN	D A F

TOPOGRAPHIC SURVEY
PORTION OF LANDS OF
NEW YORK STATE ELECTRIC & GAS CORP.
(MECHANICVILLE SITE)

TOWN OF MECHANICVILLE — COUNTY: SARATOGA, N.Y.
SCALE: 1"=50' — DATE: JUNE 26,1986

DAVID A. FLANDERS ASSOCIATES
6 MORNINGSIDE DRIVE
BALLSTON LAKE, NEW YORK
MAP BY: DAVID A. FLANDERS — LIC. NO: 49,134

86-72-S

APPENDIX B

CHEMICAL DATA

APPENDIX B-1

ANALYTICAL METHODS
AND
REPRESENTATIVE WASTE CHARACTERIZATION

ANALYTICAL METHODS[1]
MECHANICVILLE SITE

Analytical Parameter	Soils and Sediments	Groundwater and Surface Water
Volatile Organic Compounds	Method 8020 with confirmatory analysis of 2 soil samples and one round of sediments using Method 8240	Method 602 for Round 1 samples; Method 624 for subsequent sampling rounds
Semi-Volatile Organic Compounds	Method 8310 with confirmatory analysis of 2 soil samples and one round of sediments using Method 8270	Method 610 for Round 1 samples; Method 625 for subsequent sampling rounds
Cyanide - Total and Ferro-Ferricyanide	Method 9010	Method 335.2
Total Organic Carbon	Method 9060	Method 415.1
Total Phenolics	Method 420.1	Method 420.1
Iron and Zinc	Method 200.7 with 3050	Method 200.7

[1] Method numbers refer to USEPA methods (USEPA, 1983) unless otherwise noted.

ORGANIC COMPOUNDS IN COAL TAR STORAGE VESSELS
ITHACA-COURT STREET SITE

	Coal Tar Samples		Aqueous Sample
	Vessel A[1]	Vessel B[2]	Vessel B
Volatile Organics	(mg/kg)	(mg/kg)	(mg/ℓ)
Minimum Detection Limit (MDL)	(10)	(48)	(0.002)
Volatile Aromatics			
Benzene	1,900	1,800	80.0
Toluene	2,200	2,600	33.0
Ethylbenzene	120	140	ND[3]
Total Xylene	2,200	1,900	5.6
Styrene	910	1,100	4.2
Total Volatiles	7,330	7,540	122.8
Semivolatile Organics			
Minimum Detection Limit (MDL)	(1,500)	(2,800)	(1.6)
PAH			
Acenaphthene	T[4]	T	ND
Acenaphthylene	10,000	33,000	T
Anthracene	7,800	16,000	ND
Benzo(a)anthracene	4,200	5,600	ND
Benzo(a)pyrene	4,000	5,200	ND
Benzo(g,h,i)perylene	T	T	ND
Benzo(k)fluoranthene) coeluted Benzo(b)fluoranthene)	5,200	4,900	ND
Chrysene	4,300	6,300	ND
Dibenzo(a,h)anthracene	T	T	ND
Fluoranthene	12,000	16,000	ND
Fluorene	5,400	15,000	ND
Indeno(1,2,3-cd)pyrene	T	T	ND
Naphthalene	55,000	180,000	ND
Phenanthrene	24,000	40,000	ND
Pyrene	12,000	10,000	ND
Other			
Phenol	2,700	T	48.0
2,4-Dimethylphenol	ND	ND	2.6
2,4-Dichlorophenol	T	ND	ND
Total Semivolatiles	146,600	332,000	50.6

[1] Vessel A is located adjacent to Markles Flats.
[2] Vessel B is located next to the swimming pool.
[3] ND = Not Detected
[4] T = Detected in trace concentrations at or below the MDL.

6.87.14T
0019.0.0

METALS, TOTAL ORGANIC HALIDES, AND IGNITABILITY
RESULTS FOR COAL TAR STORAGE VESSEL SAMPLES
ITHACA-COURT STREET SITE

	Coal Tar Samples		Aqueous Sample
	Vessel A[1]	Vessel B[2]	Vessel B
EP Toxicity Metals[3]	(mg/ℓ)	(mg/ℓ)	(mg/ℓ)
Ag	ND	ND	0.0033
As	0.39[4]	2.1[4]	0.014
Ba	ND	ND	0.140
Cd	ND	ND	ND
Cr	ND	ND	0.015
Hg	ND	ND	0.0002
Pb	ND	3.7[4]	0.028
Se	ND	ND	ND
Other Metals			
Cu	ND	ND	0.023
Ni	ND	ND	0.011
Ti	1.7[4]	1.8[4]	ND
Zn	0.31[4]	1.4[4]	0.065
Total Organic Halides	(mg/kg)	(mg/kg)	(mg/ℓ)
TOX, as Chlorine	830	870	0.39
Ignitability	(°F)	(°F)	
Flash Point	99	81	NA[2]

[1] ND = Not Detected
[2] NA = Not Analyzed
[3] Metals in coal tar samples were analyzed following extraction procedure (EP).
[4] EP toxicity limits for the detected metals are: As and Pb, 5 mg/ℓ; Ti and Zn, none specified.

6.87.14T
0020.0.0

AN ANALYSIS OF SPENT OXIDE WASTES[1]

Component	Percent
Free sulfur	44.70
Moisture	17.88
Ferric monohydrate	5.26
Ferrous monohydrate	6.25
Basic ferric sulfate	1.25
Ferric ammonium ferrocyanide	3.80
Ferrosoferric ammonium ferrocyanide	2.50
Ferric pyridic ferrocyanide	1.20
Organic matter peat fiber	4.68
Tar	1.21
Silica	1.05
Naphthalene	0.72
Pyridine sulfate	0.77
Ammonium sulfate	2.06
Calcium sulfate	0.12
Ferrous sulfate	0.02
Ammonium thiocyanate	1.30
Sulfur otherwise combined	1.33
Ogranic matter soluble in alkalies (humus)	1.54
Combined water and loss (by difference)	2.36
	100.00

[1] Utility Solid Waste Activities Group (USWAG), 1984. Handbook on Manufactured Gas Plant Sites. Prepared by Environmental Research and Technology, Inc. and Koppers Co., Inc., for the USWAG Superfund Committee, Washington, D.C. p. 3-46.

APPENDIX B-2

MINIMUM DETECTION LIMITS
AND
QUALITY ASSURANCE SAMPLE RESULTS

12/17/87

MINIMUM DETECTION LIMITS (1)
MECHANICVILLE SITE

$TEST PITS (MG/KG)$

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-5/S-1	TP-5/S-1 DUP	TP-5/S-1 GC/MS
VOLATILE AROMATICS	0.022	0.051	0.024	0.099	0.094	0.096
ACETONE	-- (2)	--	--	--	--	2.4
METHYLENE CHLORIDE	--	--	--	--	--	0.2
CARBON DISULFIDE	--	--	--	--	--	0.4
SEMIVOLATILE ORGANICS	0.043	11.0	5.7	78.0	93.0	13.0
IRON	10.0	10.0	10.0	10.0	10.0	--
ZINC	2.0	2.0	2.0	2.0	2.0	--
CYANIDE	0.3	0.3	0.3	0.3	0.3	--
TOTAL RECOVERABLE PHENOLICS	0.2	0.2	0.2	0.2	0.2	--
TOTAL ORGANIC CARBON	100	100	100	100	100	--

$BORINGS (MG/KG)$

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1 GC/MS
VOLATILE AROMATICS	0.043	0.052	0.56	0.028	0.54	0.052	10.0	3.6
ACETONE	--	--	--	--	--	--	--	90.0
METHYLENE CHLORIDE	--	--	--	--	--	--	--	9.0
CARBON DISULFIDE	--	--	--	--	--	--	--	3.6
SEMIVOLATILE ORGANICS	5	0.55	170	24	54	0.65	61	130
IRON	10	10	10	10	10	10	10	--
ZINC	2	2	2	2	2	2	2	--
CYANIDE	1	1	1	1	1	1	1	--
TOTAL RECOVERABLE PHENOLICS	1	1	1	1	1	1	1	--
TOTAL ORGANIC CARBON	1000	1000	1000	1000	1000	1000	1000	--

$ GROUNDWATER (MG/L) $

SAMPLE IDENTIFIER ORGANICS ANALYSIS	MW-101 HPLC	MW-101 GC/MS	MW-201 GC/MS	MW-301 GC/MS	MW-401 GC/MS	MW-102 HPLC	MW-202 GC/MS	MW-202 GC/MS DUP	MW-302 GC/MS	MW-402 GC/MS	MW-103 HPLC	MW-103 GC/MS	MW-203 GC/MS	MW-303 GC/MS	MW-403 GC/MS
VOLATILE AROMATICS	0.001	0.002	0.005	0.010	0.005	0.001	0.005	0.005	0.010	0.005	0.050	0.020	0.250	0.010	0.050
ACETONE	--	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010	0.010	--	0.500	0.500	0.010	0.100
METHYLENE CHLORIDE	--	0.050	0.050	0.010	0.005	--	0.050	0.050	0.010	0.005	--	0.050	0.250	0.010	0.050
SEMIVOLATILE ORGANICS	0.020	0.020	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.050	0.200	0.200	0.010	0.010	0.100
IRON	0.1	--	0.03	0.1	0.1	0.1	0.03	0.03	0.1	0.1	0.1	--	0.03	0.1	0.1
ZINC	0.01	--	0.005	0.02	0.020	0.01	0.005	0.005	0.02	0.02	0.01	--	0.005	0.02	0.02
CYANIDE	0.01	--	0.01	0.02	0.010	0.01	0.01	0.01	0.02	0.01	0.01	--	0.01	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	--	0.005	0.01	--	--	--	0.005	0.01	--	--	--	0.005
TOTAL ORGANIC CARBON	0.5	--	5	5	5	0.5	5	5	5	5	0.5	5	5	5	5
SULFATE	--	--	1	--	1	--	1	1	--	1	--	--	1	--	1

MINIMUM DETECTION LIMITS (1) (CONT'D)
MECHANICVILLE SITE

#GROUNDWATER (MG/L)#

SAMPLE IDENTIFIER ORGANICS ANALYSIS	MW-104 HPLC	MW-204 GC/MS	MW-304 GC/MS	MW-404 GC/MS	MW-105 HPLC	MW-205 GC/MS	MW-405 GC/MS	MW-405 GC/MS DUP	MW-106 HPLC	MW-106 HPLC DUP	MW-206 GC/MS	MW-306 GC/MS	MW-306 GC/MS DUP	MW-406 GC/MS
VOLATILE AROMATICS	0.050	0.050	0.010	0.050	0.010	0.100	0.050	0.050	0.050	0.050	0.250	0.010	0.010	0.050
ACETONE	--	0.100	0.010	0.100	--	0.200	0.100	0.100	--	--	0.500	0.010	0.010	0.100
METHYLENE CHLORIDE	--	0.050	0.010	0.050	--	0.100	8.500	8.500	--	--	0.250	0.010	0.010	0.050
SEMIVOLATILE ORGANICS	0.200	0.010	0.010	0.100	0.200	0.010	0.100	0.100	4.000	4.000	0.010	0.010	0.010	0.500
IRON	0.1	0.03	0.1	0.1	0.1	0.03	0.1	0.1	0.1	0.1	0.03	0.1	0.1	0.1
ZINC	0.01	0.005	0.02	0.02	0.01	0.005	0.02	0.02	0.01	0.01	0.005	0.02	0.02	0.02
CYANIDE	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	0.005	0.01	--	0.005	0.005	0.01	0.01	--	--	--	0.005
TOTAL ORGANIC CARBON	0.5	5	5	5	0.5	5	5	5	0.5	0.5	5	5	5	5
SULFATE	--	1	1	1	--	1	1	1	--	--	1	--	--	1

#SURFACE WATER (MG/L)#

SAMPLE IDENTIFIER ORGANICS ANALYSIS	SW-101 HPLC	SW-201 GC/MS	SW-301 GC/MS	SW-301 GC/MS DUP	SW-401 GC/MS	SW-102 HPLC	SW-202 GC/MS	SW-202 GC/MS DUP	SW-302 GC/MS	SW-402 GC/MS	SW-402 GC/MS DUP	SW-103 HPLC	SW-203 GC/MS	SW-303 GC/MS	SW-403 GC/MS
VOLATILE AROMATICS	0.001	0.005	0.010	0.010	0.005	0.001	0.005	0.005	0.010	0.005	0.005	0.001	0.005	0.010	0.005
ACETONE	--	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010
METHYLENE CHLORIDE	--	0.005	0.010	0.010	0.005	--	0.005	0.005	0.010	0.005	0.005	--	0.005	0.010	0.005
SEMIVOLATILE ORGANICS	0.020	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010
IRON	0.1	0.03	0.1	0.1	0.1	0.1	0.03	0.03	0.1	0.1	0.1	0.1	0.03	0.1	0.1
ZINC	0.01	0.005	0.02	0.02	0.02	0.01	0.005	0.005	0.02	0.02	0.02	0.01	0.005	0.02	0.01
CYANIDE	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	--	0.005	0.01	--	--	--	0.005	0.005	0.01	--	--	0.005
TOTAL ORGANIC CARBON	0.5	5	5	5	5	0.5	5	5	5	5	5	0.5	5	5	5
SULFATE	--	1	--	--	--	--	1	1	--	--	--	--	1	--	--

#SEDIMENTS (MG/KG)#

SAMPLE IDENTIFIER	SED-101	SED-201	SED-301 GC/MS	SED-301 DUP	SED-401 GC/MS	SED-102	SED-202	SED-202 DUP	SED-302 GC/MS	SED-402 GC/MS	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303 GC/MS	SED-403 GC/MS
VOLATILE AROMATICS	0.024	0.025	0.080	0.062	1.000	0.025	0.028	0.025	0.070	1.000	1.000	0.025	0.024	0.027	0.066	1.000
ACETONE	--	--	2.000	1.600	1.000	--	--	--	1.700	1.000	1.000	--	--	--	1.700	1.000
SEMIVOLATILE ORGANICS	0.420	0.360	1.100	1.100	0.600	0.410	0.510	0.900	0.940	0.600	0.600	0.500	0.520	0.310	0.990	0.600
IRON	0.1	9200	5	5	2	0.1	19000	16000	5	2	2	0.1	0.1	20000	5	2
ZINC	0.01	36	5	5	0.5	0.01	69	100	5	0.5	0.5	0.01	0.01	88	5	0.5
CYANIDE	0.01	0.1	0.01	0.01	0.3	0.01	0.1	0.1	0.01	0.3	0.3	0.01	0.01	0.1	0.01	0.3
TOTAL RECOVERABLE PHENOLICS	0.01	0.01	0.01	0.01	0.2	0.01	0.01	0.01	0.01	0.2	0.2	0.01	0.01	0.01	0.01	0.2
TOTAL ORGANIC CARBON	0.5	4600	100	100	100	0.5	3500	7600	200	100	100	0.5	0.5	4600	100	100
SULFATE	--	32	--	--	--	--	32	32	--	--	--	--	--	32	--	--

(1) NOMINAL DETECTION LIMITS WERE USED WHEN MDLs WERE NOT REPORTED BY THE LABORATORY.

CHEMICALS FOUND IN QUALITY ASSURANCE SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
SAMPLE IDENTIFIER	SB-101	SB-201	SB-301	SB-401	TB-101	TB-201	TB-301	TB-401	FB-101	FB-201	FB-301	FB-401
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	HPLC
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)												
-VOLATILE AROMATICS-												
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
TOLUENE	ND	ND	ND	ND	ND	0.006	ND	ND	--	--	--	--
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
TOTAL XYLENE	-- (3)	ND	ND	ND	--	ND	ND	ND	--	--	--	--
m - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
o - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
p - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	ND	--	--	--	--	--	--	--
-OTHER-												
ACETONE	--	0.0438	ND	ND	--	ND	0.0242	ND	--	--	--	--
METHYLENE CHLORIDE	--	ND	ND	0.006	--	(4)	0.0095	ND	--	--	--	--
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	0.006	ND	ND	--	--	--	--
SEMIVOLATILE ORGANICS (MG/L)												
-PAH-												
ACENAPHTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(a)ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(a)PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
CHRYSENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
DIBENZO(a.h)ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FLUORENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
NAPHTHALENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
PHENANTHRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
-OTHER-												
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	0.015	0.080	--	--	--	--	--	--	--	--
2-METHYLNAPTHALENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
TOTAL PAH	ND	ND	ND	ND	--	--	--	--	--	--	--	--

CHEMICALS FOUND IN QUALITY ASSURANCE SAMPLES (CON'T)
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
SAMPLE IDENTIFIER	SB-101	SB-201	SB-301	SB-401	TB-101	TB-201	TB-301	TB-401	FB-101	FB-201	FB-301	FB-401
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	HPLC
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87
$$OTHER CHEMICALS (MG/L)$$												
-METALS-												
IRON	ND	ND	0.09	ND	--	--	--	--	ND	ND	ND	ND
ZINC	ND	0.012	ND	ND	--	--	--	--	ND	0.014	ND	ND
-CYANIDE-												
TOTAL CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
AMENABLE CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
-OTHER-												
TOTAL RECOVERABLE PHENOLICS	0.012	--	--	ND	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON	ND	1	2.3	1.0	--	--	--	--	ND	1	4.1	2.8
SULFATE	--	4.0	--	--	--	--	--	--	--	4.0	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.

12/17/87

QUALITY ASSURANCE SAMPLES
MINIMUM DETECTION LIMITS (1)
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/11/87	6/2/87	9/9/86	12/2/86	3/11/87	6/2/87	9/9/86	12/2/86	3/11/87	6/2/87
VOLATILE AROMATICS	0.001	0.005	0.010	0.005	0.001	0.005	0.010	0.005	-- (2)	--	--	--
ACETONE	0.002	0.010	0.010	0.010	0.002	0.010	0.010	0.010	--	--	--	--
METHYLENE CHLORIDE	0.001	0.005	0.010	0.005	0.001	0.005	0.010	0.005	--	--	--	--
SEMIVOLATILE ORGANICS	0.02	0.010	0.010	0.010	--	--	--	--	--	--	--	--
IRON	0.10	0.03	0.05	0.100	--	--	--	--	0.10	0.03	0.05	0.100
ZINC	0.010	0.005	0.01	0.020	--	--	--	--	0.010	0.005	0.01	0.020
TOTAL CYANIDE	0.010	0.01	0.01	0.01	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON	0.50	5	5	5	--	--	--	--	0.50	5	5	5
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	0.005	--	--	--	--	--	--	--	--
SULFATE	--	1	--	--	--	--	--	--	--	1	--	--

(1) NOMINAL DETECTION LIMITS WERE USED WHERE MDLs WERE NOT REPORTED BY THE LABORATORY.
(2) -- NOT ANALYZED

APPENDIX B-3

SOLUBILITY DATA

SOLUBILITIES OF PAHs IN WATER (mg/ℓ)[1]

Compound	Verschueren[2]	EPA Treatability Manual[3]
Acenaphthene	--	3.42
Acenaphthylene	3.93	3.93
Anthracene	1.29	0.073
Benzo(a)anthracene	0.044 at 24°C	0.014
Benzo(a)pyrene	0.003 at 20°C	0.0038
Benzo(b)fluoranthene	--	NA[4]
Benzo(k)fluoranthene	--	0.00055
Benzo(g,h,i)perylene	0.00026	0.00026
Chrysene	0.006	0.002
Dibenzo(a,h)anthracene	--	0.0005
Fluoranthene	0.120 at 24°C	0.26
Fluorene	1.9	1.98
Indeno(1,2,3-cd)pyrene	--	0.62
Naphthalene	30.0 at 20°C	34.4
Phenanthrene	0.816 at 21°C	1.29
Pyrene	0.032 at 24°C	0.14

[1] All values are calculated at 25°C unless otherwise noted.

[2] Verschueren, K. Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold Company, New York, New York 1977.

[3] USEPA, Treatability Manual Volume I: Treatability Data, Office of Research and Development, Washington, DC EPA-600/2-82-001a. September 1981 (Revised).

[4] NA - Not available.

INVESTIGATION OF THE FORMER COAL GASIFICATION SITE AT MECHANICVILLE, NEW YORK

TASK 3 REPORT
EXPANDED PROBLEM DEFINITION PROGRAM

Prepared for:

NEW YORK STATE ELECTRIC AND GAS CORPORATION
4500 VESTAL PARKWAY EAST
BINGHAMTON, NEW YORK

Prepared by:

E.C. JORDAN CO.
P.O. BOX 7050, DTS
PORTLAND, MAINE

Job No. 4945-03

SEPTEMBER 1989

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EXECUTIVE SUMMARY

The Mechanicville site is located in Mechanicville, New York, along the Anthony Kill. This site is a quarter-mile upstream from the Hudson River, on the western side of North Central Avenue. A water gas plant was operated at the site by New York State Electric and Gas Corporation (NYSEG) and its predecessor companies from 1901 until 1955. Most of the structures utilized in the coal gas manufacturing operation were cleaned out and demolished at the time of closure in 1955. Since then, the site has become a NYSEG natural gas and electric service center. The site is being investigated because it was formerly used for coal gas manufacturing. Samples of soil, groundwater, surface water, stream sediments, and air were collected at and adjacent to the site and tested in a laboratory. The chemical compounds found in the samples are those routinely found at former coal gasification sites; those present at elevated concentrations include polynuclear aromatic hydrocarbons, volatile organic compounds, and cyanide.

This report, completed by E.C. Jordan Co. (Jordan), presents results of the Task 3 Expanded Problem Definition Program for the Mechanicville site. The study builds on the foundation established in the previous Task 2 Initial Field Investigation Program, which provided an understanding of the site land use; the distribution and types of chemicals in soil, groundwater, surface water, and sediments; and the potential for chemical migration. Task 3 included the following objectives:

- confirmation of Task 2 results
- further definition of chemical distribution and types of chemicals on-site
- an assessment of air quality within buildings on the site
- a more detailed investigation of the potential for chemical migration in groundwater
- identification of areas/populations which might be impacted by chemicals on-site or chemicals migrating off-site

To achieve the Task 3 objectives, an expanded field program was conducted. Geophysical techniques were utilized for further defining depth to bedrock at the site, and six monitoring wells were installed to obtain more detailed information on groundwater flow direction and chemicals present in groundwater. Soils sampled from five of seven soil borings further defined chemicals present in the soils, and surface water and sediment samples from the Anthony Kill helped to better define migration potential of chemicals found at the site. Air sampling provided background and indoor air quality data for assessment of volatilized contaminant risk.

Task 2 results were confirmed. The Mechanicville site is underlain by 8 to 25 feet of fill material (i.e., sands, gravels, silts, and disturbed shales) which in turn overlies a fractured shale bedrock. Groundwater is 5 to 10 feet

below ground surface and migrates through both the fill material and fractured bedrock. The groundwater migrates northeasterly toward the Anthony Kill in the central and northern portions of the site, and easterly toward the Hudson River on the eastern portion of the site.

Chemicals related to former coal gasification activities were found in soil and groundwater samples collected near the former gas plant structures. The highest chemical concentrations were observed on the northern and eastern portions of the site. Sediment data from the Anthony Kill, as well as groundwater data, indicate that site-derived chemicals are migrating into the surface waters of the Anthony Kill. However, site-derived chemicals were not found at elevated levels in surface water samples collected downstream of the site, which indicates that chemicals are not entering the stream in sufficient quantities to be detected. Low concentrations of volatile aromatic chemicals were found in background and indoor air samples.

Seven chemicals identified in the groundwater exceeded the applicable New York State standards for those chemicals, although presently, there are no known groundwater users near or downgradient of the site. Potential pathways for humans to come into contact with coal-gas-related chemicals are through skin contact, ingestion, and inhalation. Because most of the site is covered by structures or has been paved, exposure to site-derived chemicals is expected to be limited primarily to excavation-related activities that could create contact and inhalation hazards. Contact with Anthony Kill sediments may additionally cause exposure for people on- and off-site. Chemicals found in air samples were well below federal and industry standards for permissible exposure levels.

Based on results from the expanded problem definition program (the presence of coal-gas-related chemicals and the potential for human exposure to these chemicals), Jordan concluded that a risk assessment (Task 4) should be performed for the site to identify potential health risks associated with human exposure to these chemicals. Additionally, the risk assessment would identify whether a program to reduce the concentrations and types of chemicals at the Mechanicville site should be undertaken.

1.0 INTRODUCTION

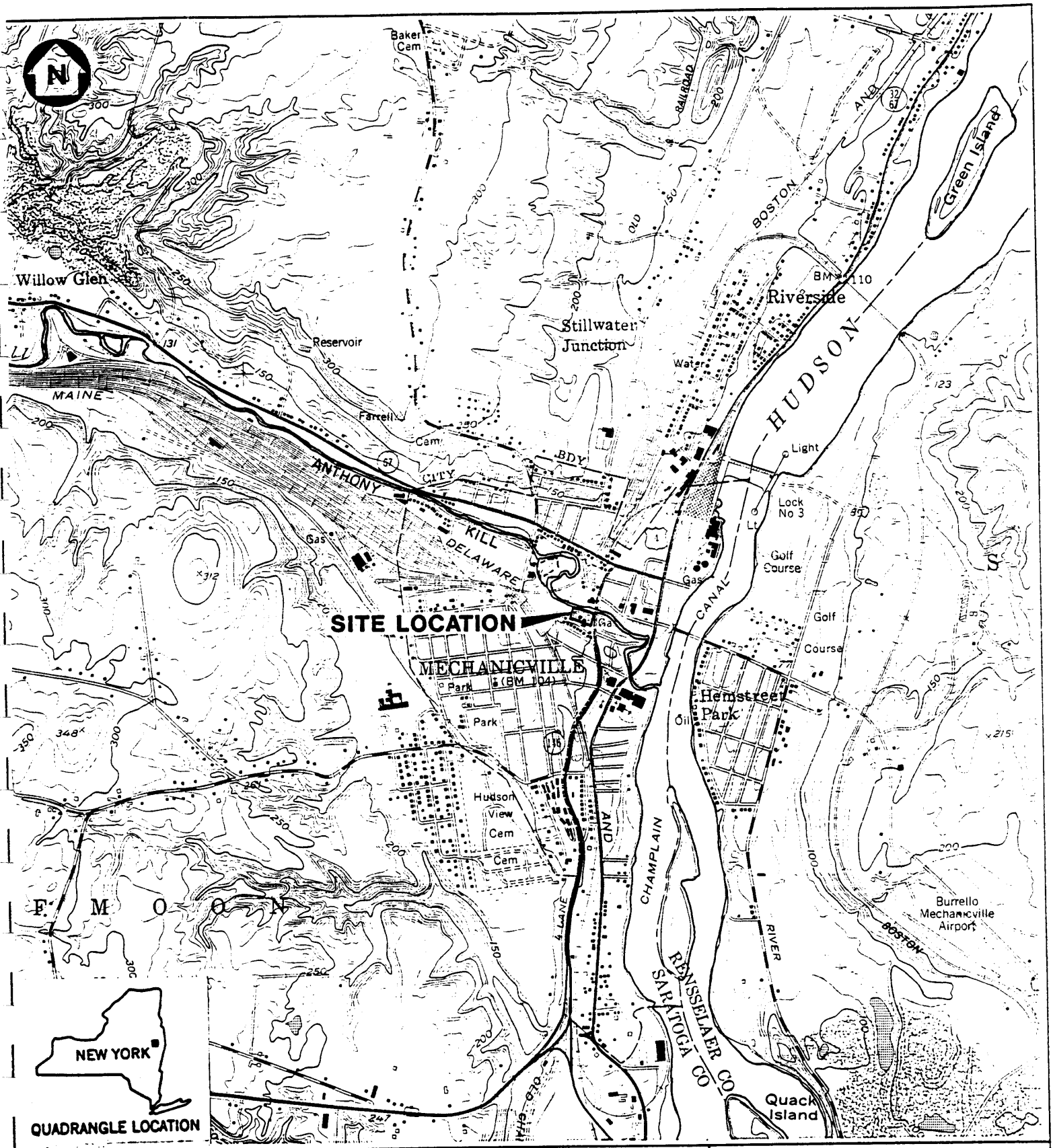
This report was prepared by E.C. Jordan Co. (Jordan) for the New York State Electric and Gas Corporation (NYSEG) under Contract No. 85S-159, Investigation of Former Coal Gasification Sites. It describes the results of Task 3, the Expanded Problem Definition Program, at the Mechanicville site, where coal gas was produced from 1901 to 1955. Task 3 was preceded by the Preliminary Site Evaluation (Task 1) and the Initial Field Investigation Program (Task 2), and will be followed by the Risk Assessment (Task 4) and Conceptual Design (Task 5), provided the need for these tasks is demonstrated. Recommendations for the conduct of future work at the Mechanicville site are included in this Task 3 report.

1.1 PROBLEM SUMMARY

The site is located in Mechanicville, Saratoga County, New York (Figure 1-1). Saratoga County is in the Valley and Ridge Physiographic Province in east-central New York (Heath, et al., 1963). The Hudson River forms the northeastern and eastern boundaries of Saratoga County; the Mohawk River, which is the largest tributary to the Hudson, forms the southeastern boundary. The Anthony Kill, a small tributary, flows into the Hudson River at Mechanicville. The Mechanicville site is adjacent to the Anthony Kill, a quarter-mile upstream from its confluence with the Hudson River. The site lies in a glacial outwash plain, at approximately 95 feet above mean sea level (MSL).

The Champlain Canal once bordered the site on the east. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) to Lake Champlain. The canal flowed through Mechanicville along what is now Central Avenue (Figure 1-2). Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. The hand-dug canal was approximately 12 feet deep and 30 feet wide. The Champlain Canal, abandoned in 1916 when the Barge Canal opened, became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the state dug up the canal, removed the trash and debris, and prepared the roadbed for Central Avenue (Sheehan, Records).

The history of coal gas production at the site, presented in more detail in the Task 1 Report, is summarized in the following paragraphs. It was reconstructed from old maps and newspaper articles, NYSEG records, and interviews with NYSEG employees (Elvins, 1986; McBride, et al., 1986). The site housed a water gas plant (Figures 1-2 and 1-3) owned by NYSEG and its predecessor companies from 1901 until 1955, at which time coal gas production ended due to the availability of natural gas. Most of the aboveground structures were demolished at the time of closure, including the coal storage shed, gas house, purifier and oxide houses, gas holders, oil tanks, and tar dehydrator (see Figures 1-2 and 1-3). Only the boiler room, indoor substation, and an old office building remain on-site. The filter beds, which are coke-filled wooden troughs set into the ground, were left in the ground and covered with soil after the gas plant closed. These beds had been used to filter residual oil and tar from the gas house condensate before discharge to the Anthony Kill.



BASE MAP SOURCE:
USGS QUADRANGLE
MECHANICVILLE (1980)

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE
MECHANICVILLE SITE LOCATION MAP

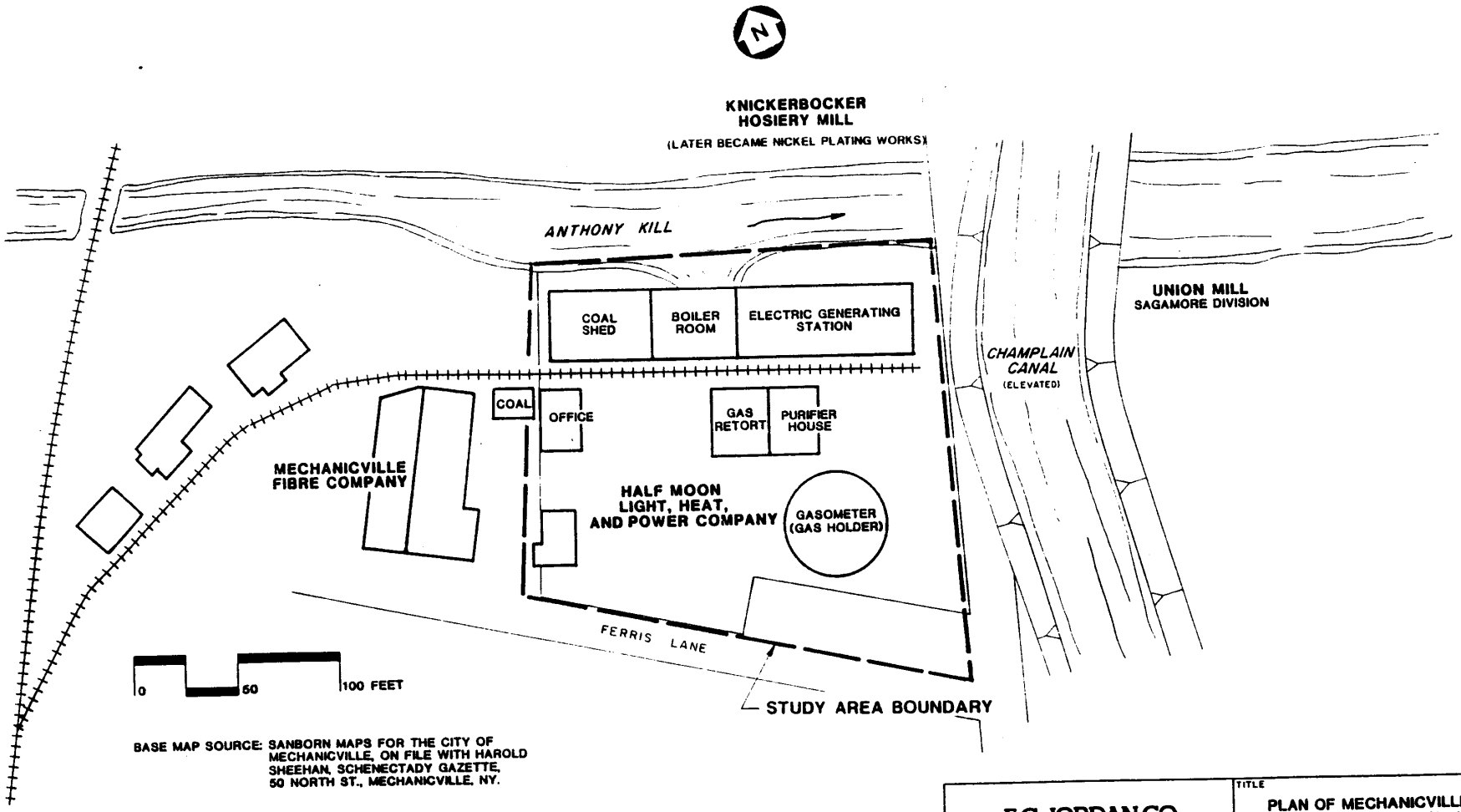
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0 2000 4000

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 1-1



BASE MAP SOURCE: SANBORN MAPS FOR THE CITY OF MECHANICVILLE, ON FILE WITH HAROLD SHEEHAN, SCHENECTADY GAZETTE, 50 NORTH ST., MECHANICVILLE, NY.

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CONSULTING ENGINEERS

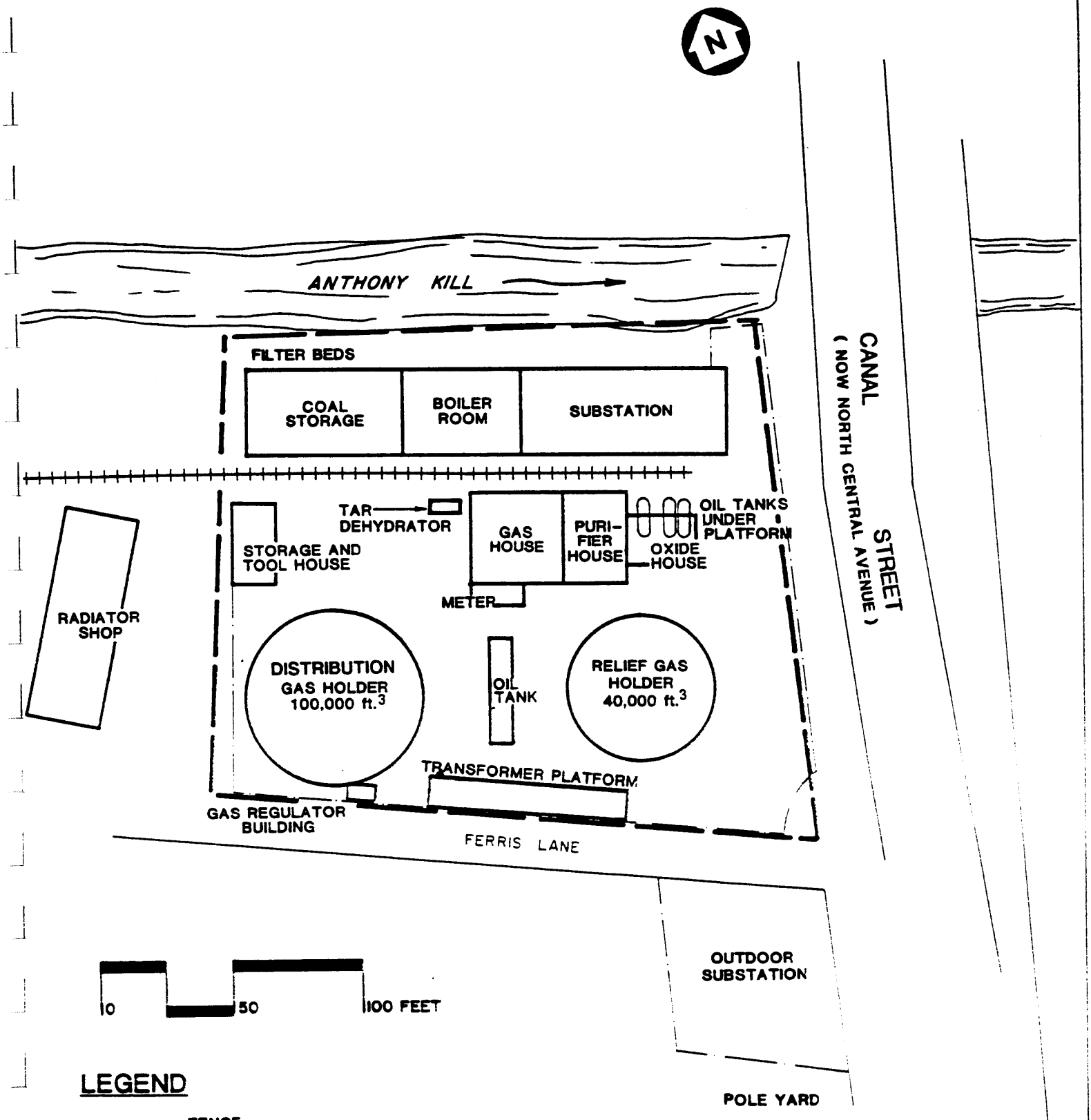
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BINGHAMTON, NEW YORK

TITLE
PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1910

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 1-2



LEGEND

- FENCE
- RAILROAD SIDING
- STUDY AREA BOUNDARY

BASE MAP PREPARED BY BROWN, CROSBY, & CO., INC., ENGINEERING DEPARTMENT, 96 WALL ST., NEW YORK, APRIL 1951.

E.C. JORDAN CO. CONSULTING ENGINEERS	PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1951
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
JOB NO. 6945-83	FIGURE 1-3

By-products of the coal gasification process included ash and condensate material from the gas house; woodchips from the purifier house; and coal tar and oil sludges. It was common practice at coal gas plants to dispose of ashes and spent oxide material on-site. Ashes and clinkers were shoveled out of the generator at night and spread in the area between the relief holder and Ferris Lane. Some of the spent woodchips were piled on the roadside to be hauled away; others were spread on the lot just west of the active plant area. The purifier house was cleaned out after plant shutdown; however, accumulated tar was left in the base of the relief holder and coke was left in the filter beds.

Ash and cinders are relatively free of organics, but may leach traces of various heavy metals and salts. Spent oxide wastes contain high concentrations of free sulfur, sulfate and sulfide compounds, cyanide compounds, and iron compounds. Coal tar is a complex mixture of organic compounds, composed primarily of polynuclear aromatic hydrocarbons (PAHs), with smaller amounts of phenolics and light aromatic compounds (USWAG, 1984).

After closure of the Mechanicville gas plant in 1955, NYSEG converted the site to a natural gas and electric service center (Figure 1-4). A small natural gas distribution shed was constructed over a portion of the old distribution gas holder. The former boiler room/substation building was converted to offices, a garage, and a supply storage maintenance shop. The old office is now used as a storage shed and tool house. A buried gasoline storage tank, containing unleaded fuel, is located adjacent to the southeastern corner of the old office. The 2,000-gallon tank, installed around 1980, replaced an older tank that was reportedly taking in water. No gasoline leaks were reported (McBride, et al., 1986). The remaining developed portion of the site is a paved parking lot. NYSEG has extended its property boundaries over the years by filling in the Anthony Kill embankment with debris. Therefore, the stream appears wider in Figure 1-3 than in Figure 1-4.

In 1922, NYSEG purchased a quarter-acre lot on the corner of Ferris Lane and North Central Street (Bevis, 1986). This property was vacant during the years the coal gas plant was operating. In 1953, NYSEG built the electrical substation that currently stands on the lot. NYSEG also owns the land on the western side of the site. The portion between the railroad tracks and the Anthony Kill (see Figure 1-4) was purchased by NYSEG in 1952 (Bevis, 1986), and the parcel between the tracks and Ferris Lane was acquired in October 1987. Jordan's investigations focused on the eastern portion of the site (approximately 1 acre), where coal gas production activities occurred.

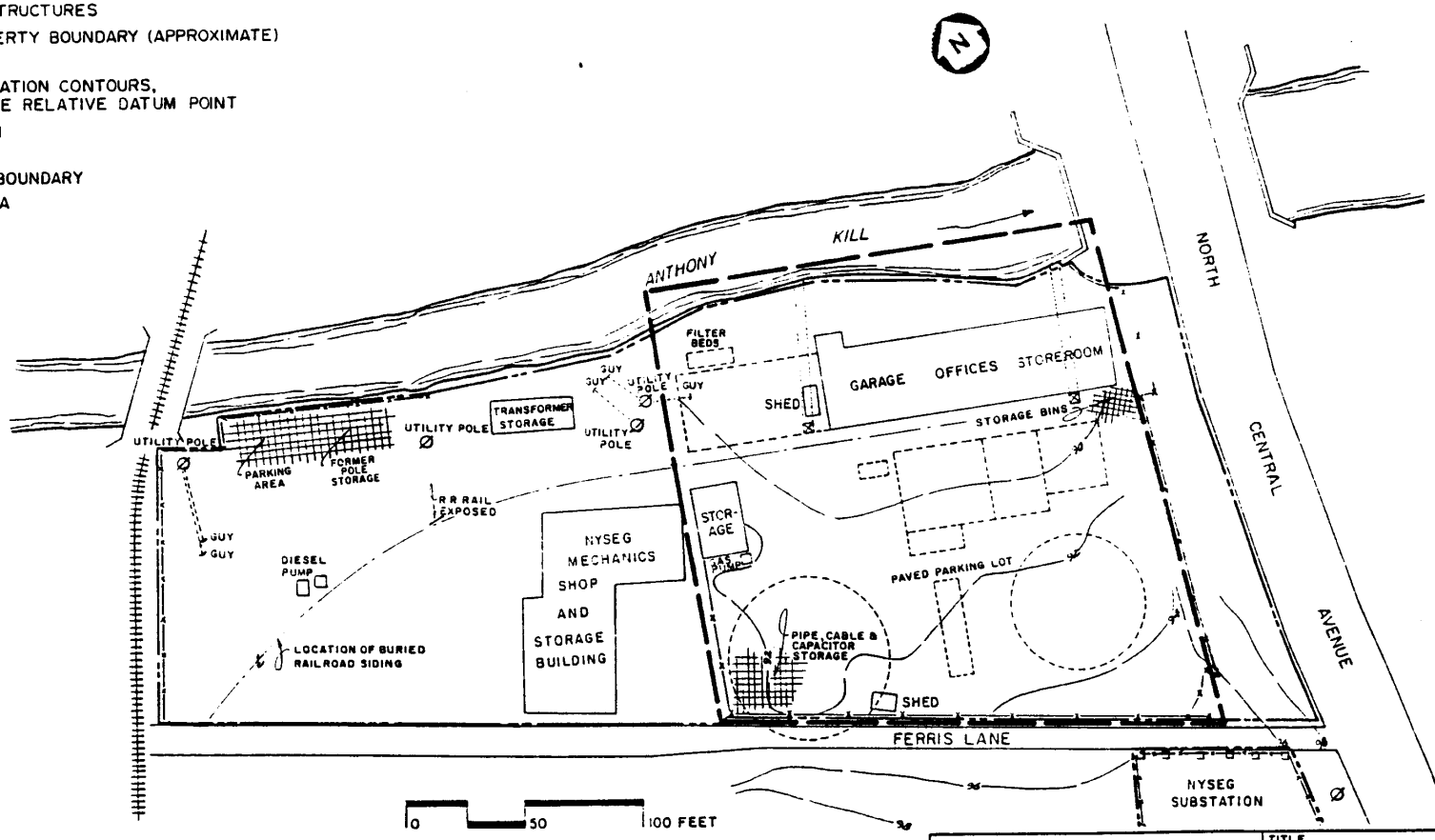
1.2 PURPOSE

In the Preliminary Site Evaluation (Task 1), Jordan developed an understanding of the site's history, environmental setting, and current conditions from available information and site reconnaissance. The Task 1 findings are presented in the Task 1 Report for Mechanicville submitted to NYSEG in August 1986 (E.C. Jordan Co., 1986a).

Based on the Task 1 findings, the scope of Task 2 (Initial Field Investigation) was developed. In this effort, Jordan developed an understanding of the

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
MECHANICVILLE SITE PLAN - 1987
MECHANICVILLE, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 1-4

environmental characteristics of the site, including hydrogeologic conditions and land use in the area surrounding the site. Also, the presence and nature of chemicals in soil, groundwater, surface water, and sediments were investigated, as well as the potential for chemical migration. Finally, a preliminary assessment of the potential health and environmental risks posed by chemicals found at the site was performed. The Task 2 exploration locations are shown in Figure 1-5. Task 2 findings, as presented in the Task 2 Report for Mechanicville (E.C. Jordan Co., 1987), are summarized as follows:

- The unconsolidated deposits at the site consist primarily of fill soils of varying composition overlying a fractured shale bedrock.

- The bedrock is a gray shale with calcite inclusions and was encountered 9 to 18 feet below ground surface. The upper 1 to 2 feet of the bedrock is highly weathered. The bedrock surface slopes to the north and east. A small east-trending bedrock depression was mapped near the former relief gas holder.

- Groundwater flow is generally north-northeast across the site; however, near the former relief gas holder, the flow is more easterly, toward North Central Avenue. Groundwater in the soil and shallow bedrock system discharges to the Anthony Kill, either adjacent to the site or farther downstream.

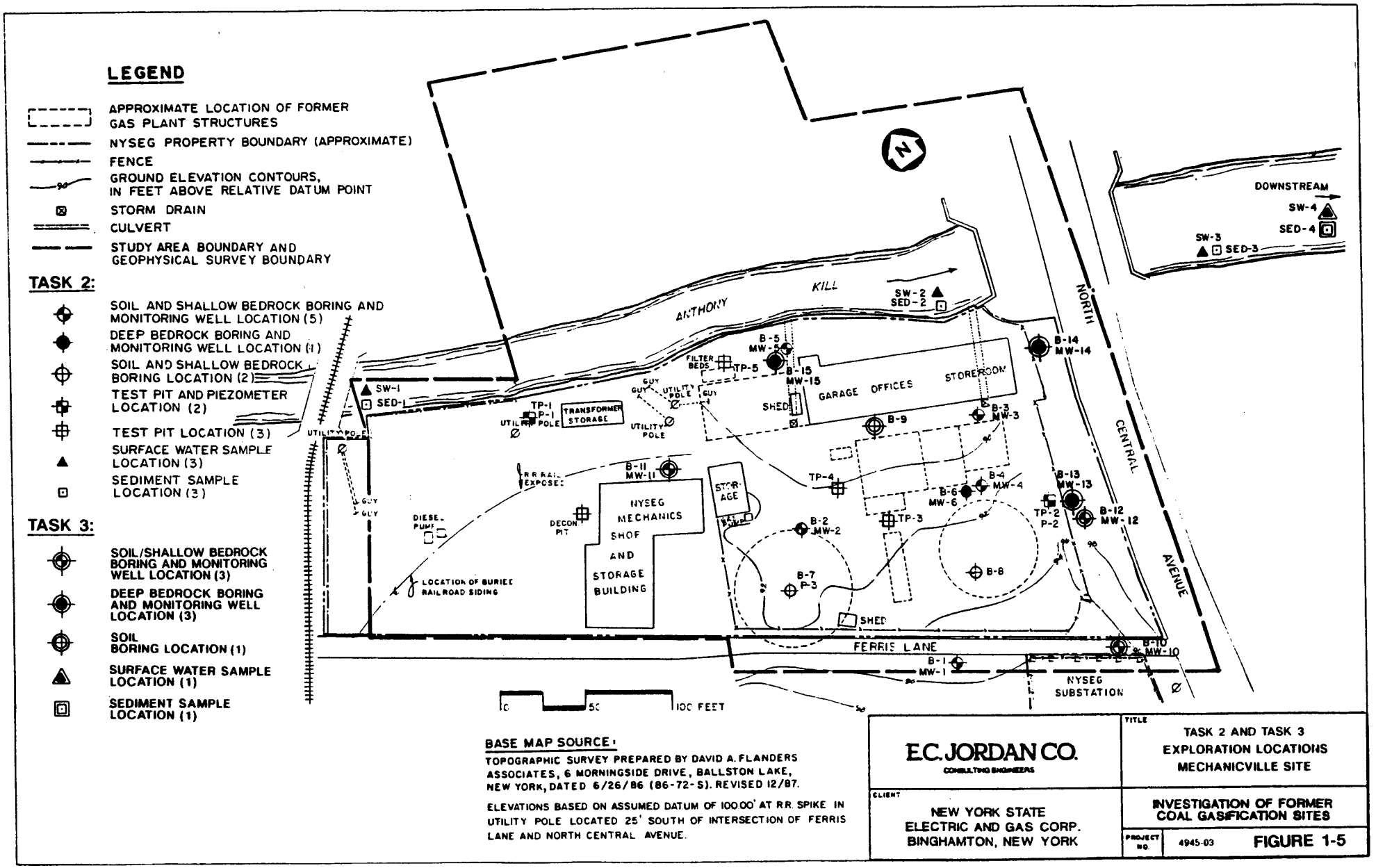
- Land use surrounding the site is predominantly residential and commercial, with the central business district of the city located east and south of the site. Sensitive land uses (i.e., schools, recreation areas, nursing homes) and potential contributors of chemicals to groundwater and surface water (i.e., tanks, drums, a railroad yard, and other industrial property) are within a half-mile radius of the site.

- Volatile organic compounds (VOCs) and PAHs were detected in soils throughout the site study area. Concentrations were highest near the former relief gas holder and the filter beds.

- VOCs and PAHs were detected in groundwater on-site. Contaminant concentrations in groundwater exceeded relevant federal and/or state criteria for public water supply systems in both bedrock and overburden monitoring wells. The highest concentrations of PAHs and VOCs were found at MW-4 and MW-6 (downgradient of the relief gas holder); MW-3 (downgradient of the oxide house); and MW-5 (downgradient of the coal storage shed and filter beds).

- Organic compounds typically associated with coal gasification wastes were found in only one of the surface water samples obtained from the Anthony Kill.

- PAHs were detected using gas chromatography/mass spectrometry (GC/MS) analytical techniques in sediments taken from the Anthony Kill adjacent to the site, but not upstream or downstream of the site.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TASK 2 AND TASK 3 EXPLORATION LOCATIONS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 1-5

The high-performance liquid chromatography (HPLC) results showed PAHs at all three locations.

- There are no water supply wells within a 1-mile radius of the site. The potential risks associated with any excavations at the site and possibility of discharge of site-derived chemicals to the Anthony Kill were identified and addressed.

The Expanded Problem Definition Program (Task 3) was designed to (1) confirm Task 2 analytical results; (2) obtain further data on chemical distribution in soil and shallow bedrock at the site and site environs; (3) further investigate the potential for chemical migration in groundwater; (4) assess the air quality within buildings on the site; and (5) identify potential chemical receptors and potentially sensitive land uses. This report summarizes results of the Task 3 investigation and provides recommendations for future activities.

1.3 SCOPE OF TASK 3

Based on the Task 2 findings, a Task 3 investigation program was designed and implemented at Mechanicville (see Figure 1-5). The subtasks completed for Task 3 are summarized as follows:

- A ground-penetrating radar (GPR) survey was performed adjacent to the site on the northern side of the Anthony Kill to extend the area of bedrock surface contouring.

- Four shallow and three deep borings were drilled for further site characterization, including chemical analysis of the soils encountered and bedrock characterization.

- Groundwater monitoring wells were installed in six of the seven borings to obtain further information on groundwater flow direction and chemicals present in groundwater. Two rounds of groundwater sampling and analysis and two sets of water level observations were accomplished in Task 3.

- Rising-head permeability tests were performed in the completed wells to determine the in-situ hydraulic conductivities of soils. Packer pressure tests were conducted in the deep bedrock wells to determine the hydraulic conductivity of the bedrock at the site.

- Task 3 soil and water samples were analyzed for VOCs and semivolatile organic compounds (SVOCs), iron, lead, zinc, cyanide compounds, phenolics, and total organic carbon (TOC). Organic analyses were performed using GC/MS methods rather than the HPLC/ultraviolet (UV) methods used in Task 2.

- A location and elevation survey was completed for the Task 3 borings, monitoring wells, and surface water and sediment sampling locations. The site plan developed in Task 1 was updated to include Task 3 explorations (see Figure 1-5).

- Air quality samples were collected at three indoor locations and one background location at the property-line fence to assess volatilized contaminant risk.

- The geologic, hydrogeologic, and chemical data were evaluated and interpreted to provide an understanding of site conditions (see Section 3.0).

- Potential receptors of site-derived chemicals were identified (see Section 4.3).

- A Task 4 program for assessing risks on-site and at the site boundaries was outlined (see Section 5.2). A schedule and cost estimate for the proposed program were developed (see Section 6.0).

2.0 FIELD ACTIVITIES

Field activities undertaken during Task 3 are described in this section. Field logs, well diagrams, and descriptions of procedures used during field activities are presented in Appendix A. Exploration and sampling procedures are further documented in the Quality Assurance Project Plan (QAPP) (E.C. Jordan Co., 1985b).

2.1 GEOPHYSICAL SURVEY

During Task 1, GPR and seismic refraction results were used to prepare a bedrock surface contour map of the site. The interpreted results correlated well with depths to bedrock observed during the boring program. These geophysical techniques were used in Task 3 to extend the bedrock surface contour map slightly east and north of the site. Figure 1-5 defines the extent of the geophysical survey. The Price Chopper parking lot, located across North Central Avenue east of the site, was not included in the survey because access to the lot was denied by the owners.

During the first week of November 1987, the Task 3 geophysical survey was conducted in areas adjacent to the site on the north and east. The GPR survey was performed with a Geophysical Survey Systems, Inc., Subsurface Interface Radar (SIR) System B. A 10-foot grid was established throughout the GPR investigation area. Seismic refraction profiling was accomplished with a Geometrics ES-2415F Signal Enhancement Seismograph. Seismic refraction work was conducted along 50-foot grid lines. Results of the geophysical investigation are discussed in Section 3.1.

2.2 BORINGS

Seven borings (i.e., B-9 through B-15) were drilled at the site by North Star Drilling of Cortland, New York, between November 9 and 19, 1987 (see Figure 1-5). The borings were drilled to (1) further define the shallow subsurface geology; (2) provide data on the distribution and migration of chemicals in soil and bedrock on-site; and (3) permit installation of monitoring wells. Boring locations were selected following consideration of the Task 2 findings regarding geology, hydrogeology, and chemical distribution, as well as the Task 3 geophysical survey data.

Borings were drilled to bedrock using hollow-stem augers; 3-inch-diameter holes were drilled into the shale bedrock at four borings (i.e., B-11, B-13, B-14, and B-15). Boring depths ranged from 5.5 to 55.5 feet below ground surface. Continuous 2-foot long split-spoon samples were collected above the bedrock (except in B-9), and continuous 10-foot long core samples were taken in the bedrock. Samples were scanned with a photoionization detector (PID) for organic vapors. Reference soil samples (for physical characteristics) and analytical soil samples (for laboratory chemical analysis) were collected from each boring except B-11 and B-13. An analytical sample was not collected at

B-11 because of the unexpectedly shallow bedrock. No samples were collected at B-13 because of its close proximity to B-12.

Core samples collected at B-11, B-13, B-14, and B-15 were logged and placed in core boxes that are presently stored on-site. Boring and rock coring logs completed by a Jordan field geologist are presented in Appendix A-2, along with a table summarizing field observations.

2.3 MONITORING WELLS

Monitoring wells were installed in six of the seven boreholes. Each monitoring well number (i.e., MW-10 through MW-15) corresponds to the number of the borehole in which it was installed; monitoring well locations are shown in Figure 1-5. The monitoring wells were installed to obtain water level measurements, permeability data, and water samples for laboratory chemical analysis. MW-10, MW-11, and MW-12 are shallow overburden wells, and MW-13, MW-14, and MW-15 are deeper bedrock wells. The shallow wells were positioned in the soil and/or shallow bedrock, while the deeper wells were sealed below the bedrock surface. All the wells are located in areas of the site where data were needed to evaluate chemical migration. Two of the deeper wells, MW-13 and MW-15, are adjacent to shallow wells. These well pairs provide data on vertical seepage gradients at the site.

Monitoring wells were constructed using 10-foot-long, 2-inch-inside diameter, stainless steel well screens with 0.01-foot slots, except for MW-11, where a 5-foot screen was used because of the shallowness of bedrock. Flush-mounted, locking protective casings were installed on all wells. Wells were backfilled with clean, graded, quartzite sand, and sealed with a minimum of 2 feet of bentonite pellets. Well installation diagrams are included in Appendix A-3.

The screened zones (including the sand backfill) in MW-10, MW-11, and MW-12 were positioned to coincide approximately with the top 10 feet of the water table, and span soil and/or shallow bedrock strata, as discussed previously. The screened zones of bedrock wells MW-13, MW-14, and MW-15 were positioned to intersect the most permeable zones in the bedrock, as determined by the packer pressure tests performed prior to well placement. Packer test data are presented in Appendix A-4.

The wells were developed using an air compression system. If development water appeared contaminated, it was collected and drummed in Department of Transportation (DOT)-approved containers that were labeled and stored on-site. Upon completion of the well development, rising-head permeability tests were conducted on the wells. Packer pressure tests were also conducted in the deep bedrock wells to characterize permeability of the bedrock at the site. Methods and results of rising-head and packer tests are provided in Appendix A-4.

2.4 GROUNDWATER SAMPLING

Two rounds of groundwater sampling of the 12 Task 2 and Task 3 wells were conducted in December 1987 and March 1988. During each round, water level

measurements were taken at each well. The water level data are presented in Appendix A-5, as well as in Section 3.2.1. Using dedicated bailers, groundwater samples were collected from each well, and quality assurance/quality control (QA/QC) samples (i.e., duplicates, trip blanks, sampler blanks, and filtration blanks) were obtained. The monitoring well sampling procedures followed are detailed in Appendix A-6. Samples were submitted to NYSEG's laboratory for groundwater analyses; results are discussed in Section 3.6.2. The chemical quality assurance data supporting the results are presented in Appendix B.

2.5 SURFACE WATER/SEDIMENT SAMPLING

Three surface water and three sediment sampling stations were selected to investigate the distribution of organic and inorganic compounds along the Anthony Kill (see Figure 1-5). The sampling stations were upstream of the site, adjacent to the site near the outlet of the easternmost drainage culvert, and downstream of the site on the eastern side of the North Central Avenue bridge. Surface water and sediment samples were collected in December 1987 and March 1988. Two samples were collected from each medium at each sampling station. Samples were submitted to NYSEG's laboratory for surface water and sediment analyses; results are discussed in Sections 3.6.3 and 3.6.4, respectively. The chemical quality data supporting the results are presented in Appendix B.

2.6 AIR MONITORING

To evaluate levels of benzene, toluene, ethylbenzene, and xylenes in the indoor air at the site, samples were collected in the office, the adjacent storeroom area, the separate garage building, and an additional background location at the property-line fence. Each location was sampled in duplicate for quality control. Samples were collected using charcoal sorbent tubes; sampling pumps were calibrated in accordance with the National Institute for Occupational Safety and Health (NIOSH) Method 1501. Samples were collected over a 6-hour period, from approximately 10:00 AM to 4:00 PM, on December 28, 1989.

Upon completion of the sample collection, the charcoal tube samples were delivered to the subcontracted analytical laboratory for analysis by solvent desorption with GC flame ionization detection (FID), in accordance with NIOSH Method 1501. A field-biased blank sample was collected and submitted to the laboratory for quality control blank analysis. Results of air quality sampling are discussed in Section 3.6.5.

2.7 SITE SURVEY

Locations of borings, monitoring wells, and geophysical control points were surveyed by David A. Flanders Associates of Ballston Lake, New York, in early December 1987. The surveyor determined ground surface elevations to the nearest 0.1 foot, and the uncapped riser elevations of the monitoring wells to

the nearest 0.01 foot. The reference datum was a railroad spike in the utility pole located between the NYSEG substation and North Central Avenue, south of the site. This point was assumed to be at an elevation of 100 feet. Exploration locations were mapped on the base map developed in Task 1 (see Appendix A-7).

3.0 SITE CHARACTERIZATION

The geology and hydrogeology of the Mechanicville site, as interpreted from data gathered in Tasks 1, 2, and 3, are described in this section. Results of the land use survey and the laboratory chemical analyses of samples collected during Task 3 are also discussed in this section.

3.1 GEOLOGY AND SOILS

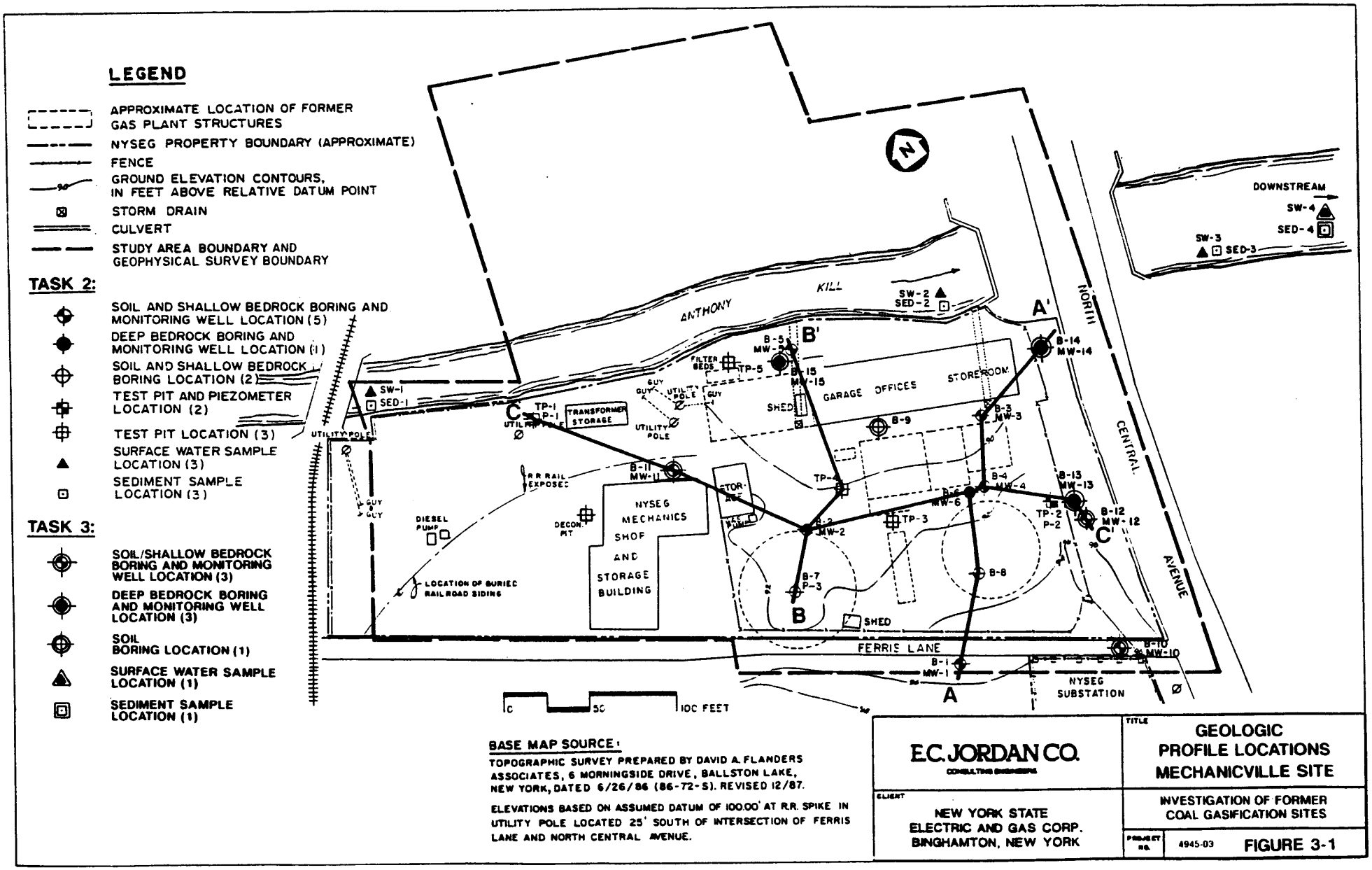
The Saratoga County area is drained by the Hudson River and its tributaries. The Hudson River Valley is formed by highly folded and faulted shales originally deposited as sediments along the continental margin during the Ordovician Period, approximately 500 million years ago. The preglacial Hudson River Valley and its drainage system were probably similar to the present configuration. However, the valleys may have been widened or deepened by subglacial erosion when the Laurentide Ice Sheet flowed south over this area from Canada.

As the ice sheet began its northward retreat, sediment-laden meltwater streams flowed through the Anthony Kill Valley, depositing sands and gravels in the higher energy zones, and clays and silts in quieter water. These glaciofluvial deposits form the terraces that lie along the southern border of Mechanicville.

Subsurface conditions at the Mechanicville site were investigated during Task 2 by means of test pit and boring explorations, and during Task 3 by boring explorations. The shallow geology consists of 3 to 25 feet of fill and silty shale overlying a fractured shale bedrock. The bedrock surface is deepest in the southeastern portion of the site. An interpretation of site stratigraphy is illustrated through geologic profiles located on a plan view of the site (Figure 3-1). The profiles, shown in Figures 3-2 through 3-4, are constructed with a 10:1 vertical scale exaggeration.

The fill, which includes a silty sand and gravel and a clayey silt and fractured shale, forms the upper 8 to 25 feet of the site. In the southeastern portion of the site, where excavation for the relief gas holder occurred, and in the area between the building and the Anthony Kill, a silty shale unit underlies the fill deposits. The silty shale unit is 8 to 9 feet thick in B-4 and B-8, and 1.5 feet thick in B-14. This silty shale unit is loose, moist, and lacks structure, and is interpreted to represent fill material (possibly disturbed weathered bedrock from on-site). Isolated gravelly sand and silty clay till units were also encountered at the site. The unconsolidated deposits overlie a shale bedrock, which is severely weathered in its upper 1 to 2 feet and highly fractured in the upper 5 to 10 feet. Subsurface geologic conditions investigated at the site are described in the following subsections.

Fill. The uppermost fill consists primarily of brown to black silty sand and gravel with organic matter, ash, brick fragments, glass, and woodchips. Within the fill, there is considerable heterogeneity, including zones of clayey silt and fractured shale. The fill averages 8 to 25 feet thick across the site, but thins at the Anthony Kill (see Figures 3-2 and 3-3). The off-site lateral



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

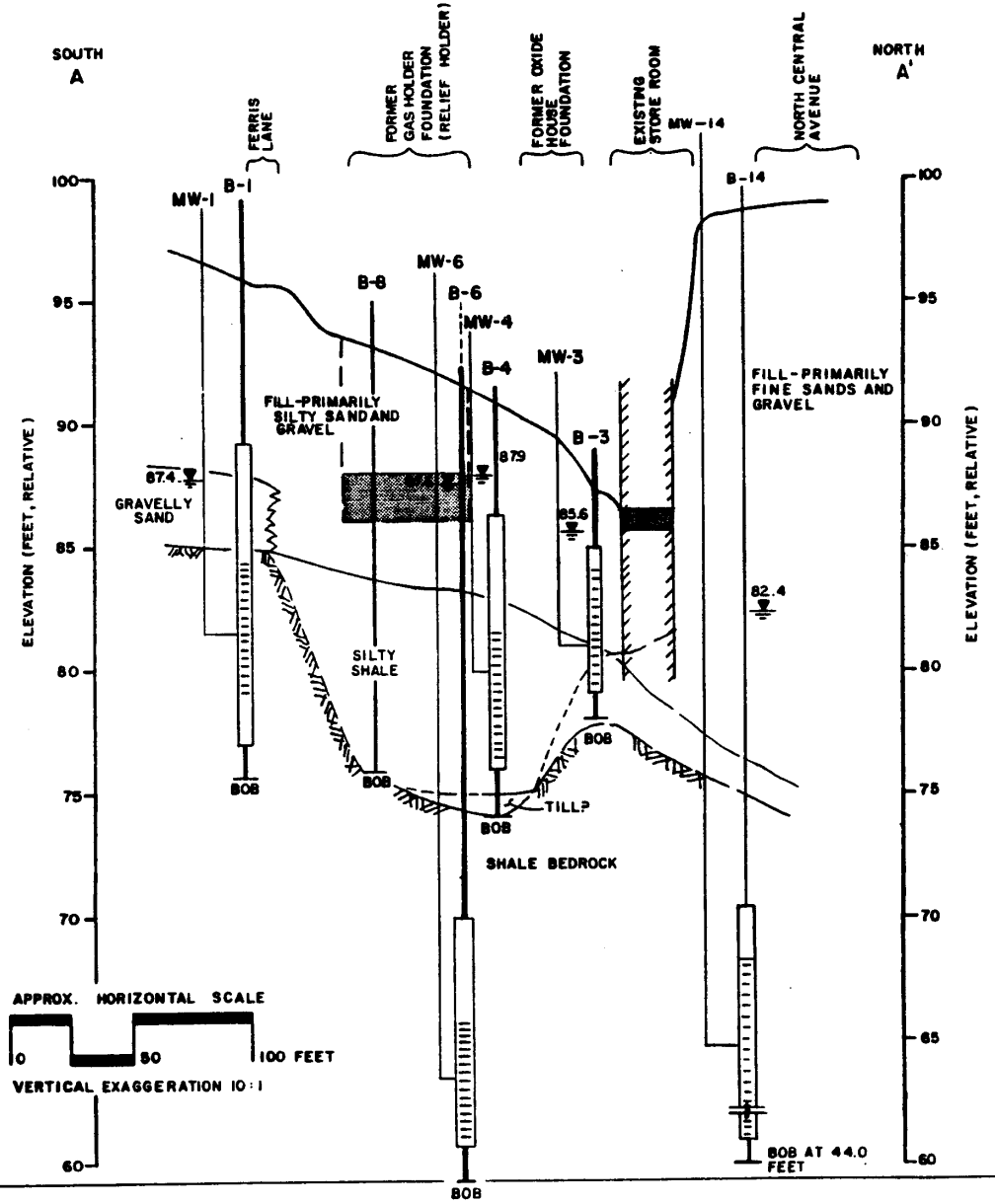
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
GEOLOGIC PROFILE LOCATIONS
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-1



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

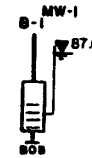
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ⊟)

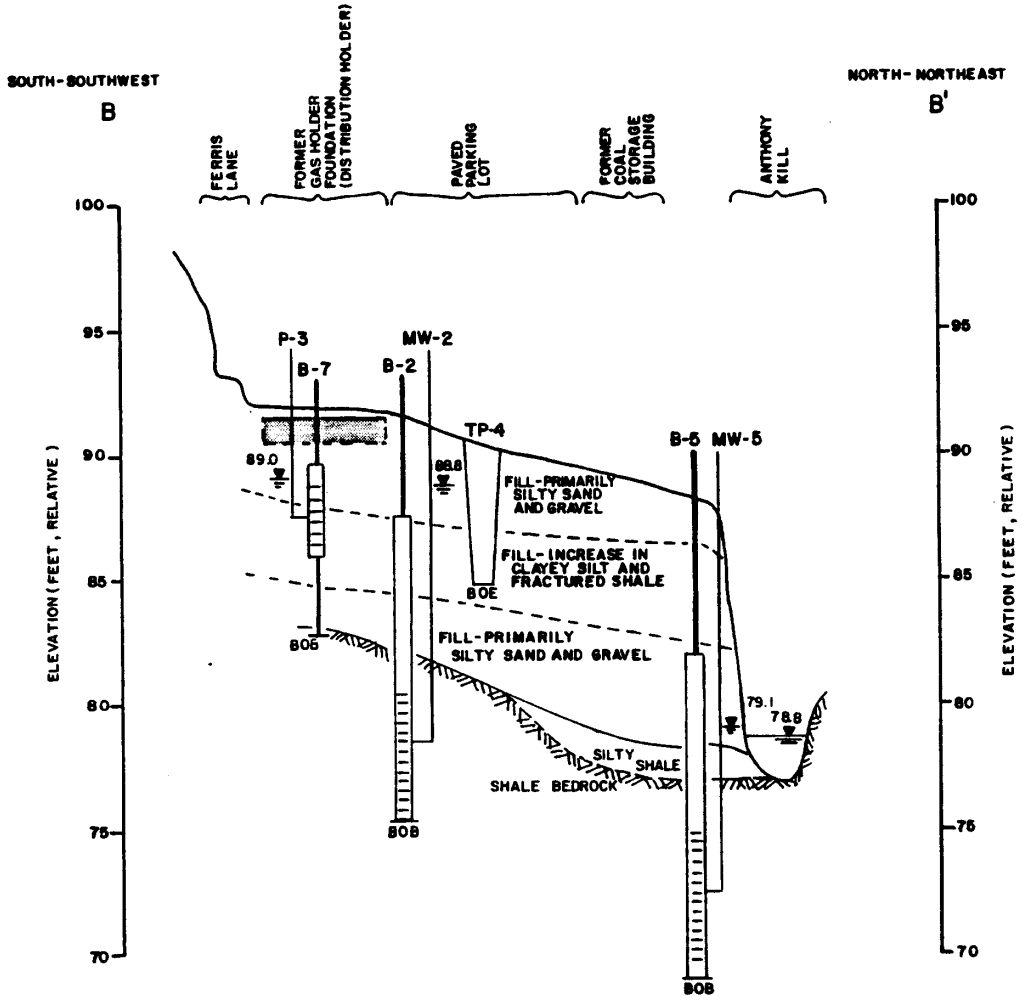
BOTTOM OF BORING

79.3 OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

EC JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE A-A' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	4945-63 FIGURE 3-2



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

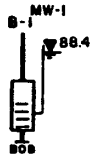
FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

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LEGEND

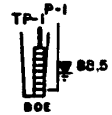


BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

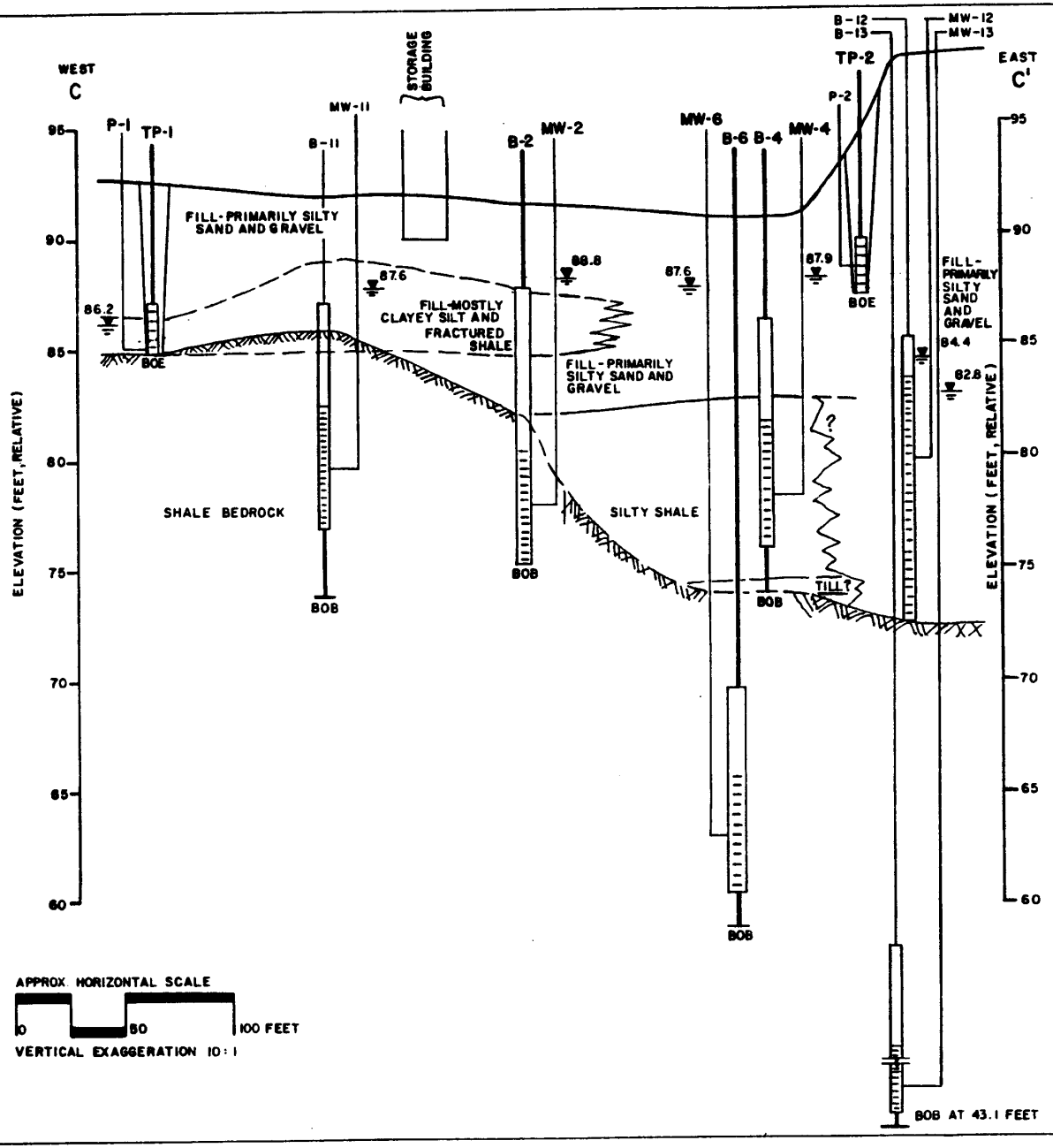


OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE B-B' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-83	FIGURE 3-3



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

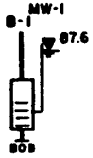
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

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SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ⊟)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE C–C' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-63	FIGURE 3-4

extent of the fill is unknown, but is expected to occur east of the site along North Central Avenue where the old Champlain Canal was filled.

Gravelly Sand. A brown, dense, gravelly sand was encountered in only one boring (B-1) at a depth of 8 feet below ground surface (see Figure 3-2). The gravelly sand unit is 1.5 to 4 feet thick. At B-1, the gravelly sand overlies weathered bedrock. The gravelly sand may be fill or, if the area has not been disturbed, a glaciofluvial deposit.

Silty Shale. In the southeastern portion of the site, and between the present-day office building and the Anthony Kill, a silty shale unit overlies the bedrock. This unit consists of black to gray platy shale fragments with silt. The silty shale is loose, saturated, and lacks a consistent structure. These properties indicate that this area may have been disturbed by excavation, backfilling, and grading during construction of the gas plant. The silty shale in these areas is interpreted to be fill material. The silty shale unit varies in thickness across the site from 1 to 9 feet. It is thickest in the area of the former relief gas holder, near B-4, B-6, and B-8 (see Figure 3-2). The off-site lateral extent of the silty shale layer is unknown.

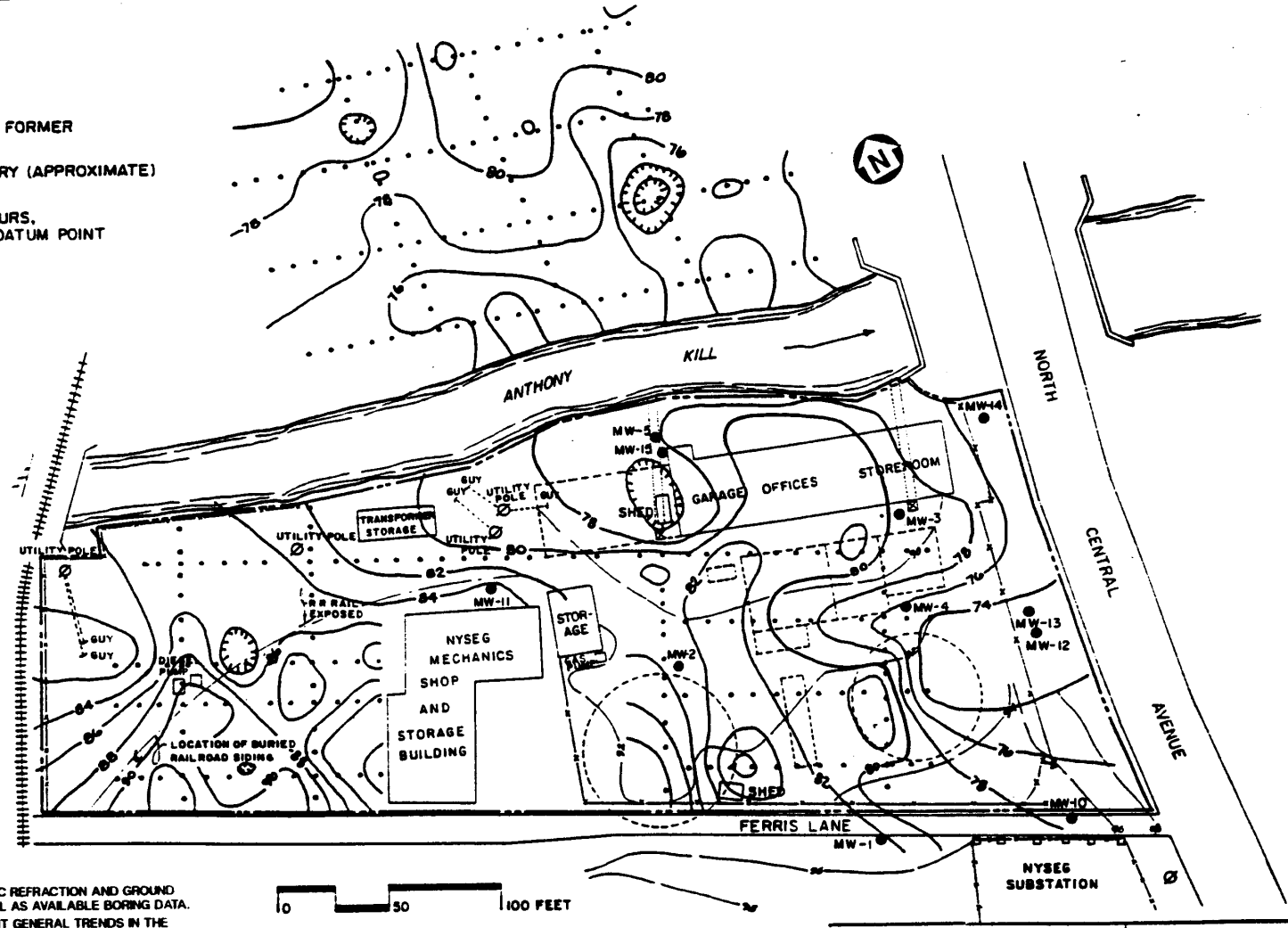
Till. A thin, discontinuous tan to light gray silty clay till with fine gravel was encountered at the top of the bedrock surface in one boring (B-4). The pocket of till is less than 1 foot thick and is located along the northern edge of a small bedrock trough. The till contained some natural organic matter, suggesting that this remnant till was the original postglacial topsoil at the site. Because the till appears to be laterally discontinuous, it is not anticipated to significantly influence groundwater flow at the site.

Shale Bedrock. The bedrock at the Mechanicville site is a thinly bedded gray shale with calcite inclusions. The upper 1 to 2 feet of the bedrock is severely weathered and contains silt and dry platy shale fragments. Bedrock crops out at several locations along the southern bank of the Anthony Kill. Based on measurements taken from these outcrops, the bedrock strikes nearly east-west, and bedding dips approximately 30 degrees to the south. Bedrock core was obtained in eight borings beneath the highly weathered zone. As observed in the core, the upper portion of the bedrock contains fractures spaced between 2 inches to a foot apart. The primary fractures are parallel to bedding and secondary fractures exist at angles up to 90 degrees to the primary fractures. Some weathering has occurred along the fracture faces. In the deeper borings, more competent bedrock was encountered (i.e., deeper bedrock contained fewer fractures than shallow bedrock). Some of the deeper bedrock fractures contained coal tar or had a distinct coal tar odor. Groundwater movement in the bedrock occurs primarily through the fractures in response to the hydraulic gradient.

A bedrock surface contour map interpreted from the GPR and seismic refraction surveys and boring exploration data collected during Tasks 1, 2, and 3 is shown in Figure 3-5. The contour map depicts the surface of the competent bedrock; 1 to 2 feet of weathered rock lie directly above this unit. A bedrock high is near the former distribution gas holder. Bedrock appears to slope downward from this high, toward both the Anthony Kill (north) and North Central Avenue (east). A small east-trending bedrock depression, approximately 5 feet deep,

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- INTERPRETED BEDROCK SURFACE CONTOUR
- MONITORING WELL LOCATION
- LOCATION OF GEOPHYSICAL SURVEY LINE
- DEPRESSION



NOTES:
1. BEDROCK CONTOURS BASED ON SEISMIC REFRACTION AND GROUND PENETRATING RADAR SURVEYS AS WELL AS AVAILABLE BORING DATA.
2. CONTOURS INTERPRETED TO REPRESENT GENERAL TRENDS IN THE BEDROCK SURFACE.
3. THE CONTOUR INTERVAL (2 FEET) INDICATES DEGREE OF ACCURACY (±1 TO 2 FEET) REPRESENTED BY INTERPRETATION.

BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

EC JORDAN CO. CONSULTING ENGINEERS	**BEDROCK SURFACE CONTOURS MECHANICVILLE SITE**
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-03	**FIGURE 3-5**

occurs in the center of the site near the location of the former relief gas holder (B-4 and B-6). This small depression may represent a relic postglacial stream channel. Another bedrock low is located in the north-central portion of the site near MW-5 and MW-15. This depression is bowl-shaped and may represent a postglacial stream scour depression. On the northern side of the Anthony Kill, bedrock slopes to the south, toward the stream channel.

3.2 HYDROGEOLOGY

The interpretation of hydrogeologic conditions at the site is based on field and laboratory permeability data and water level observations. The raw data are presented in Appendices A-4 and A-5, respectively. A discussion of the data follows.

Based on observations made during the excavation of borings and test pits, and groundwater measurements from piezometers and monitoring wells, the water table at the site exists at a depth ranging from approximately 2 to 20 feet below ground surface. The water table occurs principally in the fill during both high and low water table conditions. The saturated thickness of soils at the site ranges from approximately 3 to 25 feet.

The screens of MW-1, MW-2, MW-5, MW-10, and MW-11 intercept groundwater in the fill and shallow bedrock. MW-3, MW-4, and MW-12 and piezometers P-1 through P-3 monitor groundwater levels in the fill. MW-6, MW-13, MW-14, and MW-15 monitor groundwater levels at depth in the fractured bedrock and therefore were not considered in developing water table contours. The water table contours for the site are shown in Figure 3-6. The contours were developed using groundwater levels observed on March 29, 1988, from MW-1 through MW-5, MW-10 through MW-12, and P-3. Water level data from P-1 and P-2 were excluded from interpretation because of artificially high water levels (see next paragraph). Groundwater level data collected in August, September, and December of 1987, and in March, June, and December of 1988, resulted in similar contours. Although water level data within bedrock are limited, the data indicate that the groundwater contours for the deeper bedrock would be similar in shape to the water table contours.

Data obtained from the Task 3 field program suggested that water levels obtained from P-1 and P-2 are artificially high because the piezometers were constructed where test pits had been excavated and backfilled. It is believed that the test pits are acting as precipitation and groundwater collecting basins, resulting in elevated groundwater level readings. Therefore, the P-1 and P-2 data were omitted when identifying the groundwater contours for Task 2 and Task 3.

3.2.1 Groundwater Flow Conditions

In Task 2, the water table sloped to the northeast, toward the Anthony Kill. The groundwater flow direction in the southeastern corner of the site, near the former relief gas holder, appeared to be more easterly, toward the Hudson River. It was interpreted that the easterly flow was controlled by the silty shale fill, the bedrock depression, and shallow bedrock fractures.

Task 3 data shown in Figure 3-6 also indicate that groundwater flow in the fill and shallow bedrock is northeasterly toward the Anthony Kill across the western and northern portion of the site, and to the east toward the Hudson River across the remainder of the site. Groundwater migration across the western and northern portion of the site appears to be part of a local flow system, controlled by the presence of the Anthony Kill. On the eastern portion of the site, groundwater is migrating easterly along the east-west trending bedrock channel (see Figure 3-5). The regional flow west of the Hudson River where the site is located is also easterly.

The average horizontal gradient of the water table was calculated to be 0.05 feet/feet (ft/ft) across the site in March 1988. As discussed previously, the primary direction of groundwater flow is northeasterly, toward the Anthony Kill.

Water level data collected from the fill and bedrock wells provide an indication of the vertical seepage gradients for the system. Water levels collected from well clusters in the fill and bedrock at MW-12/MW-13 and MW-4/MW-6 indicate downward vertical gradients. The average vertical groundwater gradient (based on water level data collected between August 1986 and March 1988) at MW-12/MW-13 was 0.06 ft/ft downward from the fill into the bedrock. At MW-4/MW-6, the average vertical groundwater gradient (based on water level data collected in December 1987 and March 1988) was calculated to be 0.02 ft/ft downward from the fill into the bedrock. Water level data collected (in March 1988) for MW-5 and MW-15, both screened in the shallow bedrock, indicated that the shallow bedrock near the Anthony Kill has an upward gradient, potentially indicating discharge to the Anthony Kill from the groundwater system for this period. The surface water elevation data collected in both December 1987 and March 1988 support the presence of a groundwater discharge zone along the Anthony Kill site boundary. Because no surface water elevation data are available during what may be considered high flow in the Anthony Kill, it is not possible to identify whether the gradient could reverse in the vicinity of the stream during high flows.

Groundwater flow within the fractured rock is controlled by the orientation, size, and interconnection of the fractures. Based on visual observations of rock core from the upper 5 to 31 feet of the bedrock formation at eight borings, the primary fractures are oriented 30 to 45 degrees from horizontal. Groundwater movement would occur primarily along these fractures, and these fractures would provide the interconnection for groundwater migration from the bedrock to the fill material and vice versa.

The impervious asphalt paving and buildings that cover most of the site presently limit direct infiltration by precipitation. Two storm drains located in the northern portion of the site collect surface runoff and discharge to the Anthony Kill. Limited rainwater infiltration into the site subsurface soils over the years has minimized the potential for waste constituents to be flushed downward into the groundwater. However, during the coal gas production years, the site was not paved, and conditions were more favorable for the mobilization of waste constituents. The date of paving is not known.

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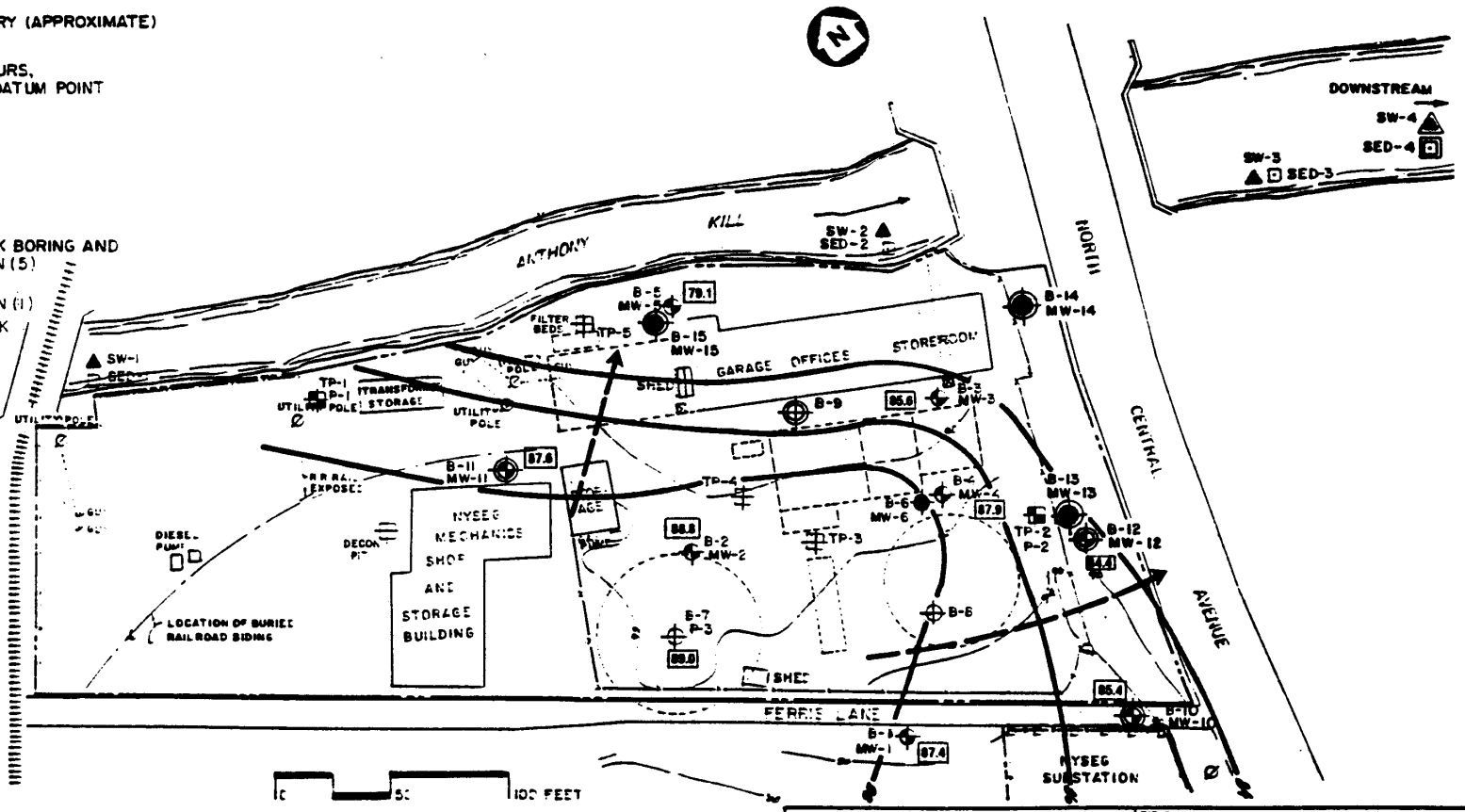
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)
- 89.0 WATER LEVEL (FT. RELATIVE) OBSERVED ON MARCH 29, 1988
- INTERPRETED GROUNDWATER SURFACE CONTOUR
- INTERPRETED GROUNDWATER FLOW DIRECTION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT RR SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

TITLE: WATER TABLE CONTOURS MECHANICVILLE SITE MARCH 1988

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-6

In-situ permeability and packer tests were conducted in the monitoring wells during the Task 2 and Task 3 exploration programs to estimate hydraulic conductivities and groundwater flow rates in the soil, the shallow bedrock, and the deep bedrock. The results of in-situ, falling-head, and rising-head permeability tests on the shallow wells screened primarily in the silty shale (MW-3, MW-4, and MW-10) indicate hydraulic conductivities ranging from 2.2×10^{-5} to 1.9×10^{-4} cm/sec, or 0.06 to 0.54 ft/day. In-situ permeability tests in the wells screened primarily in shallow bedrock (MW-1, MW-2, MW-5, and MW-11) indicate hydraulic conductivities ranging from 2.0×10^{-4} to 1.1×10^{-3} cm/sec, or 0.57 to 3.1 ft/day. The in-situ permeability and packer tests conducted in the deeper bedrock wells (MW-6, MW-13, MW-14, and MW-15) indicate hydraulic conductivities ranging from 1.4×10^{-5} to 9.0×10^{-4} cm/sec, or 0.04 to 2.55 ft/day.

The upper fill consists of a heterogeneous mixture of materials that may have a broad range of permeabilities. The upper fill is not saturated; therefore, the range was not defined. The saturated thickness of fill is limited at the site; most of the wells were installed below the upper fill to monitor the groundwater flow. One well (MW-12) was installed in the lower fill and produced a hydraulic conductivity of 4.0×10^{-4} cm/sec, or 1.1 ft/day. A laboratory permeability test was performed on a sample of lower fill collected from test pit TP-1. This sample yielded a hydraulic conductivity of 2.7×10^{-8} cm/sec, or 7.5×10^{-5} ft/day. The extreme variance in permeability is due to the inherent differences in the fill material; MW-12 is installed in silty sand and gravel, whereas the sample tested from TP-1 is a clayey silt.

Groundwater velocity is a function of hydraulic conductivity, effective porosity, and groundwater gradient. The hydraulic conductivity of the silty shale was determined from Task 2 and Task 3 field tests to range from 2.2×10^{-5} to 1.9×10^{-4} cm/sec, or 0.06 to 0.54 ft/day. The geometric mean hydraulic conductivity is calculated to be 1.0×10^{-4} cm/sec, or 0.28 ft/day. Using an effective porosity of 0.25 for the silty shale (Davis, 1969), and a groundwater gradient of 0.06 ft/ft, the corresponding horizontal groundwater flow rate in the silty shale is approximately 20 ft/yr.

Limited published data are available to estimate the porosity of fractured rock; therefore, a "best" estimate for the site was selected. An effective porosity of 0.10 was estimated for the shallow bedrock (Bouwer, 1978). The hydraulic conductivity of the shallow bedrock was found to range from 2.0×10^{-4} to 1.1×10^{-3} cm/sec, or 0.57 to 3.1 ft/day, with the geometric mean of the hydraulic conductivity being 4.0×10^{-4} cm/sec, or 1.10 ft/day. With a groundwater gradient of 0.06 ft/ft, the corresponding horizontal groundwater flow rate for the shallow bedrock is approximately 200 ft/yr.

For the deeper bedrock, the hydraulic conductivity ranged from 1.4×10^{-5} to 9.0×10^{-4} cm/sec, or 0.04 to 2.55 ft/day, with the geometric mean of the hydraulic conductivity being 2.0×10^{-4} cm/sec, or 0.57 ft/day. Using an effective porosity of 0.10 for the deep bedrock as well (Davis, 1969), and a groundwater gradient of 0.06 ft/ft, the corresponding horizontal groundwater flow rate for the deeper bedrock is approximately 104 ft/yr.

In summary, based on the permeability data and seepage gradients, the primary zone of groundwater movement at the site is interpreted to exist within the

fractured zones of the shallow bedrock. Additionally, groundwater flow in the fill and shallow bedrock is northeasterly toward the Anthony Kill across the western and northern portions of the site. Groundwater migration in this area of the site is controlled by the presence of the Anthony Kill. Water level data collected for well pair MW-5/MW-15 indicate that the shallow bedrock near the Anthony Kill has an upward gradient, potentially indicating discharge from the groundwater to the Anthony Kill. For well pairs MW-12/MW-13 and MW-4/MW-6, downward vertical gradients exist, indicating movement of groundwater from fill to bedrock.

3.2.2 Groundwater Usage

Historically, the City of Mechanicville used surface water supplies for a drinking water source. The Mechanicville reservoir is approximately 3 miles northwest of the site, at an elevation approximately 160 feet higher than the site. The reservoir is drained by Plum Brook, which flows into the Anthony Kill a few miles upstream of the site. A few residences outside the city limits, however, use groundwater for drinking water (Renaldi, 1986). The closest domestic wells are nearly a mile southwest (upgradient) of the site in the Town of Halfmoon. Based on information obtained during the records search, there are no active industrial wells in the Mechanicville area. There are two abandoned industrial wells: (1) the West Virginia Pulp and Paper Co. well (2,157 feet deep), located a half-mile northeast of the site; and (2) a bedrock well used by the former Mintzer Petroleum Co. (29 feet deep), located 1.5 miles south (upgradient) of the site (Heath, et al., 1963). The records examined did not report the yields of these wells.

3.3 SURFACE WATER HYDROLOGY

The Anthony Kill and Hudson River are two major surface water bodies near the site. The Anthony Kill flows out of Round Lake in a southeasterly direction, then bends eastward, flowing past the site and emptying into the Hudson River at Mechanicville (see Figure 1-1). The Hudson River is located approximately 1,500 feet east of the site.

Surface runoff from the site flows into two drainage catch basins that empty via underground culverts into the Anthony Kill. Locations of the culverts are shown in Figure 1-4.

3.3.1 Discharge

There are no continuous-record gauging stations on the Anthony Kill. The U.S. Geological Survey (USGS) has periodically taken base-flow measurements at the partial-record stations on the Anthony Kill at Mechanicville (Station No. 01335700: latitude 42°55'05" and longitude 73°42'53") and Coons Crossing (Station No. 01335698: latitude 42°55'13" and longitude 73°44'50") (USGS, 1979). Coons Crossing is located upstream of the site, 3.1 miles to the northwest. Based on base flow measurements, Jordan estimated the annual low flow at the Mechanicville Station at 17 cubic feet per second (cfs) for a drainage basin of 62.4 square miles. The average annual low flow at the Coons Crossing Station was estimated at 15 cfs for a drainage basin of 52.9 square

miles. The USGS maintains a partial-record gauging station on the Hudson River at Mechanicville (Station No. 01335500: latitude 42°54'45" and longitude 73°40'45"). The drainage area upstream of this station is 4,500 square miles. Based on data collected from 1931 to 1956, the 7-day, 10-year low flow at this station is 1,900 cfs (USGS, 1979).

3.3.2 Stream Water Quality

The New York State Department of Environmental Conservation (NYSDEC) assigned a Class D stream classification to the section of the Anthony Kill from the Mechanicville city line to the Hudson River (Hodgson, 1986). Class D waters are designated by NYSDEC for secondary contact recreation, but no higher uses because of intermittent flow or water quality conditions that are not conducive to the propagation of game fish. Farther upstream, between Coons Crossing and Mechanicville, the Anthony Kill is designated Class C(t). Class C waters are suitable for fishing and all other uses, except primary contact recreation or as a source of water for drinking, culinary, or food processing purposes. The "(t)" denotes that the water body is a trout stream (NYSDEC, 1981).

NYSDEC has conducted water quality testing downstream of Mechanicville on the Hudson River, and 2 miles upstream of the site at Plum Brook (which drains the water supply reservoir) (NYSDEC, 1981). The Hudson River test results (1981) showed water quality impairment from coliform bacteria, heavy metals, and polychlorinated biphenyls (PCBs). No impairment was evident at Plum Brook, which has a Class A designation (i.e., suitable for use as a water supply source) (NYSDEC, 1981). It should be noted that the Hudson River drainage basin upstream of the test point encompasses an enormous land area containing numerous potential sources of chemical contamination.

3.4 AIR

VOC contamination in test borings and monitoring wells located in close proximity to the combination office/storeroom building led to concern that these VOCs may result in volatilized or airborne contamination of the indoor air quality. General wind data and air quality data were compiled in Task 1 to assess general background conditions at the site (E.C. Jordan Co., 1986a).

Wind data reported for the Albany County Airport, which is 10 to 12 miles south of the Mechanicville site, indicate that the wind is from the south from May through June. The prevailing wind for the remainder of the year is from the west-northwest. Wind velocities are generally moderate over the Hudson Valley Region with an average annual wind speed reported at the Albany County Airport of 8.8 miles per hour (mph), with monthly averages ranging from 6.9 to 10.4 mph (NOAA, 1971). The airport data are likely to be representative of the general wind conditions in the Albany County area, however, local micrometeorological conditions may be different. Local topography would favor a prevailing northwesterly wind direction for Mechanicville, New York (Taylor, 1986).

Mechanicville was once a control station within the statewide ambient air monitoring network operated by the NYSDEC Bureau of Air Quality Surveillance. The station consisted of a high-volume air sampler operated monthly for the

monitoring of total suspended particles (TSP), 60 feet above grade, 1 to 2 miles south of the Mechanicville site. TSP results collected from 1976 to 1982 ranged from 39 to 47 $\mu g/m^3$ and were below Federal Ambient Air Quality Standards of 75 $\mu g/m^3$. No volatile organic monitoring is known to have been conducted in the area.

3.5 LAND USE

General land uses and cover types were surveyed during Task 2 for the area within a half-mile radius of the site (Figure 3-7). Existing land use maps, street maps, and aerial photographs, combined with field checking, were used to determine general land uses. Potentially sensitive land uses were identified with the assistance of local officials and published data. Potential contributors of chemicals to groundwater and surface water were identified from aerial photographs and during field inspection. Current land uses around the site are described in the following subsections.

3.5.1 General Land Use

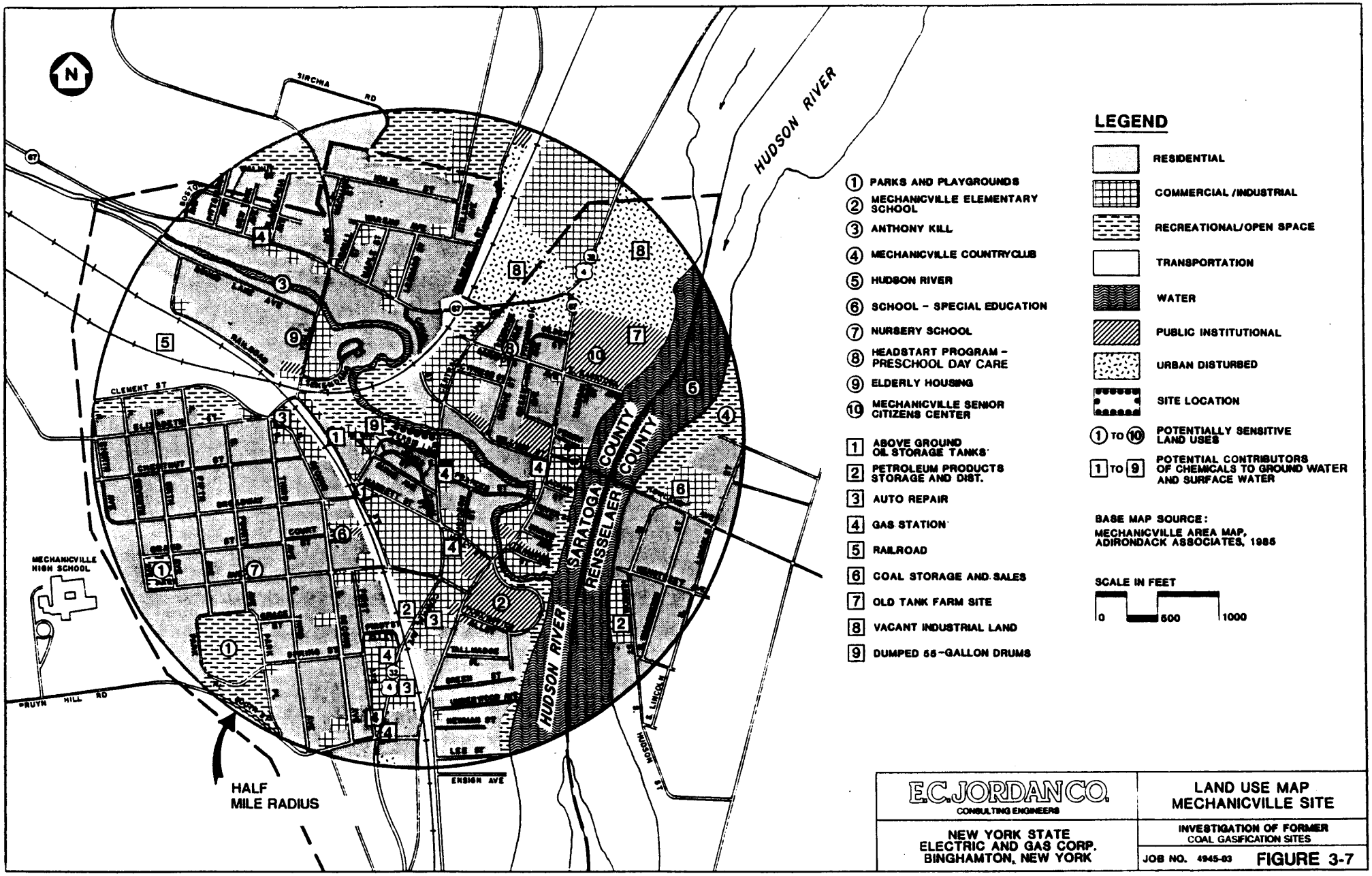
Figure 3-7 depicts present land use and cover types for the area within a half-mile radius of the site. Land uses in the immediate vicinity of the site are both residential and commercial. The central business district of the city, located east and south of the site, is characterized by a mixture of commercial, residential, public, and semipublic land uses, including retail stores, offices, municipal buildings (i.e., city hall, fire station, library, and community services), the post office, and several churches. The central business district is bordered on the east by the Hudson River. The portion of the land use study area on the eastern side of the Hudson River in Schagticoke is predominantly residential.

Southwest of the site, land uses are primarily residential with a few interspersed commercial sites and parks. Railroad yards of the Delaware and Hudson, and Boston and Maine railroads are located west of the site. Land northwest and north of the site is primarily open space, with a few private residences and commercial facilities. The area northeast of the site is a mixture of commercial, residential, and industrial properties.

3.5.2 Potentially Sensitive Land Use

Segments of the human population particularly sensitive to contaminants include the very young, the elderly, and the infirmed. The young are particularly sensitive because a given dose of a harmful material will have a greater effect on a smaller, lighter child than on a larger, heavier adult. A child's immune system is also more susceptible to negative impacts as the physiological systems develop. The elderly and infirmed typically suffer from other medical problems that decrease the body's ability to fight chemical intake. Additionally, the elderly and the infirmed may take medication for other health problems; effects of chemicals on the body may be exacerbated by these drugs.

Therefore, land uses that foster concentrations of these populations are of particular concern in conducting a risk assessment. At the Mechanicville site,



E.C. JORDAN CO.
CONSULTING ENGINEERS

LAND USE MAP
MECHANICVILLE SITE

NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

JOB NO. 4945-83

FIGURE 3-7

these uses include day care centers, schools, recreational areas, nursing homes, and elderly housing projects. Figure 3-7 shows the proximity of these land uses to the site.

3.5.3 Potential Contributors of Chemicals to Groundwater and Surface Water

Potential sources of chemicals in groundwater and surface water presently near the site include aboveground and belowground tanks used for storing petroleum products, vehicle maintenance yards, a railroad yard, a coal storage and sales facility, vacant industrial property, and a drum disposal area. The drums were observed on the vacant lot just west of the site. There are about a dozen 55-gallon drums in poor condition lying on their sides in the grass. The contents and origin of these drums are not known. The location of the potential contributors identified in the land use survey are depicted in Figure 3-7.

As noted in the Task 1 Report (E.C. Jordan Co., 1986a), the segment of the Anthony Kill adjacent to the site was heavily industrialized in the late 1800's and early 1900's. There was a fiber manufacturing company where NYSEG's mechanics shop now stands; a nickel plating factory just north of the site on the Anthony Kill; and a textile mill across North Central Avenue where the Price Chopper supermarket is now located. These and other past industrial sites in the area were very likely sources of chemicals, some of which may still be evident in the environment.

3.6 DISTRIBUTION OF CHEMICALS

The Task 3 sampling and chemical analysis program for Mechanicville included soil, groundwater, surface water, sediment, and air samples. All samples (except for the air samples) were submitted to NYSEG's laboratory. The air samples were shipped to ESA Laboratories of Bedford, MA, for analysis. NYSEG forwarded all soil samples to ERCO of Cambridge, Massachusetts, for analysis. December 1987 groundwater, surface water, and sediment samples were also forwarded to ERCO for VOC and SVOC analyses. NYSEG analyzed March 1988 samples for these parameters. Upstate Laboratory in Syracuse, New York performed all other groundwater, surface water, and sediment analyses for NYSEG.

Analytical parameters and methods are listed in Appendix B-1 and discussed briefly herein. The analytical program for soil and groundwater samples was not varied from Task 2 to Task 3, with one exception. Task 3 organic chemical analyses were performed using GC/MS analytical techniques; results are described in the following sections. Analytical results obtained in Task 2 are in Appendix B-2, while those from Task 3 are included in this section. Minimum detection limits for both sets of data and the raw data from Task 3 analyses are in Appendix B-4.

3.6.1 Soil

Analyses for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, total recoverable phenolics (phenols), and TOC were requested for all Task 3 soil samples. The laboratory performed VOC analysis on only 2 of the 6 samples submitted, for reasons that were not explained. The Task 3 soil samples were

collected from depths of 4 to 24 feet below ground surface. All six samples were taken from the silty sand fill above the shale bedrock. Analytical results for Task 3 soil samples are presented in Table 3-1. Concentrations of detected chemicals are expressed in milligrams per kilogram (mg/kg) (parts per million [ppm]). Analytical results from Task 2 soil boring and test pit samples are included in Appendix B-2.

Analyses of soil samples from the Task 2 investigation program at Mechanicville showed the presence of coal tar and coal-gasification-related chemicals (i.e., VOCs, PAHs, and cyanide) near the former relief gas holder, purifier and oxide houses, and filter beds. Task 3 soil sampling was targeted primarily at further defining the distribution of chemicals in deep soil (near the soil/bedrock interface) and in areas adjacent to former site structures and activities. Figure 3-8 illustrates the concentrations of total VOCs, total PAHs, and total cyanide in soil borings at the site, based on both Task 2 and Task 3 sampling results.

Deep soil samples (greater than 15 feet deep) contained lower levels of organics than the samples collected from shallow soils. No VOCs and a low level of PAHs (7.6 mg/kg) were detected in the deepest sample collected (B-12). The sample was taken from silty fine sand, 22 to 24 feet below ground surface garage building, approximately 75 feet from the former purifier and oxide houses. The sample was not analyzed for VOCs, but PAHs were not detected.

The highest levels of VOCs and PAHs were present in samples taken in and near the former relief gas holder, near the former purifier and oxide houses, and in the filter bed area. The highest levels of VOCs (3,800 and 3,410 mg/kg) were observed in samples taken at B-8 (at depths of 13.5 to 15.5 feet and 15.5 to 17.5 feet). B-8 is located at the site of the former relief gas holder. The highest levels of PAHs (9,310; 8,500; and 5,440 mg/kg) were observed in samples taken from B-3, TP-5, and B-8 at approximate depths of 5, 3.5, and 14.5 feet, respectively.

Task 3 Sample B-15, collected just above the shale bedrock (a composite sample collected from a depth of 4 to 8 feet) adjacent to the former filter beds, contained low levels of VOCs (1.45 mg/kg) and no detectable PAHs. In contrast, the shallow soil samples collected nearby from TP-5 and B-5 had much higher levels of VOCs (13.8 and 16.0 mg/kg, respectively) and PAHs (6,565 and 4,654 mg/kg, respectively).

To further define the extent of contamination in the vicinity of the former gas house, Sample B-9 was collected in Task 3 from silty sand 4 to 5.5 feet below ground surface. Sample B-9 was not analyzed for VOCs but contained 118 mg/kg of PAHs. The level of PAHs found at B-9 was within the same order of magnitude as those found in TP-4, but was an order of magnitude less than those observed in B-3 and B-6.

Task 3 included no additional soil sampling in the area of the former distribution gas holder. Task 2 sampling indicated moderate levels of VOCs and PAHs (4.3 and 11.2 mg/kg, respectively, at a depth of 7 to 9 feet) beneath the distribution holder, and trace levels of PAHs but no detectable levels of VOCs adjacent to it at B-2.

TABLE 3-1
Task 3 Soil Boring Analytical Results
Mechanicville Site

SAMPLE IDENTIFIER:	B-09(S-1)	B-10(S-2)	B-10(S-2) DUP-503	B-12(S-2)	B-14(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/19/87	11/17/87	11/19/87
DEPTH (Ft.):	4-5.5	16-18	16-18	22-24	18-20	4-8
ZONE SAMPLED:	Silty sand	Silty sand	Silty sand	Silty fine sand	Silty fine sand	Fill
**** Volatile Organics (mg/kg) (1) ****						
-VOLATILE AROMATICS-						
Benzene	-- (2)	--	--	ND	--	ND
Toluene	--	--	--	ND	--	ND
Ethylbenzene	--	--	--	ND	--	0.570
Styrene	--	--	--	ND	--	ND
Total Xylenes	--	--	--	ND	--	0.880
- OTHER -						
Methylene Chloride	--	--	--	ND	--	ND
2-Butanone	--	--	--	ND	--	ND
Total Volatile Aromatics	--	--	--	ND	--	1.4
Total Volatile Organics	--	--	--	ND	--	1.4
**** Semi-Volatile Organics (mg/kg) (1) ****						
-PAH-						
Acenaphthene	T (3)	T	0.53	2.35	ND	ND
Acenaphthylene	ND (4)	T	T	ND	ND	ND
Anthracene	T	T	T	0.8	ND	ND
Benzo(b)Fluoranthene	T	T	ND	ND	ND	ND
Benzo(k)Fluoranthene	(5)	(5)	ND	ND	ND	ND
Benzo(g,h,i,)Perylene	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	T	T	ND	ND	ND
Benzo(a)Pyrene	T	T	T	ND	ND	ND
Chrysene	T	T	T	ND	ND	ND
Fluoranthene	T	T	T	1.01	ND	ND
Fluorene	T	T	T	1.25	ND	ND
Indeno(1,2,3-cd)Pyrene	T	ND	ND	ND	ND	ND
Naphthalene	60	T	0.45	ND	ND	ND
Phenanthrene	58	0.88	1.1	0.8	ND	ND
Pyrene	T	0.6	T	1.39	ND	ND
-OTHER-						
2-Methylnaphthalene	T	T	T	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	R (6)	T	R
Total PAH	120	1.5	2.1	7.6	ND	ND
Total Semi-Volatile Organic	120	1.5	2.1	7.6	T	ND
**** Other Chemicals (mg/kg) ****						
-METALS-						
Iron	28000	24000	22000	18000	21000	23000
Zinc	59	42	44	32	49	390
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (7)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	0.74	ND	ND	ND	ND	2.6
Total Organic Carbon	33000	22000	24000	22000	32000	42000

NOTES:
(1) VOCs and SVOCs analyzed by GC/MS (USEPA Method 8240 and 8270).
(2) -- = Not analyzed (Laboratory Error).
(3) T = Trace concentrations detected below the quantifiable reporting limit.
(4) ND = Not detected (See Appendix B-4 for minimum detection limits).
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Data rejected because analysis of blank indicated sampling or lab-derived contamination.
(7) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

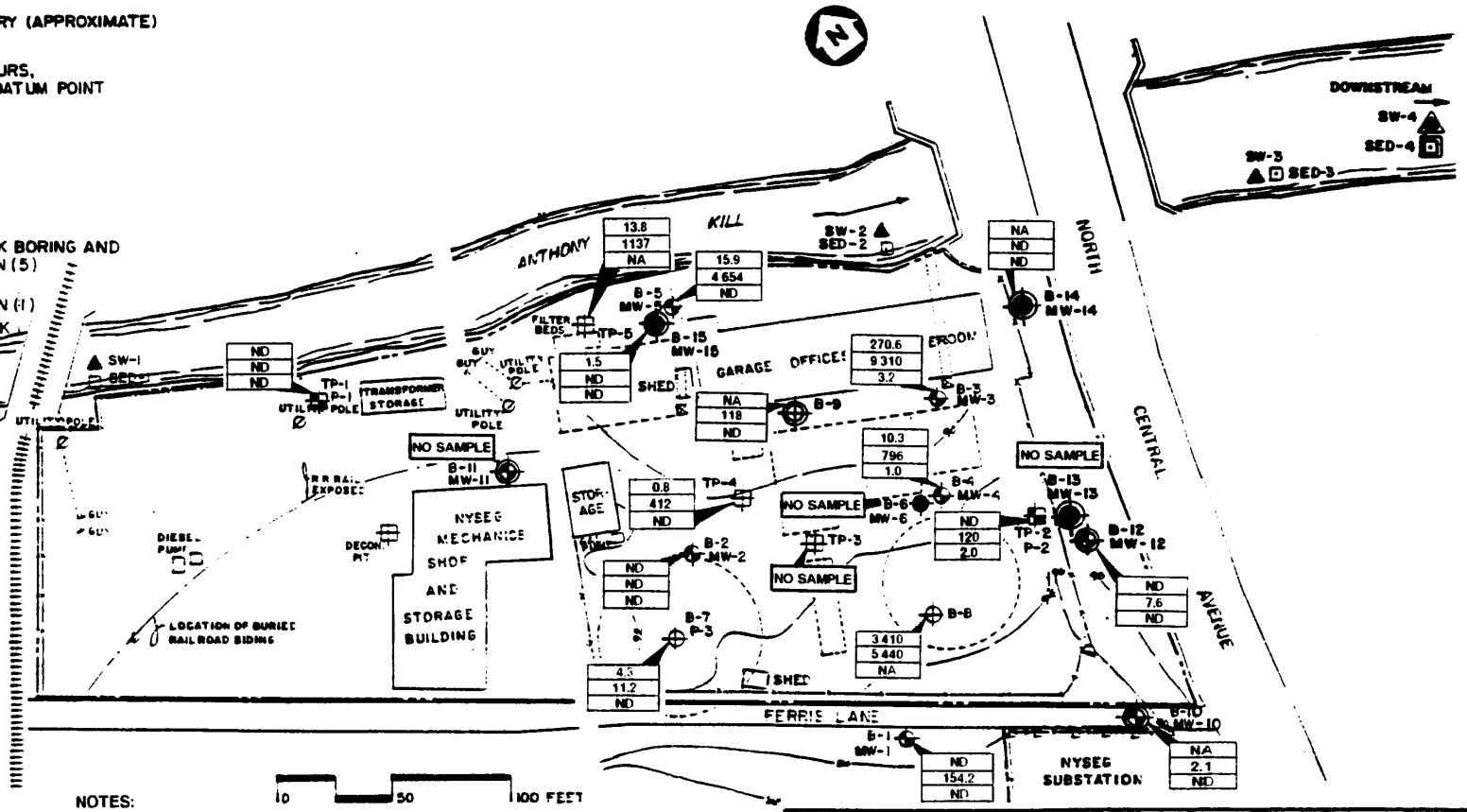
TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TOTAL VOCs / TOTAL PAHs / TOTAL CN — CONCENTRATIONS DETECTED IN SOIL BORINGS IN mg/kg DURING TASK 2 AND TASK 3 SAMPLING EVENTS.

NA — NOT ANALYZED

ND — NOT DETECTED



NOTES:

1. HPLC ORGANIC ANALYSIS RESULTS ARE SHOWN EXCEPT WHERE GC/MS RESULTS ARE AVAILABLE (TP-5; B-8, B-9, B-10, B-12, B-14, AND B-15).
2. WHERE DUPLICATE SAMPLES WERE ANALYZED BY THE SAME TECHNIQUE, THE HIGHER VALUE IS SHOWN
3. SAMPLES WERE COLLECTED AT DEPTHS BETWEEN 3 AND 24 FEET BELOW GROUND SURFACE.
4. ALL SAMPLES EXCEPT TP-5 AND B-9 WERE COLLECTED BELOW THE WATER TABLE.

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.
ELEVATIONS BASED ON ASSUMED DATUM OF 100.00 AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE: DISTRIBUTION OF CHEMICALS IN SOILS MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-8

Samples B-10 and B-1 were collected away from former coal gasification activities, near Ferris Lane. While Sample B-10 was not analyzed for VOCs, 1.48 mg/kg of PAHs were detected. A duplicate sample from B-10 contained 2.08 mg/kg of PAHs. VOCs were not detectable at B-1, but PAHs were found in the 8- to 10-foot sampling interval at 154 mg/kg.

Results of the metals analyses for both Task 2 and Task 3 soil samples show fairly narrow ranges for iron levels in the natural soils on-site (18,000 to 35,000 mg/kg). Task 3 Sample B-10 from soil 16 to 18 feet below ground surface, considered upgradient from site activities, contained 24,000 mg/kg of iron. There is no evidence that iron levels in on-site soils are elevated by historical or current site activities.

Zinc levels in Task 3 soil samples were consistent with Task 2 results, ranging from 32 to 390 mg/kg. While one Task 2 sample (B-5/S-1) showed a high zinc concentration (1,600 mg/kg), no similar zinc concentrations were found in Task 3 samples. The high concentration of zinc at B-5 could be a result of the use of zinc acetate as a corrosion inhibitor in gas holder sealing waters, a common practice at former coal gas plants (Wilson and Stevens, 1981). Metals concentrations were generally lower in the deeper silty sand than in the overlying fill. This may be more related to the nature of the fill that to any historical or current on-site activities.

Cyanide was only detected in three soil samples, all in the vicinity of the former purifier and oxide houses. The presence of cyanide in the soil (at levels of 1.0 to 3.2 mg/kg) is most likely attributable to spillage during cleaning of the purifier house (Wilson and Stevens, 1981).

Phenolics were detected in two Task 3 soil samples: B-9 (0.74 mg/kg) and B-15 (2.6 mg/kg). Sample B-9 was collected adjacent to the former gas house, and Sample B-15 was taken near the former filter beds. Phenolics were detected in two Task 2 samples at higher levels at B-3 and B-5 (3.6 and 2.6 mg/kg, respectively). Phenolics are widely distributed in the environment, due to both natural (i.e., vegetative decomposition) and manmade processes. Tars and wastewater are the sources of phenolics at coal gas plants, although tars produced by water gas plants, such as the one at Mechanicville, typically contain only negligible amounts of phenolics. Site activities may have contributed to the detectable levels of phenolics in soils at the gas house and filter beds (USWAG, 1984).

TOC analysis is a generic test for organic material and measures all VOCs and SVOCs, as well as naturally occurring biological material. The TOC concentration in the Task 3 soil samples ranged from 22,000 to 42,000 mg/kg. All Task 3 TOC levels were within the range established by Task 2 sampling (8,300 to 190,000 mg/kg). The highest TOC levels (greater than 100,000 mg/kg) typically correlated to soil samples where the highest levels of VOCs and/or PAHs were observed.

Based on results of Task 2 and Task 3 soil sample analyses and the drilling program, coal-tar- and coal-gasification-related chemicals (i.e., VOCs, PAHs, and cyanide) are present in the site's subsurface environment. Field logs of B-3, B-4, B-5, B-6, B-9, B-10, B-12, B-13, and B-15, and test pit excavations

TP-4 and TP-5 further document this. Visible coal tar contamination was observed at depths up to 16.8 feet in soils, and stained bedrock was observed in B-13 at a depth of 55 feet. The logs of the test pits and borings are presented in Appendix A.

3.6.2 Groundwater

During Task 3, groundwater samples were collected in December 1987 and March 1988 from the 12 wells at the site. The six Task 2 wells were sampled on four previous occasions (i.e., September and December of 1986, and March and June of 1987). All groundwater samples were analyzed for VOCs, SVOCs, dissolved iron and zinc, cyanide, phenolics, and TOC (see Appendix B-1 for analytical methods). Conductivity, pH, and temperature were also measured in the field. QA samples included (1) sampler blanks prepared in the field and analyzed for the same parameters as groundwater samples; (2) trip blanks prepared prior to field work and analyzed for VOCs only; and (3) filtration blanks prepared in the field by running deionized water through the filter apparatus (used for dissolved metals samples) and analyzing for selected inorganics. Appendix B-3 contains results of QA sample analyses.

Results of the Task 3 groundwater analyses (expressed in mg/ℓ [ppm]) are presented in Table 3-2 and discussed in the following paragraphs. Appendix B-2 contains Task 2 analytical results.

An interpretation of the distribution of total VOCs in shallow groundwater based on maximum concentrations detected during Task 3 sampling is presented in Figure 3-9. Deep bedrock wells (i.e., MW-6, MW-13, MW-14, and MW-15) typically yielded higher concentrations of VOCs, with the lowest concentration found at MW-15 (0.037 mg/ℓ) and the highest concentration found at MW-13 (62 mg/ℓ).

Volatile aromatic compounds, a subset of VOCs, were detected consistently in all wells except MW-1, MW-2, and MW-11. MW-1, MW-10, and MW-11 are located upgradient of the historical coal gasification plant. MW-2 is downgradient from the former distribution gas holder, but soils data from B-2 and B-7 suggest that little or no organic contaminants are in this area. Volatile aromatics were detected consistently in shallow bedrock wells MW-3, MW-4, MW-5, and MW-12, but were only present in soil samples at the corresponding locations B-3, B-4, and B-5. Volatile aromatics were detected at each of the deep bedrock wells at concentrations typically greater than those in the shallower wells.

PAHs were observed in at least one sample from every groundwater monitoring well except MW-1, MW-2, and MW-11. The average concentrations, averaged over all the samples collected at each well, ranged from nondetectable at MW-11 to 1500 mg/ℓ at MW-12. PAHs were observed at maximum concentrations exceeding 100 mg/ℓ in 4 wells: MW-3, MW-5, and MW-12 (190, 110, and 1500 mg/ℓ, respectively). PAHs were observed at maximum concentrations exceeding 10 mg/ℓ at MW-6 and MW-13 (22 and 11 mg/ℓ, respectively). The distribution of PAHs across the site is similar to the distribution in the soil samples, indicating that contaminated soils are source areas for PAH contaminants found in the groundwater.

TABLE 3-2
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-01		MW-02		
SCREENED ZONE	SOIL/SHALLOW BEDROCK		SOIL/SHALLOW BEDROCK		
SAMPLE IDENTIFIER	MW-01	MW-01	MW-02	MW-02	MW-02 DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	12/22/87	3/29/88	3/29/88
-VOLATILE AROMATICS-			** Volatile Organics (mg/l) (1) **		
Benzene	ND (2)	ND	ND	ND	-- (4)
Toluene	ND	ND	ND	ND	--
Ethylbenzene	ND	ND	ND	ND	--
Styrene	ND	ND	ND	ND	--
Total Xylenes	ND	ND	ND	ND	--
-OTHER-					
Methylene Chloride	ND	ND	ND	ND	--
2-Butanone	ND	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	ND	--
2-Hexanone	ND	ND	ND	ND	--
Chlorobenzene	ND	T	ND	T	--
1,1-Dichloroethane	ND	ND	ND	ND	--
Trichloroethene	ND	ND	ND	ND	--
Total Volatile Aromatics	ND	ND	ND	ND	--
Total Volatile Organics	ND	T	ND	T	--
			** Semi-Volatile Organics (mg/l) (1) **		
-PAH-					
Acenaphthene	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	T (3)	ND	T	ND	ND
Total PAH	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	T	ND	T	ND	ND
			** Other Chemicals (mg/l) **		
-DISSOLVED METALS-					
Iron	0.07	ND	0.04	0.12	0.23
Zinc	ND	0.02	ND	0.02	0.1
-CYANIDE-					
Total Cyanide (13)	0.01	ND	ND	ND	ND
Undistilled Cyanide (10)	ND	ND	ND	ND	ND
-OTHER-					
Total Recoverable Phenolics	0.006	ND	0.016	0.006	0.011
Total Organic Carbon	3.4	2.8	2.9	2.2	2.8
Total New York State Regulated Organics (5)	0.006	ND	0.0160	0.006	0.011
pH (6)	7.5	6.5	7.7	6.6	6.7
Conductivity (7)	1125	1389	1153	1159	1302
Temperature (8)	11.1	10.2	11.9	7.0	7.0

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-03		MW-04		MW-05	
SCREENED ZONE	SOIL		SOIL		SOIL/SHALLOW BEDROCK	
SAMPLE IDENTIFIER	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **					
Benzene	0.17	0.15	0.26	0.2	0.15	T
Toluene	0.021	ND	0.23	ND	0.094	ND
Ethylbenzene	0.11	ND	0.058	0.17	ND	0.054
Styrene	ND (2)	ND	ND	ND	ND	ND
Total Xylenes	0.40	0.42	2.2	1.3	0.19	0.16
-OTHER-						
Methylene Chloride	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	T	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.70	0.57	2.8	1.67	0.43	0.214
Total Volatile Organics	0.70	0.57	2.8	1.67	0.43	0.214
	** Semi-Volatile Organics (mg/l) (1) **					
-PAH-						
Acenaphthene	30	ND	T	T	0.51	22
Acenaphthylene	T (3)	ND	T	T	T	2.7
Anthracene	9.7	ND	ND	T	T	ND
Benzo(b)Fluoranthene	T	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	ND	1.3
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	ND	ND	ND	2.6
Benzo(a)Pyrene	T	T	ND	ND	ND	2.4
Chrysene	T	ND	ND	ND	ND	ND
Fluoranthene	12	T	ND	T	T	9.4
Fluorene	13	ND	T	T	T	10
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	64	ND	1.9	1.4	3.6	30
Phenanthrene	38	ND	T	T	0.32	26
Pyrene	21	ND	ND	ND	T	1.4
-OTHER-						
2,4 - Dimethylphenol	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	T	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND	ND	T
2-Methylnaphthalene	34	ND	0.65	0.78	1.1	35
2-Methylphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	T	ND	ND	ND	T
3-Nitroaniline	ND	ND	ND	ND	ND	T
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	T
4-Nitroaniline	ND	T	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	T	ND	ND
Dibenzofuran	T	T	ND	ND	T	2
Hexachloroethane	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	T
Nitrobenzene	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	T	ND
Total PAH	190	ND	1.9	1.4	4.4	110
Total Semi-Volatile Organics	220	ND	2.6	2.18	5.5	142.2
	** Other Chemicals (mg/l) **					
-DISSOLVED METALS-						
Iron	8.8	14.4	20	9.25	13	25
Zinc	0.11	0.2	0.52	0.05	0.54	1.09
-CYANIDE-						
Total Cyanide (13)	ND	0.27	0.05	0.05	ND	0.05
Undistilled Cyanide (10)	--	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	17	0.025	0.021	0.027	0.028	0.026
Total Organic Carbon	50,000 (12)	42	8.4	9.9	8,000 (12)	21
Total New York State Regulated Organics (5)	237.7	0.595	5.421	3.877	5.598	142.34
pH (6)	(11)	(11)	(11)	(11)	(11)	(11)
Conductivity (7)	(11)	(11)	(11)	(11)	(11)	(11)
Temperature (8)	(11)	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well. e CN- present.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-06		MW-10	
SCREENED ZONE	BEDROCK		SOIL	
SAMPLE IDENTIFIER	MW-06	MW-06	MW-10	MW-10
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **		
Benzene	0.88	0.06	ND (2)	-- (4)
Toluene	0.13	ND	ND	--
Ethylbenzene	0.14	ND	ND	--
Styrene	ND	ND	ND	--
Total Xylenes	2.4	0.04	0.012	--
-OTHER-				
Methylene Chloride	ND	ND	ND	--
2-Butanone	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	--
2-Hexanone	ND	ND	ND	--
Chlorobenzene	ND	ND	ND	--
1,1-Dichloroethane	ND	ND	ND	--
Trichloroethene	ND	ND	ND	--
Total Volatile Aromatics	3.6	0.1	0.012	--
Total Volatile Organics	3.6	0.1	0.012	--
		** Semi-Volatile Organics (mg/l) (1) **		
-PAH-				
Acenaphthene	2.2	T	0.10	T
Acenaphthylene	T	T	T (3)	ND
Anthracene	0.89	T	T	ND
Benzo(b)Fluoranthene	T	T	ND	T
Benzo(k)Fluoranthene (9)	T	ND	ND	ND
Benzo(g,h,i)Perylene	T	ND	ND	ND
Benzo(a)Anthracene	T	T	ND	T
Benzo(a)Pyrene	T	ND	ND	ND
Chrysene	T	ND	ND	T
Fluoranthene	1.0	T	T	ND
Fluorene	1.1	ND	0.028	T
Indeno(1,2,3-cd)Pyrene	T	ND	ND	ND
Naphthalene	12	ND	ND	ND
Phenanthrene	3.5	T	T	ND
Pyrene	1.6	T	T	ND
-OTHER-				
2,4 - Dimethylphenol	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND
2-Methylnaphthalene	4.6	ND	T	ND
2-Methylphenol	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	T
4-Methylphenol	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	T
Benzoic Acid	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND
Dibenzofuran	T	ND	T	ND
Hexachloroethane	ND	ND	ND	T
N-Nitrosodiphenylamine	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND
Phenol	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	T	ND	0.41
Total PAH	22	ND	0.13	ND
Total Semi-Volatile Organics	27	ND	0.13	0.41
		** Other Chemicals (mg/l) **		
-DISSOLVED METALS-				
Iron	11	5.95	0.64	1.41
Zinc	0.048	0.02	ND	0.02
-CYANIDE-				
Total Cyanide (13)	0.06	0.01	0.01	ND
Undistilled Cyanide (10)	0.07	ND	ND	ND
-OTHER-				
Total Recoverable Phenolics	0.056	0.037	ND	0.029
Total Organic Carbon	10,000 (12)	31	61	11
Total New York State Regulated Organics (5)	30.656	0.137	0.142	0.439
pH (6)	7.7	(11)	7.5	6.6
Conductivity (7)	1154	(11)	1262	1576
Temperature (8)	12.0	(11)	12.4	9.6

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-11			MW-12	
SCREENED ZONE	SOIL/SHALLOW BEDROCK			SOIL	
SAMPLE IDENTIFIER	MW-11	MW-11 Dup	MW-11	MW-12	MW-12
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	12/22/87	3/29/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **				
Benzene	ND	ND	ND	ND	0.12
Toluene	ND	ND	ND	ND	T
Ethylbenzene	ND	ND	ND	ND	1.1
Styrene	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	0.075	1.2
-OTHER-					
Methylene Chloride	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	T
1,1,1-Trichloroethane	0.0026	0.0044	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Total Volatile Aromatics	ND	ND	ND	0.075	2.4
Total Volatile Organics	0.0026	0.0044	ND	0.075	2.4
	** Semi-Volatile Organics (mg/l) (1) **				
-PAH-					
Acenaphthene	ND	ND	ND	ND	210
Acenaphthylene	ND	ND	ND	ND	T
Anthracene	ND	ND	ND	ND	86
Benzo(b)Fluoranthene	ND	ND	ND	ND	T
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	T
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	T
Benzo(a)Pyrene	ND	ND	ND	ND	T
Chrysene	ND	ND	ND	ND	T
Fluoranthene	ND	ND	ND	ND	82
Fluorene	ND	ND	ND	ND	110
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	580
Phenanthrene	ND	ND	ND	ND	320
Pyrene	ND	ND	ND	ND	130
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	540
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	T	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	T
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	T	ND	T	ND
Total PAH	ND	ND	ND	ND	1500
Total Semi-Volatile Organics	ND	T	ND	ND	2100
	** Other Chemicals (mg/l) **				
-DISSOLVED METALS-					
Iron	0.15	0.26	0.28	2.7	4.45
Zinc	ND	ND	0.01	ND	0.02
-CYANIDE-					
Total Cyanide (13)	ND	ND	ND	0.8	0.58
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
-OTHER-					
Total Recoverable Phenolics	0.005	0.01	ND	0.016	0.2
Total Organic Carbon	5.4	8.9	4.9	18	13
Total New York State Regulated Organics (5)	0.0076	0.0144	ND	0.091	2060.6
pH (6)	7.6	7.6	6.9	7.4	(11)
Conductivity (7)	785	1098	939	1470	(11)
Temperature (8)	11.7	11.1	9.1	11.3	(11)

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-13	MW-13	MW-13	MW-14	MW-14
SCREENED ZONE	BEDROCK	BEDROCK	BEDROCK	BEDROCK	BEDROCK
SAMPLE IDENTIFIER	MW-13	MW-13	MW-13 Dup	MW-14	MW-14
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	3/29/88	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **			
Benzene	9.6	12	-- (4)	2.3	2.2
Toluene	3.6	6.4	--	0.34	ND
Ethylbenzene	2.0	2	--	0.061	T
Styrene	0.94	1.8	--	ND	ND
Total Xylenes	2.2	3.5	--	0.79	0.16
-OTHER-					
Methylene Chloride	ND	36	--	ND	ND
2-Butanone	ND	ND	--	ND	ND
1,1,1-Trichloroethane	ND	ND	--	ND	ND
Vinyl Acetate	ND	ND	--	ND	ND
2-Hexanone	ND	ND	--	ND	ND
Chlorobenzene	ND	ND	--	ND	ND
1,1-Dichloroethane	ND	ND	--	ND	ND
Trichloroethene	0.053	ND	--	ND	ND
Total Volatile Aromatics	18	26	--	3.5	2.4
Total Volatile Organics	18	62	--	3.5	2.4
		** Semi-Volatile Organics (mg/l) (1) **			
-PAH-					
Acenaphthene	T	T	T	0.069	0.076
Acenaphthylene	T	0.94	0.72	T	T
Anthracene	ND	T	T	T	ND
Benzo(b)Fluoranthene	ND	T	T	ND	ND
Benzo(k)Fluoranthene (9)	ND	T	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	T	T	ND	ND
Benzo(a)Pyrene	ND	T	T	ND	ND
Chrysene	ND	T	T	ND	ND
Fluoranthene	ND	0.3	T	ND	ND
Fluorene	T	ND	ND	T	T
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	4.6	8.1	7.8	T	1.8
Phenanthrene	T	1.3	0.92	T	T
Pyrene	ND	0.45	0.33	ND	ND
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	T
2,4-Dinitrotoluene	ND	T	ND	ND	ND
2,6-Dinitrotoluene	ND	T	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	0.78	2.7	2.1	0.080	0.22
2-Methylphenol	T	ND	ND	T	T
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	T	ND	ND	0.029	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	0.58	ND	ND	0.36	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND	T	ND
Total PAH	4.6	11	9.8	0.069	1.9
Total Semi-Volatile Organics	6.0	14	12	0.54	2.1
		** Other Chemicals (mg/l) **			
-DISSOLVED METALS-					
Iron	0.14	0.26	0.18	0.4	0.16
Zinc	ND	0.01	0.02	ND	0.03
-CYANIDE-					
Total Cyanide (13)	0.15	0.1	0.13	0.12	0.09
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
-OTHER-					
Total Recoverable Phenolics	0.053	0.064	0.058	0.063	0.3
Total Organic Carbon	9	7.6	8.5	9.2	8.6
Total New York State Regulated Organics (5)	23.113	42.814	11.928	4.103	4.756
pH (6)	7.7	6.7	6.4	7.6	6.6
Conductivity (7)	1133	1332	1589	1157	1450
Temperature (8)	12.1	11.6	10.9	12.1	10.1

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported

Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-15	MW-15	MW-15
SCREENED ZONE	BEDROCK	BEDROCK	BEDROCK
SAMPLE IDENTIFIER	MW-15	MW-15 Dup	MW-15
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **	
Benzene	0.0026	0.0058	0.018
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
Styrene	ND	ND	ND
Total Xylenes	0.0027	0.0031	0.013
-OTHER-			
Methylene Chloride	ND	ND	ND
2-Butanone	ND	ND	ND
1,1,1-Trichloroethane	0.017	0.025	0.012
Vinyl Acetate	ND	ND	ND
2-Hexanone	ND	ND	T
Chlorobenzene	ND	ND	ND
1,1-Dichloroethane	0.0033	0.0031	ND
Trichloroethene	ND	ND	ND
Total Volatile Aromatics	0.0053	0.0089	0.031
Total Volatile Organics	0.026	0.037	0.043
		** Semi-Volatile Organics (mg/l) (1) **	
-PAH-			
Acenaphthene	0.040	0.026	0.031
Acenaphthylene	0.045	0.027	T
Anthracene	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND
Chrysene	ND	ND	ND
Fluoranthene	ND	ND	ND
Fluorene	T	T	0.011
Indeno(1,2,3-cd)Pyrene	ND	ND	ND
Naphthalene	0.091	T	T
Phenanthrene	T	T	T
Pyrene	ND	ND	T
-OTHER-			
2,4 - Dimethylphenol	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND
2-Methylnaphthalene	0.030	T	ND
2-Methylphenol	ND	ND	ND
2-Nitroaniline	ND	ND	ND
3-Nitroaniline	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND
4-Methylphenol	ND	ND	ND
4-Nitroaniline	ND	ND	ND
4-Nitrophenol	ND	ND	ND
Benzoic Acid	ND	ND	ND
Benzyl Alcohol	ND	ND	T
Butylbenzylphthalate	ND	ND	ND
Dibenzofuran	ND	ND	T
Hexachloroethane	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND
Nitrobenzene	ND	ND	T
Phenol	ND	ND	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND
Total PAH	0.18	0.053	0.042
Total Semi-Volatile Organics	0.21	0.053	0.042
		** Other Chemicals (mg/l) **	
-DISSOLVED METALS-			
Iron	0.13	ND	0.16
Zinc	ND	0.014	0.01
-CYANIDE-			
Total Cyanide (13)	ND	0.06	ND
Undistilled Cyanide (10)	ND	ND	ND
-OTHER-			
Total Recoverable Phenolics	0.006	0.006	ND
Total Organic Carbon	2.9	3.2	3.9
Total New York State Regulated Organics (5)	0.242	0.069	0.085
pH (6)	7.9	7.9	7.2
Conductivity (7)	949	1125	1029
Temperature (8)	12.1	11.4	13.4

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN

TASK 2:

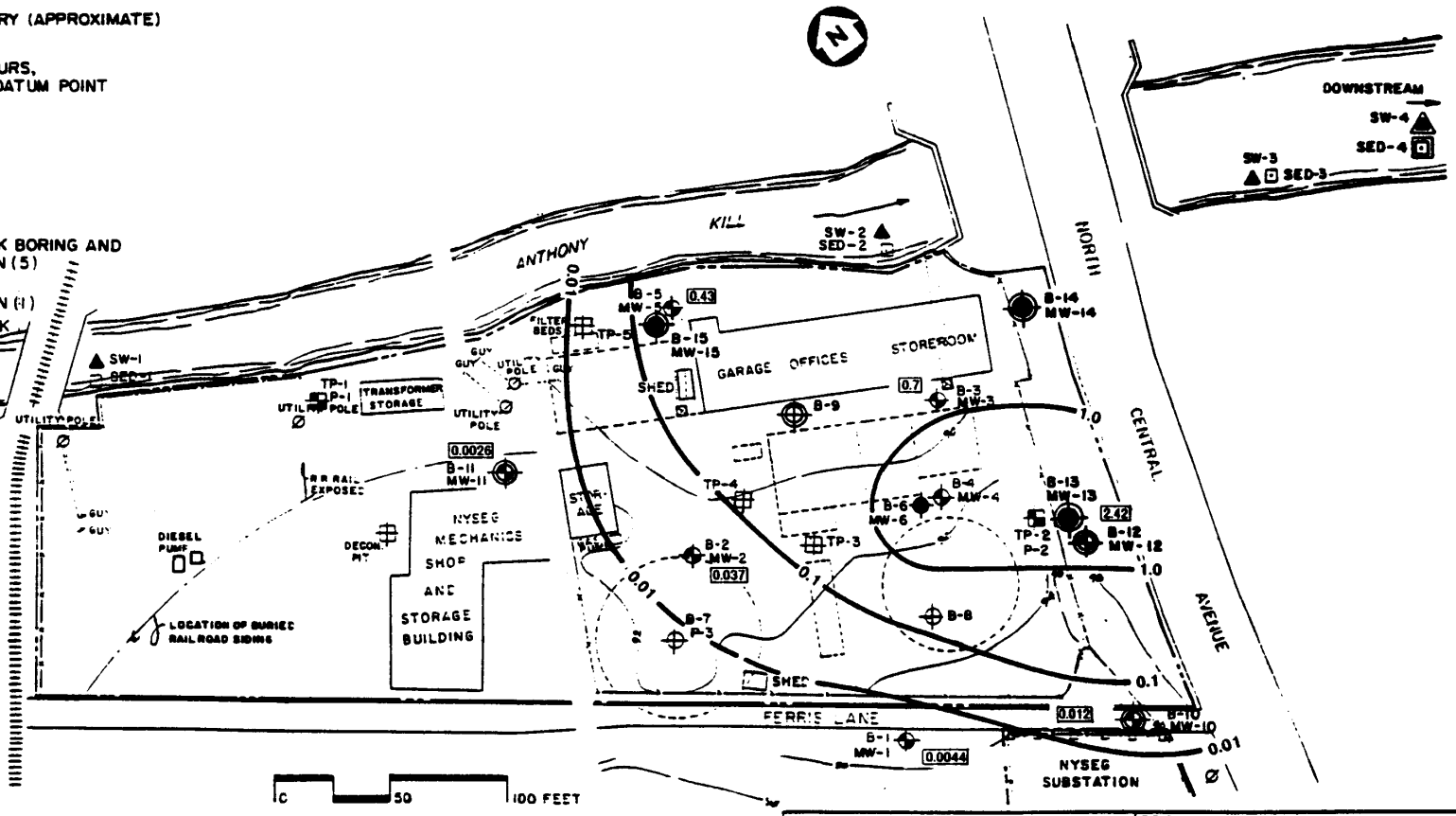
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

1.0 — INTERPRETIVE CONTOUR OF MAXIMUM CONCENTRATION (in mg/l) OF TOTAL VOC s IN SHALLOW GROUNDWATER DURING TASK 3

2.42 — MAXIMUM CONCENTRATION IN mg/l OF TOTAL VOC s IN SAMPLE COLLECTED DURING TASK 3



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
DISTRIBUTION OF TOTAL VOC s IN SHALLOW GROUNDWATER MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-9

The highest organic chemical concentrations in groundwater were found at MW-12 (downgradient of the former relief gas holder), MW-3 (downgradient of the former oxide and purifier houses), MW-5 (downgradient of the former filter beds) and MW-13 (downgradient of the former relief gas holder, adjacent to MW-12); the lowest organic chemical concentrations were found in MW-1, MW-10, and MW-11 (upgradient of the site), MW-2 (adjacent to the former gas distribution holder), and MW-15 (downgradient of the former filter beds, adjacent to MW-5). On at least one occasion, no organics were detected in MW-1, MW-2, and MW-11.

At MW-12, 7 PAH compounds were detected in the March 1988 sample while none were detected in the December 1987 sample. A comparison between the PAH concentrations in Table 3-2 and the solubility limits for PAH compounds in water (see Appendix B-2) indicates that most detectable concentrations are well above the solubility limits. The sampling protocol for the semi-volatile organic analysis does not allow sample filtration; therefore, discrepancies in the PAH results are likely related to differences in the amount of soil in the analytical samples.

Other organic chemicals, including 1,1,1-trichloroethane, 1,1-dichloroethane, and trichloroethene were detected in several groundwater samples at concentrations below 0.1 mg/ℓ. Bis(2-ethylhexyl)phthalate and methylene chloride were detected in ranges attributable to laboratory contamination. These organic compounds showed no pattern of occurrence regarding shallow versus deep wells or upgradient versus downgradient wells, and are not typically associated with coal gasification wastes. These compounds are not believed to be coal gasification plant-derived chemicals; however, they may be associated with site use following closure of the gas plant, or have an off-site origin.

Dissolved iron was present in at least one sample from every groundwater monitoring well. Concentrations in MW-1, MW-2, MW-10, and MW-11, which are considered to provide the most representative background concentrations for the site, ranged from 0.04 to 1.41 mg/ℓ. The wells with the highest concentrations of dissolved iron were MW-4, MW-5, MW-3, MW-6, and MW-12 (25, 20, 14.4, 11, and 4.45 mg/ℓ, respectively). These are the same wells that had the highest concentrations of PAHs, indicating that the elevated iron levels in the groundwater are related to on-site contamination.

Dissolved zinc concentrations were fairly uniform in all groundwater samples. Zinc was detected at least once in every well, in concentrations ranging from 0.01 to 0.11 mg/ℓ, except for one sample from MW-4 and both samples from MW-5, which contained unusually high levels (0.52, 0.54, and 1.09 mg/ℓ, respectively). The maximum zinc concentration at MW-11 (an up-gradient well) was 0.01 mg/ℓ. The elevated levels of zinc found at MW-4 and MW-5 may be related to past site usage of zinc acetate. The uniformity of zinc concentrations at other sampling locations suggests that it is a natural constituent of site groundwater which has not been elevated by site activities.

Cyanide was detected in all wells except MW-2 and MW-11 during Task 3. The highest levels of total cyanide were detected at MW-12 (0.8 and 0.58 mg/ℓ), located downgradient of the former relief gas holder. Other shallow wells

contained cyanide in concentrations ranging from nondetect (ND) to 0.27 mg/ℓ, while deep wells contained cyanide in concentrations ranging from ND to 0.15 mg/ℓ.

Total recoverable phenolics were detected in all wells. The maximum concentration in upgradient well MW-11 was 0.01 mg/ℓ. Phenolics concentrations in the deep wells ranged from ND to 0.3 mg/ℓ, while concentrations in shallow wells ranged from ND to 17 mg/ℓ.

TOC concentrations in the groundwater samples ranged from 2.2 to 61 mg/ℓ, except for three samples in which free product (coal tar) was noted in December 1987 sampling. In these three wells (i.e., MW-3, MW-5, and MW-6), TOC levels ranged from 8,000 to 50,000 mg/ℓ. TOC results do not correlate well with the VOC and SVOC analytical results, indicating there were other organic materials in the samples analyzed.

3.6.3 Surface Water

Task 2 analytical results indicated that site-derived chemicals were not present in the Anthony Kill. Task 3 sampling was designed to further evaluate surface water conditions in the vicinity of the Mechanicville site. Surface water samples were collected from three locations along the Anthony Kill during two sampling episodes (December 1987 and March 1988). Samples were collected upstream (SW-01), adjacent (SW-02), and downstream (SW-04) relative to the site. Locations SW-01 and SW-02 were sampled during Task 2. Downstream location SW-04 was chosen based on the groundwater flow direction at the site, which suggests that site groundwater discharges to the Anthony Kill in the vicinity of SW-04. Samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, phenolics, and TOC. Analytical results are presented in Table 3-3, with concentrations expressed in mg/ℓ (ppm). Task 2 analytical results are included in Appendix B-2. QA water samples included sampler blanks and trip blanks (see Section 3.5.2); results are presented in Appendix B-3.

No VOCs or PAHs were detected in any surface water samples. The only organic compound detected in surface water was bis(2-ethylhexyl)phthalate, found at SW-01 (the upstream location) on both sampling occasions. This compound was detected at low levels (less than 0.5 mg/ℓ) in a range attributable to laboratory contamination. Because it is present only at the upstream sampling location and at a low concentration, and because it is a common laboratory contaminant, it is unlikely that bis(2-ethylhexyl)phthalate is a site-derived chemical.

The metals analyses indicate the presence of iron in samples from all three stations at comparable levels (0.20 to 1.8 mg/ℓ). The highest concentration of iron was found at the location adjacent to the site (SW-02) during both sampling rounds. Zinc was detected in December 1987 samples at SW-02 (0.014 mg/ℓ), and in March 1988 samples at SW-01 and SW-02 (0.02 to 0.03 mg/ℓ). Phenolics were detected in the downstream sample (SW-03) in December 1987, but were not detected in any samples during March 1988. These results show no clear pattern of site contributions of these chemicals to the Anthony Kill.

TABLE 3-3
Task 3 Surface Water Analytical Results
Mechanicville Site

SITE IDENTIFIER:	------UPSTREAM------		------ADJACENT------		-----DOWNSTREAM------	
SAMPLE IDENTIFIER:	SW-01	SW-01	SW-02	SW-02	SW-04	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
**** Volatile Organics (mg/l) ****						
- VOLATILE AROMATICS -						
Benzene	ND (1)	ND	ND	-- (2)		
Toluene	ND	ND	ND	--	ND	--
Ethylbenzene	ND	ND	ND	--	ND	--
Styrene	ND	ND	ND	--	ND	--
Total Xylenes	ND	ND	ND	--	ND	--
- OTHER -						
Methylene Chloride	ND	ND	ND	--	ND	--
2-Butanone	ND	ND	ND	--	ND	--
Total Volatile Aromatics	ND	ND	ND	--	ND	--
Total Volatile Organics	ND	ND	ND	--	ND	--
**** Semi-Volatile Organics (mg/l) ****						
-PAH-						
Acenaphthene	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
-OTHER-						
bis (2-Ethylhexyl) Phthalate	0.39	0.034	ND	ND	ND	ND
Total PAH	ND	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	0.39	0.034	ND	ND	ND	ND
**** Other Chemicals (mg/l) ****						
-METALS-						
Iron	0.20	0.38	1.1	1.8	0.24	0.42
Zinc	ND	0.03	0.014	0.02	ND	ND
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (3)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	ND	ND	ND	ND	ND	0.011
Total Organic Carbon	6.1	4.2	6.1	4.9	4.8	4.7

NOTES:
(1) ND = Not detected (see Appendix B-4 for minimum detection limits).
(2) NA = Not analyzed (laboratory reported vial was received broken).
(3) Undistilled CN = Free dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present

3.6.4 Sediment

Task 2 sediment sampling, performed in September and December of 1986 and March and June of 1987, suggested that site-derived chemicals were present in Anthony Kill sediments adjacent to the site. Task 3 sampling was designed to further evaluate whether site-derived chemicals are present in the Anthony Kill sediments. Task 3 samples were collected during two episodes (December 1987 and March 1988) from the same locations along the Anthony Kill as surface water samples. The samples were analyzed for VOCs and SVOCs. Task 3 analytical results are presented in Table 3-4, with concentrations expressed in mg/kg (ppm). Task 2 analytical results are included in Appendix B-2.

One volatile aromatic compound, ethylbenzene, was detected at low levels (0.087 mg/kg) in December 1987 at SD-02, the location adjacent to the site. A trace concentration of benzene was detected at SD-02 during the March 1988 sampling round. No other VOCs were detected in any of the sediment samples collected and analyzed during Task 3. In Task 2 sampling, benzene was detected at SD-02 (0.07 mg/kg) and toluene was detected at SD-03 (0.07 mg/kg). Ethylbenzene, benzene, and toluene are VOCs typically associated with coal tar wastes.

No PAHs were detected above trace concentrations at SD-01 or SD-04 in Task 3 samples. At SD-02 (adjacent to the site), PAHs were detected in December 1987 (4.6 mg/kg), while only trace amounts were detected in March 1988. PAHs were detected at all three locations sampled in Task 2. GC/MS analysis of Task 2 and Task 3 sediment samples indicated that PAH concentrations adjacent to the site are elevated compared to upstream and downstream sampling locations. At the upstream location, di-n-octylphthalate was detected in March 1988 (25 mg/kg). Di-n-octylphthalate is a common environmental sample contaminant not typically associated with coal tar wastes.

Sediment samples were analyzed for metals, cyanide, or phenolics during Task 2 (at least five samples per location) and during the first round of Task 3. These analytes were omitted from the March 1988 sampling round because the previous analytical results for these compounds were judged to be sufficient. Among the December 1987 samples, iron concentrations were fairly consistent (7,100 to 8,700 mg/kg), while concentrations of zinc, cyanide, and phenolics at SD-02 adjacent to the site are above the range detected in other sediment samples. Zinc and phenolic concentrations at SD-02 were 45 and 2.3 mg/kg, respectively, while the ranges at other locations were 25 to 28 mg/kg for zinc and 0.68 to 1.3 mg/kg for phenolics. The three June 1987 sediment samples contained phenolics at comparable levels (1.8 to 6.1 mg/kg). Although cyanide was not detected at other locations, nor in any of the Task 2 samples, 1.3 mg/kg of total cyanide was detected at SD-02.

3.6.5 Air

Results of the indoor air sampling program, presented in Table 3-5, indicate low levels of benzene and toluene at all sampling locations; ethylbenzene and xylenes were below analytical detection limits for all samples.

Benzene was detected in the indoor samples but not in the background samples. The highest indoor levels were found in the storeroom. A possible source of

TABLE 3-4
Task 3 Sediment Analytical Results
Mechanicville Site

SITE IDENTIFIER	----UPSTREAM----		----ADJACENT----		----------DOWNSTREAM----------			
SAMPLE IDENTIFIER	SD-01	SD-01	SD-02	SD-02	SD-04	DUP-01	SD-04	SD-DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	12/22/87	3/30/88	3/30/88
				** Volatile Organics (mg/kg) **				
-VOLATILE AROMATICS-								
Benzene	ND (1)	ND	ND	T	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	0.087	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
-OTHER-								
Methylene Chloride	ND	R (3)	ND	R	ND	ND	R	R
2-Butanone	ND	R	ND	R	ND	ND	R	R
Total Volatile Aromatics	ND	ND	0.087	T	ND	ND	ND	ND
Total Volatile Organics	ND	ND	0.087	T	ND	ND	ND	ND
				** Semi-Volatile Organics (mg/kg) **				
-PAH-								
Acenaphthene	ND	ND	T	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	T	ND	ND	ND	ND	ND
Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	0.53	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	0.94	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	(5)	ND	ND	ND	ND	ND
Benzo(g,h,i,)Perylene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	0.59	ND	ND	ND	ND	ND
Chrysene	T (2)	ND	0.58	ND	ND	ND	ND	ND
Dibenz(a,h)Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Fluoranthene	T	ND	T	ND	T	T	ND	ND
Fluorene	ND	ND	T	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	T	ND	ND	ND	ND	ND
Naphthalene	ND	ND	0.48	ND	ND	T	ND	ND
Phenanthrene	T	ND	0.9	T	T	T	ND	ND
Pyrene	T	ND	1.1	ND	T	T	ND	ND
-OTHER-								
4-Methylphenol	ND	ND	T	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	T	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	T	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	T	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	25	ND	T	ND	ND	T	T
Total PAH	T	ND	5.1	T	T	T	ND	ND
Total Semi-Volatile Organics	T	25	5.1	T	T	T	T	T
-METALS-								
Iron	7700	NR (4)	8400	NR	8700	7100	NR	NR
Zinc	27	NR	45	NR	25	28	NR	NR
-CYANIDE-								
Total Cyanide (ppm) (6)	ND	NR	1.3	NR	ND	ND	NR	NR
Undistilled Cyanide	ND	NR	ND	NR	ND	ND	NR	NR
-OTHER-								
Total Recoverable Phenolics	1.3	NR	2.3	NR	1.2	0.68	NR	NR
Total Organic Carbon	12000	NR	32000	NR	18000	11000	NR	NR

NOTES:

(1) ND = Not detected (See Appendix B-4 for minimum detection limits).
(2) T = Trace concentrations detected below the quantifiable reporting limits.
(3) R = Data rejected because analysis of blank indicated sampling or lab-derived contamination
(4) NR = Analysis not requested
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of the amenable CN- present.

TABLE 3-5

TASK 3 AIR ANALYTICAL RESULTS - ppm
MECHANICVILLE SITE

	Office		Garage		Storeroom		Background	
Sample Identifier	OF-01	OF-02	GA-01	GA-02	ST-01	ST-02	BA-01	BA-01
Date of Sample Collection	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88
Volatile Aromatics[1]								
Benzene	0.03	0.031	0.016	0.015	0.043	0.043	ND[2]	ND
Toluene	0.009	0.009	0.048	0.048	0.012	0.012	0.037	0.028
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.039	0.040	0.064	0.063	0.055	0.055	0.037	0.028

NOTES:

[1] Samples analyzed by NIOSH Method 1501 by ESA Laboratories in Bedford, MA.

[2] ND = Not detected. The minimum detection limits are: benzene - 0.013 ppm; ethylbenzene and xylenes - 0.01 ppm.

benzene may be the forklift parked in the storeroom. Although the engine was not running during the sampling period, it is possible that residual gasoline vapors volatilized into the indoor air.

Toluene was detected in all indoor air samples. This compound also was detected in the background samples at higher levels than the indoor samples. Although an effort was made to locate the background sampler away from any vehicular traffic, it is possible that these samples were affected by general vehicle use in the area.

Duplicate samples showed consistent results for all sample locations, indicating reproducibility among the data collected.

4.0 SITE ASSESSMENT

Chemicals related to coal gasification process and waste streams were detected in the soil and groundwater at or near the site. This section focuses on the significance of the field investigation findings at the site. Section 4.1 discusses the significance of site chemical data in relation to site geology and hydrogeology. Analytical results are compared to relevant regulatory criteria (where available) in Section 4.2. Sections 4.3 and 4.4 contain an analysis of probable receptors and a survey of applicable remedial alternatives, both of which will be expanded upon in subsequent tasks, if appropriate.

4.1 CONTAMINATION ASSESSMENT

Environmental conditions at the Mechanicville site are summarized in Table 4-1 and described in the following paragraphs. The information presented in Table 4-1 is based on the Task 2 and Task 3 analytical results.

Levels of chemicals found in Task 3 soil samples across the site are consistent with Task 2 findings and site coal gasification process history. The highest levels of VOCs, PAHs, and cyanide exist in the shallow soils near the former gas house, purifier and oxide houses, filter beds, and relief gas holder. PAH levels are generally higher than VOC levels in the soil samples. In general, VOCs are more soluble in water than PAHs; therefore, PAHs tend to resist leaching from soils more than VOCs.

Most of the site is currently paved, which prevents infiltration of rainfall and impedes vertical migration of chemicals in the soil. However, the regional groundwater flow direction from west to east may be a vehicle for transporting chemicals beneath the site. Shallow on-site soils, therefore, are considered a continuing source of chemicals for on- and off-site groundwater contamination.

Task 2 and Task 3 groundwater analytical results indicate that site activities impacted water quality in soils, as well as in shallow and deep bedrock. Coal gasification waste-related chemicals (i.e., VOCs, PAHs, iron, cyanide, and phenolics) are present in elevated concentrations in on-site groundwater with respect to upgradient groundwater levels. These chemicals were found in the highest concentrations downgradient of the former relief gas holder, purifiers and oxide houses, and the filter beds. The area downgradient of the former relief gas holder, where elevated VOC and PAH levels were detected, is characterized by a bedrock trough, indicating that chemicals are travelling preferentially along the surface of the bedrock trough in the silty shale and shallow bedrock fractures.

In paired wells, PAH levels generally decrease with depth, while VOC levels show increases with depth. The heavier, less mobile, PAH chemicals are being partly retained on the soils and along the shallow bedrock fractures. The more soluble VOC chemicals are migrating with the groundwater. Downward gradients, measured in paired wells in the bedrock trough along the eastern edge of the site, indicate that these chemicals are carried into the shallow and deeper bedrock. The upward seepage gradient on the bank of the Anthony Kill indicates

TABLE 4-1

SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE SITE

TECHNICAL FACTORS	SUBSURFACE SOILS	GROUNDWATER	SURFACE WATER	SEDIMENT	AIR
Chemicals Present	The following chemicals were detected in the subsurface soils near former coal gasification structures: - VOCs - PAHs - iron and zinc - cyanide compounds - phenolic compounds These chemicals were found in samples collected from the fill soils and silty sand.	The following chemicals were detected in groundwater at the site: - VOCs - PAHs - iron and zinc - cyanide compounds - phenolic compounds - sulfate These chemicals were found in samples collected from roughly the top 10 feet of the water table and from the deeper bedrock.	The following chemicals were found in the Anthony Kill, adjacent to the site: - iron and zinc - cyanide compounds - phenolic compounds - sulfate These chemicals were primarily detected adjacent to the site. Higher concentrations of iron were detected adjacent to the site in Task 3. Higher concentrations of iron and phenols were detected upgradient of the site during Task 2.	The following chemicals were detected in sediments from the Anthony Kill, adjacent to the site: - benzene, toluene, and ethylbenzene - PAHs - iron and zinc - sulfate Benzene, toluene, and sulfate were found in samples adjacent to and/or downstream of the site. PAHs, iron, and zinc were detected upstream as well as downstream and adjacent to the site; with higher concentrations detected adjacent to and downgradient of the site.	The following chemicals were detected in indoor air samples at the site: - benzene - toluene Toluene was also found in the background samples.
Chemical Transport Mechanism	Because chemicals were detected below the water table, transport of soluble chemicals (VOCs, metals, phenolics) in shallow groundwater is likely. Both PAHs and complex cyanides are highly insoluble in water and therefore fairly immobile in the soil environment.	The interpreted direction of shallow groundwater flow is to the north-northeast, with an easterly component in the southeastern corner of the site. Shallow groundwater discharges to the Anthony Kill; regional groundwater flows easterly, toward the Hudson River. Groundwater flow within the fractured rock is controlled by the orientation, size, and interconnection of the fractures. A downward gradient was observed at two multi-level well clusters, while an upward gradient exists at the cluster adjacent to the Anthony Kill.	Dissolved and sediment-attached chemicals in the Anthony Kill may be transported downstream to the Hudson River (approximately a quarter mile).	Sediments deposited in the Anthony Kill may be resuspended during high flow/high energy conditions and carried farther downstream of the site.	Volatile and semivolatile organics found in the soils and sediments at the site may volatilize if these chemicals are exposed to the atmosphere by excavation. Similarly, winds may suspend soil and sediment particles containing site-derived contamination and carry these particles off-site, if exposed.

TABLE 4-1 (Continued)

SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE SITE

TECHNICAL FACTORS	SUBSURFACE SOILS	GROUNDWATER	SURFACE WATER	SEDIMENT	AIR
Expected Persistence of Chemicals in the Environment	There is only a slight tendency for most VOCs to adsorb to soil particles and they are expected to groundwater or slowly volatilize. They also are easily biodegradable by soil bacteria. PAHs strongly adsorb to soil particles, especially soils high in organic content. PAHs undergo microbial degradation and are readily metabolized by multi cellular organisms. The lower molecular weight PAHs (e.g., naphthalene, acenaphthene, fluorene) are degraded more rapidly that the higher molecular weight compounds (benzo(a) pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h) anthracene). Trace metals are non-volatile. Their environmental fate depends on soil/water interactions which are controlled by pH, cation exchange capacity, and organic matter content, among other factors. Amendable cyanide is soluble and biodegradable. Ferro-ferricyanides are stable compounds which are difficult to degrade.	VOCs in groundwater are expected to biodegrade over time. PAHs are relatively insoluble in water, but leaching to groundwater does occur. Dissolved PAHs in groundwater are subject to microbial degradation. However, biodegradation probably occurs more slowly in aquatic systems than in soil. Dissolved PAHs may also undergo rapid, direct photolysis when oxidants are available. The volatility of PAH compounds is low. The behavior of trace metals in groundwater is complex. However, their mobility in groundwater can be significantly retarded by adsorption and precipitation reactions. Amenable cyanide forms a single anion in water which is biodegradable. Ferro-ferricyanides in water form a metal cyanide radical which is difficult to degrade and likely to persist. Phenolic compounds are soluble and biodegradable.	See Groundwater.	See Soil.	VOCs in air are expected to disperse quickly outdoors. In a closed environment with poor ventilation, the VOC dispersion rate would be much slower.

TABLE 4-1 (Continued)

SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE SITE

TECHNICAL FACTORS	SUBSURFACE SOILS	GROUNDWATER	SURFACE WATER	SEDIMENT	AIR
Expected Persistence of Chemicals in the Environment	Therefore, they will persist in the soil environment. Under highly acidic or highly alkaline conditions, ferro-ferricyanides may become soluble. They can be transformed to amenable cyanide and hydrogen cyanide gas under highly acidic conditions. Phenolic compounds have a relatively low volatility and high solubility.				
Existing or Potential Receptors of Chemicals	The probability of direct exposure of humans or animals to chemicals in the soil is low because the site is paved. If excavations were made at the site, however, workers and area residents could be exposed to these chemicals.	Exposure to chemicals in the shallow groundwater may occur during building and utility excavations or through basement seeps in the site vicinity. The only direct groundwater usage in the area is through a few domestic wells nearly 1 mile southwest (upgradient) of the site. Because shallow groundwater appears to flow north-northeast from the site, these wells are unlikely to be receptors of site-derived chemicals.	Direct contact with the surface water by humans is likely in this highly populated area, even though this section of the Anthony Kill is designated for secondary contact recreation only (Class D). Aquatic organisms in the stream are also potential receptors of chemicals.	As with surface water, direct contact with chemicals in sediments is a concern in this urban area, especially for recreational users of the Anthony Kill.	Workers and area residents could be exposed to airborne contaminants during excavation of contaminated soil.

that dissolved chemicals are discharging to the stream. Shallow and deep groundwater migrating off-site to the north and to the east appear to be carrying elevated levels of VOCs, PAHs, and other coal gasification waste-related chemicals off-site.

Analytical results of surface water samples collected from the Anthony Kill do not show an adverse impact attributable to site activities. Although it is likely that chemicals dissolved in groundwater are being discharged from the site to the stream, the resulting surface water concentrations are below detection limits, due to volatilization and dilution. The site groundwater discharge is estimated at less than 0.005 cfs, based on an average hydraulic conductivity of 0.28 ft/day for the unconsolidated soils and 1.1 ft/day for the shallow bedrock. This discharge is less than 0.03 percent of the estimated average annual low flow of 17 cfs on the Anthony Kill at Mechanicville.

Task 2 and Task 3 sediment sampling results indicate that PAH, zinc, cyanide, and phenolic concentrations in the Anthony Kill sediments adjacent to the site are elevated above background levels (upstream) due to site activities; however, downstream sediments do not show elevated levels.

Task 3 air sampling results indicate that benzene and toluene are present at low levels in buildings on-site.

4.2 COMPARISON OF ANALYTICAL RESULTS TO REGULATORY CRITERIA

Analytical results are compared to relevant New York State criteria (where available) in this section. The site assessment process includes a review of potentially relevant environmental and health criteria. The review covered regulatory standards and guidelines included in the following: (1) New York State Regulations, (2) National Drinking Water Regulations, and (3) U.S. Environmental Protection Agency (USEPA) Health Advisories. Relevant criteria are shown in Table 4-2.

Criteria are not developed for chemicals in soil. A qualitative assessment of risks associated with chemicals in this medium is provided in Section 4.2.1. Criteria are also lacking for some of the chemicals detected in groundwater. New York State has established criteria for all chemicals regulated at the federal level, in addition to some that are not. Furthermore, where both federal and state criteria exist for a given chemical, the New York State standard is generally more stringent. Therefore, this assessment uses New York State groundwater standards and guidance values. State standards are enforceable; guidance values are not.

4.2.1 Groundwater

Table 4-2 lists the potentially applicable federal and state criteria for groundwater identified in the criteria review. Most of the presented criteria are based on the assumption that the groundwater will be used as a drinking water supply. The Mechanicville site is not located over a water supply aquifer. Because groundwater is not currently used as a public potable water supply in Mechanicville, drinking water standards are not presently applicable

TABLE 4-2
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)				
	CLASS D SURFACE WATER		CLASS GA GROUNDWATER					--AQUATIC LIFE(6)--		HUMAN HEALTH(9)		
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION
VOLATILE ORGANICS (MG/L)												
-VOLATILE AROMATICS-												
BENZENE	----	0.006	ND(11)	----	0.005(12)	0	----	5.3	----	0.00067	----	0.00066
TOLUENE	----	----	----	0.05	----	2 (12)	11	17.5	----	15	424	14.3
ETHYLBENZENE	----	----	----	0.05	----	0.68 (12)	3.40	32	----	2.40	3.28	1.4
STYRENE	----	----	0.931	----	----	0.140(12)	----	----	----	----	----	----
TOTAL XYLENE	----	----	----	0.05	----	0.44 (12)	2.20	----	----	----	----	----
m-XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
o-XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
p-XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
TRIMETHYLBENZENE	----	----	----	0.05	----	----	----	----	----	----	----	----
-OTHER-												
ACETONE	----	----	----	----	----	----	----	----	----	----	----	----
MEHYLENE CHLORIDE	----	----	----	0.05	----	----	----	12	----	----	----	----
SEMIVOLATILE ORGANICS (MG/L)												
-PAH-												
ACENAPHTHENE	----	----	----	0.02	----	----	----	0.52	----	0.02(13)	----	0.02(13)
ACENAPHTHYLENE	----	----	----	----	----	----	----	----	----	----	----	----
ANTHRACENE	----	----	----	0.05	----	----	----	----	----	----	----	----
BENZO(b)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
BENZO(k)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
BENZO(g,h,i)PERYLENE	----	----	----	----	----	----	----	----	----	----	----	----
BENZO(a)ANTHRACENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
BENZO(a)PYRENE	----	0.0000012	ND	----	----	----	----	----	----	0.0000031	----	0.0000028
CHRYSENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
DIBENZO(a,h,)ANTHRACENE	----	----	----	----	----	----	----	----	----	----	----	----
FLUORANTHENE	----	----	----	0.05	----	----	----	3.98	----	0.19	0.054	0.042
FLUORENE	----	----	----	0.05	----	----	----	----	----	----	----	----
INDENE(1,2,3-cd)PYRENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
NAPHTHALENE	----	----	----	0.01	----	----	----	2.3	0.62	----	----	----
PHENANTHRENE	----	----	----	0.05	----	----	----	----	----	----	----	----
PYRENE	----	----	----	0.05	----	----	----	----	----	----	----	----
TOTAL CARCINOGENIC PAH	----	----	----	----	----	----	----	----	----	0.0000031	----	0.0000028
-OTHER-												
BIS(2-ETHYLHEXYL)PHTHALATE	----	----	4.2	----	----	----	----	0.94	0.003	21	50	15
TOTAL NEW YORK STATE REGULATED ORGANICS (14)	----	----	0.1	----	----	----	----	----	----	----	----	----

TABLE 4-2 (CONTINUED)
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)				
	CLASS D SURFACE WATER		CLASS GA GROUNDWATER					--AQUATIC LIFE(6)--		HUMAN HEALTH(9)		
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION
OTHER CHEMICALS (MG/L)												
-METALS-												
IRON	0.03	----	0.3	----	----	0.3(15)	----	----	----	----	----	----
ZINC*	(16)	----	5	----	----	5(15)	----	----	----	5(13)	----	5(13)
-CYANIDE-												
TOTAL CYANIDE	----	----	0.2	----	----	----	0.75	----	----	----	----	----
FERRO-FERRI CYANIDE	----	----	----	----	----	----	----	----	----	----	----	----
FREE CYANIDE	0.022	----	----	----	----	----	----	0.0035	0.052	0.2	----	0.2
-OTHER-												
TOTAL RECOVERABLE PHENOLICS (17)	----	----	0.001	----	----	----	----	----	----	3.5	----	3.5
TOTAL ORGANIC CARBON	----	----	----	----	----	----	----	----	----	----	----	----
SULFATE	----	----	250.0	----	----	----	----	----	----	----	----	----

NOTES:
(1) NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES 85-W-38 AS REVISED APRIL 1, 1987. CLASS D SURFACE WATERS ARE SUITABLE FOR SECONDARY CONTACT RECREATION; CLASS GA DENOTES FRESH GROUNDWATER WHICH IS A SOURCE OF POTABLE WATER SUPPLY.
(2) MCLs (MAXIMUM CONTAMINANT LEVELS) ARE ENFORCEABLE STANDARDS FOR PUBLIC WATER SUPPLY SYSTEMS PROMULGATED UNDER THE SAFE DRINKING WATER ACT (40 CFR PART 141).
(3) MCLGs (MAXIMUM CONTAMINANT LEVEL GOALS) ARE PROPOSED NON-ENFORCEABLE HEALTH GOALS AND HAVE BEEN SET AT A LEVEL OF NO KNOWN OR ANTICIPATED HEALTH AFFECTS.
(4) EPA HEALTH ADVISORIES (FORMERLY SNARLs) ARE NON-ENFORCEABLE CRITERIA ESTABLISHED BY THE OFFICE OF DRINKING WATER. THEY ARE SET AT LEVELS WHERE ADVERSE HEALTH EFFECTS ARE NOT EXPECTED.
(5) WATER QUALITY CRITERIA WERE FORMULATED TO PROTECT AQUATIC LIFE AND HUMAN HEALTH FROM POLLUTANTS IN SURFACE WATERS. (40 CFR SUMMARY, FRI, NOV. 28, 1980, P. 79318-79379). WATER QUALITY CRITERIA HAVE NO REGULATORY IMPACT, BUT ARE USEFUL IN ESTABLISHING WATER QUALITY-BASED EFFLUENT LIMITATIONS, WATER QUALITY STANDARDS, AND TOXIC POLLUTANT EFFLUENT STANDARDS.
(6) GUIDANCE CRITERIA FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE. CONCENTRATIONS SPECIFIED SHOULD PROTECT MOST (BUT NOT NECESSARILY ALL) AQUATIC FRESHWATER LIFE AND ITS USES.
(7) THE ACUTE TOXICITY LEVEL IS THE MAXIMUM TO WHICH ORGANISMS CAN BE EXPOSED WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(8) CHRONIC TOXICITY LEVEL IS THE 24-HOUR AVERAGE VALUE THAT ORGANISMS CAN BE EXPOSED TO WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(9) HUMAN HEALTH GUIDELINES WERE DERIVED BASED ON "GUIDELINES AND METHODOLOGY USED IN THE PREPARATION OF HEALTH EFFECT ASSESSMENT CHAPTERS OF THE CONSENT DEGREE WATER CRITERIA DOCUMENTS" DEVELOPED BY EPA'S OFFICE OF RESEARCH AND DEVELOPMENT.
(10) THESE ADJUSTED CRITERIA, FOR DRINKING WATER INGESTION ONLY, WERE DERIVED FROM PUBLISHED EPA AWQC FOR COMBINED FISH AND DRINKING WATER INGESTION AND FOR FISH INGESTION ALONE. THESE ADJUSTED VALUES ARE NOT OFFICIAL EPA AWQC, BUT MAY BE APPROPRIATE FOR SUPERFUND SITES WITH CONTAMINATED GROUNDWATER. (USEPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, OCTOBER 1986, PAGES 61-64).
(11) ND = DETECTABLE BY USEPA METHODS 602 OR 624 (BENZENE) OR METHODS 610 OR 625 (BENZO(a)PYRENE).
(12) PROPOSED
(13) TO PROTECT AGAINST TASTE AND ODOR EFFECTS; NOT HEALTH BASED.
(14) NEW YORK STATE HAS A MAXIMUM WATER QUALITY VALUE OF 0.1 MG/L OF DESIGNATED ORGANIC CHEMICALS FOR SURFACE WATER AND GROUNDWATER DISCHARGES REQUIRING PERMITS. THE DESIGNATED ORGANICS INCLUDE ALL OF THE ORGANIC CHEMICALS LISTED EXCEPT ACENAPHTHYLENE, BENZO(g,h,i)PERYLENE DIBENZO(a,h)ANTHRACENE, AND STYRENE.
(15) SECONDARY MAXIMUM CONTAMINANT LEVELS WHICH APPLY TO PUBLIC WATER SYSTEMS. THESE REGULATIONS CONTROL CONTAMINANTS IN DRINKING WATER THAT PRIMARILY AFFECT THE AESTHETIC QUALITIES RELATING TO THE PUBLIC ACCEPTANCE OF DRINKING WATER (40 CFR PART 143).
(16) ZINC STANDARD FOR CLASS D WATERS IS DETERMINED BY THE FORMULA EXP(0.83[LN(PPM HARDNESS)]+1.95) AND APPLIES TO THE ACID SOLUBLE FORM.
(17) AS MEASURE BY APHA METHOD 510.8 WHICH IS EQUIVALANT TO EPA METHOD 420.1 (SEE APHA, 1985; USEPA, 1983).

at this site; they are included in this assessment for hypothetical comparative purposes.

New York State standards and guidelines are for fresh groundwater used as a source of potable water. The federal Maximum Contaminant Levels (MCLs) are enforceable standards for water supply systems, promulgated under the National Primary Drinking Water Act. Maximum Contaminant Level Goals (MCLGs), established under the Safe Drinking Water Act (SDWA), are nonenforceable health goals designed to prevent adverse health effects or risks. USEPA Health Advisories, established by the Office of Drinking Water, are set at levels where adverse health effects are not expected. Carcinogenic risks are not considered in setting USEPA Health Advisories; however, the duration of exposure to the chemical in drinking water is considered.

As shown in Table 4-2, standards have been promulgated by New York State for 10 of the chemicals detected in the Mechanicville site groundwater: benzene, styrene, benzo(a)pyrene, bis(2-ethylhexyl)phthalate, total regulated organics, iron, zinc, cyanide, phenolic compounds, and sulfate. Concentrations in excess of the New York State standard were measured for all these chemicals in Task 3, except bis(2-ethylhexyl)phthalate, sulfate, and zinc. The exceedances are graphically depicted in Figures 4-1 through 4-5. These figures show Task 2 sample results for comparison. The following discussion focuses primarily on the more recent Task 3 results.

One Task 3 sample exceeded the benzo(a)pyrene standard (nondetectable levels): MW-5 from March 1988 (see Figure 4-1). Benzo(a)pyrene was detected at trace levels in Task 3 samples from MW-3, MW-6, MW-12, and MW-13, but in no other wells.

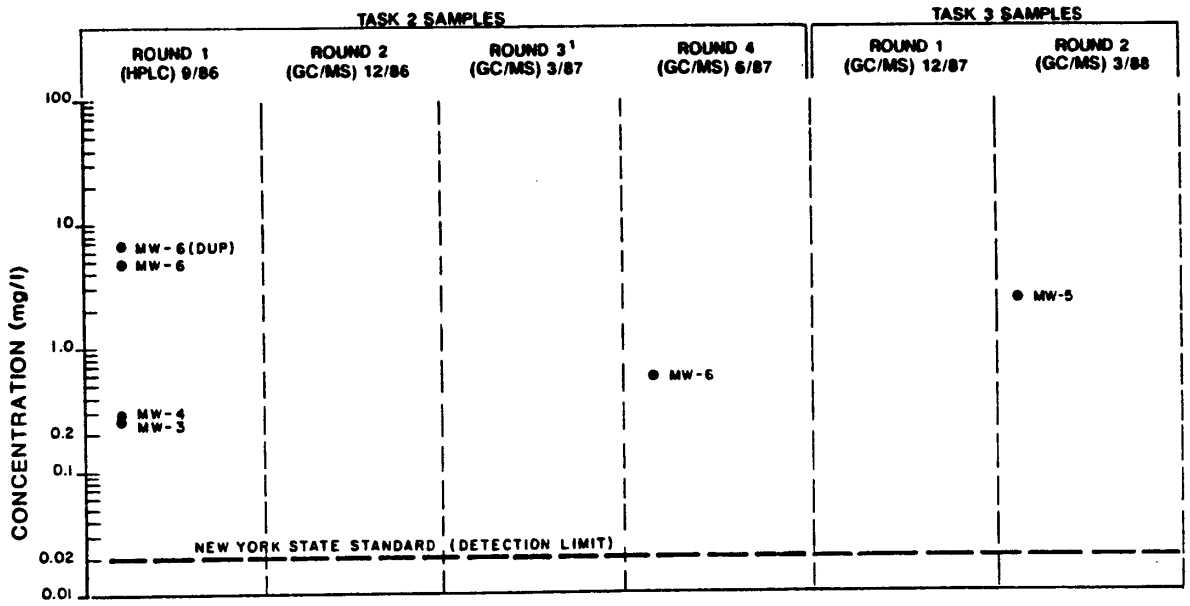
The benzene standard (nondetectable levels) was exceeded at MW-15, MW-14, MW-13, MW-12, MW-6, MW-5, MW-4, and MW-3 (see Figure 4-2). MW-15 contained concentrations of benzene below the standard. Benzene was not detected at MW-1, MW-2, MW-10, or MW-11. One sample from MW-13 exceeded the state standard of 0.931 mg/ℓ (see Figure 4-3). Styrene was not detected in any other wells during Task 3 sampling.

The New York State standard for total cyanide (0.2 mg/ℓ) was exceeded in MW-12 and MW-3 (see Figure 4-4). MW-2 and MW-11 were the only wells sampled during Task 3 that did not contain cyanide. All wells contained detectable iron; concentrations above the 0.3 mg/ℓ state standard were detected in all wells except MW-1, MW-2, MW-11, MW-13, and MW-15.

New York State regulated organics were detected at each well. The standard for this class of compounds (0.1 mg/ℓ) was exceeded in all wells except MW-1, MW-2, and MW-11. The state standard for phenolics (0.005 mg/ℓ) was exceeded in all wells on at least one occasion.

New York State has guidance values for 16 chemicals detected at Mechanicville, all of which were exceeded at one or more monitoring wells. Groundwater samples that contained chemicals in excess of the New York State guidance are listed in Table 4-3. The frequency of Task 3 guidance value exceedances in the wells decreased in the following order: MW-5 (14); MW-13 (12); MW-12, MW-6,

BENZO (a) PYRENE IN GROUNDWATER



SAMPLES IN WHICH BENZO (a) PYRENE WAS NOT DETECTED

ROUND 1 (HPLC) 9/86	ROUND 2 (GC/MS) 12/86	ROUND 3[1] (GC/MS) 3/87	ROUND 4 (GC/MS) 6/87	ROUND 1 (GC/MS) 12/87	ROUND 2 (GC/MS) 3/88
MW-1[2]	MW-1	MW-1	MW-1	MW-1	MW-1
MW-1(GC/MS)[2]	MW-2	MW-2	MW-2	MW-2	MW-2
MW-2	MW-2 (DUP)	MW-3	MW-3	MW-3[2]	MW-2(DUP)
MW-3(GC/MS)[2]	MW-3	MW-4	MW-4	MW-4	MW-3[2]
MW-5	MW-4	MW-6	MW-5	MW-5	MW-4
	MW-5	MW-6(DUP)	MW-5(DUP)	MW-6[2]	MW-6
	MW-6			MW-10	MW-10
				MW-11	MW-11
				MW-11(DUP)	MW-12[2]
				MW-12	MW-13[2]
				MW-13	MW-13(DUP)[2]
				MW-14	MW-14
				MW-15	MW-15
				MW-15(DUP)	

[1] MW-5 WAS NOT SAMPLED IN ROUND 3.
[2] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT

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TITLE
BENZO (a) PYRENE IN GROUNDWATER
MECHANICVILLE SITE

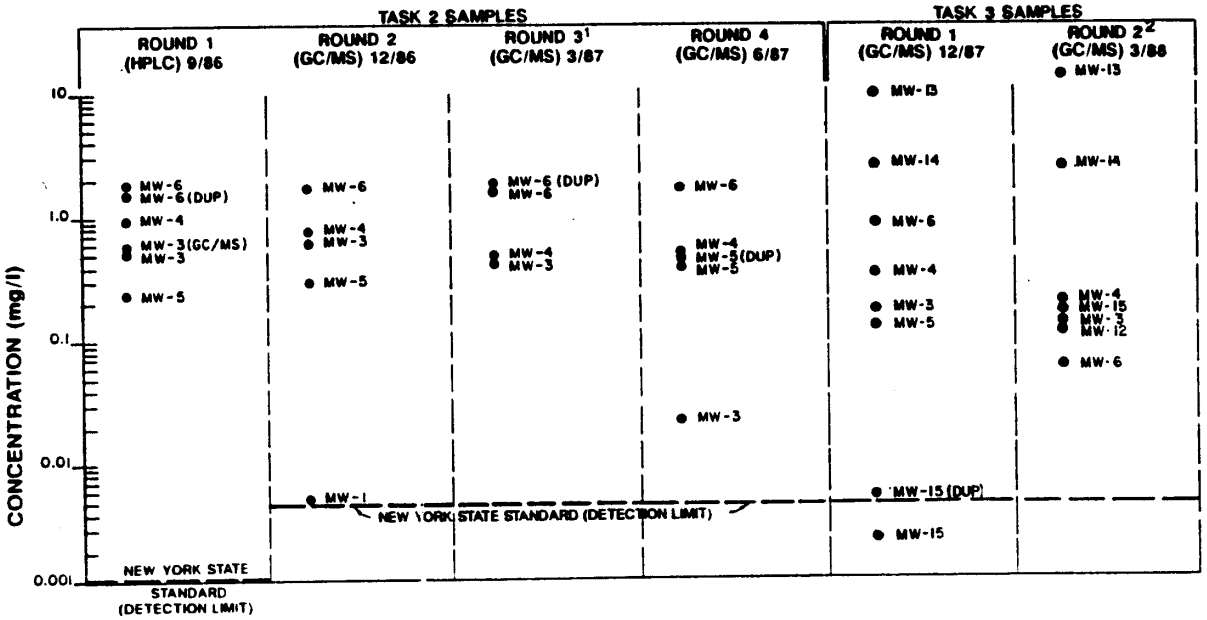
CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4045-03

FIGURE 4-1

BENZENE IN GROUNDWATER



SAMPLES IN WHICH BENZENE WAS NOT DETECTED

MW-1 MW-1(GC/MS) MW-2	MW-2 MW-2(DUP)	MW-1 MW-2	MW-1 MW-2	MW-1 MW-2 MW-10 MW-11 MW-11(DUP) MW-12	MW-1 MW-2 MW-5[3] MW-11

[1] MW-5 WAS NOT SAMPLED IN ROUND 3.

[2] BENZENE ANALYSIS WAS NOT PERFORMED ON ROUND 2 SAMPLES. MW-2(DUP), MW-10, AND MW-13(DUP).

[3] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.

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TITLE
BENZENE IN GROUNDWATER
MECHANICVILLE SITE

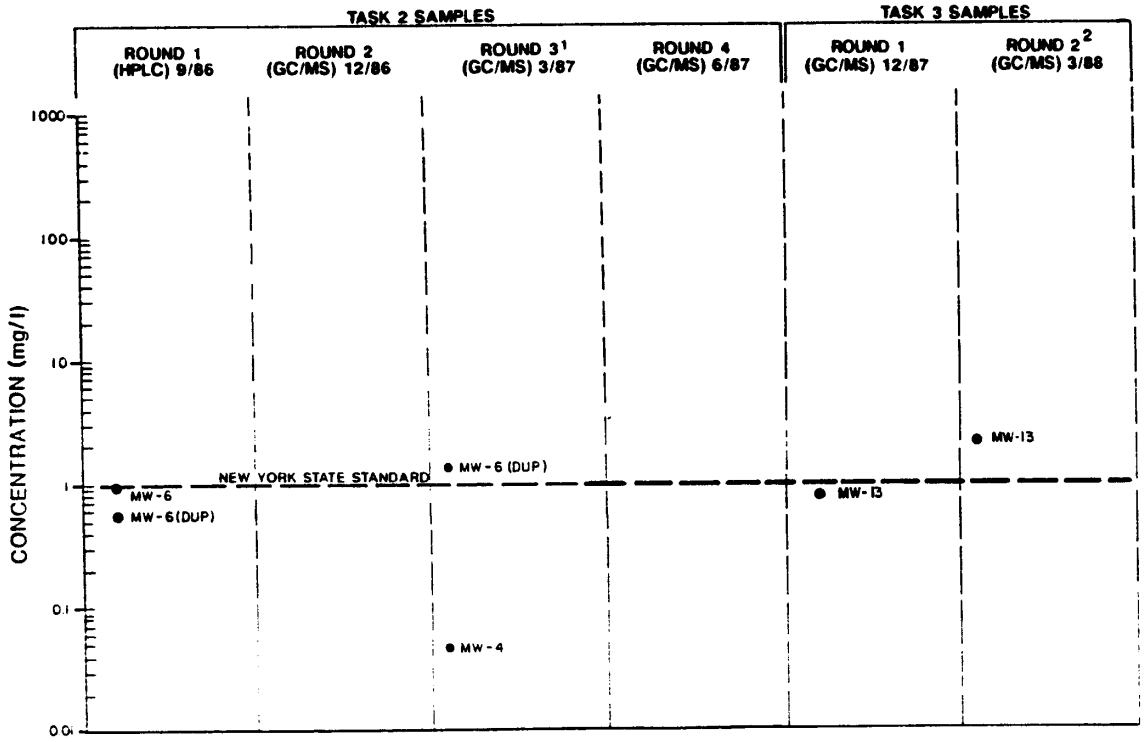
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4045-03

FIGURE 4-2

STYRENE IN GROUNDWATER



SAMPLES IN WHICH STYRENE WAS NOT DETECTED.

ROUND 1 (HPLC) 9/86	ROUND 2 (GC/MS) 12/86	ROUND 3[1] (GC/MS) 3/87	ROUND 4 (GC/MS) 6/87	ROUND 1 (GC/MS) 12/87	ROUND 2[2] (GC/MS) 3/88
MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
MW-1(GC/MS)	MW-2	MW-2	MW-2	MW-2	MW-2
MW-2	MW-2(DUP)	MW-3	MW-3	MW-2(DUP)	MW-3
MW-3	MW-3	MW-6	MW-4	MW-3	MW-4
MW-3(GC/MS)	MW-4		MW-5	MW-4	MW-5
MW-4	MW-5		MW-5(DUP)	MW-5	MW-6
MW-5	MW-6		MW-6	MW-6	MW-11
				MW-10	MW-12
				MW-11	MW-14 MW-15
				MW-11(DUP)	
				MW-12	
				MW-14	
				MW-15	
				MW-15 (DUP)	

[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

[2] STYRENE ANALYSIS WAS NOT PERFORMED ON ROUND 2 SAMPLES MW-2(DUP), MW-10, AND MW-13(DUP)

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE
STYRENE IN GROUNDWATER
MECHANICVILLE SITE

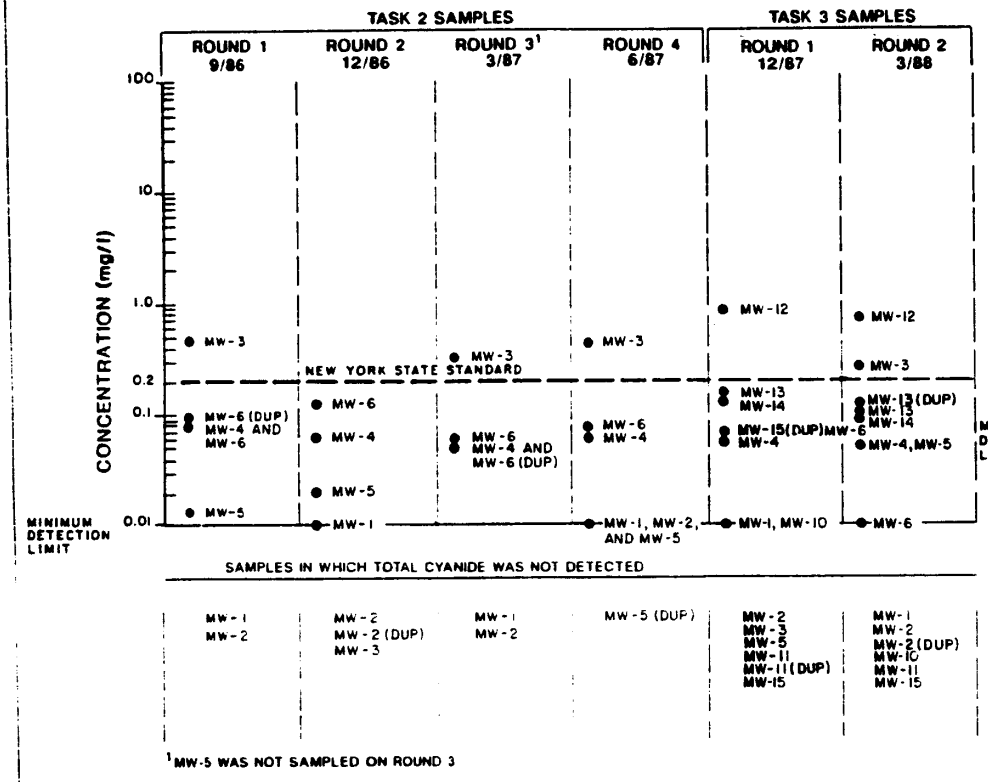
CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4845-03

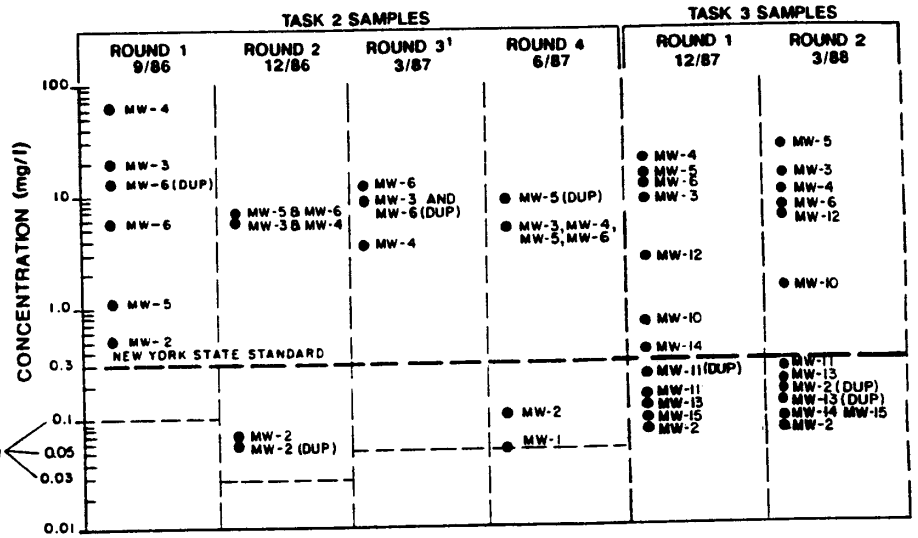
FIGURE 4-3

TOTAL CYANIDE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3

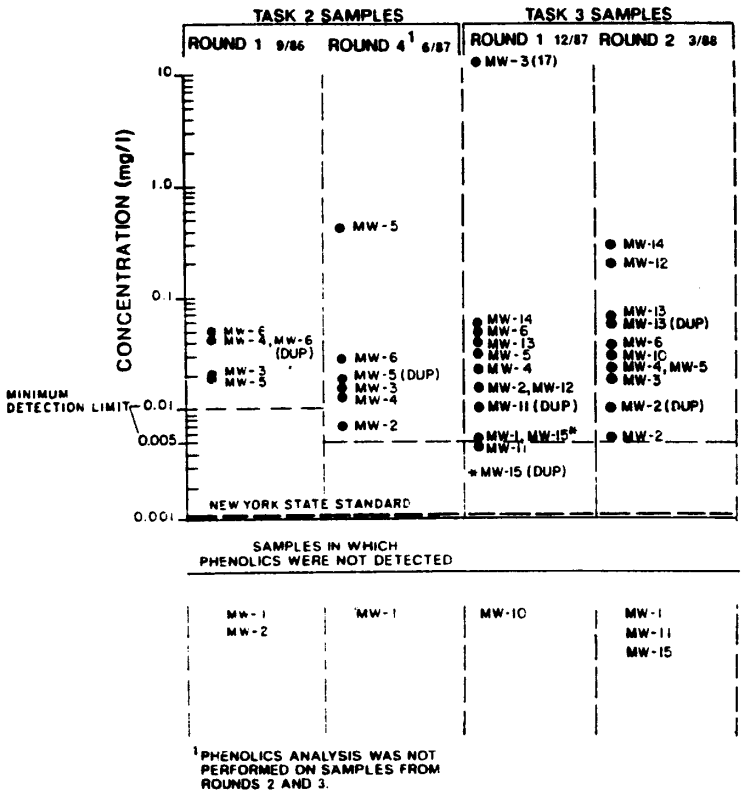
IRON IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3

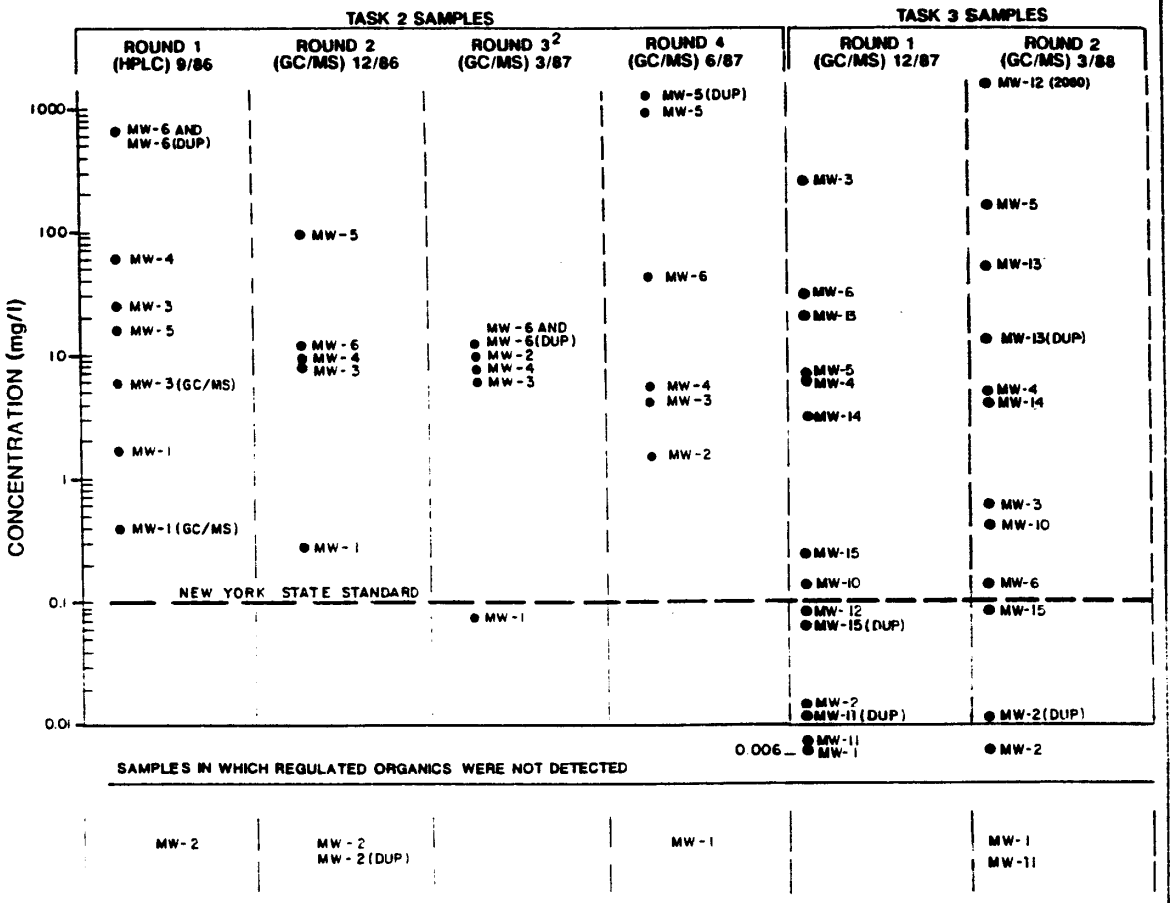
E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: TOTAL CYANIDE AND IRON IN GROUNDWATER MECHANICVILLE SITE
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4845-83 FIGURE 4-4

PHENOLICS IN GROUNDWATER



[1] PHENOLICS ANALYSIS WAS NOT PERFORMED ON SAMPLES FROM ROUNDS 2 AND 3.

TOTAL NEW YORK STATE REGULATED ORGANICS IN GROUNDWATER[1]



[2] MW-5 WAS NOT SAMPLED ON ROUND 3.

[1] THE N.Y. STATE CLASS GA STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMI-VOLATILE ORGANICS, EXCEPT FOR ACETONE, STYRENE, ACENAPHTHYLENE, BENZO(G,H,I)PENYLENE, DIBENZO(A,H)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
PHENOLICS AND TOTAL N.Y. STATE REGULATED ORGANICS IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO 4945-83

FIGURE 4-5

TABLE 4-3

TASK 3 GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	GUIDANCE VALUE (mg/ℓ)[1]	WELL NUMBER	ROUND NUMBER
Volatile Aromatics			
Toluene	0.05	MW-4	1
		MW-5	1
		MW-6	1
		MW-13	1,2
		MW-14	1
Ethylbenzene	0.05	MW-3	1
		MW-4	1,2
		MW-5	2
		MW-6	1
		MW-12	2
		MW-13	1,2
		MW-14	1
Total Xylene	0.05	MW-3	1,2
		MW-4	1,2
		MW-5	1,2
		MW-6	1
		MW-12	1,2
		MW-13	1,2
		MW-14	1,2
Methylene Chloride		MW-13	2
PAHs			
Acenaphthene	0.02	MW-3	1
		MW-5	1,2
		MW-6	1
		MW-10	1
		MW-12	2
		MW-14	1,2
		MW-15	1,2
Anthracene	0.05	MW-3	1
		MW-6	1
		MW-12	2
Benzo(k)Fluoranthene	0.000002	MW-5	2

TABLE 4-3 (Continued)

TASK 3 GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	GUIDANCE VALUE (mg/ℓ)[1]	WELL NUMBER	ROUND NUMBER
Fluoranthene	0.05	MW-3	1
		MW-5	2
		MW-6	1
		MW-12	2
		MW-13	2
Fluorene	0.05	MW-3	1
		MW-5	2
		MW-6	1
		MW-12	2
Naphthalene	0.01	MW-3	1
		MW-4	1,2
		MW-5	1,2
		MW-6	1
		MW-12	2
		MW-13	1,2
		MW-14	2
		MW-15	1
Phenanthrene	0.05	MW-3	1
		MW-5	1,2
		MW-6	1
		MW-12	2
		MW-13	2
Pyrene	0.05	MW-3	1
		MW-5	2
		MW-6	1
		MW-12	2
		MW-13	2

[1]NYSDEC, Division of Water; Technical and Operational Guidance Series 86-W-38; April 1987.

and MW-3 (10); MW-4 and MW-14 (7); MW-15 (3); and MW-10 (1). No exceedances were observed at MW-1, MW-2, or MW-11.

4.2.2 Surface Water

Table 4-2 also contains relevant federal and state surface water criteria. The listed New York State criteria are for Class D waters, which is the classification of the Anthony Kill near the Mechanicville site. USEPA Ambient Water Quality Criteria (AWQC) for aquatic life and public health are also listed.

Iron was the only chemical identified in the Anthony Kill surface water samples that exceeded the New York State Class D standards. The iron standard of 0.3 mg/ℓ was exceeded at SW-2 in December 1987 and at all three sampling locations in March 1988. Both Task 3 upstream samples (SW-1) exceeded USEPA chronic aquatic life AWQC for bis(2-ethylhexyl)phthalate. However, as stated in Section 3.6.3, bis(2-ethylhexyl)phthalate was detected in a range attributable to laboratory contamination; therefore, it is unlikely to be a site-derived chemical. No other AWQC exceedances were noted at any sampling locations.

4.2.3 Air

Table 4-4 presents permissible exposure levels for benzene, toluene, ethylbenzene, and xylene established by the Occupational Safety and Health Administration (OSHA), the American Conference of Governmental Industrial Hygienists (ACGIH), and NIOSH. All samples with measured levels of benzene and toluene indicate levels well below OSHA, NIOSH, and ACGIH permissible exposure levels.

4.3 RECEPTOR ANALYSIS

This section identifies potential receptors at the Mechanicville site; that is, individuals or populations which, under certain circumstances, could be exposed to site-derived contaminants emanating from the soils, groundwater, surface water, and sediments at the site. The potential toxicological effects of prolonged exposure to chemicals detected at the site are summarized in Table 4-5. This receptor analysis is based on information collected in Tasks 2 and 3.

4.3.1 Soil

Under current site conditions, the contaminants in on-site soils pose little or no risk of human exposure via direct contact or ingestion. Most of the site is covered with buildings or pavement. The covered area includes most of the areas where former structures of the coal gasification plant once stood: the boiler room, the electric substation, the tar dehydrator, the distribution gas holder, the oil tank, the relief gas holder, the gas house, and the purifier house. An exception is the location of the filter beds. The filter beds, which are coke-filled wooden troughs set into the ground, were left in the ground and covered with soil after the gas plant closed. These beds had been used to filter residual oil and tar from the gas house condensate before discharge to the Anthony Kill. A test pit and a soil boring in this area

TABLE 4-4

PERMISSIBLE EXPOSURE LIMITS - AIR (ppm)
MECHANICVILLE SITE

	OSHA			NIOSH	ACGIH	
Substance	TWA	CC	Peak	TWA	TLV	STEL
Benzene	10	25	50	1	10	25
Toluene	200	300	500	100	100	150
Ethylbenzene	100	--	--	--	100	125
Xylene	100	--	--	100	100	150

Notes:

TWA = Time Weighted Average (8-hr)

CC = Ceiling Concentration

Peak = Maximum Duration 10 minutes in 8 hours

TLV = Threshold Limit Value

STEL = Short-term (15-minute) Exposure Limit

TABLE 4-5

TOXICOLOGICAL PROPERTIES OF COMPOUNDS IDENTIFIED
IN VARIOUS MEDIA
MECHANICVILLE SITE

COMPOUND CLASS	MEDIA IDENTIFIED IN	SPECIFIC COMPOUNDS	TOXICOLOGICAL PROPERTIES[1]
Volatile Organic Compounds	Groundwater	Toluene, benzene, xylenes, ethylbenzene, trimethylbenzene, styrene	These aromatic compounds are absorbed readily through the respiratory and gastrointestinal (GI) tracts and can also be absorbed through the skin. Benzene has the potential to cause cancer. Depending on the dose received, the other compounds can exert toxic effects on the liver and kidneys; they can also act as central nervous system (CNS) depressants and respiratory irritants.
	Subsurface Soil	All of the above plus n-propylbenzene	
	Sediment	Toluene, benzene	
	Air	Toluene, benzene	
Semivolatile Compounds			
o PAHs	Groundwater	Acenaphthene, acenaphthylene, anthracene, benzofluoranthenes, benzo(g,h,i)perylene, benzo(a) anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd) pyrene, naphthalene, phenanthrene, pyrene.	PAHs are a diverse group of compounds of varying toxicity. They are highly lipid-soluble and are absorbed through the GI and respiratory tracts, and to a lesser degree, through the skin. Many PAHs have been shown to be potentially carcinogenic. Other PAHs are thought to be noncarcinogenic; these include fluorene, anthracene, pyrene, naphthalene, phenanthrene, and fluoranthene. The acute toxicity and chronic toxicity of low level exposures are not well understood.
	Subsurface soil Sediment	All of the above plus dibenzo(a,h)anthracene	
o Phenolic compounds	Groundwater Subsurface soil Surface water	Total recoverable phenolics	Depending on the dose, these compounds can produce liver and kidney toxicity and CNS effects. They can act as respiratory and skin irritants.
Inorganic Compounds	Groundwater	Iron, zinc, cyanide, sulfate	Iron and zinc are essential nutrients. However, they can produce objectionable effects such as staining, bad taste, and GI irritation at high levels. Bioavailable cyanide can exert toxic effects on the liver, kidneys, CNS, and cardiovascular system at high levels. Sulfate is a natural constituent of groundwater which affects taste in high concentrations (500 mg/ℓ).
	Subsurface soil	Iron, zinc, cyanide	
	Surface water	Iron, cyanide, sulfate	
	Sediment	Iron, zinc, sulfate	

[1] In assessing the risks to public health and the environment posed by these chemicals, not only toxicological properties but also potential receptors and probable exposure conditions must be considered. These factors will be addressed in the Task 4 risk assessment.

revealed the presence of numerous site-related contaminants. Any human exposure to contaminated soil would most likely be restricted to contact with soils in this area.

Routine access to the site by children or teenagers is unlikely. Most of the site is fenced, and the gates are locked at night. However, children do live near the site. There are residential areas directly bordering the site to the south. There are also many residences southwest of the site. In addition, an elementary school and a special education school are both within a half-mile of the site. Furthermore, the fencing does not completely enclose the property. There is no fence along the Anthony Kill, which is near the area of the filter beds.

Access to the site from the river is possible. Although the waterfront has a steep bank, teenagers could enter the property by walking beneath the bridge at North Central Avenue or alongside the bridge, adjacent to the NYSEG fence. Alternately, one could walk along the bank of the Anthony Kill from the west and enter the site; therefore, site access by trespassers is possible, albeit restricted.

The potential for contact with contaminated soil in the event of access is also low. Contamination has only been documented at depths of 3 feet or more, even in samples taken near the filtering beds. There was no visual, olfactory, or analytical evidence of contamination of the surficial soils. It is likely that subsurface soils would be uncovered following construction or other work-related activities in the future, including subsurface soil remedial actions and the servicing of underground sewer, water, or other utility lines. If excavation occurred, workers could contact the contaminated soils and any uncovered materials.

The possible exposure routes to chemicals in the soil during excavations include direct contact, incidental ingestion, and inhalation of airborne particles and vaporized contaminants. Such exposure could potentially occur for all soils on-site.

4.3.2 Groundwater

There are no known current users of the groundwater near or downgradient of the Mechanicville site. The City of Mechanicville historically and currently obtains drinking water from a surface water source. The Mechanicville reservoir is approximately 3 miles northeast of the site, at an elevation approximately 160 feet higher than the site. The closest domestic wells are nearly a mile southwest (upgradient) of the site in the Town of Halfmoon. No active industrial wells were identified in the Mechanicville area. The two abandoned industrial wells (i.e., the West Virginia Pulp and Paper Co. well and the former Mintzer Petroleum Co. bedrock well) are located northeast (downgradient) and south (cross-gradient) of the site.

Groundwater appears to be discharging to the Anthony Kill. The groundwater beneath the relief gas holder may flow eastward beneath North Central Avenue

and discharge to the Anthony Kill downstream of SW-3/SED-3. Groundwater flow in this area of the site may also be influenced by the old Champlain Canal bed.

It is possible that a groundwater well could be installed at some future date in the commercial area east of the site. As mentioned in Section 2.1, access to the parking lot east of the site was denied by the owners during Task 3 field activities. Such a well might intercept the contaminated groundwater before it discharged to the Anthony Kill.

In addition, there are downward gradients indicating that the surface water recharges the groundwater. Therefore, the movement of groundwater beneath the Anthony Kill to the north or east is possible, albeit not known. Therefore, there are possible future groundwater receptors north of the Anthony Kill.

4.3.3 Surface Water

The site is bounded on the north by the Anthony Kill, which flows into the Hudson River 1,500 feet east of the site. Surface water runoff from the site flows into two drainage catch basins that empty via underground culverts into the Anthony Kill. In addition, shallow groundwater discharges into the Anthony Kill; therefore, it is possible that humans who contact the surface water near the site may be exposed to site-related contaminants. However, surface water data collected from the Anthony Kill downstream from the site do not indicate site-derived contaminants impact stream water quality.

NYSDEC has assigned a Class D stream classification to the section of the Anthony Kill from the Mechanicville city line to the Hudson River (Hodgson, 1986). Class D waters are designated by NYSDEC for secondary contact recreation, but no higher uses because of intermittent flow or water quality conditions that are not conducive to the propagation of game fish.

Because of the proximity of residential neighborhoods in the vicinity of the site, and because the area to the north and west of the site is classified as an open and recreational area, it is possible that local people could come in contact with the surface water adjacent to the site.

4.3.4 Sediment

Site-related contaminants were detected in the Anthony Kill sediment samples, primarily in samples collected adjacent to the site (SED-2). In addition, a recent NYSEG Memorandum (NYSEG, 1988) indicated that coal tar was observed in Anthony Kill sediments near the North Central Avenue bridge during recent construction activities. There is potential for construction workers and other individuals in the area to be exposed to site-related chemicals by contact with contaminated sediments. However, there are other potential sources of chemicals upstream of the site (e.g., the railroad yards).

Access to the banks of the stream at and downstream of the site is possible. The area north and west of the site is classified as open/recreational; therefore, recreational users of the stream could easily access the stream bank west of the site and then walk along the bank to the area adjacent to the site. In addition, this section of the Anthony Kill is used for secondary contact

recreation (e.g., boating), and contact with sediment is possible during these activities. The possible exposure routes for recreational users of the stream and its banks to sediment include direct contact and incidental ingestion.

4.3.5 Air

Indoor air samples collected to evaluate the levels of benzene, toluene, ethylbenzene, and xylenes indicated that ethylbenzene and xylene were not detected and benzene and toluene did not exist at levels indoors which would present a threat to human health.

Excavation at the site could increase the levels of volatile organics found in air samples as well as increase to potential for airborne contaminant transport of semivolatile and inorganic contaminants. Additionally, changing atmospheric conditions (e.g., temperature, wind velocity, and humidity) are expected to impact the levels of airborne and volatilized contaminants found at the site.

4.4 PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES

Remedial alternatives that could be used to address the environmental concerns identified at the Mechanicville site during Task 2 and Task 3 are listed in Table 4-6. This list has been revised since the completion of Task 2 to reflect knowledge of the site gained from the Task 3 investigations. The final selection of alternatives will be made after completion of the risk assessment (Task 4).

TABLE 4-6

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Soil/Sediment	Containment	Capping	Much of the site is presently covered with asphalt and structures. An impervious cap could further reduce infiltration and, therefore, the rate of leaching of chemicals from the soils into the groundwater. A cap would also reduce contact potential. Not applicable to sediment.
	Removal	Excavation and Transport	Involves excavation and removal with subsequent transportation to another location. Potential impact on air quality during excavation and long-term liability at disposal site should be considered. Dredging is also an option for sediment.
	Disposal	Landfilling	Landfill selection depends on whether wastes are hazardous or nonhazardous. If hazardous, they must be disposed of in a properly licensed RCRA landfill.
	Treatment	Incineration	A proven technology, it destroys organics effectively. On-site units require test burns prior to full-scale use.
		Biodegradation	Several recent applications of this technology to coal tar and coal-tar-contaminated soils have been reported in literature. This treatment requires experimentation to determine the proper organisms and optimal operating conditions. It can be applied in situ, through land-farming, or by use of a batch reactor vessel.
		Solidification	Involves mixing the waste with cement or similar additives to incorporate the waste into the cement matrix. Process improves waste handling and is inexpensive. Does not destroy compounds but reduces toxicity by reducing contaminant mobility and availability to biota. Method is currently commercially available.
		Soil Aeration	This process removes organic contaminants from soil/sediment by partitioning. Some further treatment system may be required to treat the air, and potential impacts on air quality must be evaluated. The effect of this process on semivolatile contaminants would have to be evaluated prior to implementation.
		Vacuum Extraction	Underground wells are operated under a vacuum to volatilize and extract soil gases. Vacuum system is constructed on-site to remove and collect volatile and semivolatile compounds from the unsaturated soil zone. May require extensive carbon air treatment system to treat the off-gases. Effectiveness on semivolatile compounds would have to be evaluated prior to implementation. Not applicable to sediment.
	Access Control	Posting Fencing Land Restrictions	Prevents contact with hazardous constituents. Will be considered in conjunction with other technologies. Not applicable to sediment.
	No Action		To be considered in conjunction with other technologies.

TABLE 4-6 (Continued)

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Groundwater	Containment	Capping	See soils.
	Diversion	Low Permeable Barriers	Retard lateral chemical migration within the soil and weathered bedrock zone by positioning on the competent bedrock surface. Would not retard vertical migration or chemical movement in bedrock fractures.
		Injection Wells/Interceptor Trenches	Control groundwater flow direction. Generally used in conjunction with groundwater extraction.
	In-situ Treatment	Biodegradation	Analysis/culture of the contaminated water to determine the present activity and nutrient levels needed to stimulate hydrocarbon-utilizing bacteria.
		Aquifer Flushing	May include the use of chemical additives. Often used in conjunction with groundwater removal.
		Other Technologies	Cost-effectiveness is dependent on concentration and types of contamination. Physical or physical/chemical technologies such as oxidation and precipitation may be applicable to highly contaminated waters.
	Removal	Extraction of Groundwater via Pumping	If large volumes of water are to be extracted, on-site treatment may be appropriate. May include recharge or discharge to surface drainage. Distribution of contamination and required operating period is not known. May require years of operation.
	Treatment	Carbon Adsorption	Contaminated carbon filters require appropriate disposal or regeneration. Data regarding process efficiency and applicability are available.
		Biodegradation	On-site biological treatment may be considered if large volumes of groundwater require treatment. Extracted groundwater may also be released to publicly owned treatment works for secondary biological treatment depending on present plant capacity, waste characteristics, and feasibility.
		Steam Stripping	Steam stripping is essentially a continuous fractional distillation process using steam to remove organics from aqueous wastes. Residuals, including steam condensate, recovered solvents, and "stripped" effluent must be disposed of or treated.
		Incineration	Likely to destroy organic wastes in groundwater, but process cost is expected to be high.
		UV/Oxidation	UV light is used to enhance the reactivity of oxidants (e.g., ozone or hydrogen peroxide) with organics. Hydrocarbons and chlorinated solvents are effectively destroyed. However, UV light cannot effectively catalyze reactions in opaque solutions. Process by products (e.g., off-gas, froth) are a concern with concentrated wastestreams.
	No Action		To be considered in conjunction with other technologies.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The findings of the Task 2 and Task 3 programs are summarized in this section. Based on these findings, a Task 4 risk assessment program is recommended.

5.1 SUMMARY OF TASK 2 AND TASK 3 FINDINGS

The findings from field investigations and analytical programs conducted during Task 2 and Task 3 at the Mechanicville site are summarized as follows:

- The shallow geology consists of 8 to 25 feet of heterogeneous fill deposits including a silty sand and gravel, a clayey silt and fractured shale, and a silty shale, overlying fractured shale bedrock.

- The water table is approximately 5 to 10 feet below ground surface. Groundwater movement is principally within the silty shale and underlying bedrock fractures.

- Regional groundwater flow is west to east across the site, toward the Hudson River. Locally, groundwater flows to the north-northwest, discharging to the Anthony Kill.

- Chemicals related to former coal gasification activities are present in the soils and in the shallow and deep groundwater near the former gas plant structures; specifically, the purifier and oxide houses, the relief gas holder, and the filter beds.

- The concentrations of seven chemicals (i.e., benzo(a)pyrene, benzene, styrene, total cyanide, iron, regulated organics, and phenolics) in shallow and deep groundwater exceeded the applicable state standards for these chemicals.

- Benzene and toluene were found in all air quality samples collected but concentrations did not exceed applicable OSHA, ACGIH, and NIOSH standards.

- The primary routes identified for off-site chemical migration are via groundwater in the shallow and deep bedrock fractures, and the silty shale fill. Chemical migration is influenced by an east-trending shallow bedrock trough located downgradient of the relief gas holder.

- Land use in the vicinity of the site is both residential and commercial. Day care centers, schools, recreational areas, nursing homes, and elderly housing projects are located in the vicinity of the Mechanicville site. The site itself is used as a natural gas and electric service center.

- Migratory pathways for chemical migration or transport off-site include air (primarily during excavation of site soils), surface

water, groundwater, sediments, and movement of non-aqueous phase coal tar along the bedrock surface and through fractures.

- Potential receptors for chemicals found at the site include more sensitive segments of the population, including the elderly, young children, and the infirm. Additionally, people in the vicinity of the site may be exposed to airborne chemicals predominantly during excavation activities.

From these findings, the following conclusions can be drawn:

- The soils and groundwater in the former active plant area contain chemicals related to the coal gasification process.

- The coal gasification wastes in the subsurface environment are a continuing source of chemicals to soil and groundwater, and groundwater is the vehicle of transport.

- Downward seepage gradients within the bedrock trough near North Central Avenue are carrying chemicals down into shallow and deeper bedrock fractures.

- Chemicals are migrating northeasterly in the groundwater at the site, discharging to the Anthony Kill, and migrating easterly toward the Hudson River. The Anthony Kill is a groundwater discharge zone.

5.2 TASK 4 RECOMMENDATIONS

Jordan recommends that a Task 4 Risk Assessment be conducted for the Mechanicville site. Jordan will assess the risks associated with exposure to site-related contaminants under both existing and future use conditions at the site.

5.2.1 Site Characterization and Extent of Contamination

In the introduction to the Task 4 Report, the site, its surroundings, and the distribution of chemicals on-site will be described. This information will be extracted from the Task 2 and Task 3 reports. Although minimal effort is required to collect this information, its inclusion in the Task 4 Report is necessary for completeness. Based on the areal and vertical distribution of contaminants identified at the site, the appropriate exposure concentrations for assessing risk will be identified.

5.2.2 Selection of Indicator Compounds

If necessary, Jordan will select a subset of the chemicals identified at the Mechanicville site to represent the potential hazards at the site. The compounds selected will be the most toxic, prevalent, frequently detected, mobile, and/or persistent.

5.2.3 Hazard Identification

Jordan will identify the potential hazards associated with exposure to the indicator chemicals and will summarize the toxicologic effects of the indicator chemicals, as identified in both animal and human studies. The hazard identification will include acute and chronic toxicity, carcinogenicity, mutagenicity, teratogenicity, pharmacokinetic properties, and existing health standards and guidelines. The exposure assessment sections for specific chemicals or groups of chemicals will be similar in scope and length to those in Volume III - Risk Assessment (Draft) of the Gas Research Institute's guidance documents entitled, "Management of Manufactured Gas Plant Sites." The evidence on specific toxic endpoints (e.g., the International Agency for Research on Cancer [IARC] and USEPA carcinogenicity classifications) will be provided when available.

5.2.4 Dose-response Assessment

Jordan will identify the dose-response data used to quantitatively assess risks. These data include cancer potency factors for carcinogenic compounds and acceptable daily intake levels (e.g., USEPA-verified reference doses) for noncarcinogenic substances. The toxicologic study of Neal and Rigdon (1967), which was used to develop the Cancer Assessment Group (CAG) potency factor for benzo(a)pyrene, will also be critically reviewed and discussed. The mathematical extrapolation model used to develop the potency factor will also be identified and discussed briefly. A discussion of the uncertainties and limitations of cancer risk assessments will be included.

5.2.5 Comparison to Existing Health Guidelines and Standards

The comparison of the chemical concentrations at the site to existing state and federal health-based criteria and standards completed in Task 3 will be reviewed and updated; if necessary.

5.2.6 Exposure Assessment

In the Task 4 Exposure Assessment, Jordan will summarize the possible pathways of exposure and potentially exposed populations for the Mechanicville site identified in the Task 2 and Task 3 report. Jordan will develop exposure scenarios to assess future risks. Jordan will consult with NYSEG as it develops the exposure scenarios to receive input on the selection of various exposure parameters (e.g., frequency and duration of exposure) and the areas of possible future construction and excavation. The Task 4 report will document all exposure-related parameters used to assess risks.

Pathways by which people are or could be exposed to site-related contaminants will be identified. Both present and future pathways will be identified. Under present conditions, the opportunity for direct contact, incidental ingestion, or inhalation of airborne contaminants is limited to exposure to soils near the streambank in the area of the former filter beds. Most of the site is covered with structures or has been paved. However, present and future excavation, could cause exposure to coal tar-related contaminants. Exposure to construction workers, utility repairpersons, on-site employees, pedestrians,

and commuters will be considered. Dermal contact, incidental ingestion, and inhalation exposure to selected receptor groups will be quantitatively assessed. A day care center, a nursery school, an elementary school, a special education school, an elderly housing project, several parks and playgrounds, and a large area of recreational/open space are all within a half-mile of the site and will be considered in conjunction with the exposure assessment.

Groundwater contamination has been found at the site. The groundwater is migrating northeasterly, toward Anthony Kill, and to the east toward the Hudson River. There are no known groundwater users near or downgradient of the site. The Mechanicville water supply reservoir is upgradient of the site. Therefore, under current use, the potential for public water supply contamination is slight. There is, however, future potential for commercial/industrial groundwater use down-gradient from the site. Potential future groundwater use will be considered in conjunction with the exposure assessment.

The Anthony Kill receives contaminants from discharge of contaminated groundwater, and analysis of river sediments has revealed contamination there. Adjacent to and downstream of the site, the stream is classified as Class D (i.e., it should not be used for water supplies, fishing, or contact recreation). Despite this low classification, children may still fish, boat, or play in the stream and along the banks and construction activities may be undertaken along and within the stream channel. For example, in September 1988 remedial structural work was performed on the Central Avenue Bridge adjacent to the site. Information and results from these construction activities will be incorporated into the risk assessment. Direct contact and incidental ingestion of contaminated sediments will be assessed for health risk.

For each exposure scenario developed, Jordan will identify the population(s) at risk and, if appropriate, estimate the dose received from exposure. The values selected for the exposure parameters will be identified, and appropriate references will be cited.

5.2.7 Risk Characterization

When possible, quantitative estimates of the carcinogenic and noncarcinogenic risks associated with the various exposure scenarios will be provided. If adequate dose-response data do not exist for a chemical of interest, a qualitative discussion of the risks will be provided. Uncertainties associated with the monitoring data, exposure and risk estimates, and risk assessment methodologies (including animal-to-human and high-to-low dose extrapolations) will be discussed.

5.2.8 Development of Target Clean-up Levels

Target clean-up levels (TCLs) for the Mechanicville site will be developed, if appropriate. The need for TCLs depends on findings of the Task 4 Risk Assessment. If chemicals on-site are found to present significant health risks, then TCLs will be developed to guide the planning and implementation of remedial activities.

5.2.9 Environmental Assessment

For the environmental assessment, potential aquatic and terrestrial receptors will be identified by contacting appropriate state and local environmental agencies (i.e., to obtain species lists). Existing site information will be reviewed on soil, groundwater and sediment quality. Applicable criteria or standards from USEPA or New York State DEC will be identified, and concentrations of contaminants found associated with the site will be compared to appropriate standards or criteria.

5.2.10 Development of Scope of Work for Task 5

At the end of Task 4, Jordan will evaluate the need for Task 5 (Conceptual Design). If Task 5 is recommended, a Scope of Work for Task 5 will be developed, including budget and schedule.

5.2.11 Report Preparation

Results of the Risk Assessment and recommendations for further work at the site will be submitted as a draft report to NYSEG for review and approval. A Final Task 4 Report will be submitted following response to the review comments.

6.0 SCHEDULE AND COST

6.1 SCHEDULE

Jordan will begin the Task 4 Risk Assessment within two weeks of receipt of authorization to proceed from NYSEG (expected in mid-July 1989). A Draft Task 4 Report will be submitted to NYSEG in October 1989; this report will be finalized one month following the receipt of comments from NYSEG.

6.2 COST

The estimated cost of the Risk Assessment Program (Task 4) is presented in Table 6-1. This cost is based upon the results of the previous and Task 3 site evaluations as well as the current level of effort required by regulatory agencies for assessing risks at hazardous waste sites. The program costs presented do not include hours for responding to NYSDEC review comments, if required.

TABLE 6-1

COST OF RISK ASSESSMENT PROGRAM (TASK 4)
MECHANICVILLE SITE

Activity	Hours	Cost ($)
Labor		
Project Management	50	4,284
Data Analysis/Report Preparation		
Exposure Assessment	227	12,733
Dose Response Evaluation	47	2,562
Risk Characterization	227	12,733
Engineering Evaluation	115	5,552
Drafting	14	313
Secretarial	10	209
Total Labor Costs	690	$38,386
Other: Word Processing, Mailing, Reproduction		$ 850
TOTAL COSTS		$39,236

GLOSSARY OF ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
AWQC	Ambient Water Quality Criteria
CC	ceiling concentration
CAG	Cancer Assessment Group
cfs	cubic feet per second
CNS	central nervous system
DOT	Department of Transportation
FID	flame ionization detection
ft/ft	feet per feet
GC	gas chromatography
gpm	gallons per minute
GPR	ground-penetrating radar
HPLC	high-performance liquid chromatography
IARC	International Agency for Research on Cancer
MCLs	Maximum Contaminant Levels
MCLGs	Maximum Contaminant Level Goals
MDL	Minimum Detection Limit
mgd	million gallons per day
mg/kg	milligrams per kilogram
MS	mass spectrometry
MSL	mean sea level
ND	nondetect
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NYSDEC	New York State Department of Environmental Conservation
NYSEG	New York State Electric and Gas Corporation
OSHA	Occupational Safety and Health Administration
PAHs	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PID	photoionization detector
ppm	parts per million
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
SDWA	Safe Drinking Water Act
SIR	Subsurface Interface Radar
STEL	short-term (15-minute) exposure limit
SVOCs	semivolatile organic compounds

TCL	target clean-up level
TLV	Threshold Limit Values
TOC	total organic carbon
TSP	total suspended particulates
TWA	time-weighted average
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
USWAG	Utility Solid Waste Activity Group
UV	ultraviolet
VOCs	volatile organic compounds

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APPENDIX A

FIELD DATA

APPENDIX A-1

TEST PIT LOGS AND FIELD OBSERVATIONS

TEST PIT OBSERVATIONS
MECHANICVILLE SITE

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
TP-1	7.7	Brown fill with cobbles from 0 to 0.8 ft. and black ash with clinkers and cinders from 0.8 to 2.0 ft. Reddish brown fine sandy silt, small cobbles, large boulders, organic material, bricks and clinkers from 2.0 to 3.0 ft., and brown sandy silt with cobbles, clinkers, glass, wood, and bricks from 3.0 to 6.0 ft. From 6.0 to 7.7 ft., light brown clayey silt with dark stains in root channels and highly fractured shale fragments. Wet, oily sheen at 7.7 ft. No visible coal tar.	Slight odor in black ash layer from 0.8 to 2.0 ft. Slight odor in light brown clayey silt layer from 6.0 to 7.7 ft. PID-background levels.**	Sample TP-1/S-1 at 6.5 to 7.0 ft.*
TP-2	7.5	Brown to dark brown silty sand with sharp angular cobbles from 0 to 1.3 ft. Brown sandy fill with bricks from 1.3 to 2.6 ft. Angular cobbles and boulders from 2.6 to 5.5 ft. with less weathered angular rocks in sand matrix from 5.5 to 7.0 ft. Angular cobbles (>50%) with gray clayey silt and brown sandy silt lenses from 7.0 to 7.5 ft. No visual signs of coal tar wastes.	PID readings of background levels in ambient air. Readings of 10 ppm from sampled material.	Sample TP-2/S-1 at 7.0 to 7.5 ft.*

TEST PIT OBSERVATIONS (continued)

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
TP-3	3.0	Light brown sandy silt with cobbles from 0.2 to 1.0 ft., and dark brown silty fill with cobbles, bricks, concrete from 1.0 to 3.0 ft. Concrete obstruction at 3.0 ft. No visible signs of coal tar or other contamination encountered.	PID readings at background level in ambient air and for soil.	No samples collected due to concrete obstruction.
TP-4	5.5	Light brown sandy silt with cobbles from 0.1 to 0.3 ft. and dark brown sandy silt with cobbles from 0.3 to 1.0 ft. Bricks from 1.0 to 1.5 ft. Light brown sand from 1.5 to 3.0 ft. Angular shale saturated with coal tar from 3.0 to 4.5 ft. and larger angular shale fragments from 4.75 to 5.5 ft. (saturated with coal tar).	PID readings of 30-40 ppm near sampled soil (3 to 4 feet below ground surface).	TP-4/S-1 at 3.0 to 4.0 ft. *
TP-5	6.5	Light brown sandy silt with cobbles from 0 to 1.3 ft and dark brown sandy silt with angular cobbles from 1.3 to 3.0 ft. Highly fractured shale, silt and clay soil, wood chips, and coke fragments saturated with coal tar from 3.0 to 6.5 ft. At 6.5 ft., silt and fractured shale saturated with coal tar.	PID reading of 50 ppm over saturated soil.	TP-5/S-1 from 3.0 to 4.0 ft.* TP-5/S-2 from 4.0 to 6.0 ft.* Duplicate sample TP-5/S-1 Dup.*

* Samples analyzed by ERCO.

** Background PID levels represent ambient air levels obtained outside and upwind of the site boundaries. At the Mechanicville site, background levels were generally less than 5 ppm.

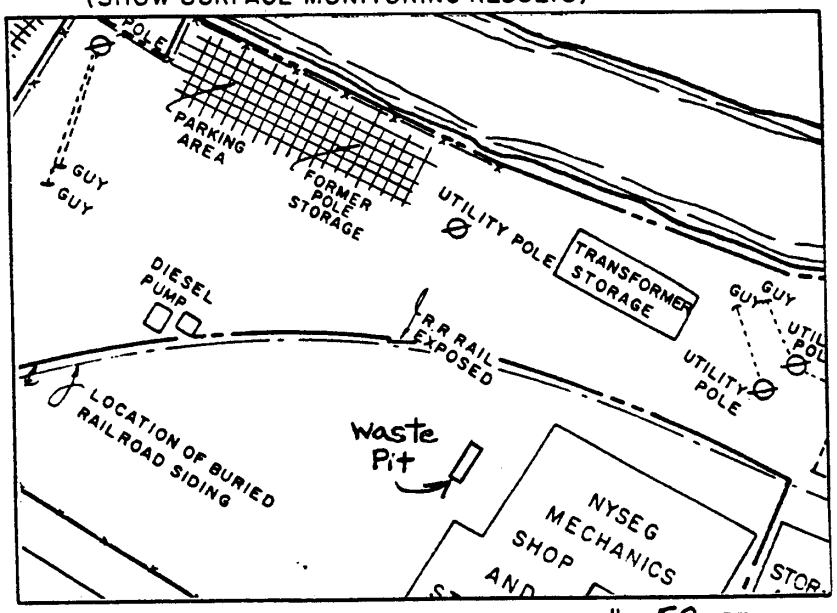
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT Waste Pit DATE 7/21/86 TIME ST. 1000 END 1030

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Wibby
2. C. Moore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE # 0

NOTES

0' – 0.3' Brown sandy fill with cobbles.

0.3' – 0.7' Asphalt

0.7' – 1.2' Brown sandy fill with cobbles

1.2' – 4.0' Brown to black sandy fill with clinkers, cobbles brick fragments, cobbles, and white/gray ash.

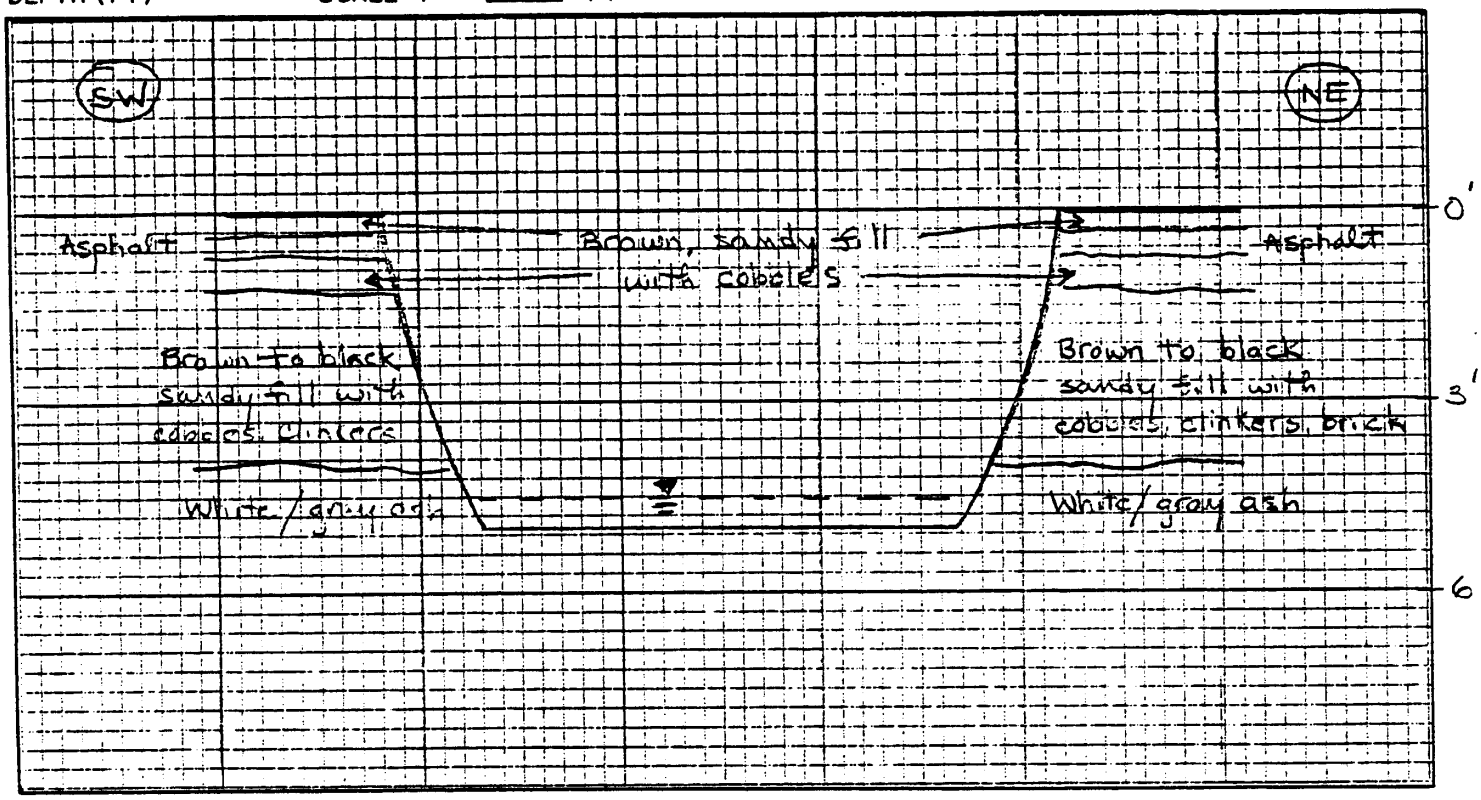
4.0' – 5.0' White/gray ash containing coke, clinkers, some wood, cobbles, and cinders grading back into cobbly brown fill.

$\bar{x}$ at 4.5'

TEST PIT RECORD
PROFILE ALONG TEST PIT– Waste Pit

SITE Mechanicsville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions: W x L x D, 2.5' x 10' x 5'

No visible coal tar but ash, coke and clinkers present.

PI readings at background level.

SAMPLES OBTAINED No Samples

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

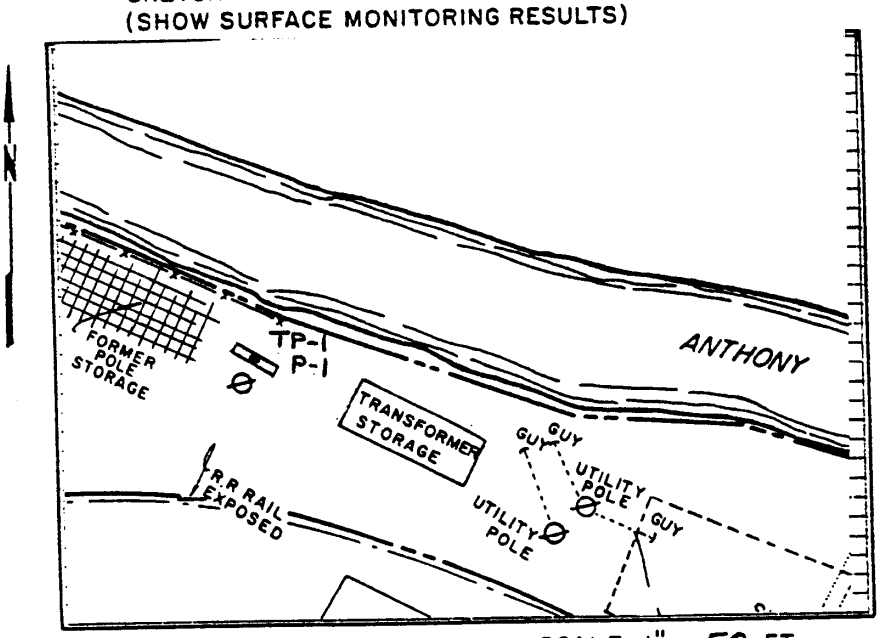
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-1 DATE 7/21/86 TIME ST. 10:50 END 11:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Wibby
2. C. Moore
3. P. Tierney } Maloy (Empire)
4. R. Ciccateri }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE 1

NOTES

FILL

0'-0.8' Brown sandy fill with cobbles loose, dry

0.8'-2.0' Black ash with clinkers and cinders oxidized, loose, dry. Slight odor.

2.0'-3.0' Reddish brown fine sandy silt with small cobbles, large rounded boulders, organic material (roots), bricks and clinkers

3.0'-6.0' Brown sandy silt with cobbles, clinkers glass, wood bricks. Dry and loose.

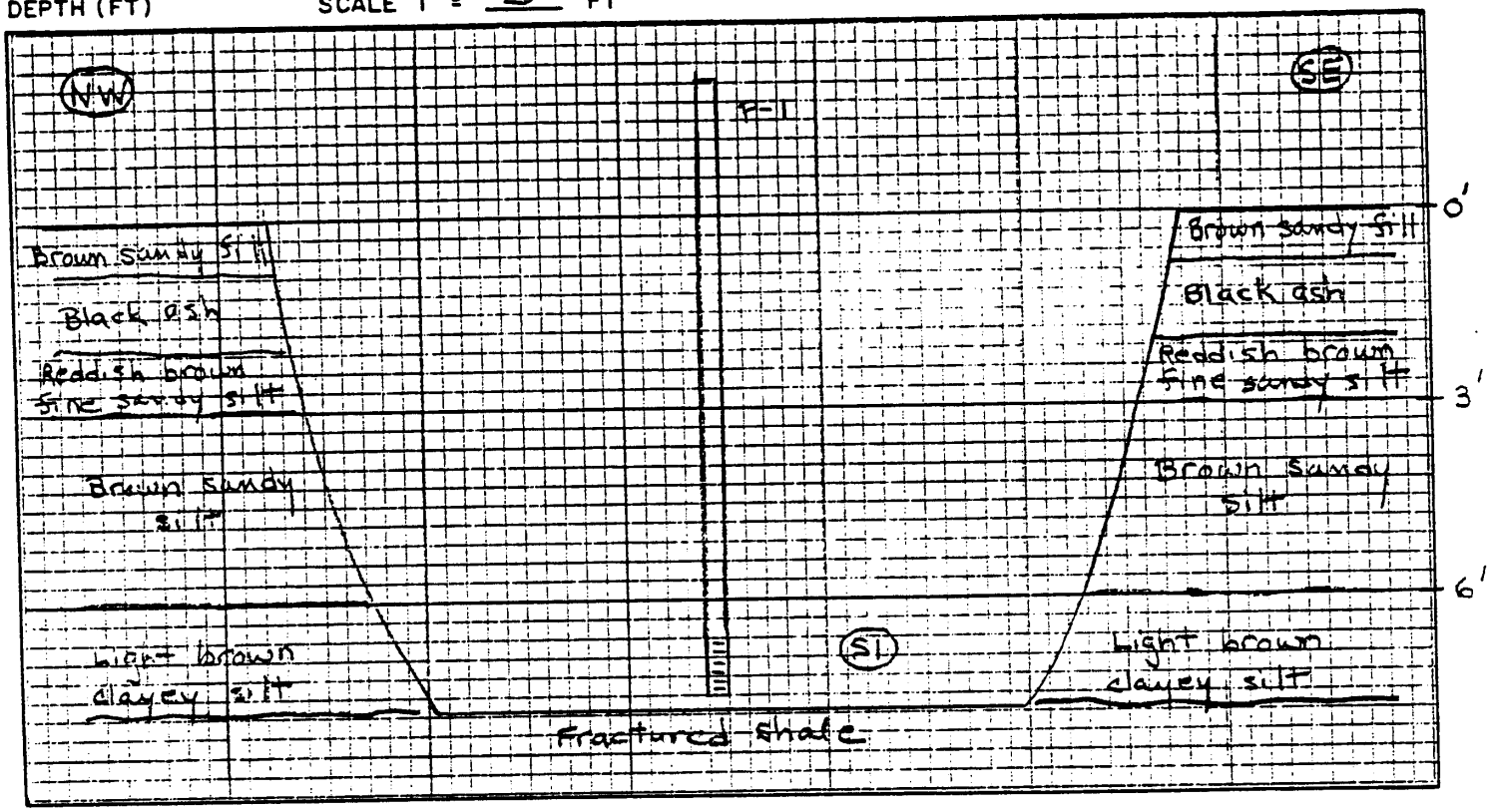
6.0'-7.7' Light brown clayey silt, cohesive, moist with mottling and slight odor. Dark stains in root channels.

7.7 Bedrock. Highly fractured shale, wet oily sheen. No groundwater seepage.

TEST PIT RECORD
PROFILE ALONG TEST PIT- 1

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD)
14' x 1.5' x 7.7'
No groundwater seepage.
PI readings at background level.
No visible coal tar but ash & clinkers present.
Piezometer (P-1) installed behind utility pole - screened from 6.5' to 7.5'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	6.5'-7.0'	MEEXTPXX01/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			
	Collected soil for		
	lab permeability test.		

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

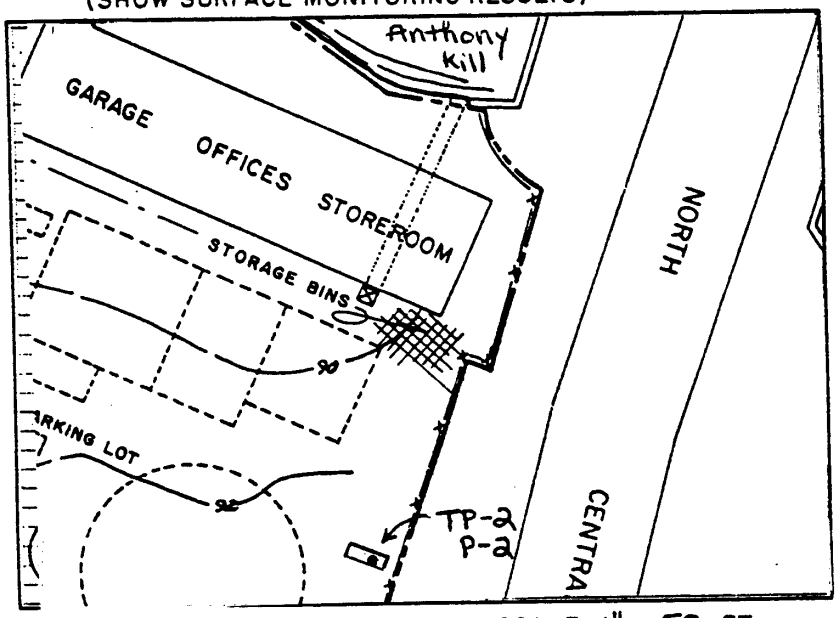
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT TP-2 DATE 7/21/86 TIME ST. 15:30 END 16:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C.Moore
2. S.Wibby
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #9, #10

NOTES 0'-1.3' Brown to dark brown silty sand with sharp angular cobbles (>50%)

1.3'-2.6' Brown sandy fill with bricks, oxidized

2.6'-5.5' Angular cobbles and boulders with some sandy fill. Highly weathered. (75% rock material)

5.5'-7.0' angular rocks, less weathered with sand matrix

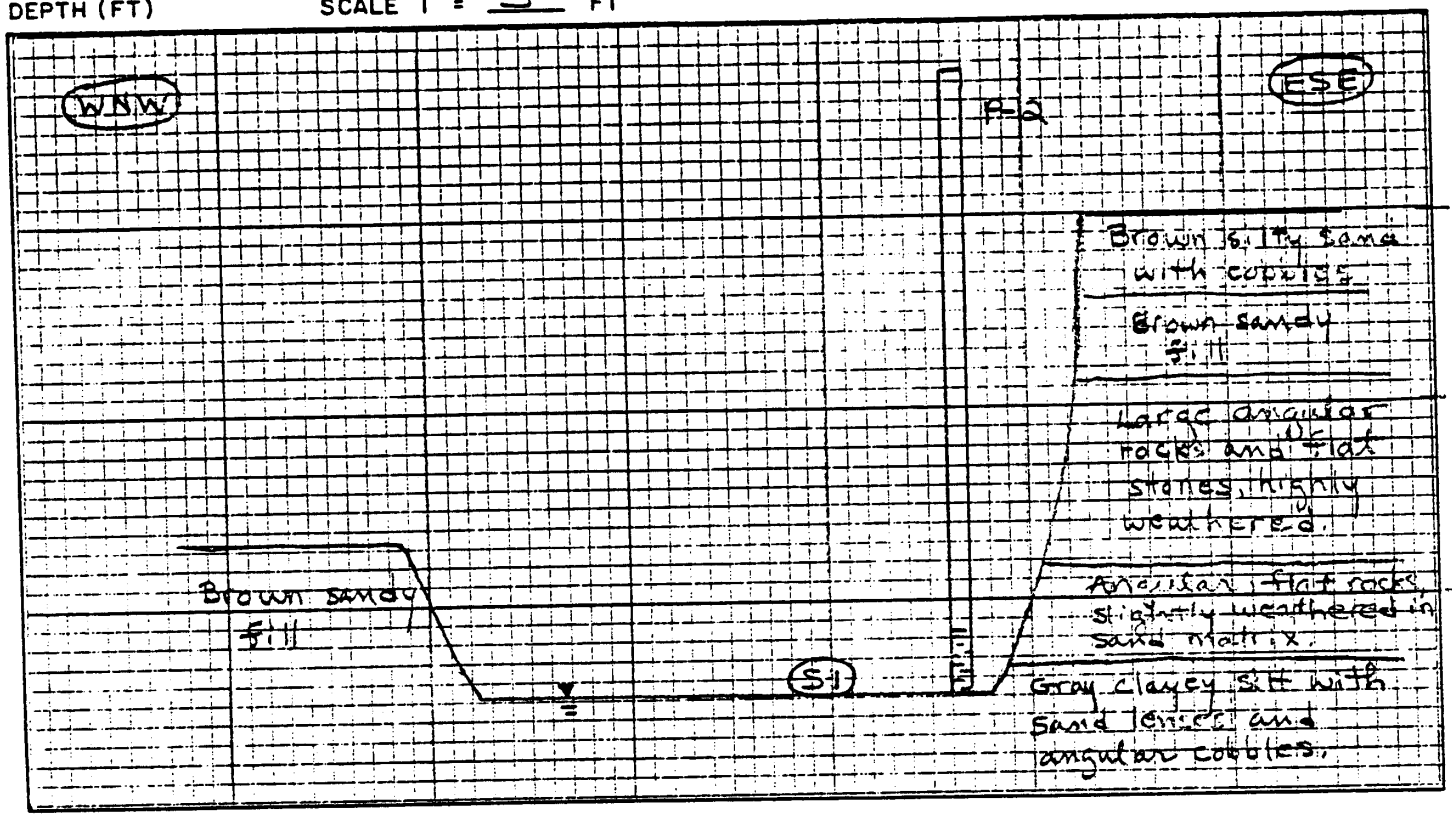
7.0'-7.5' S light gray clayey silt matrix with brown sandy silt lenses with angular cobbles (>50%). Mottling

▽ 7.5'

TEST PIT RECORD
PROFILE ALONG TEST PIT- 2

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD):
11' x 2' x 7.5'

PI readings at background level in ambient air - 10 ppm from sampled material.

No visible coal tar.

Piezometer (P-2) installed on bank - screened from 6.5'-7.5'.

Test pit was dug into the bank.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	7.0'-7.5'	MEEXTPXX02/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

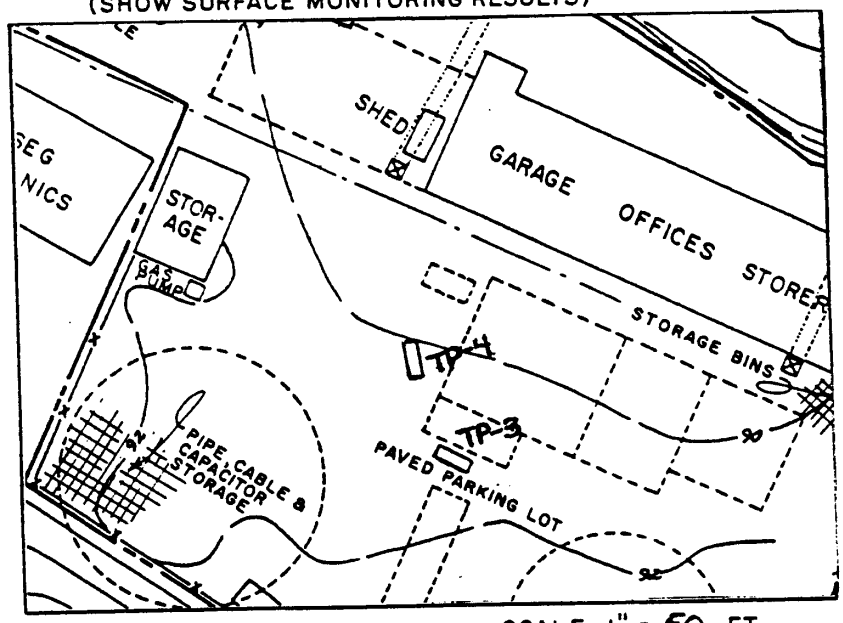
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-3 DATE 7/21 TIME ST. 14:15 END 14:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C Moore
2. S Wibby
3. PT } Maloy
4. RC } (Empire)
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N Background
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL —

EXPOSURE —

NOTES 0.2'-1' Light brown sandy silt with cobbles loose, granular, dry.

1'-3' Dark brown silty fill with cobbles, bricks, and concrete. loose, dry and granular.

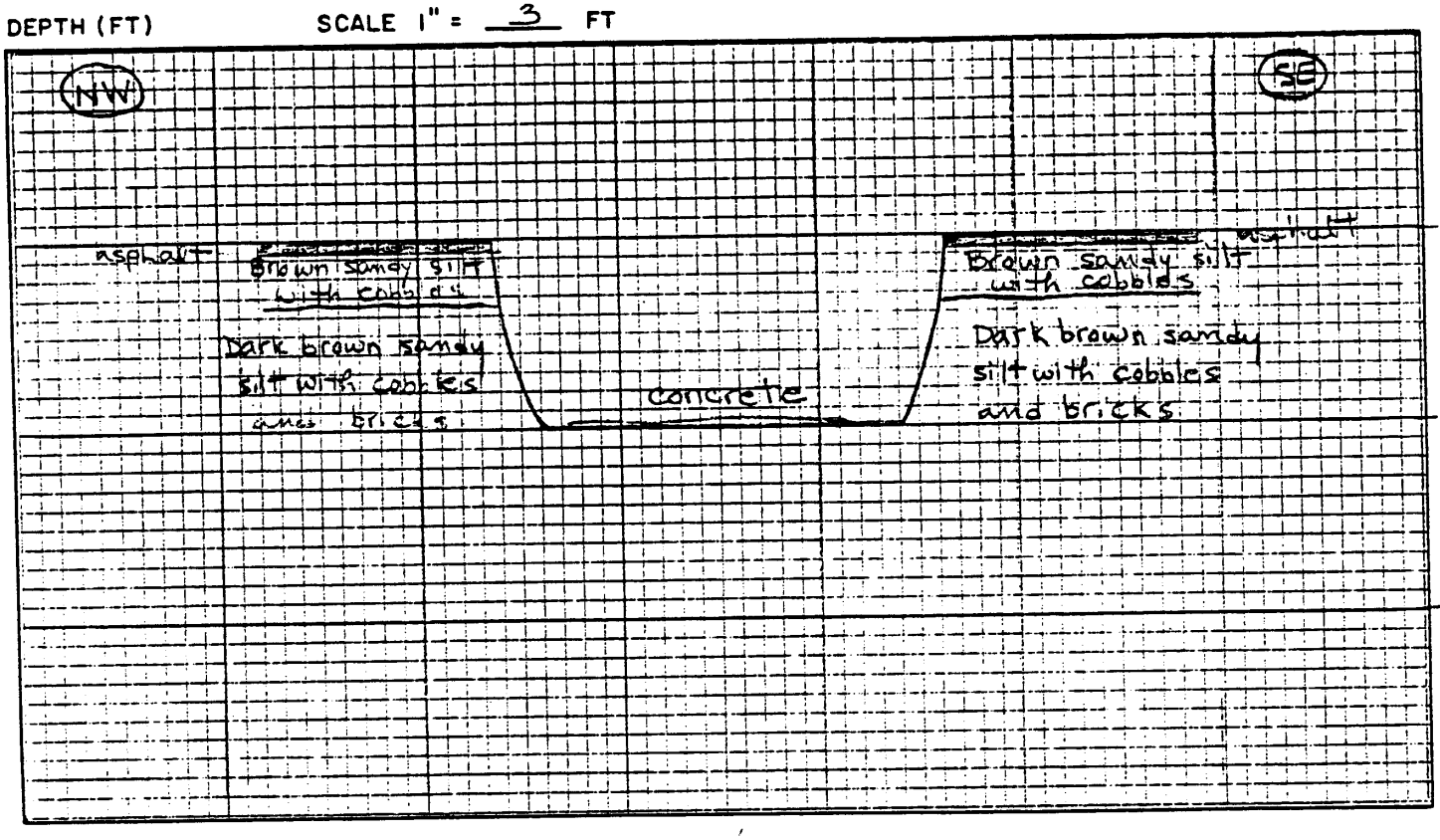
3' Concrete obstruction - refusal.

FILL

TEST PIT RECORD
PROFILE ALONG TEST PIT- 3

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (L x W x D): 7' x 2' x 3'

PI meter readings at background in ambient air and at soil.

No visible signs of coal tar or other contamination.

Test pit was abandoned after numerous attempts to break through a concrete obstruction encountered at 3.0'.

No groundwater seepage

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4		No Samples	
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

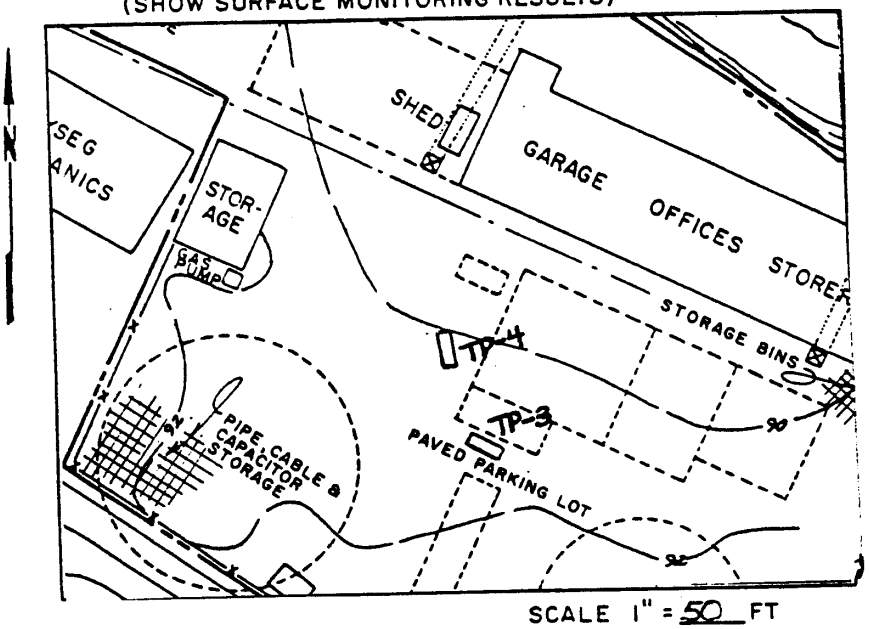
TEST PIT RECORD

SITE Mechanicville NYSEG

TEST PIT TP-4 DATE 7/21/86 TIME ST. 14:40 END 15:00

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC } Maloy (Empire)
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #6, 7, 8

NOTES 0.1' – 0.3' Light brown sandy silt w/ cobbles loose and dry.

0.3' - 1.0' Dark brown sandy silt w/ cobbles. Loose, dry.

1.0' - 1.5' Bricks

▽ 2.75' 1.5' - 3.0' Light brown sand, medium to fine

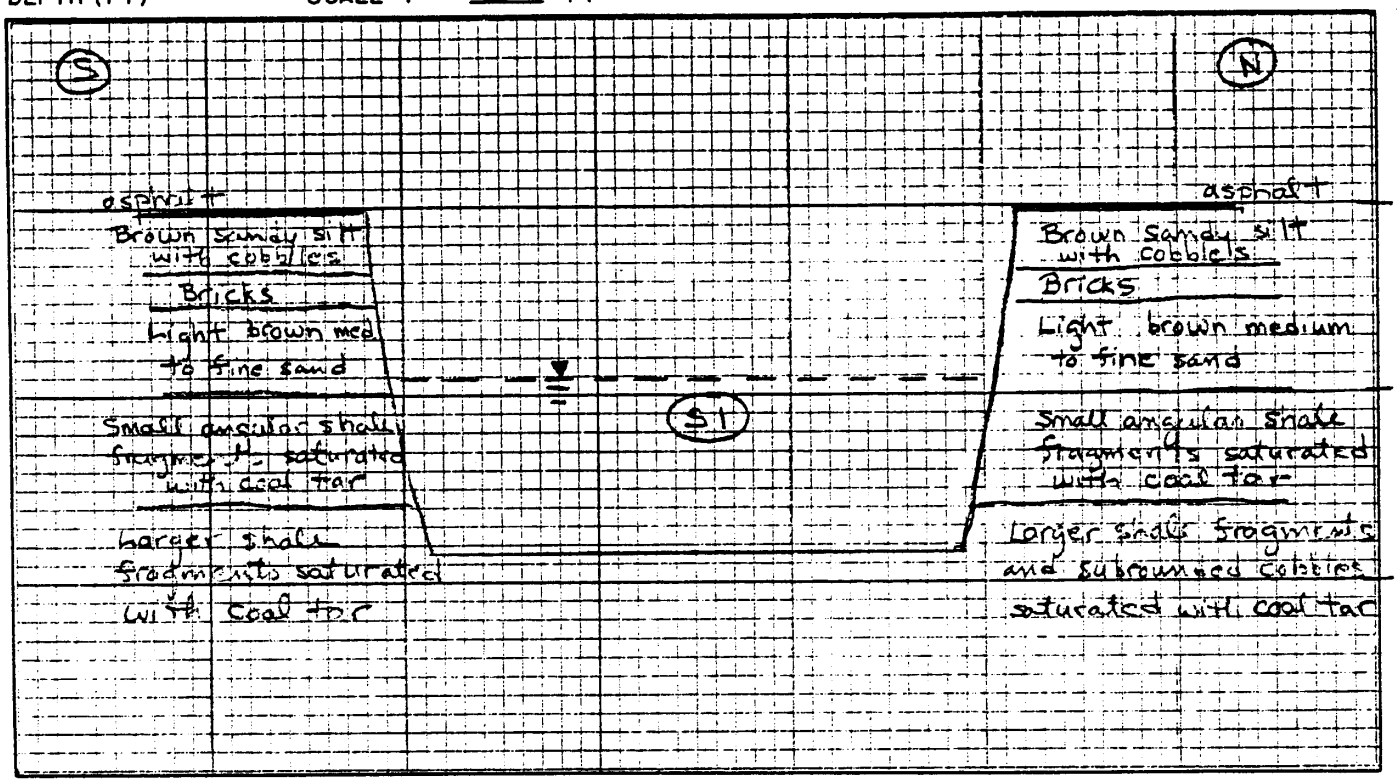
PI - 30 → 40ppm 3.0' - 4.75' angular shale rock fragments saturated with coal tar

4.75' - 5.6' Larger angular shale fragments and subrounded cobbles within clayey silt matrix. Saturated with coal tar

TEST PIT RECORD
PROFILE ALONG TEST PIT- 4

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 10' x 2' x 5.5'

PI meter readings of 30-40 ppm near sampled soil.

Coal tar observed from 3' to bottom of pit.

Water flowed rapidly into the pit from the SE corner

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEITPXX04/1	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

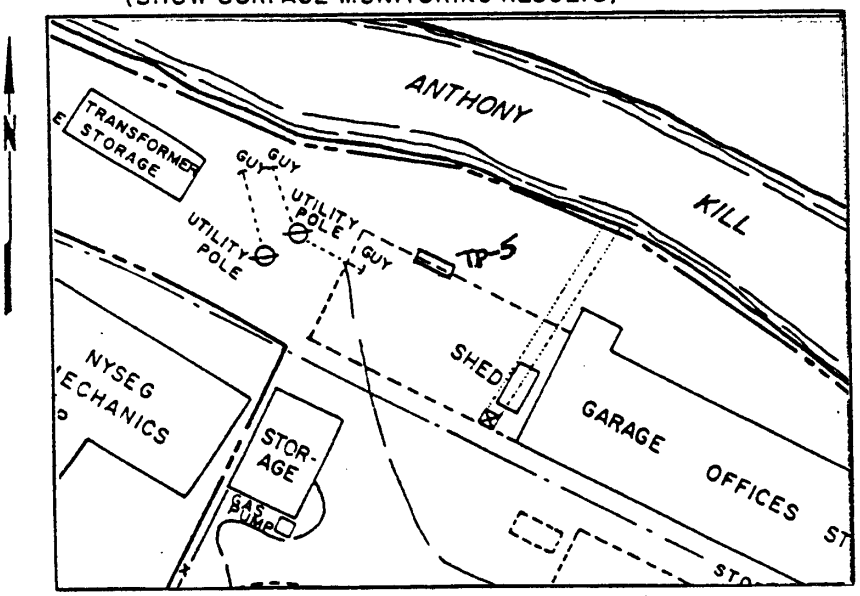
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-5 DATE 7/21/86 TIME ST. 12:50 END 13:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #2,3,4,5

NOTES 0'-1.3' Light brown sandy silt with cobbles

1.3'-3.0' Dark brown sandy silt with angular cobbles (Exposed tile drain at approx. 2')

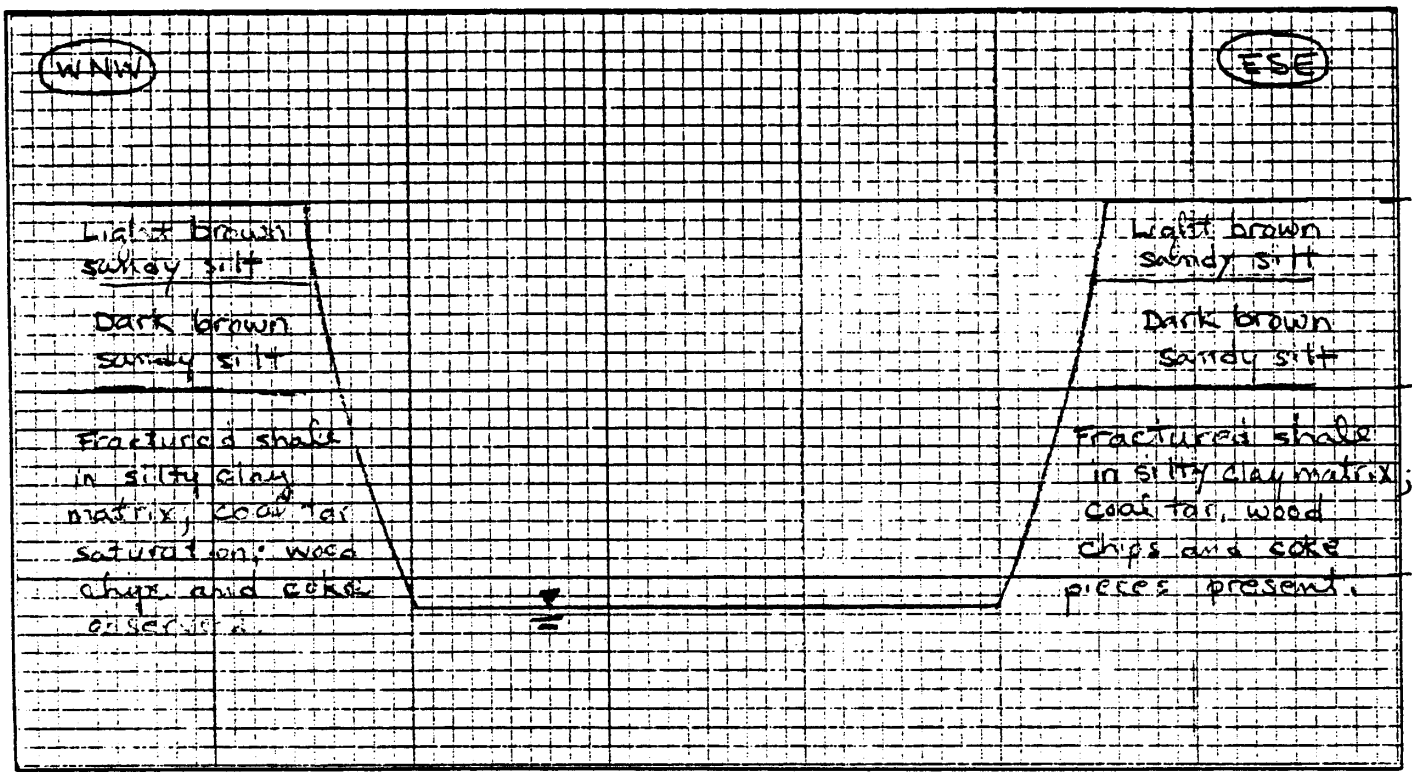
3.0-6.5' Highly fractured shale, weathered with silt and clay soil, loose. Wood chips and coke fragments present, saturated with coal tar.

▽ 6.5' Fractured bedrock surface; coal tar saturation; groundwater seepage.

TEST PIT RECORD
PROFILE ALONG TEST PIT- 5

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 12.5' x 2' x 6.5'

Coal tar saturation from 3' to bottom of pit.

PI meter reading of 50 ppm over saturated soil.

Groundwater seepage observed at bottom of pit.

Tile drain uncovered at approx 2'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEXTPXX05/11	
S-2	4.0'-6.0'	MEEITPXX05/21	
S-3		(GC/MS)	
S-4			
S-5			
S-6			
S-7			
S-8			
Dup of S1	3.0'-4.0'	MEEXTPXXDU/11	

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

APPENDIX A-2

BORING LOGS AND FIELD OBSERVATIONS

DRILLING OBSERVATIONS
MECHANICVILLE SITE

Test Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-1	20.2	Black coke ash up to 3mm diameter, from 3.5 to 4.0 ft. Brick fragments and glass encountered from surface to 8.0 ft. Dark gray shale bedrock at 12.2 ft.	No unusual odors. PID-background levels.[a]	Sample B-1/S-1 from 8.0 to 10.0 ft.[b]
B-2	16.2	Sandy to gravelly fill with shale fragments from 0.5 to 6.0 ft. Weathered shale bedrock at 9.4 feet. No visual signs of coal tar wastes encountered in boring.	No unusual odors. PID-headspace reading of 13 ppm on soil from 4.0 to 6.0 feet. Background levels elsewhere.	Sample B-2/S-1[b] from 8.0 to 9.5 ft.
B-3	9.2	Black, stained wood chips from 2.0 to 4.0 ft. Trace coal tar-stained organics and fly ash from 4.0 to 6.0 ft., and coal tar staining in sandy silt and shale chips from 6.0 to 8.0 ft. Coal tar stains from 8.0 to 9.2 ft. on weathered bedrock with little silt and fine sand.	PID headspace readings of 270 ppm and 250 ppm from 4.0 to 6.0 ft. and 6.0 to 8.0 ft., respectively.	Sample B-3/S-1[b] from 4.0 to 6.0 ft. Sample B-3/S-2 from 6.0 to 8.0
B-4	16.8	Brick chips from 4.0 to 6.0 ft. Coal tar staining noted from 6.0 to 14.0 ft. and 16 to 16.8 ft. Weathered bedrock and shale fragments predominant from 8 to 16 ft.	Coal tar odor from 4.0 - 6.0 ft. PID-ambient air readings of 10 ppm and 2 ppm at 6.0 to 8.0 ft. and 8.0 to 12.0 ft. PID-headspace readings of 10 to 70 ppm from depths of 4.0 to 12.0 ft.	Sample B-4/S-1 from 6.0 to 8.0 ft.[2]

DRILLING OBSERVATIONS (continued)
MECHANICVILLE SITE

Test Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-5	19.4	Fill material with brick, coal clinkers, fly ash and shale chips from 6.0 to 8.0 ft. Predominantly sand and gravel with organics, coal clinkers, and wood chips from 8.0 to 9.6 ft. Coal tar sheen on brown silt with shale chips from 10.5 to 11.5 ft. Bedrock at 11.5 ft.	PID background levels for ambient air. PID headspace readings of 22 ppm and 175 ppm from 10.0 to 10.9 ft and 10.5 to 11.5 ft., respectively.	Sample B-5/S-1 from 10.0 to 10.9 ft.[b] Sample B-5/S-2 from 10.5 to 11.5 ft.
B-6	32.0	Casing driven to bedrock at 17 ft. Dark gray shale bedrock thinly laminated, hard, broken, and unweathered.	PID ambient air readings at background levels. 250 - 450 ppm off of augers at 1.5 to 2.5 ft. PID headspace readings of 300 ppm at 9.2 ft. and background levels from 17.0 to 22.0 ft.	No samples collected.
B-7	9.0	Casing spun through concrete pad (0 to 3.0 ft) and spoon pounded to 7.0 ft. Coarse sandy fill with pebbles and shale fragments from 7.0 to 9.0 ft.	No ambient air or headspace readings taken.	Sample B-7/S-1 from 7.0 to 9.0 ft.[b]
B-8	17.4	Trace organics from 4.0 to 5.2 ft. Black stains on silt fill and shale fragments from 6 to 6.3 ft. Some coal tar visible on silt with cobbles from 9.5 to 13.5 ft. Extensive coal tar from 13.5 to 15.5 ft. on silty fill and shale fragments. Black, stained silty sand from 15.5 to 17.4 ft.	Slight odor from 4.0 to 6.3 ft. and 9.5 to 11.5 ft. PID ambient air readings of 1-2 ppm from 4.0 to 5.2 ft. PID headspace readings of 1-2 ppm, 20 ppm, and 30 ppm from 4.0 to 5.2 ft., 6 to 6.3 ft, and 7.5 to 9.5 ft, respectively.	Sample B-8/S-1 from 9.5 to 11.5 ft. Sample B-8/S-2 from 13.5 to 15.5 ft.[2] Sample B-8/S-3 from 15.5 to 17.5 ft.[2]

DRILLING OBSERVATIONS (continued)
MECHANICVILLE SITE

Test Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-9	5.5	1½" of bituminous material over cobbley to gravelly silty sand (fill) to 4 ft; observable contamination at 2.7 ft, over thinly bedded and weathered rock.	PID headspace readings of 65 ppm from 4 to 5.5 ft; ambient air readings at low levels.	Sample B-9/S-1 from 4.0 to 5.5 ft[c].
B-10	19.7	Brown and black ash fill, cinders, coal, and glass, over tan to black silt (fill) to 9 feet. Observable contamination at 10 ft in gravelly silty sand; becomes less contaminated with depth. Oxidized rock begins near 18.5 ft.	PID headspace readings at background to 10 ft., increasing to 10 ppm and gradually diminishing to 6 ppm at 19 ft.	Sample B-10/S-1 from 16.0 to 18.0 ft.[c]
B-11	18	Brown to olive brown silty sand to sandy silt (fill) to weathered rock at 3 ft. Hit solid rock near 6 ft.	No unusual odors. PID readings at background levels.	No analytical samples collected.
B-12	25.5	Black and yellow sand and silty sand over gray, brown and olive brown silty fine sand. Observable contamination below 14 ft.	Observable tar smell below 16 ft. PID headspace readings at background levels to 14 ft.; readings ranged from 9 ppm to 54 ppm down to 25.5 ft.	Samples B-12/S-1 from 16.0 to 18.0 ft[c].
B-13	55.5	See B-12 description. B-13 contains more gravel. Visible coal tar at 16 ft. Large cobble at 16.5 to 18.5 ft. Highly contaminated at 24 ft. Shale bedrock from 25.5 to 55.5 ft. Fracture at 55 ft. shows contamination on faces.	Coal tar odor at 16 ft. PID ranged from 10 to 50 ppm from 15 to 25.5 ft.	No analytical samples collected.

DRILLING OBSERVATIONS (continued)
MECHANICVILLE SITE

Test Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-14	55	Brown, orange, and olive brown fine sands and silts. Weathered rock from 22 to 23.5 ft.	No unusual observations. PID readings at background levels.	Sample B-14/S-1 from 18.0 to 20.0 ft.[c]
B-15	39	Black cinder, ash, brick (fill) to bedrock at 9.0 ft.	No unusual odors but visual evidence of contamination. PID readings of 1.2 ppm at surface to 36 ppm at 6.0 to 8.0 ft.	Sample B-15/S-1 from 4.0 to 7.8 ft.[c] (Collected in a boring 6 ft. south of B-15).

[a] Background PID levels represent ambient air levels obtained outside and upwind of the site boundaries. At the Mechanicville site, background levels were generally less than 5 ppm.
[b] Samples analyzed by ERCO.
[c] Samples analyzed by NYSEG.

MECHANICVILLE BORING LOG

BORING NO. B-1

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/23/86		COMPLETED 7/24/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (1.7) 10.2	PROTECTION LEVEL D
GROUND EL. 96' MSL	SOIL DRILLED 11.0'	ROCK DRILLED 9.2'	TOTAL DEPTH 20.2'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 8.65' 7-25-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0	Bkgd.	D.J. S-1					Bkgd.	0-2.0' Light brown sandy FILL with trace clay, loose, dry. Some glass, moderate amount of roots, and organics. Iron staining on surface. Recovery: .5/2.0	FILL	3 6 7 10	
2.5	Bkgd	D.J. S-2					Bkgd	2-3.5' Brown FILL same as above. 3.5-4.0' Black coke ASH, up to 3mm diameter, loose, dry. Highly oxidized from 3.75' to 3.8'. .7/2.0	FILL	7 4 3 3	
5.0	Bkgd.	D.J. S-3					Bkgd	4-6.0' Dark brown to black silty FILL with up to 1" diameter gravel, some organics, brick fragments and glass, dense, moist, some iron staining. .6/2.0	FILL	4 3 2 3	
7.5	Bkgd.	D.J. S-4					Bkgd.	6-8.0' Brown, silty FILL grading upwards to dark brown silty FILL, some gravel and glass, loose, very moist. .2/2.0	FILL	5 5 3 3	
10		ANYL S-1 DJ. S-5					Bkgd.	8-10.0' Brown, gravelly SAND, up to 4 mm diameter, somewhat dense, dry. 9.4-9.6' - Black, organic matter with grass 1.0/2.0	SAND	5 5 4 4	
12.5	Bkgd.	R-1					Bkgd.	10-11.9' Brown, gravelly SAND with dry shale fragments up to 1 inch throughout, dense to very dense, dry. 11-11.9' - weathered Shale with some silt, little oxidation, Refusal at 11.9' 1.5/2.0	SAND	12 32 77 100/.4	
								BEDROCK AT 12.2'			
								R-1 12.2-13.6' 30B 12.2'. SPIN CASING TO 12.6'. Recovery = 0"/1.4' = 0%	SHALE		
15.0	Bkgd.	R-2					Bkgd.	R-2 13.6-17.2' Dark grey SHALE, laminated (1/8" bedding units), hard, very broken, weathering (staining) along bedding planes only. Bedding dips 30°. Primary fractures along bedding planes, secondary, hairline, fractures perpendicular to primary fractures and 1/2" in length. Recovery = 85% RQD = .7"/3.6' = 19%	SHALE	19%	
17.5	Bkgd.	R-3					Bkgd.	R-3 17.0-20.2' (1.1 FT. CAVE-IN) Dark grey SHALE, same as above. Recovery = 95% RQD = 23%	SHALE	23%	CAVE-IN
20.0											

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

E.C. JORDAN CO.

FORM A (HAZMAT)

MECHANICVILLE BORING LOG

BORING NO. B-1

CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/23/86		COMPLETED 7/24/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL. 96' MSL	SOIL DRILLED 11.0'	ROCK DRILLED 9.2'	TOTAL DEPTH 20.2'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 8.65' 7-25 98

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLA	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % 20 40 60 80 100	WELL DATA
20.0		R-3					R-3 Con't.	SHALE		CAVE-IN
							BOB 20.2 FT. CAVE-IN TO 18.9			
22.5										

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

E.C. JORDAN CO.

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

CONVENTIONAL ROCK DRILLING

PROJECT NO. 4945-02
BORING NO. B-1 (M)
PAGE 1 OF 1
LOGGED BY L. ESPY DATE 7/23/86 / 7/24/86
CHECKED BY JWP DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	IN.	LGTH. FT ~~IN.~~	RECOVERY FT ~~IN.~~	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
	R-1	12.2	'	1.4'	0	0	0	0	U	-	NA	1.4 FEET OF Granular material caved in. washed out bit. R-2. Redrilled 12.2 - 13.6'.
	R-2	13.6	'	3.6'	3.06'	85%	.7'	19%	U	Approx 8 min/ft	NA	R/ Return water muddy brown color.
				RQD FOR R-2 - 2 PIECES								1.1 FT. CAVE-IN BEFORE STARTING 17.2.
	R-3	17.2		3.0'	2.9'	95%	.7'	23%	U	6-7 min/ft	NA	
				RQD FOR R-3 - 1 PIECE								
	EOB	20.2										

MECHANICVILLE BORING LOG

BORING NO. B-2

CLIENT NYSEG			PROJECT NO. 4945-II
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/1/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL. 90' MSL	SOIL DRILLED 9.5'	ROCK DRILLED 6.7'	TOTAL DEPTH 16.2
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 5.94' 8-1-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLA GC	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DET
0	Bkgd.	D.J. S-1		Bkgd.	0.5-2.0' Black, sandy to gravelly FILL, with rounded pebbles, Loose, dry.	FILL	12 | 14 | 8	
2.5	Bkgd.	D.J. S-2		Bkgd.	2-4' FILL, with 3 discrete layers: 2-3.4' Calcite, blocky (2" dia.) dry, angular chunks 3.4-3.9' Brown silty SAND, loose, dry 3.9-4.0' - Dark grey SHALE fragments in moist silty matrix. Very Wet at 3.8'. REC. 55%	FILL	6 | 10 | 3 | 4	
5.0	Bkgd.	D.J. S-3		13 ppm	4-6' Sandy to gravelly FILL with 2" pebbles, subrounded to 5.7'. 5.7-6.0'-Greenish-grey SILT to clayey SILT with some iron staining, trace organics, dense, moist. RECOVERY 35%	FILL / SILT	3 | 3 | 1 | 2	
7.5'	Bkgd.	D.J. S-4		Bkgd.	6-8' Orangish-grey clayey SILT with subrounded pebbles, dense, moist grading downwards to orangish grey silty coarse SAND with angular SHALE fragments, dense, damp. REC. 50%	SILT	3 | 12 | 6 | 14	
10.0	Bkgd.	D.J. S-5 ANVIL S-1 / R-1		Bkgd.	8-9.5' Dark grey silty coarse SAND, angular to 9.4' At 9.4' - Dark grey angular SHALE fragments, very thinly bedded, dry. REC. 45%	SAND	12 | 40 | 100/5	
12.5	Bkgd.	R-1		Bkgd.	Weathered BEDROCK AT 9.4' SET CASING AT 12.6 WASH OUT HOLE. BEGIN CORING R-1 9.5-13.5' Dark grey SHALE with 25% calcite in top 2/10 ft., V. thinly bedded (1/4-1"), hard, V. broken to broken, some weathering along bedding fractures (staining), calcite veins along bedding planes, bedding dips 30°. Recovery = 4.5/4.0' (CAVE-IN) RQD = 54%	SHALE		
15.0	Bkgd.	R-2		Bkgd.	R-2 13.5-16.2' Dark grey SHALE, massive, hard, unweathered, only 2 mechanical breaks which are along bedding planes. Recovery = 100% RQD = 100%	SHALE		
17.5					BOB 16.2'			
20.0'								

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

FIELD LOG FOR BORING IN ROCK - A.

NYSEG Mechanicville, NY

PROJECT NO. 4945-02
BORING NO. B-2
PAGE 1 OF 1

LOGGED BY L. ESPY DATE 8/1/86
CHECKED BY JWP DATE 9/22/86

BIT USE
N - NEW
R - RESET
U - USED

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT. IN.	RECOVERY FT. IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.			
9.5	R-1	9.5'	4'	4.5'	100+	NA	54%	U	6/FT		NA	4' RUN.
	R-2	13.5'	2.7'	2.5	93%	NA	100%	U	6/FT		NA	2.7' Run
		16.2										

MECHANICVILLE BORING LOG

BORING NO. B-3

CLIENT HYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/5/86		COMPLETED 8/6/86
METHOD H.S. AUGER	CASING SIZE 4.25' ID	HNU (11.7)/10.2	PROTECTION LEVEL C
GROUND EL. ~89' MSL	SOIL DRILLED 9.2'	ROCK DRILLED N/A	TOTAL DEPTH 9.2'
LOGGED BY JNW	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 2.5' 8/14/86

PI METER MALFUNCTIONING
INSPECT AMBIENT AIR DATA

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO. SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA	ELEV. (FT)
0							0.5' Asphalt				
		D.J. S-1					0.5'-2.0' Black, fn-cs sand, some gravel and angular shale chips, grading to sandy silt and shale chips; Dry; med. dense (.75'/1.5)	Fill	5 4 3		
		D.J. S-2					2.0'-4.0' Tan to gray silty sand w/ angular shale chips; some black stained wood chips. loose; moist. 30% shale chips. Recovery (.8Z/2.0')	Fill	5 4 3 3		▽
5		Anly. S-1				270 (8/11)	4.0'-6.0' Black silt (75%) w/ little angular shale chips grading to silt w/ some shale chips; trace coal tar stained org., wood and fly ash; loose; wet. (1.8'/2.0')	Fill	1 1 1 1		
		Anly S-2				250 (8/11)	6.0'-8.0' Black sandy silt w/ shale chips and wood fragments; loose; wet; friable; Coal tar stained; dry very fractured shale in the end of the sample; iron stained; horiz. and vertical fractures (Rec. 1.3'/2.0')	Fill & Wx Bdk			
							8.0-9.2' Weathered bedrock w/ little silt and fine sand; Horiz. and vert. fractures; platy and angular rock fragments; Coal tar stains, loose and wet at 8.0-8.3'; Tan, dry and dense at 8.3'-9.2'	Wx Bdk	15 72 100/.2		
10							Bottom of boring at 9.2'				
							Weathered bedrock at 8.0'-9.2'				
							Bedrock at 9.2'				
15											
20											

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

FORM A (HAZMAT)

MECHANICVILLE BORING LOG

BORING NO. B-4

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/29/86		COMPLETED 7/30/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU 11.3/10.2	PROTECTION LEVEL D/C
GROUND EL. 921 MSL	SOIL DRILLED 16.8	ROCK DRILLED NONE	TOTAL DEPTH 16.8
LOGGED BY SNW	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 3.2' (7-29-86)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	Bkgd						Auger through Pavement to .5			
	Bkgd	D.J. S-1				Bkgd.	.5-2.0' Light Brown Sand Fill w/ angular to sub-rounded gravel. Ash, brick chips, Black staining at 1.2' below G.S. Loose and dry. .7/1.5	Fill	13 9 6	
2.5	Bkgd	N.R.				Bkgd.	2.0'-4.0' No Recovery Boulder was dug out by hand. 0/2.0	Fill	13 12 7 3	
5.0	Bkgd	D.J. S-2				10	4.0'-6.0' Black to Dark Gray Sandy Silt Fill w/ sub rounded Fine gravel and brick chips. Coal tar odor. Loose and Friable. Dry 1.5/2.0	Fill	2 4 2 2	
7.5	10ppm	D.J. S-3 Anly G.C. GC/MS				70+	6.0'-8.0' Black to Brown Sandy Fill w/ small sub rounded to angular gravel, brick chips, loose - wet. grades into - Silty weathered bedrock w/ shale fragments, heavily coal tar stained and moderately oxidized. 1.5/2.0	Fill	4 8 11 14	
10.0	2	D.J. S-4				20+	8.0'-10.0' Black to Brown Silty Weathered Bedrock (50% silt), angular gravel (shale). grading into less Silty Clay weathered bedrock, coal tar present throughout - 85% Rock Material 2.0/2.0	Fill	14 19 21 31	
		D.J. S-5				70+	10-12' Clayey Silt weathered Bedrock, 75% angular gravel (shale), Coal tar stained loose, wet. 1.5/2.0	Fill	11 12 12 3	
12.5	Bkgd.	D.J. S-6				Bkgd.	12'-14' Gray Broken Shale Fragments w/ Silt, heavily stained w/ Coal tar. Loose. wet. 1.0/2.0	Fill	1 1 30 47	
15.0	Bkgd.	D.J. S-7				Bkgd.	14-16' Black Silt w/ angular shale chips gravel size. Loose. Wet 50% silt 50% Rck .2/2.0	Fill	2 1 0 2	
	Bkgd.	D.J. S-8				Bkgd.	16-16.8 Tan to Lgt Gray Silt Clay Till w/ small sub rounded pebbles & Fine gravel in the till matrix. Organics w/ Coal tar staining in root canals. Dry. Dessicated. Tight .6/1.1	Till	2 1 100/1.1	
17.5							Refusal @ 16.8' BOB - 16.8'			
20.0										

* U = THIN WALL TUBE S = SPLIT SPOON = = ROCK

EC JORDAN CO

FORM A (HAZMAT)

MECHANICVILLE BORING LOG

BORING NO. B-5

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/4/86		COMPLETED 8/5/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D. /NX4D	HNU 11.7/10.2	PROTECTION LEVEL D/C
GROUND EL. 89' MSL	SOIL DRILLED 11.5'	ROCK DRILLED 7.9'	TOTAL DEPTH 19.4
LOGGED BY SNW	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 10.0' 8/5/86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	BKGd.	D.J. S-1				Bkgd	0-2.0 Dk. Brown Silty Sand Fill w/angular gravel, organics, loose, moist. Rec. 1.6/2.0	Fill	3 6 6 4	
2.5	Bkgd.	D.J. S-2				Bkgd	2.0-4.0 Lgt. Brown angular gravel Fill w/ Sand and Silt interbedded, Oxidation Staining on shale chips. Loose. Dry. 80% Rock Material. 1.0/2.0	Fill	3 3 3 2	
5.0	Bkgd	D.J. S-3				Bkgd	4.0-6.0 Dk. Brown to Brown Silty Gravel Fill w/ Fine Sand w/some Black Stained lenses. Loose. moist. 65% angular Shale gravel. 1.2/2.0	Fill	4 2 2 3	
7.5	P.I. MALFUNCTIONING	D.J. S-4					6.0-8.0' Fill - Brick, Coal Clinkers, Brown Sandy Silt, fly ash, shale chips. Mostly Brick (75%) 1.0/2.0	Fill	4 7 11 7	
		D.J S-5					8-9.6' Dk. Brown to Brown Sand Silt Fill w/ gravel, organics, coal clinkers, wood chips. predominately sand + gravel. .9/1.6	Fill	7 12 19 100/1.1	
10.0							Auger to 10'			
		Anly S-1				22	10.0-10.9' Dk. Brown Silt w/ Rck (shale) chips-gravel size organics, Mod. Loose, wet .5/.9	SILT	15 100/.4	
		Anly S-2				175	10.9-11.5 Dk. Brown Silt w/ angular shale chips (gravel) Coal tar sheen, loose, wet .9/1.0	SILT	21 52 100/0	
							Bedrock at 11.5			
12.5							R-1 10.6-11.6 Metasedimentary Erratic Boulder 11.6-12.9 - Void Space - Sediment, wood chips shale fragments. 12.4-15.3 - Gray shale, thin darker laminations (1-2 mm thick spaced every 1/2" to 1", Hard, Massive Calcite inclusions. Unweathered to trace weathering, 30-40° Bedding planes. Fractures occur at 60° across bedding planes. Rec.: 9.45/5.0 = 89%	SHALE		
15.0							R-2 15.34-16.1 Gray Shale Same as above No Natural Fractures Rec-76%	SHALE	Not Determinable Due to Coring Problems	
17.5							R-3 16.1-19.5 Gray shale Same as above, No Natural Fractures. Rec. = 100% RQD = 86%	SHALE		
20.0							BOB-19.4			

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

PROJECT NO. 494502
BORING NO. B-5
PAGE 1 OF 1
LOGGED BY SNW DATE 8/4/86 - 8/5/86
CHECKED BY TWD DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
	R-1	10.	6	5.0	4.45	89%		89%	U	9/ft		
	R-2	15.	34	1.3	1.0	76%		NA*	U	*		* Due to mechanical problems RQD cannot be accurately interpreted
	R-3	16.	1	3.4	3.5	100%		86%	U	9/ft		

BORING NO. B-6

MECHANICVILLE BORING LOG

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (1.7) 10.2	PROTECTION LEVEL C/D
GROUND EL. 92' MSL	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND Unknown

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	SAMPLE GC	CASING BLOW COUNTS / FT.	OTHER HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0							DRIVING CASING TO BDRK. NO SAMPLING.			NO MONITORING WELL INSTALLATION
							AUGER TOP 0.5' ASPHALT & FILL			
							DIFFICULT TO KEEP CASING STRAIGHT.			
	Bkgd				47	250-450 ppm off Augers				
2.5'					48					
					49					
					30		3.5' Standing water			
5.0'							BLOWS NOT RECORDED			
	Bkgd									
7.5					11					
					12					
							BLOWS NOT RECORDED			
	Bkgd					300 ppm	9.2' - DRIVING DIFFICULT AT 9.2'. CASING KICKED OUT AT ANGLE, POSSIBLE COBBLE.			
10.0'					17					
					19					
					25					
12.5					43					
					18					
					35		14.3' CUTTINGS IN RINSEWATER LOOK LIKE WEATHERED ROCK.			
15.0'							16.4' DRIVING DIFFICULT. ROLLER-BIT FROM 16.4-17.0' TO REAM & WASH HOLE.			
							R-1 17.0-22.0' Dark grey SHALE, very thinly bedded (30° dip), hard, broken. Unweathered except along bedding planes.			
17.5		R-1				Bkgd				
	Bkgd						Recovery - 90%			
							RQD - 71%			
20.0'										

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

EC JORDAN CO

MECHANICVILLE BORING LOG

BORING NO. B-6

CLIENT NYSEG			PROJECT NO. 4945-01
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (1.7) 10.2	PROTECTION LEVEL C/D
GROUND EL. 92' MSL	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND Unknown

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR	GC	OTHER	HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DIAG.
20.0		R-1 (con't)					R-1 (con't) See page 1 for description.	SHALE BDRY		
22.5	Bkgd	R-2				Bkgd.	R-2 22.0 - 27.0' Dark grey SHALE, thinly laminated (.03-.1"), hard, broken, unweathered. Iron oxidation staining in upper (17-18) fractures. Bedding laminae offset by vertical, discontinuous fractures and foldny. Fractures occur along calcite (30-40°) inclusions. Minor amount of inclusions, concoidal in shape. Recovery - 102% RQD - 80%	SHALE 24.7		
25.0										
30.0	Bkgd.	R-3				Bkgd.	R-3 27.0 - 32.0' Dark grey SHALE, same as above except fewer inclusions than in R-2. Fractures perpendicular to bedding at 45-90°. Some evidence of deformation. Recovery = 100% RQD = 83%	SHALE		
35.0							BOB 32.0'			

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

ECJORDAN CO.

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

PROJECT NO. 4945-02
BORING NO. B-6
PAGE 1 OF 1
LOGGED BY SNW/L.ESPY DATE 7/28/86 - 7/29/86
CHECKED BY JWP DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
17.0'	R-1	17.	0	5'	4.5'	90%	NA	71%	U	NA	NA	MANY MECHANICAL Breaks in Rock, Few Natural
22.0	R-2	22.	0	5'	5.0	102%	NA	80%	U	9/ft	NA	Mechanical breaks, fractures along calcite inclusions
32.0	R-3	32.	0	5'	5.0	100%	NA	83%	U	8/ft.	NA	Verticle to Near Verticle discontinuous fractures present.

MECHANICVILLE BORING LOG

BORING NO. B-7

CLIENT NYSEG			PROJECT NO. 1945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/31/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25" ID	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL 92' MSL	SOIL DRILLED 8.8'	ROCK DRILLED NONE	TOTAL DEPTH 9.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 3.9

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	SAMPLE GC	OTHER - WATER LEVEL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DIAGRAM
0							SPIN CASING THRU. CONCRETE PAD.	ASPHALT		
							0-.3 - ASPHALT	CONCRETE		
							.3-1.2 CONCRETE PAD	VOID		
							1.2-2.1 VOID	FILL		
2.5					3.0 ▽		2.1-3.0 BOULDER FILL			
		NO RECOVERY					3-5' Pound spoon. 0% Recovery	3.9 ▽	2 2 2 2	
5.0							5-7' Pound spoon. Recovery 5% - all wash		8 5 3 3	
7.5		ANYL. S-1 DJ S-1					7-9' Dark grey coarse sandy FILL with some 1-2" pebbles, trace clay. Trace wood (may have fallen into hole), calcite piece (1" diam), weathered shale fragments at 8.8-9' - Dark grey, thinly bedded 1" long.	FILL	7 15 53 85	CAVE-IN
10.0							BOB 9.0'	Bdrk		
15.0										
20.0										

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

ECKERDANCO

BORING NO. B-8

MECHANICVILLE BORING LOG

PROJECT NO. 1945-02

CLIENT NYSEG			
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/6/86	COMPLETED 8/6/86	
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (LT/10.2)* TIP-11.7 HNU-10.7	PROTECTION LEVEL D/C
GROUND EL. 92' MSL	SOIL DRILLED 17.4'	ROCK DRILLED NONE	TOTAL DEPTH / 17.4'
LOGGED BY SNW	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 7.5-13.5' (APPROX)

DEPTH (FT)	NNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	NNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DIAGRAM
0							AUGER THRU ASPHALT TO 0.5'			
.5	Bkgd	D.J. S-1				Bkgd.	.5-2' Lgt. brown to brown Sandy FILL with cobbles and pebbles, platey to rounded, loose, dry, oxidized sediments. Broken rock Rec. 1.0/1.5	FILL	10 12 8	
2.5	Bkgd	D.J. S-2				Bkgd.	2-4' Lgt. brown to brown sandy SILT FILL w/ coal clinkers (oxidized) and trace subrounded brick and cobbles. Platey shale chips, loose to compact, dry. REC. 1.3/2.0	FILL	12 29 13 14	
5.0	1-2 ppm	D.J. S-3				1-2 ppm	4-5.2' Brown sandy FILL grading to silt FILL with depth, with concrete chips, dry, oxidized shale fragments, subrounded boulder pebbles at 4.7'. Trace organics. .9/1.2 Compact, moist. Slight coal tar odor thruout.	FILL	10 20 100/2	
7.5	Bkgd.	D.J. S-4				20 ppm (shoe)	6-6.3' Brown silt FILL w/ rounded cobbles, platey shale fragments, and brick shards. Coal tar odor and black stains. Loose and moist. Obstruction from 5.2-7.2. Augered thru. .3/.3	FILL	100/.3	
10.0	Bkgd.	D.J. S-5 NO REC.				30 ppm (shoe)	7.5-9.5' Brown silt on outside of spoon. No Recovery. 30 ppm off spoon, no staining. Rec. 0/2.0	UNK.	3 2 3 3	
	Bkgd.	ANYL. S-1 D.J. S-6				Bkgd.	9.5-11.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Slight coal tar odor, some coal tar present. REC. 2.0/2.0	SILT FILL	4 6 7 9	
12.5		D.J. S-7 (head) S-8 (soil)				Bkgd.	11.5-13.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Coal tar present at 13.3-13.5'. Wood fibers at 13.0' REC. .9/2.0	SILT FILL	9 12 32 8	
15.0		ANYL. S-2				Bkgd.	13.5-15.5' - Silty FILL w/ shale fragments and subrounded cobbles, loose, saturated. Extensive COAL TAR. REC. 1.2/2.0	FILL	6 2 2 3	
17.5	Bkgd.	GC/MS ANYL. S-3				50-100 ppm	15.5-17.4' Black stained silty SAND with subrounded cobbles, pebbles and shale chips, loose, saturated. REFUSAL AT 17.4'. REC. 1.3/2.0	SILT-SAND	3 3 2 100/.4	
20.0							BOB 17.4'			NO MONITORING WELL INSTALLATION

*U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

ECJORDANCO

MECHANICVILLE	TASK 3		BORING NO. B-9
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-11-87	COMPLTD. 11-11-87
METHOD H.S.A.	CASING SIZE 4.25" ID	PID TIP #1	PROTECTION LEVEL D
GROUND EL 88.5 Rel.	SOIL DRILLED 5.5'	ROCK DRILLED NA	TOTAL DEPTH 5.5'
LOGGED BY J. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN NA (FT)	RISER NA (FT)	MATERIAL NA PVC SS TF	ID NA PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD %	WELL DATA	EL. (FT)
0	Bg.						AUGERED TO 4'					
							COAL TAR OBVIOUS AT 2.7'					
1							VERY GRAVELLY & COBBLY; SHAKES RIG					
							CUTTINGS ARE WET W/ COAL TAR.					
2							SURFACE IS 1 1/2" OF BITUMINOUS OVER COBBLY SILTY SAND - FILL					
3												
4		S-1		1.3	Y	65	BLACK SILTY SAND(?) W/ SLUDGE & COAL TAR, SATURATED OVER VARVED WEATHERED ROCK, OLIVE GRAY TO BLACK W/ UNWEATHERED ROCK FRAGMENTS & SILT	SM-GW		23 56 40		
5							B.O.B. @ 5.5'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	**TASK 3**	**BORING NO.** B-10
CLIENT **NYSEG**		PROJECT NO. 4945-03
CONTRACTOR **NORTH STAR DRILLING CO.**	DATE STARTED 11-12-87	COMPLTD. 11-12-87
METHOD H.S.A.	CASING SIZE 6" I.D.	PID TIP # 1
GROUND EL 96.7 Rel.	SOIL DRILLED 19.2'	ROCK DRILLED .5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87
SCREEN 10.8 (FT)	RISER 8.7 (FT)	MATERIAL PVC (SS) TF

PROTECTION LEVEL D
TOTAL DEPTH 19.7'
▽ BELOW GROUND 10.2' 11-20-87
ID 2"
PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD %	WELL DATA	EL. (FT)
0	BKG	S-1		1.1		BKG	FILL BR TO BLK MOIST SANDY SILT W/ CINDERS for 1', OVER BLK TO BR ASH FILL W/ CINDERS, COAL PIECES, DRY TO MOIST		ML	10 16 26 16		
		S-2		1.2			4'			7 6 5 7		
5		S-3		.5			SILTY SAND (FILL) TAN TO BR TO DARK BR, SAND IS F TO M, TR TO LITTLE GRAVEL, MOIST W/ SOME ASH FILL; SAND IS SLIGHTLY IN APPEARANCE.		SM	3 2 3 3		
		S-4		.7						2 1 2 1		
		S-5		1.0			4' SANDY SILT BR, F. SAND, TR. CLAY, MOIST, W/ BRIGHT ORANGE MOTTLES 10		ML	2 2 4 2		
10		S-6		.7		100	SILTY SAND BL TO RUSTY SILT & F TO M. SAND, LITTLE GRAVEL, SATURATED, CONTAMINATED			2 1 8 6		
		S-7		.7		99	BR TO DK. GRAY TO BL. F. TO M. SAND, TR. GRAVEL, WEATHERED SHALE FRAGS.		SM	3 6 8 5		
15		S-8		1.0		26	below 15'			2 3 5 5		
		S-9		1.8	Y*	6	TAN TO YELLOW BR. V.F.S., WELL SORTED			6 2 5 3		
		S-10		1.3		6	WEATHERED ROCK 19' TO 19.3' 19.3' TOP OF ROCK AT 19.3'		GW/ SM	WOR 50/0.0		
20							B.O.B. 19.7'					

* DUPLICATE SAMPLE

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

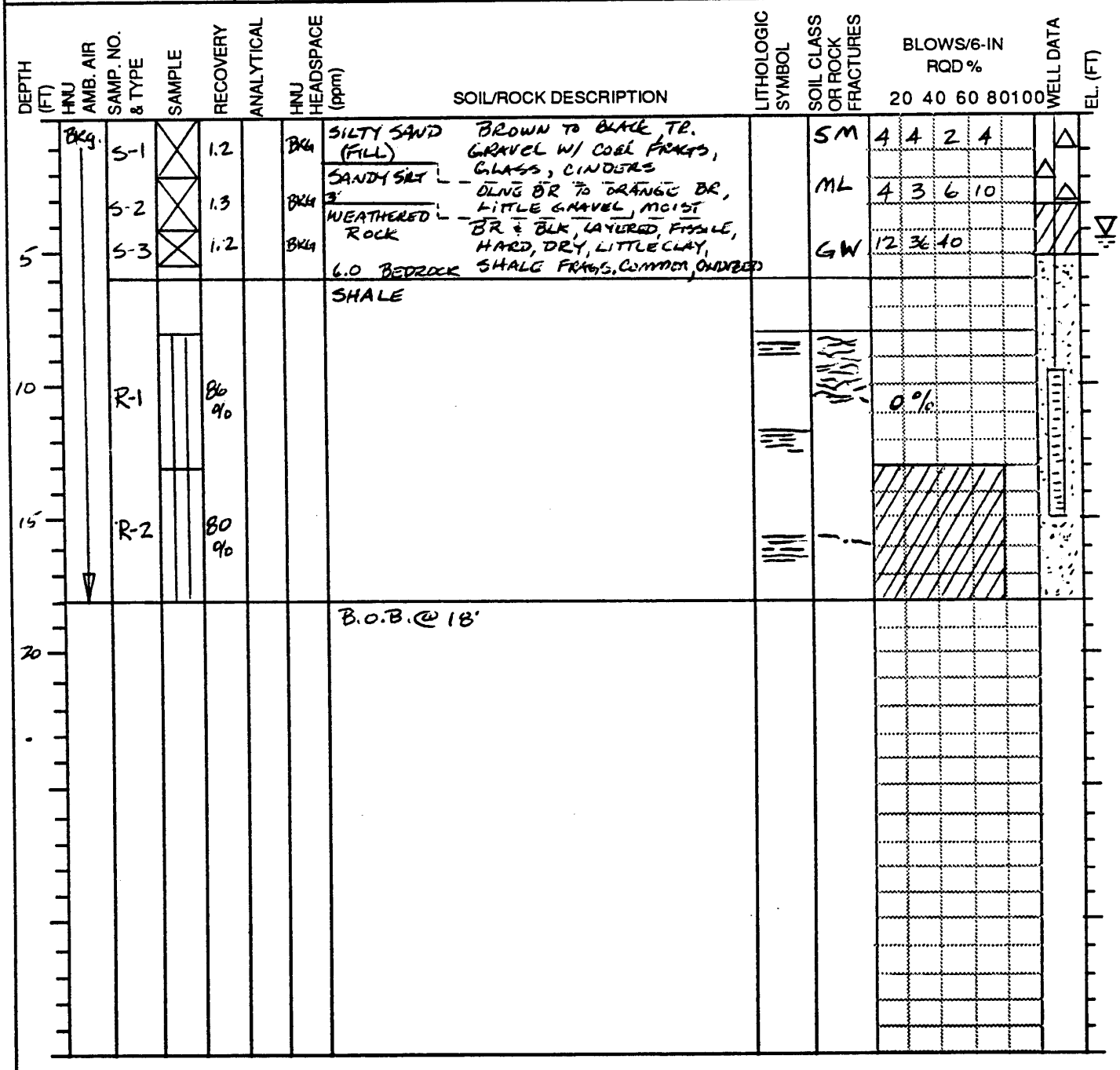
BKG = BACKGROUND
WOR = WEIGHT OF RODS

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	TASK 3	BORING NO. B-11
CLIENT NYSEG		PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.	DATE STARTED 11-12-87 COMPLTD. 11-13-87	
METHOD H.S.A. & CORING	CASING SIZE 4 1/4" ID.	PID TIP #1
GROUND EL 92.1 Rel.	SOIL DRILLED 5.5'	ROCK DRILLED* 12.5
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87
SCREEN (FT)	RISER (FT)	MATERIAL PVC SS TF

PROTECTION LEVEL D
TOTAL DEPTH 18'
▽ BELOW GROUND 4.17' (11-20-87)
ID
PAGE 1 OF 1



PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

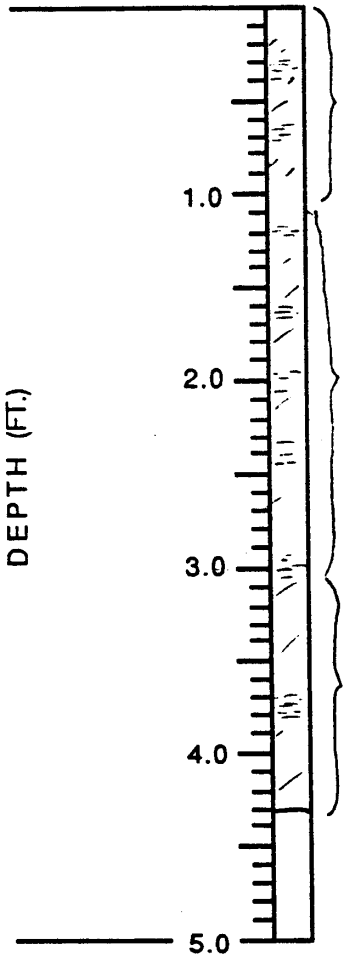
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 2

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-12-87	CHK'D BY: CM 12/29/87
BORING NO.: B-11	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 8 TO 13
CORE LENGTH (FT.): 5	CORE RECOVERY : 4.3 (FT.) 86 (%)	RQD: 0 (%)	ROCK QUALITY : V. POOR



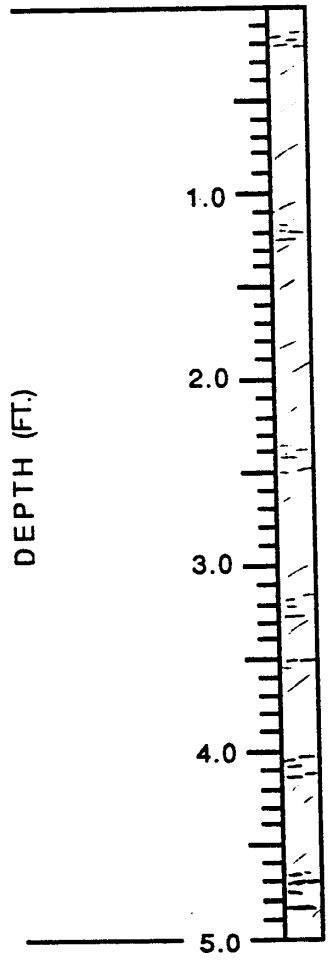
ROCK DESCRIPTION AND IDENTIFICATION

SHALE — DARK GRAY TO BLACK, THINLY BEDDED, W/ BEDS @ 35° TO 45° FROM HORIZONTAL. TOP 1' IS MODERATELY WEATHERED W/ MnO_2 & O_2 STAINING PROMINENT, BECOMES FRESH AT NEAR 11'. FRACTURE FACES AFTER 11' ARE FRESH & SHOW SLICKENSIDE FEATURES. BEDDING IS PARALLEL TO FRACTURES. NO PIECE IS AS LONG AS 3".

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 2

JOB NO.: **4945-03**	BY: NORTH STAR	DATE: 11-12-87	CHK'D BY: CN 12/29/87
BORING NO.: B-11	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 13 TO 18
CORE LENGTH (FT.): 5	CORE RECOVERY : 4 (FT.) 80 (%)	RQD: 80 (%)	ROCK QUALITY : V. GOOD



ROCK DESCRIPTION AND IDENTIFICATION

SHALE — UNWEATHERED, COMPETENT, FRESH, W/ BEDDING 15° TO 20° FROM HORIZONTAL

15.-15.4' NATURAL JOINT - NO WEATHERING

17' HEALED V. THIN FRACTURE W/ CALCITE FILLING

MECHANICVILLE	TASK 3		BORING NO. B-12
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-18-87	COMPLTD. 11-18-87
METHOD H.S.A.	CASING SIZE 6" ID	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 98.3 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED NA	TOTAL DEPTH 25.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 13.45' (11-20-87)
SCREEN 11 (FT)	RISER 14.5 (FT)	MATERIAL PVC (SS) TF	ID 2" PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
	BKG	S-1		1.6		BKG	SILTY SAND: BLACK, MOIST, FIRM IN PLACE w/ ASH FILL & CLINKERS over Br. SILTYS., TR. GRAVEL, SLIGHTLY PLASTIC		SM	5 6 5 5		
		S-2		1.2			2.5' SAND: YELLOW BROWN, FINE SAND, TR. TO LITTLE GRAVEL, MOIST			3 3 3 3		
5		S-3		.2					SP	3 2 3 3		
		S-4		.3			6' SILTY SAND: BROWN, MOIST, LITTLE GRAVEL, SLIGHTLY PLASTIC OVER BROWN WELL SORTED MED. SAND, LITTLE FINE SAND, TR. GRAVEL			7 8 10 10		
		S-5		.6					SM	27 10 17 20		
10		S-6		.9			10' SILTY FINE SAND: BROWN TO DULL YELLOW, TR. TO LITTLE GRAVEL, FIRM IN PLACE, MOIST; SATURATED w/ OBSERVABLE CONTAMINATION AFTER 15.5'			9 11 24 15		
		S-7		1.0						11 10 7 9		
		S-8		.6		45				7 7 7 5		
15		S-9		1.1		10	16' SANDY SILT 18': BROWN TO OLIVE BROWN, TR. GRAVEL - GRADES TO WELL SORTED SAND & SILT		ML	3 4 2 3		
		S-10		.9		13	SILTY SAND & GRAVEL: BLACK, OLIVE BROWN & BROWN w/ ANGULAR COARSE FRAGMENTS (AS IN A TILL), SATURATED; CONTAMINATION DESTROYS LITHOLOGY			4 5 3 4		
20		S-11		.6		54			SM	3 3 3 3		
		S-12		1.3	Y	12	22' SILTY FINE SAND: GRAY, BROWN, V. WELL SORTED, PERMEABLE, LOOSE			5 4 3 3		
25		S-13		0.4		9				2 5 10 50/0.9		
							B.O.B. @ 25.5'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	TASK 3		BORING NO. B-13
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-10-87	COMPLTD. 11-18-87
METHOD H.S.A., CASING, CORING	CASING SIZE 4" I.D.	PID TIP #1	PROTECTION LEVEL D
GROUND EL 98.6 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED 30'	TOTAL DEPTH 55.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 15.67' (11-20-87)
SCREEN 10.8 (FT)	RISER 44.7 (FT)	MATERIAL PVC/SS TF	ID 2" PAGE 1 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
0	BKG											
5												
10												
15		S-1		.6		10	GRAVELLY SILTY SAND (FILL) BROWN, WET, WITH VISIBLE COAL TAR SHEEN & ODOR		SM	27 30 59/.3		▽
20		S-2		1.2		50	SILTY SAND TAN, WET, TR. GRAVEL, W/ OBVIOUS COAL TAR CONTAMINATION		SM	3 3 3 4		
23'		S-3		2.0		22	GRAVELLY SILTY SAND BRN. TO GRAY BRN C. SAND TR. GRAVEL & SILT OVER WELL SORTED F. SAND, OVER WEATHERED ROCK,		GM	2 2 2 5		
25		S-4		1.0		10	25.5' BEDROCK LITTLE SLT, SAT., CONTAM.			4 50/0.2		
							SHALE BLACK, UNWEATHERED, HARD, THINLY LAMINATED					
30		R-1		97 %								
35												

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	TASK 3		BORING NO. B-13
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-10-87	COMPLTD. 11-18-87
METHOD H.S.A., CASING, CORING	CASING SIZE 4" I.D.	PID TIP #1	PROTECTION LEVEL D
GROUND EL 98.6 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED 30'	TOTAL DEPTH 55.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN 10.8 (FT)	RISER 44.7 (FT)	MATERIAL PVC (SS) TF	ID 2" PAGE 2 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % 20 40 60 80 100	WELL DATA	EL. (FT)
35							SHALE BLACK, FRESH UNWEATHERED BEDDING ON MM SCALE					
40		R-2		100 %								
45												
50		R-3		100 %			FRACTURE AT 55' PRODUCED COLORS ON RETURN WATER — CORE SHOWED VISIBLE COAL TAR CONTAMINATION					
55							B.O.B. @ 55.5'					
60												

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

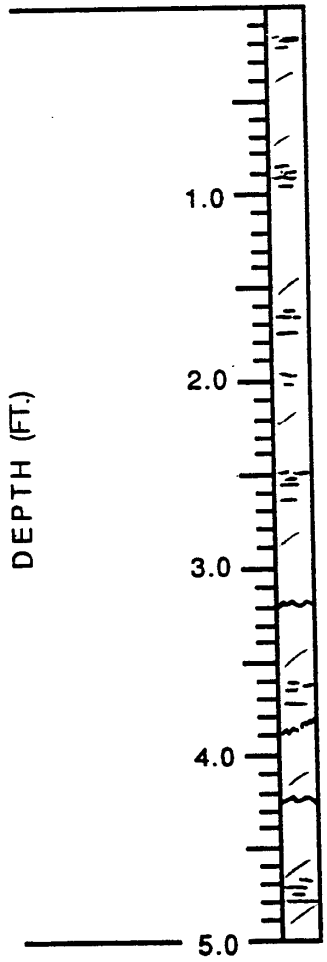
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-17-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 25.5 TO 35.5
CORE LENGTH (FT.): 10	CORE RECOVERY : 9.7 (FT.) 97 (%)	RQD: 95 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK, UNWEATHERED, HARD, THINLY LAMINATED,

BEDDING ∠'S FROM HORIZONTAL

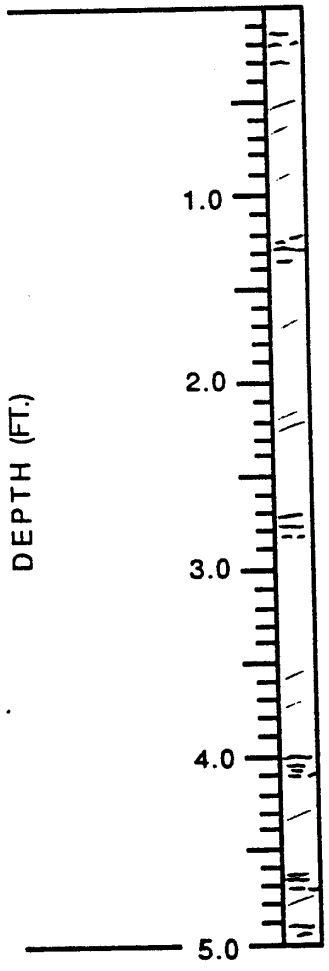
DEPTH	∠
26'	45-50°
28'	10°
30'	15°
32'	15°
34'	15°

AT : 33.4', 34', 31.7' HAVE V. SMALL JOINTING, REHEALED.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-17-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 35 TO 45
CORE LENGTH (FT.): 10	CORE RECOVERY: 10 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE
NO UNUSUAL FEATURES

BEDDING AT 15° TO HORIZONTAL

VISUAL IDENTIFICATION
ROCK CORES

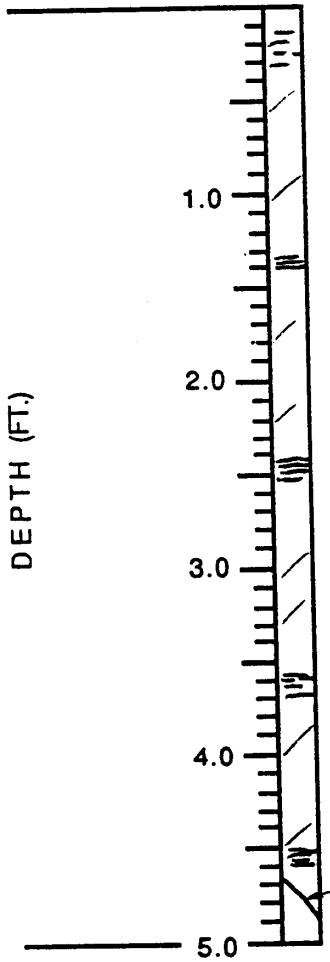
SHEET 3 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-18-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 45 TO 55.5
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.) 100 (%)	RQD: 98 (%)	ROCK QUALITY : EXCELLENT

ROCK DESCRIPTION AND IDENTIFICATION

SHALE FRESH, UNWEATHERED, BLACK TO BLACKISH GRAY W/ THIN BEDDING ON MM SCALE

BEDDING AT 20° TO 25° FROM HORIZONTAL



55' - FRACTURE (ZONE) W/ GRAVEL SIZE SHALE FRAGMENTS & CALCITE FRAGMENTS HAS VISIBLE COAL TAR SMELL & SHEEN ON FRACTURE FACES (& RETURN WATER ALSO)

55.3' - 2 HEALED FRACTURES @ 62°

55.5' - BEDDING OF 20° TO HORIZONTAL W/ FRACTURE @ 62° FROM HORIZONTAL

E.C. JORDAN CO.

MECHANICVILLE	TASK 3		BORING NO. B-14
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-9-87	COMPLTD. 11-19-87
METHOD H.S.A. & CORING	CASING SIZE 4" ID	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 98.7 Rel.	SOIL DRILLED 23.5'	ROCK DRILLED 31.5'	TOTAL DEPTH 55'
LOGGED BY T. LONGLEY	CHECKED BY CN	DATE 12/29/87	▽ BELOW GROUND 16.45' (11-20-87)
SCREEN 11 (FT)	RISER 30 (FT)	MATERIAL PVC (SS) TF	ID 2"

PAGE 1 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD %	WELL DATA	EL. (FT)
0	BKG	S-1		.8		BKG	SAND — BROWN, TRACE GRAVEL, DRY		SP	1 1 1 1		
		S-2		.4						1 1 1 1		
		S-3		1.6			4.5' V. FINE SAND — BRIGHT ORANGE TO BRN, VARIED, LITTLE SILT, BLACK & DK. BRN. LENSES, BL. CINDER MAT'L. @ 7.5'			2 3 3 2		
5		S-4		1.6					SM	3 5 5 6		
		S-5		.5			8' GRAVELLY SANDY SILT — BROWN, ORANGE, DK. GRAY, SLIGHTLY PLASTIC, FIRM IN PLACES, MOIST			4 6 7 9		
10		S-6		1.1					ML	5 12 10 13		
		S-7		.6						12 19 12 10		
		S-8		1.2			14' V. FINE SAND — OLIVE BRN, LITTLE SILT, TR. GRAVEL, MOIST, PROM. MOTTLES		SP	8 6 2 3		
15		S-9		1.8			16' SILTY FINE SAND — BRIGHT ORANGE, OLIVE BROWN, TR. GRAVEL, V. WELL SORTED, MOIST W/ DK. BRN. MOTTLES; WET AFTER 18'; GRAY SHALE FRAGS. @ 20' - FIRM & WELL GRADED HERE			– 2 3 3		
		S-10		1.0	Y				SM	6 11 12 13		
20		S-11		.2						18 12 11 8		
		S-12		.2			22' WEATHERED ROCK - DK. GRAY TO BLACK FRESH SHALE FRAGS. W/ BR. MUDDY SAND & SILT		GM	6 7 10 50/.1		
25							23.5 BEDROCK SHALE — BLACK, THINLY LAMINATED, HARD, FRESH, UNWEATHERED					
30		R-1		95 %			AT 33.8', SET OF JOINTS - RETURN WATER SHOWED SOME COLORS OF CONTAMINATION					
35												

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	TASK 3		BORING NO. B-14
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-9-87	COMPLTD. 11-19-87
METHOD H.S.A. & CORING	CASING SIZE 4"ID	PID TIP #1	PROTECTION LEVEL D
GROUND EL 98.7 Rel.	SOIL DRILLED 23.5'	ROCK DRILLED 31.5'	TOTAL DEPTH 55'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN 11 (FT)	RISER 30 (FT)	MATERIAL PVC/SS/TF	ID 2" PAGE 2 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % 20 40 60 80 100	WELL DATA	EL. (FT)
35	BKG						SHALE					
		R-2		97 %			SOME DRILLERS BREAKS IN AN OTHERWISE FRESH, UNWEATHERED BLACK, THINLY LAMINATED BLACK SHALE					
40												
		R-3		100 %								
45												
		R-4		100 %							CUTTINGS & SAND	
50												
55							BOB @ 55'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

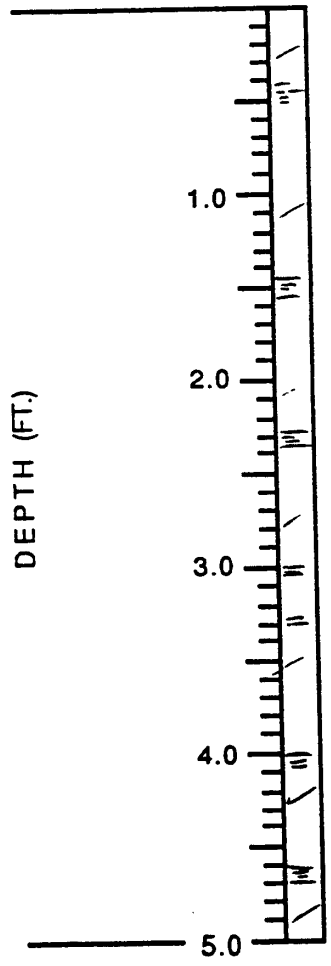
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 25 TO 35
CORE LENGTH (FT.): 10	CORE RECOVERY: 9.5 (FT.) 95 (%)	RQD: 83 (%)	ROCK QUALITY: GOOD



ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK THINLY LAMINATED, HARD, FRESH, UNWEATHERED

27.7'-28.4' } MICRO FRACTURES THAT
31.4'-32.4' } RETAIN WATER AS CORE DRIES

FROM 28' TO 35', NUMEROUS BREAKS - MOSTLY PARALLEL TO BEDDING

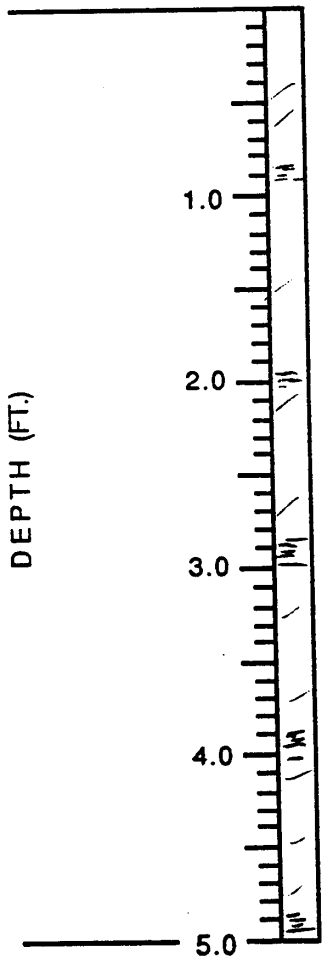
AT 33.8', HAVE A SET OF RANDOMLY ORIENTATED JOINTS; DURING DRILLING, THE RETURN WATER FROM THIS ZONE SHOWED A SHEEN; CORE GIVE NO TIP READINGS

BEDDING	DEPTHS	ANGLES
	26'	25°
	31'	35°
	34'	20°

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 35 TO 42
CORE LENGTH (FT.): 7	CORE RECOVERY : 6.8 (FT.) 97 (%)	RQD: 91 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

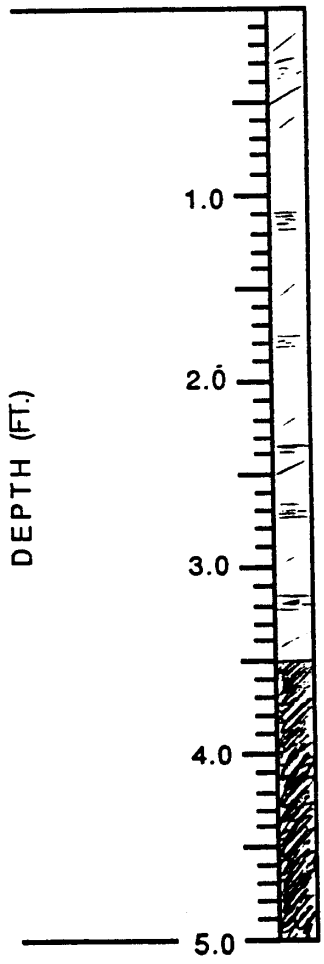
SHALE AS ABOVE

37.7' to 41' HIGH ANGLE FRACTURES 80° FROM HORIZONTAL- REHEALED & LINED W/ CALCITE- NO APPARENT WEATHERING- BROKE DUE TO DRILLING ACTION

VISUAL IDENTIFICATION
ROCK CORES

SHEET 3 OF 4

JOB NO.: **4945-03**	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 42 TO 45
CORE LENGTH (FT.): 3	CORE RECOVERY : 3 (FT.)/100 (%)	RQD: 100 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

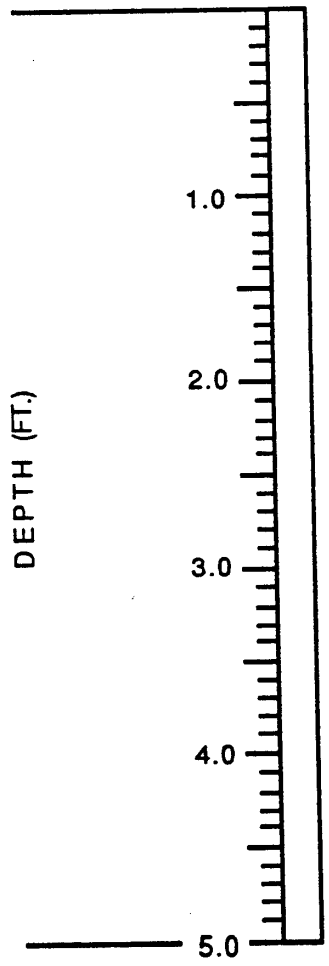
SHALE AS ABOVE

BEDDING	DEPTHS	ANGLES
	36'	20°
	40'	15°
	42'	15°

VISUAL IDENTIFICATION
ROCK CORES

SHEET 4 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-4	CORE DIA. (IN.): 2	DEPTH (FT.): 45 TO 55
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.)/100 (%)	RQD: 98 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE
COMPETENT, FRESH, NO WEATHERING
HARD
SOME DRILLERS BREAKS

MECHANICVILLE	TASK 3		BORING NO. B-15
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-13-87	COMPLTD. 11-17-87
METHOD H.S.A. & CORING	CASING SIZE 4" I.D.	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 88.5 Rel.	SOIL DRILLED 8.7'	ROCK DRILLED 30.3'	TOTAL DEPTH 39'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 8.19' (11-20-87)
SCREEN 11 (FT)	RISER 13 (FT)	MATERIAL PVC (SS) TF	ID 2" PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD %	WELL DATA	EL. (FT)
0	BKG	S-1		1.2		BKG	FILL: BLACK CINDER & ASH FILL, TRACE COAL, SOME BRICK PIECES, etc., MOIST, LOOSE			2 8 5 1		
		S-2		0.0						1 2 3 3		
5		S-3		0.7		BKG				1 1 1 1		
		S-4		1.4		BKG	7.5' GRAVELLY SILTY SAND, BRN. TO DK BRN. MOIST. OVER HIGHLY WEATHERED ORIENTED SHARDS OF ROCK - & SOIL			1 4 6 8		
		S-5		0.9		BKG	8.0 9.0'			16 45 50/a2		
10							SHALE BEDROCK: BLACK TO GRAYISH BLACK, THINLY LAMINATED, FRESH, FEW DRILLERS BREAKS.					
15		R-1		82 %								
20												
25							BREAK AT 25.5'					
30		R-2		99 %								
35		R-3		100 %			B.O.B. @ 39'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

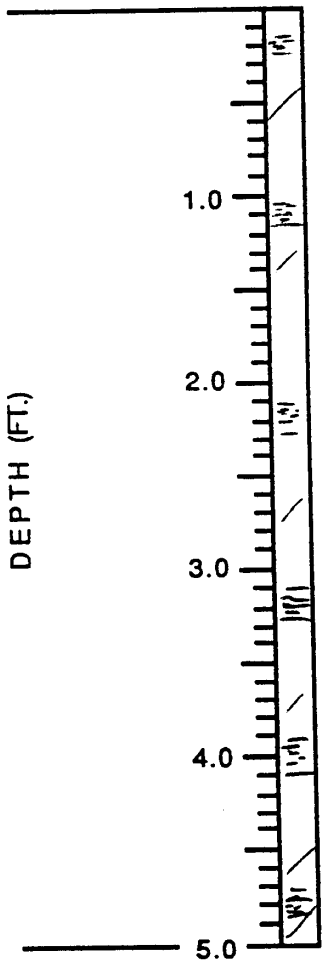
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 3

JOB NO.: **4945-03**	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CM 12/29/87
BORING NO.: B-15	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 11 TO 21
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.)/100(%)	RQD: 100 (%)	ROCK QUALITY : EXCELLENT



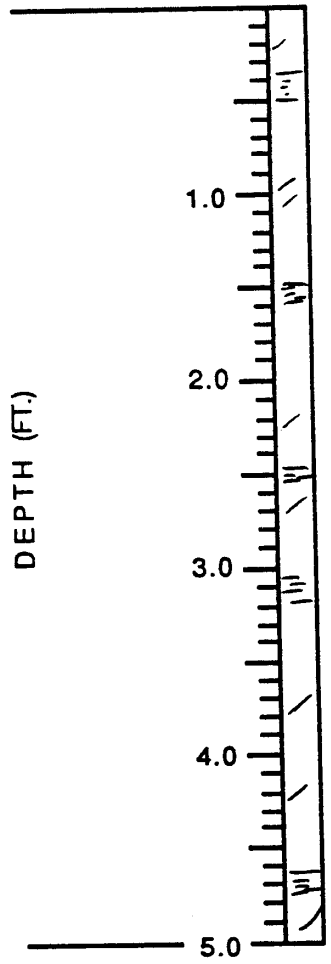
ROCK DESCRIPTION AND IDENTIFICATION

SHALE — BLACK TO GRAYISH BLACK, THINLY LAMINATED, FRESH. BEDDING AT 50° TO HORIZONTAL, HARD CALCITE LAYERS IN MM SCALE PARALLEL TO BEDDING. A FEW DRILLERS BREAKS.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CN 12/29/87
BORING NO.: B-15	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 21 TO 29.5
CORE LENGTH (FT.): 8.5	CORE RECOVERY : 8.4 (FT.) 99 (%)	RQD: 94 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

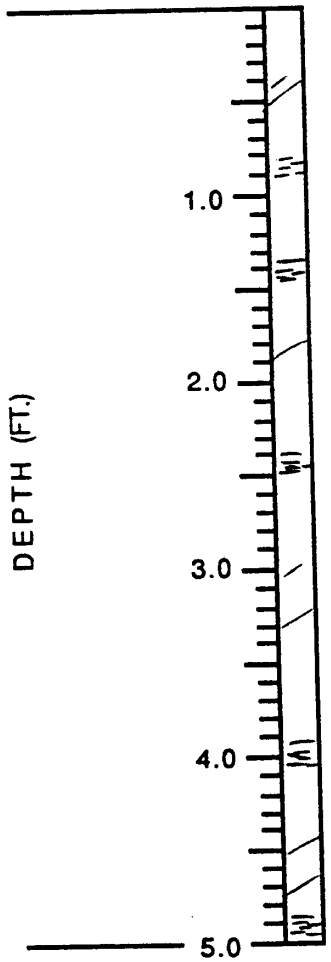
SHALE AS ABOVE; SOME DISSEMINATED PYRITE PRODUCED H_2S SMELL WHILE DRILLING

25.5' - NATURAL BREAK @ 40° FROM HORIZONTAL - IN REHEALED FRACTURE ZONE - SOME SERICITE HERE.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 3 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CM 12/29/87
BORING NO.: B-15	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 29.5 TO 39
CORE LENGTH (FT.): 9.5	CORE RECOVERY : 9.5 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE

BEDDING DEPTHS	X FROM HORIZ.
30'	45°
34'	40°
37'	35°
39.5'	25°

AT 31.8', 35.6, & 36.4' HAVE FRACTURES BUT THEY ARE FRESH & UNWEATHERED

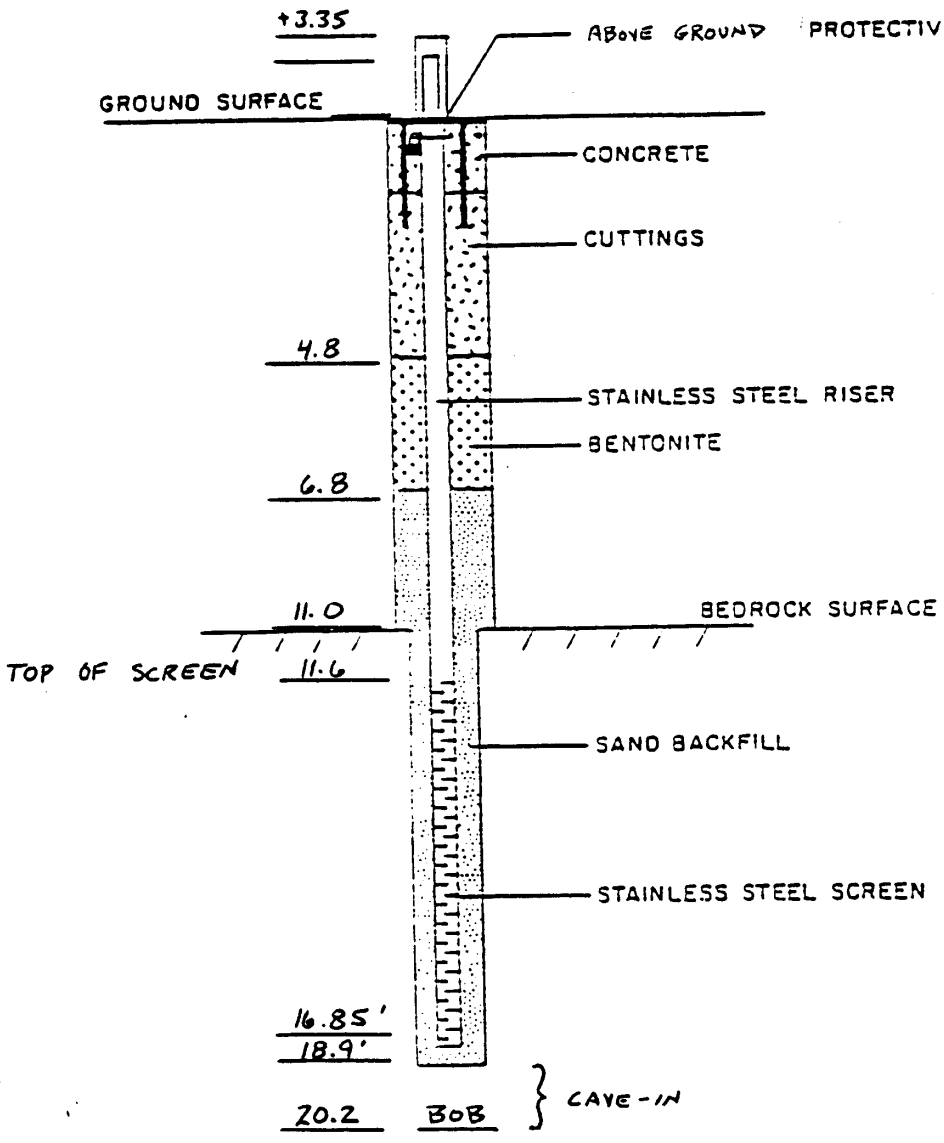
APPENDIX A-3

MONITORING WELL INSTALLATION DIAGRAMS

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-1
INSTALLED BY L. ESPY, S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

ELEV., FT. DEPTH, FT.

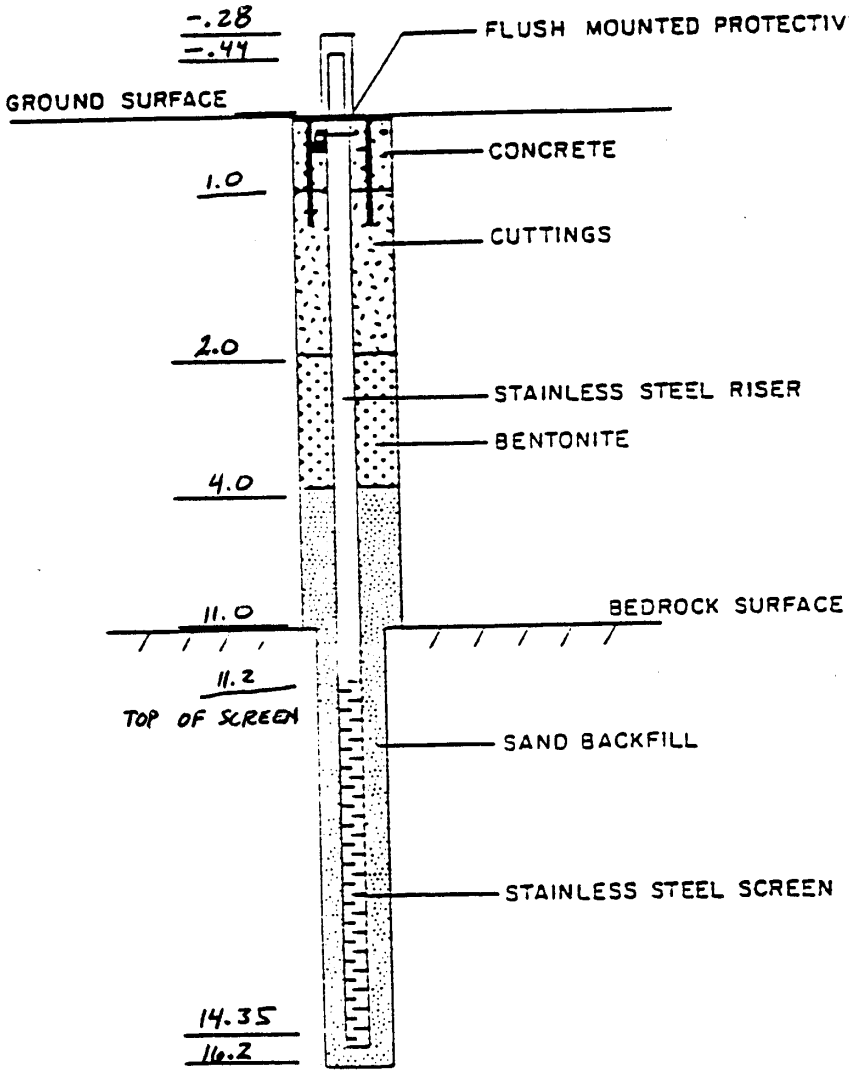


ECJORDANCO

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-2
INSTALLED BY L. ESPY, S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

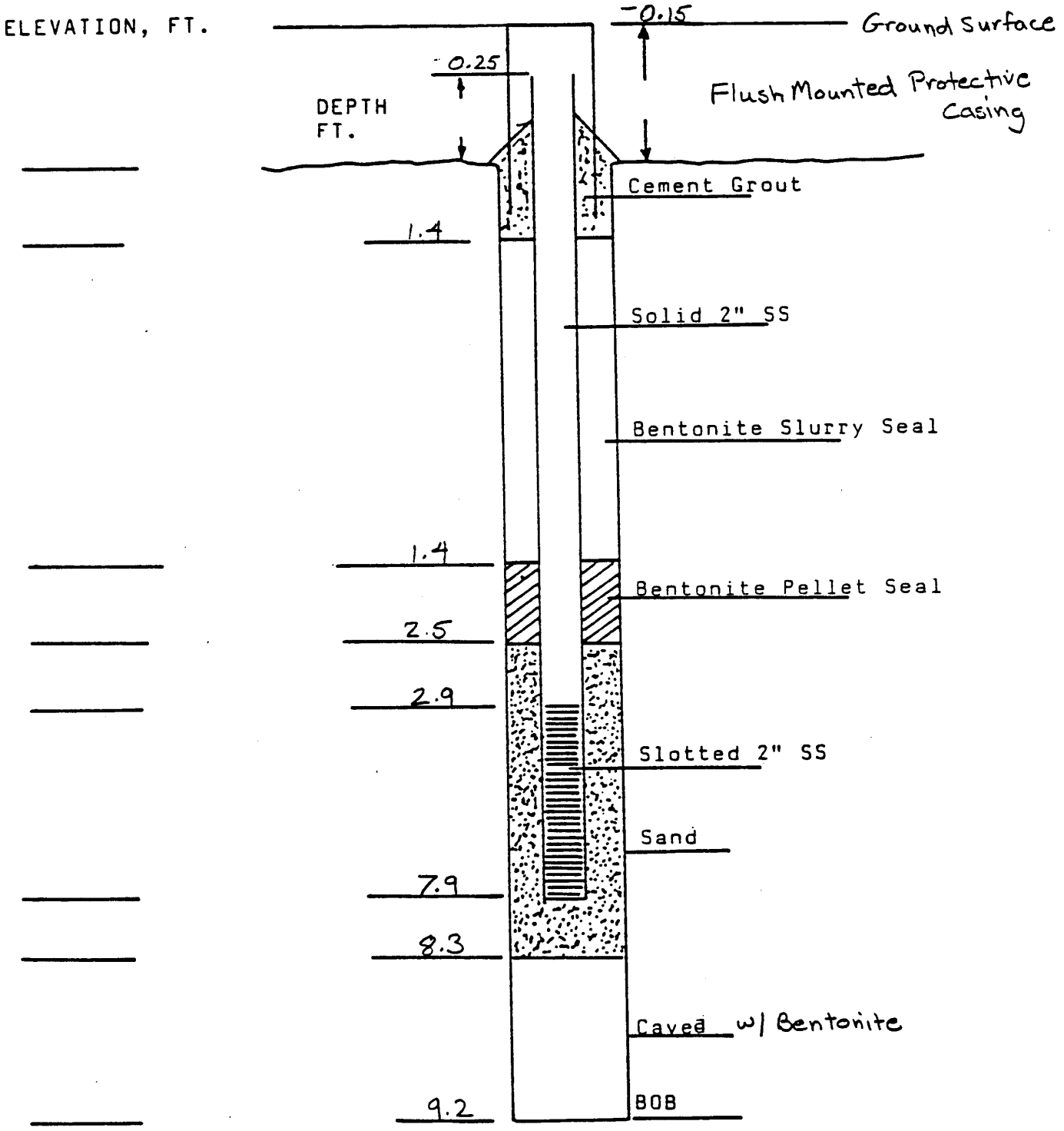
ELEV., FT. DEPTH, FT.



E.C. JORDAN CO.

WELL INSTALLATION DETAILS

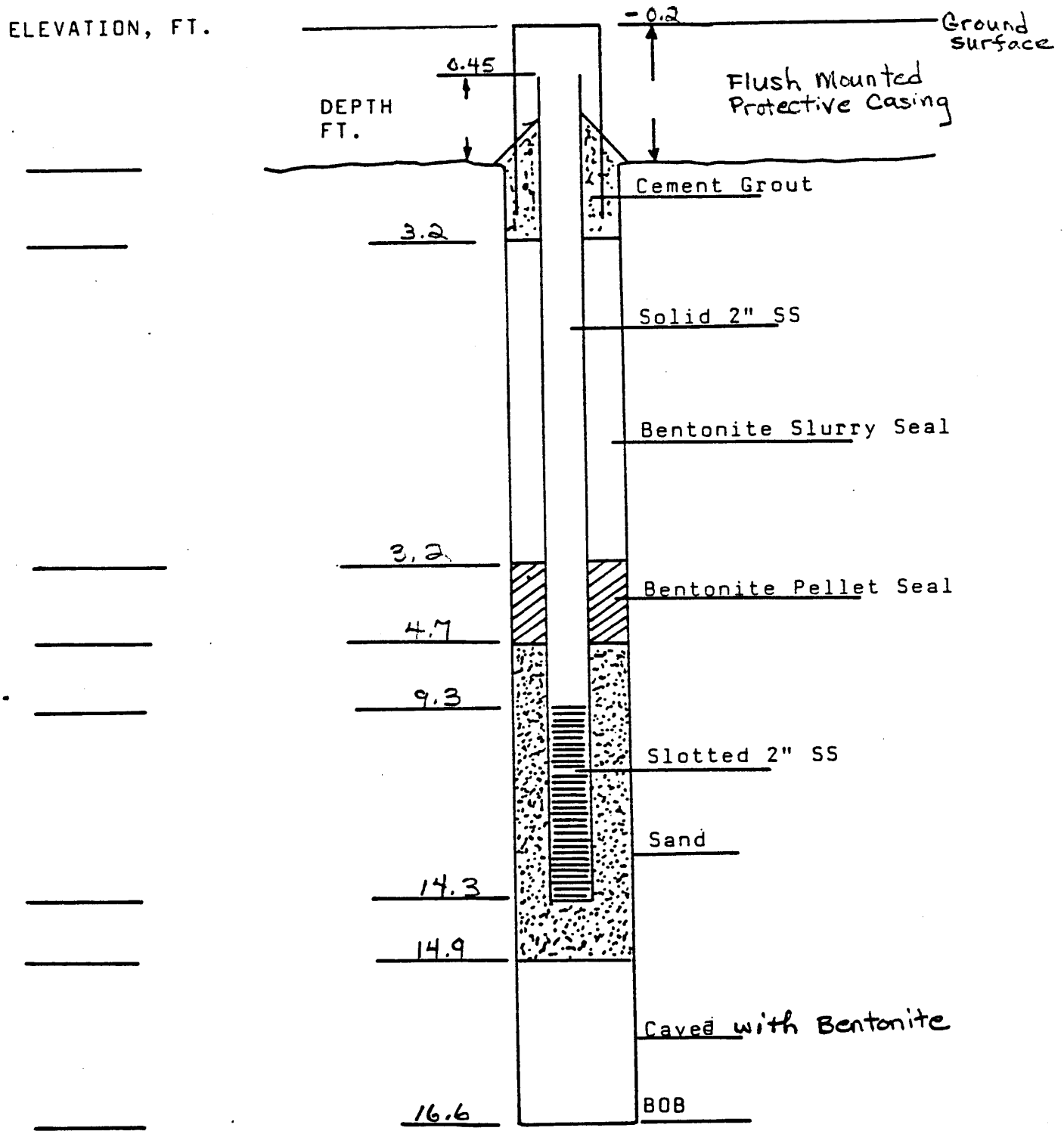
Project No. 4945-02	Project Name NYSEG MECHANICVILLE	Well No. MW-3
Installed By SNW/JWP	Date Installed 8/6/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material SS	Backfill Material #3 Jersey Sand



EC JORDAN CO

WELL INSTALLATION DETAILS

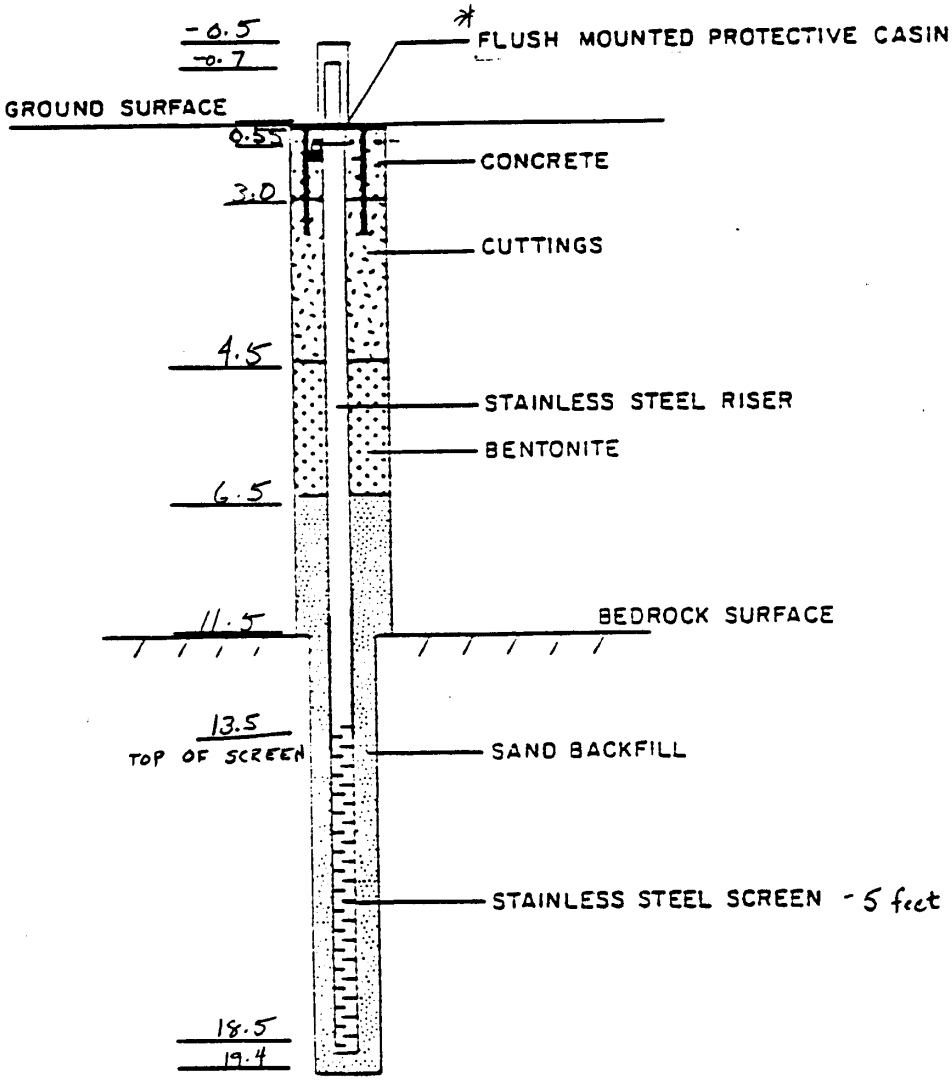
Project No. 4945-02	Project Name NYSEG Mechanicville	Well No. MW-4
Installed By SNW, LWE, ICM	Date Installed 7/30/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material Stainless Steel	Backfill Material #3 Jersey sand



MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-5
INSTALLED BY SNW; JWP	DATE INSTALLED 8/5/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 Jersey Sand

ELEV., FT. DEPTH, FT.



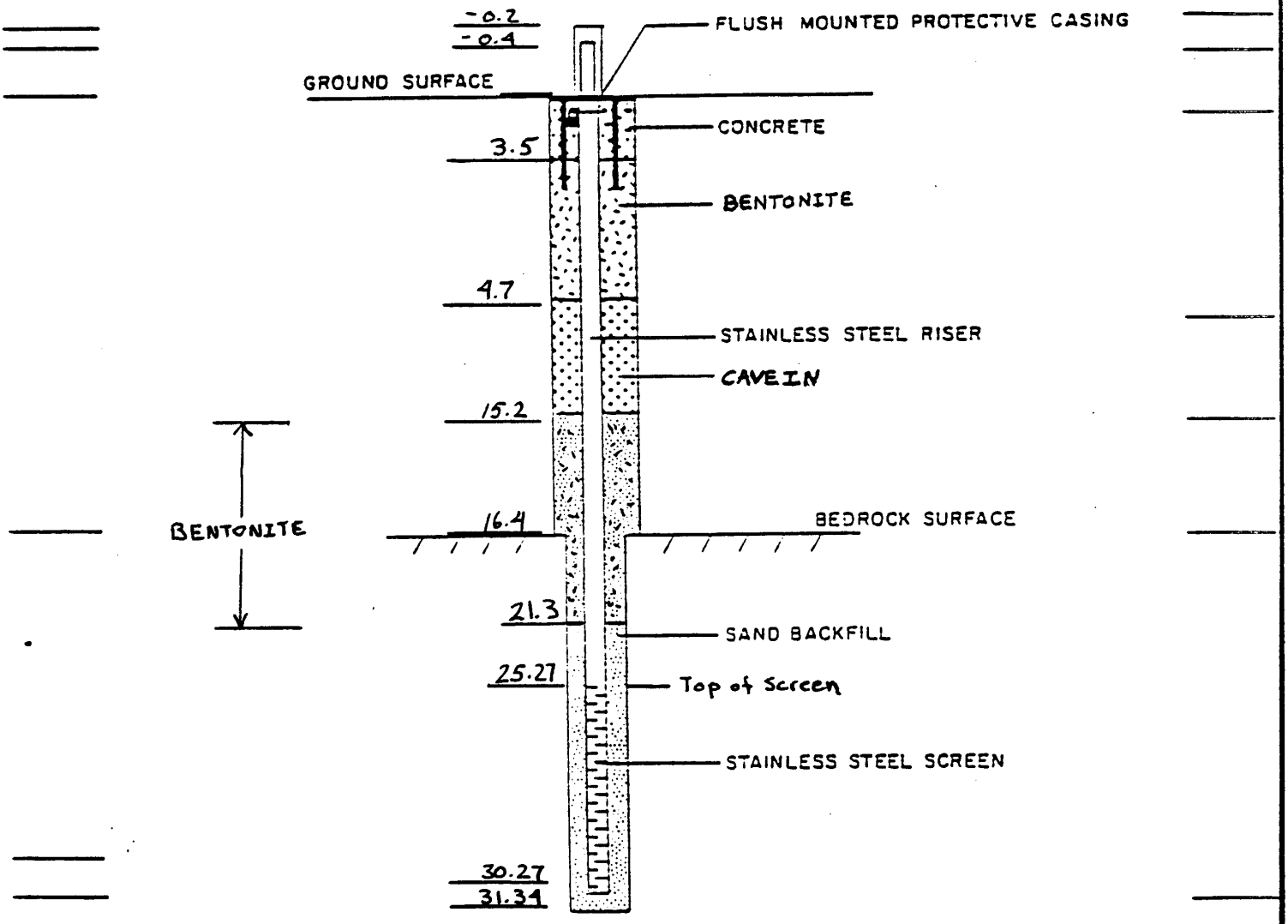
EC JORDAN CO

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-6
INSTALLED BY	**DATE INSTALLED**	**BORING DIAMETER**
SNW	7-29-86	4.0"
WELL DIAMETER	**WELL MATERIAL**	**BACKFILL MATERIAL**
2.0"	SS	#3 JERSEY SAND

ELEV., FT.

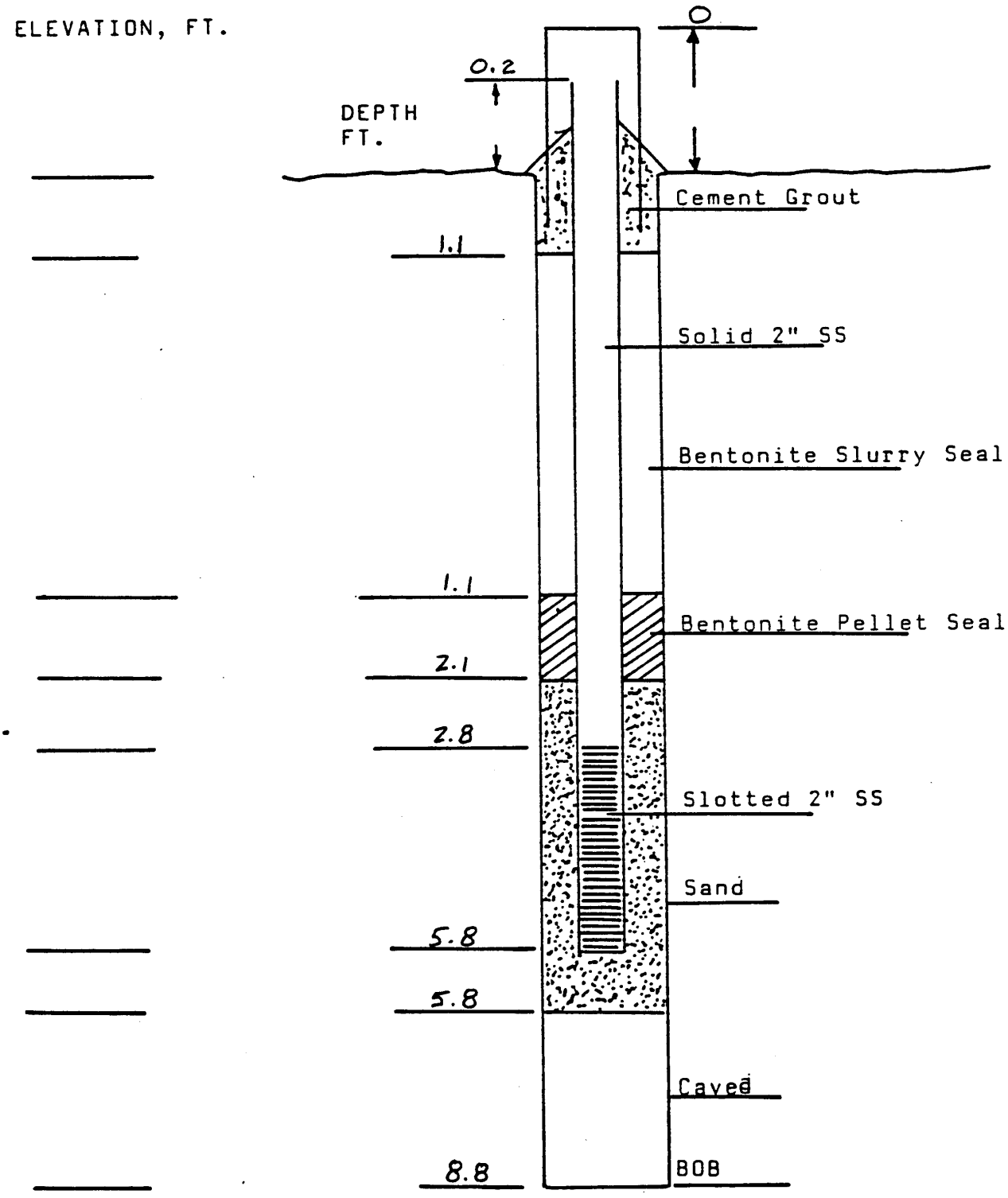
DEPTH, FT.



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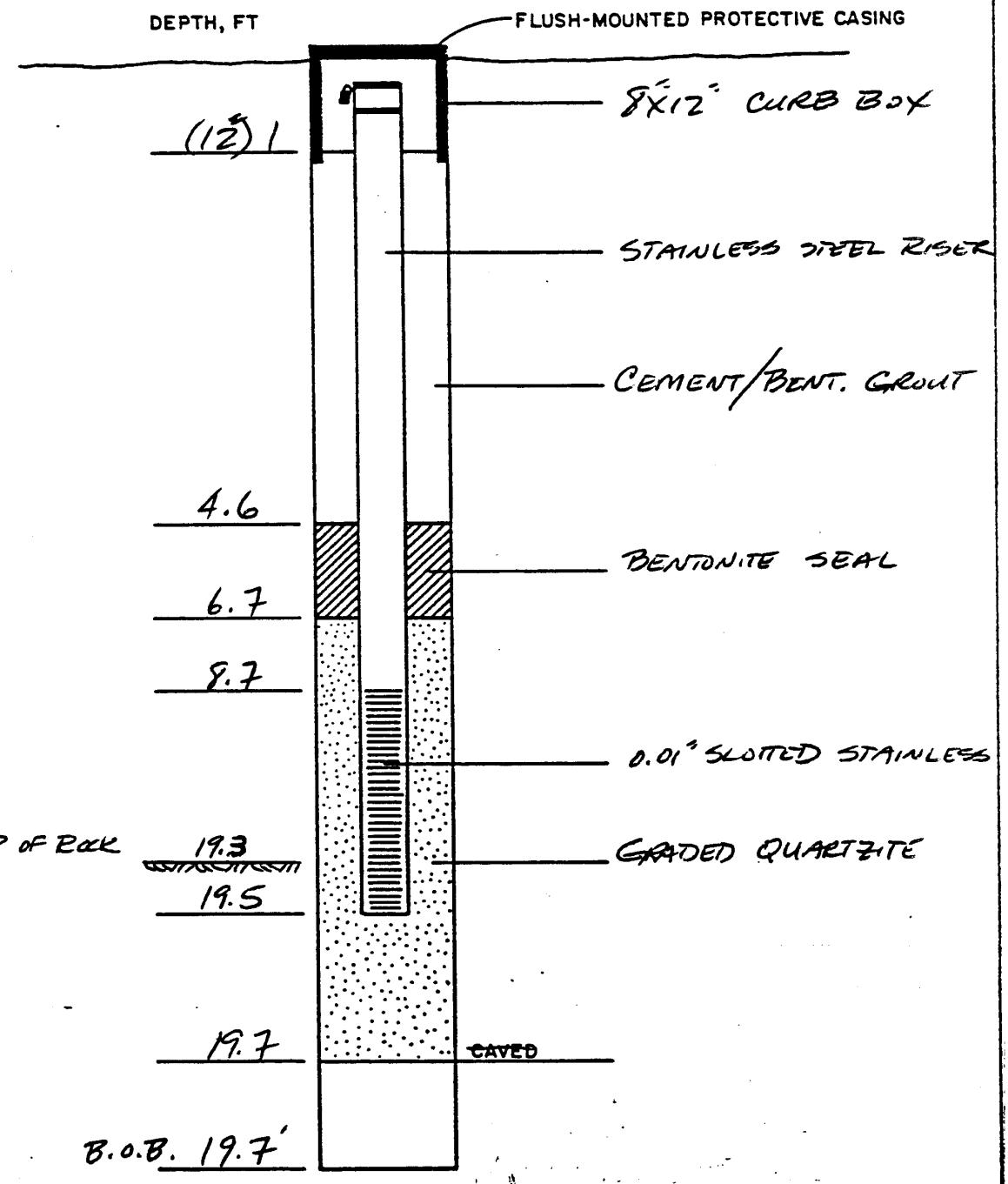
WELL INSTALLATION DETAILS

Project No. 4945 - 02	Project Name NYSEG MECHANICVILLE	Well No. Piezometer P-7
Installed By S. Wibby L. Espy	Date Installed 7-31-86	Boring Diameter 8.75"
Well Diameter 2.0"	Well Material PVC	Backfill Material #3 JERSEY SAND



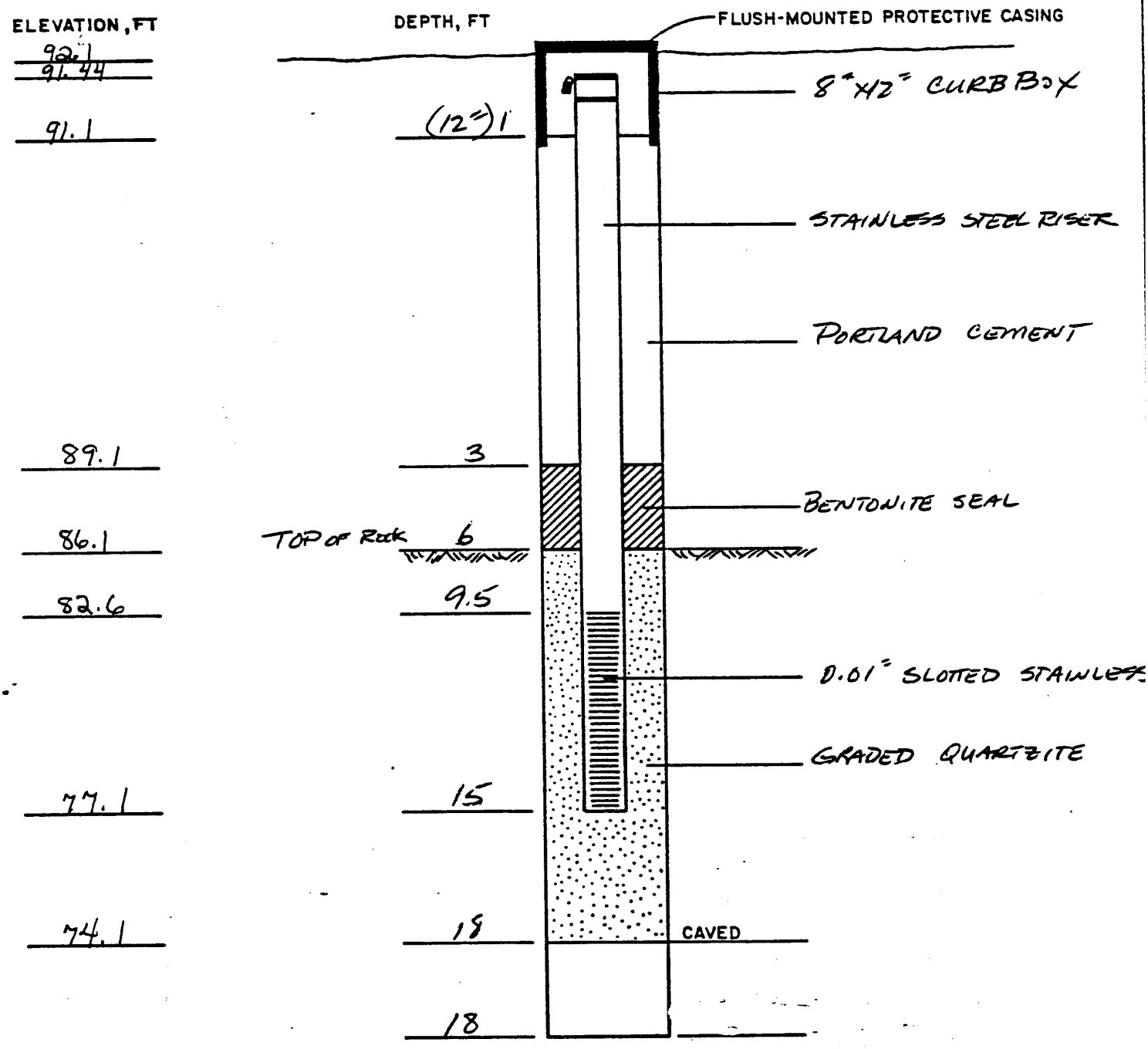
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-10
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-12-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCHEDULE 40 304 STAINLESS STEEL	BACKFILL MATERIAL #4 Q-Rck GRADED QUARTZITE



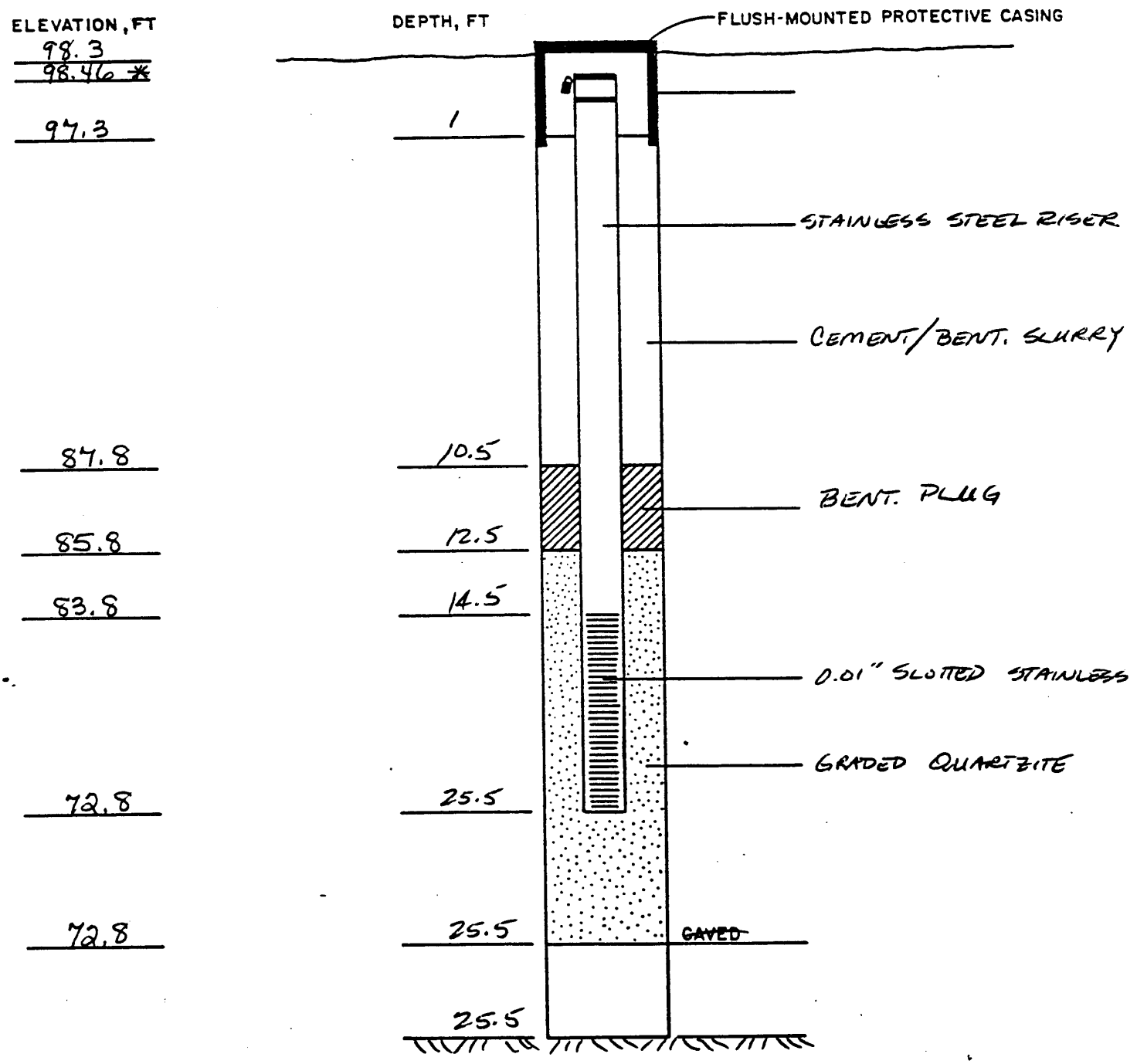
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-11
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-13-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCH. 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



WELL INSTALLATION DETAILS

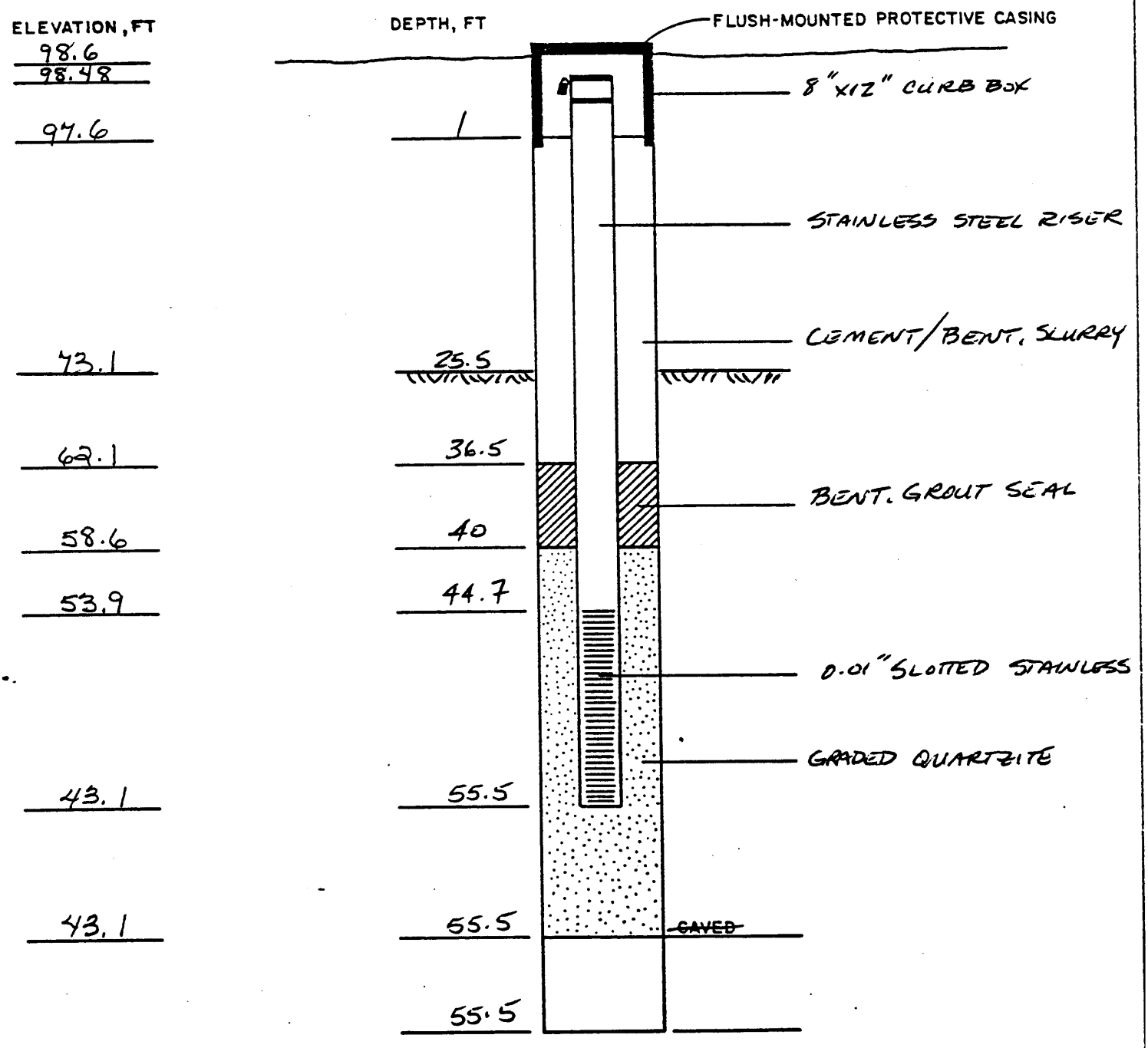
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-12
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-18-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



* Riser is slightly above the ground surface

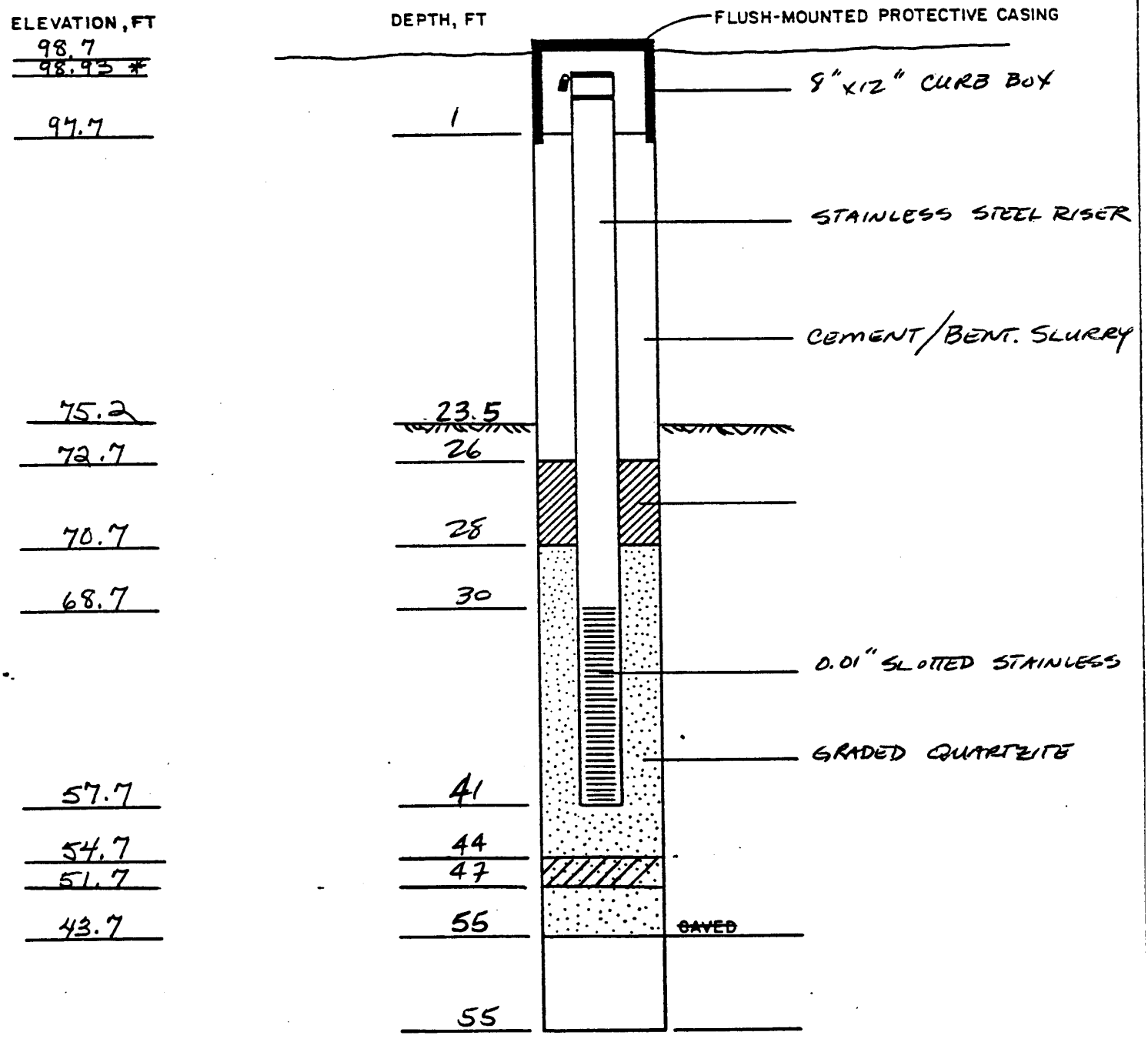
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-13
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-18-87	BORING DIAMETER 10" Soil & 4" & 3" IN Rock
WELL DIAMETER 2"	WELL MATERIAL SCH. 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



WELL INSTALLATION DETAILS

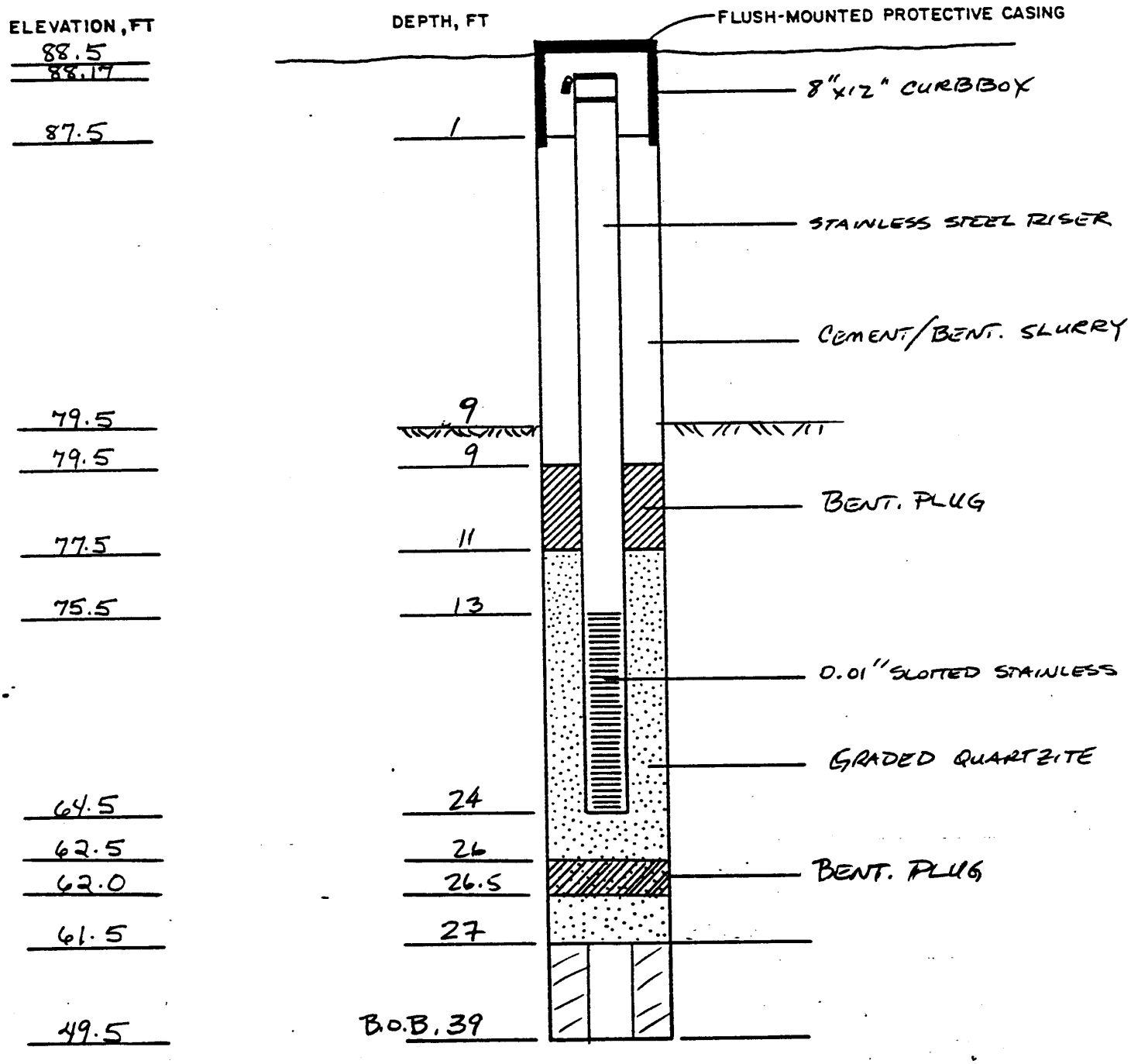
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-14
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-19-87	BORING DIAMETER 11" SOIL 4" & 3" IN ROCK
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



* Riser is slightly higher than the ground surface.

WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-15
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-17-87	BORING DIAMETER 10" Soil 4" ϕ 3" in Rock
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



APPENDIX A-4

PERMEABILITY AND DISCHARGE TEST METHODS AND CALCULATIONS

PERMEABILITY TEST METHODS

FALLING HEAD METHOD

In this method, an excess head is created in the monitoring well/piezometer by adding a volume of water which is then allowed to seep into the soil. Measurements are made of the water level in the monitoring well/piezometer over a given period of time. These measurements are continued until the rate of decrease or excess head becomes small.

RISING HEAD METHOD

In this method, water is removed from the monitoring well/piezometer and the rate of rise of the water level is observed until the rate of rise in water level becomes small.

PACKER TEST METHOD

This method is used to test the permeability of bedrock. Water is introduced under pressure to the borehole through tubing that discharges the water into a subsurface interval isolated by inflatable plugs. This allows water to seep only into the bedrock zone of interest. A flow meter was used to make measurements of the amount of water that the formation accepts.

PERMEABILITY DATA SHEET
EXAMPLE CALCULATION - FALLING HEAD TEST
MECHANICVILLE SITE

TYPE OF TEST: Falling head

Equation: $$K_h = \frac{(d^2)\ \ell n\ \frac{2mL}{D}}{8L\ (t_2 - t_1)} \times \ell n\ \frac{H_1}{H_2}$$ For uniform soil conditions

Test Data for MW-1:

m = Transformation Ratio = 1
L = Length of monitored zone = 12.1 feet = 368.8 cm
D = Diameter of borehole = 7.5 inches = 19.05 cm
d = Diameter of well pipe = 2 inches = 5.08 cm
t_1 = Time when flow rate begins to stabilize = 50 seconds
H_1 = Head at t_1 = 0.61 feet
t_2 = Time when flow rate stabilization drops = 180 seconds
H_2 = Head at t_2 = 0.03 feet

PERMEABILITY DATA SHEET
EXAMPLE CALCULATION - RISING HEAD TEST
MECHANICVILLE SITE

TYPE OF TEST: Rising head

Equation: $$K_h = \frac{(d^2)\ \ell n\ \frac{2mL}{D}}{8L\ (t_2 - t_1)} \times \ell n\ \frac{H_1}{H_2}$$ For uniform soil conditions

Test Data for MW-11:

m = Transformation Ratio = 1
L = Length of monitored zone = 5.5 feet = 167.64 cm
D = Diameter of borehole = 6 inches = 15.24 cm
d = Diameter of well pipe = 2 inches = 5.08 cm
t_1 = Time when flow rate begins to stabilize = 100 seconds
H_1 = Head at t_1 = 1.49 feet = 45.42 cm
t_2 = Time when flow rate stabilization drops = 390 seconds
H_2 = Head at t_2 = 0.61 feet = 18.59 cm

PERMEABILITY DATA SHEET
EXAMPLE CALCULATION - PACKER TEST
MECHANICVILLE SITE

TYPE OF TEST: Packer Test

Equation: $K_h = \frac{Q}{2\Pi\ L\ H} \ell n \frac{L}{r}$ $L \geq 10r$

Test Data for MW-13:

Q = Constant rate of flow into the borehole = 7.4 gal/min = 481 cm^3/sec
L = Length of test section = 13 feet = 396.24 cm
H = Differential head on test section = 1,597.2 cm
r = Radius of the borehole = 2 inches = 5.08 cm

PERMEABILITY TEST RESULTS
MECHANICVILLE SITE

STRATA TESTED	APPROXIMATE DEPTH OF TEST INTERVAL[1]	TEST LOCATION	TYPE TEST	HYDRAULIC CONDUCTIVITY cm/sec	HYDRAULIC CONDUCTIVITY ft/day	REMARKS
Task 2 Wells						
Fill, Natural Soil, Weathered & Unweathered Rock	7'-19'	MW-1	In Situ	9.5×10^{-4}	2.7	Falling Head
Fill, Natural Soil, Weathered & Unweathered Rock	4'-16'	MW-2	In Situ	1.1×10^{-3}	3.1	Falling Head
Fill, Weathered Rock	2.5'-9'	MW-3	In Situ	1.6×10^{-4}	0.45	Falling Head
Fill, Weathered & Unweathered Rock	5'-16.5'	MW-4	In Situ	1.9×10^{-4}	0.54	Falling Head
Fill, Natural Soil, Weathered & Unweathered Rock	6.5'-19.5'	MW-5	In Situ	5.4×10^{-4}	1.5	Falling Head
Weathered & Unweathered Rock	21.5'-31.5'	MW-6	In Situ	7.5×10^{-5}	0.21	Falling Head
Unweathered Rock	25'-30'	MW-6	In Situ	1.8×10^{-4}	0.51	Packer Test (15 psi)
Unweathered Rock	25'-30'	MW-6	In Situ	2.0×10^{-4}	0.57	Packer Test (30 psi)
Task 3 Wells						
Natural Soil, Weathered Rock	7'-20'	MW-10	In Situ	2.2×10^{-5}	0.06	Rising Head
Unweathered Rock	6'-18'	MW-11	In Situ	2.0×10^{-4}	0.57	Rising Head
Natural Soil	12.5'-25.5'	MW-12	In Situ	4.0×10^{-4}	1.10	Rising Head
Unweathered Rock	40'-55.5'	MW-13	In Situ	3.0×10^{-4}	0.72	Rising Head
Unweathered Rock	28'-55'	MW-14	In Situ	2.0×10^{-4}	0.57	Rising Head

PERMEABILITY TEST RESULTS
MECHANICVILLE SITE
(continued)

STRATA TESTED	APPROXIMATE DEPTH OF TEST INTERVAL[1]	TEST LOCATION	TYPE TEST	HYDRAULIC CONDUCTIVITY cm/sec	HYDRAULIC CONDUCTIVITY ft/day	REMARKS
Unweathered Rock	11'-39'	MW-15	In Situ	1.0×10^{-4}	0.28	Rising Head
Unweathered Rock	32.5'-45.5'	MW-13	In Situ	5.0×10^{-4}	1.4	Packer Test (15 psi)
Unweathered Rock	32.5'-45.5'	MW-13	In Situ	9.0×10^{-4}	2.6	Packer Test (30 psi)
Unweathered Rock	27'-35'	MW-14	In Situ	9.0×10^{-4}	2.6	Packer Test (10 psi)
Unweathered Rock	27'-35'	MW-14	In Situ	4.0×10^{-4}	1.1	Packer Test (20 psi)
Unweathered Rock	35'-45'	MW-14	In Situ	2.0×10^{-4}	0.57	Packer Test (15 psi)
Unweathered Rock	35'-45'	MW-14	In Situ	2.0×10^{-4}	0.57	Packer Test (30 psi)
Unweathered Rock	13'-21'	MW-15	In Situ	4.0×10^{-4}	1.1	Packer Test (10 psi)
Unweathered Rock	13'-21'	MW-15	In Situ	4.0×10^{-4}	1.1	Packer Test (20 psi)
Unweathered Rock	21'-29.5'	MW-15	In Situ	1.0×10^{-4}	0.28	Packer Test (15 psi)
Unweathered Rock	21'-29.5'	MW-15	In Situ	1.0×10^{-4}	0.28	Packer Test (30 psi)
Unweathered Rock	29.5'-39'	MW-15	In Situ	2.6×10^{-5}	0.07	Packer Test (15 psi)
Unweathered Rock	29.5'-39'	MW-15	In Situ	1.4×10^{-5}	0.04	Packer Test (30 psi)

[1] For rising and falling head tests, interval defined from bottom of borehole to bottom of well seal; zone of influence may be larger or smaller due to hydraulic characteristics of formation.

EXAMPLE CALCULATION
SITE GROUNDWATER DISCHARGE TO THE ANTHONY KILL
MECHANICVILLE SITE

$Q = KiA$

For Mechanicville Site:

Q = groundwater discharge, ft^3/day

K = geometric mean hydraulic conductivity = 0.28 ft/day (silty shale) and 1.1 ft/day (shallow bedrock)

i = groundwater gradient = 0.06 ft/ft

A = aquifer cross sectional area = 200 ft^2 (site length = 200 ft; saturated aquifer thickness = 10 ft)

Q (silty shale) = 33.6 ft^3/day or 0.0004 cfs

Q (shallow bedrock) = 132 ft^3/day or 0.002 cfs

Calculated site groundwater discharge to the Anthony Kill is less than 0.003 cfs.

APPENDIX A-5

GROUNDWATER LEVEL DATA

GROUNDWATER LEVEL DATA
MECHANICVILLE SITE

LOCATION	GROUND ELEVATION (Ft.-Relative[1])	RISER ELEVATION (Ft.-Relative[1])	WATER ELEVATION (Ft. Relative[1]) 8/5/86	9/9/86	12/2/86	3/10/87	6/2/87	12/22/87	3/29/88
MW-1	95.9	98.6	87.3	87.3	87.6	88.4	87.4	87.5	87.4
MW-2	91.6	91.3	88.1	88.9	89.0	89.0	88.4	88.8	88.8
MW-3	87.4	87.3	NA	84.6	85.1	85.7	83.6	85.1	85.6
MW-4	91.0	90.6	86.8	87.1	88.1	88.1	87.6	NM[2]	87.9
MW-5	88.4	87.9	78.4	78.2	78.9	NM	79.9	NM	79.1
MW-6	91.0	90.7	86.8	86.9	86.9	87.7	87.2	87.7	87.6
P-1	92.5	95.0	85.7	85.5	86.7	86.40	85.5	85.8	86.2
P-2	95.2	98.8	87.1	86.9	87.6	89.70	86.9	87.2	87.4
P-3	91.8	91.8	88.6	89.7	91.8	89.30	88.5	NM	89.0
MW-10	96.7	96.5						85.9	85.4
MW-11	92.1	91.4						87.5	87.6
MW-12	98.3	98.5						84.7	84.4
MW-13	98.6	98.5						82.6	82.8
MW-14	98.7	98.9						82.5	82.4
MW-15	88.5	88.2						80.3	81.0
Bridge[3]		86.3						77.7	78.8

NOTES:

[1] Elevation is relative to the assumed datum used to prepare the survey (see Appendix A-7).
[2] NM = Not measured due to well inaccessibility or heavy contamination.
[3] Surface water elevation of Anthony Kill at bridge.

APPENDIX A-6

MONITORING WELL SAMPLING PROCEDURES

MONITORING OF GROUNDWATER WELLS

1. Check the well for proper identification and location.

2. Measure and record the height of protective casing.

3. After unlocking the well and removing any well caps, measure and record the ambient and well-mouth organic vapor levels using the photoionization meter. If organic vapor levels at breathing height reach 5 ppm, the sampler shall utilize the appropriate safety equipment as described in the Health and Safety Plan.

4. Using the electronic water level meter, measure and record the static water level in the well to the nearest 0.01 foot. Measure also the depth to the well bottom from a constant reference point on the top of the well riser. Upon removing the water level wire, rinse it with laboratory-grade isopropanol or ethanol and then distilled water.

5. Calculate the volume of stagnant water in the well casing. Volume in liters equals 0.154 times the square of the inside diameter of the casing (in inches) times the depth of water (in feet).

SAMPLING OF GROUNDWATER MONITORING WELLS

Following the measurements and calculations described above, sampling will commence in the sequence below:

1. Lower the submersible pump or peristaltic pump intake into the well. For shallow groundwater situations, the intake of the suction tubing or of the submersible pump will be lowered to the top of the well screen and the well purged three to five times the calculated volume. Alternatives to this procedure may be necessary if one of the following conditions exist:

   a. If the well screen is very large, making pumping from the top impractical, the suction line or submersible pump should be lowered to the approximate mid-point of the screened portion of the well.

   b. If the well is situated in tight formations such as tills, clays or rock, the purging of the well should be performed from very near the bottom of the well screen. This will facilitate complete removal of standing well water.

2. Connect the instrumentation header to the pump discharge and begin flushing the well. Monitor the in situ parameters (pH, Eh, temperature, and specific conductivity) and measure the volume of groundwater being pumped. Alternately, in situ parameters may be monitored in a beaker filled from the pump discharge. Purging of the standing well water is considered complete when one of the following is achieved:

   a. at least three well volumes have been purged and in situ parameters stabilized, or

b. five well volumes have been purged, or

c. the well has been pumped dry.

3. Record the in situ parameters.

4. After purging, lower the pump intake or bailer, as appropriate for the parameters of concern (i.e. bailer for volatiles; and bailer, peristaltic or submersible pump for all other parameters) to the middle of the screened interval. If the analysis to be performed is for lighter-than-water chemical species, then the pump or bailer should be lowered to the top of the water column for sample collection.

5. Collect the sample(s).

   Volatile and semi-volatile samples are filled directly from the bailer with as little agitation as possible.

   Other samples will be placed directly into the appropriate container from the discharge tubing of the pump or bailer. Where filtration is required, an in-line filter should be used, if possible. Vacuum filtration is an alternative to an in-line device (see attached Table).

6. Remove the pump from the well and decontaminate the pump and tubing by flushing with isopropanol; up to one gallon of the solvent is used as needed. Rinse the pump and tubing with one liter of distilled water for every 40 feet of tubing.

7. Complete sample data records after each well is sampled.

8. Secure the well cap and lock.

STANDARD FIELD FILTRATION PROCEDURES

A. IN-LINE FILTRATION

EQUIPMENT

1. A portable 102-mm acrylic backflushing filter unit
2. 102-mm diameter filter papers, 0.45 µm membrane filters
3. Reagent rinse water (ASTM Type II or better)
4. 20% v/v nitric acid rinse solution

PROCEDURES

1. Attach in-line filter assembly, after assembling filter paper into filter holder, to discharge line of sampling pump. Open by-pass valve completely.
2. Turn sampling pump on, slowly turn by-pass valve closed, allowing flow into the filter. Remove trapped air through the filter bleed valve, if necessary.
3. Discard the initial 100 mℓ ± of filtrate. Collect subsequent filtrate into sample bottle.
4. Rinse barrel and filter holder assembly between samples with three rinses of reagent water. The rinse sequence when elemental parameters will be analyzed is: reagent water - 20% v/v nitric acid - reagent water.

B. VACUUM FILTRATION

EQUIPMENT

1. Two sets of either glass funnel type or self-contained polysulfone filters with sintered glass discs or polysulfone filter plates
2. 47-mm diameter filter papers, 0.45 µm membrane filters
3. Vacuum pump or ISCO peristaltic pump with silicone tubing
4. Reagent rinse water (ASTM Type II or better)
5. 20% v/v nitric acid rinse solution

PROCEDURES

1. Thoroughly rinse sintered glass disc, filter funnel, and stem or polysulfone filter units with reagent water.
2. On the basis of visual clarity of sample, prefiltering with larger pore filters may be required. If sample has a heavy clay content, organics, or suspended matter, prefiltration through a 3.0- or 5.0-µm membrane filter may be necessary.
3. Place membrane filter on filter holder with minimum handling.
4. Attach filter holder with filter to filter funnel and receiver.
5. Swirl and slowly pour sample bottle into filter funnel.
6. Attach suction tubing to filter flask and vacuum pump (or ISCO pump). Pump is turned on in the vacuum mode.
7. Filter a small portion of the sample and discard filtrate after rinsing flask with sample filtrate.
8. If prefiltering was required, pass sample through a 0.45-µm membrane filter using another filtering apparatus.
9. Transfer filtered sample to appropriate bottles.
10. Rinse filtration equipment between samples with at least three rinses of reagent water. The rinse sequence, when elemental parameters are to be analyzed, is: reagent water - 20% v/v nitric acid - reagent water.

C. PRESSURE FILTRATION

EQUIPMENT

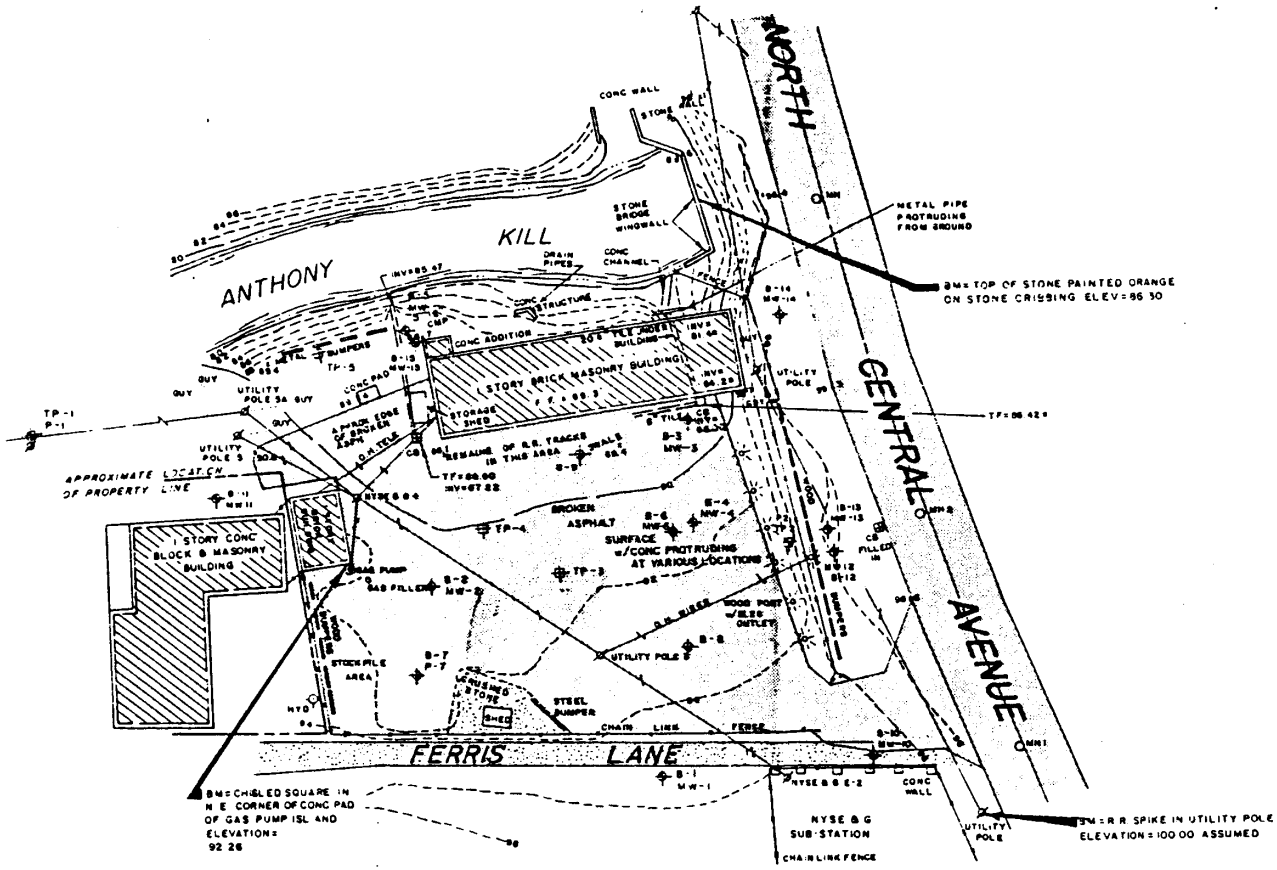
1. Pressure filter apparatus consisting of 1 liter barrel filter, filter holder and pressure hose connectors
2. Source of pressurized gas, i.e., tank of nitrogen, argon, etc.
3. 147 mm filter papers, 0.45 µm membrane filter
4. Reagent rinse water (ASTM Type II or better)
5. 20% v/v nitric acid rinse solution

PROCEDURES

1. If filter barrel has sample valve, assemble filter assembly with 0.45 µm membrane filter and attach pressure hose.
2. If filter barrel does not have a sample valve, assemble filter paper on filter holder.
3. Turn barrel upside down and pour sample into barrel.
4. Place filter holder and filter onto barrel assembly, making sure to align O-ring for a positive seal.
5. Attach swing-away bolts and tighten hand-tight.
6. Turn over filter assembly and attach pressure hose assembly.
7. Slowly turn on pressurized gas and increase pressure regulator to a maximum of 20 psi.
8. Collect filtrate from bottom of barrel assembly.
9. Rinse barrel and filter holder assembly between samples with three rinses of reagent water. The rinse sequence when elemental parameters will be determined is: reagent water - 20% v/v nitric acid - reagent water.

APPENDIX A-7

SITE SURVEY MAP



RECORD OF WORK	DATE		
	6-26-86	PREPARED FOR E C JORDAN CO.	D.A.F.
	10 7 86	MONITORING LOCATIONS & DATA ADDED E.C. JORDAN	D.A.F.
	12 4 87	" " , BORING & GEOPHYSICAL	
		SIGHTS ADDED - E C JORDAN	D.A.F.
	12 10 87	ELEVATIONS AT GEOPHYSICAL SURVEY POINTS	
		ADDED	D.A.F.

TOPOGRAPHIC SURVEY
PORTION OF LANDS OF
NEW YORK STATE ELECTRIC & GAS CORP.
(MECHANICVILLE SITE)

TOWN OF MECHANICVILLE	COUNTY: SARATOGA, N.Y.
SCALE: 1" = 50'	DATE: JUNE 26, 1986

DAVID A. FLANDERS ASSOCIATES
6 MORNINGSIDE DRIVE
BALLSTON LAKE, NEW YORK

MAP BY: DAVID A FLANDERS — L.R. NO: 49,134

86-72-S

MONITORING DEVICE			ELEVATION
MONITORING	WELL	#1	98.56
"	"	#2	91.31
"	"	#3	87.31
"	"	#4	90.61
"	"	#5	87.89
"	"	#6	90.65
"	"	#10	96.49
"	"	#11	91.44
"	"	#12	98.46
"	"	#13	98.48
"	"	#14	98.93
"	"	#15	88.17
BORING	#1	GROUND	95.9
"	#2	"	91.6
"	#3	"	87.4
"	#4	"	91.0
"	#5	"	88.4
"	#6	"	91.0
"	#7	"	91.8
"	#8	"	93.2
"	#9	"	88.5
"	#10	"	96.7
"	#11	"	92.1
"	#12	"	98.3
"	#13	"	98.6
"	#14	"	98.7
"	#15	"	88.5
PIEZOMETER		#1	95.02
"		#2	98.83
"		#7	91.76
TEST PIT		#1	92.5
"	"	#2	95.2
"	"	#3	91.4
"	"	#4	90.3
"	"	#5	89.1

NOTE: ELEVATION OF MONITORING WELLS AND PIEZOMETERS TAKEN AT TOP OF EXISTING NOTCH CUT IN TOP OF P.V.C. PIPE.

NOTES:

A. TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN COMPILED UTILIZING STANDARD FIELD SURVEY PROCEDURES. NO ATTEMPT HAS BEEN MADE TO SHOW THE SIZE AND LOCATION OF ANY UNDERGROUND UTILITIES OF SUBSURFACE FEATURES WHICH MAY EXIST.

B. ELEVATION DATUM USED IN CONNECTION WITH THE PREPARATION OF SURVEY IS FROM AN ASSUMED DATUM.

C. THE LIMITS OF OWNERSHIP OF LANDS OF NEW YORK STATE ELECTRIC AND GAS CORP.. WHERE NOT READILY APPARENT AT THE TIME OF THIS TOPOGRAPHIC SURVEY, FOR LOCATION OF PERTINENT PROPERTY LINES A BOUNDARY SURVEY IS RECOMMENDED.

APPENDIX B

CHEMICAL DATA

APPENDIX B-1

ANALYTICAL METHODS

TABLE B-1-1

ANALYTICAL METHODS[1]
TASK 2
MECHANICVILLE SITE

Analytical Parameter	Soils and Sediments	Groundwater and Surface Water
Volatile Organic Compounds	Method 8020 with confirmatory analysis of 2 soil samples and one round of sediments using Method 8240	Method 602 for Round 1 samples; Method 624 for subsequent sampling rounds
Semi-Volatile Organic Compounds	Method 8310 with confirmatory analysis of 2 soil samples and one round of sediments using Method 8270	Method 610 for Round 1 samples; Method 625 for subsequent sampling rounds
Cyanide - Total and Ferro-Ferricyanide	Method 9010	Method 335.2
Total Organic Carbon	Method 9060	Method 415.1
Total Phenolics	Method 420.1	Method 420.1
Iron and Zinc	Method 200.7 with 3050	Method 200.7

[1] Method numbers refer to USEPA methods (USEPA, 1983) unless otherwise noted.

TABLE B-1-2

ANALYTICAL METHODS[1]
TASK 3
MECHANICVILLE SITE

Analytical Parameter	Soil and Sediment	Groundwater and Surface Water
Volatile Organic Compounds	Method 8240	Method 624
Semi-Volatile Organic Compounds	Method 8270	Method 625
Cyanide - Total	Method 9010	Method 335.2
Total Organic Carbon	Method 9060	Method 415.1
Total Phenolics	Method 420.1	Method 420.1
Iron and Zinc	Method 200.7 with 3050	Method 200.7

[1] Method numbers refer to USEPA methods unless otherwise noted (USEPA, 1983).

APPENDIX B-2

ANALYTICAL DATA FOR TASK 2 SAMPLES

01/19/88

TABLE B-2-1
CHEMICALS FOUND IN TASK 2 TEST PIT SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER ORGANICS ANALYSIS (1)	TP-1/S-1 HPLC	TP-2/S-1 HPLC	TP-4/S-1 HPLC	TP-5/S-1 HPLC	TP-5/S-1 HPLC DUP	TP-5/S-1 GC/MS
DATE OF SAMPLE COLLECTION	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86
SAMPLE DEPTH (FT)	6.5-7.0	7.0-7.5	3.0-4.0	3.0-4.0	3.0-4.0	4.0-6.0
ZONE SAMPLED	FILL	FILL	FILL	FILL	FILL	FILL
VOLATILE ORGANICS (MG/KG)						
-VOLATILE AROMATICS-						
BENZENE	ND (2)	ND	0.220	ND	ND	ND
TOLUENE	ND	ND	0.160	1.000	0.750	0.640
ETHYLBENZENE	ND	ND	0.150	6.600	6.100	2.200
STYRENE	ND	ND	ND	ND	ND	ND
TOTAL XYLENES	-- (3)	--	--	--	--	11.000
m-XYLENE	ND	ND	0.091	4.100	3.100	--
o-XYLENE	ND	ND	0.082	3.900	3.000	--
p-XYLENE	ND	ND	0.062	2.100	1.600	--
TRIMETHYLBENZENE	ND	ND	ND	4.600	5.100	--
n-PROPYLBENZENE	ND	ND	0.083	2.100	2.000	--
-OTHER-						
ACETONE	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	1.000
CARBON DISULFIDE	--	--	--	--	--	0.110
TOTAL VOLATILE AROMATICS	ND	ND	0.848	24.400	21.650	13.840
SEMIVOLATILE ORGANICS (MG/KG)						
-PAH-						
ACENAPHTHENE	ND	(4)	ND	290.000	(4)	140.000
ACENAPHTHYLENE	ND	ND	(5)	(5)	(5)	33.000
ANTHRACENE	ND	ND	25.000	470.000	220.000	67.000
BENZO(b)FLUORANTHENE	ND	ND	23.000	ND	ND	13.000
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	21.000
BENZO(g,h,i)PERYLENE	ND	ND	18.000	ND	ND	13.000
BENZO(a)ANTHRACENE	ND	ND	(6)	(6)	ND	35.000
BENZO(a)PYRENE	ND	(4)	13.000	(4)	ND	36.000
CHRYSENE	ND	ND	39.000	110.000	ND	32.000
DIBENZO(a,h)ANTHRACENE	ND	ND	13.000	ND	ND	(4)
FLUORANTHENE	ND	45.000	84.000	980.000	220.000	78.000
FLUORENE	ND	18.000	31.000	620.000	2600.000	89.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	19.000	350.000	5200.000	120.000
PHENANTHRENE	ND	12.000	31.000	810.000	260.000	210.000
PYRENE	ND	45.000	96.000	1100.000	ND	250.000
-OTHER-						
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	ND
TOTAL PAH	ND	120.000	412.000	4630.000	8500.000	1137.000
OTHER CHEMICALS (MG/KG)						
-METALS-						
IRON	27000	35000	27000	31000	35000	--
ZINC	260	120	87	79	220	--
-CYANIDE-						
TOTAL CYANIDE	ND	2.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	2.0	ND	ND	ND	--
-OTHER-						
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	ND	--
TOTAL ORGANIC CARBON	8300	1400	10000	30000	26000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED OR NOT APPLICABLE.
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

TABLE B-2-2
CHEMICALS FOUND IN TASK 2 SOIL BORING SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-9/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	GC/MS
DATE OF SAMPLE COLLECTION	7/23/86	8/1/86	8/5/86	7/29/86	8/4/86	7/31/86	8/6/86	8/6/86
SAMPLE DEPTH (FT)	8.0-10.0	8.0-9.5	4.0-6.0	6.0-8.0	10.0-11.0	7.0-9.0	13.5-15.5	15.5-17.5
ZONE SAMPLED	GRAVELLY SAND	FILL	FILL AND SILTY SHALE	FILL AND SILTY SHALE	SILTY SHALE	FILL	SILTY SHALE	SILTY SHALE
VOLATILE ORGANICS (MG/KG)								
-VOLATILE AROMATICS-								
BENZENE	ND (2)	ND	13.000	ND	0.980	2.400	640.000	380.000
TOLUENE	ND	ND	8.600	0.310	1.600	1.300	840.000	660.000
ETHYLBENZENE	ND	ND	120.000	2.300	6.300	0.170	440.000	250.000
STYRENE	ND	ND	ND	ND	ND	0.180	780.000	720.000
TOTAL XYLENES	-- (3)	--	--	--	--	--	--	1400.000
m-XYLENE	ND	ND	25.000	0.640	1.500	0.180	400.000	--
o-XYLENE	ND	ND	44.000	2.400	ND	ND	320.000	--
p-XYLENE	ND	ND	25.000	0.870	1.500	0.075	210.000	--
TRIMETHYLBENZENE	ND	ND	35.000	3.800	4.200	ND	170.000	--
n-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
ACETONE	--	--	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	--	--	ND
CARBON DISULFIDE	--	--	--	--	--	--	--	ND
TOTAL VOLATILE AROMATICS	ND	ND	270.600	10.320	15.980	4.305	3900.000	3410.000
SEMIVOLATILE ORGANICS (MG/KG)								
-PAH-								
ACENAPHTHENE	9.000	(4)	380.000	42.000	250.000	(4)	600.000	(4)
ACENAPHTHYLENE	ND	(5)	(5)	(5)	(5)	(5)	(5)	670.000
ANTHRACENE	8.000	(4)	670.000	80.000	450.000	(4)	550.000	270.000
BENZO(b)FLUORANTHENE	5.700	ND	(4)	ND	120.000	(4)	200.000	(4)
BENZO(k)FLUORANTHENE	(4)	ND	240.000	ND	ND	0.930	ND	(4)
BENZO(g,h,i)PERYLENE	(4)	ND	(4)	ND	ND	1.400	140.000	(4)
BENZO(a)ANTHRACENE	(6)	(6)	(6)	(6)	ND	(6)	(6)	(4)
BENZO(a)PYRENE	6.200	ND	200.000	(4)	94.000	1.100	140.000	(4)
CHRYSENE	17.000	(4)	780.000	100.000	ND	0.800	480.000	(4)
DIBENZO(a,h)ANTHRACENE	5.300	ND	ND	ND	ND	1.300	ND	ND
FLUORANTHENE	44.000	(4)	1100.000	130.000	750.000	0.890	850.000	290.000
FLUORENE	34.000	(4)	1300.000	120.000	620.000	1.100	2100.000	380.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND	ND	(4)
NAPHTHALENE	ND	(4)	2300.000	44.000	760.000	1.900	1500.000	2500.000
PHENANTHRENE	13.000	(4)	940.000	110.000	630.000	0.870	760.000	870.000
PYRENE	11.000	(4)	1400.000	170.000	980.000	0.870	1400.000	460.000
-OTHER-								
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	ND
TOTAL PAH	154.200	(4)	9310.000	796.000	4654.000	11.210	8720.000	5440.000
OTHER CHEMICALS (MG/KG)								
-METALS-								
IRON	34000	30000	31000	35000	27000	26000	19000	--
ZINC	190	75	130	80	1600	320	61	--
-CYANIDE-								
TOTAL CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
TOTAL RECOVERABLE PHENOLICS	ND	ND	3.6	ND	2.6	ND	ND	--
TOTAL ORGANIC CARBON	110000	6800	100000	23000	110000	76000	190000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

TABLE B-2-3
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)															
-VOLATILE AROMATICS-															
BENZENE	ND (2)	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	0.530	0.560	0.608	0.429	0.230
TOLUENE	ND	ND	(4)	ND	ND	ND	ND	ND	ND	ND	0.100	0.120	(4)	0.0576	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.640	0.910	0.715	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	0.010	ND	ND	--	ND	ND	ND	ND	--	0.770	0.640	0.0329	0.379
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.110	--	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.300	--	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.140	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--
-OTHER-															
ACETONE	--	0.220	3.780	0.059	ND	--	ND	ND	0.0536	ND	--	ND	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	ND	--	ND	ND	0.0086	ND	--	ND	ND	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	0.0155	ND	ND	ND	ND	ND	ND	ND	1.820	2.360	1.967	0.5195	0.609
SEMIVOLATILE ORGANICS (MG/L)															
-PAH-															
ACENAPHTHENE	0.110	0.022	0.012	ND	ND	ND	ND	ND	1.030	0.902	ND	0.420	ND	0.537	0.524
ACENAPHTHYLENE	0.250	0.048	0.018	ND	ND	ND	ND	ND	ND	0.084	2.500	(4)	ND	ND	ND
ANTHRACENE	(4)	(4)	0.031	ND	ND	ND	ND	ND	ND	ND	0.300	(4)	ND	0.226	0.140
BENZO(b)FLUORANTHENE	ND	(4,5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	(5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	(6)	(4)	ND	0.102	ND
BENZO(a)PYRENE	(4)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.280	(4)	ND	ND	ND
CHRYSENE	0.024	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.880	(4)	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.061	0.024	ND	ND	ND	ND	ND	ND	0.930	ND	2.700	(4)	0.680	0.223	0.174
FLUORENE	0.240	0.026	0.010	ND	ND	ND	ND	ND	ND	ND	4.700	(4)	0.660	0.197	0.198
INDENO(1,2,3,-cd)PYRENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	(4)	ND	ND	ND
NAPHTHALENE	1.200	0.260	0.136	ND	ND	ND	ND	ND	6.034	0.445	13.000	2.600	4.130	2.480	1.914
PHENANTHRENE	0.051	0.039	0.028	ND	ND	ND	ND	ND	1.700	ND	1.300	0.440	ND	0.624	0.140
PYRENE	0.044	0.025	0.017	(4)	ND	ND	ND	ND	ND	ND	0.660	0.200	0.690	0.431	0.264
-OTHER-															
BIS(2-ETHYLHEXYL)PHTHALATE	--	0.073	0.016	(4)	0.040	--	0.016	0.018	1.710	ND	--	0.250	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.144	--	ND	ND	ND	0.856
TOTAL PAH	1.980	0.444	0.252	(4)	ND	ND	ND	ND	9.694	1.431	26.320	3.660	6.160	4.820	3.354

TABLE B-2-3 (CONT.)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)															
-METALS-															
IRON	ND	--	ND	ND	0.05	0.50	0.07	0.06	ND	0.10	20.00	--	6.60	9.70	4.90
ZINC	ND	--	0.007	ND	ND	ND	0.072	0.005	ND	0.09	0.11	--	0.008	0.03	0.02
-CYANIDE-															
TOTAL CYANIDE (12)	ND	--	0.01	ND	0.01	ND	ND	ND	ND	0.01	0.46	--	ND	0.320	0.42
AMENABLE CYANIDE	ND	--	--	ND	ND	ND	ND	--	ND	ND	ND	--	--	ND	ND
FERRO-FERRI CYANIDE	ND	--	0.03	ND	0.01	ND	ND	0.02	ND	0.01	0.46	--	0.05	0.320	0.42
-OTHER-															
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	ND	ND	--	--	--	0.008	0.020	--	--	--	0.015
TOTAL ORGANIC CARBON	4.1	--	14	3.2	4.2	4.6	9	6	3.7	4.1	11	--	24	15.3	11
SULFATE	--	--	74.6	--	--	--	65.2	60.6	--	--	--	--	17.7	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	1.730	0.396	0.250	0.000	ND	ND	ND	ND	9.694	1.355	25.660	6.020	8.127	5.340	3.978
FIELD MEASUREMENTS															
pH (8)	5.3	5.3	6.7	7.5	6.6	6.0	6.4	6.4	7.6	6.8	(11)	(11)	(11)	(11)	(11)
CONDUCTIVITY (9)	1830	1830	370	2040	1315	1680	786	786	1890	1225	(11)	(11)	(11)	(11)	(11)
TEMPERATURE (10)	11.2	11.2	8.4	5.9	10.0	17.8	13.3	13.3	3.2	12.6	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

TABLE B-2-3 (CON'T)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)														
-VOLATILE AROMATICS-														
BENZENE	0.950	0.673	0.482	0.494	0.240	0.298	0.412	0.440	1.900	1.600	1.690	1.520	1.630	1.613
TOLUENE	0.760	0.487	0.335	0.409	0.200	0.295	0.400	0.362	1.600	1.200	0.815	0.353	0.353	0.616
ETHYLBENZENE	2.300	0.803	1.140	0.378	0.071	0.270	0.541	0.464	1.700	1.300	0.855	0.943	1.500	1.956
STYRENE	ND	ND	0.051	ND	ND	ND	ND	ND	0.920	0.610	ND	ND	1.370	ND
TOTAL XYLENE	--	1.230	1.440	1.347	--	ND	0.273	0.227	--	--	1.220	1.270	ND	1.452
m - XYLENE	0.850	--	--	--	0.065	--	--	--	1.200	1.000	--	--	--	--
o - XYLENE	0.810	--	--	--	0.120	--	--	--	0.940	0.770	--	--	--	--
p - XYLENE	0.430	--	--	--	0.058	--	--	--	0.570	0.450	--	--	--	--
TRIMETHYLBENZENE	0.088	--	--	--	0.046	--	--	--	0.120	0.100	--	--	--	--
-OTHER-														
ACETONE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.850	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.350	ND	ND	ND
TOTAL VOLATILE AROMATICS	6.188	3.193	3.448	2.628	0.800	0.863	1.626	1.493	8.950	7.030	4.580	4.086	4.853	5.637
SEMIVOLATILE ORGANICS (MG/L)														
-PAH-														
ACENAPHTHENE	0.980	0.240	0.187	0.218	0.260	17.300	150.280	195.500	37.000	48.000	ND	0.890	1.200	3.580
ACENAPHTHYLENE	8.300	ND	0.041	0.218	2.400	ND	150.280	197.200	26.000	59.000	ND	ND	ND	3.300
ANTHRACENE	0.510	ND	ND	ND	ND	7.600	178.330	227.800	11.000	16.000	ND	ND	ND	5.290
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	4.000	6.600	ND	ND	ND	0.540
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	7.200	4.100	ND	ND	ND	0.580
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	ND	ND	ND	ND	ND	18.360	23.970	(6)	(6)	ND	ND	ND	ND
BENZO(a)PYRENE	0.290	ND	ND	ND	ND	ND	ND	ND	4.800	6.500	ND	ND	ND	0.560
CHRYSENE	1.400	ND	ND	ND	ND	ND	ND	26.350	25.000	17.000	ND	ND	ND	0.680
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	4.200	ND	0.014	ND	0.150	6.300	43.860	59.500	93.000	74.000	ND	ND	1.310	2.510
FLUORENE	13.000	ND	0.026	0.100	3.900	7.600	62.220	80.920	120.000	140.000	ND	ND	ND	1.980
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	33.000	6.120	3.970	2.392	11.000	39.400	331.500	413.100	280.000	300.000	6.980	5.040	5.910	18.760
PHENANTHRENE	2.000	ND	ND	ND	ND	6.700	178.330	227.800	36.000	45.000	ND	1.340	1.530	5.290
PYRENE	1.000	ND	0.027	ND	(4)	8.100	93.450	112.370	36.000	30.000	ND	0.843	ND	ND
-OTHER-														
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	0.013	ND	--	ND	ND	ND	--	--	ND	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	0.580	--	ND	197.200	247.690	--	--	ND	ND	ND	7.170
TOTAL PAH	64.680	6.360	4.265	2.928	17.710	93.000	1206.610	1564.510	680.000	746.200	6.980	8.113	9.950	43.070

TABLE B-2-3 (CONT.)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
##OTHER CHEMICALS (MG/L)##														
-METALS-														
IRON	61.00	6.50	3.86	5.10	1.10	7.50	5.10	9.40	5.50	14.00	7.60	10.10	9.70	4.80
ZINC	0.29	0.02	0.02	0.01	ND	0.021	0.16	0.33	ND	ND	ND	0.01	0.01	0.03
-CYANIDE-														
TOTAL CYANIDE (13)	0.072	0.06	0.050	0.06	0.013	0.02	0.01	ND	0.075	0.081	0.12	0.060	0.050	0.07
AMENABLE CYANIDE	ND	0.04	ND	ND	0.013	--	ND	ND	0.026	0.024	0.10	ND	ND	ND
FERRO-FERRI CYANIDE	0.072	0.02	0.050	0.06	ND	0.06	0.01	0.01	0.049	0.057	0.02	0.060	0.050	0.07
-OTHER-														
TOTAL RECOVERABLE PHENOLICS	0.043	--	--	0.014	0.019	--	0.43	0.017	0.050	0.043	--	--	--	0.031
TOTAL ORGANIC CARBON	12	20	5.2	9.4	7.4	30	16	12	16	16	28	12.5	13.7	14
SULFATE	--	30.9	--	--	--	84.0	--	--	--	--	14.5	--	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	62.611	9.553	7.621	5.352	16.129	93.863	1058.366	1368.820	662.080	693.663	11.910	12.199	13.433	45.438
##FIELD MEASUREMENTS##														
pH (8)	(11)	(11)	(11)	(11)	5.8	6.4	(11)	(11)	5.7	5.7	6.9	7.7	7.7	6.7
CONDUCTIVITY (9)	(11)	(11)	(11)	(11)	1640	680	(11)	(11)	1930	1930	1136	2300	2300	1385
TEMPERATURE (10)	(11)	(11)	(11)	(11)	12.7	12.0	(11)	(11)	16.0	16.0	14.3	6.0	6.0	13.1

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) MW-5 ROUND 3 SAMPLING WAS NOT CONDUCTED DUE TO WEATHER OBSTRUCTIONS.
(13) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

01/19/88

TABLE B-2-4
CHEMICALS FOUND IN TASK 2 SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	--	--	ND	ND	ND
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
-OTHER-																
ACETONE	--	ND	ND	ND	ND	--	ND	0.010	ND	ND	ND	--	--	ND	ND	ND
METHYLENE CHLORIDE	--	--	0.0054	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANICS (MG/L)																
-PAH-																
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	ND	ND	0.016	--	ND	ND	ND	ND	0.012	--	--	0.025	ND	0.030
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.069	ND	--	--	ND	ND	ND
TOTAL PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.105	ND	ND	ND	ND	ND	ND

TABLE B-2-4 (CONT.)
CHEMICALS FOUND IN TASK 2 SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
						‡‡OTHER CHEMICALS (MG/L)‡‡										
-METALS-																
IRON	0.23	0.47	1.09	0.99	0.037	0.23	0.40	0.45	0.79	0.36	0.33	0.22	0.24	0.41	0.78	0.33
ZINC	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	0.01
-CYANIDE-																
TOTAL CYANIDE (4)	ND	0.01	ND	ND	ND	ND	0.01	ND	ND	0.01	ND	ND	ND	ND	ND	0.01
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	ND
FERRO-FERRI CYANIDE	ND	0.01	ND	ND	ND	ND	0.02	0.03	ND	0.01	ND	ND	ND	0.01	ND	0.01
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	0.24	ND	--	--	--	0.013	0.005	ND	0.037	--	--	ND
TOTAL ORGANIC CARBON	5.5	11	11.9	7.3	6.4	ND	10	9	7.5	6.0	6.0	5.0	5.4	10.0	6.2	5.5
OIL AND GREASE	11	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
SULFATE	--	16.4	--	--	--	--	19.3	18.6	--	--	--	--	--	18.4	--	--

NOTES:
(1) INDICATES SAMPLE VALUES WERE OBTAINED BY GC/MS (EPA METHODS 624 AND 625) OR BY HPLC (EPA METHODS 602 AND 610).
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

TABLE B-2-5
CHEMICALS FOUND IN TASK 2 SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301 DUP	SED-401	SED-102	SED-202	SED-202 DUP	SED-302	SED-402	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/KG)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.070	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
a - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
b - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
p - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
-OTHER-																
ACETONE	--	--	ND	ND	5.300	--	--	--	ND	6.600	3.800	--	--	--	ND	4.000
METHYLENE CHLORIDE	--	--	ND	ND	2.400	--	--	--	ND	3.000	2.900	--	--	--	ND	2.300
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	0.07	ND
SEMIVOLATILE ORGANICS (MG/KG)																
-PAH-																
ACENAPHTHENE	(4)	ND	ND	ND	ND	(4)	ND	ND	ND	0.700	1.600	0.910	1.100	(4)	ND	ND
ACENAPHTHYLENE	0.740	ND	ND	ND	ND	0.900	ND	ND	ND	ND	1.300	2.700	3.500	8.800	ND	ND
ANTHRACENE	(4)	(4)	ND	ND	ND	(4)	(4)	(4)	(4)	ND	ND	1.100	1.200	(4)	(4)	ND
BENZO(b)FLUORANTHENE	(4)	0.580	ND	ND	ND	(4)	(4)	2.000	(4,5)	ND	ND	1.000	0.940	0.630	(4,5)	ND
BENZO(k)FLUORANTHENE	(4)	(5)	ND	ND	ND	(4)	(5)	4.800	(4,5)	ND	ND	0.930	1.000	(5)	(4,5)	ND
BENZO(g,h,i)PERYLENE	ND	3.100	ND	ND	ND	ND	(4)	15.000	ND	ND	ND	ND	ND	4.400	(4)	ND
BENZO(a)ANTHRACENE	(6)	(6)	ND	ND	ND	(6)	(6)	(6)	(4)	ND	ND	(6)	(6)	(5)	(4)	ND
BENZO(a)PYRENE	(4)	0.450	ND	ND	ND	(4)	(4)	6.100	(4)	ND	ND	0.740	0.800	0.650	(4)	ND
CHRYSENE	0.520	0.610	ND	ND	ND	0.460	(4)	8.500	(4)	ND	ND	2.000	2.100	(4)	(4)	ND
DIBENZO(a,h)ANTHRACENE	ND	0.930	ND	ND	ND	(4)	ND	7.100	ND	ND	ND	ND	1.600	2.300	ND	ND
FLUORANTHENE	0.960	0.470	ND	ND	ND	0.920	(4)	5.600	(4)	ND	ND	2.200	4.700	(4)	(4)	ND
FLUORENE	1.500	ND	ND	ND	ND	1.400	ND	ND	ND	ND	0.500	4.000	4.300	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	(7)	ND	ND	ND	(4)	ND	(7)	ND	ND	ND	(4)	(4)	(7)	(4)	ND
NAPHTHALENE	3.600	ND	ND	ND	ND	3.300	ND	19.000	(4)	4.400	13.000	10.000	19.000	ND	ND	ND
PHENANTHRENE	0.570	0.390	ND	ND	ND	(4)	(4)	1.800	(4)	ND	ND	2.000	2.300	(4)	(4)	ND
PYRENE	0.690	0.770	ND	ND	ND	0.960	(4)	5.900	(4)	ND	ND	1.900	3.100	(4)	(4)	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	(4)	ND	ND	--	--	--	(4)	ND	ND	--	--	--	(4)	ND
2-METHYLNAPHTHALENE	--	--	ND	ND	ND	--	--	--	ND	0.900	ND	--	--	--	ND	ND
DI-N-BUTYL PHTHALATE	--	--	--	--	2.100	--	--	--	--	ND	4.000	--	--	--	--	3.200
TOTAL PAH	8.580	7.300	ND	ND	ND	7.940	(3)	75.800	(4)	5.100	16.400	29.480	45.640	16.780	(4)	ND

TABLE B-2-5 (CON'T)
CHEMICALS FOUND IN TASK 2 SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301	SED-401	SED-102	SED-202	SED-202	SED-302	SED-402	SED-402	SED-103	SED-103	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
##OTHER CHEMICALS (MG/KG)##																
-METALS-																
IRON	16000	9200	10800	8320	15600	21000	19000	16000	9980	30800	23600	13000	13000	20000	13000	33100
ZINC	47	36	37	31	--	51	69	100	46	--	--	65	60	88	76	--
-CYANIDE-																
TOTAL CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	3.1	ND	ND	ND	ND	6.1	3.1	ND	ND	ND	ND	1.8
TOTAL ORGANIC CARBON	3000	4600	4790	3320	9700	7700	3500	7600	16100	11000	22000	4500	4600	4600	9350	15000
SULFATE	--	ND	--	--	--	--	60	40	--	--	--	--	--	30	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE REPORTING LIMIT.
(5) BENZO(b)FLUORANTHENE AND BENZO(k)FLUORANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) INDENO(1,2,3-cd)PYRENE AND BENZO(g,h,i)PERYLENE, COELUTED.

APPENDIX B-3

ANALYTICAL DATA FOR QUALITY ASSURANCE SAMPLES

TABLE B-3-1
CHEMICALS FOUND IN TASK 2 QUALITY ASSURANCE SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
SAMPLE IDENTIFIER	SB-101	SB-201	SB-301	SB-401	TB-101	TB-201	TB-301	TB-401	FB-101	FB-201	FB-301	FB-401
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	HPLC
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)												
-VOLATILE AROMATICS-												
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
TOLUENE	ND	ND	ND	ND	ND	0.006	ND	ND	--	--	--	--
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
TOTAL XYLENE	-- (3)	ND	ND	ND	--	ND	ND	ND	--	--	--	--
m - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
o - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
p - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	ND	--	--	--	--	--	--	--
-OTHER-												
ACETONE	--	0.0438	ND	ND	--	ND	0.0242	ND	--	--	--	--
METHYLENE CHLORIDE	--	ND	ND	0.006	--	(4)	0.0095	ND	--	--	--	--
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	0.006	ND	ND	--	--	--	--
SEMIVOLATILE ORGANICS (MG/L)												
-PAH-												
ACENAPHTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(a)ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(a)PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
CHRYSENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FLUORENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
NAPHTHALENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
PHENANTHRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
-OTHER-												
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	0.015	0.080	--	--	--	--	--	--	--	--
2-METHYLNAPTHALENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
TOTAL PAH	ND	ND	ND	ND	--	--	--	--	--	--	--	--

TABLE B-3-1 (CONT.)
CHEMICALS FOUND IN TASK 2 QUALITY ASSURANCE SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
SAMPLE IDENTIFIER	SB-101	SB-201	SB-301	SB-401	TB-101	TB-201	TB-301	TB-401	FB-101	FB-201	FB-301	FB-401
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	HPLC
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)												
-METALS-												
IRON	ND	ND	0.09	ND	--	--	--	--	ND	ND	ND	ND
ZINC	ND	0.012	ND	ND	--	--	--	--	ND	0.014	ND	ND
-CYANIDE-												
TOTAL CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	[4]	--
AMENABLE CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
-OTHER-												
TOTAL RECOVERABLE PHENOLICS	0.012	--	--	ND	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON	ND	1	2.3	1.0	--	--	--	--	ND	1	4.1	2.8
SULFATE	--	4.0	--	--	--	--	--	--	--	4.0	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.

TABLE B-3-2
Chemicals Detected in Task 3 Quality Assurance Samples
Mechanicville Site

SAMPLE TYPE:	------FILTRATION BLANK------		------SAMPLER BLANK------	
SAMPLE IDENTIFIER:	FB-01	FB-01	SB-01	SB-01
DATE OF SAMPLE COLLECTION:	12/22/87	3/29/88	12/22/87	3/29/88
**** Volatile Organics (mg/l) ****				
-VOLATILE AROMATICS-	NR	NR	ND	ND
-OTHER-				
Acetone	NR	NR	0.16	ND
Chlorobenzene	NR	NR	ND	ND
Total Volatile Aromatics	NR	NR	ND	ND
Total Volatile Organics	NR	NR	0.16	ND
**** Semi-Volatile Organics (mg/l) ****				
-PAH-	NR	NR	ND	ND
-OTHER-				
Phenol	NR	NR	ND	ND
bis (2-Ethylhexyl) Phthalate	NR	NR	ND	ND
Total PAH	NR	NR	ND	ND
Total Semi-Volatile Organics	NR	NR	ND	ND
**** Other Chemicals (mg/l) ****				
-METALS-				
Iron	ND	ND	0.24	ND
Zinc	ND	0.02	ND	ND
-CYANIDE-	NR	NR	ND	ND
-OTHER-				
Total Recoverable Phenolics	NR	NR	ND	0.009
Total Organic Carbon	3.8	4.9	2.1	1.2

NOTES:

(1) Trace concentrations detected below the quantifiable reporting limit.
ND = Not Detected.
NR = Not Requested.

TABLE B-3-2
Chemicals Detected in Task 3 Quality Assurance Samples
Mechanicville Site

SAMPLE TYPE:	------TRIP BLANK------	
SAMPLE IDENTIFIER:	TB-01	TB-01
DATE OF SAMPLE COLLECTION:	12/22/87	3/29/88
** Volatile Organics (mg/l) **		
-VOLATILE AROMATICS-	ND	ND
-OTHER-		
Acetone	ND	
Chlorobenzene	ND	(1)
Total Volatile Aromatics	ND	ND
Total Volatile Organics	ND	ND
** Semi-Volatile Organics (mg/l) **		
-PAH-	NR	NR
-OTHER-		
Phenol	NR	NR
bis (2-Ethylhexyl) Phthalate	NR	NR
Total PAH	NR	NR
Total Semi-Volatile Organics	NR	NR
** Other Chemicals (mg/l) **		
-METALS-		
Iron	NR	NR
Zinc	NR	NR
-CYANIDE-	NR	NR
-OTHER-		
Total Recoverable Phenolics	NR	NR
Total Organic Carbon	NR	NR

NOTES:

(1) Trace concentrations detected below the quantifiable reporting limit.
ND = Not Detected.
NR = Not Requested.

APPENDIX B-4

MINIMUM DETECTION LIMITS
AND
TASK 3 LABORATORY DATA REPORTS

TABLE B-4-1
MINIMUM DETECTION LIMITS
MECHANICVILLE SITE

#TEST PITS (MG/KG)#

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-5/S-1	TP-5/S-1 DUP	TP-5/S-1 GC/MS
VOLATILE AROMATICS	0.022	0.051	0.024	0.099	0.094	0.096
ACETONE	-- (2)	--	--	--	--	2.4
METHYLENE CHLORIDE	--	--	--	--	--	0.2
CARBON DISULFIDE	--	--	--	--	--	0.4
SEMIVOLATILE ORGANICS	0.043	11.0	5.7	78.0	93.0	13.0
IRON	10.0	10.0	10.0	10.0	10.0	--
ZINC	2.0	2.0	2.0	2.0	2.0	--
CYANIDE (1)	0.3	0.3	0.3	0.3	0.3	--
TOTAL RECOVERABLE PHENOLICS	0.2	0.2	0.2	0.2	0.2	--
TOTAL ORGANIC CARBON	100	100	100	100	100	--

#BORINGS (MG/KG)#

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1 GC/MS
VOLATILE AROMATICS	0.043	0.052	0.56	0.028	0.54	0.052	10.0	3.6
ACETONE	--	--	--	--	--	--	--	90.0
METHYLENE CHLORIDE	--	--	--	--	--	--	--	9.0
CARBON DISULFIDE	--	--	--	--	--	--	--	3.6
SEMIVOLATILE ORGANICS	5	0.55	170	24	54	0.65	61	130
IRON	10	10	10	10	10	10	10	--
ZINC	2	2	2	2	2	2	2	--
CYANIDE (1)	1	1	1	1	1	1	1	--
TOTAL RECOVERABLE PHENOLICS	1	1	1	1	1	1	1	--
TOTAL ORGANIC CARBON	1000	1000	1000	1000	1000	1000	1000	--

GROUNDWATER (MG/L)

SAMPLE IDENTIFIER ORGANICS ANALYSIS	MW-101 HPLC	MW-101 GC/MS	MW-201 GC/MS	MW-301 GC/MS	MW-401 GC/MS	MW-102 HPLC	MW-202 GC/MS	MW-202 GC/MS DUP	MW-302 GC/MS	MW-402 GC/MS	MW-103 HPLC	MW-103 GC/MS	MW-203 GC/MS	MW-303 GC/MS	MW-403 GC/MS
VOLATILE AROMATICS	0.001	0.002	0.005	0.010	0.005	0.001	0.005	0.005	0.010	0.005	0.050	0.020	0.250	0.010	0.050
ACETONE	--	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010	0.010	--	0.500	0.500	0.010	0.100
METHYLENE CHLORIDE	--	0.050	0.050	0.010	0.005	--	0.050	0.050	0.010	0.005	--	0.050	0.250	0.010	0.050
SEMIVOLATILE ORGANICS	0.020	0.020	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.050	0.200	0.200	0.010	0.010	0.100
IRON	0.1	--	0.03	0.1	0.1	0.1	0.03	0.03	0.1	0.1	0.1	--	0.03	0.1	0.1
ZINC	0.01	--	0.005	0.02	0.020	0.01	0.005	0.005	0.02	0.02	0.01	--	0.005	0.02	0.02
CYANIDE (1)	0.01	--	0.01	0.02	0.010	0.01	0.01	0.01	0.02	0.01	0.01	--	0.01	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	--	0.005	0.01	--	--	--	0.005	0.01	--	--	--	0.005
TOTAL ORGANIC CARBON	0.5	--	5	5	5	0.5	5	5	5	5	0.5	5	5	5	5
SULFATE	--	--	1	--	1	--	1	1	--	1	--	--	1	--	1

(1) TOTAL CYANIDE

TABLE B-4-1
MINIMUM DETECTION LIMITS (1) (CONT'D)
MECHANICVILLE SITE

#GROUNDWATER (MG/L)#

SAMPLE IDENTIFIER ORGANICS ANALYSIS	MW-104 HPLC	MW-204 GC/MS	MW-304 GC/MS	MW-404 GC/MS	MW-105 HPLC	MW-205 GC/MS	MW-405 GC/MS	MW-405 GC/MS DUP	MW-106 HPLC	MW-106 HPLC DUP	MW-206 GC/MS	MW-306 GC/MS	MW-306 GC/MS DUP	MW-406 GC/MS
VOLATILE AROMATICS	0.050	0.050	0.010	0.050	0.010	0.100	0.050	0.050	0.050	0.050	0.250	0.010	0.010	0.050
ACETONE	--	0.100	0.010	0.100	--	0.200	0.100	0.100	--	--	0.500	0.010	0.010	0.100
METHYLENE CHLORIDE	--	0.050	0.010	0.050	--	0.100	8.500	8.500	--	--	0.250	0.010	0.010	0.050
SEMIVOLATILE ORGANICS	0.200	0.010	0.010	0.100	0.200	0.010	0.100	0.100	4.000	4.000	0.010	0.010	0.010	0.500
IRON	0.1	0.03	0.1	0.1	0.1	0.03	0.1	0.1	0.1	0.1	0.03	0.1	0.1	0.1
ZINC	0.01	0.005	0.02	0.02	0.01	0.005	0.02	0.02	0.01	0.01	0.005	0.02	0.02	0.02
CYANIDE (3)	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	0.005	0.01	--	0.005	0.005	0.01	0.01	--	--	--	0.005
TOTAL ORGANIC CARBON	0.5	5	5	5	0.5	5	5	5	0.5	0.5	5	5	5	5
SULFATE	--	1	1	1	--	1	1	1	--	--	1	--	--	1

#SURFACE WATER (MG/L)#

SAMPLE IDENTIFIER ORGANICS ANALYSIS	SW-101 HPLC	SW-201 GC/MS	SW-301 GC/MS	SW-301 GC/MS DUP	SW-401 GC/MS	SW-102 HPLC	SW-202 GC/MS	SW-202 GC/MS DUP	SW-302 GC/MS	SW-402 GC/MS	SW-402 GC/MS DUP	SW-103 HPLC	SW-203 GC/MS	SW-303 GC/MS	SW-403 GC/MS
VOLATILE AROMATICS	0.001	0.005	0.010	0.010	0.005	0.001	0.005	0.005	0.010	0.005	0.005	0.001	0.005	0.010	0.005
ACETONE	--	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010
METHYLENE CHLORIDE	--	0.005	0.010	0.010	0.005	--	0.005	0.005	0.010	0.005	0.005	--	0.005	0.010	0.005
SEMIVOLATILE ORGANICS	0.020	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010
IRON	0.1	0.03	0.1	0.1	0.1	0.1	0.03	0.03	0.1	0.1	0.1	0.1	0.03	0.1	0.1
ZINC	0.01	0.005	0.02	0.02	0.02	0.01	0.005	0.005	0.02	0.02	0.02	0.01	0.005	0.02	0.02
CYANIDE (3)	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	--	0.005	0.01	--	--	--	0.005	0.005	0.01	--	--	0.005
TOTAL ORGANIC CARBON	0.5	5	5	5	5	0.5	5	5	5	5	5	0.5	5	5	5
SULFATE	--	1	--	--	--	--	1	1	--	--	--	--	1	--	--

#SEDIMENTS (MG/KG)#

SAMPLE IDENTIFIER	SED-101	SED-201	SED-301 GC/MS	SED-301 DUP	SED-401 GC/MS	SED-102	SED-202	SED-202 DUP	SED-302 GC/MS	SED-402 GC/MS	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303 GC/MS	SED-403 GC/MS
VOLATILE AROMATICS	0.024	0.025	0.080	0.062	1.000	0.025	0.028	0.025	0.070	1.000	1.000	0.025	0.024	0.027	0.066	1.000
ACETONE	--	--	2.000	1.600	1.000	--	--	--	1.700	1.000	1.000	--	--	--	1.700	1.000
SEMIVOLATILE ORGANICS	0.420	0.360	1.100	1.100	0.600	0.410	0.510	0.900	0.940	0.600	0.600	0.500	0.520	0.310	0.990	0.600
IRON	0.1	9200	5	5	2	0.1	19000	16000	5	2	2	0.1	0.1	20000	5	2
ZINC	0.01	36	5	5	0.5	0.01	69	100	5	0.5	0.5	0.01	0.01	88	5	0.5
CYANIDE (3)	0.01	0.1	0.01	0.01	0.3	0.01	0.1	0.1	0.01	0.3	0.3	0.01	0.01	0.1	0.01	0.3
TOTAL RECOVERABLE PHENOLICS	0.01	0.01	0.01	0.01	0.2	0.01	0.01	0.01	0.01	0.2	0.2	0.01	0.01	0.01	0.01	0.2
TOTAL ORGANIC CARBON	0.5	4600	100	100	100	0.5	3500	7600	200	100	100	0.5	0.5	4600	100	100
SULFATE	--	32	--	--	--	--	32	32	5	--	--	--	--	32	--	--

(1) NOMINAL DETECTION LIMITS WERE USED WHEN MDLs WERE NOT REPORTED BY THE LABORATORY.
(2) -- NOT ANALYZED
(3) TOTAL CYANIDE

01/19/88

TABLE B-4-2
QUALITY ASSURANCE SAMPLES
MINIMUM DETECTION LIMITS (1)
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/11/87	6/2/87	9/9/86	12/2/86	3/11/87	6/2/87	9/9/86	12/2/86	3/11/87	6/2/87
VOLATILE AROMATICS	0.001	0.005	0.010	0.005	0.001	0.005	0.010	0.005	-- (2)	--	--	--
ACETONE	0.002	0.010	0.010	0.010	0.002	0.010	0.010	0.010	--	--	--	--
METHYLENE CHLORIDE	0.001	0.005	0.010	0.005	0.001	0.005	0.010	0.005	--	--	--	--
SEMIVOLATILE ORGANICS	0.02	0.010	0.010	0.010	--	--	--	--	--	--	--	--
IRON	0.10	0.03	0.05	0.100	--	--	--	--	0.10	0.03	0.05	0.100
ZINC	0.010	0.005	0.01	0.020	--	--	--	--	0.010	0.005	0.01	0.020
TOTAL CYANIDE	0.010	0.01	0.01	0.01	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON	0.50	5	5	5	--	--	--	--	0.50	5	5	5
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	0.005	--	--	--	--	--	--	--	--
SULFATE	--	1	--	--	--	--	--	--	--	1	--	--

(1) NOMINAL DETECTION LIMITS WERE USED WHERE MDLs WERE NOT REPORTED BY THE LABORATORY.
(2) -- NOT ANALYZED

TABLE B-4-3

EXPLANATION OF TERMS AND ABBREVIATIONS
USED IN LABORATORY REPORTS

Term or Abbreviation	Explanation
Flagged Data Table	Presents analytical results corrected for errors and for method blank analysis as required.
RL	Reporting Limit. Indicates concentration at which laboratory can obtain accurate and repeatable results. Commonly referred to as the "Detection Limit."
J	Compound concentration estimated. Detected, but at a concentration below the Reporting Limit.
B	Compound detected in method blank.
U	Analysis performed for compound, but compound not detected.
D	Concentration determined by sample dilution.
R	Concentration value rejected because compound concentration in blank was greater than five times the Reporting Limit.
NA	Sample not analyzed for this compound.
NR	Sample analysis not requested.

TABLE B-4-4

FLAGGED DATA TABLE PROJECT: NYSEG - Mechanicville Soil Samples

SAMPLE LOCATION:	MEEDB-XX09/11	MEEDB-XX10/21	MEEDB-XX14/21	MEEDB-XXDU/15	MEEDB-XX12/21	MEEDB-XX15/11
SAMPLE IDENTIFIER:	B-09(S-1)	B-10(S-2)	B-14(S-2)	DUP-503	B-12(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/17/87	11/19/87	11/19/87
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
VOLATILE ORGANIC COMPOUNDS	RL ug/kg					
Chloromethane	10	NA	NA	NA	NA	280 U	340 U
Bromomethane	10	NA	NA	NA	NA	280 U	340 U
Vinyl Chloride	10	NA	NA	NA	NA	280 U	340 U
Chloroethane	10	NA	NA	NA	NA	280 U	340 U
Methylene Chloride	5	NA	NA	NA	NA	120 J	170 U
Acetone	10	NA	NA	NA	NA	2100 UJB	2600 UJB
Carbon Disulfide	5	NA	NA	NA	NA	140 U	170 U
1,1 - Dichloroethene	5	NA	NA	NA	NA	460 UJB	570 UJB
1,1 - Dichloroethane	5	NA	NA	NA	NA	140 U	170 U
Trans-1,2 - Dichloroethene	5	NA	NA	NA	NA	140 U	170 U
Chloroform	5	NA	NA	NA	NA	140 U	170 U
1,2 - Dichloroethane	5	NA	NA	NA	NA	140 U	170 U
2-Butanone	10	NA	NA	NA	NA	280 U	340 U
1,1,1 - Trichloroethane	5	NA	NA	NA	NA	140 U	170 U
Carbon Tetrachloride	5	NA	NA	NA	NA	140 U	170 U
Vinyl Acetate	10	NA	NA	NA	NA	280 U	340 U
Bromodichloromethane	5	NA	NA	NA	NA	140 U	170 U
1,2 - Dichloropropane	5	NA	NA	NA	NA	140 U	170 U
Trans- 1,3 -Dichloropropene	5	NA	NA	NA	NA	140 U	170 U
Trichloroethene	5	NA	NA	NA	NA	610 UJB	750 UJB
Dibromochloromethane	5	NA	NA	NA	NA	140 U	170 U
1,1,2 - Trichloroethane	5	NA	NA	NA	NA	140 U	170 U
Benzene	5	NA	NA	NA	NA	580 UJB	720 UJB
Cis- 1,3 -Dichloropropene	5	NA	NA	NA	NA	140 U	170 U
2-Chloroethylvinylether	10	NA	NA	NA	NA	280 U	340 U
Bromoform	5	NA	NA	NA	NA	140 U	170 U
4-Methyl-2-Pentanone	10	NA	NA	NA	NA	280 U	340 U
2-Hexanone	10	NA	NA	NA	NA	280 U	340 U
Tetrachloroethene	5	NA	NA	NA	NA	140 U	170 U
1,1,2,2 - Tetrachloroethane	5	NA	NA	NA	NA	140 U	170 U
Toluene	5	NA	NA	NA	NA	710 UJB	880 UJB
Chlorobenzene	5	NA	NA	NA	NA	660 UJB	810 UJB
Ethylbenzene	5	NA	NA	NA	NA	140 U	570
Styrene	5	NA	NA	NA	NA	140 U	170 U
Total Xylenes	5	NA	NA	NA	NA	140 U	880
%SOLID		NA	NA	NA	NA	88.6	71.6
DRYWT/DIL FACTOR		NA	NA	NA	NA	28	34

TABLE B-4-4

FLAGGED DATA TABLE PROJECT: NYSEG - Mechanicville Soil Samples

SAMPLE LOCATION:	MEEDB-XX09/11	MEEDB-XX10/21	MEEDB-XX14/21	MEEDB-XXDU/15	MEEDB-XX12/21	MEEDB-XX15/11
SAMPLE IDENTIFIER:	B-09(S-1)	B-10(S-2)	B-14(S-2)	DUP-503	B-12(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/17/87	11/19/87	11/19/87
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/kg						
Phenol	330	34000 U	400 U	410 U	450 U	752 U	931 U
bis(2-Chloroethyl)Ether	330	34000 U	400 U	410 U	450 U	752 U	931 U
2-Chlorophenol	330	34000 U	400 U	410 U	450 U	752 U	931 U
1,3 - Dichlorobenzene	330	34000 U	400 U	410 U	450 U	752 U	931 U
1,4 - Dichlorobenzene	330	34000 U	400 U	410 U	450 U	752 U	931 U
Benzyl Alcohol	330	34000 U	400 U	410 U	450 U	NA	NA
1,2 - Dichlorobenzene	330	34000 U	400 U	410 U	450 U	752 U	931 U
2-Methylphenol	330	34000 U	400 U	410 U	450 U	NA	NA
bis(2-Chloroisopropyl)Ether	330	34000 U	400 U	410 U	450 U	752 U	931 U
4-Methylphenol	330	34000 U	400 U	410 U	450 U	NA	NA
N-Nitroso-Di-n-Propylamine	330	34000 U	400 U	410 U	450 U	752 U	931 U
Hexachloroethane	330	34000 U	400 U	410 U	450 U	752 U	931 U
Nitrobenzene	330	34000 U	400 U	410 U	450 U	752 U	931 U
Isophorone	330	34000 U	400 U	410 U	450 U	752 U	931 U
2-Nitrophenol	330	34000 U	400 U	410 U	450 U	3760 U	4660 U
2,4 - Dimethylphenol	330	34000 U	400 U	410 U	450 U	752 U	931 U
Benzoic Acid	1600	170000 U	2000 U	2000 U	2200 U	NA	NA
bis(2-Chloroethoxy)Methane	330	34000 U	400 U	410 U	450 U	752 U	931 U
2,4 - Dichlorophenol	330	34000 U	400 U	410 U	450 U	752 U	931 U
1,2,4 - Trichlorobenzene	330	34000 U	400 U	410 U	450 U	752 U	931 U
Naphthalene	330	60000	180 J	410 U	450	752 U	931 U
4-Chloroaniline	330	34000 U	400 U	410 U	450 U	NA	NA
Hexacholorobutadiene	330	34000 U	400 U	410 U	450 U	752 U	931 U
4-Chloro-3-Methylphenol	330	34000 U	400 U	410 U	450 U	NA	NA
2-Methylnaphthalene	330	26000 J	100 J	410 U	260 J	NA	NA
Hexachlorocyclopentadiene	330	34000 U	400 U	410 U	450 U	752 U	931 U
2,4,6 - Trichlorophenol	330	34000 U	400 U	410 U	450 U	752 U	931 U
2,4,5 - Trichlorophenol	1600	170000 U	2000 U	2000 U	2200 U	NA	NA
2-Chloronaphthalene	330	34000 U	400 U	410 U	450 U	752 U	931 U
2-Nitroaniline	1600	170000 U	2000 U	2000 U	2200 U	NA	NA
Dimethyl Phthalate	330	34000 U	400 U	410 U	450 U	752 U	931 U
Acenaphthylene	330	34000 U	130 J	410 U	110 J	752 U	931 U
3-Nitroaniline	1600	170000 U	2000 U	2000 U	2200 U	NA	NA
Acenaphthene	330	31000 J	360 J	410 U	530	2350	931 U
2,4 - Dinitrophenol	1600	170000 U	2000 U	2000 U	2200 U	3760 U	4660 U
4-Nitrophenol	1600	170000 U	2000 U	2000 U	2200 U	3760 U	4660 U
Dibenzofuran	330	34000 U	41 J	410 U	90 J	NA	NA

TABLE B-4-4

FLAGGED DATA TABLE

PROJECT: NYSEG - Mechanicville Soil Samples

SAMPLE LOCATION:	MEEDB-XX09/11	MEEDB-XX10/21	MEEDB-XX14/21	MEEDB-XXDU/15	MEEDB-XX12/21	MEEDB-XX15/11
SAMPLE IDENTIFIER:	B-09(S-1)	B-10(S-2)	B-14(S-2)	DUP-503	B-12(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/17/87	11/19/87	11/19/87
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/kg					
2,4 - Dinitrotoluene	330	34000 U	400 U	410 U	450 U	752 U	931 U
2,6 - Dinitrotoluene	330	34000 U	400 U	410 U	450 U	752 U	931 U
Diethylphthalate	330	34000 U	400 U	410 U	450 U	752 U	931 U
4-Chlorophenyl-Phenylether	330	34000 U	400 U	410 U	450 U	752 U	931 U
Fluorene	330	16000 J	210 J	410 U	350 J	1250	931 U
4-Nitroaniline	1600	170000 U	2000 U	2000 U	2200 U	NA	NA
4,6 - Dinitro-2-Methylphenol	1600	170000 U	2000 U	2000 U	2200 U	NA	NA
N-Nitrosodiphenylamine (1)	330	34000 U	400 U	410 U	450 U	752 U	931 U
4-Bromophenyl-Phenylether	330	34000 U	400 U	410 U	450 U	752 U	931 U
Hexachlorobenzene	330	34000 U	400 U	410 U	450 U	752 U	931 U
Pentachlorophenol	1600	170000 U	2000 U	2000 U	2200 U	3760 U	4660 U
Phenanthrene	330	58000	880	410 U	1100	800	931 U
Anthracene	330	11000 J	220 J	410 U	260 J	800	931 U
Di-n-Butylphthalate	330	34000 U	400 U	410 U	450 U	752 U	931 U
Fluoranthene	330	18000 J	370 J	410 U	240 J	1010	931 U
Pyrene	330	27000 J	600	410 U	350 J	1390	931 U
Butylbenzylphthalate	330	34000 U	400 U	410 U	450 U	752 U	931 U
3,3' - Dichlorobenzidine	660	68000 U	800 U	810 U	900 U	NA	NA
Benzo (a) Anthracene	330	7500 J	220 J	410 U	100 J	752 U	931 U
bis (2-Ethylhexyl) Phthalate	330	34000 U	400 U	65 J	450 U	R	R
Chrysene	330	7200 J	240 J	410 U	110 J	752 U	931 U
Di-n-Octyl Phthalate	330	34000 U	400 U	410 U	450 U	752 U	931 U
Benzo (b) Fluoranthene	330	12000 DJ	220 DJ	410 U	450 U	752 U	931 U
Benzo (k) Fluoranthene	330	12000 DJ	220 DJ	410 U	450 U	752 U	931 U
Benzo (a) Pyrene	330	11000 J	210 J	410 U	85 J	752 U	931 U
Indeno (1,2,3-cd) Pyrene	330	4200 J	400 U	410 U	450 U	752 U	931 U
Dibenz (a,h) Anthracene	330	34000 U	400 U	410 U	450 U	752 U	931 U
Benzo (g,h,i,) Perylene	330	4500 J	400 U	410 U	450 U	752 U	931 U
p-Chloro-m-cresol		NA	NA	NA	NA	752 U	931 U
4,6,-Dinitro-o-cresol		NA	NA	NA	NA	3760 U	4660 U
Benzidine		NA	NA	NA	NA	6000 U	7450 U
3,3-Dichlorobenzidine		NA	NA	NA	NA	1500 U	1860 U
1,2-Diphenylhyrdrazine		NA	NA	NA	NA	752 U	931 U
n-Nitrosodimethylamine		NA	NA	NA	NA	752 U	931 U
%SOLIDS:		96	82.3	79.7	72.7	88.6	71.6
DRYWT/DIL FACTOR		103.03	1.21	1.24	1.36	2.28	2.8
Total Phenols (ppm)		0.74	0.5 U	0.5 U	0.5 U	0.5 U	2.6
Dissolved Iron (ppm)		28000	24000	21000	22000	18000	23000
Dissolved Zinc (ppm)		59	42	49	44	32	390
Total Cyanide (ppm)		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Undistilled Cyanide		NA	NA	NA	NA	NA	NA
TOC		3.3 %	2.2 %	3.2 %	2.4 %	2.2 %	4.2 %

D = Coelution

TABLE B-4-5

17-Aug-89

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:		MEGDMW8601/15	MEGDMW8602/15	MEGDMW8603/15	MEGDMW8604/15	MEGDMW8605/15	MEGDMW8606/15	MEGDMW8710/11
SAMPLE IDENTIFIER:		MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-10
DATE OF SAMPLE COLLECTION:		12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE ORGANIC COMPOUNDS	RL ug/l							
Chloromethane	5	5 U	5 U	50 U	50 U	50 U	5 U	5 U
Bromomethane	5	5 U	5 U	50 U	50 U	50 U	5 U	5 U
Vinyl Chloride	5	5 U	5 U	50 U	50 U	50 U	5 U	5 U
Chloroethane	5	5 U	5 U	50 U	50 U	50 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	50 U	50 U	50 U	5 U	5 U
Acetone	50	50 U	50 U	500 U	500 U	500 U	50 U	50 U
Carbon Disulfide	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
1,1 - Dichloroethene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
1,1 - Dichloroethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Trans -1,2 - Dichloroethene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Chloroform	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
1,2 - Dichloroethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
2-Butanone	10	10 U	10 U	100 U	100 U	100 U	10 U	10 U
1,1,1 - Trichloroethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Carbon Tetrachloride	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Vinyl Acetate	10	10 U	10 U	100 U	100 U	100 U	10 U	10 U
Bromodichloromethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
1,2 - Dichloropropane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Trans- 1,3 -Dichloropropene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Trichloroethene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Dibromochloromethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
1,1,2 - Trichloroethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Benzene	2	2 U	2 U	170	260	150	880	2 U
Cis- 1,3 -Dichloropropene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
2-Chloroethylvinylether	10	10 U	10 U	100 U	100 U	100 U	10 U	10 U
Bromoform	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
4-Methyl-2-Pentanone	10	10 U	10 U	100 U	100 U	100 U	10 U	10 U
2-Hexanone	10	10 U	10 U	100 U	100 U	100 U	10 U	10 U
1,1,2,2 - Tetrachloroethane	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Tetrachloroethene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Toluene	2	2 U	2 U	21	230	94	130	2 U
Chlorobenzene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Ethylbenzene	2	2 U	2 U	110	58	20 U	140	2 U
Styrene	2	2 U	2 U	20 U	20 U	20 U	2 U	2 U
Total Xylenes	2	2 U	2 U	400	2200	190	2400	12
DRYWT/DILUTION FACTOR		1	1	10	10	10	1	1

NOTE: Since volatile method blank data was not provided by the laboratory, blank corrections could not be performed.

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l	SAMPLE LOCATION: MEGDMW8601/15	MEGDMW8602/15	MEGDMW8603/15	MEGDMW8604/15	MEGDMW8605/15	MEGDMW8606/15	MEGDMW8710/11
		SAMPLE IDENTIFIER: MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-10
		DATE OF SAMPLE COLLECTION: 12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
		UNITS: ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Phenol	20	20 U	20 U	6000 U	*	240 U	800 U	20 U
bis(2-Chloroethyl)Ether	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2-Chlorophenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
1,3 - Dichlorobenzene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
1,4 - Dichlorobenzene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Benzyl Alcohol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
1,2 - Dichlorobenzene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2-Methylphenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
bis(2-Chloroisopropyl)Ether	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
4-Methylphenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
N-Nitroso-Di-n-Propylamine	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Hexachloroethane	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Nitrobenzene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Isophorone	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2-Nitrophenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2,4 - Dimethylphenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Benzoic Acid	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
bis(2-Chloroethoxy)Methane	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2,4 - Dichlorophenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
1,2,4 - Trichlorobenzene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Naphthalene	20	20 U	20 U	64000	1900	3600	12000	20 U
4-Chloroaniline	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Hexacholorobutadiene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
4-Chloro-3-Methylphenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2-Methylnaphthalene	20	20 U	20 U	34000	650	1100	4600	*
Hexachlorocyclopentadiene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2,4,6 - Trichlorophenol	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2,4,5 - Trichlorophenol	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
2-Chloronaphthalene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2-Nitroaniline	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
Dimethyl Phthalate	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Acenaphthylene	20	20 U	20 U	*	*	*	*	*
3-Nitroaniline	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
Acenaphthene	20	20 U	20 U	30000	*	510	2200	100
2,4 - Dinitrophenol	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
4-Nitrophenol	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
Dibenzofuran	20	20 U	20 U	*	200 U	*	*	*
2,4 - Dinitrotoluene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
2,6 - Dinitrotoluene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Diethylphthalate	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
4-Chlorophenyl-Phenylether	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Fluorene	20	20 U	20 U	13000	*	*	1100	28

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:		MEGDMW8601/15	MEGDMW8602/15	MEGDMW8603/15	MEGDMW8604/15	MEGDMW8605/15	MEGDMW8606/15	MEGDMW8710/11
SAMPLE IDENTIFIER:		MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-10
DATE OF SAMPLE COLLECTION:		12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l							
4-Nitroaniline	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
4,6 - Dinitro-2-Methylphenol	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
N-Nitrosodiphenylamine	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
4-Bromophenyl-Phenylether	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Hexachlorobenzene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Pentachlorophenol	100	100 U	100 U	30000 U	1000 U	1200 U	4000 U	100 U
Phenanthrene	20	20 U	20 U	38000	*	320	3500	*
Anthracene	20	20 U	20 U	9700	200 U	*	890	*
Di-n-Butylphthalate	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Fluoranthene	20	20 U	20 U	12000	200 U	*	1000	*
Pyrene	20	20 U	20 U	21000	200 U	*	1600	*
Butylbenzylphthalate	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
3,3' - Dichlorobenzidine	40	40 U	40 U	12000 U	400 U	480 U	1600 U	40 U
Benzo (a) Anthracene	20	20 U	20 U	*	200 U	240 U	*	20 U
bis (2-Ethylhexyl) Phthalate	20	*	*	6000 U	200 U	*	800 U	20 U
Chrysene	20	20 U	20 U	*	200 U	240 U	*	20 U
Di-n-Octyl Phthalate	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Benzo (b) Fluoranthene	20	20 U	20 U	* +	200 U	240 U	* +	20 U
Benzo (k) Fluoranthene	20	20 U	20 U	+	200 U	240 U	+	20 U
Benzo (a) Pyrene	20	20 U	20 U	*	200 U	240 U	*	20 U
Indeno (1,2,3-cd) Pyrene	20	20 U	20 U	6000 U	200 U	240 U	*	20 U
Dibenz (a,h) Anthracene	20	20 U	20 U	6000 U	200 U	240 U	800 U	20 U
Benzo (g,h,i,) Perylene	20	20 U	20 U	6000 U	200 U	240 U	*	20 U
DRYWT/DILUTION FACTOR		1	1	300	10	12	40	1
Total Phenols (mg/l)		0.006	0.016	17	0.021	0.028	0.056	0.005 U
Dissolved Iron (mg/l)		0.07	0.04	8.8	20	13	11	0.64
Dissolved Zinc (mg/l)		0.005 U	0.005 U	0.11	0.52	0.54	0.048	0.005 U
Total Cyanide (mg/l)		0.01	0.01 U	5 U	0.05	0.01 U	0.06	0.01
Undistilled Cyanide (mg/l)		0.01 U	0.01 U	N/A	0.01 U	0.01 U	0.07	0.01 U
TOC (mg/l)		3.4	2.9	50000 **	8.4	8000 **	10000 **	61

Notes:

** = Visible Product

* = Trace concentrations detected below the reporting limit.

+ = Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

VOLATILE ORGANIC COMPOUNDS	RL ug/l	SAMPLE LOCATION: MEGDMW8711/11	MEGXMW87DU/15	MEGDMW8712/11	MEGDMW8713/11	MEGDMWMS13/15	MEGDMWMD13/15	MEGDMW8714/11
		SAMPLE IDENTIFIER: MW-11	MW-11 Dup	MW-12	MW-13	Matrix Spike	Matrix Spike Duplicate	MW-14
		DATE OF SAMPLE COLLECTION: 12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
		UNITS: ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Chloromethane	5	5 U	5 U	5 U	100 U	100 U	100 U	50 U
Bromomethane	5	5 U	5 U	5 U	100 U	100 U	100 U	50 U
Vinyl Chloride	5	5 U	5 U	5 U	100 U	100 U	100 U	50 U
Chloroethane	5	5 U	5 U	5 U	100 U	100 U	100 U	50 U
Methylene Chloride	5	5 U	5 U	5 U	100 U	100 U	100 U	50 U
Acetone	50	50 U	50 U	50 U	1000 U	1000 U	1000 U	500 U
Carbon Disulfide	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
1,1 - Dichloroethene	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
1,1 - Dichloroethane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Trans -1,2 - Dichloroethene	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Chloroform	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
1,2 - Dichloroethane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
2-Butanone	10	10 U	10 U	10 U	200 U	200 U	200 U	100 U
1,1,1 - Trichloroethane	2	2.6	4.4	2 U	40 U	40 U	40 U	20 U
Carbon Tetrachloride	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Vinyl Acetate	10	10 U	10 U	10 U	200 U	200 U	200 U	100 U
Bromodichloromethane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
1,2 - Dichloropropane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Trans- 1,3 -Dichloropropene	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Trichloroethene	2	2 U	2 U	2 U	53	40 U	40 U	20 U
Dibromochloromethane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
1,1,2 - Trichloroethane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Benzene	2	2 U	2 U	2 U	9600	7400	2100	2300
Cis- 1,3 -Dichloropropene	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
2-Chloroethylvinylether	10	10 U	10 U	10 U	200 U	200 U	200 U	100 U
Bromoform	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
4-Methyl-2-Pentanone	10	10 U	10 U	10 U	200 U	200 U	200 U	100 U
2-Hexanone	10	10 U	10 U	10 U	200 U	200 U	200 U	100 U
1,1,2,2 - Tetrachloroethane	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Tetrachloroethene	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Toluene	2	2 U	2 U	2 U	3600	5500	4900	340
Chlorobenzene	2	2 U	2 U	2 U	40 U	40 U	40 U	20 U
Ethylbenzene	2	2 U	2 U	2 U	2000	1900	1600	61
Styrene	2	2 U	2 U	2 U	940	970	930	20 U
Total Xylenes	2	2 U	2 U	75	2200	2300	2000	790
DRYWT/DILUTION FACTOR		1	1	1	20	20	20	10

NOTE: Since volatile method blank data was not provided by the laboratory, blank corrections could not be performed.

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:	MEGDMW8711/11	MEGXMW87DU/15	MEGDMW8712/11	MEGDMW8713/11	MEGDMWMS13/15	MEGDMWMD13/15	MEGDMW8714/11
SAMPLE IDENTIFIER:	MW-11	MW-11 Dup	MW-12	MW-13	Matrix Spike	Matrix Spike Duplicate	MW-14
DATE OF SAMPLE COLLECTION:	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l							
Phenol	20	20 U	20 U	20 U	580	*	*	360
bis(2-Chloroethyl)Ether	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2-Chlorophenol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
1,3 - Dichlorobenzene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
1,4 - Dichlorobenzene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Benzyl Alcohol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
1,2 - Dichlorobenzene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2-Methylphenol	20	20 U	20 U	20 U	*	1000 U	2000 U	*
bis(2-Chloroisopropyl)Ether	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
4-Methylphenol	20	20 U	20 U	20 U	*	*	*	29
N-Nitroso-Di-n-Propylamine	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Hexachloroethane	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Nitrobenzene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Isophorone	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2-Nitrophenol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2,4 - Dimethylphenol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Benzoic Acid	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
bis(2-Chloroethoxy)Methane	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2,4 - Dichlorophenol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
1,2,4 - Trichlorobenzene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Naphthalene	20	20 U	20 U	20 U	4600	5600	9500	*
4-Chloroaniline	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Hexacholorobutadiene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
4-Chloro-3-Methylphenol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2-Methylnaphthalene	20	20 U	20 U	20 U	780	*	*	80
Hexachlorocyclopentadiene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2,4,6 - Trichlorophenol	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2,4,5 - Trichlorophenol	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
2-Chloronaphthalene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2-Nitroaniline	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
Dimethyl Phthalate	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Acenaphthylene	20	20 U	20 U	20 U	*	*	*	*
3-Nitroaniline	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
Acenaphthene	20	20 U	20 U	20 U	*	1000 U	2000 U	69
2,4 - Dinitrophenol	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
4-Nitrophenol	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
Dibenzofuran	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2,4 - Dinitrotoluene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
2,6 - Dinitrotoluene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Diethylphthalate	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
4-Chlorophenyl-Phenylether	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Fluorene	20	20 U	20 U	20 U	*	1000 U	2000 U	*

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:		MEGDMW8711/11	MEGXMW87DU/15	MEGDMW8712/11	MEGDMW8713/11	MEGDMWMS13/15	MEGDMWMD13/15	MEGDMW8714/11
SAMPLE IDENTIFIER:		MW-11	MW-11 Dup	MW-12	MW-13	Matrix Spike	Matrix Spike Duplicate	MW-14
DATE OF SAMPLE COLLECTION:		12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l							
4-Nitroaniline	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
4,6 - Dinitro-2-Methylphenol	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
N-Nitrosodiphenylamine	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
4-Bromophenyl-Phenylether	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Hexachlorobenzene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Pentachlorophenol	100	100 U	100 U	100 U	2000 U	5000 U	10000 U	100 U
Phenanthrene	20	20 U	20 U	20 U	*	1000 U	2000 U	*
Anthracene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	*
Di-n-Butylphthalate	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Fluoranthene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Pyrene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Butylbenzylphthalate	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
3,3' - Dichlorobenzidine	40	40 U	40 U	40 U	800 U	2000 U	4000 U	40 U
Benzo (a) Anthracene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
bis (2-Ethylhexyl) Phthalate	20	20 U	*	*	400 U	1000 U	2000 U	*
Chrysene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Di-n-Octyl Phthalate	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Benzo (b) Fluoranthene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Benzo (k) Fluoranthene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Benzo (a) Pyrene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Indeno (1,2,3-cd) Pyrene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Dibenz (a,h) Anthracene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
Benzo (g,h,i,) Perylene	20	20 U	20 U	20 U	400 U	1000 U	2000 U	20 U
DRYWT/DILUTION FACTOR		1	1	1	20	50	100	1
Total Phenols (mg/l)		0.005	0.01	0.016	0.053	NR	NR	0.063
Dissolved Iron (mg/l)		0.15	0.26	2.7	0.14	0.23	0.13	0.4
Dissolved Zinc (mg/l)		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.013	0.005 U
Total Cyanide (mg/l)		0.01 U	0.01 U	0.8	0.15	0.14	0.15	0.12
Undistilled Cyanide (mg/l)		0.01 U	0.01 U	0.02	0.01 U	0.02	0.02	0.02
TOC (mg/l)		5.4	8.9	18	9	NR	NR	9.2

Notes:

** = Visible Oil

* = Trace concentrations detected below the reporting limit.

+ = Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:	MEGDMW8715/11	MEGXMW87DU/25	MEGXMW87FB/15	MEGXMW87SB/15	MESUSSXX01/15	MESISSXX02/15	MESDSSXX04/11
SAMPLE IDENTIFIER:	MW-15	MW-15 Dup	FB-01	SB-01	SW-01	SW-02	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l

VOLATILE ORGANIC COMPOUNDS	RL ug/l							
Chloromethane	5	5 U	5 U	NR	5 U	5 U	5 U	5 U
Bromomethane	5	5 U	5 U	NR	5 U	5 U	5 U	5 U
Vinyl Chloride	5	5 U	5 U	NR	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	NR	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	NR	5 U	5 U	5 U	5 U
Acetone	50	50 U	50 U	NR	160	50 U	50 U	50 U
Carbon Disulfide	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
1,1 - Dichloroethene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
1,1 - Dichloroethane	2	3.3	3.1	NR	2 U	2 U	2 U	2 U
Trans -1,2 - Dichloroethene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Chloroform	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
1,2 - Dichloroethane	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
2-Butanone	10	10 U	10 U	NR	10 U	10 U	10 U	10 U
1,1,1 - Trichloroethane	2	17	25	NR	2 U	2 U	2 U	2 U
Carbon Tetrachloride	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Vinyl Acetate	10	10 U	10 U	NR	10 U	10 U	10 U	10 U
Bromodichloromethane	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
1,2 - Dichloropropane	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Trans- 1,3 -Dichloropropene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Trichloroethene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Dibromochloromethane	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
1,1,2 - Trichloroethane	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Benzene	2	2.6	5.8	NR	2 U	2 U	2 U	2 U
Cis- 1,3 -Dichloropropene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
2-Chloroethylvinylether	10	10 U	10 U	NR	10 U	10 U	10 U	10 U
Bromoform	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
4-Methyl-2-Pentanone	10	10 U	10 U	NR	10 U	10 U	10 U	10 U
2-Hexanone	10	10 U	10 U	NR	10 U	10 U	10 U	10 U
1,1,2,2 - Tetrachloroethane	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Tetrachloroethene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Toluene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Chlorobenzene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Ethylbenzene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Styrene	2	2 U	2 U	NR	2 U	2 U	2 U	2 U
Total Xylenes	2	2.7	3.1	NR	2 U	2 U	2 U	2 U
DRYWT/DILUTION FACTOR		1	1	NR	1	1	1	1

NOTE: Since volatile method blank data was not provided by the laboratory, blank corrections could not be performed.

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:		MEGDMW8715/11	MEGXMW87DU/25	MEGXMW87FB/15	MEGXMW87SB/15	MESUSSXX01/15	MESISSXX02/15	MESDSSXX04/11
SAMPLE IDENTIFIER:		MW-15	MW-15 Dup	FB-01	SB-01	SW-01	SW-02	SW-04
DATE OF SAMPLE COLLECTION:		12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l							
Phenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
bis(2-Chloroethyl)Ether	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2-Chlorophenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
1,3 - Dichlorobenzene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
1,4 - Dichlorobenzene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Benzyl Alcohol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
1,2 - Dichlorobenzene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2-Methylphenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
bis(2-Chloroisopropyl)Ether	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
4-Methylphenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
N-Nitroso-Di-n-Propylamine	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Hexachloroethane	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Nitrobenzene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Isophorone	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2-Nitrophenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2,4 - Dimethylphenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Benzoic Acid	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
bis(2-Chloroethoxy)Methane	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2,4 - Dichlorophenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
1,2,4 - Trichlorobenzene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Naphthalene	20	91	*	NR	20 U	40 U	20 U	20 U
4-Chloroaniline	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Hexacholorobutadiene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
4-Chloro-3-Methylphenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2-Methylnaphthalene	20	30	*	NR	20 U	40 U	20 U	20 U
Hexachlorocyclopentadiene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2,4,6 - Trichlorophenol	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2,4,5 - Trichlorophenol	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
2-Chloronaphthalene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2-Nitroaniline	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
Dimethyl Phthalate	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Acenaphthylene	20	45	27	NR	20 U	40 U	20 U	20 U
3-Nitroaniline	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
Acenaphthene	20	40	26	NR	20 U	40 U	20 U	20 U
2,4 - Dinitrophenol	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
4-Nitrophenol	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
Dibenzofuran	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2,4 - Dinitrotoluene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
2,6 - Dinitrotoluene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Diethylphthalate	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
4-Chlorophenyl-Phenylether	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Fluorene	20	*	*	NR	20 U	40 U	20 U	20 U

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:		MEGDMW8715/11	MEGXMW87DU/25	MEGXMW87FB/15	MEGXMW87SB/15	MESUSSXX01/15	MESISSXX02/15	MESDSSXX04/11
SAMPLE IDENTIFIER:		MW-15	MW-15 Dup	FB-01	SB-01	SW-01	SW-02	SW-04
DATE OF SAMPLE COLLECTION:		12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l							
4-Nitroaniline	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
4,6 - Dinitro-2-Methylphenol	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
N-Nitrosodiphenylamine	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
4-Bromophenyl-Phenylether	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Hexachlorobenzene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Pentachlorophenol	100	100 U	100 U	NR	100 U	200 U	100 U	100 U
Phenanthrene	20	*	*	NR	20 U	40 U	20 U	20 U
Anthracene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Di-n-Butylphthalate	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Fluoranthene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Pyrene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Butylbenzylphthalate	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
3,3' - Dichlorobenzidine	40	40 U	40 U	NR	40 U	80 U	40 U	40 U
Benzo (a) Anthracene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
bis (2-Ethylhexyl) Phthalate	20	20 U	20 U	NR	20 U	390	*	20 U
Chrysene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Di-n-Octyl Phthalate	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Benzo (b) Fluoranthene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Benzo (k) Fluoranthene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Benzo (a) Pyrene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Indeno (1,2,3-cd) Pyrene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Dibenz (a,h) Anthracene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
Benzo (g,h,i,) Perylene	20	20 U	20 U	NR	20 U	40 U	20 U	20 U
DRYWT/DILUTION FACTOR		1	1	NR	1	2	1	1
Total Phenols (mg/l)		0.006	0.006	NR	0.005 U	0.005 U	0.005 U	0.005 U
Dissolved Iron (mg/l)		0.13	0.03 U	0.03 U	0.24	0.2	1.1	0.24
Dissolved Zinc (mg/l)		0.005 U	0.014	0.005 U	0.005 U	0.005 U	0.014	0.005 U
Total Cyanide (mg/l)		0.01 U	0.06	NR	0.01 U	0.01 U	0.01 U	0.01 U
Undistilled Cyanide (mg/l)		0.01 U	0.01 U	NR	0.01 U	0.01 U	0.01 U	0.01 U
TOC (mg/l)		2.9	3.2	3.8	2.1	6.1	6.1	4.8

Notes:

** = Visible Oil

* = Trace concentrations detected below the reporting limit.

+ = Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:	MESXSSXXDU/15	MEGXMW87TB/15
SAMPLE IDENTIFIER:	SW-04 Dup	TB-01
DATE OF SAMPLE COLLECTION:	12/22/87	12/22/87
UNITS:	ug/l	ug/l

VOLATILE ORGANIC COMPOUNDS	RL ug/l		
Chloromethane	5	5 U	5 U
Bromomethane	5	5 U	5 U
Vinyl Chloride	5	5 U	5 U
Chloroethane	5	5 U	5 U
Methylene Chloride	5	5 U	5 U
Acetone	50	50 U	50 U
Carbon Disulfide	2	2 U	2 U
1,1 - Dichloroethene	2	2 U	2 U
1,1 - Dichloroethane	2	2 U	2 U
Trans -1,2 - Dichloroethene	2	2 U	2 U
Chloroform	2	2 U	2 U
1,2 - Dichloroethane	2	2 U	2 U
2-Butanone	10	10 U	10 U
1,1,1 - Trichloroethane	2	2 U	2 U
Carbon Tetrachloride	2	2 U	2 U
Vinyl Acetate	10	10 U	10 U
Bromodichloromethane	2	2 U	2 U
1,2 - Dichloropropane	2	2 U	2 U
Trans- 1,3 -Dichloropropene	2	2 U	2 U
Trichloroethene	2	2 U	2 U
Dibromochloromethane	2	2 U	2 U
1,1,2 - Trichloroethane	2	2 U	2 U
Benzene	2	2 U	2 U
Cis- 1,3 -Dichloropropene	2	2 U	2 U
2-Chloroethylvinylether	10	10 U	10 U
Bromoform	2	2 U	2 U
4-Methyl-2-Pentanone	10	10 U	10 U
2-Hexanone	10	10 U	10 U
1,1,2,2 - Tetrachloroethane	2	2 U	2 U
Tetrachloroethene	2	2 U	2 U
Toluene	2	2 U	2 U
Chlorobenzene	2	2 U	2 U
Ethylbenzene	2	2 U	2 U
Styrene	2	2 U	2 U
Total Xylenes	2	2 U	2 U
DRYWT/DILUTION FACTOR		1	1

NOTE: Since volatile method blank data was not provided by the laboratory, blank corrections could not be performed.

TABLE B-4-5

17-Aug-89

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:	MESXSSXXDU/15		MEGXMW87TB/15
SAMPLE IDENTIFIER:	SW-04 Dup		TB-01
DATE OF SAMPLE COLLECTION:	12/22/87		12/22/87
UNITS:	ug/l		ug/l

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l		
Phenol	20	20 U	NR
bis(2-Chloroethyl)Ether	20	20 U	NR
2-Chlorophenol	20	20 U	NR
1,3 - Dichlorobenzene	20	20 U	NR
1,4 - Dichlorobenzene	20	20 U	NR
Benzyl Alcohol	20	20 U	NR
1,2 - Dichlorobenzene	20	20 U	NR
2-Methylphenol	20	20 U	NR
*bis(2-Chloroisopropyl)Ether	20	20 U	NR
4-Methylphenol	20	20 U	NR
N-Nitroso-Di-n-Propylamine	20	20 U	NR
Hexachloroethane	20	20 U	NR
Nitrobenzene	20	20 U	NR
Isophorone	20	20 U	NR
2-Nitrophenol	20	20 U	NR
2,4 - Dimethylphenol	20	20 U	NR
Benzoic Acid	100	100 U	NR
bis(2-Chloroethoxy)Methane	20	20 U	NR
2,4 - Dichlorophenol	20	20 U	NR
1,2,4 - Trichlorobenzene	20	20 U	NR
Naphthalene	20	20 U	NR
4-Chloroaniline	20	20 U	NR
Hexacholorobutadiene	20	20 U	NR
4-Chloro-3-Methylphenol	20	20 U	NR
2-Methylnaphthalene	20	20 U	NR
Hexachlorocyclopentadiene	20	20 U	NR
2,4,6 - Trichlorophenol	20	20 U	NR
2,4,5 - Trichlorophenol	100	100 U	NR
2-Chloronaphthalene	20	20 U	NR
2-Nitroaniline	100	100 U	NR
Dimethyl Phthalate	20	20 U	NR
Acenaphthylene	20	20 U	NR
3-Nitroaniline	100	100 U	NR
Acenaphthene	20	20 U	NR
2,4 - Dinitrophenol	100	100 U	NR
4-Nitrophenol	100	100 U	NR
Dibenzofuran	20	20 U	NR
2,4 - Dinitrotoluene	20	20 U	NR
2,6 - Dinitrotoluene	20	20 U	NR
Diethylphthalate	20	20 U	NR
4-Chlorophenyl-Phenylether	20	20 U	NR
Fluorene	20	20 U	NR

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance and Surface Water Samples

SAMPLE LOCATION:	MESXSSXXDU/15		MEGXMW87TB/15
SAMPLE IDENTIFIER:	SW-04 Dup		TB-01
DATE OF SAMPLE COLLECTION:	12/22/87		12/22/87
UNITS:	ug/l		ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l		
4-Nitroaniline	100	100 U	NR
4,6 - Dinitro-2-Methylphenol	100	100 U	NR
N-Nitrosodiphenylamine	20	20 U	NR
4-Bromophenyl-Phenylether	20	20 U	NR
Hexachlorobenzene	20	20 U	NR
Pentachlorophenol	100	100 U	NR
Phenanthrene	20	20 U	NR
Anthracene	20	20 U	NR
Di-n-Butylphthalate	20	20 U	NR
Fluoranthene	20	20 U	NR
Pyrene	20	20 U	NR
Butylbenzylphthalate	20	20 U	NR
3,3' - Dichlorobenzidine	40	40 U	NR
Benzo (a) Anthracene	20	20 U	NR
bis (2-Ethylhexyl) Phthalate	20	20 U	NR
Chrysene	20	20 U	NR
Di-n-Octyl Phthalate	20	20 U	NR
Benzo (b) Fluoranthene	20	20 U	NR
Benzo (k) Fluoranthene	20	20 U	NR
Benzo (a) Pyrene	20	20 U	NR
Indeno (1,2,3-cd) Pyrene	20	20 U	NR
Dibenz (a,h) Anthracene	20	20 U	NR
Benzo (g,h,i,) Perylene	20	20 U	NR
DRYWT/DILUTION FACTOR		1	NR
Total Phenols (mg/l)		0.01	NR
Dissolved Iron (mg/l)		0.25	NR
Dissolved Zinc (mg/l)		0.005 U	NR
Total Cyanide (mg/l)		0.01 U	NR
Undistilled Cyanide (mg/l)		0.01 U	NR
TOC (mg/l)		5	NR

Notes:
** = Visible Oil
* = Trace concentrations detected below the reporting limit.
+ = Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.

TABLE B-4-5

02-Aug-89

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MEGUMW8601/16	MEGUMW8602/16	MEGXMW87DU/26	MEGUMW8603/16	MEGUMW8604/16	MEGUMW8605/16	MEGUMW8606/16
SAMPLE IDENTIFIER:		MW-01	MW-02	MW-02 Dup	MW-03	MW-04	MW-05	MW-06
DATE OF SAMPLE COLLECTION:		3/29/88	3/29/88	3/29/88	3/30/88	3/30/88	3/30/88	3/30/88
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE ORGANIC COMPOUNDS	RL ug/l							
Chloromethane	10	10 U	10 U	Broken	100 U	200 U	100 U	50 U
Bromomethane	10	10 U	10 U	Vial	100 U	200 U	100 U	50 U
Vinyl Chloride	10	10 U	10 U	NA	100 U	200 U	100 U	50 U
Chloroethane	10	10 U	10 U	NA	100 U	200 U	100 U	50 U
Methylene Chloride	5	13 UJB	12 UJB	NA	120 UJB	260 UJB	120 UJB	75 UJB
Acetone	10	47 UJB	99 UJB	NA	990 UJB	940 UJB	990 UJB	900 UJB
Carbon Disulfide	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
1,1 - Dichloroethene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
1,1 - Dichloroethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
trans-1,2 - Dichloroethene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Chloroform	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
1,2 - Dichloroethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
2-Butanone	10	33 UJB	70 UJB	NA	700 UJB	660 UJB	700 UJB	195 UJB
1,1,1 - Trichloroethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Carbon Tetrachloride	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Vinyl Acetate	10	10 U	10 U	NA	100 U	27 J	100 U	50 U
Bromodichloromethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
1,2 - Dichloropropane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Trans- 1,3 -Dichloropropene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Trichloroethene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Dibromochloromethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
1,1,2 - Trichloroethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Benzene	5	5 U	5 U	NA	150	200	39 J	60
Cis- 1,3 -Dichloropropene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
2-Chloroethylvinylether	10	10 U	10 U	NA	100 U	200 U	100 U	50 U
Bromoform	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
4-Methyl-2-Pentanone	10	10 UJB	10 UJB	NA	100 UJB	200 UJB	100 UJB	70 UJB
2-Hexanone	10	10 UJB	10 U	NA	100 U	200 UJB	100 U	50 UJB
Tetrachloroethene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
1,1,2,2 - Tetrachloroethane	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Toluene	5	25 UJB	25 UJB	NA	250 UJB	500 UJB	250 UJB	130 UJB
Chlorobenzene	5	1.6 J	1.6 J	NA	50 U	100 U	50 U	25 U
Ethylbenzene	5	5 U	5 U	NA	50 U	170	54	25 U
Styrene	5	5 U	5 U	NA	50 U	100 U	50 U	25 U
Total Xylenes	5	5 U	5 U	NA	420	1300	160	40
DRYWT/DILUTION FACTOR		1	1	NA	10	20	10	5

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l	SAMPLE LOCATION: MEGUMW8601/16	MEGUMW8602/16	MEGXMW87DU/26	MEGUMW8603/16	MEGUMW8604/16	MEGUMW8605/16	MEGUMW8606/16
		SAMPLE IDENTIFIER: MW-01	MW-02	MW-02 Dup	MW-03	MW-04	MW-05	MW-06
		DATE OF SAMPLE COLLECTION: 3/29/88	3/29/88	3/29/88	3/30/88	3/30/88	3/30/88	3/30/88
		UNITS: ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Phenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	15 J
bis(2-Chloroethyl)Ether	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2-Chlorophenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
1,3 - Dichlorobenzene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
1,4 - Dichlorobenzene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Benzyl Alcohol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
1,2 - Dichlorobenzene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2-Methylphenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
bis(2-Chloroisopropyl)Ether	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
4-Methylphenol	10	10 U	6200 U	250 U	620 U	250 U	270 J	100 U
N-Nitroso-Di-n-Propylamine	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Hexachloroethane	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Nitrobenzene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Isophorone	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2-Nitrophenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2,4 - Dimethylphenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Benzoic Acid	50	50 U	31000 U	1250 U	3100 U	1250 U	100 J	500 U
bis(2-Chloroethoxy)Methane	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2,4 - Dichlorophenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
1,2,4 - Trichlorobenzene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Naphthalene	10	10 U	6200 U	250 U	620 U	1400	30000	100 U
4-Chloroaniline	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Hexacholorobutadiene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
4-Chloro-3-Methylphenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2-Methylnaphthalene	10	10 U	6200 U	250 U	620 U	780	35000	100 U
Hexachlorocyclopentadiene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2,4,6 - Trichlorophenol	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
2,4,5 - Trichlorophenol	50	50 U	31000 U	1250 U	3100 U	1250 U	3100 U	500 U
2-Chloronaphthalene	10	10 U	6200 U	250 U	620 U	250 U	140 J	100 U
2-Nitroaniline	50	50 U	31000 U	250 U	83 J	250 U	460 J	500 U
Dimethyl Phthalate	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Acenaphthylene	10	10 U	6200 U	250 U	620 U	30 J	2700	12 J
3-Nitroaniline	50	50 U	31000 U	1250 U	3100 U	1250 U	1200 J	500 U
Acenaphthene	10	10 U	6200 U	250 U	620 U	230 J	22000	120 J
2,4 - Dinitrophenol	50	50 U	6200 U	1250 U	3100 U	1250 U	3100 U	500 U
4-Nitrophenol	50	50 U	31000 U	1250 U	3100 U	1250 U	3100 U	500 U
Dibenzofuran	10	10 U	6200 U	250 U	88 J	250 U	2000	100 U
2,4 - Dinitrotoluene	10	10 U	31000 U	250 U	300 J	250 U	600 U	100 U
2,6 - Dinitrotoluene	10	10 U	6200 U	250 U	620 U	250 U	260 J	100 U
Diethylphthalate	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
4-Chlorophenyl-Phenylether	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Fluorene	10	10 U	6200 U	250 U	620 U	99 J	10000	100 U

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MEGUMW8601/16	MEGUMW8602/16	MEGXMW87DU/26	MEGUMW8603/16	MEGUMW8604/16	MEGUMW8605/16	MEGUMW8606/16
SAMPLE IDENTIFIER:		MW-01	MW-02	MW-02 Dup	MW-03	MW-04	MW-05	MW-06
DATE OF SAMPLE COLLECTION:		3/29/88	3/29/88	3/29/88	3/30/88	3/30/88	3/30/88	3/30/88
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l							
4-Nitroaniline	50	50 U	31000 U	1250 U	120 J	1250 U	3100 U	500 U
4,6 - Dinitro-2-Methylphenol	50	50 U	31000 U	1250 U	3100 U	1250 U	3100 U	500 U
N-Nitrosodiphenylamine (1)	10	10 UJB	6200 UJB	250 UJB	341 UJB	250 UJB	620 JB	100 UJB
4-Bromophenyl-Phenylether	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Hexachlorobenzene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Pentachlorophenol	50	50 U	31000 U	1250 U	3100 U	1250 U	3100 U	500 U
Phenanthrene	10	10 U	6200 U	250 U	620 U	180 J	26000	27 J
Anthracene	10	10 U	6200 U	250 U	620 U	39 J	600 U	13 J
Di-n-Butylphthalate	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Fluoranthene	10	10 U	6200 U	250 U	94 J	27 J	9400	31 J
Pyrene	10	10 U	6200 U	250 U	620 U	250 U	1400	70 J
Butylbenzylphthalate	10	10 U	6200 U	250 U	620 U	37 J	600 U	100 U
3,3' - Dichlorobenzidine	20	20 U	12400 U	500 U	1240 U	500 U	1200 U	200 U
Benzo (a) Anthracene	10	10 U	6200 U	250 U	620 U	250 U	2600	20 J
bis (2-Ethylhexyl) Phthalate	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Chrysene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Di-n-Octyl Phthalate	10	470 UJB	291400 UJB	11750 UJB	29140 UJB	11750 UJB	28200 UJB	4700 UJB
Benzo (b) Fluoranthene	10	10 U	6200 U	250 U	620 U	250 U	600 U	14 J
Benzo (k) Fluoranthene	10	10 U	6200 U	250 U	620 U	250 U	1300	100 U
Benzo (a) Pyrene	10	10 U	6200 U	250 U	230 J	250 U	2400	100 U
Indeno (1,2,3-cd) Pyrene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Dibenz (a,h) Anthracene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
Benzo (g,h,i,) Perylene	10	10 U	6200 U	250 U	620 U	250 U	600 U	100 U
DRYWT/DILUTION FACTOR		1	620	25	62	25	60	10
Total Phenols (mg/l)		0.005 U	0.006	0.011	0.025	0.027	0.026	0.037
Dissolved Iron (mg/l)		0.05 U	0.12	0.23	14.4	9.25	25	5.95
Dissolved Zinc (mg/l)		0.02	0.02	0.1	0.2	0.05	1.09	0.02
Total Cyanide (mg/l)		0.01 U	0.01 U	0.01 U	0.27	0.05	0.05	0.01
Undistilled Cyanide (mg/l)		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
TOC (mg/l)		2.8	2.2	2.8	42	9.9	21	31

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

VOLATILE ORGANIC COMPOUNDS	RL ug/l	SAMPLE LOCATION: MEGUMW8710/12	MEGUMW8711/12	MEGUMW8712/12	MEGUMW8713/12	MEGXMW87DU/16	MEGUMW8714/12	MEGUMW8715/12
		SAMPLE IDENTIFIER: MW-10	MW-11	MW-12	MW-13	MW-13 Dup	MW-14	MW-15
		DATE OF SAMPLE COLLECTION: 3/29/88	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88
		UNITS: ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Chloromethane	10	Broken	10 U	50 U	1000 U	Broken	200 U	10 U
Bromomethane	10	Vial	10 U	50 U	1000 U	Vial	200 U	10 U
Vinyl Chloride	10	NA	10 U	50 U	1000 U	NA	200 U	10 U
Chloroethane	10	NA	10 U	50 U	1000 U	NA	200 U	10 U
Methylene Chloride	5	NA	12 UJB	65 UJB	36000	NA	300 UJB	12 UJB
Acetone	10	NA	99 UJB	235 UJB	57000 UJB	NA	3600 UJB	99 UJB
Carbon Disulfide	5	NA	5 U	25 U	500 U	NA	100 U	5 U
1,1 - Dichloroethene	5	NA	5 U	25 U	500 U	NA	100 U	5 U
1,1 - Dichloroethane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
trans-1,2 - Dichloroethene	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Chloroform	5	NA	5 U	25 U	500 U	NA	100 U	5 U
1,2 - Dichloroethane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
2-Butanone	10	NA	70 UJB	170 JB	2000 UJB	NA	780 UJB	70 UJB
1,1,1 - Trichloroethane	5	NA	5 U	25 U	500 U	NA	100 U	12
Carbon Tetrachloride	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Vinyl Acetate	10	NA	10 U	50 U	1000 U	NA	200 U	10 U
Bromodichloromethane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
1,2 - Dichloropropane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Trans- 1,3 -Dichloropropene	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Trichloroethene	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Dibromochloromethane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
1,1,2 - Trichloroethane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Benzene	5	NA	5 U	120	12000	NA	2200	18
Cis- 1,3 -Dichloropropene	5	NA	5 U	25 U	500 U	NA	100 U	5 U
2-Chloroethylvinylether	10	NA	10 U	50 U	1000 U	NA	200 U	10 U
Bromoform	5	NA	5 U	25 U	500 U	NA	100 U	5 U
4-Methyl-2-Pentanone	10	NA	10 UJB	50 UJB	1000 U	NA	280 UJB	10 UJB
2-Hexanone	10	NA	10 U	50 UJB	1000 U	NA	200 UJB	1.1 JB
Tetrachloroethene	5	NA	5 U	25 U	500 U	NA	100 U	5 U
1,1,2,2 - Tetrachloroethane	5	NA	5 U	25 U	500 U	NA	100 U	5 U
Toluene	5	NA	25 UJB	230 JB	6400	NA	520 UJB	25 UJB
Chlorobenzene	5	NA	5.0 U	25 U	500 U	NA	100 U	5 U
Ethylbenzene	5	NA	5 U	1100	2000	NA	81 J	5 U
Styrene	5	NA	5 U	25 U	1800	NA	100 U	5 U
Total Xylenes	5	NA	5 U	1200	3500	NA	160	13
DRYWT/DILUTION FACTOR		NA	1	5	100	NA	20	1

TABLE B-4-5

02-Aug-89

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:	MEGUMW8710/12	MEGUMW8711/12	MEGUMW8712/12	MEGUMW8713/12	MEGXMW87DU/16	MEGUMW8714/12	MEGUMW8715/12
SAMPLE IDENTIFIER:	MW-10	MW-11	MW-12	MW-13	MW-13 Dup	MW-14	MW-15
DATE OF SAMPLE COLLECTION:	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l						
Phenol	10	100 U	10 U	50000 U	250 U	250 U	44 J	1.7 J
bis(2-Chloroethyl)Ether	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2-Chlorophenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
1,3 - Dichlorobenzene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
1,4 - Dichlorobenzene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Benzyl Alcohol	10	100 U	10 U	50000 U	250 U	250 U	50 U	1 J
1,2 - Dichlorobenzene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2-Methylphenol	10	100 U	10 U	50000 U	250 U	250 U	5.5 J	10 U
bis(2-Chloroisopropyl)Ether	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
4-Methylphenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
N-Nitroso-Di-n-Propylamine	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Hexachloroethane	10	16 J	10 U	50000 U	250 U	250 U	50 U	10 U
Nitrobenzene	10	100 U	10 U	50000 U	250 U	250 U	50 U	1.1 J
Isophorone	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2-Nitrophenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2,4 - Dimethylphenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Benzoic Acid	50	500 U	50 U	250000 U	1250 U	1250 U	9 J	50 U
bis(2-Chloroethoxy)Methane	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2,4 - Dichlorophenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
1,2,4 - Trichlorobenzene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Naphthalene	10	100 U	10 U	580000	8100	7800	1800	5.1 J
4-Chloroaniline	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Hexacholorobutadiene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
4-Chloro-3-Methylphenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2-Methylnaphthalene	10	100 U	10 U	540000	2700	2100	220	10 U
Hexachlorocyclopentadiene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2,4,6 - Trichlorophenol	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2,4,5 - Trichlorophenol	50	500 U	50 U	250000 U	1250 U	1250 U	250 U	50 U
2-Chloronaphthalene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
2-Nitroaniline	50	500 U	1.1 J	250000 U	1250 U	250 U	250 U	50 U
Dimethyl Phthalate	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Acenaphthylene	10	100 U	10 U	26000 J	940	720	18 J	5.8 J
3-Nitroaniline	50	500 U	50 U	250000 U	1250 U	1250 U	250 U	50 U
Acenaphthene	10	14 J	10 U	210000	220 J	170 J	76	31
2,4 - Dinitrophenol	50	500 U	50 U	250000 U	1250 U	1250 U	250 U	50 U
4-Nitrophenol	50	28 J	50 U	250000 U	1250 U	1250 U	250 U	50 U
Dibenzofuran	10	100 U	10 U	23000 J	64 J	48 J	50 U	1.1 J
2,4 - Dinitrotoluene	10	100 U	10 U	50000 U	52 J	250 U	50 U	10 U
2,6 - Dinitrotoluene	10	14 J	10 U	50000 U	36 J	250 U	50 U	10 U
Diethylphthalate	10	100 U	10 U	50000 U	1250 U	250 U	50 U	10 U
4-Chlorophenyl-Phenylether	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Fluorene	10	16 J	10 U	110000	250 U	250 U	21 J	11

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MEGUMW8710/12	MEGUMW8711/12	MEGUMW8712/12	MEGUMW8713/12	MEGXMW87DU/16	MEGUMW8714/12	MEGUMW8715/12
SAMPLE IDENTIFIER:		MW-10	MW-11	MW-12	MW-13	MW-13 Dup	MW-14	MW-15
DATE OF SAMPLE COLLECTION:		3/29/88	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88	3/29/88
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l							
4-Nitroaniline	50	500 U	50 U	250000 U	1250 U	1250 U	250 U	50 U
4,6 - Dinitro-2-Methylphenol	50	15 J	50 U	250000 U	1250 U	1250 U	250 U	50 U
N-Nitrosodiphenylamine (1)	10	100 UJB	10 UJB	27500 UJB	137 UJB	250 UJB	50 UJB	5.5 UJB
4-Bromophenyl-Phenylether	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Hexachlorobenzene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Pentachlorophenol	50	500 U	50 U	250000 U	1250 U	1250 U	250 U	50 U
Phenanthrene	10	100 U	10 U	320000	1300	920	23 J	5.7 J
Anthracene	10	100 U	10 U	86000	310 J	210 J	50 U	10 U
Di-n-Butylphthalate	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Fluoranthene	10	100 U	10 U	82000	300	230 J	50 U	10 U
Pyrene	10	100 U	10 U	130000	450	330	50 U	1.7 J
Butylbenzylphthalate	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
3,3' - Dichlorobenzidine	20	200 U	20 U	100000 U	500 U	500 U	100 U	20 U
Benzo (a) Anthracene	10	35 J	10 U	34000 J	110 J	74 J	50 U	10 U
bis (2-Ethylhexyl) Phthalate	10	410	10 U	50000 U	250 U	250 U	50 U	10 U
Chrysene	10	29 J	10 U	32000 J	130 J	110 J	50 U	10 U
Di-n-Octyl Phthalate	10	4700 UJB	470 UJB	2350000 UJB	11750 UJB	11750 UJB	2350 UJB	470 UJB
Benzo (b) Fluoranthene	10	30 J	10 U	12000 J	38 J	85 J	50 U	10 U
Benzo (k) Fluoranthene	10	100 U	10 U	8400 J	41 J	250 U	50 U	10 U
Benzo (a) Pyrene	10	100 U	10 U	28000 J	100 J	72 J	50 U	10 U
Indeno (1,2,3-cd) Pyrene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Dibenz (a,h) Anthracene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
Benzo (g,h,i,) Perylene	10	100 U	10 U	50000 U	250 U	250 U	50 U	10 U
DRYWT/DILUTION FACTOR		10	1	5000	25	25	5	1
Total Phenols (mg/l)		0.029	0.005 U	0.2	0.064	0.058	0.3	0.005 U
Dissolved Iron (mg/l)		1.41	0.28	4.45	0.26	0.18	0.16	0.16
Dissolved Zinc (mg/l)		0.02	0.01	0.02	0.01	0.02	0.03	0.01
Total Cyanide (mg/l)		0.01 U	0.01 U	0.58	0.1	0.13	0.09	0.01 U
Undistilled Cyanide (mg/l)		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
TOC (mg/l)		11	4.9	13	7.6	8.5	8.6	3.9

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MEGXMW87FB/16	MESUSSMS02/16	MESUSSMD02/16	MEGXMW87SB/16	MESUSSXX01/16	MESUSSXX02/16	MESUSSXX04/16
SAMPLE IDENTIFIER:		FB-01	Matrix Spike	Matrix Spike Duplicate	SB-01	SW-01	SW-02	SW-04
DATE OF SAMPLE COLLECTION:		3/29/88	3/30/88	3/30/88	3/29/88	3/30/88	3/30/88	3/30/88
UNITS:		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
VOLATILE ORGANIC COMPOUNDS	RL ug/l							
Chloromethane	10	NR	10 U	10 U	10 U	10 U	Broken Vial	Broken Vial
Bromomethane	10	NR	10 U	10 U	10 U	10 U	NA	NA
Vinyl Chloride	10	NR	10 U	10 U	10 U	10 U	NA	NA
Chloroethane	10	NR	10 U	10 U	10 U	10 U	NA	NA
Methylene Chloride	5	NR	15 UJB	15 UJB	12 UJB	12 UJB	NA	NA
Acetone	10	NR	180 UJB	180 UJB	99 UJB	99 UJB	NA	NA
Carbon Disulfide	5	NR	5 U	5 U	5 U	5 U	NA	NA
1,1 - Dichloroethene	5	NR	5 U	5 U	5 U	5 U	NA	NA
1,1 - Dichloroethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
trans-1,2 - Dichloroethene	5	NR	5 U	5 U	5 U	5 U	NA	NA
Chloroform	5	NR	5 U	5 U	5 U	5 U	NA	NA
1,2 - Dichloroethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
2-Butanone	10	NR	39 UJB	39 UJB	70 UJB	70 UJB	NA	NA
1,1,1 - Trichloroethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
Carbon Tetrachloride	5	NR	5 U	5 U	5 U	5 U	NA	NA
Vinyl Acetate	10	NR	10 U	10 U	10 U	10 U	NA	NA
Bromodichloromethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
1,2 - Dichloropropane	5	NR	5 U	5 U	5 U	5 U	NA	NA
Trans- 1,3 -Dichloropropene	5	NR	5 U	5 U	5 U	5 U	NA	NA
Trichloroethene	5	NR	5 U	5 U	5 U	5 U	NA	NA
Dibromochloromethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
1,1,2 - Trichloroethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
Benzene	5	NR	5 U	5 U	5 U	5 U	NA	NA
Cis- 1,3 -Dichloropropene	5	NR	5 U	5 U	5 U	5 U	NA	NA
2-Chloroethylvinylether	10	NR	10 U	10 U	10 U	10 U	NA	NA
Bromoform	5	NR	5 U	5 U	5 U	5 U	NA	NA
4-Methyl-2-Pentanone	10	NR	14 UJB	14 UJB	10 U	10 U	NA	NA
2-Hexanone	10	NR	10 UJB	10 UJB	10 UJB	10 UJB	NA	NA
Tetrachloroethene	5	NR	5 U	5 U	5 U	5 U	NA	NA
1,1,2,2 - Tetrachloroethane	5	NR	5 U	5 U	5 U	5 U	NA	NA
Toluene	5	NR	26 UJB	26 UJB	25 UJB	25 UJB	NA	NA
Chlorobenzene	5	NR	5 U	2.4 J	5 U	5 U	NA	NA
Ethylbenzene	5	NR	5 U	5 U	5 U	5 U	NA	NA
Styrene	5	NR	5 U	5 U	5 U	5 U	NA	NA
Total Xylenes	5	NR	5 U	5 U	5 U	5 U	NA	NA
DRYWT/DILUTION FACTOR		NR	1	1	1	1	NA	NA

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:	MEGXMW87FB/16	MESUSSMS02/16	MESUSSMD02/16	MEGXMW87SB/16	MESUSSXX01/16	MESUSSXX02/16	MESUSSXX04/16
SAMPLE IDENTIFIER:	FB-01	Matrix Spike	Matrix Spike Duplicate	SB-01	SW-01	SW-02	SW-04
DATE OF SAMPLE COLLECTION:	3/29/88	3/30/88	3/30/88	3/29/88	3/30/88	3/30/88	3/30/88
UNITS:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l						
Phenol	10	NR	MISSING DATA	3.1 J	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)Ether	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
1,3 - Dichlorobenzene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
1,4 - Dichlorobenzene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Benzyl Alcohol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
1,2 - Dichlorobenzene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2-Methylphenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl)Ether	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
4-Methylphenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Hexachloroethane	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Nitrobenzene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Isophorone	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,4 - Dimethylphenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Benzoic Acid	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
bis(2-Chloroethoxy)Methane	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,4 - Dichlorophenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
1,2,4 - Trichlorobenzene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Naphthalene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Hexacholorobutadiene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,4,6 - Trichlorophenol	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,4,5 - Trichlorophenol	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
2-Chloronaphthalene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
Dimethyl Phthalate	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Acenaphthylene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
3-Nitroaniline	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
Acenaphthene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,4 - Dinitrophenol	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
4-Nitrophenol	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
Dibenzofuran	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,4 - Dinitrotoluene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
2,6 - Dinitrotoluene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Diethylphthalate	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-Phenylether	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Fluorene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U

TABLE B-4-5

02-Aug-89

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l	SAMPLE LOCATION: MEGXMW87FB/16	MESUSSMS02/16	MESUSSMD02/16	MEGXMW87SB/16	MESUSSXX01/16	MESUSSXX02/16	MESUSSXX04/16
		SAMPLE IDENTIFIER: FB-01	Matrix Spike	Matrix Spike Duplicate	SB-01	SW-01	SW-02	SW-04
		DATE OF SAMPLE COLLECTION: 3/29/88	3/30/88	3/30/88	3/29/88	3/30/88	3/30/88	3/30/88
		UNITS: ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
4-Nitroaniline	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
4,6 - Dinitro-2-Methylphenol	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
N-Nitrosodiphenylamine (1)	10	NR	MISSING DATA	30 UJB	10 UJB	10 UJB	10 UJB	10 UJB
4-Bromophenyl-Phenylether	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50	NR	MISSING DATA	150 U	50 U	50 U	50 U	50 U
Phenanthrene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Anthracene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Di-n-Butylphthalate	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Fluoranthene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Pyrene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
3,3' - Dichlorobenzidine	20	NR	MISSING DATA	60 U	20 U	20 U	20 U	20 U
Benzo (a) Anthracene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
bis (2-Ethylhexyl) Phthalate	10	NR	MISSING DATA	30 U	10 U	34	10 U	10 U
Chrysene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Di-n-Octyl Phthalate	10	NR	MISSING DATA	1410 UJB	470 UJB	470 UJB	470 UJB	470 UJB
Benzo (b) Fluoranthene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Benzo (k) Fluoranthene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Benzo (a) Pyrene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Indeno (1,2,3-cd) Pyrene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Dibenz (a,h) Anthracene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
Benzo (g,h,i,) Perylene	10	NR	MISSING DATA	30 U	10 U	10 U	10 U	10 U
DRYWT/DILUTION FACTOR		NR		3	1	1	1	1
Total Phenols (mg/l)		NR	NR	NR	0.009	0.005 U	0.005 U	0.011
Dissolved Iron (mg/l)		0.05 U	1.18	1.62	0.05 U	0.38	1.8	0.42
Dissolved Zinc (mg/l)		0.02	0.01	0.02	0.01 U	0.03	0.02	0.01 U
Total Cyanide (mg/l)		NR	MISSING DATA	NR	0.01 U	0.01 U	0.01 U	0.01 U
Undistilled Cyanide (mg/l)		NR	MISSING DATA	NR	0.01 U	0.01 U	0.01 U	0.01 U
TOC (mg/l)		4.9	NR	NR	1.2	4.2	4.9	4.7

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MESUSSXXDU/16	MEGXMW87TB/16
SAMPLE IDENTIFIER:		SW-04 Dup	TB-01
DATE OF SAMPLE COLLECTION:		3/30/88	3/29/88
UNITS:		ug/l	ug/l
VOLATILE ORGANIC COMPOUNDS	RL ug/l		
Chloromethane	10	10 U	10 U
Bromomethane	10	10 U	10 U
Vinyl Chloride	10	10 U	10 U
Chloroethane	10	10 U	10 U
Methylene Chloride	5	13 UJB	12 UJB
Acetone	10	47 UJB	99 UJB
Carbon Disulfide	5	5 U	5 U
1,1 - Dichloroethene	5	5 U	5 U
1,1 - Dichloroethane	5	5 U	5 U
trans-1,2 - Dichloroethene	5	5 U	5 U
Chloroform	5	5 U	5 U
1,2 - Dichloroethane	5	5 U	5 U
2-Butanone	10	33 UJB	70 UJB
1,1,1 - Trichloroethane	5	5 U	5 U
Carbon Tetrachloride	5	5 U	5 U
Vinyl Acetate	10	10 U	10 U
Bromodichloromethane	5	5 U	5 U
1,2 - Dichloropropane	5	5 U	5 U
Trans- 1,3 -Dichloropropene	5	5 U	5 U
Trichloroethene	5	5 U	5 U
Dibromochloromethane	5	5 U	5 U
1,1,2 - Trichloroethane	5	5 U	5 U
Benzene	5	5 U	5 U
Cis- 1,3 -Dichloropropene	5	5 U	5 U
2-Chloroethylvinylether	10	10 U	10 U
Bromoform	5	5 U	5 U
4-Methyl-2-Pentanone	10	10 UJB	10 UJB
2-Hexanone	10	10 UJB	10 U
Tetrachloroethene	5	5 U	5 U
1,1,2,2 - Tetrachloroethane	5	5 U	5 U
Toluene	5	25 UJB	25 UJB
Chlorobenzene	5	2.6 J	1.1 J
Ethylbenzene	5	5 U	5 U
Styrene	5	5 U	5 U
Total Xylenes	5	5 U	5 U
DRYWT/DILUTION FACTOR		1	1

TABLE B-4-5

FLAGGED DATA TABLE

PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MESUSSXXDU/16	MEGXMW87TB/16
SAMPLE IDENTIFIER:		SW-04 Dup	TB-01
DATE OF SAMPLE COLLECTION:		3/30/88	3/29/88
UNITS:		ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/l		
Phenol	10	10 U	NR
bis(2-Chloroethyl)Ether	10	10 U	NR
2-Chlorophenol	10	10 U	NR
1,3 - Dichlorobenzene	10	10 U	NR
1,4 - Dichlorobenzene	10	10 U	NR
Benzyl Alcohol	10	10 U	NR
1,2 - Dichlorobenzene	10	10 U	NR
2-Methylphenol	10	10 U	NR
bis(2-Chloroisopropyl)Ether	10	10 U	NR
4-Methylphenol	10	10 U	NR
N-Nitroso-Di-n-Propylamine	10	10 U	NR
Hexachloroethane	10	10 U	NR
Nitrobenzene	10	10 U	NR
Isophorone	10	10 U	NR
2-Nitrophenol	10	10 U	NR
2,4 - Dimethylphenol	10	10 U	NR
Benzoic Acid	50	50 U	NR
bis(2-Chloroethoxy)Methane	10	10 U	NR
2,4 - Dichlorophenol	10	10 U	NR
1,2,4 - Trichlorobenzene	10	10 U	NR
Naphthalene	10	10 U	NR
4-Chloroaniline	10	10 U	NR
Hexacholorobutadiene	10	10 U	NR
4-Chloro-3-Methylphenol	10	10 U	NR
2-Methylnaphthalene	10	10 U	NR
Hexachlorocyclopentadiene	10	10 U	NR
2,4,6 - Trichlorophenol	10	10 U	NR
2,4,5 - Trichlorophenol	50	50 U	NR
2-Chloronaphthalene	10	10 U	NR
2-Nitroaniline	50	50 U	NR
Dimethyl Phthalate	10	10 U	NR
Acenaphthylene	10	10 U	NR
3-Nitroaniline	50	50 U	NR
Acenaphthene	10	10 U	NR
2,4 - Dinitrophenol	50	50 U	NR
4-Nitrophenol	50	50 U	NR
Dibenzofuran	10	10 U	NR
2,4 - Dinitrotoluene	10	10 U	NR
2,6 - Dinitrotoluene	10	10 U	NR
Diethylphthalate	10	10 U	NR
4-Chlorophenyl-Phenylether	10	10 U	NR
Fluorene	10	10 U	NR

TABLE B-4-5

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Groundwater, Quality Assurance, and Surface Water Samples

SAMPLE LOCATION:		MESUSSXXDU/16	MEGXMW87TB/16
SAMPLE IDENTIFIER:		SW-04 Dup	TB-01
DATE OF SAMPLE COLLECTION:		3/30/88	3/29/88
UNITS:		ug/l	ug/l
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/l		
4-Nitroaniline	50	50 U	NR
4,6 - Dinitro-2-Methylphenol	50	50 U	NR
N-Nitrosodiphenylamine (1)	10	10 UJB	NR
4-Bromophenyl-Phenylether	10	10 U	NR
Hexachlorobenzene	10	10 U	NR
Pentachlorophenol	50	50 U	NR
Phenanthrene	10	10 U	NR
Anthracene	10	10 U	NR
Di-n-Butylphthalate	10	10 U	NR
Fluoranthene	10	10 U	NR
Pyrene	10	10 U	NR
Butylbenzylphthalate	10	10 U	NR
3,3' - Dichlorobenzidine	20	20 U	NR
Benzo (a) Anthracene	10	10 U	NR
bis (2-Ethylhexyl) Phthalate	10	10 U	NR
Chrysene	10	10 U	NR
Di-n-Octyl Phthalate	10	470 UJB	NR
Benzo (b) Fluoranthene	10	10 U	NR
Benzo (k) Fluoranthene	10	10 U	NR
Benzo (a) Pyrene	10	10 U	NR
Indeno (1,2,3-cd) Pyrene	10	10 U	NR
Dibenz (a,h) Anthracene	10	10 U	NR
Benzo (g,h,i,) Perylene	10	10 U	NR
DRYWT/DILUTION FACTOR		1	NR
Total Phenols (mg/l)		0.005 U	NR
Dissolved Iron (mg/l)		0.33	NR
Dissolved Zinc (mg/l)		0.02	NR
Total Cyanide (mg/l)		0.01 U	NR
Undistilled Cyanide (mg/l)		0.01 U	NR
TOC (mg/l)		3.7	NR

TABLE B-4-6

17-Aug-89

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Sediment Samples

SAMPLE LOCATION:	METUSSXX01/15	METISSXX02/15	METDSSXX04/11	METXSSXXDU/15
SAMPLE IDENTIFIER:	SD-01	SD-02	SD-04	01
DATE OF SAMPLE COLLECTION:	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg

VOLATILE ORGANIC COMPOUNDS	RL ug/kg				
Chloromethane	150	197 U	214 U	200 U	188 U
Bromomethane	150	197 U	214 U	200 U	188 U
Vinyl Chloride	150	197 U	214 U	200 U	188 U
Chloroethane	150	197 U	214 U	200 U	188 U
Methylene Chloride	150	197 U	214 U	200 U	188 U
Acetone	1500	1974 U	2143 U	2000 U	1875 U
Carbon Disulfide	60	79 U	86 U	80 U	75 U
1,1 - Dichloroethene	60	79 U	86 U	80 U	75 U
1,1 - Dichloroethane	60	79 U	86 U	80 U	75 U
trans-1,2 - Dichloroethene	60	79 U	86 U	80 U	75 U
Chloroform	60	79 U	86 U	80 U	75 U
1,2 - Dichloroethane	60	79 U	86 U	80 U	75 U
2-Butanone	300	395 U	429 U	400 U	375 U
1,1,1 - Trichloroethane	60	79 U	86 U	80 U	75 U
Carbon Tetrachloride	60	79 U	86 U	80 U	75 U
Vinyl Acetate	300	395 U	429 U	400 U	375 U
Bromodichloromethane	60	79 U	86 U	80 U	75 U
1,2 - Dichloropropane	60	79 U	86 U	80 U	75 U
Trans- 1,3 -Dichloropropene	60	79 U	86 U	80 U	75 U
Trichloroethene	60	79 U	86 U	80 U	75 U
Dibromochloromethane	60	79 U	86 U	80 U	75 U
1,1,2 - Trichloroethane	60	79 U	86 U	80 U	75 U
Benzene	60	79 U	86 U	80 U	75 U
Cis- 1,3 -Dichloropropene	60	79 U	86 U	80 U	75 U
2-Chloroethylvinylether	300	395 U	429 U	400 U	375 U
Bromoform	60	79 U	86 U	80 U	75 U
4-Methyl-2-Pentanone	300	395 U	429 U	400 U	375 U
2-Hexanone	300	395 U	429 U	400 U	375 U
1,1,2,2 - Tetrachloroethane	60	79 U	86 U	80 U	75 U
Tetrachloroethene	60	79 U	86 U	80 U	75 U
Toluene	60	79 U	86 U	80 U	75 U
Chlorobenzene	60	79 U	86 U	80 U	75 U
Ethylbenzene	60	79 U	87	80 U	75 U
Styrene	60	79 U	86 U	80 U	75 U
Total Xylenes	60	79 U	86 U	80 U	75 U
%SOLID		76	70	75	80
DRYWT/DIL FACTOR		1.32	1.43	1.33	1.25

TABLE B-4-6

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Sediment Samples

SAMPLE LOCATION:	METUSSXX01/15	METISSXX02/15	METDSSXX04/11	METXSSXXDU/15
SAMPLE IDENTIFIER:	SD-01	SD-02	SD-04	01
DATE OF SAMPLE COLLECTION:	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/kg				
Phenol	330	460 U	430 U	450 U	400 U
bis(2-Chloroethyl)Ether	330	460 U	430 U	450 U	400 U
2-Chlorophenol	330	460 U	430 U	450 U	400 U
1,3 - Dichlorobenzene	330	460 U	430 U	450 U	400 U
1,4 - Dichlorobenzene	330	460 U	430 U	450 U	400 U
Benzyl Alcohol	330	460 U	430 U	450 U	400 U
1,2 - Dichlorobenzene	330	460 U	430 U	450 U	400 U
2-Methylphenol	330	460 U	430 U	450 U	400 U
bis(2-Chloroisopropyl)Ether	330	460 U	430 U	450 U	400 U
4-Methylphenol	330	460 U	*	450 U	400 U
N-Nitroso-Di-n-Propylamine	330	460 U	430 U	450 U	400 U
Hexachloroethane	330	460 U	430 U	450 U	400 U
Nitrobenzene	330	460 U	430 U	450 U	400 U
Isophorone	330	460 U	430 U	450 U	400 U
2-Nitrophenol	330	460 U	430 U	450 U	400 U
2,4 - Dimethylphenol	330	460 U	430 U	450 U	400 U
Benzoic Acid	1600	2300 U	2200 U	2300 U	2000 U
bis(2-Chloroethoxy)Methane	330	460 U	430 U	450 U	400 U
2,4 - Dichlorophenol	330	460 U	430 U	450 U	400 U
1,2,4 - Trichlorobenzene	330	460 U	430 U	450 U	400 U
Naphthalene	330	460 U	480	450 U	*
4-Chloroaniline	330	460 U	430 U	450 U	400 U
Hexacholorobutadiene	330	460 U	430 U	450 U	400 U
4-Chloro-3-Methylphenol	330	460 U	430 U	450 U	400 U
2-Methylnaphthalene	330	460 U	*	450 U	400 U
Hexachlorocyclopentadiene	330	460 U	430 U	450 U	400 U
2,4,6 - Trichlorophenol	330	460 U	430 U	450 U	400 U
2,4,5 - Trichlorophenol	1600	2300 U	2200 U	2300 U	2000 U
2-Chloronaphthalene	330	460 U	430 U	450 U	400 U
2-Nitroaniline	1600	2300 U	2200 U	2300 U	2000 U
Dimethyl Phthalate	330	460 U	430 U	450 U	400 U
Acenaphthylene	330	460 U	*	450 U	400 U
3-Nitroaniline	1600	2300 U	2200 U	2300 U	2000 U
Acenaphthene	330	460 U	*	450 U	400 U
2,4 - Dinitrophenol	1600	2300 U	2200 U	2300 U	2000 U
4-Nitrophenol	1600	2300 U	2200 U	2300 U	2000 U
Dibenzofuran	330	460 U	430 U	450 U	400 U
2,4 - Dinitrotoluene	330	460 U	430 U	450 U	400 U
2,6 - Dinitrotoluene	330	460 U	430 U	450 U	400 U
Diethylphthalate	330	460 U	430 U	450 U	400 U
4-Chlorophenyl-Phenylether	330	460 U	430 U	450 U	400 U
Fluorene	330	460 U	*	450 U	400 U

TABLE B-4-6

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Sediment Samples

SAMPLE LOCATION:	METUSSXX01/15	METISSXX02/15	METDSSXX04/11	METXSSXXDU/15
SAMPLE IDENTIFIER:	SD-01	SD-02	SD-04	01
DATE OF SAMPLE COLLECTION:	12/22/87	12/22/87	12/22/87	12/22/87
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.) RL ug/kg				
4-Nitroaniline 1600	2300 U	2200 U	2300 U	2000 U
4,6 - Dinitro-2-Methylphenol 1600	2300 U	2200 U	2300 U	2000 U
N-Nitrosodiphenylamine (1) 330	460 U	430 U	450 U	400 U
4-Bromophenyl-Phenylether 330	460 U	430 U	450 U	400 U
Hexachlorobenzene 330	460 U	430 U	450 U	400 U
Pentachlorophenol 1600	2300 U	2200 U	2300 U	2000 U
Phenanthrene 330	*	900	*	*
Anthracene 330	460 U	*	450 U	400 U
Di-n-Butylphthalate 330	460 U	430 U	450 U	400 U
Fluoranthene 330	*	1000	*	*
Pyrene 330	*	1100	*	*
Butylbenzylphthalate 330	460 U	*	450 U	400 U
3,3' - Dichlorobenzidine 660	910 U	870 U	900 U	790 U
Benzo (a) Anthracene 330	*	530	450 U	400 U
bis (2-Ethylhexyl) Phthalate 330	460 U	*	450 U	400 U
Chrysene 330	*	580	450 U	400 U
Di-n-Octyl Phthalate 330	460 U	430 U	450 U	400 U
Benzo (b) Fluoranthene 330	460 U	940 +	450 U	400 U
Benzo (k) Fluoranthene 330	460 U	+	450 U	400 U
Benzo (a) Pyrene 330	460 U	590	450 U	400 U
Indeno (1,2,3-cd) Pyrene 330	460 U	*	450 U	400 U
Dibenz (a,h) Anthracene 330	460 U	*	450 U	400 U
Benzo (g,h,i,) Perylene 330	460 U	*	450 U	400 U
%SOLIDS:	73	74.6	73.1	80.3
DRYWT/DILUTION FACTOR	1.37	1.34	1.36	1.25
Total Phenols (ppm)	1.3	2.3	1.2	0.68
Dissolved Iron (ppm)	7700	8400	8700	7100
Dissolved Zinc (ppm)	27	45	25	28
Total Cyanide (ppm)	1 U	1.3	1 U	1 U
Undistilled Cyanide	N/A	N/A	N/A	N/A
TOC (dry weight)	1.2 %	3.2 %	1.8 %	1.1 %

Notes:
** = Visible Product
* = Trace concentrations detected below the reporting limits.
+ = Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.

TABLE B-4-6

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Sediment Samples

SAMPLE LOCATION:	METUSSXX01/16	METUSSXX02/16	METUSSXX04/12	METUSSXXDU/16
SAMPLE IDENTIFIER:	SD-01 SEDIMENT	SD-02 SEDIMENT	SD-04 SEDIMENT	SD-DUP SEDIMENT
DATE OF SAMPLE COLLECTION:	3/30/88	3/30/88	3/30/88	3/30/88
SAMPLE DEPTH (Ft.):				
UNITS:	ug/kg	ug/kg	ug/kg	ug/kg

VOLATILE ORGANIC COMPOUNDS	RL ug/kg				
Chloromethane	10	1300 U	1400 U	1300 U	1300 U
Bromomethane	10	1300 U	1400 U	1300 U	1300 U
Vinyl Chloride	10	1300 U	1400 U	1300 U	1300 U
Chloroethane	10	1300 U	1400 U	1300 U	1300 U
Methylene Chloride	5	45000 R	~ 54000 R	48000 R	36000 R
Acetone	10	62000 UJB	68000 UJB	61000 UJB	60000 UJB
Carbon Disulfide	5	640 U	710 U	640 U	630 U
1,1 - Dichloroethene	5	640 U	710 U	640 U	630 U
1,1 - Dichloroethane	5	640 U	710 U	640 U	630 U
1,2 - Dichloroethene (Total)	5	640 U	710 U	640 U	630 U
Chloroform	5	640 U	710 U	640 U	630 U
1,2 - Dichloroethane	5	640 U	710 U	640 U	630 U
2-Butanone	10	8400 R	9100 R	9000 R	8400 R
1,1,1 - Trichloroethane	5	640 U	710 U	640 U	630 U
Carbon Tetrachloride	5	640 U	710 U	640 U	630 U
Vinyl Acetate	10	1300 U	1400 U	1300 U	1300 U
Bromodichloromethane	5	640 U	710 U	640 U	630 U
1,2 - Dichloropropane	5	640 U	710 U	640 U	630 U
Trans- 1,3 -Dichloropropene	5	640 U	710 U	640 U	630 U
Trichloroethene	5	640 U	710 U	640 U	630 U
Dibromochloromethane	5	640 U	710 U	640 U	630 U
1,1,2 - Trichloroethane	5	640 U	710 U	640 U	630 U
Benzene	5	640 U	190 J	640 U	630 U
Cis- 1,3 -Dichloropropene	5	640 U	710 U	640 U	630 U
2-Chloroethylvinylether	10	1300 U	1400 U	1300 U	1300 U
Bromoform	5	640 U	710 U	640 U	630 U
4-Methyl-2-Pentanone	10	1300 U	1400 U	1300 U	1300 U
2-Hexanone	10	1300 U	1400 U	1300 U	1300 U
Tetrachloroethene	5	640 U	710 U	640 U	630 U
1,1,2,2 - Tetrachloroethane	5	640 U	710 U	640 U	630 U
Toluene	5	4300 UJB	4800 UJB	4300 UJB	4300 UJB
Ethylbenzene	5	640 U	710 U	640 U	630 U
Chlorobenzene	5	640 U	710 U	640 U	630 U
Styrene	5	640 U	710 U	640 U	630 U
Total Xylenes	5	640 U	710 U	640 U	630 U
%SOLID		78.2	70.8	78.4	79.5
DRYWT/DIL FACTOR		130	140	130	130

TABLE B-4-6

19-Oct-88

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Sediment Samples

SEMI-VOLATILE ORGANIC COMPOUNDS	RL ug/kg	SAMPLE LOCATION: METUSSXX01/16	METUSSXX02/16	METUSSXX04/12	METUSSXXDU/16
		SAMPLE IDENTIFIER: SD-01	SD-02	SD-04	SD-DUP
		SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
		DATE OF SAMPLE COLLECTION: 3/30/88	3/30/88	3/30/88	3/30/88
		SAMPLE DEPTH (Ft.):			
		UNITS: ug/kg	ug/kg	ug/kg	ug/kg
Phenol	330	850 U	2300 U	850 U	860 U
bis(2-Chloroethyl)Ether	330	850 U	2300 U	850 U	860 U
2-Chlorophenol	330	850 U	2300 U	850 U	860 U
1,3 - Dichlorobenzene	330	850 U	2300 U	850 U	860 U
1,4 - Dichlorobenzene	330	850 U	2300 U	850 U	860 U
Benzyl Alcohol	330	850 U	2300 U	850 U	860 U
1,2 - Dichlorobenzene	330	850 U	2300 U	850 U	860 U
2-Methylphenol	330	850 U	2300 U	850 U	860 U
bis(2-Chloroisopropyl)Ether	330	850 U	2300 U	850 U	860 U
4-Methylphenol	330	850 U	2300 U	850 U	860 U
N-Nitroso-Di-n-Propylamine	330	850 U	2300 U	850 U	860 U
Hexachloroethane	330	850 U	2300 U	850 U	860 U
Nitrobenzene	330	850 U	2300 U	850 U	860 U
Isophorone	330	850 U	2300 U	850 U	860 U
2-Nitrophenol	330	850 U	2300 U	850 U	860 U
2,4 - Dimethylphenol	330	850 U	2300 U	850 U	860 U
Benzoic Acid	1600	4100 U	11000 U	4100 U	4200 U
bis(2-Chloroethoxy)Methane	330	850 U	2300 U	850 U	860 U
2,4 - Dichlorophenol	330	850 U	2300 U	850 U	860 U
1,2,4 - Trichlorobenzene	330	850 U	2300 U	850 U	860 U
Naphthalene	330	850 U	2300 U	850 U	860 U
4-Chloroaniline	330	850 U	2300 U	850 U	860 U
Hexacholorobutadiene	330	850 U	2300 U	850 U	860 U
4-Chloro-3-Methylphenol	330	850 U	2300 U	850 U	860 U
2-Methylnaphthalene	330	850 U	2300 U	850 U	860 U
Hexachlorocyclopentadiene	330	850 U	2300 U	850 U	860 U
2,4,6 - Trichlorophenol	330	850 U	2300 U	850 U	860 U
2,4,5 - Trichlorophenol	1600	4100 U	11000 U	4100 U	4200 U
2-Chloronaphthalene	330	850 U	2300 U	850 U	860 U
2-Nitroaniline	1600	4100 U	11000 U	4100 U	4200 U
Dimethyl Phthalate	330	850 U	2300 U	850 U	860 U
Acenaphthylene	330	850 U	2300 U	850 U	860 U
2,6 - Dinitrotoluene	330	850 U	2300 U	850 U	860 U
3-Nitroaniline	1600	4100 U	11000 U	4100 U	4200 U
Acenaphthene	330	850 U	2300 U	850 U	860 U
2,4 - Dinitrophenol	1600	4100 U	11000 U	4100 U	4200 U
4-Nitrophenol	1600	4100 U	11000 U	4100 U	4200 U
Dibenzofuran	330	850 U	2300 U	850 U	860 U
2,4 - Dinitrotoluene	330	850 U	2300 U	850 U	860 U
Diethylphthalate	330	850 U	2300 U	850 U	860 U
4-Chlorophenyl-Phenylether	330	850 U	2300 U	850 U	860 U
Fluorene	330	850 U	2300 U	850 U	860 U

TABLE B-4-6

19-Oct-88

FLAGGED DATA TABLE — PROJECT: NYSEG - Mechanicville Sediment Samples

SAMPLE LOCATION:		METUSSXX01/16	METUSSXX02/16	METUSSXX04/12	METUSSXXDU/16
SAMPLE IDENTIFIER:		SD-01	SD-02	SD-04	SD-DUP
		SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
DATE OF SAMPLE COLLECTION:		3/30/88	3/30/88	3/30/88	3/30/88
SAMPLE DEPTH (Ft.):					
UNITS:		ug/kg	ug/kg	ug/kg	ug/kg
SEMI-VOLATILE ORGANIC COMPOUNDS (Cont.)	RL ug/kg				
4-Nitroaniline	1600	4100 U	11000 U	4100 U	4200 U
4,6 - Dinitro-2-Methylphenol	660	4100 U	11000 U	4100 U	4200 U
N-Nitrosodiphenylamine (1)	330	850 U	2300 U	850 U	860 U
4-Bromophenyl-Phenylether	330	850 U	2300 U	850 U	860 U
Hexachlorobenzene	330	850 U	2300 U	850 U	860 U
Pentachlorophenol	1600	4100 U	11000 U	4100 U	4200 U
Phenanthrene	330	850 U	1900 J	850 U	860 U
Anthracene	330	850 U	2300 U	850 U	860 U
Di-n-Butylphthalate	330	850 U	2300 U	850 U	860 U
Fluoranthene	330	850 U	2300 U	850 U	860 U
Pyrene	330	850 U	2300 U	850 U	860 U
Butylbenzylphthalate	330	850 U	2300 U	850 U	860 U
3,3' - Dichlorobenzidine	660	1700 U	4600 U	1700 U	1700 U
Benzo (a) Anthracene	330	850 U	2300 U	850 U	860 U
Chrysene	330	850 U	2300 U	850 U	860 U
bis (2-Ethylhexyl) Phthalate	330	850 U	2300 U	850 U	860 U
Di-n-Octyl Phthalate	330	25000	2000 JB	1800 JB	520 JB
Benzo (b) Fluoranthene	330	850 U	2300 U	850 U	860 U
Benzo (k) Fluoranthene	330	850 U	2300 U	850 U	860 U
Benzo (a) Pyrene	330	850 U	2300 U	850 U	860 U
Indeno (1,2,3-cd) Pyrene	330	850 U	2300 U	850 U	860 U
Dibenz (a,h) Anthracene	330	850 U	2300 U	850 U	860 U
Benzo (g,h,i,) Perylene	330	850 U	2300 U	850 U	860 U
%SOLIDS:		78.2	70.8	78.4	79.5
DRYWT/DILUTION FACTOR		2.58	6.97	2.58	2.6

APPENDIX B-5

SOLUBILITY DATA

SOLUBILITIES OF PAHs IN WATER (mg/ℓ)[1]

Compound	Verschueren[2]	EPA Treatability Manual[3]
Acenaphthene	--	3.42
Acenaphthylene	3.93	3.93
Anthracene	1.29	0.073
Benzo(a)anthracene	0.044 at 24°C	0.014
Benzo(a)pyrene	0.003 at 20°C	0.0038
Benzo(b)fluoranthene	--	NA[4]
Benzo(k)fluoranthene	--	0.00055
Benzo(g,h,i)perylene	0.00026	0.00026
Chrysene	0.006	0.002
Dibenzo(a,h)anthracene	--	0.0005
Fluoranthene	0.120 at 24°C	0.26
Fluorene	1.9	1.98
Indeno(1,2,3-cd)pyrene	--	0.62
Naphthalene	30.0 at 20°C	34.4
Phenanthrene	0.816 at 21°C	1.29
Pyrene	0.032 at 24°C	0.14

1 All values are calculated at 25°C unless otherwise noted.

2 Verschueren, K. Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold Company, New York, New York 1977.

3 USEPA, Treatability Manual Volume I: Treatability Data, Office of Research and Development, Washington, DC EPA-600/2-82-001a. September 1981 (Revised).

4 NA - Not available.

INVESTIGATION OF THE FORMER COAL GASIFICATION SITE AT MECHANICVILLE, NEW YORK

FINAL TASK 4 REPORT
RISK ASSESSMENT

Prepared for:

New York State Electric and Gas Corporation
4500 Vestal Parkway East
Binghamton, New York 13903-1082

Prepared by:

E.C. Jordan Co.
Wakefield, Massachusetts
Job No. 4945-04

August 1990

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EXECUTIVE SUMMARY

The former Mechanicville coal gasification plant site is located in Mechanicville, New York, along the Anthony Kill (a small tributary of the Hudson River). The site is a quarter-mile upstream of the Hudson River, on the western side of North Central Avenue. A gas manufacturing plant was operated at the site by New York State Electric and Gas Corporation (NYSEG) and its predecessor companies from 1901 until 1955. Most of the structures utilized in the coal gas manufacturing operation were demolished at the time of closure in 1955. Since then, the site has become a NYSEG natural gas and electric service center. The site is being investigated because it was formerly used for coal gas manufacturing. Samples of soil, groundwater, surface water, stream sediments, and air were collected at and adjacent to the site and tested in a laboratory. The chemical compounds found in the samples are those routinely found at former coal gasification sites; those present at elevated concentrations include polynuclear aromatic hydrocarbons, volatile organic compounds, and cyanide.

This report, prepared by the E.C. Jordan Co. (Jordan), presents the results of the Task 4 Risk Assessment for the Mechanicville site. The study identifies and estimates the potential risks associated with the chemicals present in the soil, sediment, groundwater, and air at the site by (1) selecting "contaminants of concern" that represent potential hazards; (2) identifying potential exposure pathways and exposed populations at and near the site; and (3) assessing the public health and environmental risks associated with exposure to site-related chemicals through the use of dose/response data

(e.g., USEPA cancer potency factors and reference doses) and relevant standards and criteria (e.g., interim sediment quality criteria).

Contaminants of concern were selected following a field investigation in which data were collected to determine each contaminant's location, level, and frequency of detection. It should be noted that the sampling program was designed to indicate areas where residuals from the coal gasification processes would be expected. The carcinogenic contaminants of concern which were identified are carcinogenic polycyclic aromatic hydrocarbons (PAHs) and benzene. The noncarcinogenic contaminants of concern which were identified are toluene, ethyl benzene, styrene, trimethylbenzene, xylenes, noncarcinogenic PAHs, and cyanide.

Health risks were estimated using accepted methods (USEPA, 1986a and Atlantic Environmental Services, 1988). Carcinogenic risk estimates were determined by multiplying the estimated body dose from exposure to a carcinogen by its USEPA carcinogenic potency value. This calculation results in an estimate of an individual's incremental or excess cancer risk due to exposure to site-related contamination. It should be recognized that the USEPA cancer potency factor is the upper 95-percent confidence limit of the slope of the dose-response curve for benzo(a)pyrene. This means that, with 95-percent statistical certainty, the true potency is as stated or less. Therefore, it is highly unlikely that the true potency of benzo(a)pyrene is greater than stated, and it could be considerably lower. For these reasons, the calculated cancer risks associated with the various exposure levels are expected to represent upper limits of the true risk.

Noncarcinogenic risk estimates were determined by dividing the body dose for each noncarcinogen by the relevant standard, criterion, or guideline, resulting in a ratio called the risk ratio. Noncarcinogenic risk ratios for the individual compounds were then summed together to form a hazard index. To put these risk estimates into perspective, they were evaluated against target risk levels.

Target risk levels for carcinogenic compounds have been adopted from USEPA guidelines stating that the total incremental carcinogenic risk for an individual resulting from exposure at a hazardous waste site should be between 10^{-4} and 10^{-6}. (A risk of 10^{-4} is interpreted as an additional 1 in 10,000 chance of an individual developing cancer during a lifetime, as a result of the exposure.) For noncarcinogenic compounds, the hazard index is compared to 1. If the hazard index is less than or equal to 1, no adverse health effects are anticipated from the predicted body-dose level. If the index is greater than 1, the predicted body-dose level could potentially result in adverse health effects.

Public exposure to the contaminants detected at the Mechanicville site is currently limited by two conditions: (1) the majority of the site is paved or covered with buildings, providing limited access to the site and thus minimizing exposure potential to either volatilized contaminants or contact with contaminated soil; and (2) the groundwater at the site is not used as a drinking water source.

For the public health risk assessment, Jordan estimated the potential carcinogenic and noncarcinogenic risks from site-related exposures under baseline conditions (i.e., current conditions and future conditions, assuming no construction or remedial action). It was determined that direct contact with on-site soil (surface and subsurface) and Anthony Kill sediments by area residents (specifically, older children between ages 8 and 18), construction workers, or utility workers, would not be expected to pose a significant health risk under the assumed exposure conditions. Both carcinogenic and noncarcinogenic risks were within target risk levels. Future on-site excavation could also expose nearby residents to inhalation of airborne volatile and particulate-bound contaminants. Jordan concluded that inhalation of contaminants, volatilized or aerosolized by potential future site activities involving soil excavation, also does not pose a significant health risk to the general population.

The Mechanicville site is not located over a water supply aquifer. The nearest water supply wells are about one mile southwest (upgradient) of the site in the town of Halfmoon. Because Mechanicville site groundwater is neither currently used nor expected to be used in the foreseeable future as a source of drinking water, public health risks associated with the groundwater are negligible.

Groundwater beneath the site, however, does contain several contaminants at concentrations which exceed both USEPA and NY State drinking water standards.

As has been done in the past, the site health and safety plan should be followed during any future exploratory work on the Mechanicville site to prevent or minimize undue exposure.

It is unlikely that the site is significantly utilized by wildlife because of the industrial nature of the area and the lack of suitable habitats. Aquatic organisms in the Anthony Kill, immediately adjacent to the site, were determined to be the environmental receptors most likely to be affected by site-related contamination.

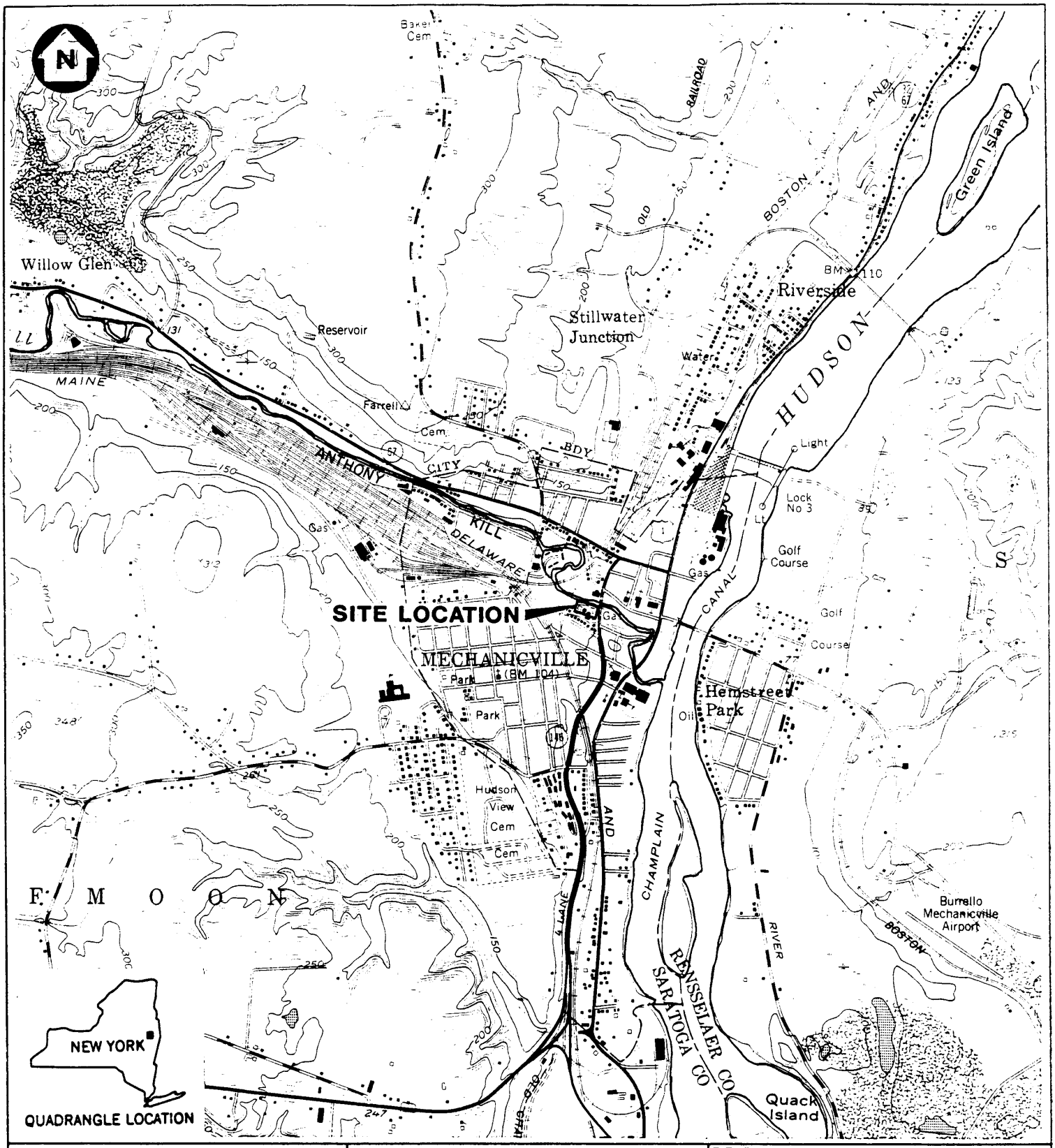
The results of the environmental risk assessment indicate that some potential for impacts does exist for aquatic organisms living in the Anthony Kill immediately adjacent to the site. However, these risks appear to be relatively minor, for several reasons. Few compounds were present at levels in excess of their environmental criteria, the extent of exceedances was minimal, and potential impacts were associated only with "worst case" conditions, with no impacts expected under typical conditions. Also, the amount of benthic habitat is limited due to the stream bed morphology and exposed bedrock, with little sediment accumulation. Finally, there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants in the downstream surface water and sediment samples did not exceed protective criteria, even under the most conservative assumptions.

1.0 INTRODUCTION

This report presents the results of the Risk Assessment (Task 4) for the Mechanicville former manufactured gas plant (MGP) site in Saratoga County, New York. The report was prepared by E.C. Jordan Co. (Jordan) for the New York State Electric and Gas Corporation (NYSEG) under Contract No. 85S-159, Investigation of Former Coal Gasification Sites. This report was preceded by four reports summarizing a Preliminary Site Evaluation (Task 1), Quality Control/Quality Assurance and Health and Safety Plans, an Initial Field Investigation Program (Task 2), and an Expanded Problem Definition Program (Task 3). These reports were completed in August 1986, November 1986, December 1987, and September 1989, respectively.

The site is located in Mechanicville, Saratoga County, New York (Figure 1-1). Saratoga County is in the Valley and Ridge physiographic province of east central New York (Heath, et al., 1963). The Hudson River forms the north-eastern and eastern boundaries of Saratoga County; the Mohawk River, which is the largest tributary to the Hudson, forms the southeastern boundary. The Anthony Kill, a small tributary, flows into the Hudson River at Mechanicville. The Mechanicville site is adjacent to the Anthony Kill, one quarter-mile upstream from its confluence with the Hudson River. The site lies in a glacial outwash plain, at approximately 95 feet above mean sea level (MSL).

The Champlain Canal once bordered the site on the east. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) to Lake Champlain. The canal flowed through Mechanicville along what is now

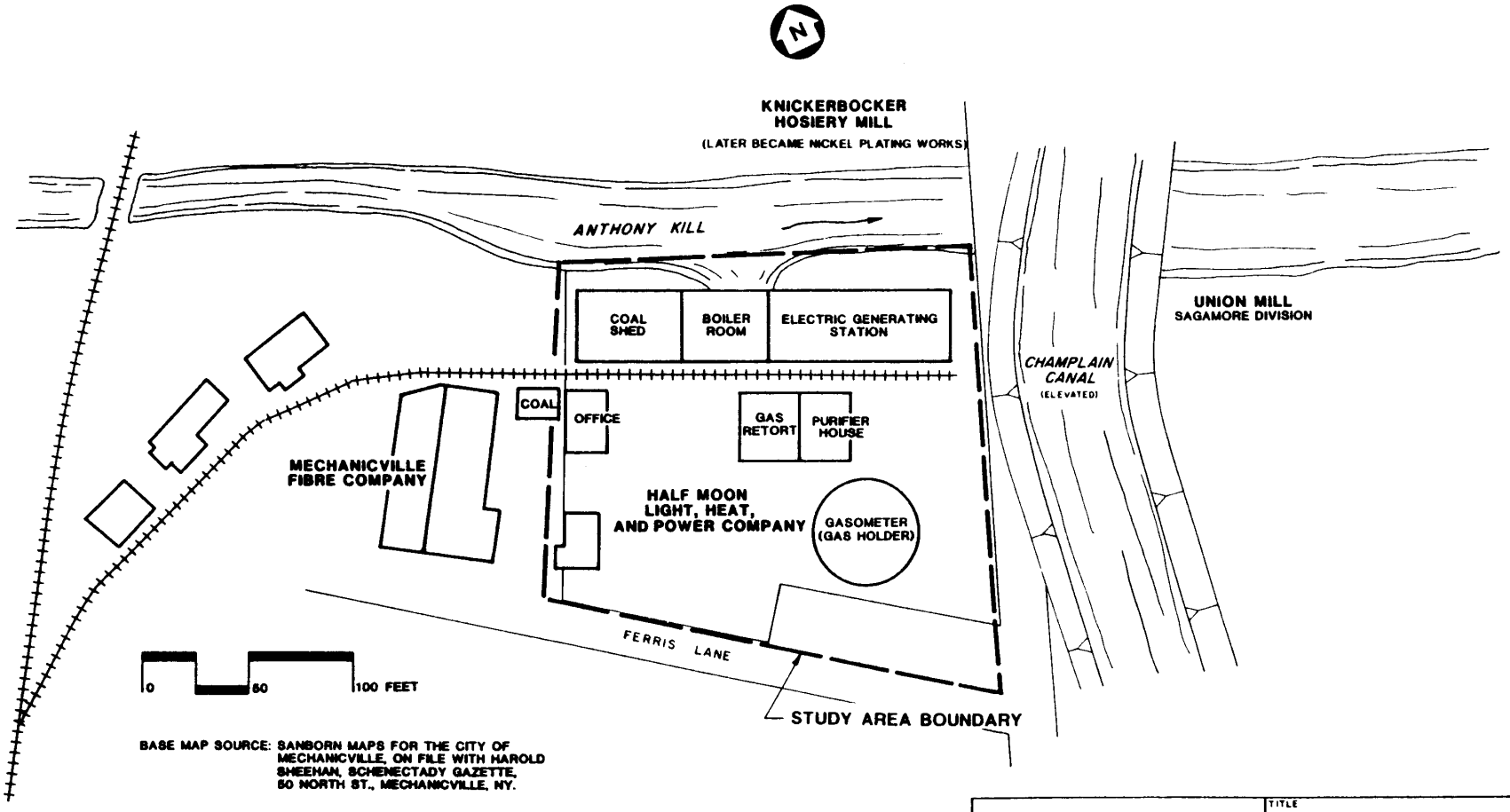


BASE MAP SOURCE: **USGS QUADRANGLE** **MECHANICVILLE (1980)**	**E.C. JORDAN CO.** CONSULTING ENGINEERS	TITLE **MECHANICVILLE SITE LOCATION MAP**
SCALE IN FEET 0 — 2000 — 4000	CLIENT **NEW YORK STATE ELECTRIC AND GAS CORP.** **BINGHAMTON, NEW YORK**	**INVESTIGATION OF FORMER COAL GASIFICATION SITES** PROJECT NO. 4945-04 **FIGURE 1-1**

Central Avenue (Figure 1-2). Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. The hand-dug canal was approximately 12 feet deep and 30 feet wide. The Champlain Canal, abandoned in 1916 when the Barge Canal opened, became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the state dug up the canal, removed the trash and debris, and prepared the roadbed for Central Avenue (Sheehan, Records).

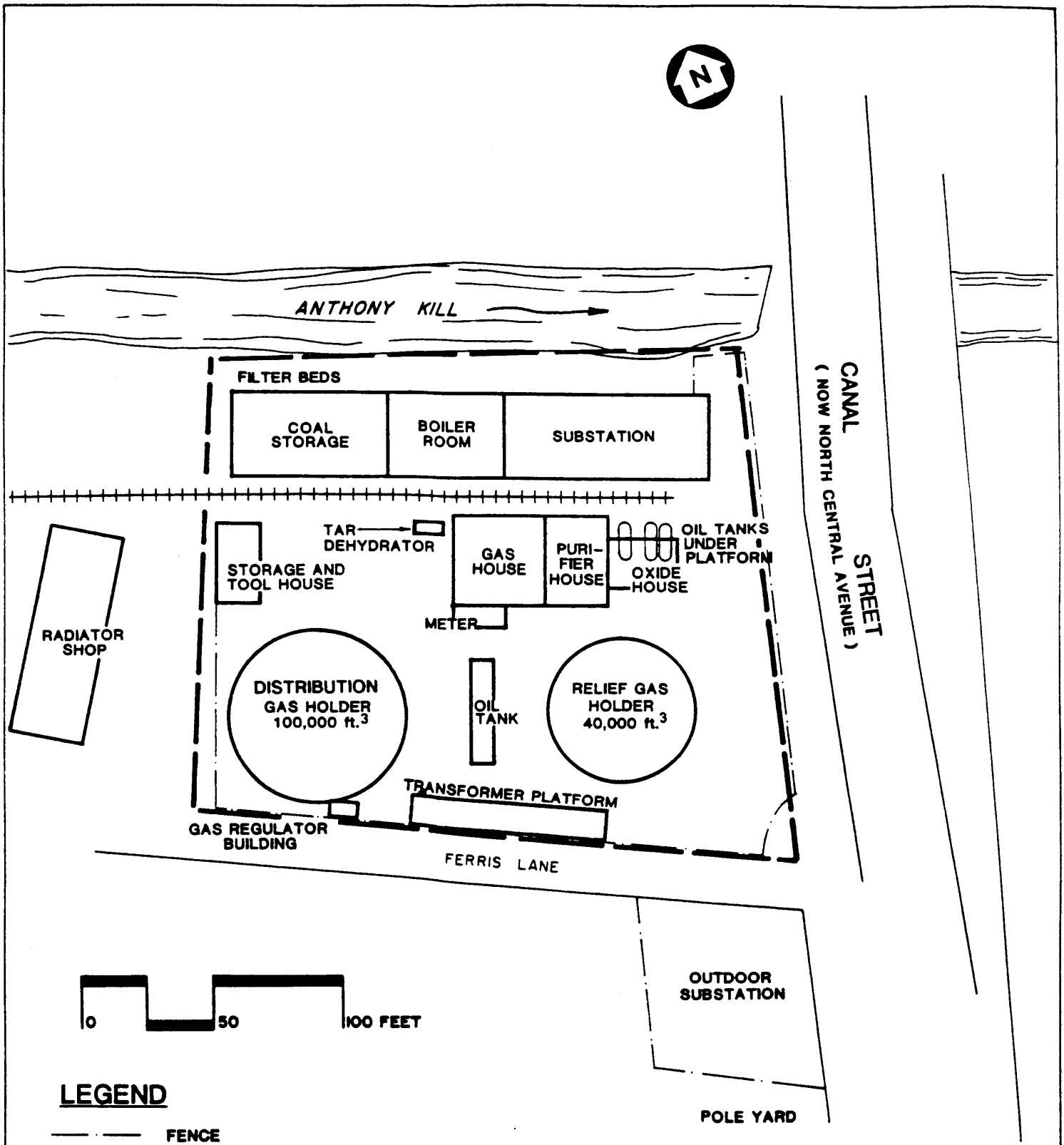
The site housed a coal gasification plant (Figures 1-2 and 1-3) owned by NYSEG and its predecessor companies from 1901 until 1955, at which time coal gas production ended due to the availability of natural gas. Most of the above ground structures were demolished at the time of closure and removed, including the coal storage shed, gas house, purifier and oxide houses, gas holders, oil tanks, and tar dehydrator (see Figures 1-2 and 1-3). Only the boiler room, indoor substation, and an old office building remain on-site. The filter beds and relief gas holder were left in the ground and covered with soil (E.C. Jordan Co, 1987; 1989).

After closure of the Mechanicville gas plant in 1955, NYSEG converted the site to a natural gas and electric service center (Figure 1-4). A small natural gas distribution shed was constructed over a portion of the old distribution gas holder. The former boiler room/substation building was converted to offices, a garage, and a storeroom. The old office is now used as a storage building and tool house.



BASE MAP SOURCE: SANBORN MAPS FOR THE CITY OF MECHANICVILLE, ON FILE WITH HAROLD SHEEHAN, SCHENECTADY GAZETTE, 50 NORTH ST., MECHANICVILLE, NY.

E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1910
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO 4945-04 **FIGURE 1-2**



LEGEND

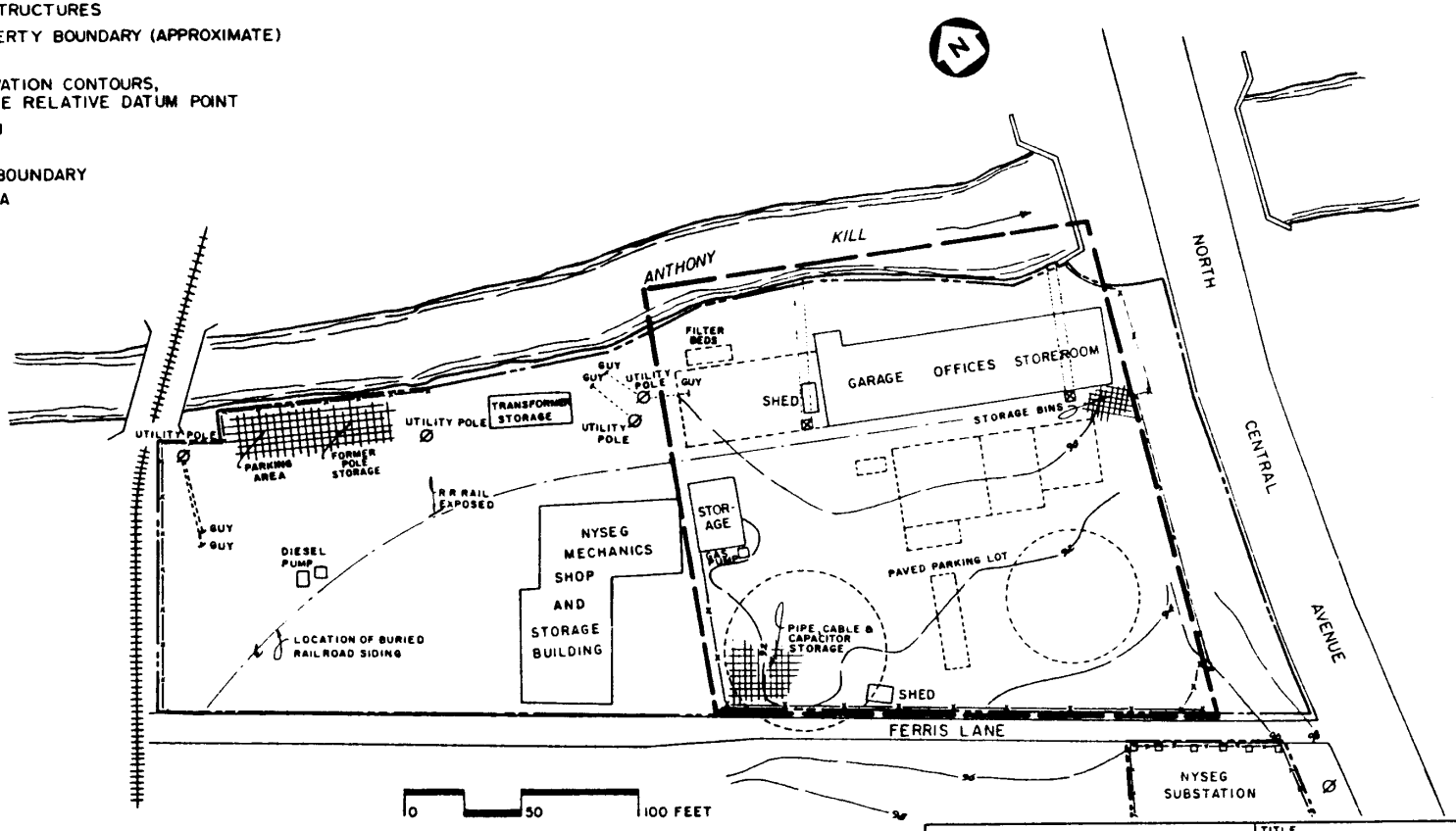
- FENCE
- RAILROAD SIDING
- STUDY AREA BOUNDARY

BASE MAP PREPARED BY BROWN, CROSBY, & CO., INC., ENGINEERING DEPARTMENT, 96 WALL ST., NEW YORK, APRIL 1951.

E.C. JORDAN CO. CONSULTING ENGINEERS	PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1951
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	JOB NO. 4945-04 FIGURE 1-3

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE: MECHANICVILLE SITE PLAN - 1987
MECHANICVILLE, NEW YORK

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO 4945-04

FIGURE 1-4

An underground gasoline storage tank, containing unleaded gasoline, is currently located adjacent to the southeastern corner of the old office. The 2,000-gallon tank, installed around 1980, replaced an older tank that was reportedly taking in water, without any gasoline leaks reported (McBride, et al., 1986). The remaining developed portion of the site is a paved parking lot. NYSEG has extended its property boundaries over the years by reclaiming the Anthony Kill embankment. Therefore, the stream appears wider in Figure 1-3 than in Figure 1-4.

In 1922, NYSEG purchased a quarter-acre lot on the corner of Ferris Lane and North Central Street (Bevis, 1986). This property was vacant during the years the coal gas plant was operating. According to the plan shown in Figure 1-3, NYSEG built the electrical substation that currently stands on the lot in 1951. NYSEG also owns the land on the western side of the site. The portion between the railroad tracks and the Anthony Kill (see Figure 1-4) was purchased by NYSEG in 1952 (Bevis, 1986), and the parcel between the tracks and Ferris Lane was acquired in October 1987. Jordan's investigations focused on the eastern portion of the site (approximately 1 acre), where coal gas production activities occurred.

1.1 PROBLEM SUMMARY

The Mechanicville site is being investigated because of its former use as a coal gasification facility. By-products of the coal gasification process included coal ash, condensate material from the gas house, woodchips from the purifier house, coal tar and oil sludges. Ashes and clinkers were spread on

the site, as were some of the spent woodchips. Residual tar was left both in the filter beds and in the base of the relief holder.

The Initial Field Investigation (Task 2) and Expanded Problem Definition Programs (Task 3) detected the presence of chemicals related to former coal gasification activities. They included volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), including polynuclear aromatic hydrocarbons (PAHs), and metals. These were found in both the soil and shallow and deep groundwater samples collected near the former plant structures, specifically the purifier and oxide houses, the relief gas holder, and the filter beds. Low concentrations of VOCs were found in background air and indoor air samples.

The subsurface coal gasification wastes are a source of chemicals to soil and groundwater, thus making groundwater a vehicle of transport. Compounds are migrating northeasterly in the groundwater at the site, discharging to the Anthony Kill, and migrating easterly toward the Hudson River. However, site-derived compounds were not found at elevated levels in surface water samples collected downstream of the site, which suggests that compounds are not entering the stream in sufficient quantities to be detected.

The scope of the Risk Assessment (Task 4) was developed based on information obtained during the Preliminary Site Evaluation (Task 1), Initial Field Investigation Program (Task 2), and Expanded Problem Definition Program (Task 3). The Task 4 program was designed to (1) identify and assess the potential risk associated with exposure to the chemicals present on-site; and (2)

- identification of the dose/response data used to quantitatively assess risk (e.g., USEPA cancer potency factors and reference doses);

- comparison of the environmental concentrations of chemicals on-site to existing state and federal health-based criteria and standards;

- characterization of human health and environmental risks associated with exposure to site-related chemicals;

- establishment, if necessary, of target clean-up levels to protect against future potential exposure to contaminants of concern;

- evaluation of the need for Conceptual Remedial Design (Task 5); and

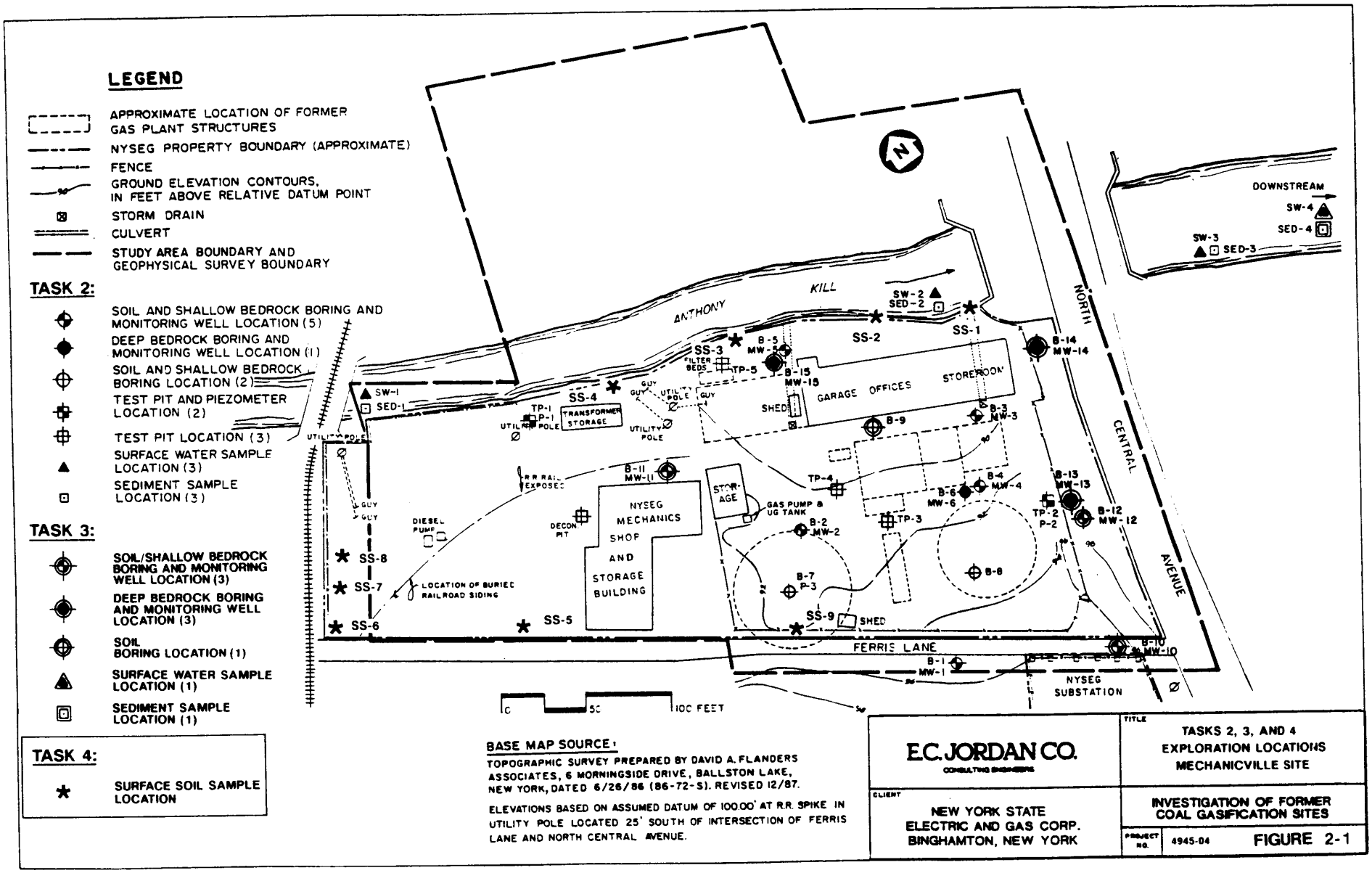
- generation of a report that summarizes the Task 4 findings.

2.0 SITE CHARACTERIZATION AND SELECTION OF CONTAMINANTS OF CONCERN

2.1 INTRODUCTION

This section presents a summary of the geologic/hydrogeologic conditions at the Mechanicville site and the distribution of chemicals at the site, as interpreted from data gathered during Tasks 2, 3, and 4. Figure 2-1 shows the locations of all Task 2, Task 3, and Task 4 explorations and Appendix A contains the analytical data collected as part of these field exploration programs. More detailed information on site conditions is contained in the Task 2 and Task 3 Reports (E.C. Jordan Co., 1987; 1989).

The site characterization summary is followed by a discussion of the screening method used to select contaminants of concern for the site. These are compounds that are judged to be important in evaluating the risks to public health posed by the site. This screening process provides the basis to limit the number of compounds evaluated, if appropriate. In accordance with the guidelines presented in the Superfund Public Health Evaluation Manual (USEPA, 1986a), compounds were selected based on inherent toxicity, concentration, distribution, and frequency of detection. This discussion considers soil (both surface and subsurface), surface water, sediment, air, and groundwater samples.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TASKS 2, 3, AND 4
EXPLORATION LOCATIONS
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 2-1

2.2 SUMMARY OF SITE GEOLOGY/HYDROGEOLOGY

2.2.1 Geology and Soils

The subsurface conditions at the Mechanicville site were investigated by means of test pit and soil boring explorations. The top eight feet consists of fill material. Beneath the fill, the shallow geology (8 to 25 feet) includes silty sand, gravel, and clayey silt, which overlies fractured shale bedrock. Isolated gravelly sand and silty clay till units were also observed at the site. The geologic profile of the site is described in Appendix A-1.

2.2.2 Hydrogeology

The interpretation of hydrogeologic conditions at the site is based on field and laboratory permeability data and water level observations made during Tasks 2 and 3.

Groundwater is 2 to 20 feet below ground surface and migrates through the fill material, shallow soils, and fractured bedrock. Based on permeability data and seepage gradients, the primary zone of groundwater movement exists within the fractured zones of the shallow bedrock. Groundwater flow in the fill and shallow bedrock is northeasterly toward the Anthony Kill across the western and northern portions of the site. On the eastern portion of the site, groundwater is flowing easterly along a east-west trending bedrock channel. The regional groundwater flow west of the Hudson River, where the site is located, is also easterly (E.C. Jordan Co., 1989).

Groundwater velocity was estimated in the Task 3 report, based on hydraulic conductivity, effective porosity, and groundwater gradient. Horizontal groundwater flow rates were estimated at approximately 20, 200, and 140 ft/yr in the silty shale, shallow bedrock, and deeper bedrock, respectively.

2.3 SUMMARY OF CONTAMINANT DISTRIBUTION IN SOILS

Both surface and subsurface soil samples were collected and analyzed for the Mechanicville site.

2.3.1 Subsurface Soil

Subsurface soil samples collected at the Mechanicville site for Tasks 2 and 3 were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, total recoverable phenolics (phenols) and total organic carbon (TOC). A total of 16 locations were sampled. Five test pit samples were collected from depths of 3 to 7.5 feet below ground surface. Thirteen soil boring samples (plus one duplicate) were collected from 4 to 24 foot depths. The analytical results of the soil sampling program are presented in Appendix A-2.

Analyses of subsurface soil samples from the field investigation program showed the presence of coal tar and coal gasification-related compounds (i.e., VOCs, PAHs, and cyanide) near the former relief gas holder, purifier and oxide houses, and filter beds. The highest levels of VOCs and PAHs were detected in samples taken at or near these sites. Figure 2-2 shows the concentrations of total VOCs, total PAHs, and total cyanide in soil borings at the site, based

on both Task 2 and Task 3 sampling results. The highest levels of VOCs (3,800 and 3,410 mg/kg) were observed in samples taken at B-8 (at depths of 13.5 to 15.5 feet and 15.5 to 17.5 feet) which is located at the site of the former gas relief holder. The highest levels of PAHs were observed in samples taken from B-8 (5,440 mg/kg), TP-5 (8500 mg/kg; adjacent to the filter beds) and B-3 (9,310 mg/kg in the vicinity of the former purifier and oxide houses). Deep soil samples (greater than 15 feet deep) contained lower levels of organics than the samples collected from shallow soils.

Iron levels ranged from 18,000-35,000 mg/kg. The lower concentrations were in the deeper fine silty sand. Higher levels were seen in shallow fill samples. Zinc levels generally ranged from 32-390 mg/kg, except for one Task 2 sample (B-5/S-1) which contained 1,600 mg/kg.

Cyanide was detected in three subsurface soil samples at levels ranging from 1.0-3.2 mg/kg. These samples were collected in the vicinity of the former purifier and oxide houses. The concentration of cyanide in this area is most likely due to spillage during cleaning of the purifier house (Wilson and Stevens, 1981).

Phenolic compounds were found in four soil boring samples at depths of 4 to 11 feet. Concentrations ranged from 0.74 to 3.6 mg/kg. These samples were

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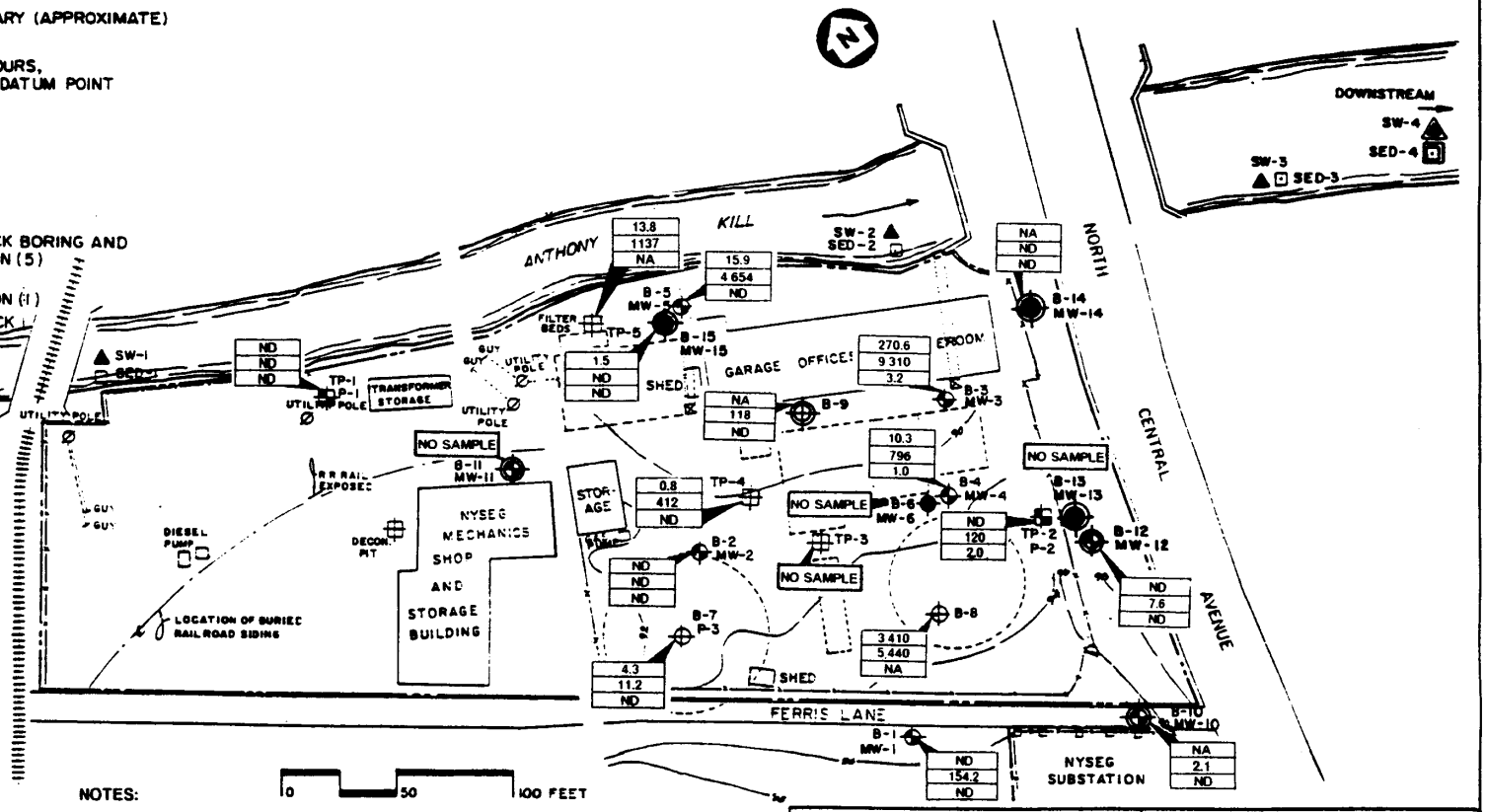
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)



NOTES:

1. HPLC ORGANIC ANALYSIS RESULTS ARE SHOWN EXCEPT WHERE GC/MS RESULTS ARE AVAILABLE (TP-5; B-8, B-9, B-10, B-12, B-14, AND B-15).
2. WHERE DUPLICATE SAMPLES WERE ANALYZED BY THE SAME TECHNIQUE, THE HIGHER VALUE IS SHOWN.
3. SAMPLES WERE COLLECTED AT DEPTHS BETWEEN 3 AND 24 FEET BELOW GROUND SURFACE.
4. ALL SAMPLES EXCEPT TP-5 AND B-9 WERE COLLECTED BELOW THE WATER TABLE.

TOTAL VOCs TOTAL PAHs TOTAL CN	CONCENTRATIONS DETECTED IN SOIL BORINGS IN mg/kg DURING TASK 2 AND TASK 3 SAMPLING EVENTS.
NA	NOT ANALYZED
ND	NOT DETECTED

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

TITLE: DISTRIBUTION OF CHEMICALS IN SOILS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 2-2

collected in the vicinity of the former filter beds and the former gas and purifier houses. Phenolics are widely distributed in the environment due to both natural (i.e., vegetative decomposition) and manmade processes. Tars and wastewaters at coal gas plants are a source of phenolics; however, the tars produced by water gas plants such as the one at Mechanicville, usually contain only negligible amounts of phenolics. The detectable levels of phenolics in soils at the gas house and filter beds may be due to other site activities.

2.3.2 Surface Soil

As part of the Task 4 work plan, nine surface soil samples plus one duplicate sample were collected at the site in August 1989. These samples were taken to characterize the extent of contamination in surface soils at the site. The nine samples and one duplicate (SS-1 through SS-9, plus SS-3A), along with one trip blank, were sent to a laboratory for analysis. Samples SS-1, SS-2, SS-3, SS-3A, SS-4, and SS-5 were analyzed for cyanide, SVOCs, VOCs, and PCBs. The remaining samples, SS-6 through SS-9, were analyzed for PCBs only. The analytical results are included in Appendix A-7.

The analytical results of the Task 4 surface soil sampling program were reviewed for quality control/quality assurance. Two issues were identified upon data review. The first relates to sample holding time. Although the soil samples were held for 50 days instead of the recommended 40 days, they were stored properly (in dark containers at 4° C) so that the analytical results are expected to be reliable. The second issue relates to the relatively high detection limits for the volatile organic compound (VOC)

analyses. This is not thought to be a serious data issue at the Mechanicville site because VOCs would not be expected to be present at significant concentrations in surface soils. Volatilization over the many years since coal gasification activity terminated would most likely result in insignificant levels in surface soils.

No PCBs were detected in any of the surface soil samples that were collected. This includes sample SS-5, which was taken next to the PCB waste-oil drums (see Figure 2-1). Additionally, no VOCs were detected in samples SS-1 through SS-5. A trace of bromomethane was detected in sample SS-3, but at a concentration below the detection limit for that sample. In addition, this compound was not detected in the duplicate sample, SS-3A.

Cyanide was detected in two surface soil samples, SS-1 and SS-3A (no cyanide was detected in replicate sample SS-3) at 1.8 and 1.9 mg/kg, respectively. Both of these samples were collected from the area behind the garage offices and storeroom building, along the upper bank of the Anthony Kill. Several PAHs were detected in Samples SS-1 through SS-4, including the duplicate sample. Concentrations of total PAHs ranged from 9.1 mg/kg to 71 mg/kg. No PAHs were detected in sample SS-5. Bis(2-ethylhexyl)phthalate (BEHP) was found in two samples plus the duplicate sample. Although this compound is a common laboratory contaminant, no BEHP was detected in the laboratory blank, therefore this compound is considered to be present in the surface soil. One other SVOC, di-n-butyl phthalate, was detected in several samples. However, this is also a common laboratory contaminant and was found in the laboratory

blank at similar concentrations. Therefore this compound was not considered to be present in surface soils at the site.

2.4 SUMMARY OF CONTAMINANT DISTRIBUTION IN GROUNDWATER

Groundwater samples were collected from 12 wells at the site during Tasks 2 and 3. Four rounds of samples were collected during Task 2 and two rounds during Task 3. All samples were analyzed for VOCs, SVOCs, dissolved iron and zinc, cyanide, phenolics, and TOC. Conductivity, pH, and temperature were measured in the field. The analytical results are presented in Tables A-3-1 and A-3-2 in Appendix A-3.

Cyanide was detected in all wells except MW-11. The highest levels of total cyanide (0.58 - 0.8 mg/L) were observed at MW-12 during Task 3. During Task 2, a maximum level of 0.42 mg/L was reported at MW-3. Well MW-12 is located downgradient from the former relief gas holder while MW-3 is downgradient from the former purifier/oxide structures.

Volatile aromatic compounds, a subset of VOCs, were detected consistently in all wells except MW-1, MW-2, and MW-11. MW-1, MW-10, and MW-11 are located upgradient of the historical coal gasification plant. MW-2 is downgradient from the former distribution gas holder, but soils data from B-2 and B-7 suggest little or no contamination in this area. Concentrations in the deep bedrock wells (MW-6, MW-13, MW-14, and MW-15) were generally greater than those detected in the shallow wells. Other VOCs, including 1,1,1-trichloroethane, 1,1-dichloroethane, and trichloroethylene were detected in

several samples but they are not believed to be site-derived (E.C. Jordan Co., 1989; GRI, 1987).

PAHs were observed in at least one sample from all wells except MW-1, MW-2, and MW-11. The average concentrations of all the samples collected at each well ranged from nondetectable (at MW-1, MW-2, and MW-11) to 750 mg/L at MW-12. The maximum levels of 1,500 and 1,564 mg/L were observed at wells MW-12 and MW-5, respectively. The distribution of PAHs in the groundwater is similar to the distribution in the soil, indicating that contaminated soil is the source of PAHs in the groundwater.

It should be noted that the groundwater sampling data indicate that the detected PAHs are particulate in nature, rather than dissolved species. Some concentrations measured greatly exceed the solubility of PAHs in water. The solubility of PAHs ranges from 0.50 μg/l for dibenzo(a,h)anthracene to 620 μg/l for indeno(1,2,3-cd)pyrene. Thus, the groundwater concentrations must not be indicative of dissolved PAH concentrations. This conclusion is consistent with the sampling protocol, because groundwater samples for organics are not filtered prior to analysis for organic contamination.

Dissolved iron was present in at least one sample from every well. Wells MW-1, MW-2, MW-10, and MW-11, considered to provide the most representative background concentrations, contained concentrations ranging from 0.04 to 1.4 mg/L. The wells with the highest concentrations of dissolved iron were MW-3, MW-4, MW-5, MW-6, and MW-12. These were the same wells that had the highest concentrations of PAHs.

Dissolved zinc was detected at least once in every well. Samples from MW-4 and MW-5 contained unusually high levels (0.52 to 1.09 mg/L). This may be related to the past site usage of zinc acetate. Samples at other wells were fairly uniform (0.01 to 0.11 mg/L). This uniformity suggests that zinc is a natural constituent of site groundwater which has not been elevated by site activities (E.C. Jordan Co., 1989).

Total recoverable phenolics were detected in all wells. The maximum concentration in shallow wells was 17 mg/L while the maximum concentration in deep wells was 0.3 mg/L.

2.5 SUMMARY OF CONTAMINANT DISTRIBUTION IN SURFACE WATER

Surface water samples were collected from four locations: SW-01 (upstream), SW-02 (adjacent), and SW-03 and SW-04 (downstream). There were four sampling episodes during Task 2 and two during Task 3. Samples were analyzed for VOCs, SVOCs, iron, zinc, phenolics, cyanide, and TOC. The analytical results of the surface water sampling program are presented in Appendix A-4.

No volatile aromatics were detected in any surface water samples. PAHs were detected once at the location adjacent to the site at a concentration of 0.105 mg/L. Other organics detected during Task 2 included methylene chloride (upstream), acetone (adjacent), and bis(2-ethylhexyl)phthalate (all locations). These compounds were found at concentrations less than 0.1 mg/L. They were also found in some sampler and trip blanks. During Task 3, bis(2-

ethylhexyl)phthalate was found upstream on both sampling occasions at concentrations less than 0.5 mg/L; it was not found adjacent or downstream of the site. These three contaminants (methylene chloride, acetone, and bis(2-ethylhexyl)phthalate), when present at low concentrations, are common laboratory contaminants. It is unlikely that they are derived from the site (GRI, 1987).

Iron was found at all four locations at levels ranging from 0.2 to 1.8 mg/L. The highest concentration was found adjacent to the site. Zinc was detected in at least one sample from three locations; only the downstream sample taken during Task 3 had no detectable zinc. Concentrations ranged from 0.01 to 0.03 mg/L. Phenolics were detected in at least one sample from all locations except the upstream and adjacent locations sampled during Task 3. Cyanide was not detected in any of the Task 3 samples. It was detected in at least one sample in each Task 2 location.

2.6 SUMMARY OF CONTAMINANT DISTRIBUTION IN SEDIMENT

Sediment samples were collected from the same locations as surface water samples. There were four sediment sampling episodes during Task 2 and two during Task 3. The samples were analyzed for VOCs, SVOCs, iron, zinc, phenolics, TOC, and cyanide. The analytical results of the sediment sampling program are presented in Appendix A-5.

Three VOCs were detected in the sediments. During Task 2, Round 3 sampling, benzene and toluene were found at a concentration of 0.07 mg/kg, adjacent to

and downstream from the site. During Task 3, ethylbenzene was detected at a level of 0.087 mg/kg adjacent to the site, along with a trace concentration of benzene. These contaminants are associated with coal tar wastes as well as petroleum products and industrial chemicals.

Analysis of Task 2 and Task 3 sediment samples indicated that PAH concentrations adjacent to the site are elevated compared to upstream and downstream sampling locations. Sampling location SD-02 contained trace levels up to 75.8 mg/kg of total PAHs during Task 2 sampling, and trace levels to 5.1 mg/kg during Task 3 sampling.

Concentrations of iron and zinc were fairly consistent in the four locations. Iron concentrations ranged from 7,100-33,100 mg/kg while zinc concentrations ranged from 25 to 100 mg/kg. Cyanide compounds were not detected in any Task 2 samples while in Task 3 a cyanide level of 1.3 mg/kg was detected adjacent to the site. Phenolics were detected in Task 2 Round 4 samples at all three locations at comparable levels (1.8-6.1 mg/kg). During Task 3, phenolic levels ranged from 0.68 to 2.3 mg/kg.

2.7 SUMMARY OF VOLATILE AROMATIC COMPOUND DISTRIBUTION IN INDOOR AIR

Indoor air samples were collected at the Mechanicville site, at four locations: in the office, the adjacent storeroom area, the separate garage building, and an additional background location at the property-line fence (see Figure 2-1). The samples were analyzed for the presence of benzene,

toluene, ethylbenzene, and xylenes. The analytical results of the air sampling program are presented in Appendix A-6.

The results of the indoor air program revealed low levels of benzene and toluene at most sampling locations. The only exception was benzene not being detected in the background sample. Ethyl benzene and xylenes were below analytical detection limits for all samples.

The highest indoor levels of toluene and benzene were found in the storeroom. A possible source of benzene in the storeroom may be a forklift which is used in this area. Although the engine was not running during the sampling period, it is possible that residual gasoline vapors had volatilized into the air. Toluene was detected in the background sample at higher levels than two of the indoor samples. It was highest in the garage. It is possible that the sample was affected by vehicle use in the area.

2.8 CONTAMINANTS OF CONCERN

Summary tables of subsurface soil, sediment, and groundwater data at the Mechanicville site were prepared for selected sampling locations. Sampling locations were chosen for statistical analysis on the basis of human exposure potential. It should be noted that the sampling program was designed to investigate areas where residuals from the coal gasification processes would be expected. The summary statistics presented in Tables 2-1 through 2-9 were used to select the contaminants of concern for the public health risk

S2soil

TABLE 2-1

SUMMARY STATISTICS OF SELECTED SUBSURFACE SOIL SAMPLING LOCATIONS
VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

VOLATILE ORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
BENZENE	103.6	640	0	5/10
TOLUENE	151.2	840	0	8/10
ETHYLBENZENE	82.1	440	0	8/10
STYRENE	150.0	780	0	3/10
TOTAL XYLENES	306.0	1400	0.235	8/8
TRIMETHYLBENZENE	26.7	170	0	4/8
n-PROPYLBENZENE	0.3	2.05	0	2/8
ACETONE	0.0	0	0	0/2
METHYLENE CHLORIDE	0.5	1	0	1/2
CARBON DISULFIDE	0.1	0.11	0	1/2
2-BUTANONE				0

NOTES:

Includes Task 2 soil borings B-2, B-3, B-4, B-7, and B-8
and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-09.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S2soil

TABLE 2-2

SUMMARY STATISTICS OF SELECTED SUBSURFACE SOIL SAMPLING LOCATIONS
SEMI-VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

SEMI-VOLATILE ORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
ACENAPHTHENE	128.8	600	0	10/11
ACENAPHTHYLENE	365.8	1388	0	9/11
ANTHRACENE	183.0	670	0	10/11
BENZO(b)FLUORANTHENE	35.4	200	0	7/11
BENZO(k)FLUORANTHENE	30.0	240	0	5/11
BENZO(g,h,i)PERYLENE	29.3	140	0	7/11
BENZO(a)ANTHRACENE	76.5	390	0	10/11
BENZO(a)PYRENE	45.2	200	0	10/11
CHRYSENE	76.2	390	0	10/11
DIBENZO(a,h)ANTHRACENE	1.3	13	0	3/11
FLUORANTHENE	285.2	1100	0.28	11/11
FLUORENE	514.3	2100	0.28	11/11
INDENO(1,2,3-cd)-PYRENE	6.1	65	0	2/11
NAPHTHALENE	545.5	2500	0	10/11
PHENANTHRENE	320.7	940	0.28	11/11
PYRENE	398.7	1400	0.28	11/11
BIS(2-ETHYLHEXYL)PHTHALATE	0.0	0	0	0/3
2-METHYLNAPHTHALENE	13.0	13	13	1/11
DIBENZOFURAN	-	-	-	
TOTAL CARCINOGENIC PAHS	271.0	1305	0.28	11/11
TOTAL PAHS	3040.0	9480	2.38	11/11

NOTES:

Includes Task 2 soil borings B-2, B-3, B-4, B-7, and B-8 and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-09.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

S2soil

TABLE 2-3

SUMMARY STATISTICS OF SELECTED SUBSURFACE SOIL SAMPLING LOCATIONS
INORGANIC COMPOUNDS
MECHANICVILLE SITE

INORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
IRON	29333.3	35000	19000	9/9
ZINC	120.2	320	59	9/9
-CYANIDE-				
TOTAL CYANIDE	0.7	3.2	0	3/9
AMENABLE CYANIDE	0.5	3.2	0	2/8
FERRO-FERRI CYANIDE	0.3	2	0	1/8
-OTHER-				
TOTAL RECOVERABLE PHENOLICS	0.5	3.6	0	2/9
TOTAL ORGANIC CARBON	51133.3	190000	1400	9/9

NOTES:

Includes Task 2 soil borings B-2, B-3, B-4, B-7, and B-8
and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-09.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S2tbls

TABLE 2-4

SUMMARY STATISTICS FOR SELECTED SEDIMENT SAMPLING LOCATIONS
VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

VOLATILE ORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
Benzene	0.0330	0.095	0	2/5
Toluene	0.0000	0	0	0/5
Ethylbenzene	0.0174	0.087	0	1/5
Styrene	0.0000	0	0	0/5
Total Xylenes	0.0000	0	0	0/5
Acetone	2.6000	5.2	0	1/2
Methylene Chloride	0.7375	2.95	0	1/4
2-Butanone	0.0000	0	0	0/2

NOTES:

Includes Task 2 samples SED-302 and SED-402;Task 3 sample at SD-02;
two NYSEG samples collected in 11/88, and ; the NYSDEC sample of 10/88.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S2tbls

TABLE 2-5

SUMMARY STATISTICS FOR SELECTED SEDIMENT SAMPLING LOCATIONS
SEMIVOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

SEMI-VOLATILE ORGANICS	ARITHMETIC (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
Acenaphthene	0.5093	1.6	0	4/7
Acenaphthylene	0.8664	3	0	4/7
Anthracene	0.7593	1.63	0	5/7
Benzo(b)Fluoranthene	0.2371	0.95	0	3/7
Benzo(k)Fluoranthene	0.9729	3.1	0	4/7
Benzo(g,h,i,)Perylene	0.1307	0.4	0	3/7
Benzo(a)Pyrene	0.8386	2	0	5/7
Benzo(a)Anthracene	0.8143	2.5	0	4/7
Chrysene	0.7643	2.3	0	4/7
Dibenz(a,h)Anthracene	0.0307	0.215	0	1/7
Fluoranthene	2.8486	10	0	5/7
Fluorene	0.4364	1.59	0	4/7
Indeno(1,2,3-cd)Pyrene	0.1021	0.3	0	3/7
Naphthalene	2.0543	8.7	0	6/7
Phenanthrene	2.0871	5.49	0	6/7
Pyrene	2.4743	7.6	0	5/7
4-Methylphenol	0.0430	0.215	0	1/5
2-Methylnaphthalene	0.6750	2.66	0	5/7
Butylbenzylphthalate	0.0430	0.215	0	1/5
bis(2-Ethylhexyl)phthalate	0.8264	2.8	0	4/7
Di-n-octylphthalate	0.0330	0.165	0	1/5
Dibutyl phthalate	1.1750	2	0	3/4
Total Carcinogenic PAHs	3.7600	10.2	0	5/7
Total PAHs	16.0	38.9	0.95	7/7

NOTES:

Includes Task 2 samples SED-302 and SED-402;Task 3 sample at SD-02;
two NYSEG samples collected in 11/88, and ; the NYSDEC sample of 10/88.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was anlayzed.

S2tbls

TABLE 2-6

SUMMARY STATISTICS FOR SELECTED SEDIMENT SAMPLING LOCATIONS
INORGANIC COMPOUNDS
MECHANICVILLE SITE

INORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
Iron	15193.3	27200	8400	3/3
Zinc	45.5	46	45	2/2
-CYANIDE-				
Total Cyanide (ppm)	0.4	1.3	0	1/3
-OTHER-				
Total Recoverable Phenolics	2.3	4.6	0	2/3
Total Organic Carbon	21533.3	32000	16100	3/3
Sulfate	-	-	-	-

NOTES:

Includes Task 2 samples SED-302 and SED-402;Task 3 samples at SD-02;
two NYSEG samples collected in 11/88, and; the NYSDEC sample of 10/88.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S-2tabs

TABLE 2-7

SUMMARY STATISTICS FOR SELECTED DOWNGRADIENT WELLS
GROUNDWATER FROM
VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

VOLATILE ORGANICS	ARITHMETIC MEAN (mg/l)	MAXIMUM (mg/l)	MINIMUM (mg/l)	FREQUENCY OF DETECTION
BENZENE	1.12774	12.000	0	27/33
TOLUENE	0.44912	6.400	0	19/33
ETHYLBENZENE	0.43933	2.000	0	20/33
STYRENE	0.10533	1.800	0	4/33
TOTAL XYLENE	0.74081	3.500	0	27/33
TRIMETHYLBENZENE	-	-	-	0
ACETONE	0.06071	0.850	0	1/14
METHYLENE CHLORIDE	1.13594	36.000	0	2/32
2-BUTANONE	0.00139	0.025	0	1/18
1,1,1-TRICHLOROETHANE	0.00183	0.021	0	2/18
VINYL ACETATE	0.00556	0.100	0	1/18
2-HEXANONE	0.00028	0.005	0	1/18
CHLOROBENZENE	0.00007	0.001	0	1/18
1,1-DICHLOROETHANE	0.00018	0.003	0	1/18
TRICHLOROETHENE	0.00294	0.053	0	1/18

NOTES:

Includes all Task 2 and 3 monitoring wells except upgradient wells MW-1, MW-10, and MW-11.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S-2tabs

TABLE 2-8

SUMMARY STATISTICS FOR GROUNDWATER FROM SELECTED DOWNGRADIENT WELLS
SEMIVOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

SEMIVOLATILE ORGANICS	ARITHMETIC MEAN (mg/l)	MAXIMUM (mg/l)	MINIMUM (mg/l)	FREQUENCY OF DETECTION
BENZO(b)FLUORANTHENE	0.8308	25.000	0	6/33
BENZO(k)FLUORANTHENE	0.8680	25.000	0	6/33
BENZO(g,h,i)PERYLENE	0.0121	0.400	0	1/33
BENZO(a)ANTHRACENE	1.5607	25.000	0	8/32
BENZO(a)PYRENE	0.9665	25.000	0	8/33
CHRYSENE	1.2873	25.000	0	7/33
DIBENZO(a,h)ANTHRACENE	0.0000	0.000	0	0/33
FLUORANTHENE	5.1082	82.000	0	19/33
FLUORENE	6.5798	110.000	0	21/33
INDENO(1,2,3,-cd)PYRENE	0.0152	0.400	0	2/33
NAPHTHALENE	35.7671	580.000	0	27/33
PHENANTHRENE	18.4497	320.000	0	22/33
PYRENE	8.1093	130.000	0	16/33
2,4-DIMETHYLPHENOL	0.0014	0.025	0	1/18
2,4-DINITROTOLUENE	0.0207	0.310	0	2/18
2,6-DINITROTOLUENE	0.0202	0.300	0	2/18
2-CHLORONAPHTHALENE	0.0167	0.300	0	1/18
2-METHYLNAPHTHALENE	25.7826	540.000	0	17/33
2-METHYLPHENOL	0.0297	0.300	0	4/18
2-NITROANILINE	0.1722	1.550	0	2/18
3-NITROANILINE	0.0861	1.550	0	1/18
4,6-DINITRO-2-METHYLPHENOL	0.0000	0.000	0	0/18
4-METHYLPHENOL	0.0202	0.200	0	3/18
4-NITROANILINE	0.0861	1.550	0	1/18
4-NITROPHENOL	0.0000	0.000	0	0/18
BENZOIC ACID	0.0875	1.550	0	2/18
BENZYL ALCOHOL	0.0003	0.005	0	1/18
BUTYLBENZYLPHTHALATE	0.0069	0.125	0	1/18
DIBENZOFURAN	1.7089	25.000	0	8/18
HEXACHLOROETHANE	0.0000	0.000	0	0/18
N-NITROSODIPHENYLAMIME	0.0167	0.300	0	1/18
NITROBENZENE	0.0003	0.005	0	1/18
PHENOL	0.0622	0.580	0	6/18
BIS(2-ETHYLHEXYL)PHTHALATE	0.0648	1.710	0	8/33
TOTAL CARCINOGENIC PAHS	5.4800	125.000	0	11/33
TOTAL PAHS	109.0000	1668.000	0	29/33

NOTES:

Includes all Task 2 and 3 monitoring wells except upgradient wells MW-1, MW-10, and MW-11.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

TABLE 2-9

SUMMARY STATISTICS FOR SELECTED DOWNGRADIENT WELLS
GROUNDWATER FROM
INORGANIC COMPOUNDS
MECHANICVILLE SITE

INORGANICS	ARITHMETIC MEAN (mg/l)	MAXIMUM (mg/l)	MINIMUM (mg/l)	FREQUENCY OF DETECTION
IRON	5.930	25.000	0	31/32
ZINC	0.102	1.090	0	26/32
-CYANIDE-				
TOTAL CYANIDE	0.111	0.800	0	24/32
AMENABLE CYANIDE	0.012	0.100	0	2/12
FERRO-FERRI CYANIDE	0.083	0.420	0	13/14
UNDISTILLED CYANIDE	0.006	0.070	0	3/17
TOTAL RECOVERABLE PHENOLICS	0.793	17.000	0	22/23
TOTAL ORGANIC CARBON	1679.662	50000.000	2.500	30/30
SULFATE	42.000	84.000	14.500	5/5
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	120.670	2060.600	0	32/33

NOTES:

Includes all Task 2 and 3 monitoring wells except upgradient wells MW-1, MW-10, and MW-11.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

assessment and to represent the exposure point concentrations for the estimation of contaminant body dose levels. (Appendix A contains the analytical data for individual sampling locations which were used to calculate the summary statistics..)

The summary statistics shown in these tables include the frequency of detection, the minimum, maximum, and arithmetic mean of concentrations. In computing the mean, "non-detects" were assigned the value of zero. This assignment tends to lower the mean not that significantly, unless a detection limit is high.

Sampling locations used to represent the potential for human exposure to subsurface soils (see Tables 2-1 through 2-3) include Task 2 soil borings B-2, B-3, B-4, B-7, and B-8 and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-9. As seen in Figure 2-1, these sampling locations correspond to the site parking lot (the area in front of the garage and offices) and the filter bed area. These areas were judged to represent locations on the site of possible future subsurface exploration and excavation.

Tables 2-4 through 2-6 contain summary statistics for selected sediment sampling locations. To model potential human exposure to sediments in the Anthony Kill, data for sampling locations adjacent to the site were selected. These include Task 2 and 3 data for sampling location SD-02, two NYSEG samples collected in 11/88, and one New York Department of Environmental Conservation (NYSDEC) sample collected in 10/88.

Summary statistics which reflect the levels of site-related contaminants in the on-site groundwater are presented in Tables 2-7 through 2-9. These data include all Task 2 and 3 monitoring well locations except upgradient wells MW-1, MW-10 and MW-11.

No contaminants of concern were chosen for surface water or groundwater. This is because there was no indication of site-related surface water contamination, based on the Task 2 and 3 surface water sampling results. Also, groundwater is not a current source of drinking water nor does it represent a potential source for the future. Therefore Jordan's evaluation of the risks associated with groundwater consumption is limited to a comparison of the concentrations found to groundwater or drinking water standards.

Chemicals were selected as contaminants of concern in subsurface soil, sediment, and indoor air based upon their concentrations, frequency of detection, and toxicologic properties. All chemicals detected in surface soil samples SS-1 through SS-4 were chosen as contaminants of concern for this medium. Table 2-10 lists the contaminants of concern selected for this risk assessment. All of the contaminants of concern in Table 2-10 are associated with coal gasification activities (GRI, 1987).

Both carcinogenic and noncarcinogenic PAHs were detected at a high frequency and magnitude. Of the sixteen PAHs detected at the site, seven have been classified as potential human carcinogens and were selected as contaminants of concern. These include benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and

TABLE 2-10

CONTAMINANTS OF CONCERN
MECHANICVILLE SITE

CARCINOGENS	MEDIUM IN WHICH DETECTED
Carcinogenic PAHs[1]	Soil, Sediment
Benzene	Soil, Sediment, Indoor Air
NONCARCINOGENS	
Toluene	Soil, Indoor Air
Xylene	Soil
Ethyl Benzene	Soil, Sediment
Styrene	Soil
Noncarcinogenic PAHs[2]	Soil, Sediment
Cyanide	Soil, Sediment
Trimethylbenzene	Soil

NOTES:

1 Include benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

2 Include acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, and 2-methylnaphthalene (sediment only).

indeno(1,2,3-cd)pyrene. In addition, several PAHs were chosen as contaminants of concern to represent the noncarcinogenic hazards of PAHs. These include naphthalene, pyrene, acenaphthene, acenaphthylene, phenanthrene, fluoranthene, fluorene, anthracene, 2-methylnaphthalene, and benzo(g,h,i)perylene.

Although iron and zinc were found in all samples, they were not selected because they are of such low toxicity. In addition, levels in soil were similar to background levels at the site, while levels in sediment were within an average background range reported by Moore and Ramamoorthy (1984).

Other compounds such as acetone, butylbenzyl phthalate, di-n-octyl phthalate, carbon disulfide, 4-methylphenol and propyl benzene were not chosen because of their low frequency of detection. In addition, some of these compounds are common laboratory contaminants and therefore may not actually be present on the site.

3.0 HAZARD IDENTIFICATION

In this section, the toxicological properties of the contaminants of concern, all of which are associated with coal gasification activities, are briefly reviewed. A detailed discussion of the health effects of all contaminants is presented in Appendix B.

3.1 POLYNUCLEAR AROMATIC HYDROCARBONS

Most PAHs in the environment are formed during the combustion of organic compounds. Major sources of PAHs include incomplete combustion of fuels for heat and manufacturing; burning of coals, gasoline, and diesel exhaust; and burning of municipal and agricultural wastes. Cigarette smoke also contains PAHs. To a limited extent, these compounds also occur naturally (i.e., plants and bacteria synthesize PAHs during growth, and naturally caused brush and forest fires produce PAHs).

PAHs represent a class of several hundred compounds consisting of annelated (benzene) rings. PAHs are ubiquitous in the environment and most are formed during the combustion of organic compounds. Sixteen PAHs were detected at this site. Seven of these compounds have been classified as potential human carcinogens (Carcinogen Assessment Group [CAG] B2 classification): benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene (USEPA, 1984). Several other PAHs are genotoxic but have not been shown to be carcinogenic (i.e., anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene,

phenanthrene, and pyrene). Numerous epidemiological studies of worker populations have shown a clear association between PAH-containing materials (e.g., soots, tars, and oils) and increased cancer risk (IARC, 1983).

Several noncarcinogenic PAHs were also detected at the site. One of them, naphthalene, was selected as a surrogate to represent noncarcinogenic PAH hazard potential. Except for naphthalene, little toxicological information exists on the other compounds. The toxicity of naphthalene is summarized in Section 3.3.

PAHs are highly lipid-soluble and are absorbed via the gastrointestinal (GI) tract, skin, and lungs (USEPA, 1984). Many PAHs produce tumors in mouse skin when applied topically in solvents or as coal tar products. Therefore, dermal contact is a potentially important exposure route for these compounds. The degree of skin absorption of PAHs from contaminated soils, however, is not known (USEPA, 1984).

The USEPA cancer potency factors for oral and inhalation exposures of benzo(a)pyrene are 11.5 and 6.11 $(mg/kg/day)^{-1}$, respectively. These values are used to assess the carcinogenic risks associated with the mixture of carcinogenic PAHs found in the soil. (Potency factors are not available for the other carcinogenic PAHs). Using the factor for benzo(a)pyrene to represent the potency of the seven identified carcinogenic compounds is widely practiced for risk assessment of PAHs. Although benzo(a)pyrene is one of the most potent carcinogenic PAHs, many other carcinogenic PAHs are known

to be present in coal tar wastes that were not analytes in the methods used to test site soils.

It should be recognized that the USEPA cancer potency factor is the upper 95-percent confidence limit of the slope of the dose-response curve for benzo(a)pyrene (using the linearized multistage extrapolation model). This means that, with 95-percent statistical certainty, the true potency is as stated or less. Therefore, it is highly unlikely that the true potency of benzo(a)pyrene is greater than stated, and it could be considerably lower. For these reasons, the calculated cancer risks associated with the various exposure levels are expected to represent upper limits of the true risk.

It should be noted that these potency values were under reevaluation by USEPA at the time of this writing. New values were not available for use in this risk assessment.

In addition to the USEPA-derived potency factors, ICF-Clement Associates have developed new potency factors for benzo(a)pyrene using a different dose-response model than the USEPA. While the USEPA used the linearized multi-stage model, ICF-Clement used a newly-developed two-stage biologically-based model, which is a special case of the Moolgavkar and Knudson risk model (Atlantic Environmental Services, Inc., 1988). These new oral and inhalation potency estimates for benzo(a)pyrene are 3.22 and 0.453 $(mg/kg/day)^{-1}$, respectively and they can be used with the USEPA estimates to provide a range of possible cancer risks associated with PAHs.

ICF-Clement Associates has also developed relative potency factors for other PAH compounds, based on their comparative potencies to that of benzo(a)pyrene. These comparative potencies are illustrated below:

PAH	Relative Potency
Benzo(a)pyrene	1.000
Benzo(a)anthracene	0.145
Benzo(b)fluoranthene	0.140
Benzo(k)fluoranthene	0.066
Benzo(g,h,i)perylene	0.022

PAH	Relative Potency
Chrysene	0.0044
Dibenzo(a,h)anthracene	1.1100
Indeno(1,2,3-c,d)pyrene	0.2320

Source: Atlantic Environmental Services, 1988

The merits and limitations of using the various cancer potency factors are discussed in detail in Appendix B-1.

3.2 BENZENE

Benzene, a highly flammable volatile aromatic hydrocarbon, is used both as a gasoline additive and a chemical intermediate in the production of many compounds (e.g., styrene and phenol).

Benzene is recognized human carcinogen (IARC, 1982). Several epidemiological studies provided sufficient evidence of a causal relationship between benzene exposure and leukemia in humans. Benzene is a known inducer of aplastic anemia in humans, with a latency period of up to 10 years. It reduces the

number of white blood cells and other blood components, which may progress to a reduction in all blood cell types. Similar adverse effects on the blood-cell-producing system occur in animals exposed to benzene. In both humans and animals, benzene exposure is associated with chromosomal damage, although it has not been shown to be mutagenic. Embryolethality has also been observed in experimental animals.

Exposure to high concentrations of benzene in the air causes central nervous system (CNS) depression and cardiovascular effects. Benzene has been reported to cause subjective symptoms (e.g., headaches and nausea) with chronic exposure to as little as 100 parts per million (ppm).

3.3 NAPHTHALENE

Naphthalene is a member of the class of compounds known as PAHs, which were described in Section 3.1. In this risk assessment, naphthalene is used to represent the toxicity of noncarcinogenic PAHs.

Naphthalene is absorbed most readily by the inhalation route in humans. Acute short-term exposure to naphthalene may lead to severe anemia. In severe exposure, ingestion causes gastroenteric distress, tremors, and convulsions. Corneal ulceration and cataracts have been observed in humans after repeat exposure to naphthalene vapor. Naphthalene vapors may also cause headache, nausea, and profuse perspiration. With dermal contact, naphthalene is a mild primary irritant. Naphthalene is not known to be a mutagen or carcinogen (Clayton and Clayton, 1981).

3.4 TOLUENE

Toluene is an important raw material for organic syntheses. It is used in the production of benzene, benzyl chloride, benzoic acid, phenol, cresols, vinyl toluene, TNT and toluene diisocyanate. It is also used as a solvent for paints, rubber and resins and as a component of motor and aviation fuels.

Acute and chronic exposures to 200 ppm or greater concentrations of toluene vapor cause eye irritation, headache, nausea, and other CNS effects in humans. In humans, acute exposures to very high concentrations can cause narcosis; however, exposures to quantities sufficient to produce unconsciousness fail to produce organ damage. There is no conclusive evidence that toluene is carcinogenic or mutagenic in animals or humans (USEPA, 1980a). The National Toxicology Program (NTP) is currently conducting an inhalation carcinogenicity bioassay in rats and mice.

Researchers have reported that toluene is embryotoxic and one study reported a high incidence of cleft palate in mice. There are no accounts of teratogenic effects in humans after exposure to toluene (USEPA, 1987).

3.5 ETHYL BENZENE

The major use of ethyl benzene is as an intermediate in the production of styrene. It is also used in the manufacture of cellulose acetate and synthetic rubber. Significant quantities are consumed in connection with xylene, which may contain as much as 20% ethyl benzene as a solvent or

diluent. These xylene/ethyl benzene mixtures are used as diluents in the paint industry, in agricultural sprays for insecticides and in gasoline blends.

To date, ethyl benzene has not been evaluated by USEPA for human carcinogenicity potential. The target organs for health impacts from acute exposures are the eyes, upper respiratory system, skin, and CNS. No data on teratogenicity or mutagenicity of ethyl benzene were located by USEPA (1980b). Human toxicity of ethyl benzene is characterized by its irritancy to the skin and, less markedly, to the mucous membranes (ACGIH, 1986).

3.6 XYLENE(S)

Xylene is a VOC used as a solvent for prints, inks, and adhesives. Xylenes are components of detergents and other household and industrial products.

Xylene has not been found to be carcinogenic when administered orally to rats or mice. Xylene was not found to be mutagenic in a battery of short-term assays. Xylene is not teratogenic but has caused fetotoxicity in rats and mice. Acute exposure to high levels of xylene affects the CNS and irritates the mucous membranes. Short-term xylene exposure can cause eye, nose, and throat irritation at 200 ppm. There is some evidence that chronic exposures to less than 50 ppm can cause headaches and other CNS effects.

3.7 CYANIDE

Both cyanide gases and salts are used in industrial processes. HCN is manufactured at 14 sites in the U.S. and is used as an intermediate in the production of nylon and other compounds. Minor uses of HCN include insecticides and rodenticides for fumigating enclosed spaces (e.g., grain storage areas). Cyanide salts are used mainly in the electroplating and metal-finishing industries. Minor applications of the salts include the manufacture of dyes and pigments, as well as use as insecticides and rodenticides.

Cyanide is a compound that may exist as a salt (e.g., potassium or sodium cyanide) or as a gas (e.g., hydrogen cyanide [HCN]). Cyanides as a class are absorbed readily by the lungs, GI tract, and skin of animals and humans (USEPA, 1985). The fastest route of uptake for cyanide is the inhalation of gaseous HCN. Once cyanide is absorbed, it is readily distributed throughout the body. The liver can readily detoxify cyanide compounds. Therefore, cyanides absorbed from the GI tract first pass through the liver, where they are converted to less toxic compounds (usually thiocyanide), before systemic distribution. When inhalation is the route of exposure, systemic distribution occurs before the cyanide-containing blood passes through the liver. Therefore, the effective dose to target organs is higher for inhalation exposure than oral exposure for the same administered body dose.

Acute exposure to high levels of cyanides produces adverse effects on the central nervous, respiratory, and cardiovascular systems (ATSDR, 1988). Coma

and/or death can be eventual outcomes. Lower-level exposures produce rapid deep breathing, convulsions, and loss of consciousness (ATSDR, 1988). Skin irritation can result from contact with dust containing cyanide (ATSDR, 1988). Chronic exposures (months to years) to low levels of cyanides affect the CNS and the thyroid gland. No evidence exists to indicate that cyanide is carcinogenic (ATSDR, 1988).

3.8 STYRENE

Styrene is a volatile aromatic compound produced primarily from the dehydrogenation of ethyl benzene. Styrene is used to produce polystyrene, which is a thermoplastic with excellent electrical properties and thermal stability.

Styrene is classified by USEPA as a possible human carcinogen (Group C) because there is limited evidence of carcinogenicity from animal studies but no human data. There is, however, no USEPA cancer potency factor for styrene.

The target organs for toxic effects are the CNS, the respiratory system, and the eyes and skin. There is some epidemiologic evidence suggesting reproductive effects.

3.9 TRIMETHYLBENZENE

Trimethylbenzenes are alkylated benzenes. This group of compounds, which include xylenes, toluene, and ethylbenzene is a by-product of petroleum

distillation and found in coke oven effluents. Trimethylbenzene is primarily used in industry as solvents, paint thinners, and motor fuel components. One of the three trimethylbenzene isomers has been identified as an insect attractant.

Little experimental work has been carried out on trimethylbenzene. It seems to have very similar properties to other alkylated benzenes, such as xylene and toluene. Like these compounds, trimethylbenzene is relatively non-toxic except with acute exposures to very high concentrations.

Trimethylbenzene, like other alkylated benzenes, is primarily a CNS depressant with such symptoms as irritability, nervousness, headache, nausea, and even narcosis. It is absorbed through the skin, gastrointestinal tract, and lungs; however, unlike other compounds of its class, it is not systemically toxic through dermal absorption. There have been reports of hypochromic anemia in peripheral blood and deviation from normal coagulation in workers exposed for many years to trimethylbenzene at air concentrations between 10 and 60 ppm.

4.0 DOSE/RESPONSE ASSESSMENT

4.1 INTRODUCTION

In risk assessments, the likely range of incremental risk associated with given levels and conditions of human exposure to a carcinogenic or noncarcinogenic substance is estimated. For carcinogens, the purpose of the dose/response assessment is to define the relationship between the dose of a substance and the likelihood of a carcinogenic effect. Noncarcinogens are thought to have a threshold level for health effects; therefore, USEPA has derived some guidelines based on acceptable exposure levels. The outcome of the dose/response assessment, when coupled with information or assumptions concerning the magnitude of human exposure, can provide a numerical estimate of risk.

Information derived from the hazard identification process is used to guide the dose/response assessment. This guidance is necessary for determining the appropriateness and limitations of the available data sets that might be used for dose/response extrapolation. Such guidance is important, since numerical risk estimates are not affected by the likelihood that an agent is in reality a human carcinogen. That is, a numerical risk estimate can often be derived for a substance even if the weight-of-evidence in support of human carcinogenicity is extremely weak. Therefore, current USEPA guidelines state that agents classified in Groups A (human carcinogens) and B (probable human carcinogens) according to the weight-of-evidence stratification are suitable for quantitative risk estimation. Agents categorized in Group C (possible human carcinogens) must be judged on a case-by-case basis, and agents in

Groups D (not classified) and E (no evidence of human carcinogenicity) do not have risk estimates derived.

Regardless of the weight-of-evidence, there are major uncertainties in derived risk estimates, which are due to experimental and epidemiologic variability, as well as problems in extrapolating both from animals to humans and from high to low doses. Three major issues impact the validity of dose-response assessments used to derive risk estimates: (1) the selection of a study (i.e., data set) upon which to base the calculations; (2) the mathematical model used to extrapolate from experimental observations at high doses to predicted occurrences at very low doses; and (3) the conversion to an equivalent human dose corresponding to the animal dose used. USEPA provides guidance in these three areas.

Study selection involves the identification of a data set that provides sufficient, well-documented dose/response information to enable a valid extrapolation. Ideally, human data are preferable to animal data, although adequate human data sets are relatively uncommon. Therefore, it is often necessary to seek dose/response information from a species which biologically resembles humans (e.g., with respect to metabolism, physiology, and pharmacokinetics), and where the route of administration is similar to the expected mode of human exposure (e.g., inhalation and ingestion). Cancer incidence data should allow for determination of statistically significant elevations in the occurrence of tumors at specific target organ sites.

The low levels of cancer risk that are generally considered acceptable in community settings (typically $1x10^{-5}$ to $1x10^{-6}$) cannot be measured directly,

either by animal experiments or epidemiologic studies. Therefore, different extrapolation models have been developed to estimate cancer risk associated with extremely low doses, based on the observed responses that occur at high doses. Current theories on the carcinogenic process led to the belief that carcinogenesis is associated with a low-dose linearity and linear nonthreshold dose-response relationship. The mathematical formulation typically chosen to describe the dose-risk relationship at low doses is the linearized multi-stage model. Although this is generally regarded as the base of many of the current mathematical extrapolation models, USEPA cautions that no solid scientific basis exists for any extrapolation model and that the risk estimates made with such models are intended to be plausible upper limits (i.e., the true risk is not likely to be higher than the estimate, but it could be as low as zero).

The determination of human equivalent doses by conversion of doses administered to experimental animals requires the assumption that humans and animals are equally sensitive to the toxic effects of a substance, if the same dose per unit body surface area is absorbed by each species. Further assumptions for dose conversions involve standardized scaling factors to account for differences between humans and experimental animals with respect to lifespan, body size, breathing rates, and other physiologic parameters. In addition, evaluation of risks associated with one route of administration (e.g., inhalation) when tests in animals involve a different route (e.g., ingestion) requires additional assumptions with corresponding additional uncertainties. These uncertainties should be acknowledged and explained as thoroughly as possible.

4.2 USE OF MATHEMATICAL MODELS IN DERIVATION OF A CANCER POTENCY FACTOR

The USEPA cancer potency factors (CPFs) are derived by use of the linearized multi-staged procedure. USEPA recognizes that this method produces very conservative risk estimates and that other mathematical models exist. Several dose/response models are available for low-dose extrapolation. These include the probit, the multi-hit, the logit, and the multistage models. These models are generally statistical in character and are not derived from biological arguments, except for the multistage model, which has been used to support the somatic mutation hypothesis of carcinogenesis. In the Guidelines for Carcinogen Risk Assessment (51FR33997), USEPA states:

> No single mathematical procedure is recognized as the most appropriate for low-dose extrapolation in carcinogenesis. When relevant biological evidence on mechanism of action exists (e.g., pharmacokinetics or target organ dose), the models or procedures employed should be consistent with the evidence. When data and information are limited, however, and when much uncertainty exists regarding the mechanism of carcinogenic action, models or procedures that incorporate low-dose linearity are preferred when compatible with the limited information.

USEPA policy is to use the linearized multistage model unless there is adequate scientific justification for using another model. The multistage model is used for the extrapolation because it is the most general model, with other models approximating some form of the multistage model according to the values of the parameters. The goodness of fit of experimental data is not, however, an appropriate means for justifying the use of one model over another.

USEPA emphasizes in the guidelines that the linearized multistage model leads to a plausible upper limit to the risk that is consistent with some proposed mechanisms of carcinogenesis. Such an estimate, however, does not necessarily give a realistic prediction of the risk. The true value of the risk is unknown and may be as low as zero. An established procedure does not yet exist for making "most likely" or "best" estimates of risk within the range of uncertainty defined by the upper- and lower-limit estimates. The point estimate generated from the model is not used because a question remains as to the shape of the dose/response curve beyond the experimental exposure level. Therefore, the upper-bound estimate of the carcinogenic potency is derived when animal bioassay data are used. This upper-bound estimate can be taken as a plausible estimate if the true dose/response curve is actually linear at low doses. The other reason why the upper-bound estimate is used instead of the point estimate is that, in some cases, the point estimate is extremely unstable, depending on where the lowest experimental dose is, while the upper-bound estimate is much more stable.

For several reasons, estimates such as the unit risk, when based on animal studies, provide only an approximate indication of the absolute risk in populations exposed to known carcinogen concentrations. There may be important differences between animals and humans in target site susceptibility, immunological responses, hormone function, dietary factors, and disease. Unit risk estimates can be useful, however, in making rough comparisons of the relative potency of a given agent, as compared to other carcinogens.

Derivation of the unit risk estimate requires calculation of the slope of the dose-risk relationship, which is obtained by application of the extrapolation model. The dose-risk slope value, q_1, is taken as an upper bound of the potency of the chemical in inducing cancer at low doses; it is referred to as the cancer potency factor (CPF). Therefore, at a given dose d, q_1 x d is a 95-percent upper confidence limit on the extra lifetime risk (probability) of cancer occurring.

The USEPA integrated risk information system (IRIS) is a database that USEPA has established that contains all evaluated data on many toxic substances found at hazardous waste sites. This database was employed by Jordan to identify the cancer potency factors and reference doses (RfDs) applicable to this risk assessment. A reference dose is the dose-response value used to assess noncarcinogenic effects. It is defined as an estimate of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime. Where no information was found in IRIS, other government documents were used (e.g., Superfund Public Health Evaluation Manual update 1987 and Health Effects Assessment documents). Tables 4-1 through 4-3 present the dose/response data used in this risk assessment for the contaminants of concern at the Mechanicville site, including CPF or RfD values, source of these values, the study type used to determine these values, and toxicokinetic factors (TKFs).

As stated in Section 3.1, ICF-Clement Associates has developed new oral and inhalation potency factors for benzo(a)pyrene based on a different extrapolation model than that used by the USEPA. ICF-Clement's model is a

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TABLE 4-1

ORAL DOSE RESPONSE DATA
MECHANICVILLE SITE

COMPOUND	DOSE-RESPONSE VALUE	UNIT	SOURCE	DATE	STUDY TYPE *	TOXICOKINETIC FACTORS Most Probable/Realistic Worst SOIL (oral)	SOIL (dermal)
CARCINOGENS							
PAHs (1)	11.5	(mg/kg/day)-1	SPHEM (6)	Oct 87	diet	0.50 / 1.00	0.01 / 0.10
PAHs (2)	3.22	(mg/kg/day)-1	AES (9)	1988	diet	0.50 / 1.00	0.01 / 0.10
Benzene	0.02	(mg/kg/day)-1	IRIS (7)	Aug 89	inhalation	0.10 / 0.50	0.05 / 0.25
NONCARCINOGENS							
Toluene (3)	0.3	mg/kg/day	IRIS	Aug 89	inhalation	0.05 / 0.25	0.025 /0.125
Xylenes	2.0	mg/kg/day	IRIS	Aug 89	gavage	0.10 / 0.50	0.050 /0.250
Ethylbenzene (4)	0.1	mg/kg/day	IRIS	Aug 89	gavage	0.10 / 0.50	0.050 /0.250
Cyanide	0.02	mg/kg/day	IRIS	Aug 89	diet	0.5 / 1.00	1.000 / 2.50
Styrene	0.2	mg/kg/day	IRIS	Aug 89	gavage	0.1 / 0.5	0.050 / 0.25
Noncarcinogenic PAHs (5)	0.4	mg/kg/day	SPHEM	Sept 88	diet	0.5 / 1.00	0.010 / 0.10
Trimethylbenzene (5)	2.0	mg/kg/day	IRIS	Aug 89	gavage	0.10 / 0.50	0.050 / 0.25

(1) USEPA dose/response value for benzo(a)pyrene
(2) ICF-Clement dose/response value for benzo(a)pyrene
(3) Toluene study based on 50% absorption
(4) Ethylbenzene administered in olive oil
(5) Dose/response value for naphthalene
(6) Dose/response value for xylenes
(7) Superfund Public Health Evaluation Manual
(8) USEPA Integrated Risk Information System
(9) Atlantic Environmental Services (AES), 1988

mechdri

TABLE 4-2

INHALATION DOSE RESPONSE DATA
MECHANICVILLE SITE

COMPOUND	DOSE-RESPONSE VALUE	UNIT	SOURCE	DATE	STUDY TYPE *	TOXICOKINETIC FACTORS: INHALATION TKF Volatile	TOXICOKINETIC FACTORS: INHALATION TKF Particulate
CARCINOGENS							
PAHs (1)	6.1	(mg/kg/day)-1	SPHEM(6)	Oct 87	inhalation	N/A (8)	1.00
PAHs (2)	0.453	(mg/kg/day)-1	AES (9)	1988	inhalation	N/A (8)	1.00
Benzene	0.029	(mg/kg/day)-1	IRIS(7)	Aug 89	inhalation	1.00	N/A
NONCARCINOGENS							
Toluene	1.0	mg/kg/day	IRIS	Sept 88	inhalation	1.00	N/A
Xylenes	0.4	mg/kg/day	AIC	Sept 88	inhalation	1.00	N/A
Ethylbenzene (3)	0.1	mg/kg/day	IRIS	Aug 89	gavage	1.00	N/A
Cyanide (3)	0.02	mg/kg/day	IRIS	Nov 88	diet	N/A	7.50
Styrene (3)	0.2	mg/kg/day	IRIS	Sept 88	gavage	1.00	N/A
Noncarcinogenic PAHs (4)	0.4	mg/kg/day	SPHEM	April 89	diet	N/A	0.75
Trimethylbenzene (5)	0.4	mg/kg/day	AIC	Sept 88	inhalation	1.00	N/A

(1) USEPA dose/response value for benzo(a)pyrene
(2) ICF-Clement dose/response value for benzo(a)pyrene
(3) Inhalation dose/response value is not available for this compound; therefore, the oral dose/response value was used
(4) Dose/response value for naphthalene
(5) Dose/response value for xylene
(6) Superfund Public Health Evaluation Manual
(7) USEPA Integrated Risk Information System
(8) Not applicable
(9) Atlantic Environmental Services (AES), 1988

TABLE 4-3

TOXICOKINETIC FACTORS (TKFs)
MECHANICVILLE SITE

STUDY TYPE	DERMAL/SOIL	ORAL/SOIL
Gavage	0.05/0.25[1]	0.1/0.5
Drinking Water	0.05/0.25	0.1/0.5
Diet	.01/0.10	0.5/1.0
Inhalation	0.05/0.25[2]	0.1/0.5[2]

Notes:
[1] Most probable case/realistic worst case.

[2] Multiplied by the absorption-factor from inhalation study, if any.

two-stage biologically-based model which produces oral and inhalation potency factors 72 and 93 percent lower than the USEPA factors. ICF-Clement's estimates can be used to provide a range of possible cancer risks associated with PAHs.

4.3 TOXICOKINETIC FACTOR (TKF)

To estimate the risk to human health posed by the presence of chemicals in soil and sediment at the Mechanicville site, Jordan first estimated the exposure dose of each constituent. The exposure dose is similar to the administered dose of a laboratory experiment. The experimentally-based cancer potency factors and reference doses used in quantitative risk assessment are based on administered doses in most cases.

The toxicokinetic factor (TKF) is defined as the ratio of the estimated absorption factor for the site-specific medium and route of exposure to the known or estimated absorption factor for the laboratory study from which the cancer potency factor or the reference dose was derived. Use of this factor allows Jordan to make appropriate adjustments if the efficiency of absorption is known or expected to differ because of physiological effects and/or matrix or vehicle effects.

TKFs can be less than one or greater than one, depending on the particular circumstances at hand. If it is thought that absorption from the site-specific exposure is the same as absorption in the laboratory study, then the TKF is 1.0.

In the absence of detailed toxicological information on every compound of interest, it has been common practice for risk assessors to use a default value of 1.0. This approach is not always adequately protective of public health, because there are many cases in which it is expected that absorption from the site-related exposure would be higher than that in the laboratory study. In this assessment, the absorption by inhalation of cyanide adsorbed to soil particles would be expected to be higher than in the diet study upon which its dose/response value is based.

For carcinogenic PAHs and cyanide, specific TKFs were derived based on a review of relevant toxicological data. These TKFs are described in the dose/response profile for each compound (see Appendix B-1). For the other contaminants of concern, Jordan has estimated compound-specific TKFs based on a conservative, internally consistent algorithm as shown in Table 4-3. The procedure requires that the route of exposure and the vehicle be known for all studies from which cancer potency factors or reference doses were derived by USEPA. This information is discussed in the dose/response profile for each contaminant of concern. The algorithm requires the use of numerous assumptions regarding systemic absorption of the constituents. These assumptions are reasonable and are presented in the following paragraphs.

TKFs were derived for three situations: (1) dermal uptake from soil; (2) ingestion of soil; and (3) inhalation of volatilized compounds or particulates. The dose/response values listed in Tables 4-1 and 4-2 were derived from several types of studies. Most oral values were derived from studies in which animals were administered the test compound orally either by gavage, in drinking water, or in diet. However, some oral dose/response

values (i.e., for benzene and toluene) were based on inhalation studies. Most inhalation dose/response values were based on inhalation studies.

The TKF values for situations 1 and 2 are listed in Tables 4-1 and Table 4-3. The assumptions employed in deriving them are discussed below:

- Absorption from gavage studies (in which feeding is by stomach tube) is similar to absorption from drinking water studies.

- Absorption of compounds from drinking water in humans is similar to absorption in laboratory animals from drinking water or gavage.

- Absorption of volatile compounds via inhalation in animals is similar to absorption from drinking water. That is, in both cases absorption is assumed to be very high.

The above assumptions are conservative and reasonable. Their application results in a series of TKFs that can be applied to specific contaminants of concern depending on the nature of the study from which the dose/response values were derived. In some cases, the TKFs are one or greater than one. For instance, the gastrointestinal (GI) absorption of a constituent such as PAHs from soil may be as great as it is from diet. Since the cancer potency factor is based on a dietary study, a TKF of 0.5-1.0 is used to account for the difference in absorption expected for the estimated exposure at the Mechanicville site. In other cases, the TKFs are less than one. For instance, dermal absorption of a compound such as xylene from soil is expected

to be less than absorption when the compound is administered by gavage. Thus, the TKF for this compound for dermal uptake from soil is 0.05-0.25.

In the derivation of TKFs, for most of the contaminants of concern, Jordan assumes the following:

- Absorption of vapors at the site is the same as absorption of vapors in a laboratory study.

- Absorption of vapors at the site is the same as absorption from gavage in a laboratory study.

- Absorption of inhaled particles at the site is the same as absorption of vapors in a laboratory study; however, 75 percent of the inhaled particles is assumed to remain in the lungs and be available for absorption.

Therefore, the TKFs for most of these compounds are 1.0 for volatilized compounds and 0.75 for particulates (see Table 4-2).

The exceptions are PAHs and amenable cyanide. The cancer inhalation potency factor for PAHs is based on an inhalation study where hamsters were exposed to benzo(a)pyrene in a sodium chloride aerosol. It is assumed that absorption from soil particulates is the same as absorption from the sodium chloride aerosol; therefore, the TKF is 1.0. Jordan assumed that 75 percent of PAH particulates are retained in the lungs compared to volatilized PAHs; Thus, the TKF for volatilized PAHs is 1.33. The inhalation TKF for amenable cyanide

(particulates) is 7.5 based on route-specific metabolic differences. Its derivation is explained in the dose/response section for cyanide in Appendix B.

Table 4-2 contains the inhalation TKFs used in the risk scenarios.

5.0 EXPOSURE ASSESSMENT

The purpose of this exposure assessment is to identify and characterize potential exposures at the Mechanicville site. The exposure assessment consists of three steps. First, the exposure pathway analysis identifies potential pathways by which individuals may be exposed to site-related contamination. Second, the exposed population analysis identifies populations around the site who might be exposed. Finally, the methods to calculate incurred body doses resulting from these exposures are presented, along with some of the assumptions and parameters that are used in these calculations.

5.1 INTRODUCTION

The Mechanicville site is currently used as an electric and gas service center. However, NYSEG has other plans for the site in the future. These plans include moving the service center to another location outside the City of Mechanicville. NYSEG does not intend to sell the site, but it expects to lease the site (O'Meara and Martin, 1989). There are currently two potential bidders to lease the property: the city (to use the site as a storage lot), and a private car dealership (to use it as a car lot). Leasing of the site may require regrading the site and removing existing underground and aboveground structures at the site.

Because of the contamination found at the site (as described in Section 2 of this report), it is possible that individuals may be exposed to site-related

contamination. Under current conditions, the potential for exposure of nearby residents and site trespassers is limited because the site is not easily accessible. The property is bordered on three sides by a fence, and on the fourth side by a steep embankment along the Anthony Kill Stream.

5.2 EXPOSURE PATHWAY ANALYSIS

There are several pathways by which individuals on or near the site may be exposed to site-related contamination. These pathways involve exposure to soil, groundwater, surface water, air, and sediment. Table 5-1 presents the exposure pathways evaluated in this risk assessment.

5.2.1 Soil Exposure Pathway

Contamination was found in surface and subsurface soil, thus individuals who might contact these soils could be exposed to site-related contamination. Surface soil along the Anthony Kill bank was found to contain semivolatile organic compounds. Subsurface soils near the former gas plant structure locations were found to contain VOCs, SVOCs, and some inorganic compounds.

Because the area along the Anthony Kill is not fenced, the potential exists for trespassers to gain access to the site and contact soil contaminants. However, a steep embankment limits access to the site, making the potential for this exposure very low. Furthermore, most of the site is covered by asphalt or buildings. It is assumed that trespassers could only be exposed to

TABLE 5-1

EXPOSURE PATHWAYS
MECHANICVILLE SITE

MEDIUM	POINT OF EXPOSURE	ROUTE OF EXPOSURE	EXPOSED POPULATION	STATUS
Subsurface Soils	On-Site	-Dermal absorption -Incidental ingestion	Utility Workers	Future
Surface soils	On-Site (Stream bank area)	-Dermal absorption -Incidental ingestion	Trespassers	Current
Air Emissions	On-Site,	-Inhalation	Site Residents	Current
			Construction Workers	Future
	Off-Site, dispersion		Children	Future
Sediments	Off-Site (adjacent to site)	-Dermal absorption -Incidental ingestion	Recreational river users	Current
			Construction Workers	

surface soil behind the office building near the Anthony Kill, an area that is densely vegetated. If trespassers were to gain access to other areas of the site, it is unlikely that they would dig below the surface to contact contaminated soil. Since the exposure of trespassers to contaminated subsurface soil is unlikely, only surface soil exposure will be assessed under this exposure scenario.

Subsurface soil could be uncovered during excavation activities in the future. Such activities might include the servicing of underground sewer, water, or other utility lines. Workers could contact contaminated soil and uncovered stockpiled materials. Therefore, exposure of workers (i.e., utility workers) to excavated soil will be evaluated in this report.

5.2.2 Groundwater Exposure Pathway

Contamination was found in groundwater. However, there appear to be no exposures to this medium, for two reasons. First, as shown in the Tasks 2 and 3 Reports, most of the groundwater under the site appears to discharge directly into the Anthony Kill, except for groundwater in the southern and eastern portions of the site which moves easterly towards the Hudson River. Second, there are no known current users of the groundwater near or downgradient of the Mechanicville site. The City of Mechanicville obtains its drinking water from a surface water reservoir approximately 3 miles northeast of the site, at an elevation approximately 160 feet higher than the site. The closest domestic wells are nearly a mile southwest (upgradient) of the site in the Town of Halfmoon, and no active industrial wells were identified in the

Mechanicville area. Two abandoned industrial wells are located northeast and south of the site. Neither appear to be downgradient from the site. Although some groundwater moves east of the site before discharging into the river, there are no known receptors and thus groundwater is not considered a potential current or future exposure pathway.

5.2.3 Surface Water Exposure Pathway

Surface water of the Anthony Kill represents another potential pathway for exposure to site-related contaminants. Surface water runoff from the site flows into two drainage catch basins that empty via underground culverts into the Anthony Kill. Another potential source of site-related contamination to Anthony Kill surface water is on-site shallow groundwater which discharges to the stream.

The New York State Department of Environmental Conservation (NYSDEC) has classified the section of stream from the Mechanicville city line to the Hudson River as Class D (usable for secondary non-contact recreation such as boating). Use of this section of the Anthony Kill for secondary recreation has been confirmed by the City of Mechanicville (Erano, 1989). Every spring there is a canoe race down the Anthony Kill, going through Mechanicville, to the Hudson River.

Because of the proximity of residential neighborhoods to the site, and because the stream is used for recreational purposes, it is likely that people contact the surface water in the Anthony Kill. Surface water data collected from the

Anthony Kill do not indicate that site-related contaminants are present at detectable levels. Therefore, exposure by this pathway will not be assessed further.

5.2.4 Sediment Exposure Pathway

Site-related contaminants were found in the sediments of the Anthony Kill, primarily in the samples collected adjacent to the site (SED-2). Individuals who might contact these sediments could be exposed to site-related contamination. In addition to the contaminants found in the sediments, there has been an unconfirmed report of coal tar from the site seeping into the Anthony Kill (E.C. Jordan, 1989).

Public contact with contaminated sediments is possible because the stream is used for recreational purposes. Also, each year residents of Mechanicville clear away debris that collects in the stream for an annual canoe race to the Hudson River (Erano, 1989). Sediment exposure could occur if canoeists get out of their boats and contact the contaminated sediments. On occasion, town workers enter the stream near the site to clear debris or to work on the North Central Avenue Bridge. During such activities, workers could be exposed to contaminated sediments. Therefore, potential exposures of both the general public and construction workers to contaminants in the sediments of the Anthony Kill will be assessed.

5.2.5 Inhalation Exposure Pathway

The possibility of current site users inhaling VOCs was investigated by monitoring indoor air on the site. The indoor air sampling program was described in Section 2.7 and the results of the indoor air evaluation are discussed in Section 7.3.

Residents living near the site could be exposed to site-related contaminants by the inhalation of fugitive dust. Coal tar contaminants could be released to the air during the excavation of contaminated soil from such activities as underground utility repair. If the excavated soil were to remain stockpiled on the site, the soil pile could act as a source of fugitive dust. Contaminants can become airborne by vaporizing or by aerosolizing as particulate-bound contaminants from wind erosion of excavated soil. These contaminants could potentially be inhaled by residents downwind of the Mechanicville site during the period such activities occur. Therefore, exposure of residents to site-related compounds via the inhalation pathway will be evaluated.

Utility workers may also be exposed to these volatile compounds and particulate emissions. Worker exposure will be evaluated by comparing modeled ambient concentrations to worker health standards, to assess compliance with health and safety regulations.

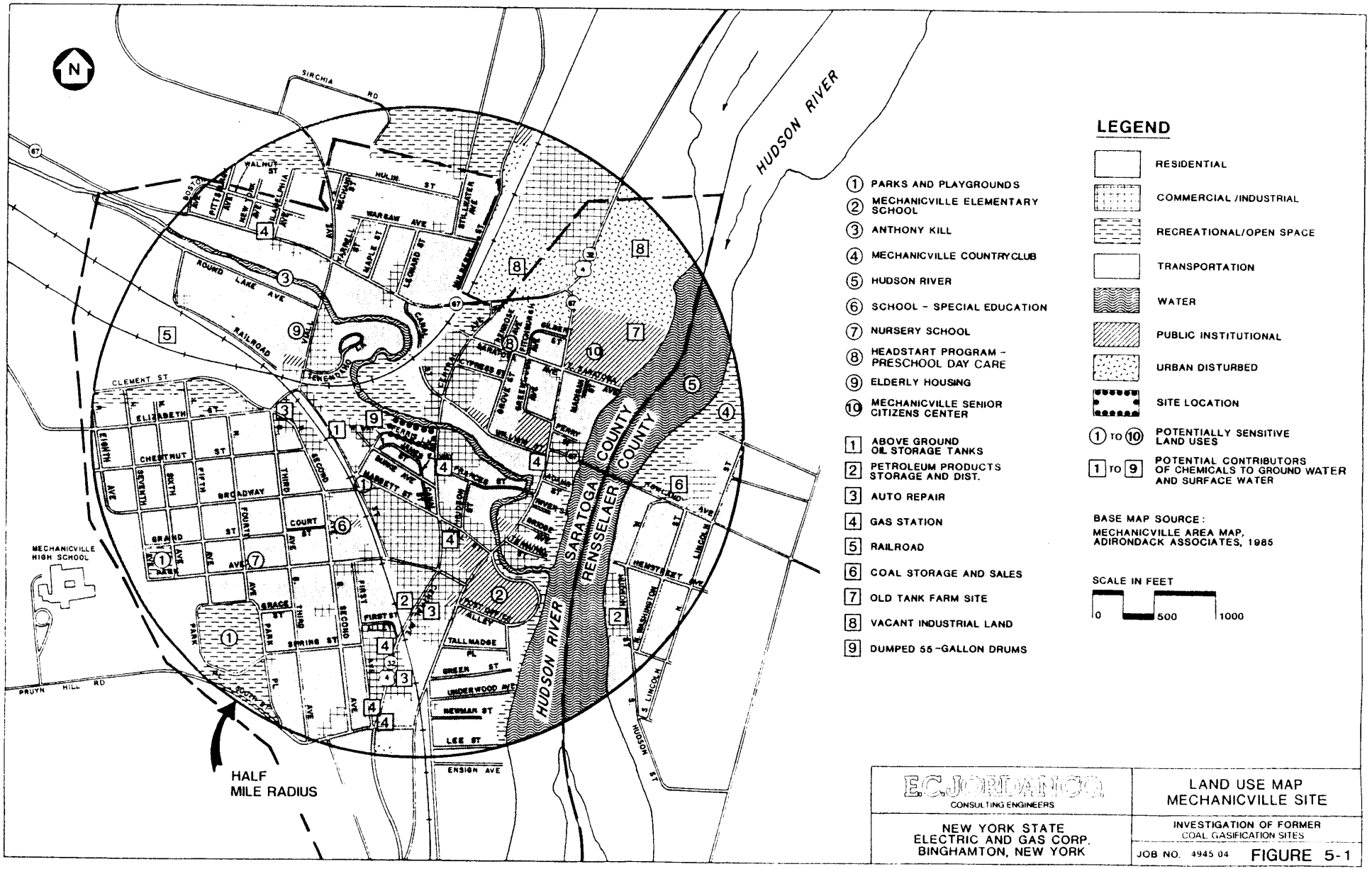
5.2.6 Additional Potential Routes of Exposure

If the site were to be used in the future for other purposes, existing above- and below-ground structures would most likely be removed. The site could be regraded, which might lead to potential dermal and inhalation exposures. As stated earlier, future plans for the site include possible leasing for a car dealership, in which event the existing underground fuel tank would probably be removed (O'Meara and Martin, 1989). This removal could result in subsurface soil exposure of workers. However, the length of time required for the underground tank removal is expected to be minimal relative to the time predicted for soil excavation during utility repairs. Various dust control measures can eliminate this exposure pathway. NYSEG recognizes that, should this activity occur, protective measures would need to be taken. Inhalation exposures associated with the removal of the underground tank or the regrading of the site will not be assessed further in this report.

5.3 EXPOSED POPULATION ANALYSIS

In this section, the general characteristics of the human population who represent potential receptors to site-related contamination will be discussed. The discussion includes identification of particularly sensitive subpopulations within the vicinity of the Mechanicville site, and land uses which would be associated with these populations.

There are several subpopulations that are particularly sensitive to chemical exposures: the very young, the very old, and the infirm. The young are



LEGEND

1. PARKS AND PLAYGROUNDS
2. MECHANICVILLE ELEMENTARY SCHOOL
3. ANTHONY KILL
4. MECHANICVILLE COUNTRYCLUB
5. HUDSON RIVER
6. SCHOOL - SPECIAL EDUCATION
7. NURSERY SCHOOL
8. HEADSTART PROGRAM - PRESCHOOL DAY CARE
9. ELDERLY HOUSING
10. MECHANICVILLE SENIOR CITIZENS CENTER

1. ABOVE GROUND OIL STORAGE TANKS
2. PETROLEUM PRODUCTS STORAGE AND DIST.
3. AUTO REPAIR
4. GAS STATION
5. RAILROAD
6. COAL STORAGE AND SALES
7. OLD TANK FARM SITE
8. VACANT INDUSTRIAL LAND
9. DUMPED 55-GALLON DRUMS

RESIDENTIAL

COMMERCIAL /INDUSTRIAL

RECREATIONAL/OPEN SPACE

TRANSPORTATION

WATER

PUBLIC INSTITUTIONAL

URBAN DISTURBED

SITE LOCATION

(1) TO (10) POTENTIALLY SENSITIVE LAND USES

[1] TO [9] POTENTIAL CONTRIBUTORS OF CHEMICALS TO GROUND WATER AND SURFACE WATER

BASE MAP SOURCE:
MECHANICVILLE AREA MAP,
ADIRONDACK ASSOCIATES, 1985

SCALE IN FEET
0 500 1000

E.C. JORDAN CO.
CONSULTING ENGINEERS

NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

LAND USE MAP
MECHANICVILLE SITE

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

JOB NO. 4945 04 FIGURE 5-1

5.4 CALCULATION OF BODY DOSE LEVELS

To estimate incurred body dose levels, two hypothetical exposure scenarios were developed. These reflect realistic worst case and most probable case exposure conditions. These scenarios differ by varying exposure parameters (e.g., duration of exposure, frequency of contact) and by varying environmental concentrations, using either the maximum concentration detected (realistic worst case) or the average concentration (most probable case). This approach provides a range of potentially incurred body dose levels that would presumably bracket actual exposures for a hypothetical individual. The hypothetical populations for these exposure scenarios are categorized as the general population, children (ages 1 to 6), older children (ages 8 to 18), and utility or construction workers.

Incurred body dose levels were calculated for dermal, oral, and inhalation exposures by multiplying the concentration of each contaminant by appropriate exposure parameters or factors. These factors include the following: frequency and duration of exposure, ventilation rate or sediment/soil contact rate, and the appropriate TKF. The equations used to calculate incurred body dose levels for carcinogenic and noncarcinogenic compounds are presented in Table 5-2.

Incurred body doses were estimated for both current and future potential exposures. Current exposures include the potential exposure of older children (ages 8 to 18) and workers to site-related contamination in sediments of the Anthony Kill (adjacent to the site) and older children (ages 8 to 18) to

TABLE 5-2 (continued)

EQUATIONS USED TO ESTIMATE BODY DOSES
MECHANICVILLE SITE

NONCARCINOGENS

1. Inhalation:

$$\text{Average Daily Dose Over Period of Exposure (mg/kg/day)} = \text{Concentration in Medium } (\mu g/m^3) \times \text{Amount of Air Inhaled } (m^3) \text{ per Event} \times \frac{1}{\text{Body Wt. (kg)}} \times$$

$$\frac{\text{Events/yr}}{\text{365 days/yr}} \times \text{TKF} \times \frac{\text{1 mg}}{\text{1,000 ug}}$$

2. Direct Contact and Incidental Ingestion, Soil or Sediment:

$$\text{Average Daily Dose Level Over Period of Exposure (mg/kg/day)} = \text{Concentration in Medium (ug/g)} \times (\text{Soil Contacted (g) per Event} \times \text{Dermal TKF}) + (\text{Soil Ingested (g) per Event} \times \text{Oral TKF})) \times \frac{1}{\text{Body Wt. (kg)}}$$

$$\times \frac{\text{Events/yr}}{\text{365 days/yr}} \times \frac{\text{1 mg}}{\text{1,000 ug}}$$

Note: TKF = Toxicokinetic Factor

surface soil. These exposures could occur by direct contact with and incidental ingestion of sediments and soil. (Incidental ingestion can occur when sediment or soil present on a person's hands is transferred to food or cigarettes, and is then ingested.) Future exposures include potential exposures to contaminated subsurface soil on the site during excavation activities. Workers on the site could be exposed by direct contact with and incidental ingestion of subsurface soil, and inhalation of volatilized organic compounds and airborne particulate contaminants. Future exposures may also include the general population, residents downwind of the site who may be exposed to VOCs and airborne particulate contaminants during excavation activities.

5.4.1 Exposure Parameters for Current Potential Exposures

As discussed above, incurred body doses were calculated for current potential exposures to site-related contaminants in sediments from the Anthony Kill. These doses were estimated for two populations: older children (ages 8 to 18) and construction workers.

Sediment Exposure Scenarios

Parameters used for body dose calculations of older children exposed to sediments are presented in Table 5-3. For this scenario, "children" refers to age 8 up to age 18 (children under 8 years of age would not be as likely to canoe the Anthony Kill). Older children were chosen to represent the general population because they are more sensitive to chemical insult than adults (as

TABLE 5-3

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SEDIMENTS
DURING RECREATIONAL ACTIVITIES (1)
MECHANICVILLE SITE

	MOST PROBABLE CASE	WORST CASE
Average Body Weight (2)	45 kg	45 kg
Surface Area Exposed (3)	4970 cm^2	6097 cm^2
Soil Contacted (unit deposition) (4)	0.5 mg/cm^2	1.5 mg/cm^2
Incidental Ingestion (5)	50 mg/event	100 mg/event
Frequency of Exposure	1 events/yr	2 events/yr
Total Exposure Duration	5 yrs	10 yrs

Notes:

(1) Older children, ages 8 through 18

(2) Average body weight, males and females, Anderson et al., 1985

(3) Hands, forearms, feet, and lower legs, USEPA, 1989

(4) Shaum, 1984

(5) Lagoy, 1987

described in the previous section) and because it is more probable for older children to get out of their canoes and contact the sediments than adults.

The average body weight of the 8 to 18 age group is 45 kg (Anderson et al., 1985). The surface area exposed is assumed to be the hands, forearms, feet, and lower legs, and it is based on the 50th percentile (most probable) and 95th percentile (realistic worst). A frequency of one exposure per year was chosen to represent the most probable case because the canoe race occurs only once per year. Two exposures per year were assumed for the realistic worst case scenario. Even though older children could be exposed to Anthony Kill sediments more than once a year, it is unlikely that they would be adjacent to the site during each exposure. In addition, because it is most likely that only older children (i.e., ages 13-18) would be allowed to canoe down the stream, five years was chosen as a most probable exposure duration, while 10 years was chosen as the realistic worst case. Ten years represents the maximum possible exposure duration for the ages of 8 to 18.

Table 5-4 presents the parameters used for calculating incurred body doses of construction workers exposed to sediments in the Anthony Kill. It is assumed that construction workers could be exposed to contaminated sediments while performing such activities as repairing the Central Avenue Bridge. Only hands and forearms were assumed to be exposed because workers would most likely wear long pants, boots, and shirts which would limit the exposed surface area. The 50th percentile was used to calculate the most probable case surface area, while the 95th percentile was used to calculate the realistic worst case surface area. It was assumed that some sediment could remain on the hands

after working and be incidentally ingested, and that the frequency of these exposures would be five or 10 days per year. The duration of exposure was assumed to be three years for the most probable case and ten years for the realistic worst case. Although construction-type work could occur for several years, it is unlikely that a particular worker would return to the same place for more than 10 years.

Soil Exposure Scenario

Table 5-5 presents the parameters used for calculating incurred body doses of trespassers to surface soil. Many of these parameters are the same as for sediment exposures. The potentially exposed population was assumed to be the same, older children between the ages 8-18 with an average body weight of 45 kg. Surface area, soil contacted, amount incidentally ingested, and the total exposure duration were also assumed to be the same. The frequency of exposure, however, differs in that exposure to surface soil is assumed to occur 5 days per year for a most probable case, and 10 days per year for a realistic worst case. Few exposures are assumed because access to the site is gained only by climbing a steep, highly vegetated slope.

5.4.2 Exposure Parameters for Future Potential Exposure

Incurred body doses were estimated for future potential exposures to both subsurface soil and air emissions. Subsurface soil exposure body doses were calculated for utility workers, while incurred body doses from inhalation of contaminants were estimated for the general population.

TABLE 5-5

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SURFACE SOIL
DURING RECREATIONAL ACTIVITIES (1)
MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight (2)	45 kg	45 kg
Surface Area Exposed (3)	4970 cm^2	6097 cm^2
Soil Contacted (unit deposition) (4)	0.5 mg/cm^2	1.5 mg/cm^2
Incidental Ingestion (5)	50 mg/event	100 mg/event
Frequency of Exposure	5 events/yr	10 events/yr
Total Exposure Duration	5 yrs	10 yrs

Notes:

(1) Older children, ages 8 through 18

(2) Average body weight, males and females, Anderson et al., 1985

(3) Hands, forearms, feet, and lower legs, USEPA, 1989

(4) Shaum, 1984

(5) Lagoy, 1987

Subsurface Soil Exposure Scenario

Table 5-6 presents the exposure parameters used to estimate incurred body doses to utility workers via direct contact with and incidental ingestion of contaminated soil. Utility workers' hands and forearms only were assumed to be exposed to subsurface soil. It was also assumed that the frequency of utility repair activities in which the worker might be exposed to soil was relatively low (one or two days per year), although the pile of excavated soil could sit around for several days. The duration of exposure was assumed to be over a 2 or 4 year period, meaning that a worker could return to the site in subsequent years.

Inhalation Exposure Scenario

Exposure to VOCs on the site was evaluated by sampling indoor air. The indoor air sampling program is described in Section 2.7 and the results are evaluated in Section 7.3.2.

Table 5-7 presents the exposure parameters used to estimate incurred body doses due to inhalation of airborne particulates and volatile contaminants during utility repair activities. Although the general population downwind of the site could be exposed to particulate dust and volatiles, exposure doses were estimated for children only, ages 1 to 6, because they represent the most sensitive population. To estimate a child's incurred body dose due to inhalation exposure, Jordan assumed that the child could be exposed 24 hours a day at two different locations and during three different activities. These

TABLE 5-6

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SOILS DURING UTILITY WORK (1) MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight	70 kg	70 kg
Surface Area Exposed (2)	2300 cm^2	2830 cm^2
Soil Contacted (unit deposition) (3)	0.5 mg/cm^2	1.5 mg/cm^2
Incidental Soil Ingestion (4)	50 mg/event	100 mg/event
Frequency of Exposure	1 day/yr	2 days/yr
Total Exposure Duration	2 yrs	4 yrs

Notes:

(1) Utility Workers

(2) Hands and forearms, Anderson et al., 1985

(3) Shaum, 1984

(4) Lagoy, 1987

TABLE 5-7
FUTURE INHALATION EXPOSURES (1)
DURING UTILITY WORK AND EXCAVATION
MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight	21 kg	21 kg
Duration of Utility Repair Activity	20 days	25 days
I. Child at Preschool		
Distance from Activity	750 ft	750 ft
Duration of Exposure	8 hrs	8 hrs
Inhalation Rate (light activity) (2)	0.8 m^3/hr	0.8 m^3/hr
II. Child at Home		
Distance from Activity	100 ft	100 ft
Duration of Exposure	6 hrs	6 hrs
Inhalation Rate (moderate activity) (2)	2.0 m^3/hr	2.0 m^3/hr
III. Child Asleep		
Distance from Activity	100 ft	100 ft
Duration of Exposure	10 hrs	10 hrs
Inhalation Rate (2)	0.4 m^3/hr	0.4 m^3/hr

Notes:

(1) Child 1 - 6 years of age, inhalation of volatile compounds and particulates

(2) USEPA, 1987

include attending pre-school and playing and sleeping at home. It is assumed that both of these locations are downwind of the site. The child was assumed to attend the nearest identified school, which was at an estimated distance of 750 feet from the site. The child was also assumed to live at the nearest identified residence, which is approximately 100 feet from the site.

Inhalation rates for the three activities are different: light activity during school, moderate activity during play, and a resting rate while asleep. Although actual utility repair might only take one or two days, the soil pile that was assumed to be stockpiled on the site could potentially remain on the site for several days after the repair work. Thus chemicals in the soil could volatilize, and particulates could be blown downwind, increasing the time that a child could be exposed to site-related contaminants. The soil pile was assumed to sit for 20 days (most probable case) or 25 days (realistic worst case), corresponding to exposure durations of 20 or 25 days.

As mentioned earlier, incurred body doses will not be estimated for workers onsite. Instead, the estimated concentrations of contaminants in air will be compared to Occupational Safety and Health Administration (OSHA) standards, specifically Permissible Exposure Levels (PELs).

Finally, although potentially contaminated subsurface soil may remain in a pile for several days at the site, incurred body doses for children due to direct contact with these soils will not be estimated. This is because, as stated earlier, access to the site is restricted.

6.0 AIR QUALITY MODELING OF FUGITIVE AIR EMISSIONS

Future inhalation exposures at the Mechanicville site are possible during activities such as underground utility repair. This section presents the air modeling approach used to predict particle and VOC emissions and the resulting downwind air concentrations.

6.1 INTRODUCTION

Currently, the Mechanicville site is not a source of fugitive air emissions because the site is covered with buildings and asphalt paving. However, if construction activities occurred (e.g., excavation of a trench to repair utility lines), contaminated shallow soils (at an average depth of 7 feet) could be dispersed into the air. In addition, VOCs could become airborne due to volatilization. As discussed in Section 5.0, two future potential scenarios involving excavation of soil have been identified in this risk assessment: removal of coal tar-related structures and utility repair. Since Jordan predicted the duration of volatile emissions to be 10 times longer for utility repair compared with tank removal, only utility repair activities are modeled.

Jordan used a two-step modeling process to estimate atmospheric concentrations of air contaminants potentially emitted from the Mechanicville site. In the first step, Jordan estimated contaminant emission rates. In the second step, Jordan estimated downwind ambient concentrations using air dispersion modeling.

The modeling process is summarized in the following paragraphs and is discussed in detail in Appendix D.

To predict emission rates for nonvolatile contaminants (i.e., PAHs and amenable cyanide), Jordan used USEPA-developed particle emission rates due to wind erosion and assumed the contaminant fraction of the particles to be equal to the soil fraction (Cowherd, 1985). For VOCs (assumed to be a source of exposure only during utility repair work when subsurface soil is exposed for more than a couple of days), Jordan estimated volatilization emission rates based on the total mass of each contaminant which could be volatilized. Jordan found that emission rates for volatilized contaminants, under assumed conditions, greatly exceeded the contaminant emission rates for particles.

6.2 ESTIMATE OF EMISSIONS

Jordan predicted emission rates of contaminants from the Mechanicville site for both particles (dust) and VOCs using the modeling methods described in this section.

6.2.1 Fugitive Dust Emissions

To predict total inhalable fugitive dust emissions, Jordan applied equations based on field research of surface mines and storage piles for various materials (Cowherd, 1985). These equations can be used to estimate contaminant emissions assuming contaminant concentration in the airborne dust equals the measured chemical concentrations in the surface soil.

Airborne inhalable particulate matter, defined as particles with an aerodynamic diameter equal to or smaller than 10 micrometers (um), are denoted by the symbol PM_{10}. Inhalable particulates can be retained by the body upon inhalation and contribute to inhalation exposure.

Estimates of contaminant emission rates were based upon PM_{10} emission factors for wind erosion, the duration of construction activities, the mass fraction of contaminant in the soil, and the exposed surface area of the contaminated soil (see Appendix D).

6.2.2 Volatilization Rates from Soil

The volatilization of contaminants through the soil is a complex process involving the mass transfer of volatiles from the soil particles into the air pores in the soil, mass transfer through the soil pore spaces, and mass transfer from the soil surface into the ambient air. To estimate the volatilization rates of organic chemicals from the contaminated soil, Jordan used a simplified but conservative approach.

Based on the mean soil concentration measured at the Mechanicville site, the mass (grams) of the contaminant in the soil for two soil volume cases was estimated. Contaminant emission rates due to volatilization from the surface soils were calculated (see Table D-2 in Appendix D) for the following two cases:

Most probable: 10 percent of VOC mass emitted over 20-day period

Worst case: 100 percent of VOC mass emitted over 30-day period

For the two cases, the emission rates due to volatilization from the exposed soil are assumed to remain constant over the specified period.

6.3 AIR QUALITY DISPERSION MODELS

After estimating contaminant emission rates for the different scenarios, Jordan used air dispersion models to estimate ambient air concentrations at selected distances to the receptor from the Mechanicville site. For modeling purposes, Jordan considered the soil piles from the hypothetical future site construction to be area sources with dimensions equaling the exposed soil surface area. Contaminant emissions were assumed to be mixed uniformly over a height equal to the height of the soil pile.

The ambient air concentrations were predicted as hourly values of contaminant concentrations. In order to relate these predictions to longer averaging times, conservative scaling factors recommended by USEPA (1977) were used to estimate longer-duration exposure concentrations. The 1-hour average concentration predictions were multiplied by 0.40 to obtain 24-hour average off-site concentrations, and by 0.70 to obtain 8-hour average on-site concentrations (see Appendix D).

6.4 AIR QUALITY MODELING RESULTS

The estimated ambient air concentrations due to fugitive dust emissions from soil erosion for the utility repair scenario are presented in Tables D-3 and D-4 in Appendix D. The ambient 1-hour average concentration was calculated based on an assumed D atmospheric stability class, and windspeeds of 4.0 m/s and 21.4 m/sec. These windspeeds are based on local climatological data to represent the most-probable and maximum hourly windspeeds, respectively.

Based on the emission rates for volatilization from surface soil, Table D-5 provides the chemical-specific 1-hour average VOC concentrations for the two contaminated soil volume cases (i.e., two utility repair scenarios). The ambient 1-hour average concentrations were calculated based on an assumed D atmospheric stability class and wind speed values of 2.0 and 4.0 m/sec. These assumed wind speeds are low, to be extremely conservative. It is unlikely that there would be 2.0 m/sec winds at a D stability class for extended periods.

7.0 COMPARISON OF RESULTS TO REGULATORY STANDARDS AND GUIDELINES

In this section analytical results are compared to relevant or applicable standards and guidelines which were identified from the following sources: (1) New York State standards and guidance values; (2) National Drinking Water Regulations; (3) USEPA Health Advisories; and (4) New York State Air Guide No. 1. Relevant and applicable standards and guidelines are listed in Table 7-1 and Table 7-2.

Regulatory standards and guidelines are not available for the chemicals detected in on-site soils. For groundwater and air, New York State standards and guidance values are used in this assessment for several reasons. Firstly, New York State has established standards and guidelines for many of the chemicals detected at the Mechanicville site, including all those chemicals regulated at the federal level. Secondly, where both federal and state criteria exist for a given chemical, the New York State standard is generally more stringent. New York State standards are enforced by regulation, while guidance values are not enforceable by law.

7.1 GROUNDWATER

The Mechanicville site is not located over a water supply aquifer. The nearest known water supply wells are about one mile southwest (upgradient) of the site in the Town of Halfmoon. Because Mechanicville groundwater is not currently used as a public potable water supply, drinking water standards are

TABLE 7-1

CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)					NEW YORK STATE DRINKING WATER REGULATIONS
	CLASS D ----SURFACE WATER----		CLASS GA -----GROUNDWATER-----					----AQUATIC LIFE(6)----		----------HUMAN HEALTH (9)----------			
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION	MAXIMUM CONTAMINANT LEVELS(18)
VOLATILE ORGANICS (mg/L)													
-VOLATILE AROMATICS-													
BENZENE	----	0.006	ND(11)	----	0.005(12)	0	----	5.3	----	0.00067	----	0.00066	0.005
TOLUENE	----	----	----	0.05	2.0(12)	2(12)	2	17.5	----	15	424	14.3	0.005
ETHYLBENZENE	----	----	----	0.05	0.7(12)	0.68(12)	0.7	32	----	2.40	3.28	1.4	0.005
STYRENE	----	----	0.931	----	0.005(12)	0(12)	0	----	----	----	----	----	0.005
TOTAL XYLENE	----	----	----	0.05	10(12)	10(12)	10	----	----	----	----	----	0.005
m - XYLENE	----	----	----	----	----	----	----	----	----	----	----	----	0.005
o - XYLENE	----	----	----	----	----	----	----	----	----	----	----	----	0.005
p - XYLENE	----	----	----	----	----	----	----	----	----	----	----	----	0.005
TRIMETHYLBENZENE	----	----	----	0.05	----	----	----	----	----	----	----	----	
-OTHER-													0.05
ACETONE	----	----	----	----	----	----	----	----	----	----	----	----	0.005
METHYLENE CHLORIDE	----	----	----	0.05	----	----	----	12	----	----	----	----	
SEMIVOLATILE ORGANICS (mg/L)													
-PAH-													
ACENAPHTHENE	----	----	----	0.02	----	----	----	1.7	0.52	0.02(13)	----	0.05	0.05
ACENAPHTHYLENE	----	----	----	----	----	----	----	----	----	----	----	----	0.05
ANTHRACENE	----	----	----	0.05	----	----	----	----	----	----	----	----	0.05
BENZO(b)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028	0.05
BENZO(k)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028	0.05
BENZO(g,h,i)PERYLENE	----	----	----	----	----	----	----	----	----	----	----	----	0.05
BENZO(a)ANTHRACENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028	0.05
BENZO(a)PYRENE	----	0.0000012	ND	----	----	----	----	----	----	0.0000031	----	0.0000028	0.05
CHRYSENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028	0.05
DIBENZO(a,h)ANTHRACENE	----	----	----	----	----	----	----	----	----	----	----	----	0.05
FLUORANTHENE	----	----	----	0.05	----	----	----	3.98	----	0.19	0.054	0.042	0.05
FLUORENE	----	----	----	0.05	----	----	----	----	----	----	----	----	0.05
INDENO(1,2,3,-cd)PYRENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028	0.05
NAPHTHALENE	----	----	----	0.01	----	----	----	2.3	0.62	----	----	----	0.05
PHENANTHRENE	----	----	----	0.05	----	----	----	----	----	----	----	----	0.05
PYRENE	----	----	----	0.05	----	----	----	----	----	----	----	----	0.05
TOTAL CARCINOGENIC PAH	----	----	----	----	----	----	----	----	----	0.0000031	----	0.0000028	0.05
-OTHER-													
BIS(2-ETHYLHEXYL)PHTHALATE	----	----	4.2	----	----	----	----	0.94	0.003	21	50	15	0.05
TOTAL NEW YORK STATE REGULATED ORGANICS (14)	----	----	0.1	----	----	----	----	----	----	----	----	----	----

TABLE 7-1 (Continued)

CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)					NEW YORK STATE DRINKING WATER REGULATIONS
	CLASS D		CLASS GA					----AQUATIC LIFE(6)----		----------HUMAN HEALTH (9)----------			
	----SURFACE WATER----		-----GROUNDWATER-----										
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION	MAXIMUM CONTAMINANT LEVELS(18)
						Other Chemicals (mg/L)							
-METALS-													
IRON	0.3	----	0.3	----	----	0.3(15)	----	----	----	----	----	----	0.3(15)
ZINC	(16)	----	5	----	----	5(15)	----	----	----	5(13)	----	5(13)	5.0(15)
-CYANIDE-													
TOTAL CYANIDE	----	----	0.2	----	----	----	0.2	----	----	----	----	----	----
FERRO-FERRI CYANIDE	----	----	----	----	----	----	----	----	----	----	----	----	----
FREE CYANIDE	0.022	----	----	----	----	----	----	0.0035	0.052	0.2	----	0.2	----
-OTHER-													
TOTAL RECOVERABLE PHENOLICS (17)	----	----	0.001	----	----	----	----	----	----	3.5	----	3.5	----
TOTAL ORGANIC CARBON	----	----	----	----	----	----	----	----	----	----	----	----	----
SULFATE	----	----	250.0	----	----	----	----	----	----	----	----	----	250(15)

NOTES:
(1) NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES 85-W-38 AS REVISED APRIL 1, 1987. CLASS D SURFACE WATER ARE SUITABLE FOR SECONDARY CONTACT RECREATION; CLASS GA DENOTES FRESH GROUNDWATER WHICH IS A SOURCE OF POTABLE WATER SUPPLY.
(2) MCLs (MAXIMUM CONTAMINANT LEVELS) ARE ENFORCEABLE STANDARDS FOR PUBLIC WATER SUPPLY SYSTEMS PROMULGATED UNDER THE SAFE DRINKING WATER ACT (40 CFR PART 141).
(3) MCLGs (MAXIMUM CONTAMINANT LEVEL GOALS) ARE PROPOSED NON-ENFORCEABLE HEALTH GOALS AND HAVE BEEN SET AT A LEVEL OF NO KNOWN OR ANTICIPATED HEALTH AFFECTS.
(4) EPA HEALTH ADVISORIES (FORMERLY SNARLs) ARE NON-ENFORCEABLE CRITERIA ESTABLISHED BY THE OFFICE OF DRINKING WATER. THEY ARE SET AT LEVELS WHERE ADVERSE HEALTH EFFECTS ARE NOT EXPECTED.
(5) WATER QUALITY CRITERIA WERE FORMULATED TO PROTECT AQUATIC LIFE AND HUMAN HEALTH FROM POLLUTANTS IN SURFACE WATERS. (40 CFR SUMMARY, FRI, NOV. 28, 1980, P.79318-79379). WATER QUALITY CRITERIA HAVE NO REGULATORY IMPACT, BUT ARE USEFUL IN ESTABLISHING WATER QUALITY-BASED EFFLUENT LIMITATIONS, WATER QUALITY STANDARDS, AND TOXIC POLLUTANT EFFLUENT STANDARDS.
(6) GUIDANCE CRITERIA FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE. CONCENTRATIONS SPECIFIED SHOULD PROTECT MOST (BUT NOT NECESSARILY ALL) AQUATIC FRESHWATER LIF AND ITS USES.
(7) THE ACUTE TOXICITY LEVEL IS THE MAXIMUM TO WHICH ORGANISMS CAN BE EXPOSED WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(8) CHRONIC TOXICITY LEVEL IS THE 24-HOUR AVERAGE VALUE THAT ORGANISMS CAN BE EXPOSED TO WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(9) HUMAN HEALTH GUIDELINES WERE DERIVED BASED ON "GUIDELINES AND METHODOLOGY USED IN THE PREPARATION OF HEALTH EFFECT ASSESSMENT CHAPTERS OF THE CONSENT WATER CRITERIA DOCUMENTS" DEVELOPED BY EPA's OFFICE OF RESEARCH AND DEVELOPMENT.
(10) THESE ADJUSTED CRITERIA, FOR DRINKING WATER INGESTION ONLY, WERE DERIVED FROM PUBLISHED EPA AWOC FOR COMBINED FISH AND DRINKING WATER INGESTION AND FOR FISH INGESTION ALONE. THESE ADJUSTED VALUES ARE NOT OFFICIAL EPA AWQC, BUT MAY BE APPROPRIATE FOR SUPERFUND SITES WITH CONTAMINATED GROUNDWATER. (USEPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, OCTOBER 1986, PAGES 61-64.)
(11) ND = DETECTABLE BY USEPA METHODS 602 OR 624 (BENZENE) OR METHODS 610 OR 625 (BENZO(a)PYRENE).
(12) PROPOSED
(13) TO PROTECT AGAINST TASTE AND ODOR EFFECTS; NOT HEALTH BASED.
(14) NEW YORK STATE WAS A MAXIMUM WATER QUALITY VALUE OF 0.1 MG/L OF DESIGNATED ORGANIC CHEMICALS FOR SURFACE WATER AND GROUNDWATER DISCHARGES REQUIRING PERMITS. THE DESIGNATED ORGANICS INCLUDE ALL OF THE ORGANIC CHEMICALS LISTED EXCEPT ACENAPHTHYLENE, BENZO(g,h,l)PERYLENE DIBENZO(a,h)ANTHRACENE, AND STYRENE.
(15) SECONDARY MAXIMUM CONTAMINANT LEVELS WHICH APPLY TO PUBLIC WATER SYSTEMS. THESE REGULATIONS CONTROL CONTAMINANTS IN DRINKING WATER THAT PRIMARILY AFFECT THE AESTHETIC QUALITIES RELATING TO THE PUBLIC ACCEPTANCE OF DRINKING WATER (40 CFR PART 143).
(16) ZINC STANDARD FOR CLASS D WATERS IS DETERMINED BY THE FORMULA EXP(0.83[LW(PPH HARDNESS)] + 1.95) AND APPLIES TO THE ACID SOLUBLE FORM.
(17) AS MEASURE BY APHA METHOD 510.8 WHICH IS EQUIVALENT TO EPA METHOD 420.1 (SEE APHA, 1985; USEPA, 1983).
(18) N.Y. DEPT. OF HEALTH REGULATIONS, SUBPART 5-1 OF PART 5 OF TITLE 10, EFFECTIVE 1/19/90.

TABLE 7-2

POTENTIALLY APPLICABLE STANDARDS AND GUIDELINES
FOR AIRBORNE CHEMICALS MODELED FROM TASK 2 AND TASK 3 SOIL SAMPLES
MECHANICVILLE SITE

CONTAMINANT	NEW YORK STATE AALs (ug/m3)
-VOLATILE AROMATICS-	
Benzene	100 (1)
Toluene	7,500 (1)
Ethyl Benzene	1,450 (1)
Styrene	716 (1)
Xylene	1,450 (1)
-OTHER-	
Methylene Chloride	1,167 (1)
-PAH-	
Acenaphthene	-- (2)
Acenaphthylene	--
Anthracene	--
Benzo(b)Fluoranthene	--
Benzo(k)Fluoranthene	--
Benzo(g,h,i)Perylene	--
Benzo(a)Anthracene	--
Benzo(a)Pyrene	--
Chrysene	--
Dibenzo(a,h)Anthracene	--
Fluoranthene	--
Fluorene	--
Ideneo(1,2,3-cd)Pyrene	--
Naphthalene	167
Phenanthrene	--
Pyrene	--
-OTHER-	
Bis(2-Ethylhexyl)Phthalate	--

TABLE 7-2 (continued)

POTENTIALLY APPLICABLE STANDARDS AND GUIDELINES
FOR AIRBORNE CHEMICALS MODELED FROM TASK 2 AND TASK 3 SOIL SAMPLES
MECHANICVILLE SITE

CONTAMINANT	NEW YORK STATE AALs (ug/m^3)
-METALS-	0.167 (3)
Iron	--
Zinc	
-CYANIDE-	16.7 (1)(4)
Total Cyanide	--
Ferro-Ferri Cyanide	--
Amenable Cyanide	
-OTHER-	--
Total Recoverable Phenolics	--
Total Organic Carbon	--
Total New York State Regulated Organics	--

NOTES:

(1) Interim Ambient Air Level (AAL), Derived from American Conference of Governmental and Industrial Hygienists Time-weighted Average Threshold Limit Value (ACGIH TWA-TLV).

(2) Not available

(3) Proposed AAL - Personal Communication with Stanley Byer, NYSDEC, 12/14/88.

(4) As cyanide.

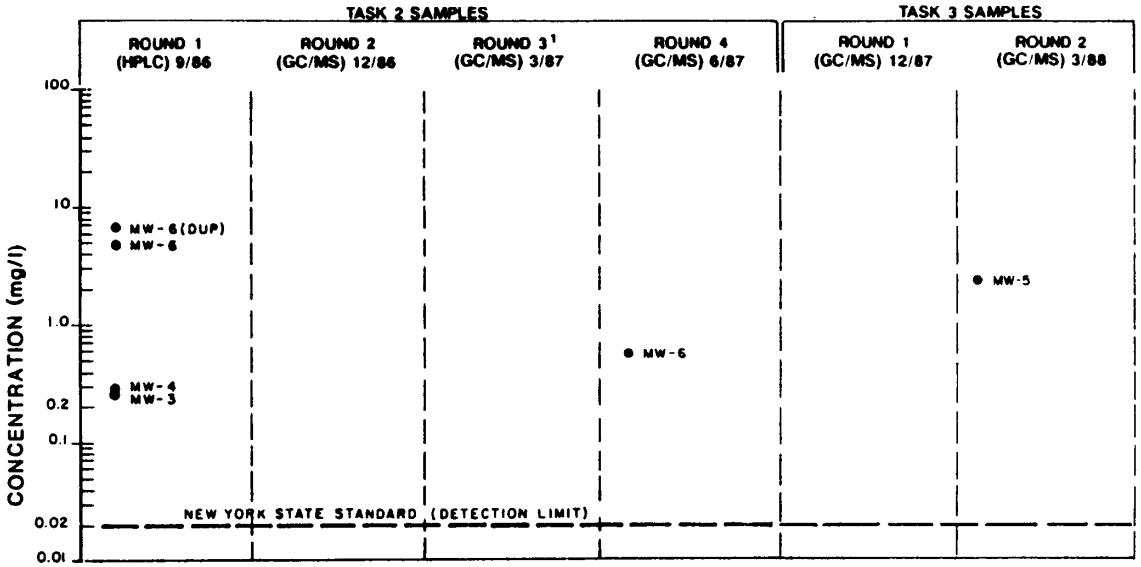
PAH = Polynuclear Aromatic Hydrocarbon.

not presently applicable. They are included for hypothetical comparison purposes only and are listed in Table 7-1.

The New York State standards and guidelines are for groundwater used as a source of potable water. The federal Maximum Contaminant Levels (MCLs) are enforceable standards for water supply systems promulgated under the authority of the federal Safe Drinking Water Act (SDWA). Maximum Contaminant Level Goals (MCLGs) are nonenforceable health goals established under the same act to prevent any adverse health effects or risks, without considering the cost or feasibility of attainment. USEPA Health Advisories are nonenforceable guidelines established by the Office of Drinking Water. They are set at levels where adverse health effects are not expected. Carcinogenic risks are not considered in setting USEPA Health Advisories. However, these advisories consider the length of exposure to the chemical in drinking water. The values shown in Table 7-1 are for lifetime adult exposure. Assumptions were made about the weight of the exposed individuals and the amount of water ingested in developing these values.

As shown in Table 7-1, groundwater (Class GA) standards have been promulgated by New York State for 10 of the chemicals detected in groundwater beneath the Mechanicville site: benzene, styrene, benzo(a)pyrene, bis(2-ethylhexyl) phthalate, total regulated organics, iron, zinc, cyanide, phenolic compounds, and sulfate. Concentrations in excess of the New York State standard were measured for each of these chemicals except bis(2-ethylhexyl) phthalate, sulfate and zinc. The exceedances are graphically depicted in Figures 7-1 through 7-5.

BENZO (a) PYRENE IN GROUNDWATER



SAMPLES IN WHICH BENZO (a) PYRENE WAS NOT DETECTED

ROUND 1 (HPLC) 9/86	ROUND 2 (GC/MS) 12/86	ROUND 3[1] (GC/MS) 3/87	ROUND 4 (GC/MS) 6/87	ROUND 1 (GC/MS) 12/87	ROUND 2 (GC/MS) 3/88
MW-1[2]	MW-1	MW-1	MW-1	MW-1	MW-1
MW-1(GC/MS)[2]	MW-2	MW-2	MW-2	MW-2	MW-2
MW-2	MW-2(DUP)	MW-3	MW-3	MW-3[2]	MW-2(DUP)
MW-3(GC/MS)[2]	MW-3	MW-4	MW-4	MW-4	MW-3[2]
MW-5	MW-4	MW-6	MW-5	MW-5[2]	MW-4
	MW-5	MW-6(DUP)	MW-5(DUP)	MW-6[2]	MW-6
	MW-6			MW-10	MW-10
				MW-11	MW-11
				MW-11(DUP)	MW-12[2]
				MW-12	MW-13[2]
				MW-13	MW-13(DUP)[2]
				MW-14	MW-14
				MW-15	MW-15
				MW-15(DUP)	

[1] MW-5 WAS NOT SAMPLED IN ROUND 3.
[2] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT

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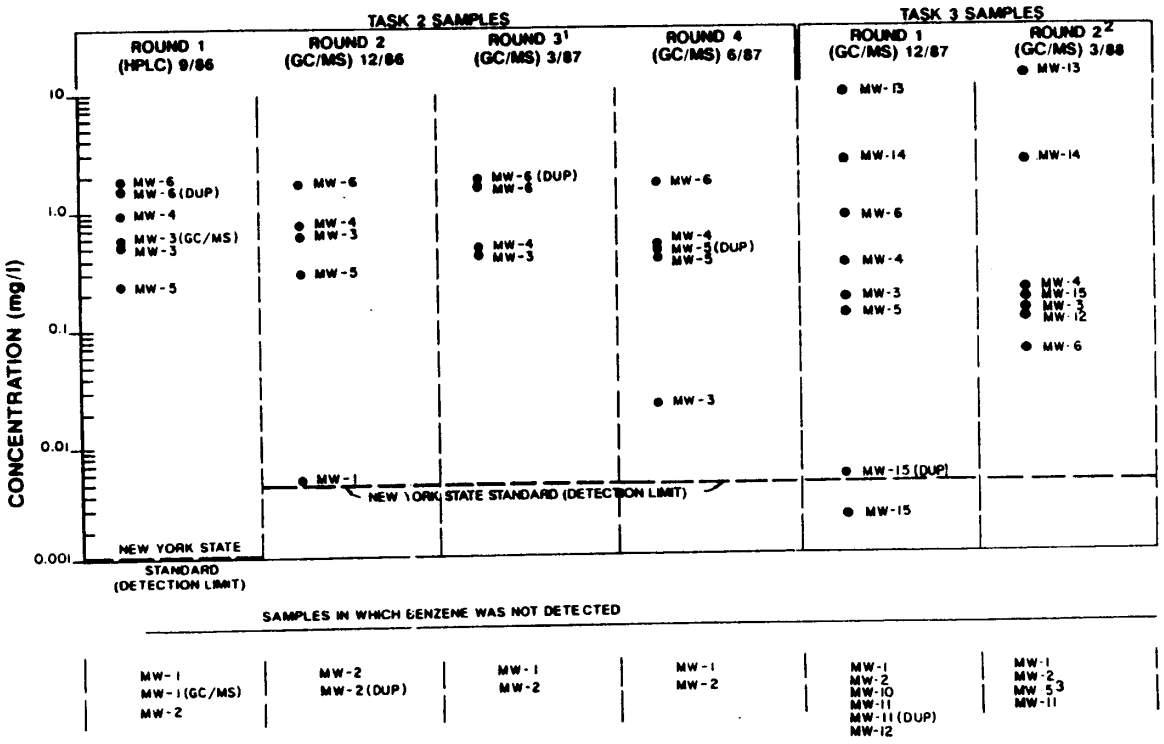
TITLE
BENZO (a) PYRENE IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO 4945-04

FIGURE 7-1

BENZENE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED IN ROUND 3.

[2] BENZENE ANALYSIS WAS NOT PERFORMED ON ROUND 2 SAMPLES. MW-2(DUP), MW-10, AND MW-13(DUP).

[3] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.

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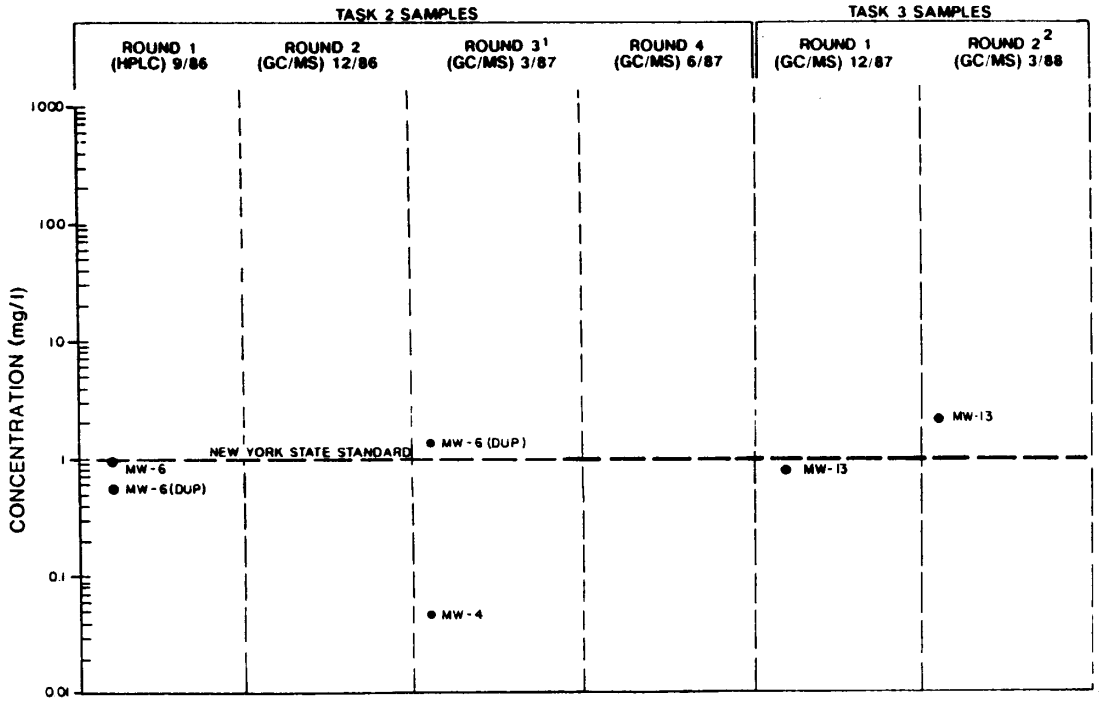
TITLE
BENZENE IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 7-2

STYRENE IN GROUNDWATER



SAMPLES IN WHICH STYRENE WAS NOT DETECTED

ROUND 1 (HPLC) 9/86	ROUND 2 (GC/MS) 12/86	ROUND 3[1] (GC/MS) 3/87	ROUND 4 (GC/MS) 6/87	ROUND 1 (GC/MS) 12/87	ROUND 2[2] (GC/MS) 3/88
MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
MW-1(GC/MS)	MW-2	MW-2	MW-2	MW-2	MW-2
MW-2	MW-2(DUP)	MW-3	MW-3	MW-2(DUP)	MW-3
MW-3	MW-3	MW-6	MW-4	MW-3	MW-4
MW-3(GC/MS)	MW-4		MW-5	MW-4	MW-5
MW-4	MW-5		MW-5(DUP)	MW-5	MW-6
MW-5	MW-6		MW-6	MW-6	MW-11
				MW-10	MW-12
				MW-11	MW-14 MW-15
				MW-11(DUP)	
				MW-12	
				MW-14	
				MW-15	
				MW-15(DUP)	

[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

[2] STYRENE ANALYSIS WAS NOT PERFORMED ON ROUND 2 SAMPLES MW-2(DUP), MW-10, AND MW-13(DUP).

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STYRENE IN GROUNDWATER
MECHANICVILLE SITE

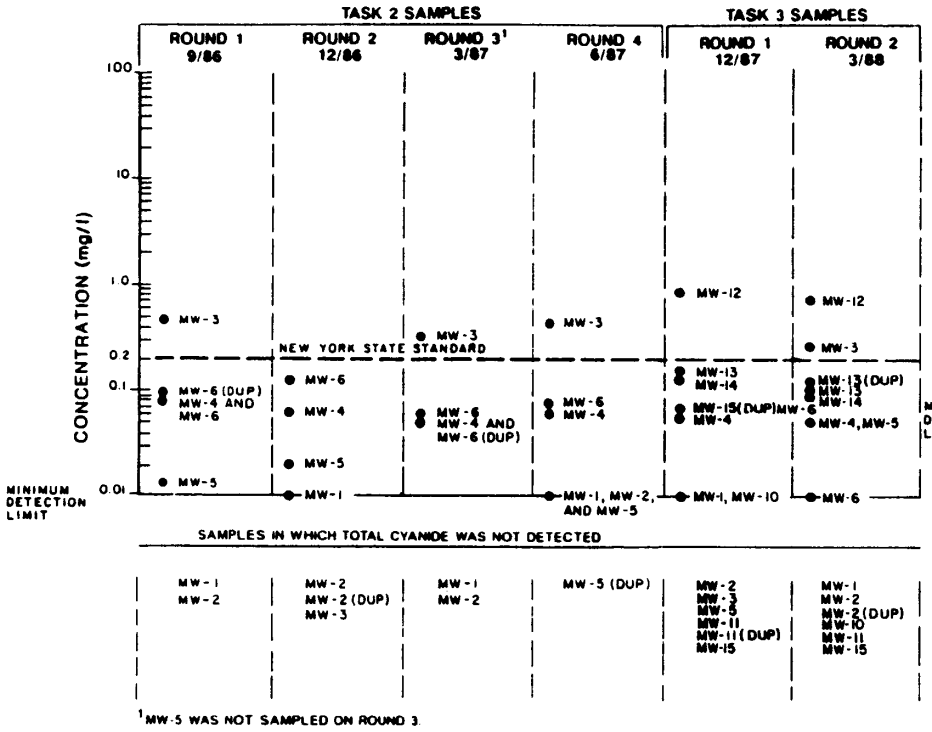
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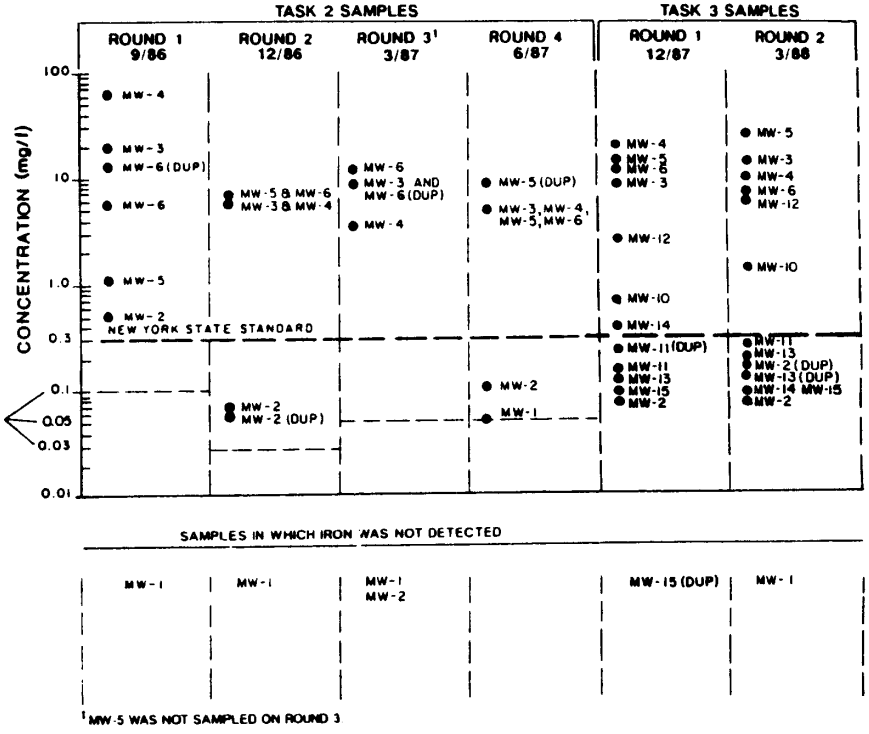
FIGURE 7-3

TOTAL CYANIDE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

IRON IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

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BINGHAMTON, NEW YORK

TITLE
TOTAL CYANIDE AND IRON IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 7-4

Phenolic compounds exceeded the 0.001 mg/L standard at MW-2, MW-3, MW-4, MW-5, and MW-6 during Task 2. In Task 3, the standard was exceeded in all wells except MW-11.

The New York State Department of Health has also promulgated Maximum Contaminant Levels (MCLs) for most of the compounds of interest at Mechanicville. Table 7-3 identifies groundwater samples containing chemicals in excess of these drinking water standards.

New York State has guidance values for 16 chemicals detected at Mechanicville, all of which were exceeded at one or more monitoring wells. Groundwater samples that contained chemicals in excess of the New York State guidance values are listed in Table 7-4.

7.2 SURFACE WATER

Table 7-1 also contains relevant federal and state criteria for surface water. The New York State criteria are for Class D waters which is the classification of the Anthony Kill near the Mechanicville site. USEPA Ambient Water Quality Criteria (AWQC) for aquatic life and human health are also listed.

Iron was the only chemical identified in the Anthony Kill surface water samples that exceeded the New York State Class D standards. The iron standard of 0.3 mg/L was exceeded at all sampling locations (upstream, adjacent to the site, downstream) during both Task 2 and Task 3 sampling. The chronic AWQC for bis(2-ethylhexyl)phthalate was exceeded during Task 2 sampling at all

TABLE 7-3

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE DEPARTMENT OF HEALTH
MAXIMUM CONTAMINANT LEVELS
MECHANICVILLE SITE

CHEMICAL	MCL (mg/L)[1]	WELL NUMBER
Volatile Aromatics		
Benzene	0.005	MW-1, MW-3, MW-4, MW-5, MW-6 MW-12, MW-13, MW-14, MW-15
Toluene	0.005	MW-3, MW-4, MW-5, MW-6, MW-13, MW-14
Ethylbenzene	0.005	MW-3, MW-4, MW-5, MW-6, MW-12, MW-13, MW-14
Styrene	0.005	MW-4, MW-6, MW-13
Total Xylenes	0.005	MW-1, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-13, MW-14, MW-15
Trimethylbenzene	0.005	MW-4, MW-5, MW-6
PAHs		
Acenaphthene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-14
Acenaphthylene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-13
Anthracene	0.05	MW-3, MW-4, MW-5, MW-6, MW-12
Benzo(b)fluoranthene	0.05	MW-6
Benzo(k)fluoranthene	0.05	MW-5, MW-6
Benzo(a)anthracene	0.05	MW-3, MW-5
Benzo(a)pyrene	0.05	MW-3, MW-4, MW-6
Chrysene	0.05	MW-3, MW-4, MW-5, MW-6
Fluoranthene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-12, MW-13

TABLE 7-4 (Continued)

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	GUIDANCE VALUE (mg/l)[1]	WELL NUMBER
Anthracene	0.05	MW-3 MW-4 MW-5 MW-6 MW-12
Benzo(k)Fluoranthene	0.000002	MW-5 MW-6
Benzo(a)Anthracene	0.000002	MW-3 MW-5
Benzo(b)Fluoranthene	0.000002	MW-6
Benzo(a)Fluoranthene	0.000002	MW-3 MW-5
Fluoranthene	0.05	MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-12 MW-13
Fluorene	0.05	MW-1 MW-3 MW-4 MW-5 MW-6 MW-12

locations and, during Task 3, only at the upstream sampling location. Bis(2-ethylhexyl)phthalate was detected in a range attributable to laboratory contamination; therefore, it is unlikely to be a site-derived chemical.

7.3 AIR

Modeled ambient air concentrations of site-derived chemicals can be compared to New York State Acceptable Ambient Levels (AALs). Measured indoor air concentrations of selected analytes (benzene, toluene, ethylbenzene, and xylene) can be compared to worker standards for indoor exposure.

7.3.1 Ambient Air

New York State has promulgated guidelines for various toxic air contaminants (NYSDEC, 1985-1986). There are no federal air regulations applicable to the atmospheric release of the contaminants of concern at the Mechanicville site. The New York State Air Guide No. 1 establishes Acceptable Ambient Levels (AALs) and contaminant-specific levels for a variety of air contaminants. Interim AALs are based on the threshold limit value-time weighted average (TLV-TWA) concentration, adopted as guidance criteria by the American Conference of Governmental and Industrial Hygienists (ACGIH) (NYSDEC, 1985-1986). Contaminant-specific levels will be developed to replace interim AALs as more detailed data and information concerning these chemicals become available. Contaminant-specific AALs are based on an in-depth evaluation of the chemical in question; they are derived using a No-Observed-Effect-Level (NOEL) and applying safety factors.

The ACGIH criteria are for 5-day, 8-hour workplace exposures and assume no exposure during non-working hours. The New York State Interim AALs are equal to the ACGIH values divided by 300. This adjustment takes into account 24-hour exposure to the chemicals. AALs are annual average ambient concentrations that should not be exceeded for any off-site receptor. Table 7-2 shows AALs for contaminants of concern at the Mechanicville site. PAHs are considered "high" toxicity air contaminants. There are no chemical-specific AALs for this compound class.

A comparison of the modeled 24-hour ambient concentrations at the nearest off-site receptor (100 feet downwind) are compared to AALs in Table 7-5. For those compounds for which AALs exist, the modeled concentrations were several orders of magnitude lower than the respective AALs.

7.3.2 Indoor Air

Table 7-6 compares the results of the indoor air sampling program to various air standards and guidelines developed to protect workers exposed during an 8-hour work day. PELs set by OSHA and guidelines established by ACGIH and the National Institute of Occupational Safety and Health (NIOSH) are identified. All samples with detectable levels of benzene and toluene were well below OSHA, NIOSH, and ACGIH standards or guidelines. Neither ethylbenzene nor xylene were detectable.

TABLE 7-5

COMPARISON OF MODELED AMBIENT CONCENTRATIONS
AT 100 FT. DOWNWIND
OF SITE TO NEW YORK STATE
ACCEPTABLE AMBIENT LEVELS (ug/m^3)
MECHANICVILLE SITE

CONTAMINANT	NY AAL (ug/m^3)	MODELED 24-HOUR AVERAGE CONCENTRATION	
		MOST PROBABLE	REALISTIC WORST
CARCINOGENS			
Benzene	100	0.3	12.8
Methylene chloride	1167	0.001	0.06
NONCARCINOGENS			
Cyanide	16.7	0.00002	0.0009
Ethylbenzene	1450	0.2	10.1
Styrene	716	0.4	18.4
Toluene	7500	0.4	18.6
Xylenes	1450	0.9	37.7

TABLE 7-6

COMPARISON OF INDOOR AIR SAMPLING RESULTS
TO WORKER STANDARDS AND GUIDELINES
MECHANICVILLE SITE

	Worker Standards and Guidelines						Air Analytical Results - ppm							
							Office		Garage		Storeroom		Background	
		OSHA		NIOSH	ACGIH		OF-01	OF-02	GA-01	GA-02	ST-01	ST-02	BA-01	BA-02
Substance	TWA	CC	Peak	TWA	TLV	STEL	12/88	12/88	12/88	12/88	12/88	12/88	12/88	12/88
Benzene	10	25	50	1	10	25	0.03	0.031	0.016	0.015	0.043	0.043	ND	ND
Toluene	200	300	500	100	100	150	0.009	0.009	0.048	0.048	0.012	0.012	0.037	0.028

ND = Not detected. The minimum detection limits are: benzene - 0.013 ppm; ethylbenzene and xylenes - 0.01 ppm.

TWA = Time Weighted Average (8-hr)

CC = Ceiling Concentration

Peak = Maximum Duration 10 minutes in 8 hours

TLV = Threshold Limit Value

STEL = Short-Term (15 minute) Exposure Limit

7.4 SOIL AND SEDIMENT

Regulatory standards and criteria are not available for chemicals detected in the soil or sediment, at either the federal or state level.

8.0 PUBLIC HEALTH RISK CHARACTERIZATION

This section characterizes the risks to those populations who could potentially be exposed to contamination found at the Mechanicville site. The type and extent of risks depend on the nature, duration, and frequency of exposure to the contaminants, as well as the characteristics of the populations exposed. This exposure-related information, discussed in Section 5, combined with the dose/response data presented in Section 4, are the basis for this risk characterization.

Carcinogenic and noncarcinogenic risk estimates were calculated for each of the hypothetical exposure scenarios discussed in Section 5. Two types of hypothetical exposure scenarios were developed to reflect realistic worst and most probable case exposure conditions. These scenarios differ by varying exposure parameter and by ranging environmental concentrations, using the maximum concentration detected (realistic worst) or the average concentration (most probable case). Briefly, these scenarios include older children (ages 8 to 18) being exposed to on-site surface soil and sediment in the Anthony Kill, construction workers exposed to sediment, utility workers exposed to on-site subsurface soil, and children exposed to off-site volatile compounds and particulate dusts emanating from excavated soil.

Carcinogenic risk estimates were determined by multiplying the body-dose level for each carcinogen by its USEPA carcinogenic potency value and, for PAHs, by the ICF-Clement potency value as well. This calculation results in an estimate of an individual's incremental or excess cancer risk due to exposure to site-related contamination. Noncarcinogenic risk estimates were determined

by dividing the body-dose level for each noncarcinogen by the relevant standard, criterion, or guideline, resulting in a ratio called the risk ratio. Noncarcinogenic risk ratios for the individual compounds were then summed together to form a hazard index. To put these risk estimates into perspective, they were evaluated against target risk levels.

Target risk levels for carcinogenic compounds have been adopted from USEPA guidelines stating that the total incremental carcinogenic risk for an individual resulting from exposure at a hazardous waste site should be between 10^{-4} and 10^{-6}. (A risk of 10^{-4} is interpreted as an 1 in 10,000 chance of an individual developing cancer during a lifetime, as a result of the exposure.) Based on these guidelines, the risk characterization in this report refers to the carcinogenic risk estimates as being "below the target range" when risks are less than 10^{-6}, "within the target range" when risks are between 10^{-4} and 10^{-6}, and "above the target range" when risks are above 10^{-4}. Historically, regulatory agencies have considered risks between 10^{-5} and 10^{-6} to be acceptable.

For noncarcinogenic compounds, the hazard index is compared to 1. If the hazard index is less than or equal to 1, no adverse health effects are anticipated from the predicted body-dose level. If the index is greater than 1, the predicted body-dose level could potentially result in adverse health effects. This determination is necessarily imprecise, because the derivation of the relevant standard or guideline involves the use of multiple safety factors. In addition, the risk ratios for individual compounds should properly be summed only if the target organ or mechanisms of action are identical for the compounds. Therefore, the potential for adverse health

effects of a mixture having a hazard index greater than one must be evaluated on a case-by-case basis.

8.1 RISKS DUE TO SOIL EXPOSURES

Both carcinogenic and noncarcinogenic risks were estimated for exposure to contaminated soil at the Mechanicville site. The two populations who could potentially be exposed are older children, ages 8-18, and utility workers. Risks were estimated for older children exposed to surface soil, and utility workers exposed to subsurface soil.

8.1.1 Potential Risks to Teenagers and Older Children

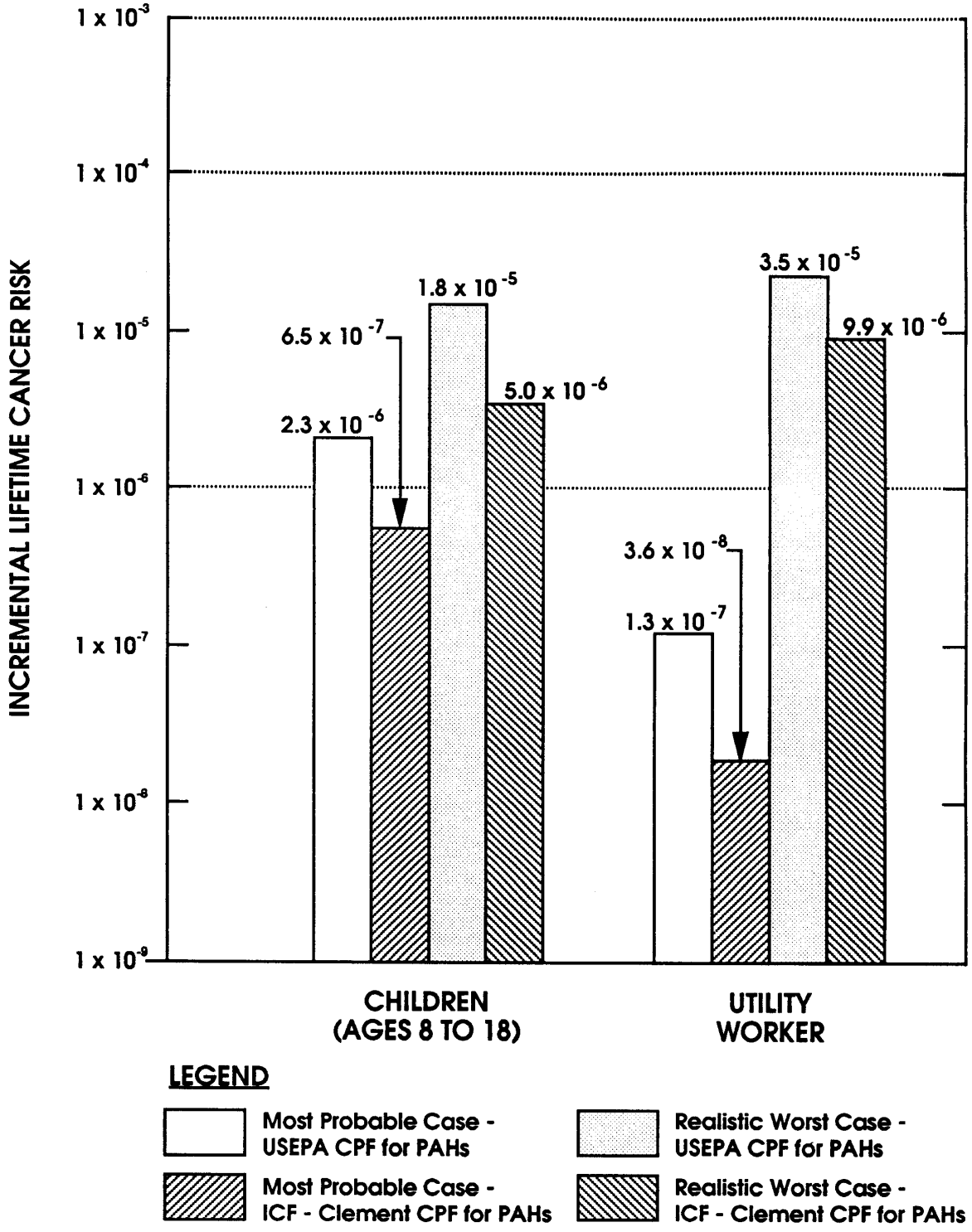
Risk estimates were calculated for teenagers and older children potentially exposed to contaminated surface soil at the Mechanicville site. This population (ages 8 to 18) was selected because it represents the one with the highest exposure potential; older children play unsupervised, are mobile, and could trespass onto the site and be exposed to surface soil. The risk estimates are presented in Table 8-1 and Figures 8-1 and 8-2. The incremental carcinogenic risk estimated for the most probable case scenario is 2.3×10^{-6} and for the realistic worst case, 1.8×10^{-5}. The excess risk is essentially due to exposure to the carcinogenic PAHs. Both estimates are within the USEPA target range. Using the carcinogenic potency factor developed by Clement Associates (1987), carcinogenic risks of 6.5×10^{-7} and 5.0×10^{-6} were estimated for the most probable and realistic worst cases, respectively. These estimates are below and within the USEPA target range.

TABLE 8-1

RISK ESTIMATES FOR EXPOSURE OF OLDER CHILDREN
TO SURFACE SOIL
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Carcinogenic PAHs	2.3×10^{-6}(1) 6.5×10^{-7}(2)	1.8×10^{-5}(1) 5.0×10^{-6}(2)
Total:	2.3×10^{-6}(1) 6.5×10^{-7}(2)	1.8×10^{-5}(1) 5.0×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (amenable)	9.7×10^{-5}	1.3×10^{-3}
Noncarcinogenic PAHs	8.5×10^{-6}	2.7×10^{-5}
Total:	1.1×10^{-4}	1.3×10^{-3}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor



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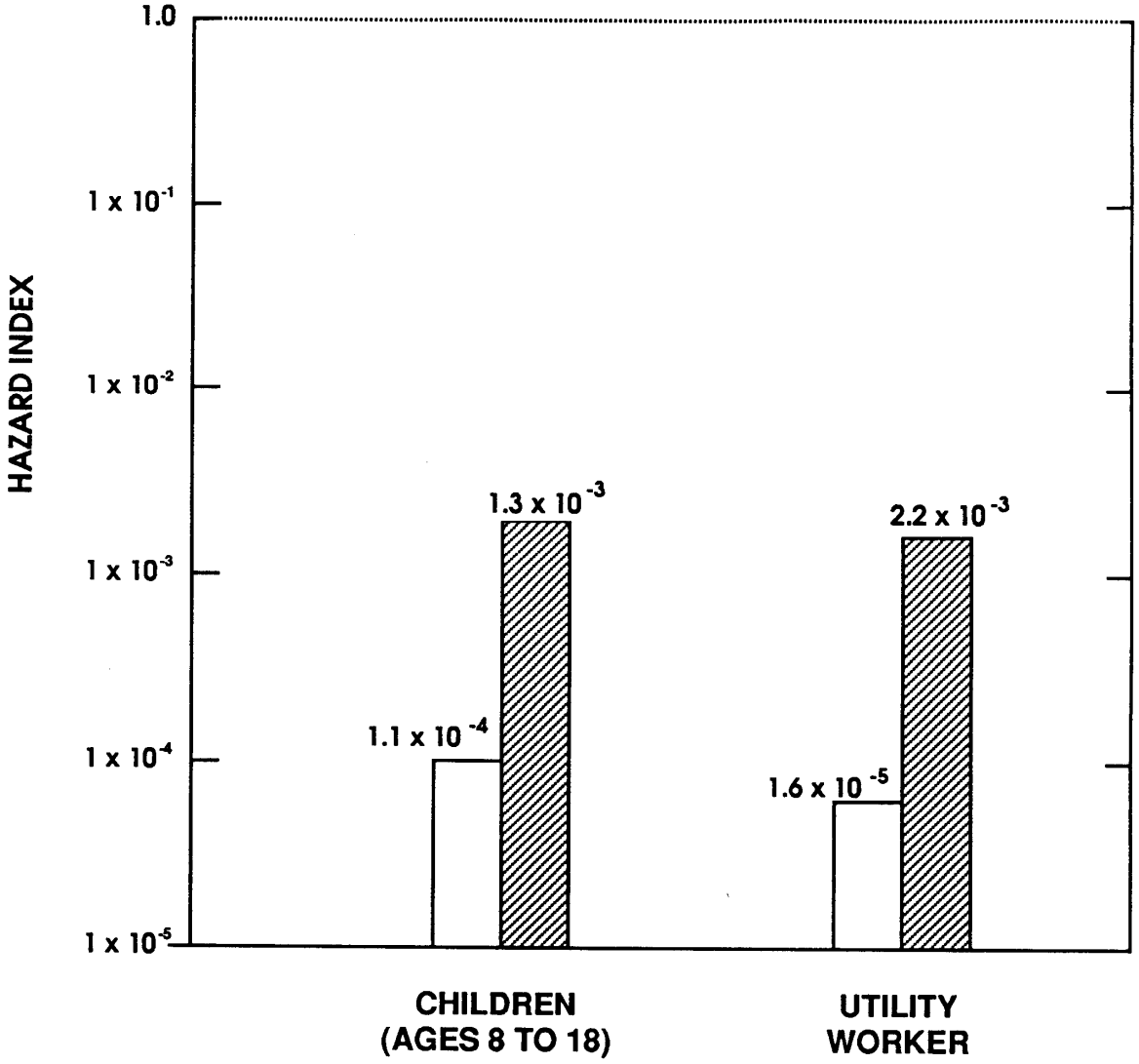
MECHANICVILLE
CARCINOGENIC RISKS -
DERMAL CONTACT/
INGESTION OF SOIL

NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

JOB NO. 4945-04

FIGURE 8-1



E.C.JORDAN CONSULTING ENGINEERS	MECHANICVILLE NONCARCINOGENIC HAZARD INDEX - DERMAL CONTACT/ INGESTION OF SOIL
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	JOB NO. 4945-04 FIGURE 8-2

Noncarcinogenic risks are 0.00011 for the most probable case scenario, and 0.0013 for the realistic worst case scenario. Both of these are well below 1. Therefore no significant adverse health effects would be expected due to the exposure of older children to contaminated soil under the assumed conditions of exposure.

8.1.2 Potential Risks to Utility Workers

Risk estimates were also calculated for utility workers who could be exposed to contaminated subsurface soil during future utility repair work. They are presented in Table 8-2 and Figures 8-1 and 8-2. Using the USEPA cancer potency factor, total incremental carcinogenic risks for the most probable case scenario were estimated at 1.3×10^{-7}. Although there were two carcinogenic compounds detected in the subsurface soil, over 99 percent of the risk is attributed to the presence of carcinogenic PAHs. Risk for the realistic worst case was estimated at 3.5×10^{-5}. This is also attributable to the presence of carcinogenic PAHs. Both of these risk estimates are within the USEPA's target range. Using the PAH potency factor developed by Clement Associates (1987), carcinogenic risks were estimated at 3.6×10^{-8} and 9.9×10^{-6} for the most probable and realistic worst cases, respectively. These are below and within the USEPA target range.

The noncarcinogenic hazard indices were significantly less than one for both scenarios, with an index of 0.000016 for the most probable case and 0.0022 for the realistic worst case. Because the hazard index for both scenarios was well below one, no adverse health effects would be expected in utility workers

TABLE 8-2

RISK ESTIMATES FOR EXPOSURE OF UTILITY WORKERS
TO SUBSURFACE SOIL
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	2.1×10^{-10}	9.2×10^{-8}
Carcinogenic PAHs	1.3×10^{-7}(1) 3.5×10^{-8}(2)	3.5×10^{-5}(1) 9.8×10^{-6}(2)
Total:	1.3×10^{-7}(1) 3.6×10^{-8}(2)	3.5×10^{-5}(1) 9.9×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (amenable)	1.2×10^{-6}	1.3×10^{-4}
Ethyl Benzene	2.0×10^{-6}	3.8×10^{-4}
Noncarcinogenic PAHs	9.9×10^{-6}	1.1×10^{-3}
Styrene	1.8×10^{-6}	3.4×10^{-4}
Toluene	6.2×10^{-7}	1.2×10^{-4}
Trimethylbenzene	3.3×10^{-8}	7.4×10^{-6}
Xylene (total)	3.7×10^{-7}	6.1×10^{-5}
Total:	1.6×10^{-5}	2.2×10^{-3}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

exposed to subsurface soil at the Mechanicville site under the assumed exposure conditions.

8.2 RISKS DUE TO SEDIMENT EXPOSURES

Both carcinogenic and noncarcinogenic risks were estimated for exposure to sediment in the Anthony Kill. The two populations who could potentially be exposed are older children and construction workers.

8.2.1 Potential Risks to Older Children

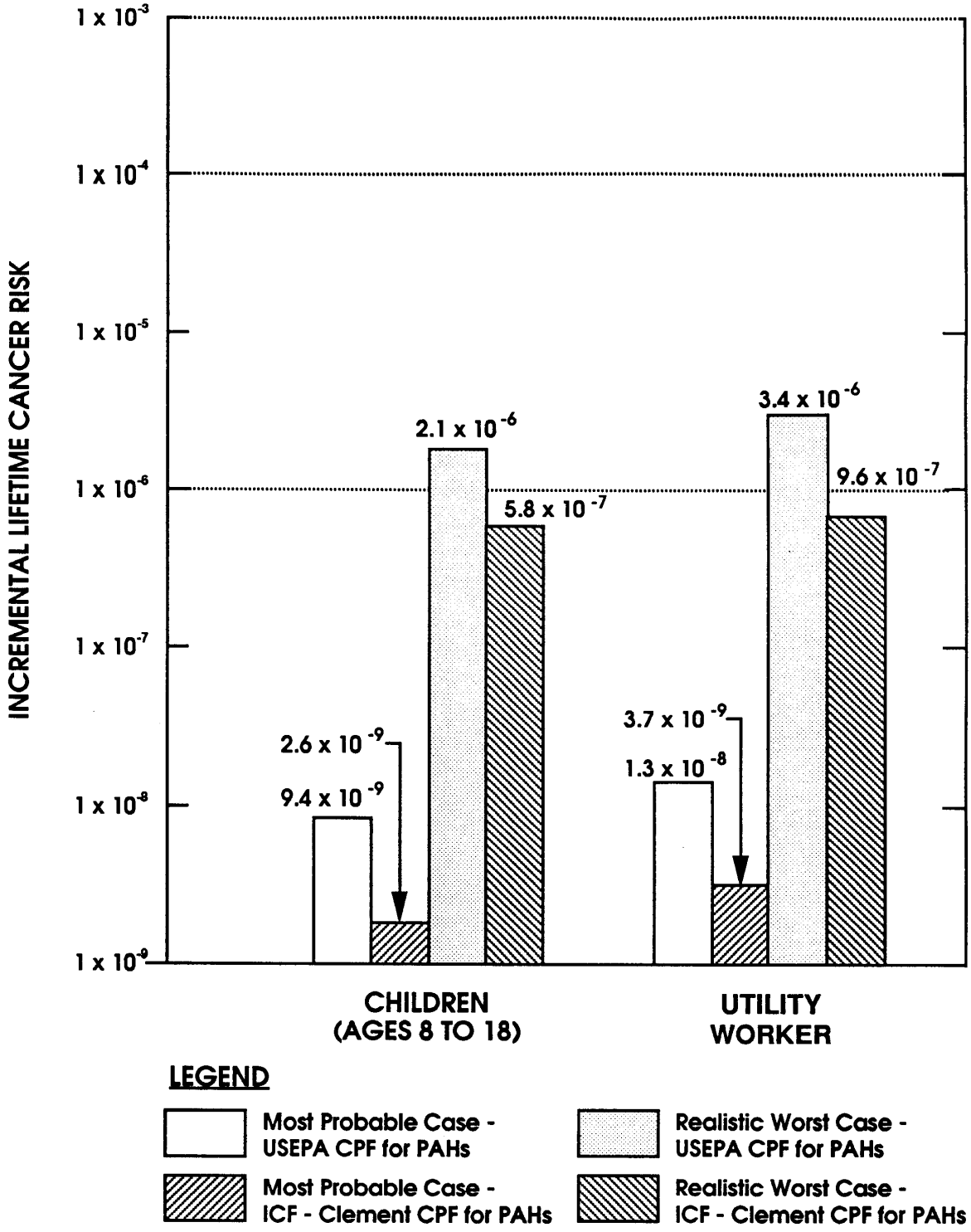
Risk estimates were calculated for older children potentially exposed to site-related contamination in the sediments of the Anthony Kill which are adjacent to the site. They are presented in Table 8-3 and Figures 8-3 and 8-4. Using the USEPA potency factor for PAHs, total incremental carcinogenic risks were below the USEPA target range for the most probable case scenario (9.4×10^{-9}), and within the target range for the realistic worst case scenario (2.1×10^{-6}). Carcinogenic PAHs contributed to over 99 percent of the total incremental risk in both cases. Using the PAH potency factor developed by Clement Associates (1987), the carcinogenic risks were estimated at 2.6×10^{-9} and 5.8×10^{-7} for the most probable and realistic worst cases, respectively. Both estimates are below the USEPA target range. The hazard index was estimated at 0.000003 for the most probable case and 0.0002 for the realistic worst case. These hazard indices are significantly below one. Therefore no adverse health effects would be expected from the exposure of older children to contaminated sediments.

TABLE 8-3

RISK ESTIMATES FOR EXPOSURE OF CHILDREN
TO SEDIMENT
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	5.4×10^{-13}	1.1×10^{-10}
Carcinogenic PAHs	9.4×10^{-9}(1) 2.6×10^{-9}(2)	2.1×10^{-6}(1) 5.8×10^{-7}(2)
Total:	9.4×10^{-9}(1) 2.6×10^{-9}(2)	2.1×10^{-6}(1) 5.8×10^{-7}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (total)	3.3×10^{-6}	1.8×10^{-4}
Ethyl Benzene	1.4×10^{-9}	2.5×10^{-7}
Noncarcinogenic PAHs	9.7×10^{-8}	1.3×10^{-5}
Total:	3.4×10^{-6}	2.0×10^{-4}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor



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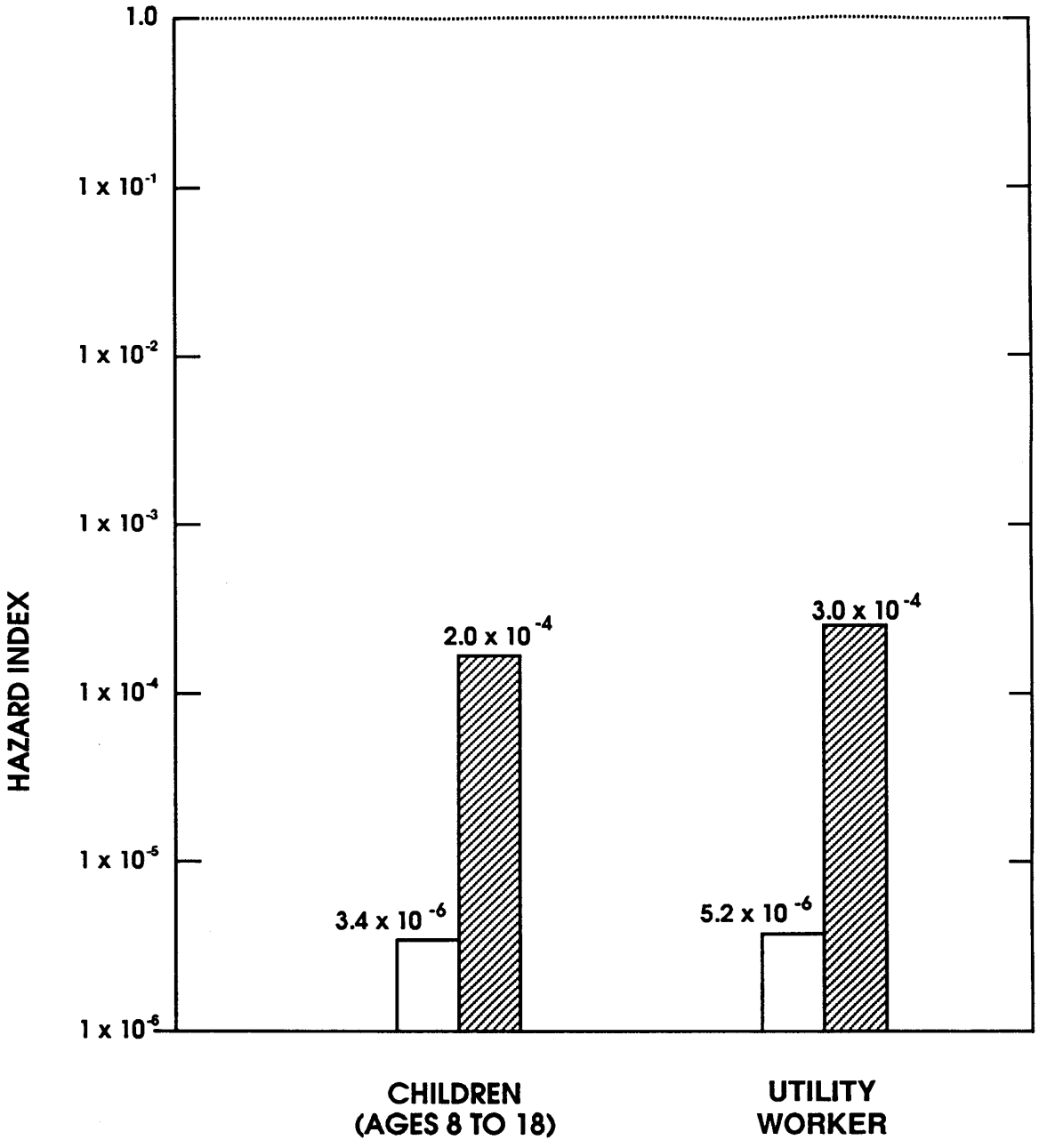
MECHANICVILLE
CARCINOGENIC RISKS -
DERMAL CONTACT/
INGESTION OF SEDIMENT

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FIGURE 8-3



E.C.JORDAN CONSULTING ENGINEERS	MECHANICVILLE NONCARCINOGENIC HAZARD INDEX - DERMAL CONTACT/ INGESTION OF SEDIMENT
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
JOB NO. 4945-04	FIGURE 8-4

8.2.2 Potential Risks to Workers

Risks were estimated for construction workers potentially exposed to contaminated sediments of the Anthony Kill. They are presented in Table 8-4 and Figures 8-3 and 8-4. Using the USEPA potency factor, incremental carcinogenic risk estimates were below the USEPA target range for the most probable case (1.3×10^{-8}) and within the target range for the realistic worst case (3.4×10^{-6}). Carcinogenic PAHs contributed to more than 99 percent of the total risk in both cases. Using the PAH potency factor developed by Clement Associates (1987), carcinogenic risks were estimated at 3.7×10^{-9} and 9.6×10^{-7} for the most probable and realistic worst cases, respectively. Both estimates are below the USEPA target range.

Hazard indices were below one for both the most probable and realistic worst case, with indices of 0.0000052 and 0.0003, respectively. Because both indices are significantly below one, no adverse health effects would be expected due to contaminated sediments during assumed construction-type activities.

8.3 RISKS DUE TO INHALATION OF VOLATILE ORGANIC COMPOUNDS AND PARTICULATES

Both carcinogenic and noncarcinogenic risk estimates were calculated for exposure to VOCs and particulate dust originating from a hypothetical soil pile excavated and stockpiled on-site during utility repair work. The population assumed to be exposed were young children living

TABLE 8-4

RISK ESTIMATES FOR EXPOSURE OF WORKERS
TO SEDIMENT
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	5.0×10^{-13}	1.7×10^{-10}
Carcinogenic PAHs	1.3×10^{-8}(1) 3.7×10^{-9}(2)	3.4×10^{-6}(1) 9.6×10^{-7}(2)
Total:	1.3×10^{-8}(1) 3.7×10^{-9}(2)	3.4×10^{-6}(1) 9.6×10^{-7}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (total)	5.0×10^{-6}	2.7×10^{-4}
Ethyl Benzene	2.1×10^{-9}	3.8×10^{-7}
Noncarcinogenic PAHs	2.3×10^{-7}	2.2×10^{-5}
Total:	5.2×10^{-6}	3.0×10^{-4}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

downwind of the site. This population was used because it represents the most sensitive group.

8.3.1 Potential Risks to Young Children

Risk estimates were calculated for young children, ages 1 to 6, assumed to inhale VOCs and particulates originating on-site and are presented in Table 8-5 and Figures 8-5 and 8-6. Using the USEPA potency factor for PAHs, the total incremental carcinogenic risk was estimated at 2.2×10^{-7} for the most probable case and 1.3×10^{-5} for the realistic worst case. Both estimates are within the USEPA target range. The major contributor to these estimates is carcinogenic PAHs, at 85 and 86 percent of the total risk for the most probable and realistic worst cases, respectively. Using the PAH potency factor developed by Clement Associates (1987), carcinogenic risks were estimated at 4.9×10^{-8} and 2.6×10^{-6} for the most probable and realistic worst cases, respectively. Both estimates are below or within the USEPA target range.

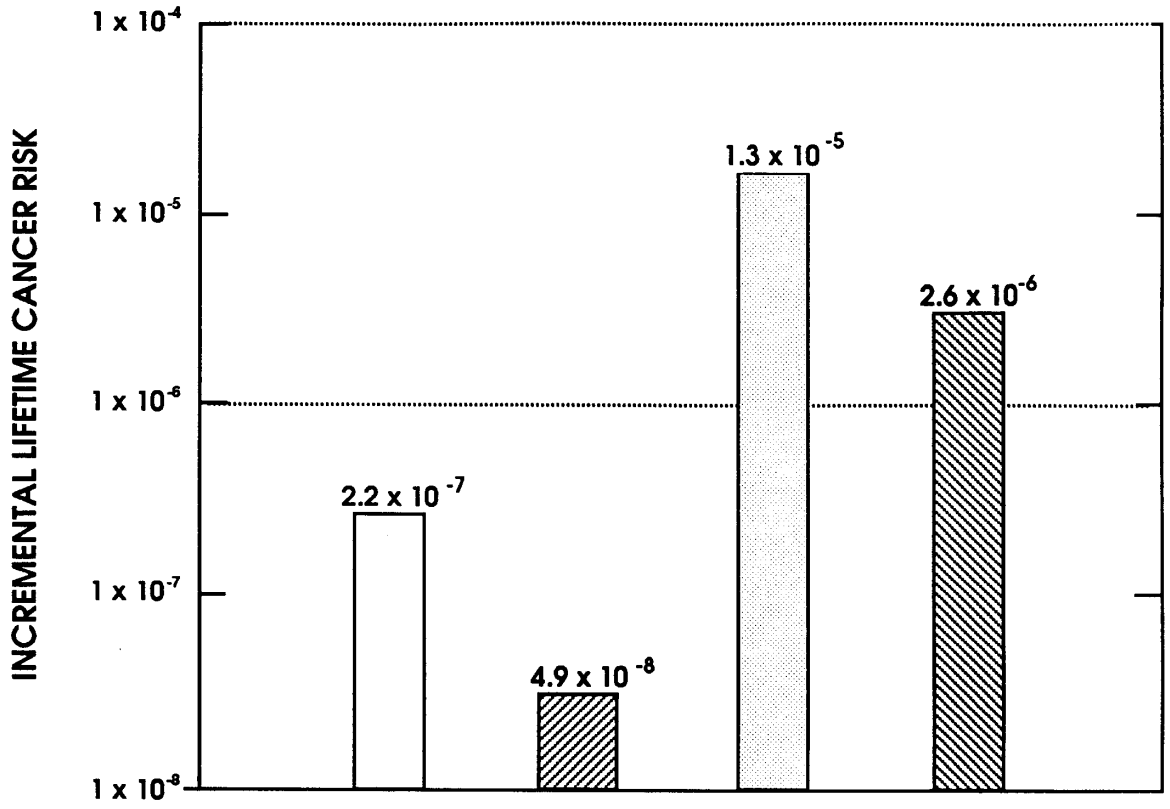
The hazard index was estimated at 0.00035 for the most probable case and 0.018 for the realistic worst case. Both indices are well below one. Therefore no adverse health effects would be expected due to the inhalation of VOCs or fugitive dust particulates originating at the Mechanicville site under the assumed conditions of exposure.

TABLE 8-5

RISK ESTIMATES FOR EXPOSURE OF YOUNG CHILDREN
TO SOIL CONTAMINATION VIA INHALATION
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	3.5×10^{-8}	1.8×10^{-6}
Carcinogenic PAHs	1.9×10^{-7}(1) 1.4×10^{-8}(2)	1.1×10^{-5}(1) 8.3×10^{-7}(2)
Total:	2.2×10^{-7}(1) 4.9×10^{-8}(2)	1.3×10^{-5}(1) 2.6×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (amenable)	3.5×10^{-7}	2.0×10^{-5}
Ethyl Benzene	1.1×10^{-4}	5.7×10^{-3}
Noncarcinogenic PAHs	7.0×10^{-6}	4.1×10^{-4}
Styrene	1.0×10^{-4}	5.2×10^{-3}
Toluene	2.0×10^{-5}	1.1×10^{-3}
Trimethylbenzene	9.0×10^{-6}	4.6×10^{-4}
Xylene (total)	1.0×10^{-4}	5.3×10^{-3}
Total:	3.5×10^{-4}	1.8×10^{-2}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor



LEGEND

- Most Probable Case - USEPA CPF for PAHs
- Realistic Worst Case - USEPA CPF for PAHs
- Most Probable Case - ICF - Clement CPF for PAHs
- Realistic Worst Case - ICF - Clement CPF for PAHs

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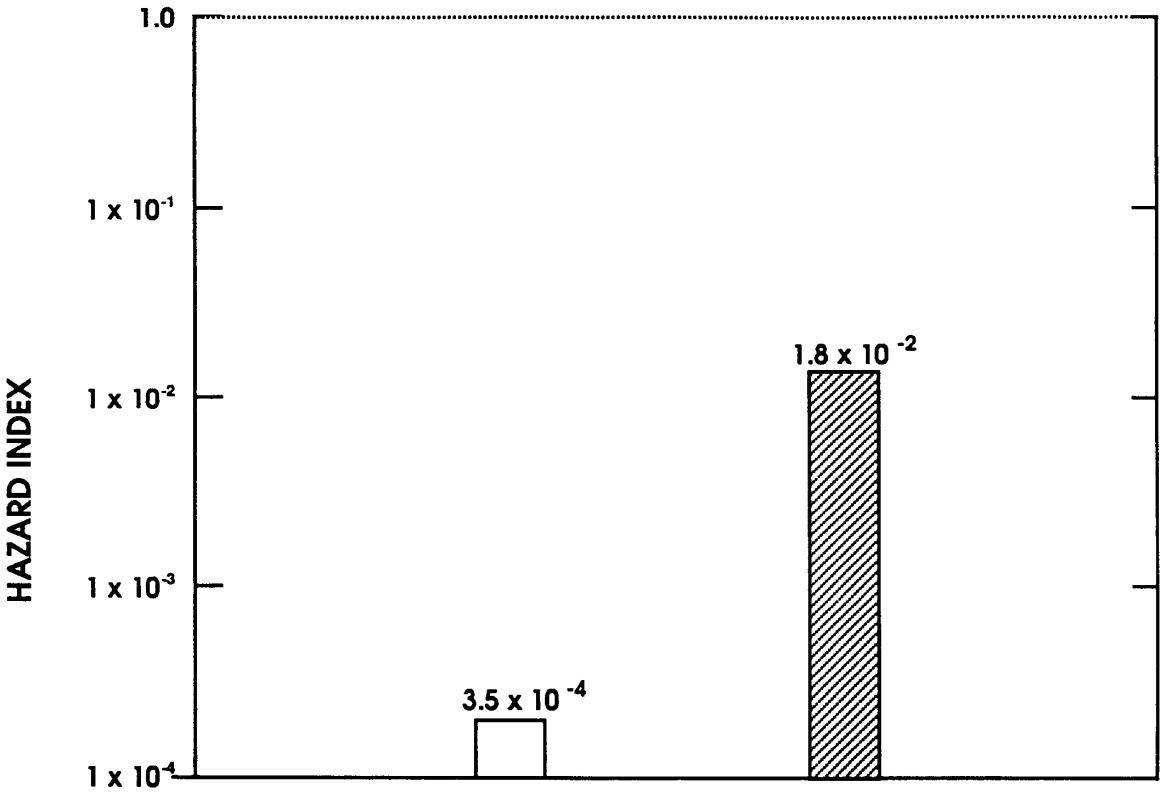
MECHANICVILLE
CARCINOGENIC RISKS -
FUTURE INHALATION EXPOSURE
OF CHILDREN DURING
SOIL EXCAVATION

NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
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FIGURE 8-5



LEGEND

Most Probable Case

Realistic Worst Case

E.C.JORDAN CONSULTING ENGINEERS	MECHANICVILLE NONCARCINOGENIC HAZARD INDEX - FUTURE INHALATION EXPOSURE OF CHILDREN DURING SOIL EXCAVATION
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	JOB NO. 4945-04 FIGURE 8-6

8.4 UNCERTAINTY/LIMITATIONS IN RISK ASSESSMENT

Regardless of the type of risk estimate developed, it should be emphasized that all estimates of risk are based on numerous assumptions which introduce many uncertainties into the risk characterization process. Assumptions such as frequency and duration of exposure are subjective decisions based on knowledge of site conditions. Absorption rates are often unknown for specific chemicals, and the pharmacokinetics of a contaminant may differ between the specific site and the laboratory study from which the dose/response criterion was derived. In addition, the use of established standards or guidelines, such as the dose/response value, introduces additional uncertainties into the risk estimates due to the following factors:

- o potential adverse human health effects are extrapolated from effects seen in animal studies,
- o effects observed at low doses are often extrapolated from effects seen at high doses,
- o atmospheric concentrations of contaminants volatilizing from soil are often estimated using models,
- o dose/response effects are often estimated using models.

By using a range of realistic exposure assumptions, it is Jordan's opinion that the uncertainty inherent in the risk characterization process has been

minimized to the best extent possible. Both lower and upper bounds for risk have been provided for each exposure scenario. These estimates are designed to ensure human health protection. These should be used to determine the location and relative magnitude of risk at the site, and the relative magnitude of risk among media.

8.5 SUMMARY

Table 8-6 presents a summary of estimated risks due to exposure to contamination in soil and sediment at the Mechanicville site. All incremental carcinogenic risks were either within or below the USEPA target range of 10^{-4} to 10^{-6}. Carcinogenic PAHs appear to be the major contributor to these risks. In addition, all hazard indices of noncarcinogenic risks were well below one, indicating that no adverse noncarcinogenic health effects would be expected due to exposure. Based on the results/conditions of this quantitative risk assessment, Jordan concludes that, under the assumed exposure conditions, contaminants found at this site do not pose a significant health risk to workers on the site or to residents around the site. As has been done in the past, the site health and safety plan should be followed during any future exploratory work on the Mechanicville site to prevent or minimize undue exposure.

TABLE 8-6

SUMMARY OF RISK ESTIMATES BY MEDIUM
MECHANICVILLE SITE

Medium	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Surface Soil, Children	2.3×10^{-6}(1) 6.5×10^{-7}(2)	1.8×10^{-5}(1) 5.0×10^{-6}(2)
Subsurface Soil, Worker	1.3×10^{-7}(1) 3.6×10^{-8}(2)	3.5×10^{-5}(1) 9.9×10^{-6}(2)
Sediment, Children	9.4×10^{-9}(1) 2.6×10^{-9}(2)	2.1×10^{-6}(1) 5.8×10^{-7}(2)
Sediment, Workers	1.3×10^{-8}(1) 3.7×10^{-9}(2)	3.4×10^{-6}(1) 9.6×10^{-7}(2)
Inhalation, Children	2.2×10^{-7}(1) 4.9×10^{-8}(2)	1.3×10^{-5}(1) 2.6×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Surface Soil, Children	1.1×10^{-4}	1.3×10^{-3}
Subsurface Soil, Worker	1.6×10^{-5}	2.2×10^{-3}
Sediment, Children	3.4×10^{-6}	2.0×10^{-4}
Sediment, Workers	5.2×10^{-6}	3.0×10^{-4}
Inhalation, Children	3.5×10^{-4}	1.8×10^{-2}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

9.0 ENVIRONMENTAL RISK ASSESSMENT

The primary objectives of the environmental assessment for the Mechanicville site are to characterize the environmental receptors associated with the site; evaluate present and future impacts; and if appropriate, provide sufficient information to support remedial alternatives and develop mitigative measures to address any adverse effects. The risk assessment focused primarily on the Anthony Kill, as this stream is directly adjacent to the site. Potentially affected media investigated include soil, surface water, groundwater, and sediment.

9.1 ENVIRONMENTAL RECEPTORS

Environmental receptors potentially affected by site-related chemicals include aquatic organisms in the Anthony Kill, and terrestrial wildlife which utilize the area. Due to the industrialized nature of the area, and the lack of suitable habitats, it is unlikely that the site is significantly utilized by wildlife. Although the surficial soil is contaminated with PAHs, the exposed soil consists primarily of packed gravel unsuitable for soil invertebrates. Consequently, a movement of contaminants through the terrestrial food web is considered unlikely. In addition, the relative importance of this exposure pathway is minimized by the small size of the site and the low wildlife-carrying capacity of the surrounding commercial area.

Aquatic habitats adjacent to the site are potentially at risk because these areas can function as contaminant sinks and groundwater discharge areas. As

overland runoff and groundwater discharge to the Anthony Kill, potential contaminants transported in these flows can accumulate in sediment or be directly discharged to surface water. Accumulated contaminants in sediment may resist breakdown and contribute to water quality degradation over time. There is also the potential for impact to downstream areas. Potential aquatic receptor taxa include fish, macroinvertebrates, plankton, and amphibians. Limited data exist on the species present in adjacent aquatic areas.

The NYSDEC has assigned two stream classifications to the Anthony Kill. The section upstream from the Mechanicville city line is classified as C(t). Class C waters are suitable for fishing and all other uses except as a source of water supply for drinking, culinary, or food processing purposes or primary contact recreation. The "t" denotes that this segment of the stream is a trout stream. In Mechanicville, the stream is classified as D. Class D waters are designated for secondary contact recreation, but no higher classification uses because of intermittent flow or water conditions that do not support the propagation of game fish.

According to the records of the New York State Wildlife Resources Center, no endangered, threatened, or species of special concern occur in proximity of the site.

9.2 ENVIRONMENTAL RISK ASSESSMENT

This section presents an assessment of risk to environmental receptors from contaminated surface water, groundwater, and sediments.

9.2.1 Surface Water

As part of the Task 2 field investigation, four rounds of surface water samples were collected at three locations along the Anthony Kill during 1986 and 1987. Location SW-1 is situated upstream of the site, location SW-2 is situated adjacent to the site, and location SW-3 is situated downstream. Samples were collected in September and December of 1986, and March and June of 1987. In the Task 3 field investigation, two additional surface water sampling rounds were performed, again at three locations along the Anthony Kill. However, during this field investigation, a new sample location (SW-4) further downstream was chosen to replace SW-3, based on a more complete understanding of the extent of groundwater discharge to the stream. A statistical summary of compounds detected during the surface water sampling is presented in Table 9-1. Mean values presented in Table 9-1, as well as the tables which follow, were calculated using zeros for sample data reported as ND. The range of concentrations at which these compounds were detected are presented in Table 9-2, along with relevant water quality standards.

Only bis(2-ethylhexyl)phthalate, 2-methylnaphthalene and two inorganics (cyanide and iron) were detected at levels exceeding the AWQC or the New York Class D Standards. However, the levels of bis(2-ethylhexyl)phthalate and the two inorganic compounds were not elevated, compared with the upstream location. In addition, 2-methylnaphthalene was only detected once (in a location adjacent to the site) during the surface water sampling program, and was not detected in a duplicate sample taken concurrently. Three other PAH compounds, acenaphthene, acenaphthylene and pyrene, were also detected at

MC_TAB_1.WK1

TABLE 9-1

SUMMARY OF CHEMICALS DETECTED IN SURFACE WATER
MECHANICVILLE SITE

CHEMICAL	UPSTREAM			ADJACENT			DOWNSTREAM		
	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY
ACETONE	ND	-	0/3	3.3E-03	1.0E-02	1/3	ND	-	0/3
METHYLENE CHLORIDE	1.1E-03	5.4E-03	1/5	ND	-	0/4	ND	-	0/4
ACENAPHTHENE	ND	-	0/5	4.2E-03	2.1E-02	1/5	ND	-	0/5
ACENAPHTHYLENE	ND	-	0/5	4.4E-03	2.2E-02	1/5	ND	-	0/5
PYRENE	ND	-	0/5	2.0E-03	1.0E-02	1/5	ND	-	0/5
BIS(2-ETHYLHEXYL)PHTHALATE	8.8E-02	3.9E-01	3/5	1.2E-03	6.0E-03	1/5	1.1E-02	3.0E-02	2/5
2-METHYLNAPHTHALENE	ND	-	0/3	1.1E-02	3.5E-02	1/3	ND	-	0/5
CYANIDE (total)	2.0E-03	1.0E-02	1/5	2.0E-03	1.0E-02	2/5	2.0E-03	1.0E-02	1/5
IRON	4.2E-01	1.0E+00	5/5	8.9E-01	1.8E+00	5/5	4.4E-01	7.8E-01	5/5
ZINC	8.0E-03	3.0E-02	2/5	7.8E-03	2.0E-02	3/5	2.0E-03	1.0E-02	1/5

NOTES:
a Only chemicals found above detection limits presented.
b All compounds expressed in mg/l unless otherwise noted.
c ND = Not detected.

MP_TAB-2.WK1

TABLE 9-2

COMPARISON OF CHEMICALS FOUND IN SURFACE WATER SAMPLES WITH STANDARDS AND CRITERIA FOR THE PROTECTION OF AQUATIC LIFE
MECHANICVILLE SITE

COMPOUND	RANGE OF CONCENTRATIONS	CHRONIC AWQC		NEW YORK STATE CLASS D STANDARDS	NEW YORK STATE CLASS C STANDARDS
ACETONE	ND - 0.01	9.7	f	---	---
METHYLENE CHLORIDE	ND - 0.0054	11	g	---	---
ACENAPHTHENE	ND - 0.021	0.52		---	---
ACENAPHTHYLENE	ND - 0.022	0.037	f	---	---
PYRENE	ND - 0.01	0.013		---	---
BIS(2-ETHYLHEXYL)PHTHALATE	ND - 0.39	0.012	f	---	0.0006
2-METHYLNAPHTHALENE	ND - 0.035	0.027	f	---	---
CYANIDE	ND - 0.01	0.0052		0.022	0.0052
IRON	0.037 - 1.8	1.0		0.3	0.3
ZINC	ND - 0.02	0.11		0.23	0.03

NOTES:
a Only those compounds found above detection limits presented.
b All compounds expressed in mg/l unless otherwise noted.
c Ambient Water Quality Criteria (USEPA, 1986) for freshwater species, assuming hardness of 100mg/l.
d NYSDEC (1986). Creek is currently graded Class D in the vicinity of the site. Assuming hardness of 100mg/l.
e Not detected (see Task 2 Report Appendix for minimum detection limits [Jordan, 1987]).
f Based on a 10-fold safety factor of an estimated EC50 value for Daphnia magna, using a QSAR equation from Hermens et al., 1984
g Criterion for total halomethanes.

levels below their respective AWQC in the surface water sample which contained 2-methylnaphthalene. These compounds were not detected in the associated duplicate sample. The presence of PAHs in surface water appears to be infrequent. Levels are low when detected adjacent to the site and are not detected in downstream surface water samples. Therefore, the impact of PAH releases on stream water quality is expected to be minimal.

9.2.2 Groundwater

Although no environmental receptors are exposed directly to groundwater at the site, the majority of groundwater beneath the site discharges to the Anthony Kill (Jordan, 1987; Jordan, 1989), and stream quality could potentially be affected. Therefore an assessment of the potential impact of groundwater constituents discharging in the Anthony Kill was conducted.

Data used in this evaluation included analytical results from groundwater samples collected from the 12 site wells during December 1987 and March 1988, as part of the Task 3 Investigation, and the six Task 2 wells sampled on four previous occasions (September and December of 1986, and March and June of 1987). A summary of these analytical data is presented in Table 9-3, and maximum levels of each chemical were used in conjunction with a dilution factor, described below, to estimate potential groundwater impacts on the Anthony Kill.

In order to conservatively assess potential impacts of groundwater discharge to the Anthony Kill, an estimate of stream water quality under low flow

conditions was made. The estimated stream concentrations were conservatively computed using the reported average low flow over a seven-day period with a ten year recurrence interval (i.e., 7Q10) and the estimated groundwater discharge rate to the stream. The reported 7Q10 for the Anthony Kill is 17 cubic feet per second (cfs). The estimated groundwater discharge rate was computed using a 500 foot length of the stream and a stream bank depth of one foot. The stream bottom is composed primarily of competent bedrock, and given the relative permeability of the soil, it is reasonable to assume that the majority of the groundwater discharge occurs through the stream bank soils. Using the estimated hydraulic conductivity for the on-site soils (200 feet per year or 6.3×10^{-6} feet per second) and a stream bank area of 500 square feet, the groundwater discharge rate is 0.003 cfs. Therefore, under low flow conditions during which dilution effect would be minimized, the estimated stream dilution factor is 5363.

Estimated low flow stream concentrations were computed for all chemicals detected in groundwater at the site. For chemicals which were detected at levels below their reported solubilities the maximum observed groundwater concentration was divided by the estimated dilution factor to calculate the low flow stream concentrations. For those chemicals which were detected at levels which exceeded the respective reported solubilities, the maximum solubility reported in the literature was divided by the estimated low flow dilution factor to calculate the low flow stream concentrations.

The estimated low flow stream concentrations and the ambient water quality criteria (AWQC) are listed in Table 9-3 along with groundwater concentration

MC_TAB-4.WK1

TABLE 9-4
SUMMARY OF CHEMICALS DETECTED IN ANTHONY KILL SEDIMENT
MECHANICVILLE SITE

CHEMICAL	UPSTREAM			ADJACENT			DOWNSTREAM		
	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY
ACETONE	2.6E+00	5.3E+00	1/2	2.6E+00	5.2E+00	1/2	2.0E+00	4.0E+00	1/2
BENZENE	ND	-	0/4	1.8E-02	7.0E-02	1/4	ND	-	0/4
ETHYLBENZENE	ND	-	0/4	2.2E-02	8.7E-02	1/4	ND	-	0/4
METHYLENE CHLORIDE	6.0E-01	2.4E+00	1/4	7.4E-01	3.0E+00	1/4	5.7E-01	2.3E+00	1/4
TOLUENE	ND	-	0/4	ND	-	0/4	1.8E-02	7.0E-02	1/4
ACENAPHTHENE	ND	-	0/4	5.9E-01	1.6E+00	4/6	ND	-	0/4
ACENAPHTHYLENE	ND	-	0/4	1.0E+00	3.0E+00	4/6	ND	-	0/4
ANTHRACENE	ND	-	0/4	7.5E-01	1.6E+00	5/7	1.2E-01	4.7E-01	1/4
BENZO(b)FLUORANTHENE	ND	-	0/4	2.8E-01	4.8E-01	3/5	1.2E-01	4.7E-01	1/4
BENZO(k)FLUORANTHENE	ND	-	0/4	1.1E+00	3.1E+00	5/7	1.2E-01	4.7E-01	1/4
BENZO(g,h,i)PERYLENE	ND	-	0/4	1.4E-01	4.0E-01	3/6	1.2E-01	4.7E-01	1/4
BENZO(a)ANTHRACENE	4.1E-02	1.7E-01	1/4	9.5E-01	2.5E+00	4/6	1.2E-01	4.7E-01	1/4
BENZO(a)PYRENE	ND	-	0/4	8.4E-01	2.0E+00	5/7	1.2E-01	4.7E-01	1/4
CHRYSENE	4.1E-02	1.7E-01	1/4	8.9E-01	2.3E+00	4/6	1.2E-01	4.7E-01	1/4
DIBENZO(a,h)ANTHRACENE	ND	-	0/4	2.8E-02	1.7E-01	1/6	ND	-	0/4
FLUORANTHENE	4.1E-02	1.7E-01	1/4	2.7E+00	1.0E+01	5/7	1.6E-01	4.7E-01	2/4
FLUORENE	ND	-	0/4	1.0E-01	4.0E-01	3/5	ND	-	0/4
INDENO(1,2,3-cd)PYRENE	ND	-	0/4	1.1E-01	3.0E-01	3/6	1.2E-01	4.7E-01	1/4
NAPHTHALENE	ND	-	0/4	2.1E+00	8.7E+00	6/7	4.1E-02	1.7E-01	1/4
PHENANTHRENE	4.1E-02	1.7E-01	1/4	2.1E+00	5.5E+00	6/7	1.6E-01	4.7E-01	2/4
PYRENE	4.1E-02	1.7E-01	1/4	2.5E+00	7.6E+00	5/7	1.6E-01	4.7E-01	2/4
BIS(2-ETHYLHEXYL)PHTHALATE	1.4E-01	5.5E-01	1/4	9.6E-01	2.8E+00	4/6	1.1E-01	4.5E-01	1/4
2-METHYLNAPHTHALENE	ND	-	0/4	6.7E-01	2.7E+00	5/7	ND	-	0/4
DI-N-BUTYL PHTHALATE	2.1E+00	2.1E+00	1/1	2.0E+00	2.0E+00	1/1	3.2E+00	3.2E+00	1/1
DI-N-OCTYL PHTHALATE	1.3E+01	1.3E+01	1/1	5.0E-01	5.0E-01	1/1	5.8E-01	9.0E-01	1/1
CYANIDE (total)	ND	-	0/3	4.3E-01	1.3E+00	1/3	ND	-	0/3
IRON	1.1E+04	1.6E+04	3/3	1.5E+04	2.7E+04	3/3	1.8E+04	3.3E+04	3/3
ZINC	3.2E+01	3.4E+01	2/2	4.6E+01	4.6E+01	2/2	5.1E+01	7.6E+01	2/2

NOTES:
a Only those compounds found above detection limits are presented.
b All compounds expressed in mg/kg unless otherwise noted.
c ND = Not detected.

There are no final standards or criteria for the protection of aquatic life for chemical levels in sediment. However, interim sediment criteria values have been established (USEPA 1988). These interim criteria are based on the Equilibrium Partitioning Approach (USEPA 1988), which estimates the interstitial water concentration of the contaminant given the total organic carbon (TOC) sediment concentration and the partitioning coefficient between the two media. From this relationship chronic AWQC are used to establish the "no-effect" concentration in the interstitial water. Thus, toxicity to benthic organisms is correlated to the interstitial, or pore water concentration, and not directly to the total concentration of the contaminant in the sediment.

Interim sediment criteria have been developed for only six of the chemicals (all PAHs) found during the sediment sampling program conducted for the Mechanicville site. These criteria, presented in Table 9-5, can be directly compared to the TOC-normalized PAH concentrations detected in Anthony Kill sediment. Chemical concentrations must be normalized because the extent to which PAHs and other hydrophobic organic compounds are bound to sediment, and hence unavailable to biota, is directly related to the amount of organic carbon (USEPA, 1988). The normalized average sediment concentrations measured upstream, adjacent to, and downstream of the site, along with available Interim Sediment Quality Criteria (SQC) and associated confidence intervals, are listed in Table 9-5. The confidence interval represents the range within which (with 95% certainty) the actual sediment criterion should fall, and is based on the uncertainty associated with the derivation the protective criteria. The lower value of the interval represents the sediment

MC_TAB_5.WK1

TABLE 9-5

COMPARISON OF SEDIMENT CHEMICAL CONCENTRATIONS WITH INTERIM
SEDIMENT QUALITY CRITERIA (SQC) FOR THE PROTECTION OF AQUATIC LIFE
MECHANICVILLE SITE

		UPSTREAM			ADJACENT			DOWNSTREAM		
COMPOUND	SQC (mg/kg C)	AVERAGE CONCENTRATION (mg/kg)	TOC (kg C/kg)	NORMALIZED CONCENTRATION (mg/kg C)	AVERAGE CONCENTRATION (mg/kg)	TOC (kg C/kg)	NORMALIZED CONCENTRATION (mg/kg C)	AVERAGE CONCENTRATION (mg/kg)	TOC (kg C/kg)	NORMALIZED CONCENTRATION (mg/kg C)
ACENAPHTHENE	732 (180-3,030)	—	0.0086	—	0.59	0.0215	27.4	—	0.0129	—
BENZO(a)ANTHRACENE	1317 (217-7,999)	0.041	0.0086	4.8	0.95	0.0215	44.2	0.12	0.0129	9.3
BENZO(a)PYRENE	1063 (225-5018)	—	0.0086	—	0.84	0.0215	39.1	0.12	0.0129	9.3
FLUORANTHENE	1883 (423-8,375)	0.041	0.0086	4.8	2.7	0.0215	125.6	0.16	0.0129	12.4
PHENANTHRENE	139 (32.6-605)	0.041	0.0086	4.8	2.1	0.0215	97.7	0.16	0.0129	12.4
PYRENE	1311 (265-6465)	0.041	0.0086	4.8	2.5	0.0215	116.3	0.16	0.0129	12.4

NOTES:
a Interim Sediment Quality Criterion, expressed as mg per kg of sediment carbon. Figures in brackets are the lower and upper 95% confidence interval values.
b Total organic carbon.
c Chemical concentration expressed in terms of kilograms of carbon.

concentration which, with 97.5% certainty, will be protective of aquatic biota. Similarly, the upper value represents a concentration at which deleterious effects are to be expected, with a similar degree of certainty, in at least some aquatic species.

To evaluate the potential impacts associated with chemical levels in sediment, chemical concentrations were compared with the available SQC and associated confidence intervals. The potential for deleterious effects exists when the average concentration at which a chemical is detected falls within the confidence interval of the particular SQC. Chemicals detected at average concentrations in the sediment below the lower value of the confidence interval are likely having no deleterious effects upon aquatic receptor organisms; similarly, chemicals detected at average concentrations above the upper value are likely having an impact on at least some species.

For the sediment quality criteria presented, the average concentration of phenanthrene in sediments adjacent to the site exceeds the lower SQC confidence interval value, but falls below the SQC itself. This indicates that there is a possibility that phenanthrene is impacting some components of the aquatic community in the Anthony Kill. Due to the fact that typical concentrations do fall below the actual SQC itself, however, this possibility is considered of minor concern. Mean concentrations of the other PAH concentrations, for which SQC are available, fell below the lower value of the respective confidence intervals and are predicted to represent no risk of adverse impacts to aquatic receptors. The potential effect on aquatic life of other sediment chemical concentrations cannot be evaluated due to the lack of

applicable standards or criteria. However, the chemicals evaluated are considered to be representative of other similar compounds.

Two site-specific factors further reduce the potential for negative impacts that elevated PAH levels in the sediments have on stream biota in the Anthony Kill. First, because the stream is fairly fast-moving (17 cfs under low flow conditions) and the substrate is rocky, with exposed bedrock in places, it is not likely that the benthic community is well developed in the vicinity of the Mechanicville site. Consequently, the abundance and diversity of aquatic receptors is expected to be quite limited. In addition, the significant reduction in PAH levels in sediment in the downstream locations indicates that there is, at present, little migration of contaminants down the Anthony Kill. These results suggest that while elevated PAH levels are present in sediments of the Anthony Kill adjacent to the site, the levels are likely having little or no impact on freshwater life. Moreover, any potential impacts would be limited to a small area adjacent to the site.

This evaluation suggests that any potential adverse effects, due to the presence of PAHs in sediments, are quite minimal.

9.3 Conclusions

An environmental risk assessment was conducted for the NYSEG Mechanicville site located in Mechanicville, New York. Potential impacts on environmental receptors from contaminated soils, surface water, groundwater, and stream sediment were evaluated.

There is no indication that any threatened, endangered or species of special concern occur in the general vicinity of the site. Aquatic organisms (including benthic species) are the environmental receptors most likely to be affected by site-related contamination.

An evaluation of the risks posed by contaminants detected in the surface water, groundwater and sediment suggests that some potential for impacts does exist for organisms existing in the Anthony Kill in a limited area adjacent to the site. However these risks appear to be relatively minor, for several reasons. Few compounds were determined to exceed their media-specific protective criteria, and the extent of these exceedances were minimal. Moreover, potential impacts were associated only with "worst case" conditions (e.g. stream low-flow conditions), with no impacts expected under more typical assumptions. Finally, there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants detected in the downstream surface water and sediment samples never exceeded relevant protective criteria, even under the most conservative assumptions.

10.0 SUMMARY AND CONCLUSIONS

The significant findings and conclusions of the Task 4 Risk Assessment are as follows:

- The contaminants of concern identified in the soil and sediment at the Mechanicville site include carcinogenic PAHs and benzene and several noncarcinogens (toluene, trimethylbenznene, ethyl benzene, styrene, PAHs, trimethylbenzene, xylenes, and cyanide).

- Under current site conditions, the potential for public exposure to the contaminants of concern is low, for two reasons: (1) most of the site is paved or covered with buildings and access to the site is limited, restricting the possibility of contact with contaminated soil or volatilized contaminants; and (2) the groundwater at the site is not used as a drinking water source.

- For the public health risk assessment, Jordan identified probable exposure pathways by which people could come in contact with site-derived chemicals under current and future conditions, assuming no remedial action at the site. These included the following: direct contact with and incidental ingestion of surface soil, subsurface soil, and Anthony Kill sediment, and inhalation of volatile compounds and soil particulates.

- Potential carcinogenic and noncarcinogenic risks to human health

were estimated under these assumed exposure pathways. Estimated incremental lifetime carcinogenic risks were within the USEPA target risk range for both the most probable and realistic worst exposure scenarios, for all of the exposure pathways identified. (USEPA guidelines state that the total incremental carcinogenic risk for an individual resulting from exposure at a hazardous waste site should be between 10^{-4} and 10^{-6}; a risk of 10^{-4} is interpreted as an additional 1 in 10,000 chance of an individual developing cancer during a lifetime, as a result of the exposure.) The noncarcinogenic hazard indices were all well below the cutoff of 1.0, indicating that no significant adverse noncarcinogenic effects would be expected. Therefore, Jordan concludes that, under the assumed conditions of exposure, no significant adverse health effects would be anticipated.

- Because Mechanicville site groundwater is not currently used or expected to be used in the foreseeable future as a source of drinking water, public health risks associated with the groundwater are negligible. Groundwater beneath the site, however, does contain several contaminants at levels above both USEPA and NY drinking water standards.

- As has been done in the past, the site health and safety plan should be followed during any future exploratory work on the Mechanicville site to prevent or minimize undue exposure.

- It is unlikely that the site is significantly utilized by wildlife because of the industrial nature of the area and the lack of suitable habitats. Aquatic organisms in the Anthony Kill, immediately adjacent to the site, were determined to be the environmental receptors most likely to be affected by site-related contamination.

- The results of the environmental risk assessment indicate that some potential for impacts does exist for aquatic organisms living in the Anthony Kill immediately adjacent to the site. However, these risks appear to be relatively minor, for several reasons. Few compounds were present at levels in excess of their environmental criteria, the extent of exceedances was minimal, and potential impacts were associated only with "worst case" conditions, with no impacts expected under typical conditions. Also, the amount of benthic habitat is limited due to the stream bed morphology and exposed bedrock, with little sediment accumulation. Finally, there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants in the downstream surface water and sediment samples did not exceed protective criteria, even under the most conservative assumptions.

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GLOSSARY OF ACRONYMS

AAL	Acceptable Ambient Level
ACGIH	American Conference of Governmental Industrial Hygienists
AIC	Acceptable Intake - chronic
ATSDR	Agency for Toxic Substances and Disease Registry
AWQC	Ambient Water Quality Criteria
BEHP	bis(2-ethylhexyl)phthalate
CC	ceiling concentration
CAG	Carcinogen Assessment Group
CNS	central nervous system
CPF	cancer potency factor
DOT	Department of Transportation
GC	gas chromatography
GI	gastrointestinal
HCN	hydrogen cyanide
HPLC	high-performance liquid chromatography
IARC	International Agency for Research on Cancer
IRIS	Integrated Risk Information System
MCLs	Maximum Contaminant Levels
MCLGs	Maximum Contaminant Level Goals
MDL	Minimum Detection Limit
mg/kg	milligrams per kilogram
MSL	mean sea level
ND	nondetect
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NTP	National Toxicology Program
NYSDEC	New York State Department of Environmental Conservation
NYSEG	New York State Electric and Gas Corporation
OSHA	Occupational Safety and Health Administration
PAHs	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PEL	permissible exposure level
PM_{10}	inhalable particulate matter
ppm	part per million
QA/QC	quality assurance/quality control

GLOSSARY OF ACRONYMS (cont.)

RfD	reference dose
SDWA	Safe Drinking Water Act
SPHEM	Superfund Public Health Evaluation Manual
SQC	sediment quality criteria
STEL	short-term (15-minute) exposure limit
SVOCs	semivolatile organic compounds
TCL	target clean-up level
TKF	toxicokinetic factor
TLV	Threshold Limit Values
TOC	total organic carbon
TSP	total suspended particulates
TWA	time-weighted average
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VOCs	volatile organic compound

APPENDIX A

SITE CHARACTERIZATION DATA
MECHANICVILLE SITE

APPENDIX A-1

GEOLOGIC PROFILES
MECHANICVILLE SITE

SUBSURFACE GEOLOGIC CONDITIONS

Subsurface geologic conditions investigated at the site are described in the following subsections. An interpretation of site stratigraphy is illustrated through geologic profiles located on a plan view of the site (Figure A-1).

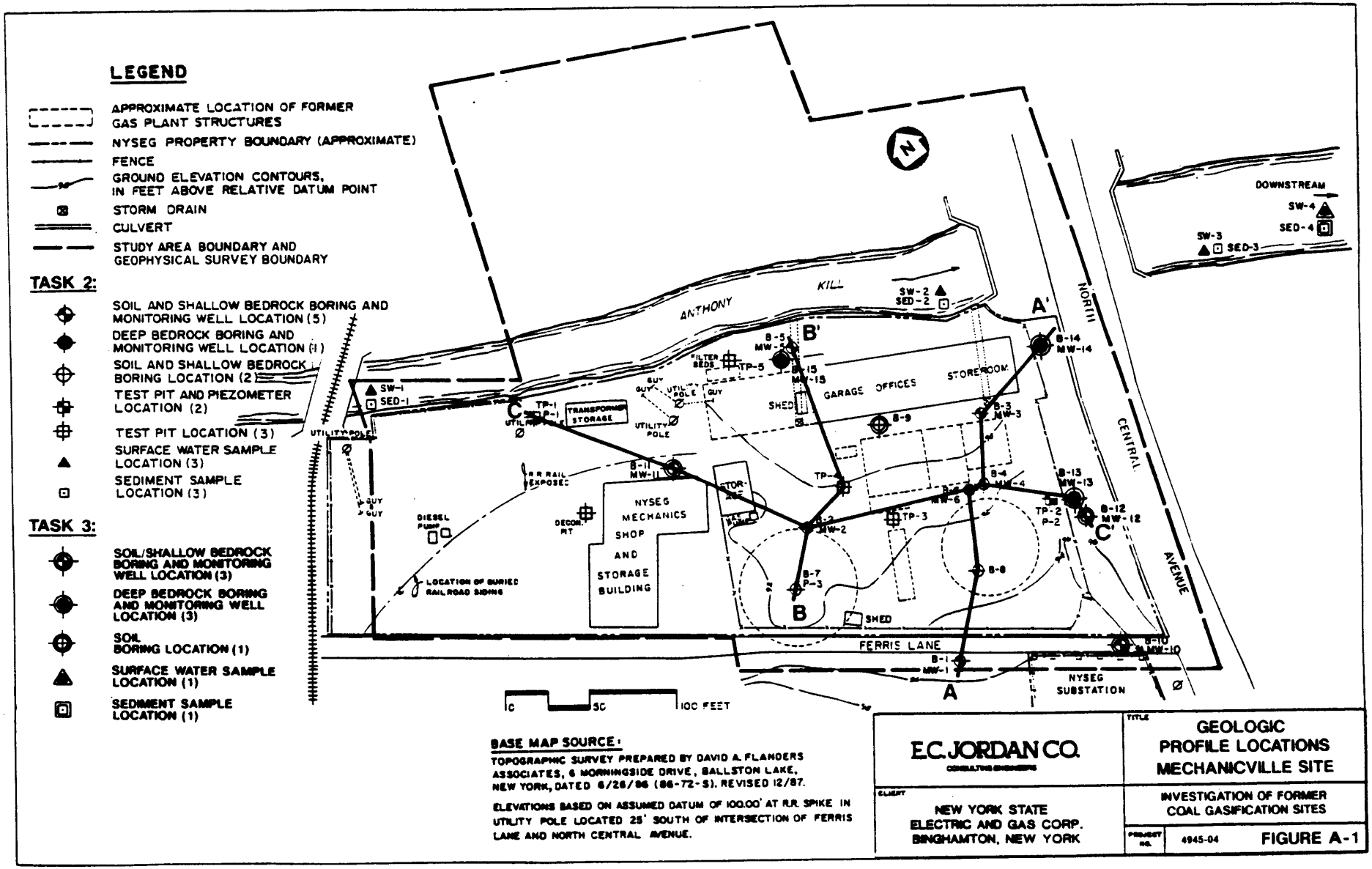
Fill. The uppermost fill consists primarily of brown to black silty sand and gravel with organic matter, ash, brick fragments, glass, and woodchips. Within the fill, there is considerable heterogeneity, including zones of clayey silt and fractured shale. The fill averages 8 to 25 feet thick across the site, but thins at the Anthony Kill (see Figures A-2 and A-3). The off-site lateral extent of the fill is unknown, but is expected to occur east of the site along North Central Avenue where the old Champlain Canal was filled.

Gravelly Sand. A brown, dense, gravelly sand was encountered in only one boring (B-1) at a depth of 8 feet below ground surface (see Figure A-2). The gravelly sand unit is 1.5 to 4 feet thick. At B-1, the gravelly sand overlies weathered bedrock. The gravelly sand may be fill or, if the area has not been disturbed, a glaciofluvial deposit.

Silty Shale. In the southeastern portion of the site, and between the present-day office building and the Anthony Kill, a silty shale unit overlies the bedrock. This unit consists of black to gray platy shale fragments with silt. The silty shale is loose, saturated, and lacks a consistent structure. These properties indicate that this area may have been disturbed by excavation, backfilling, and grading during construction of the gas plant. The silty shale in these areas is interpreted to be fill material. The silty shale unit varies in thickness across the site from 1 to 9 feet. It is thickest in the area of the former relief gas holder, near B-4, B-6, and B-8 (see Figure A-2). The off-site lateral extent of the silty shale layer is unknown.

Till. A thin, discontinuous tan to light gray silty clay till with fine gravel was encountered at the top of the bedrock surface in one boring (B-4). The pocket of till is less than one foot thick and is located along the northern edge of a small bedrock trough. The till contained some natural organic matter, suggesting that this remnant till was the original postglacial topsoil at the site. Because the till appears to be laterally discontinuous, it is not anticipated to significantly influence groundwater flow at the site.

Shale Bedrock. The bedrock at the Mechanicville site is a thinly bedded gray shale with calcite inclusions. The upper one to two feet of the bedrock is severely weathered and contains silt and dry platy shale fragments. Bedrock crops out at several locations along the southern bank of the Anthony Kill. Based on measurements taken from these outcrops, the bedrock strikes nearly east-west, and bedding dips approximately 30 degrees to the south. Bedrock core was obtained in eight borings beneath the highly weathered zone. As observed in the core, the upper portion of the bedrock contains fractures spaced between two inches to a foot apart. The primary fractures are parallel to bedding and secondary fractures exist at angles up to 90 degrees to the primary fracture. Some weathering has occurred along the fracture faces. In the deeper borings, more competent bedrock was encountered (i.e., deeper bedrock contained fewer fractures than shallow bedrock). Some of the deeper bedrock fractures contained coal tar or had a distinct coal tar odor. Groundwater movement in the bedrock occurs primarily through the fractures in response to the hydraulic gradient.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

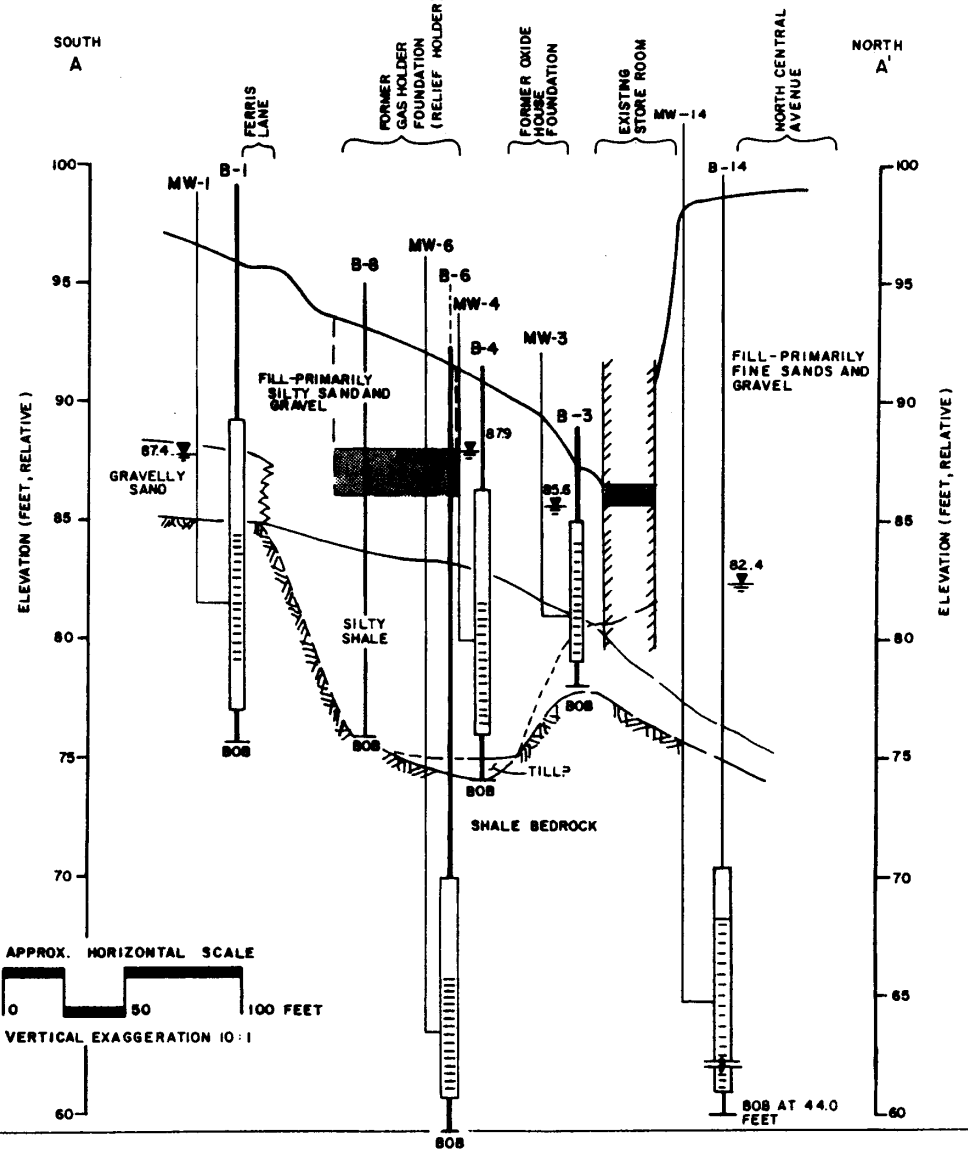
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
GEOLOGIC PROFILE LOCATIONS
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE A-1



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

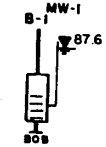
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

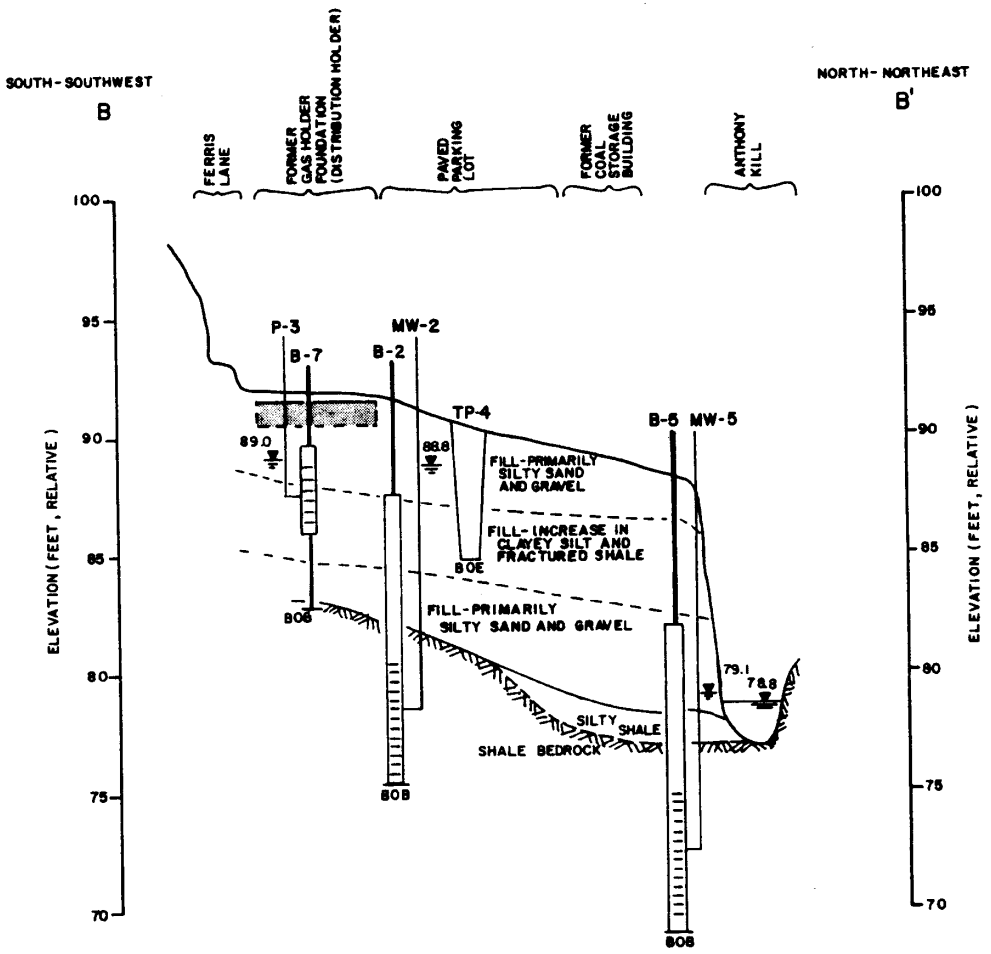
BOTTOM OF BORING

79.3 OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE A-A' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	4945-04 FIGURE A-2



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

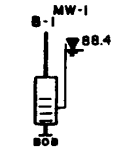
FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND

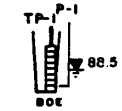


BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

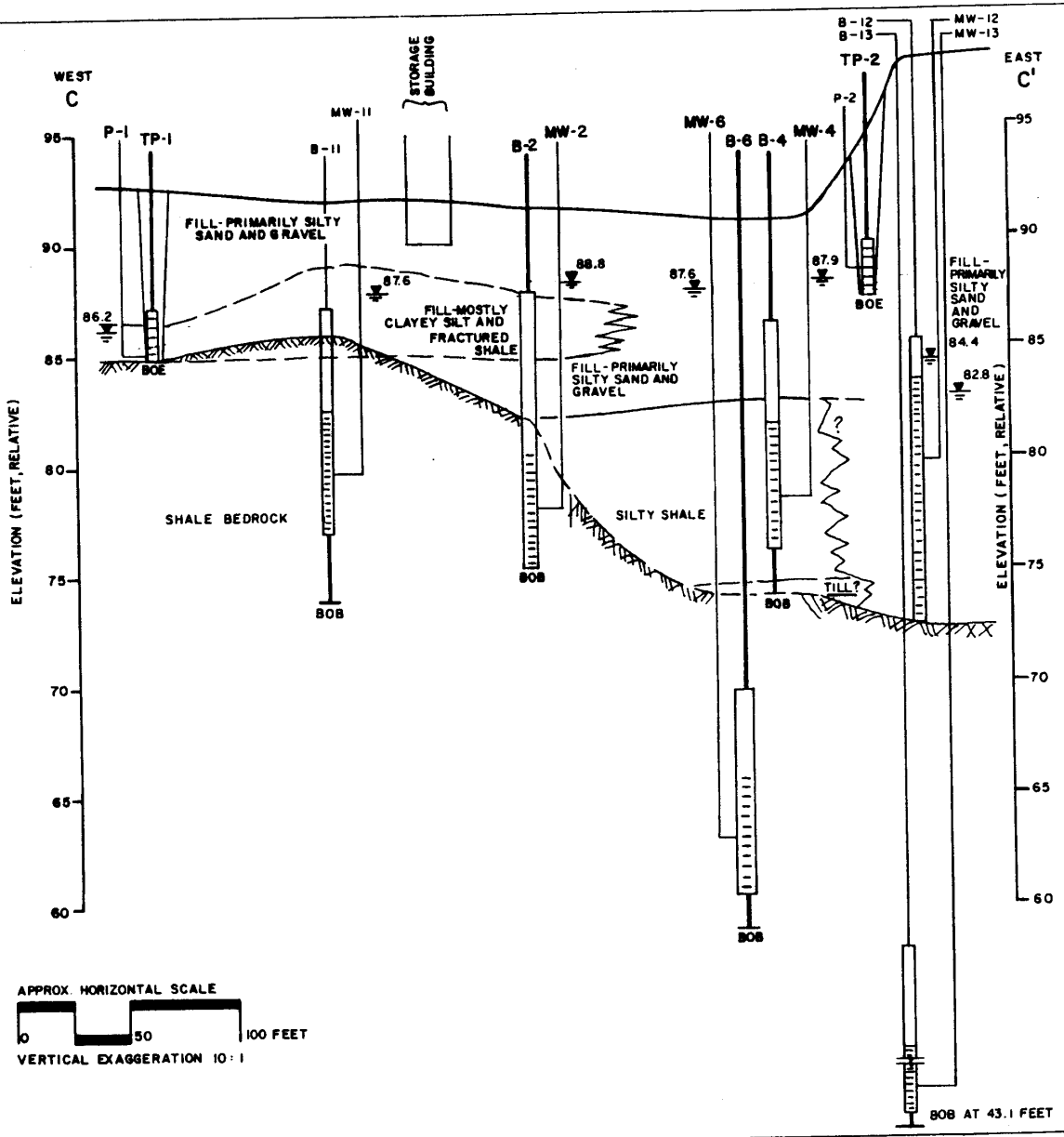


OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE B-B' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	4945-04 FIGURE A-3



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▭)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE C-C' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-04	FIGURE A-4

APPENDIX A-2

TASKS 2 AND 3 SOIL ANALYTICAL DATA
MECHANICVILLE SITE

4945TA21

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TABLE A-2-1
CHEMICALS FOUND IN TASK 2 TEST PIT SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-5/S-1	TP-5/S-1	TP-5/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC DUP	GC/MS
DATE OF SAMPLE COLLECTION	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86
SAMPLE DEPTH (FT)	6.5-7.0	7.0-7.5	3.0-4.0	3.0-4.0	3.0-4.0	4.0-6.0
ZONE SAMPLED	FILL	FILL	FILL	FILL	FILL	FILL
VOLATILE ORGANICS (MG/KG)						
-VOLATILE AROMATICS-						
BENZENE	ND (2)	ND	0.220	ND	ND	ND
TOLUENE	ND	ND	0.160	1.000	0.750	0.640
ETHYLBENZENE	ND	ND	0.150	6.600	6.100	2.200
STYRENE	ND	ND	ND	ND	ND	ND
TOTAL XYLENES	-- (3)	--	--	--	--	11.000
m-XYLENE	ND	ND	0.091	4.100	3.100	--
o-XYLENE	ND	ND	0.082	3.900	3.000	--
p-XYLENE	ND	ND	0.062	2.100	1.600	--
TRIMETHYLBENZENE	ND	ND	ND	4.600	5.100	--
n-PROPYLBENZENE	ND	ND	0.083	2.100	2.000	--
-OTHER-						
ACETONE	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	1.000
CARBON DISULFIDE	--	--	--	--	--	0.110
TOTAL VOLATILE AROMATICS	ND	ND	0.848	24.400	21.650	13.840
SEMIVOLATILE ORGANICS (MG/KG)						
-PAH-						
ACENAPHTHENE	ND	(4)	ND	290.000	(4)	140.000
ACENAPHTHYLENE	ND	ND	(5)	(5)	(5)	33.000
ANTHRACENE	ND	ND	25.000	470.000	220.000	67.000
BENZO(b)FLUORANTHENE	ND	ND	23.000	ND	ND	13.000
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	21.000
BENZO(g,h,i)PERYLENE	ND	ND	18.000	ND	ND	13.000
BENZO(a)ANTHRACENE	ND	ND	(6)	(6)	ND	35.000
BENZO(a)PYRENE	ND	(4)	13.000	(4)	ND	36.000
CHRYSENE	ND	ND	59.000	110.000	ND	32.000
DIBENZO(a,h)ANTHRACENE	ND	ND	13.000	ND	ND	(4)
FLUORANTHENE	ND	45.000	84.000	880.000	220.000	78.000
FLUORENE	ND	18.000	31.000	620.000	2600.000	89.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	19.000	350.000	5200.000	120.000
PHENANTHRENE	ND	12.000	31.000	810.000	260.000	210.000
PYRENE	ND	45.000	96.000	1100.000	ND	250.000
-OTHER-						
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	ND
TOTAL PAH	ND	120.000	412.000	4630.000	8500.000	1137.000

11/21/89

TABLE A-2-1 (CONT.)
CHEMICALS FOUND IN TASK 2 TEST PIT SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-5/S-1	TP-5/S-1	TP-5/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC DUP	GC/MS
DATE OF SAMPLE COLLECTION	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86
SAMPLE DEPTH (FT)	6.5-7.0	7.0-7.5	3.0-4.0	3.0-4.0	3.0-4.0	4.0-6.0
ZONE SAMPLED	FILL	FILL	FILL	FILL	FILL	FILL
OTHER CHEMICALS (MG/KG)						
-METALS-						
IRON	27000	35000	27000	31000	35000	--
ZINC	260	120	87	79	220	--
-CYANIDE-						
TOTAL CYANIDE	ND	2.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	2.0	ND	ND	ND	--
-OTHER-						
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	ND	--
TOTAL ORGANIC CARBON	8300	1400	10000	30000	26000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED.
(3) -- = NOT ANALYZED OR NOT APPLICABLE.
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

11/21/89

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TABLE A-2-2
CHEMICALS FOUND IN TASK 2 SOIL BORING SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	GC/MS
DATE OF SAMPLE COLLECTION	7/23/86	8/1/86	8/5/86	7/29/86	8/4/86	7/31/86	8/6/86	8/6/86
SAMPLE DEPTH (FT)	8.0-10.0	8.0-9.5	4.0-6.0	6.0-8.0	10.0-11.0	7.0-9.0	13.5-15.5	15.5-17.5
ZONE SAMPLED	GRAVELLY SAND	FILL	FILL AND SILTY SHALE	FILL AND SILTY SHALE	SILTY SHALE	FILL	SILTY SHALE	SILTY SHALE
VOLATILE ORGANICS (MG/KG)								
-VOLATILE AROMATICS-								
BENZENE	ND (2)	ND	13.000	ND	0.880	2.400	640.000	380.000
TOLUENE	ND	ND	8.600	0.310	1.600	1.300	840.000	660.000
ETHYLBENZENE	ND	ND	120.000	2.300	6.300	0.170	440.000	250.000
STYRENE	ND	ND	ND	ND	ND	0.180	780.000	720.000
TOTAL XYLENES	-- (3)	--	--	--	--	--	--	1400.000
m-XYLENE	ND	ND	25.000	0.640	1.500	0.180	400.000	--
o-XYLENE	ND	ND	44.000	2.400	ND	ND	320.000	--
p-XYLENE	ND	ND	25.000	0.870	1.500	0.075	210.000	--
TRIMETHYLBENZENE	ND	ND	35.000	3.800	4.200	ND	170.000	--
n-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
ACETONE	--	--	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	--	--	ND
CARBON DISULFIDE	--	--	--	--	--	--	--	ND
TOTAL VOLATILE AROMATICS	ND	ND	270.600	10.320	15.980	4.305	3800.000	3410.000
SEMIVOLATILE ORGANICS (MG/KG)								
-PAH-								
ACENAPHTHENE	9.000	(4)	380.000	42.000	250.000	(4)	600.000	(4)
ACENAPHTHYLENE	ND	(5)	(5)	(5)	(5)	(5)	(5)	670.000
ANTHRACENE	8.000	(4)	670.000	80.000	450.000	(4)	550.000	270.000
BENZO(b)FLUORANTHENE	5.700	ND	(4)	ND	120.000	(4)	200.000	(4)
BENZO(k)FLUORANTHENE	(4)	ND	240.000	ND	ND	0.980	ND	(4)
BENZO(g,h,i)PERYLENE	(4)	ND	(4)	ND	ND	1.400	140.000	(4)
BENZO(a)ANTHRACENE	(6)	(6)	(6)	(6)	ND	(6)	(6)	(4)
BENZO(a)PYRENE	6.200	ND	200.000	(4)	94.000	1.100	140.000	(4)
CHRYSENE	17.000	(4)	780.000	100.000	ND	0.800	480.000	(4)
DIBENZO(a,h)ANTHRACENE	6.300	ND	ND	ND	ND	1.300	ND	ND
FLUORANTHENE	44.000	(4)	1100.000	130.000	750.000	0.890	850.000	290.000
FLUORENE	34.000	(4)	1300.000	120.000	620.000	1.100	2100.000	380.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND	ND	(4)
NAPHTHALENE	ND	(4)	2300.000	44.000	760.000	1.900	1500.000	2500.000
PHENANTHRENE	13.000	(4)	940.000	110.000	630.000	0.870	760.000	870.000
PYRENE	11.000	(4)	1400.000	170.000	980.000	0.870	1400.000	460.000
-OTHER-								
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	ND
TOTAL PAH	154.200	(4)	9310.000	796.000	4654.000	11.210	8720.000	5440.000

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TABLE A-2-2 (CONT.)
CHEMICALS FOUND IN TASK 2 SOIL BORING SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	GC/MS
DATE OF SAMPLE COLLECTION	7/23/86	8/1/86	8/5/86	7/29/86	8/4/86	7/31/86	8/6/86	8/6/86
SAMPLE DEPTH (FT)	8.0-10.0	8.0-9.5	4.0-6.0	6.0-8.0	10.0-11.0	7.0-9.0	13.5-15.5	15.5-17.5
ZONE SAMPLED	GRAVELLY SAND	FILL	FILL AND SILTY SHALE	FILL AND SILTY SHALE	SILTY SHALE	FILL	SILTY SHALE	SILTY SHALE
OTHER CHEMICALS (MG/KG)								
-METALS-								
IRON	34000	30000	31000	35000	27000	26000	19000	--
ZINC	190	75	130	80	1600	320	61	--
-CYANIDE-								
TOTAL CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
TOTAL RECOVERABLE PHENOLICS	ND	ND	3.6	ND	2.6	ND	ND	--
TOTAL ORGANIC CARBON	110000	6800	100000	23000	110000	76000	190000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

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TABLE A-2-3
TASK 3 SOIL BORING ANALYTICAL RESULTS
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-09(S-1)	B-10(S-2)	B-10(S-2) DUP-503	B-12(S-2)	B-14(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/19/87	11/17/87	11/19/87
DEPTH (FT.):	4-5.5	16-18	16-18	22-24	18-20	4-8
ZONE SAMPLED:	SILTY SAND	SILTY SAND	SILTY SAND	SILTY FINE SAND	SILTY FINE SAND	FILL
VOLATILE ORGANICS (MG/KG) (1)						
-VOLATILE AROMATICS-						
BENZENE	-- (2)	--	--	ND	--	ND
TOLUENE	--	--	--	ND	--	ND
ETHYLBENZENE	--	--	--	ND	--	0.570
STYRENE	--	--	--	ND	--	ND
TOTAL XYLENES	--	--	--	ND	--	0.880
-OTHER-						
METHYLENE CHLORIDE	--	--	--	ND	--	ND
2-BUTANONE	--	--	--	ND	--	ND
TOTAL VOLATILE AROMATICS	--	--	--	ND	--	1.4
TOTAL VOLATILE ORGANICS	--	--	--	ND	--	1.4
SEMIVOLATILE ORGANICS (MG/KG) (1)						
-PAH-						
ACENAPHTHENE	T (3)	T	0.53	2.35	ND	ND
ACENAPHTHYLENE	ND (4)	T	T	ND	ND	ND
ANTHRACENE	T	T	T	0.8	ND	ND
BENZO(b)FLUORANTHENE	T	T	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	(5)	(5)	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	T	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	T	T	T	ND	ND	ND
BENZO(a)PYRENE	T	T	T	ND	ND	ND
CHRYSENE	T	T	T	ND	ND	ND
FLUORANTHENE	T	T	T	1.01	ND	ND
FLUORENE	T	T	T	1.25	ND	ND
INDENO(1,2,3-cd)-PYRENE	T	ND	ND	ND	ND	ND
NAPHTHALENE	60	T	0.45	ND	ND	ND
PHENANTHRENE	58	0.88	1.1	0.8	ND	ND
PYRENE	T	0.6	T	1.39	ND	ND

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TABLE A-2-3 (CONT.)
TASK 3 SOIL BORING ANALYTICAL RESULTS
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-09(S-1)	B-10(S-2)	B-10(S-2) DUP-503	B-12(S02)	B-14(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/19/87	11/17/87	11/19/87
DEPTH (FT.):	4-5.5	16-18	16-18	22-24	18-20	4-8
ZONE SAMPLED:	SILTY SAND	SILTY SAND	SILTY SAND	SILTY FINE SAND	SILTY FINE SAND	FILL
-OTHER-						
2-Methylnaphthalene	T	T	T	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	R(6)	T	R
TOTAL PAH	120	1.5	2.1	7.6	ND	ND
TOTAL SEMI-VOLATILE ORGANIC	120	1.5	2.1	7.6	T	ND
OTHER CHEMICALS (MG/KS (MG/KG)						
-METALS-						
IRON	28000	24000	22000	18000	21000	23000
ZINC	59	42	44	32	49	390
-CYANIDE-						
TOTAL CYANIDE	ND	ND	ND	ND	ND	ND
UNDISTILLED CYANIDE (7)	ND	ND	ND	ND	ND	ND
-OTHER-						
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	ND	2.6
TOTAL ORGANIC CARBON	33000	22000	24000	22000	32000	42000

NOTES:
(1) VOCs and SVOCs analyzed by GC/MS (USEPA Method 8240 and 8270).
(2) -- = Not analyzed (Laboratory Error).
(3) T = Trace concentrations detected below the quantifiable reporting limit.
(4) ND = Not Detected.
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Data rejected because analysis of blank indicated sampling or lab-derived contamination.
(7) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present.

APPENDIX A-3

GROUNDWATER ANALYTICAL DATA
MECHANICVILLE SITE

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TABLE A-3-1
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)															
-VOLATILE AROMATICS-															
BENZENE	ND (2)	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	0.530	0.560	0.608	0.429	0.230
TOLUENE	ND	ND	(4)	ND	ND	ND	ND	ND	ND	ND	0.100	0.120	(4)	0.0576	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.640	0.910	0.719	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	0.010	ND	ND	--	ND	ND	ND	ND	--	0.770	0.640	0.0329	0.379
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.110	--	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.300	--	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.140	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--
-OTHER-															
ACETONE	--	0.220	3.780	0.059	ND	--	ND	ND	0.0536	ND	--	ND	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	ND	--	ND	ND	0.0086	ND	--	ND	ND	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	0.0155	ND	ND	ND	ND	ND	ND	ND	1.820	2.360	1.967	0.5195	0.609
SEMIVOLATILE ORGANICS (MG/L)															
-PAH-															
ACENAPHTHENE	0.110	0.022	0.012	ND	ND	ND	ND	ND	1.030	0.902	ND	0.420	ND	0.537	0.524
ACENAPHTHYLENE	0.250	0.048	0.018	ND	ND	ND	ND	ND	ND	0.084	2.500	(4)	ND	ND	ND
ANTHRACENE	(4)	(4)	0.031	ND	ND	ND	ND	ND	ND	ND	0.300	(4)	ND	0.226	0.140
BENZO(b)FLUORANTHENE	ND	(4,5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	(5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	(6)	(4)	ND	0.102	ND
BENZO(a)PYRENE	(4)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.280	(4)	ND	ND	ND
CHRYSENE	0.024	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.880	(4)	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.061	0.024	ND	ND	ND	ND	ND	ND	0.930	ND	2.700	(4)	0.680	0.223	0.174
FLUORENE	0.240	0.026	0.010	ND	ND	ND	ND	ND	ND	ND	4.700	(4)	0.660	0.197	0.198
INDENO(1,2,3,-cd)PYRENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	(4)	ND	ND	ND
NAPHTHALENE	1.200	0.260	0.136	ND	ND	ND	ND	ND	6.034	0.445	13.000	2.600	4.130	2.480	1.914
PHENANTHRENE	0.051	0.039	0.028	ND	ND	ND	ND	ND	1.700	ND	1.300	0.440	ND	0.624	0.140
PYRENE	0.044	0.025	0.017	(4)	ND	ND	ND	ND	ND	ND	0.660	0.200	0.690	0.431	0.264
-OTHER-															
BIS(2-ETHYLHEXYL)PHTHALATE	--	0.073	0.016	(4)	0.040	--	0.016	0.018	1.710	ND	--	0.250	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.144	--	ND	ND	ND	0.856
TOTAL PAH	1.980	0.444	0.252	(4)	ND	ND	ND	ND	9.694	1.431	26.320	3.660	6.160	4.820	3.354

TABLE A-3-1 (CONT.)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS DUP	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)															
-METALS-															
IRON	ND	--	ND	ND	0.05	0.50	0.07	0.06	ND	0.10	20.00	--	6.60	9.70	4.90
ZINC	ND	--	0.007	ND	ND	ND	0.072	0.005	ND	0.09	0.11	--	0.008	0.03	0.02
-CYANIDE-															
TOTAL CYANIDE (12)	ND	--	0.01	ND	0.01	ND	ND	ND	ND	0.01	0.46	--	ND	0.320	0.42
AMENABLE CYANIDE	ND	--	--	ND	ND	ND	ND	--	ND	ND	ND	--	--	ND	ND
FERRO-FERRI CYANIDE	ND	--	0.03	ND	0.01	ND	ND	0.02	ND	0.01	0.46	--	0.05	0.320	0.42
-OTHER-															
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	ND	ND	--	--	--	0.008	0.020	--	--	--	0.015
TOTAL ORGANIC CARBON	4.1	--	14	3.2	4.2	4.6	9	6	3.7	4.1	11	--	24	15.3	11
SULFATE	--	--	74.6	--	--	--	65.2	60.6	--	--	--	--	17.7	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	1.730	0.396	0.250	0.000	ND	ND	ND	ND	9.694	1.355	25.660	6.020	8.127	5.340	3.978
FIELD MEASUREMENTS															
pH (8)	5.3	5.3	6.7	7.5	6.6	6.0	6.4	6.4	7.6	6.8	(11)	(11)	(11)	(11)	(11)
CONDUCTIVITY (9)	1830	1830	370	2040	1315	1680	786	786	1890	1225	(11)	(11)	(11)	(11)	(11)
TEMPERATURE (10)	11.2	11.2	8.4	5.9	10.0	17.8	13.3	13.3	3.2	12.6	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED.
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS.

TABLE A-3-1 (CONT.)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)														
-VOLATILE AROMATICS-														
BENZENE	0.950	0.673	0.482	0.494	0.240	0.298	0.412	0.440	1.900	1.600	1.690	1.520	1.630	1.613
TOLUENE	0.760	0.487	0.335	0.409	0.200	0.295	0.400	0.362	1.600	1.200	0.815	0.353	0.353	0.616
ETHYLBENZENE	2.300	0.803	1.140	0.378	0.071	0.270	0.541	0.464	1.700	1.300	0.855	0.943	1.500	1.956
STYRENE	ND	ND	0.051	ND	ND	ND	ND	ND	0.920	0.610	ND	ND	1.370	ND
TOTAL XYLENE	--	1.230	1.440	1.347	--	ND	0.273	0.227	--	--	1.220	1.270	ND	1.452
m - XYLENE	0.850	--	--	--	0.065	--	--	--	1.200	1.000	--	--	--	--
o - XYLENE	0.810	--	--	--	0.120	--	--	--	0.940	0.770	--	--	--	--
p - XYLENE	0.430	--	--	--	0.058	--	--	--	0.570	0.450	--	--	--	--
TRIMETHYLBENZENE	0.088	--	--	--	0.046	--	--	--	0.120	0.100	--	--	--	--
-OTHER-														
ACETONE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.850	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.350	ND	ND	ND
TOTAL VOLATILE AROMATICS	6.188	3.193	3.448	2.628	0.800	0.863	1.626	1.493	8.950	7.030	4.580	4.086	4.853	5.637
SEMIVOLATILE ORGANICS (MG/L)														
-PAH-														
ACENAPHTHENE	0.980	0.240	0.187	0.218	0.260	17.300	150.280	195.500	37.000	48.000	ND	0.890	1.200	3.580
ACENAPHTHYLENE	8.300	ND	0.041	0.218	2.400	ND	150.280	197.200	26.000	59.000	ND	ND	ND	3.300
ANTHRACENE	0.510	ND	ND	ND	ND	7.600	178.330	227.800	11.000	16.000	ND	ND	ND	5.290
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	4.000	6.600	ND	ND	ND	0.540
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	7.200	4.100	ND	ND	ND	0.580
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	ND	ND	ND	ND	ND	18.360	23.970	(6)	(6)	ND	ND	ND	ND
BENZO(a)PYRENE	0.290	ND	ND	ND	ND	ND	ND	ND	4.800	6.500	ND	ND	ND	0.560
CHRYSENE	1.400	ND	ND	ND	ND	ND	ND	26.350	25.000	17.000	ND	ND	ND	0.680
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	4.200	ND	0.014	ND	0.150	6.300	43.860	59.500	93.000	74.000	ND	ND	1.310	2.510
FLUORENE	13.000	ND	0.026	0.100	3.900	7.600	62.220	80.920	120.000	140.000	ND	ND	ND	1.980
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	33.000	6.120	3.970	2.392	11.000	39.400	331.500	413.100	280.000	300.000	6.980	5.040	5.910	18.760
PHENANTHRENE	2.000	ND	ND	ND	ND	6.700	178.330	227.800	36.000	45.000	ND	1.340	1.530	5.290
PYRENE	1.000	ND	0.027	ND	(4)	8.100	93.450	112.370	36.000	30.000	ND	0.843	ND	ND
-OTHER-														
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	0.013	ND	--	ND	ND	ND	--	--	ND	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	0.580	--	ND	197.200	247.690	--	--	ND	ND	ND	7.170
TOTAL PAH	64.680	6.360	4.265	2.928	17.710	93.000	1206.610	1564.510	680.000	746.200	6.980	8.113	9.950	43.070

TABLE A-3-1 (CONT.)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)														
-METALS-														
IRON	61.00	6.50	3.86	5.10	1.10	7.50	5.10	9.40	5.50	14.00	7.60	10.10	9.70	4.80
ZINC	0.29	0.02	0.02	0.01	ND	0.021	0.16	0.33	ND	ND	ND	0.01	0.01	0.03
-CYANIDE-														
TOTAL CYANIDE (13)	0.072	0.06	0.050	0.06	0.013	0.02	0.01	ND	0.075	0.081	0.12	0.060	0.050	0.07
AMENABLE CYANIDE	ND	0.04	ND	ND	0.013	--	ND	ND	0.026	0.024	0.10	ND	ND	ND
FERRO-FERRI CYANIDE	0.072	0.02	0.050	0.06	ND	0.06	0.01	0.01	0.049	0.057	0.02	0.060	0.050	0.07
-OTHER-														
TOTAL RECOVERABLE PHENOLICS	0.043	--	--	0.014	0.019	--	0.43	0.017	0.050	0.043	--	--	--	0.031
TOTAL ORGANIC CARBON	12	20	5.2	9.4	7.4	30	16	12	16	16	28	12.5	13.7	14
SULFATE	--	30.9	--	--	--	84.0	--	--	--	--	14.5	--	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	62.611	9.553	7.621	5.352	16.129	93.863	1058.386	1368.820	662.080	693.663	11.910	12.199	13.433	45.438
FIELD MEASUREMENTS														
pH (8)	(11)	(11)	(11)	(11)	5.8	6.4	(11)	(11)	5.7	5.7	6.9	7.7	7.7	6.7
CONDUCTIVITY (9)	(11)	(11)	(11)	(11)	1640	680	(11)	(11)	1930	1930	1138	2300	2300	1385
TEMPERATURE (10)	(11)	(11)	(11)	(11)	12.7	12.0	(11)	(11)	16.0	16.0	14.3	6.0	6.0	13.1

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED.
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) MW-5 ROUND 3 SAMPLING WAS NOT CONDUCTED DUE TO WEATHER OBSTRUCTIONS.
(13) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS.

11/21/89

TA-3-21

TABLE A-3-2
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	---------- MW-01 ----------		---------- MW-02 ----------		
SCREENED ZONE	--- SOIL/SHALLOW BEDROCK ---		---------- SOIL/SHALLOW BEDROCK ----------		
SAMPLE IDENTIFIER	MW-01	MW-01	MW-02	MW-02	MW-02 DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	12/22/87	3/29/88	3/29/88
- VOLATILE AROMATICS -		** Volatile Organics (mg/l) (1) **			
Benzene	ND (2)	ND	ND	ND	-- (4)
Toluene	ND	ND	ND	ND	--
Ethylbenzene	ND	ND	ND	ND	--
Styrene	ND	ND	ND	ND	--
Total Xylenes	ND	ND	ND	ND	--
- OTHER -					
Methylene Chloride	ND	ND	ND	ND	--
2-Butanone	ND	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	ND	--
2-Hexanone	ND	ND	ND	ND	--
Chlorobenzene	ND	T	ND	T	--
1,1-Dichloroethane	ND	ND	ND	ND	--
Trichloroethene	ND	ND	ND	ND	--
Total Volatile Aromatics	ND	ND	ND	ND	--
Total Volatile Organics	ND	T	ND	T	--
		** Semi-Volatile Organics (mg/l) (1) **			
- PAH -					
Acenaphthene	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene (9)	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
Indeno (1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-01		MW-02		
SCREENED ZONE	SOIL/SHALLOW BEDROCK		SOIL/SHALLOW BEDROCK		
SAMPLE IDENTIFIER	MW-01	MW-01	MW-02	MW-02	MW-02 DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	12/22/87	3/29/88	3/29/88
- OTHER -					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4 - Dinitrotoluene	ND	ND	ND	ND	ND
2,6 - Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitrol-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	T (3)	ND	ND	ND	ND
Total PAH	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	T	ND	T	ND	ND
** Other Chemicals (mg/l) **					
- DISSOLVED METALS -					
Iron	0.07	ND	0.04	0.12	0.23
Zinc	ND	0.02	ND	0.02	0.1
- CYANIDE -					
Total Cyanide (13)	0.01	ND	ND	ND	ND
Undistilled Cyanide (10)	ND	ND	ND	ND	ND
- OTHER -					
Total Recoverable Phenolics	0.006	ND	0.016	0.006	0.011
Total Organic Carbon	3.4	2.8	2.9	2.2	2.8
Total New York State Regulated Organics (5)	0.006	ND	0.0160	0.006	0.011
pH (6)	7.5	6.5	7.7	6.6	6.7

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-01		MW-02		
SCREENED ZONE	SOIL/SHALLOW BEDROCK		SOIL/SHALLOW BEDROCK		
SAMPLE IDENTIFIER	MW-01	MW-01	MW-02	MW-02	MW-02 DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	12/22/87	3/29/88	3/29/88
- OTHER -					
Conductivity (7)	1125	1389	1153	1159	1302
Temperature (8)	11.1	10.2	11.9	7.0	7.0

NOTES:

(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not Detected.
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN - Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-03		MW-04		MW-05	
SCREENED ZONE	SOIL		SOIL		SOIL/SHALLOW BEEDROCK	
SAMPLE IDENTIFIER	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
- VOLATILE AROMATICS -	** Volatile Organics (mg/l) (1) **					
Benzene	0.17	0.15	0.26	0.2	0.15	T
Toluene	0.021	ND	0.23	ND	0.094	ND
Ethylbenzene	0.11	ND	0.058	0.17	ND	0.054
Styrene	ND (2)	ND	ND	ND	ND	ND
Total Xylenes	0.40	0.42	2.2	1.3	0.19	0.16
- OTHER -						
Methylene Chloride	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	T	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.70	0.57	2.8	1.67	0.43	0.214
Total Volatile Organics	0.70	0.57	2.8	1.67	0.43	0.214
	** Semi-Volatile Organics (mg/l) (1) **					
- PAH -						
Acenaphthene	30	ND	T	T	0.51	22
Acenaphthylene	T (3)	ND	T	T	T	2.7
Anthracene	9.7	ND	ND	T	T	ND
Benzo(b)fluoranthene	T	ND	ND	ND	ND	ND
Benzo(k)fluoranthene (9)	ND	ND	ND	ND	ND	1.3
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	ND	ND	ND	2.6
Benzo(a)Pyrene	T	T	ND	ND	ND	2.4
Chrysene	T	ND	ND	ND	ND	ND
Fluoranthene	12	T	ND	T	T	9.4
Fluorene	13	ND	T	T	T	10
Indeno (1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	64	ND	1.9	1.4	3.6	30
Phenanthrene	38	ND	T	T	0.32	26
Pyrene	21	ND	ND	ND	T	1.4

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-03		MW-04		MW-05	
SCREENED ZONE	SOIL		SOIL		SOIL/SHALLOW BEEDROCK	
SAMPLE IDENTIFIER	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
- OTHER -						
2,4 - Dimethylphenol	ND	ND	ND	ND	ND	ND
2,4 - Dinitrotoluene	ND	T	ND	ND	ND	ND
2,6 - Dinitrotoluene	ND	ND	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND	ND	T
2-Methylnaphthalene	34	ND	0.65	0.78	1.1	35
2-Methylphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	T	ND	ND	ND	T
3-Nitroaniline	ND	ND	ND	ND	ND	T
4,6 - Dinitrol-2-Methylphenol	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	T
4-Nitoaniline	ND	T	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	T	ND	ND
Dibenzofuran	T	T	ND	ND	T	2
Hexachloroethane	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	T
Nitrobenzene	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	T	ND
Total PAH	190	ND	1.9	1.4	4.4	110
Total Semi-Volatile Organics	220	ND	2.6	2.18	5.5	142.2
** Other Chemicals (mg/l) **						
- DISSOLVED METALS -						
Iron	8.8	14.4	20	9.25	13	25
Zinc	0.11	0.2	0.52	0.05	0.54	1.09
- CYANIDE -						
Total Cyanide (13)	ND	0.27	0.05	0.05	ND	0.05
Undistilled Cyanide (10)	--	ND	ND	ND	ND	ND
- OTHER -						
Total Recoverable Phenolics	17	0.025	0.021	0.027	0.028	0.026
Total Organic Carbon	50,000 (12)	42	8.4	9.9	8,000 (12)	21
Total New York State Regulated Organics (5)	237.7	0.595	5.421	3.877	5.598	142.34
pH (6)	(11)	(11)	(11)	(11)	(11)	(11)

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-06		MW-10	
SCREENED ZONE	BEDROCK		SOIL	
SAMPLE IDENTIFIER	MW-06	MW-06	MW-10	MW-10
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/29/88
- VOLATILE AROMATICS -		** Volatile Organics (mg/l) (1) **		
Benzene	0.88	0.06	ND (2)	-- (4)
Toluene	0.13	ND	ND	--
Ethylbenzene	0.14	ND	ND	--
Styrene	ND	ND	ND	--
Total Xylenes	2.4	0.04	0.012	--
- OTHER -				
Methylene Chloride	ND	ND	ND	--
2-Butanone	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	--
2-Hexanone	ND	ND	ND	--
Chlorobenzene	ND	ND	ND	--
1,1-Dichloroethane	ND	ND	ND	--
Trichloroethene	ND	ND	ND	--
Total Volatile Aromatics	3.6	0.1	0.012	--
Total Volatile Organics	3.6	0.1	0.012	--
		** Semi-Volatile Organics (mg/l) (1) **		
- PAH -				
Acenaphthene	2.2	T	0.10	T
Acenaphthylene	T	T	T (3)	ND
Anthracene	0.89	T	T	ND
Benzo(b)fluoranthene	T	T	ND	T
Benzo(k)fluoranthene (9)	T	ND	ND	ND
Benzo(g,h,i)Perylene	T	ND	ND	ND
Benzo(a)Anthracene	T	T	ND	T
Benzo(a)Pyrene	T	ND	ND	ND
Chrysene	T	ND	ND	T
Fluoranthene	1.0	T	T	ND
Fluorene	1.1	ND	0.028	T
Indeno (1,2,3-cd)Pyrene	T	ND	ND	ND
Naphthalene	12	ND	ND	ND
Phenanthrene	3.5	T	T	ND
Pyrene	1.6	T	T	ND

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-06		MW-10	
SCREENED ZONE	BEDROCK		SOIL	
SAMPLE IDENTIFIER	MW-06	MW-06	MW-10	MW-10
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/29/88
- OTHER -				
2,4 - Dimethylphenol	ND	ND	ND	ND
2,4 - Dinitrotoluene	ND	ND	ND	ND
2,6 - Dinitrotoluene	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND
2-Methylnaphthalene	4.6	ND	T	ND
2-Methylphenol	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND
4,6 - Dinitrol-2-Methylphenol	ND	ND	ND	T
4-Methylphenol	ND	ND	ND	ND
4-Nitoaniline	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	T
Benzoic Acid	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND
Dibenzofuran	T	ND	T	ND
Hexachloroethane	ND	ND	ND	T
N-Nitrosodiphenylamine	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND
Phenol	ND	T	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	0.41
Total PAH	22	ND	0.13	ND
Total Semi-Volatile Organics	27	ND	0.13	0.41
			** Other Chemicals (mg/l) **	
- DISSOLVED METALS -				
Iron	11	5.95	0.64	1.41
Zinc	0.048	0.02	ND	0.02
- CYANIDE -				
Total Cyanide (13)	0.06	0.01	0.01	ND
Undistilled Cyanide (10)	0.07	ND	ND	ND
- OTHER -				
Total Recoverable Phenolics	0.056	0.037	ND	0.029
Total Organic Carbon	10,000 (12)	31	61	11
Total New York State Regulated Organics (5)	30.656	0.137	0.142	0.439
pH (6)	7.7	(11)	7.5	6.6

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-06		MW-10	
SCREENED ZONE	BEDROCK		SOIL	
SAMPLE IDENTIFIER	MW-06	MW-06	MW-10	MW-10
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/29/88
- OTHER -				
Conductivity (7)	1154	(11)	1262	1576
Temperature (8)	12.0	(11)	12.4	9.6

NOTES:

(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not Detected.
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN - Free and dissociable CN-; method used and detected most, but not necessa all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-11			MW-12	
SCREENED ZONE	SOIL/SHALLOW BEDROCK			SOIL	
SAMPLE IDENTIFIER	MW-11	MW-11 DUP	MW-11	MW-12	MW-12
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	12/22/87	3/29/88
- VOLATILE AROMATICS -	** Volatile Organics (mg/l) (1) **				
Benzene	ND	ND	ND	ND	0.12
Toluene	ND	ND	ND	ND	T
Ethylbenzene	ND	ND	ND	ND	1.1
Styrene	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	0.075	1.2
- OTHER -					
Methylene Chloride	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	T
1,1,1-Trichloroethane	0.0026	0.0044	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Total Volatile Aromatics	ND	ND	ND	0.075	2.4
Total Volatile Organics	0.0026	0.0044	ND	0.075	2.4
	** Semi-Volatile Organics (mg/l) (1) **				
- PAH -					
Acenaphthene	ND	ND	ND	ND	210
Acenaphthylene	ND	ND	ND	ND	T
Anthracene	ND	ND	ND	ND	86
Benzo(b)fluoranthene	ND	ND	ND	ND	T
Benzo(k)fluoranthene (9)	ND	ND	ND	ND	T
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	T
Benzo(a)Pyrene	ND	ND	ND	ND	T
Chrysene	ND	ND	ND	ND	T
Fluoranthene	ND	ND	ND	ND	82
Fluorene	ND	ND	ND	ND	110
Indeno (1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	580
Phenanthrene	ND	ND	ND	ND	320
Pyrene	ND	ND	ND	ND	130

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-11			MW-12	
SCREENED ZONE	SOIL/SHALLOW BEDROCK			SOIL	
SAMPLE IDENTIFIER	MW-11	MW-11 DUP	MW-11	MW-12	MW-12
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	12/22/87	3/29/88
- OTHER -					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4 - Dinitrotoluene	ND	ND	ND	ND	ND
2,6 - Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	540
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	T	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitrol-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitoaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	T
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	T	ND	T	ND
Total PAH	ND	ND	ND	ND	1500
Total Semi-Volatile Organics	ND	T	ND	ND	2100
** Other Chemicals (mg/l) **					
- DISSOLVED METALS -					
Iron	0.15	0.26	0.28	2.7	4.45
Zinc	ND	ND	0.01	ND	0.02
- CYANIDE -					
Total Cyanide (13)	ND	ND	ND	0.8	0.58
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
- OTHER -					
Total Recoverable Phenolics	0.005	0.01	ND	0.016	0.2
Total Organic Carbon	5.4	8.9	4.9	18	13
Total New York State Regulated Organics (5)	0.0076	0.0144	ND	0.091	2060.6
pH (6)	7.6	7.6	6.9	7.4	(11)

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-11			MW-12	
SCREENED ZONE	SOIL/SHALLOW BEDROCK			SOIL	
SAMPLE IDENTIFIER	MW-11	MW-11 DUP	MW-11	MW-12	MW-12
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	12/22/87	3/29/88
- OTHER -					
Conductivity (7)	785	1098	939	1470	(11)
Temperature (8)	11.7	11.1	9.1	11.3	(11)

NOTES:

(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not Detected.
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN - Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-13			MW-14	
SCREENED ZONE	BEDROCK			BEDROCK	
SAMPLE IDENTIFIER	MW-13	MW-13	MW-13 DUP	MW-14	MW-14
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	3/29/88	12/22/87	3/29/88
- VOLATILE AROMATICS -		** Volatile Organics (mg/l) (1) **			
Benzene	9.6	12	-- (4)	2.3	2.2
Toluene	3.6	6.4	--	0.34	ND
Ethylbenzene	2.0	2	--	0.061	T
Styrene	0.94	1.8	--	ND	ND
Total Xylenes	2.2	3.5	--	0.79	0.16
- OTHER -					
Methylene Chloride	ND	36	--	ND	ND
2-Butanone	ND	ND	--	ND	ND
1,1,1-Trichloroethane	ND	ND	--	ND	ND
Vinyl Acetate	ND	ND	--	ND	ND
2-Hexanone	ND	ND	--	ND	ND
Chlorobenzene	ND	ND	--	ND	ND
1,1-Dichloroethane	ND	ND	--	ND	ND
Trichloroethene	0.053	ND	--	ND	ND
Total Volatile Aromatics	18	26	--	3.5	2.4
Total Volatile Organics	18	62	--	3.5	2.4
		** Semi-Volatile Organics (mg/l) (1) **			
- PAH -					
Acenaphthene	T	T	T	0.069	0.076
Acenaphthylene	T	0.94	0.72	T	T
Anthracene	ND	T	T	T	ND
Benzo(b)fluoranthene	ND	T	T	ND	ND
Benzo(k)fluoranthene (9)	ND	T	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	T	T	ND	ND
Benzo(a)Pyrene	ND	T	T	ND	ND
Chrysene	ND	T	T	ND	ND
Fluoranthene	ND	0.3	T	ND	ND
Fluorene	T	ND	ND	T	T
Indeno (1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	4.6	8.1	7.8	T	1.8
Phenanthrene	T	1.3	0.92	T	T
Pyrene	ND	0.45	0.33	ND	ND

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-13	MW-13	MW-13	MW-14	MW-14
SCREENED ZONE	BEDROCK	BEDROCK	BEDROCK	BEDROCK	BEDROCK
SAMPLE IDENTIFIER	MW-13	MW-13	MW-13 DUP	MW-14	MW-14
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	3/29/88	12/22/87	3/29/88
- OTHER -					
2,4 - Dimethylphenol	ND	ND	ND	ND	T
2,4 - Dinitrotoluene	ND	T	ND	ND	ND
2,6 - Dinitrotoluene	ND	T	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	0.78	2.7	2.1	0.080	0.22
2-Methylphenol	T	ND	ND	T	T
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitrol-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	T	ND	ND	0.029	ND
4-Nitoaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	0.58	ND	ND	0.36	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND	T	ND
Total PAH	4.6	11	9.8	0.069	1.9
Total Semi-Volatile Organics	6.0	14	12	0.54	2.1
			** Other Chemicals (mg/l) **		
- DISSOLVED METALS -					
Iron	0.14	0.26	0.18	0.4	0.16
Zinc	ND	0.01	0.02	ND	0.03
- CYANIDE -					
Total Cyanide (13)	0.15	0.1	0.13	0.12	0.09
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
- OTHER -					
Total Recoverable Phenolics	0.053	0.064	0.058	0.063	0.3
Total Organic Carbon	9	7.6	8.5	9.2	8.6
Total New York State Regulated Organics (5)	23.113	42.814	11.928	4.103	4.756
pH (6)	7.7	6.7	6.4	7.6	6.6

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-13	MW-13	MW-13	MW-14	MW-14
SCREENED ZONE	BEDROCK	BEDROCK	BEDROCK	BEDROCK	BEDROCK
SAMPLE IDENTIFIER	MW-13	MW-13	MW-13 DUP	MW-14	MW-14
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	3/29/88	12/22/87	3/29/88
- OTHER -					
Conductivity (7)	1133	1332	1589	1157	1450
Temperature (8)	12.1	11.6	10.9	12.1	10.1

NOTES:

(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not Detected.
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN - Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-15		
SCREENED ZONE	BEDROCK		
SAMPLE IDENTIFIER	MW-15	MW-15 DUP	MW-15
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88
- VOLATILE AROMATICS -	** Volatile Organics (mg/l) (1) **		
Benzene	0.0026	0.0058	0.018
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
Styrene	ND	ND	ND
Total Xylenes	0.0027	0.0031	0.013
- OTHER -			
Methylene Chloride	ND	ND	ND
2-Butanone	ND	ND	ND
1,1,1-Trichloroethane	0.017	0.025	0.012
Vinyl Acetate	ND	ND	ND
2-Hexanone	ND	ND	T
Chlorobenzene	ND	ND	ND
1,1-Dichloroethane	0.0033	0.0031	ND
Trichloroethene	ND	ND	ND
Total Volatile Aromatics	0.0053	0.0089	0.031
Total Volatile Organics	0.026	0.037	0.043
	** Semi-Volatile Organics (mg/l) (1) **		
- PAH -			
Acenaphthene	0.040	0.026	0.031
Acenaphthylene	0.045	0.027	T
Anthracene	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND
Benzo(k)fluoranthene (9)	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND
Chrysene	ND	ND	ND
Fluoranthene	ND	ND	ND
Fluorene	T	T	0.011
Indeno (1,2,3-cd)Pyrene	ND	ND	ND
Naphthalene	0.091	T	T
Phenanthrene	T	T	T
Pyrene	ND	ND	T

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-15	MW-15	MW-15
SCREENED ZONE	BEDROCK	BEDROCK	BEDROCK
SAMPLE IDENTIFIER	MW-15	MW-15	MW-15 DUP
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88
- OTHER -			
2,4 - Dimethylphenol	ND	ND	ND
2,4 - Dinitrotoluene	ND	ND	ND
2,6 - Dinitrotoluene	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND
2-Methylnaphthalene	0.030	T	ND
2-Methylphenol	ND	ND	ND
2-Nitroaniline	ND	ND	ND
3-Nitroaniline	ND	ND	ND
4,6 - Dinitrol-2-Methylphenol	ND	ND	ND
4-Methylphenol	ND	ND	ND
4-Nitoaniline	ND	ND	ND
4-Nitrophenol	ND	ND	ND
Benzoic Acid	ND	ND	ND
Benzyl Alcohol	ND	ND	T
Butylbenzylphthalate	ND	ND	ND
Dibenzofuran	ND	ND	T
Hexachloroethane	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND
Nitrobenzene	ND	ND	T
Phenol	ND	ND	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND
Total PAH	0.18	0.053	0.042
Total Semi-Volatile Organics	0.21	0.053	0.042
		** Other Chemicals (mg/l) **	
- DISSOLVED METALS -			
Iron	0.13	ND	0.16
Zinc	ND	0.014	0.01
- CYANIDE -			
Total Cyanide (13)	ND	0.06	ND
Undistilled Cyanide (10)	ND	ND	ND
- OTHER -			
Total Recoverable Phenolics	0.006	0.006	ND
Total Organic Carbon	2.9	3.2	3.9
Total New York State Regulated Organics (5)	0.242	0.069	0.085
pH (6)	7.9	7.9	7.2

TABLE A-3-2 (CONT.)
TASK 3 GROUNDWATER ANALYTICAL RESULTS
MECHANICVILLE SITE

WELL IDENTIFIER	MW-15			
SCREENED ZONE	BEDROCK			
SAMPLE IDENTIFIER	MW-15	MW-15	MW-15 DUP	
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	
- OTHER -				
Conductivity (7)	949	1125	1589	1029
Temperature (8)	12.1	11.4	10.9	13.4

NOTES:

(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not Detected.
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN - Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

APPENDIX A-4

SURFACE WATER ANALYTICAL DATA
MECHANICVILLE SITE

TABLE A-4-1
CHEMICALS FOUND IN TASK 2 SURFACE WATER SAMPLES
MECHANICVILLE SITE

TA-4-1

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301	SW-401	SW-102	SW-202	SW-202	SW-302	SW-402	SW-402	SW-103	SW-103	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS DUP	GC/MS	HPLC	GC/MS	GC/MS DUP	GC/MS	GC/MS	GC/MS DUP	HPLC	HPLC DUP	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	--	--	ND	ND	ND
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
-OTHER-																
ACETONE	--	ND	ND	ND	ND	--	ND	0.010	ND	ND	ND	--	--	ND	ND	ND
METHYLENE CHLORIDE	--	--	0.0054	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANICS (MG/L)																
-PAH-																
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(a.h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	ND	ND	0.016	--	ND	ND	ND	ND	0.012	--	--	0.025	ND	0.030
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.069	ND	--	--	ND	ND	ND
TOTAL PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.105	ND	ND	ND	ND	ND	ND

TABLE A-4-1 (CONT.)
CHEMICALS FOUND IN TASK 2 SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
						OTHER CHEMICALS (MG/L)										
-METALS-																
IRON	0.23	0.47	1.09	0.99	0.037	0.23	0.40	0.45	0.79	0.36	0.33	0.22	0.24	0.41	0.78	0.33
ZINC	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	0.01
-CYANIDE-																
TOTAL CYANIDE	ND	0.01	ND	ND	ND	ND	0.01	ND	ND	0.01	ND	ND	ND	ND	ND	0.01
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	ND
FERRO-FERRI CYANIDE	ND	0.01	ND	ND	ND	ND	0.02	0.03	ND	0.01	ND	ND	ND	0.01	ND	0.01
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	0.24	ND	--	--	--	0.013	0.005	ND	0.037	--	--	ND
TOTAL ORGANIC CARBON	5.5	11	11.9	7.3	6.4	ND	10	9	7.5	6.0	6.0	5.0	5.4	10.0	6.2	5.5
OIL AND GREASE	11	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
SULFATE	--	16.4	--	--	--	--	19.3	18.6	--	--	--	--	--	18.4	--	--

NOTES:
(1) INDICATES SAMPLE VALUES WERE OBTAINED BY GC/MS (EPA METHODS 624 AND 625) OR BY HPLC (EPA METHODS 602 AND 610).
(2) ND = NOT DETECTED.
(3) -- = NOT ANALYZED
(4) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

11/21/89

TA-4-2

TABLE A-4-2
TASK 3 SURFACE WATER ANALYTICAL RESULTS
MECHANICVILLE SITE

SITE IDENTIFIER:	UPSTREAM		ADJACENT		DOWNSTREAM	
SAMPLE IDENTIFIER:	SW-01	SW-01	SW-02	SW-02	SW-04	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
- VOLATILE AROMATICS -		** Volatile Organics (mg/l) (1) **				
Benzene	ND (1)	ND	ND	-- (2)		
Toluene	ND	ND	ND	--	ND	--
Ethylbenzene	ND	ND	ND	--	ND	--
Styrene	ND	ND	ND	--	ND	--
Total Xylenes	ND	ND	ND	--	ND	--
- OTHER -						
Methylene Chloride	ND	ND	ND	--	ND	--
2-Butanone	ND	ND	ND	--	ND	--
Total Volatile Aromatics	ND	ND	ND	--	ND	--
Total Volatile Organics	ND	ND	ND	--	ND	--
		** Semi-Volatile Organics (mg/l) (1) **				
- PAH -						
Acenaphthene	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND

11/21/89

TA-4-2

TABLE A-4-2 (CONT.)
TASK 3 SURFACE WATER ANALYTICAL RESULTS
MECHANICVILLE SITE

SITE IDENTIFIER:	UPSTREAM		ADJACENT		DOWNSTREAM	
SAMPLE IDENTIFIER:	SW-01	SW-01	SW-02	SW-02	SW-04	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
- OTHER -						
bis(2-Ethylhexyl)phthalate	0.39	0.034	ND	ND	ND	ND
Total PAH	ND	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	0.39	0.034	ND	ND	ND	ND
** Other Chemicals (mg/l) **						
- DISSOLVED METALS -						
Iron	0.20	0.38	1.1	1.8	0.24	0.42
Zinc	ND	0.03	0.014	0.02	ND	ND
- CYANIDE -						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (3)	ND	ND	ND	ND	ND	ND
- OTHER -						
Total Recoverable Phenolics	ND	ND	ND	ND	ND	0.011
Total Organic Carbon	6.1	4.2	6.1	4.9	4.8	4.7

NOTES:

(1) ND = Not Detected.

(2) NA = Not analyzed (laboratory reported vial was received broken).

(3) Undistilled CN = Free dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present.

APPENDIX A-5

SEDIMENT ANALYTICAL DATA
MECHANICVILLE SITE

TABLE A-5-1
CHEMICALS FOUND IN TASK 2 SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301	SED-401	SED-102	SED-202	SED-202	SED-302	SED-402	SED-402	SED-103	SED-103	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS DUP	GC/MS	HPLC	HPLC	HPLC DUP	GC/MS	GC/MS	GC/MS DUP	HPLC	HPLC DUP	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/KG)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.070	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
m - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
o - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
p - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
-OTHER-																
ACETONE	--	--	ND	ND	5.300	--	--	--	ND	6.600	3.800	--	--	--	ND	4.000
METHYLENE CHLORIDE	--	--	ND	ND	2.400	--	--	--	ND	3.000	2.900	--	--	--	ND	2.300
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	0.07	ND
SEMIVOLATILE ORGANICS (MG/KG)																
-PAH-																
ACENAPHTHENE	(4)	ND	ND	ND	ND	(4)	ND	ND	ND	0.700	1.600	0.910	1.100	(4)	ND	ND
ACENAPHTHYLENE	0.740	ND	ND	ND	ND	0.900	ND	ND	ND	ND	1.300	2.700	3.500	8.800	ND	ND
ANTHRACENE	(4)	(4)	ND	ND	ND	(4)	(4)	(4)	(4)	ND	ND	1.100	1.200	(4)	(4)	ND
BENZO(b)FLUORANTHENE	(4)	0.580	ND	ND	ND	(4)	(4)	2.000	(4,5)	ND	ND	1.000	0.940	0.630	(4,5)	ND
BENZO(k)FLUORANTHENE	(4)	(5)	ND	ND	ND	(4)	(5)	4.800	(4,5)	ND	ND	0.930	1.000	(5)	(4,5)	ND
BENZO(g,h,i)PERYLENE	ND	3.100	ND	ND	ND	ND	(4)	15.000	ND	ND	ND	ND	ND	4.400	(4)	ND
BENZO(a)ANTHRACENE	(6)	(6)	ND	ND	ND	(6)	(6)	(6)	(4)	ND	ND	(6)	(6)	(6)	(4)	ND
BENZO(a)PYRENE	(4)	0.450	ND	ND	ND	(4)	(4)	6.100	(4)	ND	ND	0.740	0.800	0.650	(4)	ND
CHRYSENE	0.520	0.610	ND	ND	ND	0.460	(4)	8.500	(4)	ND	ND	2.000	2.100	(4)	(4)	ND
DIBENZO(a.h)ANTHRACENE	ND	0.930	ND	ND	ND	(4)	ND	7.100	ND	ND	ND	ND	1.600	2.300	ND	ND
FLUORANTHENE	0.960	0.470	ND	ND	ND	0.920	(4)	5.600	(4)	ND	ND	2.200	4.700	(4)	(4)	ND
FLUORENE	1.500	ND	ND	ND	ND	1.400	ND	ND	ND	ND	0.500	4.000	4.300	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	(7)	ND	ND	ND	(4)	ND	(7)	ND	ND	ND	(4)	(4)	(7)	(4)	ND
NAPHTHALENE	3.600	ND	ND	ND	ND	3.300	ND	19.000	(4)	4.400	13.000	10.000	19.000	ND	ND	ND
PHENANTHRENE	0.570	0.390	ND	ND	ND	(4)	(4)	1.800	(4)	ND	ND	2.000	2.300	(4)	(4)	ND
PYRENE	0.690	0.770	ND	ND	ND	0.960	(4)	5.900	(4)	ND	ND	1.900	3.100	(4)	(4)	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	(4)	ND	ND	--	--	--	(4)	ND	ND	--	--	--	(4)	ND
2-METHYLNAPHTHALENE	--	--	ND	ND	ND	--	--	--	ND	0.900	ND	--	--	--	ND	ND
DI-N-BUTYL PHTHALATE	--	--	--	--	2.100	--	--	--	--	ND	4.000	--	--	--	--	3.200
TOTAL PAH	8.580	7.300	ND	ND	ND	7.940	(3)	75.800	(4)	5.100	16.400	29.480	45.640	16.780	(4)	ND

TABLE A-5-2
TASK 3 SEDIMENT ANALYTICAL RESULTS
MECHANICVILLE SITE

SITE IDENTIFIER:	UPSTREAM		ADJACENT		DOWNSTREAM			
SAMPLE IDENTIFIER:	SD-01	SD-01	SD-02	SD-02	SD-04	DUP-01	SD-04	SD-DUP
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	12/22/87	3/30/88	3/30/88
- VOLATILE AROMATICS -		** Volatile Organics (mg/l) (1) **						
Benzene	ND (1)	ND	ND	T	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	0.087	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
- OTHER -								
Methylene Chloride	ND	R (3)	ND	R	ND	ND	R	R
2-Butanone	ND	R	ND	R	ND	ND	R	R
Total Volatile Aromatics	ND	ND	0.087	T	ND	ND	ND	ND
Total Volatile Organics	ND	ND	0.087	T	ND	ND	ND	ND
		** Semi-Volatile Organics (mg/l) (1) **						
- PAH -								
Acenaphthene	ND	ND	T	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	T	ND	ND	ND	ND	ND
Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	0.53	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	0.94	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	(5)	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	0.59	ND	ND	ND	ND	ND
Chrysene	T (2)	ND	0.58	ND	ND	ND	ND	ND
Dibenz(a,h)Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Fluoranthene	T	ND	T	ND	T	T	ND	ND
Fluorene	ND	ND	T	ND	ND	ND	ND	ND
Indeno (1,2,3-cd)Pyrene	ND	ND	T	ND	ND	ND	ND	ND
Naphthalene	ND	ND	0.48	ND	ND	T	ND	ND
Phenanthrene	T	ND	0.9	T	T	T	ND	ND
Pyrene	T	ND	1.1	ND	T	T	ND	

TABLE A-5-2 (CONT.)
TASK 3 SEDIMENT ANALYTICAL RESULTS
MECHANICVILLE SITE

SITE IDENTIFIER:	UPSTREAM		ADJACENT		DOWNSTREAM			
SAMPLE IDENTIFIER:	SD-01	SD-01	SD-02	SD-02	SD-04	DUP-01	SD-04	DUP-01
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	12/22/87	3/30/88	3/30/88
- OTHER -								
4-Methylphenol	ND	ND	T	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	T	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	T	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	T	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	25	ND	T	ND	ND	T	T
Total PAH	T	ND	5.1	T	T	T	ND	ND
Total Semi-Volatile Organics	T	25	5.1	T	T	T	T	T
** Other Chemicals (mg/l) **								
- DISSOLVED METALS -								
Iron	7700	NR (4)	8400	NR	8700	7100	NR	NR
Zinc	27	NR	45	NR	25	28	NR	NR
- CYANIDE -								
Total Cyanide (ppm) (6)	ND	NR	1.3	NR	ND	ND	NR	NR
Undistilled Cyanide	ND	NR	ND	NR	ND	ND	NR	NR
- OTHER -								
Total Recoverable Phenolics	1.3	NR	2.3	NR	1.2	0.68	NR	NR
Total Organic Carbon	1200	NR	32000	NR	18000	11000	NR	NR

NOTES:

(1) ND = Not Detected.
(2) T = Trace concentrations detected below the quanitifiable reporting limits.
(3) R = Data rejected because analysis of blank indicated sampling or lab-derived contamination.
(4) NR = Analysis not requested.
(5) Benzo(b)fluoranthene and Benzo(k)fluoranthene coeluted.
(6) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of the amenable CN- present.

TABLE A-5-4
NYSEG Sediment Sample Results of November 1988

UPSTATE LABORATORIES, INC.

HSL

Analysis Results
Report Number
Date:

NYSEG
(all results mg/kg)

ACID EXTRACTABLES

CLIENT I.D.	Mechanicville Anthony Kill MEE1XX8801G 11/2/88	Mechanicville Anthony Kill MEE1XX8802G 11/2/88		
ULI I.D.	30988025	30988026		
Phenol	<0.2	<0.2		
2-Chlorophenol	↓	↓		
2-Nitrophenol				
2,4-Dimethylphenol				
2,4-Dichlorophenol				
4-Chloro-3-Methylphenol				
2,4,6-Trichlorophenol	↓	↓		
2,4-Dinitrophenol	<2	<2		
4-Nitrophenol	<0.2	<0.2		
2-Methyl-4,6-Dinitrophenol	<2	<2		
Pentachlorophenol	<0.5	<0.5		
Benzyl Alcohol	<2	<2		
2-Methylphenol	<0.2	<0.2		
4-Methylphenol	<0.2	<0.2		
Benzoic Acid	<2	<2		
4-Chloroaniline	<0.2	<0.2		
2-Methylnaphthalene	0.6	0.8		
2,4,5-Trichlorophenol	<0.2	<0.2		
2-Nitroaniline	↓	↓		
3-Nitroaniline	↓	↓		
Dibenzofuran	<0.5	<0.5		
4-Nitroaniline	<0.2	<0.2		

TABLE A-5-4, cont.
NYSEG Sediment Sample Results of November 1988

UPSTATE LABORATORIES, INC.
Analysis Results
Report Number
Date:

NYSEG

BASE/NEUTRAL EXTRACTIONS (mg/kg)

CLIENT I.D.	MEE1xx880G	MEE1xx8802G		
UL I.D.	30988025	30988026		
N-Nitrosodimethylamine	<0.2	<0.2		
~~Dichloromethyl)ether~~				
Bis(2-chloroethyl)ether	<0.2	<0.2		
1,3-Dichlorobenzene				
1,4-Dichlorobenzene				
1,2-Dichlorobenzene				
Bis(2-Chloroisopropyl)ether				
Hexachloroethane				
Nitrobenzene				
N-Nitrosodipropylamine				
Isophorone				
Bis(2-chloroethoxy)methane				
1,2,4-Trichlorobenzene	1.5	1.4		
Naphthalene	<0.2	<0.2		
Hexachlorobutadiene	<0.2			
Hexachlorocyclopentadiene	<0.2			
2-Chloronaphthalene	<0.2			
Dimethylphthalene	3.0	2.2		
Acenaphthylene	<0.2	<0.2		
2,6-Dinitrotoluene	1.6	0.6		
Acenaphthene	<0.2	<0.2		
2,4-dinitrotoluene	1.0	<0.2		
Fluorene	<0.2	<0.2		
Diethylphthalate				

TABLE A-5-4, cont.
NYSEG Sediment Sample Results of November 1988

UPSTATE LABORATORIES, INC.

Analysis Results
Report Number
Date:

NYSEG
(mg/kg)

BASE/NEUTRAL EXTRACTABLES

CLIENT I.D.	MEEIXX8801G	MEEIXX8802G		
ULI I.D.	30988025	30988026		
Chlorophenylphenyl ether	<0.2	<0.2		
N-Nitrosodiphenylamine	<0.2	<0.2		
~~1,2-Diphenylhydrazine~~				
4-Bromophenylphenyl ether	<0.2	<0.2		
Hexachlorobenzene	<0.2	<0.2		
Phenanthrene ?	2.0	4.8		
Anthracene ?	1.6	1.4		
Dibutyl phthalate ?	1.3	1.4		
Fluoranthene ?	10	7.0		
Benzidine	<0.2	<0.2		
Pyrene	7.6	5.8		
Butyl benzyl phthalate	<0.2	<0.2		
3,3'-Dichlorobenzidine	<0.2	<0.2		
* Chrysene	2.3	2.0		
* Benzo(a)anthracene	2.5	2.2		
Bis(2-ethylhexyl) phthalate	2.3	2.8		
Dioctyl phthalate	<0.2	<0.2		
* Benzo(b)fluoranthene	<0.2	<0.2		
* Benzo(k)fluoranthene	3.1	3.0		
* Benzo(a)pyrene	2.0	1.9		
* Indeno(1,2,3-cd)pyrene	0.3	0.2		
Dibenzo(a,h)anthracene *	<0.2	<0.2		
Benzo(g,h,i)pyrene	0.4	0.3		

APPENDIX A-6

AIR ANALYTICAL DATA
MECHANICVILLE SITE

TABLE A-6-1

TASK 3 AIR ANALYTICAL RESULTS - ppm
MECHANICVILLE SITE

	Office		Garage		Storeroom		Background	
Sample Identifier	OF-01	OF-02	GA-01	GA-02	ST-01	ST-02	BA-01	BA-01
Date of Sample Collection	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88
Volatile Aromatics[1]								
Benzene	0.03	0.031	0.016	0.015	0.043	0.043	ND[2]	ND
Toluene	0.009	0.009	0.048	0.048	0.012	0.012	0.037	0.028
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.039	0.040	0.064	0.063	0.055	0.055	0.037	0.028

NOTES:

[1] Sample analyzed by NIOSH Method 1501 by ESA Laboratories in Bedford, MA.

[2] ND = Not detected. The minimum detection limits are: benzene - 0.013 ppm; ethylbenzene and xylenes - 0.01 ppm.

APPENDIX A-7

TASK 4 SURFACE SOIL DATA
LABORATORY RESULTS
MECHANICVILLE SITE

MECHANICVILLE SOILS PCB RESULTS

SAMPLE LOCATION	PCB	% MOISTURE
MEEIXX8901	< 6 PPB	0.0
MEEIXX8902	< 6 PPB	27.3
MEEIXX8903	< 6 PPB	13.3
MEEIXX8903A	< 6 PPB	6.7
MEEIXX8904	< 6 PPB	12.5
MEEIXX8905	< 6 PPB	11.8
MEEIXX8906	< 6 PPB	7.1
MEEIXX8906A	< 6 PPB	14.3
MEEIXX8907	< 6 PPB	13.3
MEEIXX3907A	< 6 PPB	20.0
MEEIXX8908	< 6 PPB	3.3
MEEIXX8908A	< 6 PPB	23.5
MEEIXX8909	< 6 PPB	6.7
MEEIXX8910		0.0

Sample location MEEIXX8910 = a trip blank

[redacted]

Analysis Results
Report Number 092089024
Date: September 20, 1989

JAL

CLIENT I.D.	ULI I.D.	Amenable Cyanide	Total Cyanide (distilled)	Total Cyanide (un-distilled)	
MECHANICSVILLE:					
SS-1 MEEIXX8901 8/29/89	24389090	1.8	1.8	<1.0	
SS-2 MEEIXX8902 8/29/89	24389091	<1.0	<1.0	<1.0	
SS-3 MEEIXX8903 8/29/89	24389092	<1.0	<1.0	<1.0	
SS-3A MEEIXX8903A 8/29/89	24389093	1.9	1.9	<1.0	
SS-4 MEEIXX8904 8/29/89	24389094	<1.0	<1.0	<1.0	
SS-5 MEEIXX8905 8/29/89	24389095	<1.0	<1.0	<1.0	
SS-10 MEEIXX8910 8/29/89	24389097	9.9	9.9	<1.0	

All results are expressed as ppm as received.
Sampled by client.

Approved: _____ 9/20/89

Note: See disclaimer on cover letter.

SOIL MATRIX
METHOD 8270 -- HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEI Blank (9/1/89)	MEEIXX8910 (9/1/89)
Acenaphthene	<0.33	<0.33
Acenaphthylene	<0.33	<0.33
Anthracene	<0.33	<0.33
Benzo(a)anthracene	<0.33	<0.33
Benzo(a)pyrene	<0.33	<0.33
Benzo(b)fluoranthene	<0.33	<0.33
Benzo(g,h,i)perylene	<0.33	<0.33
Benzo(k)fluoranthene	<0.33	<0.33
Benzoic acid	<0.33	<0.33
Benzyl alcohol	<0.33	<0.33
Bis(2-chloroethoxy)methane	<0.33	<0.33
Bis(2-chloroethyl)ether	<0.33	<0.33
Bis(2-chloroisopropyl)ether	<0.33	<0.33
Bis(2-ethylhexyl)phthalate	<0.33	0.41
4-Bromophenylphenylether	<0.33	<0.33
Butylbenzylphthalate	<0.33	<0.33
4-Chloroaniline	<0.33	<0.33
2-Chloronaphthalene	<0.33	<0.33
4-Chlorophenylphenylether	<0.33	<0.33
Chrysene	<0.33	<0.33
Dibenzo(a,h)anthracene	<0.33	<0.33
Dibenzofuran	<0.33	<0.33
1,2-Dichlorobenzene	<0.33	<0.33
1,3-Dichlorobenzene	<0.33	<0.33
1,4-Dichlorobenzene	<0.33	<0.33
3,3'-Dichlorobenzidine	<0.66	<0.66
Diethylphthalate	<0.33	<0.33
Dimethylphthalate	<0.33	<0.33
Di-n-butylphthalate	0.68	0.86
2,6-Dinitrotoluene	<0.33	<0.33
2,4-Dinitrotoluene	<0.33	<0.33
Di-n-octylphthalate	<0.33	6.6
Fluoranthene	<0.33	<0.33
Fluorene	<0.33	<0.33
Hexachlorobenzene	<0.33	<0.33
Hexachlorobutadiene	<0.33	<0.33
Hexachlorocylopentadiene	<0.33	<0.33
Hexachloroethane	<0.33	<0.33
Indeno(1,2,3-cd)pyrene	<0.33	<0.33
Isophorone	<0.33	<0.33

(Continued)

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEI Blank (9/1/89)	MEEIXX8910 (9/1/89)
2-Methylnaphthalene	<0.33	<0.33
Naphthalene	<0.33	<0.33
2-Nitroaniline	<1.6	<1.6
3-Nitroaniline	<1.6	<1.6
4-Nitroaniline	<1.6	<1.6
Nitrobenzene	<0.33	<0.33
N-nitrosodi-n-propylamine	<0.33	<0.33
N-nitrosodiphenylamine	<0.33	<0.33
Phenanthrene	<0.33	<0.33
Pyrene	<0.33	<0.33
1,2,4-Trichlorobenzene	<0.33	<0.33
2-Chlorophenol	<0.33	<0.33
2,4-Dichlorophenol	<0.33	<0.33
2,4-Dimethylphenol	<0.33	<0.33
4,6-Dinitro-o-cresol	<1.6	<1.6
2,4-Dinitrophenol	<1.6	<1.6
2-Methylphenol	<0.33	<0.33
4-Methylphenol	<0.33	<0.33
2-Nitrophenol	<0.33	<0.33
4-Nitrophenol	<1.6	<1.6
p-Chloro-m-cresol	<0.33	<0.33
Pentachlorophenol	<1.6	<1.6
Phenol	<0.33	<0.33
2,4,5-Trichlorophenol	<1.6	<1.6
2,4,6-Trichlorophenol	<0.33	<0.33
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards Level Added = 2.0 ug/g (% Recovery)		
Phenanthrene-D_{10}	122	111
Surrogates (% Recovery)		
2-Fluorophenol	70	83
Phenol-D_5	88	89
2,4,6-Tribromophenol	44	56
Nitrobenzene-D_5	94	87
2-Fluorobiphenyl	71	78
Terphenyl-D_{14}	93	98

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEIXX8901 * (9/1/89)	MEEIXX8902 * (9/1/89)
Acenaphthene	<0.66	<0.66
Acenaphthylene	2.1	5.2
Anthracene	1.1	2.8
Benzo(a)anthracene	4.5	5.4
Benzo(a)pyrene	3.4	4.9
Benzo(b)fluoranthene	2.7	8.7
Benzo(g,h,i)perylene	1.6	2.9
Benzo(k)fluoranthene	4.3	7.1
Benzoic acid	<0.66	<0.66
Benzyl alcohol	<0.66	<0.66
Bis(2-chloroethoxy)methane	<0.66	<0.66
Bis(2-chloroethyl)ether	<0.66	<0.66
Bis(2-chloroisopropyl)ether	<0.66	<0.66
Bis(2-ethylhexyl)phthalate	3.7	<0.66
4-Bromophenylphenylether	<0.66	<0.66
Butylbenzylphthalate	<0.66	<0.66
4-Chloroaniline	<0.66	<0.66
2-Chloronaphthalene	<0.66	<0.66
4-Chlorophenylphenylether	<0.66	<0.66
Chrysene	6.2	9.6
Dibenzo(a,h)anthracene	<0.66	<0.66
Dibenzofuran	<0.66	<0.66
1,2-Dichlorobenzene	<0.66	<0.66
1,3-Dichlorobenzene	<0.66	<0.66
1,4-Dichlorobenzene	<0.66	<0.66
3,3'-Dichlorobenzidine	<1.3	<1.3
Diethylphthalate	<0.66	<0.66
Dimethylphthalate	<0.66	<0.66
Di-n-butylphthalate	<0.66	0.99
2,6-Dinitrotoluene	<0.66	<0.66
2,4-Dinitrotoluene	<0.66	<0.66
Di-n-octylphthalate	<0.66	<0.66
Fluoranthene	7.4	5.3
Fluorene	0.71	<0.66
Hexachlorobenzene	<0.66	<0.66
Hexachlorobutadiene	<0.66	<0.66
Hexachlorocylopentadiene	<0.66	<0.66
Hexachloroethane	<0.66	<0.66
Indeno(1,2,3-cd)pyrene	1.4	2.5
Isophorone	<0.66	<0.66

(Continued)

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX
METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE) MEEIXX8901 * (9/1/89)	MEEIXX8902 * (9/1/89)
2-Methylnaphthalene	<0.66	<0.66
Naphthalene	<0.66	<0.66
2-Nitroaniline	<3.2	<3.2
3-Nitroaniline	<3.2	<3.2
4-Nitroaniline	<3.2	<3.2
Nitrobenzene	<0.66	<0.66
N-nitrosodi-n-propylamine	<0.66	<0.66
N-nitrosodiphenylamine	<0.66	<0.66
Phenanthrene	8.5	2.6
Pyrene	16	14
1,2,4-Trichlorobenzene	<0.66	<0.66
2-Chlorophenol	<0.66	<0.66
2,4-Dichlorophenol	<0.66	<0.66
2,4-Dimethylphenol	<0.66	<0.66
4,6-Dinitro-o-cresol	<3.2	<3.2
2,4-Dinitrophenol	<3.2	<3.2
2-Methylphenol	<0.66	<0.66
4-Methylphenol	<0.66	<0.66
2-Nitrophenol	<0.66	<0.66
4-Nitrophenol	<3.2	<3.2
p-Chloro-m-cresol	<0.66	<0.66
Pentachlorophenol	<3.2	<3.2
Phenol	<0.66	<0.66
2,4,5-Trichlorophenol	<3.2	<3.2
2,4,6-Trichlorophenol	<0.66	<0.66
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards		
Level Added = 2.0 ug/g		
(% Recovery)		
Phenanthrene-D_{10}	143	154
Surrogates		
(% Recovery)		
2-Fluorophenol	76	78
Phenol-D_5	73	74
2,4,6-Tribromophenol	53	58
Nitrobenzene-D_5	72	70
2-Fluorobiphenyl	69	68
Terphenyl-D_{14}	95	95

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEIXX8903 * (9/1/89)	MEEIXX8903A * (9/1/89)
Acenaphthene	1.5	1.7
Acenaphthylene	<0.66	<0.66
Anthracene	1.3	1.1
Benzo(a)anthracene	2.8	2.5
Benzo(a)pyrene	1.8	1.9
Benzo(b)fluoranthene	2.3	1.9
Benzo(g,h,i)perylene	<0.66	0.69
Benzo(k)fluoranthene	2.1	2.4
Benzoic acid	<0.66	<0.66
Benzyl alcohol	<0.66	<0.66
Bis(2-chloroethoxy)methane	<0.66	<0.66
Bis(2-chloroethyl)ether	<0.66	<0.66
Bis(2-chloroisopropyl)ether	<0.66	<0.66
Bis(2-ethylhexyl)phthalate	1.1	0.92
4-Bromophenylphenylether	<0.66	<0.66
Butylbenzylphthalate	<0.66	<0.66
4-Chloroaniline	<0.66	<0.66
2-Chloronaphthalene	<0.66	<0.66
4-Chlorophenylphenylether	<0.66	<0.66
Chrysene	3.4	3.1
Dibenzo(a,h)anthracene	<0.66	<0.66
Dibenzofuran	<0.66	<0.66
1,2-Dichlorobenzene	<0.66	<0.66
1,3-Dichlorobenzene	<0.66	<0.66
1,4-Dichlorobenzene	<0.66	<0.66
3,3'-Dichlorobenzidine	<1.3	<1.3
Diethylphthalate	<0.66	<0.66
Dimethylphthalate	<0.66	<0.66
Di-n-butylphthalate	1.1	0.93
2,6-Dinitrotoluene	<0.66	<0.66
2,4-Dinitrotoluene	<0.66	<0.66
Di-n-octylphthalate	<0.66	<0.66
Fluoranthene	6.0	4.7
Fluorene	<0.66	<0.66
Hexachlorobenzene	<0.66	<0.66
Hexachlorobutadiene	<0.66	<0.66
Hexachlorocylopentadiene	<0.66	<0.66
Hexachloroethane	<0.66	<0.66
Indeno(1,2,3-cd)pyrene	<0.66	<0.66
Isophorone	<0.66	<0.66

(Continued)

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX
METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE) MEEIXX8904 * (9/1/89)	MEEIXX8905 * (9/1/89)
2-Methylnaphthalene	<0.66	<0.66
Naphthalene	<0.66	<0.66
2-Nitroaniline	<3.2	<3.2
3-Nitroaniline	<3.2	<3.2
4-Nitroaniline	<3.2	<3.2
Nitrobenzene	<0.66	<0.66
N-nitrosodi-n-propylamine	<0.66	<0.66
N-nitrosodiphenylamine	<0.66	<0.66
Phenanthrene	<0.66	<0.66
Pyrene	1.2	<0.66
1,2,4-Trichlorobenzene	<0.66	<0.66
2-Chlorophenol	<0.66	<0.66
2,4-Dichlorophenol	<0.66	<0.66
2,4-Dimethylphenol	<0.66	<0.66
4,6-Dinitro-o-cresol	<3.2	<3.2
2,4-Dinitrophenol	<3.2	<3.2
2-Methylphenol	<0.66	<0.66
4-Methylphenol	<0.66	<0.66
2-Nitrophenol	<0.66	<0.66
4-Nitrophenol	<3.2	<3.2
p-Chloro-m-cresol	<0.66	<0.66
Pentachlorophenol	<3.2	<3.2
Phenol	<0.66	<0.66
2,4,5-Trichlorophenol	<3.2	<3.2
2,4,6-Trichlorophenol	<0.66	<0.66
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards		
Level Added = 2.0 ug/g		
(% Recovery)		
Phenanthrene-D_{10}	143	133
Surrogates		
(% Recovery)		
2-Fluorophenol	75	74
Phenol-D_5	77	70
2,4,6-Tribromophenol	47	43
Nitrobenzene-D_5	64	62
2-Fluorobiphenyl	70	67
Terphenyl-D_{14}	102	94

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

Sample Number
BLANK96

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: BLANK96
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 09/06/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared:
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 0.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	630	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	630	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	630	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	630	U
75-09-2	Methylene Chloride	630	U	79-00-5	1,1,2-Trichloroethane	630	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	630	U
75-15-0	Carbon Disulfide	630	U	10061-01-5	cis-1,3-Dichloropropene	630	U
75-35-4	1,1-Dichloroethene	630	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	630	U	75-25-2	Bromoform	630	U
156-60-5	Trans-1,2-Dichloroethene	630	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	630	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	630	U	127-18-4	Tetrachloroethene	630	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	630	U	108-88-3	Toluene	630	U
56-23-5	Carbon Tetrachloride	630	U	108-90-7	Chlorobenzene	630	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	630	U
75-27-4	Bromodichloromethane	630	U	100-42-5	Styrene	630	U
					Total Xylenes	630	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MEEIXX8901

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0196
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 0.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	630	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	630	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	630	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	630	U
75-09-2	Methylene Chloride	630	U	79-00-5	1,1,2-Trichloroethane	630	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	630	U
75-15-0	Carbon Disulfide	630	U	10061-01-5	cis-1,3-Dichloropropene	630	U
75-35-4	1,1-Dichloroethene	630	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	630	U	75-25-2	Bromoform	630	U
156-60-5	Trans-1,2-Dichloroethene	630	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	630	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	630	U	127-18-4	Tetrachloroethene	630	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	630	U	108-88-3	Toluene	630	U
56-23-5	Carbon Tetrachloride	630	U	108-90-7	Chlorobenzene	630	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	630	U
75-27-4	Bromodichloromethane	630	U	100-42-5	Styrene	630	U
					Total Xylenes	630	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MEEIXX8902

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0296
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 27.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1700	U	78-87-5	1,2-Dichloropropane	860	U
74-83-9	Bromomethane	1700	U	10061-02-6	Trans-1,3-Dichloropropene	860	U
75-01-4	Vinyl Chloride	1700	U	79-01-6	Trichloroethene	860	U
75-00-3	Chloroethane	1700	U	124-48-1	Dibromochloromethane	860	U
75-09-2	Methylene Chloride	860	U	79-00-5	1,1,2-Trichloroethane	860	U
67-64-1	Acetone	1700	U	71-43-2	Benzene	860	U
75-15-0	Carbon Disulfide	860	U	10061-01-5	cis-1,3-Dichloropropene	860	U
75-35-4	1,1-Dichloroethene	860	U	110-75-8	2-Chloroethylvinylether	1700	U
75-34-3	1,1-Dichloroethane	860	U	75-25-2	Bromoform	860	U
156-60-5	Trans-1,2-Dichloroethene	860	U	108-10-1	4-Methyl-2-Pentanone	1700	U
67-66-3	Chloroform	860	U	591-78-6	2-Hexanone	1700	U
107-06-2	1,2-Dichloroethane	860	U	127-18-4	Tetrachloroethene	860	U
78-93-3	2-Butanone	1700	U	79-34-5	1,1,2,2-Tetrachloroethane	1700	U
71-55-6	1,1,1-Trichloroethane	860	U	108-88-3	Toluene	860	U
56-23-5	Carbon Tetrachloride	860	U	108-90-7	Chlorobenzene	860	U
108-05-4	Vinyl Acetate	1700	U	100-41-4	Ethylbenzene	860	U
75-27-4	Bromodichloromethane	860	U	100-42-5	Styrene	860	U
					Total Xylenes	860	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

| Sample Number
| MEEIXX8903

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0396
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 13.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1400	U	78-87-5	1,2-Dichloropropane	720	U
74-83-9	Bromomethane	300	J	10061-02-6	Trans-1,3-Dichloropropene	720	U
75-01-4	Vinyl Chloride	1400	U	79-01-6	Trichloroethene	720	U
75-00-3	Chloroethane	1400	U	124-48-1	Dibromochloromethane	720	U
75-09-2	Methylene Chloride	720	U	79-00-5	1,1,2-Trichloroethane	720	U
67-64-1	Acetone	1400	U	71-43-2	Benzene	720	U
75-15-0	Carbon Disulfide	720	U	10061-01-5	cis-1,3-Dichloropropene	720	U
75-35-4	1,1-Dichloroethene	720	U	110-75-8	2-Chloroethylvinylether	1400	U
75-34-3	1,1-Dichloroethane	720	U	75-25-2	Bromoform	720	U
156-60-5	Trans-1,2-Dichloroethene	720	U	108-10-1	4-Methyl-2-Pentanone	1400	U
67-66-3	Chloroform	720	U	591-78-6	2-Hexanone	1400	U
107-06-2	1,2-Dichloroethane	720	U	127-18-4	Tetrachloroethene	720	U
78-93-3	2-Butanone	1400	U	79-34-5	1,1,2,2-Tetrachloroethane	1400	U
71-55-6	1,1,1-Trichloroethane	720	U	108-88-3	Toluene	720	U
56-23-5	Carbon Tetrachloride	720	U	108-90-7	Chlorobenzene	720	U
108-05-4	Vinyl Acetate	1400	U	100-41-4	Ethylbenzene	720	U
75-27-4	Bromodichloromethane	720	U	100-42-5	Styrene	720	U
					Total Xylenes	720	U

J - Reported value is less than the detection limit.
U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MEEIXX8903A

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME3A96
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 7.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	670	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	670	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	670	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	670	U
75-09-2	Methylene Chloride	670	U	79-00-5	1,1,2-Trichloroethane	670	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	670	U
75-15-0	Carbon Disulfide	670	U	10061-01-5	cis-1,3-Dichloropropene	670	U
75-35-4	1,1-Dichloroethene	670	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	670	U	75-25-2	Bromoform	670	U
156-60-5	Trans-1,2-Dichloroethene	670	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	670	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	670	U	127-18-4	Tetrachloroethene	670	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	670	U	108-88-3	Toluene	670	U
56-23-5	Carbon Tetrachloride	670	U	108-90-7	Chlorobenzene	670	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	670	U
75-27-4	Bromodichloromethane	670	U	100-42-5	Styrene	670	U
					Total Xylenes	670	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-DEFT-LAS
Lab Sample ID No: MS0436
Sample Matrix: SOIL
Data Release Authorized By:

Case No: MS2299
NC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 12.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1400	U	78-87-5	1,2-Dichloropropane	710	U
74-83-9	Bromomethane	1400	U	10061-02-6	Trans-1,3-Dichloropropene	710	U
75-01-4	Vinyl Chloride	1400	U	79-01-6	Trichloroethene	710	U
75-00-3	Chloroethane	1400	U	124-48-1	Dibromochloromethane	710	U
75-09-2	Methylene Chloride	710	U	79-00-5	1,1,2-Trichloroethane	710	U
67-64-1	Acetone	1400	U	71-43-2	Benzene	710	U
75-15-0	Carbon Disulfide	710	U	10061-01-5	cis-1,3-Dichloropropene	710	U
75-35-4	1,1-Dichloroethene	710	U	110-75-8	2-Chloroethylvinylether	1400	U
75-34-3	1,1-Dichloroethane	710	U	75-25-2	Bromoform	710	U
156-60-5	Trans-1,2-Dichloroethene	710	U	108-10-1	4-Methyl-2-Pentanone	1400	U
67-66-3	Chloroform	710	U	591-78-6	2-Hexanone	1400	U
107-06-2	1,2-Dichloroethane	710	U	127-18-4	Tetrachloroethene	710	U
78-93-3	2-Butanone	1400	U	79-34-5	1,1,2,2-Tetrachloroethane	1400	U
71-55-6	1,1,1-Trichloroethane	710	U	108-88-3	Toluene	710	U
56-23-5	Carbon Tetrachloride	710	U	108-90-7	Chlorobenzene	710	U
108-05-4	Vinyl Acetate	1400	U	100-41-4	Ethylbenzene	710	U
75-27-4	Bromodichloromethane	710	U	100-42-5	Styrene	710	U
					Total Xylenes	710	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

| Sample Number
| MEEIXX8905

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0576
Sample Matrix: SOIL
Data Release Authorized By: _____

Case No: ME82589
QC Report No: _____
Contract No: _____
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH _____
Percent Moisture: (Not Decanted) 12.0 _____

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1400	U	78-87-5	1,2-Dichloropropane	710	U
74-83-9	Bromomethane	1400	U	10061-02-6	Trans-1,3-Dichloropropene	710	U
75-01-4	Vinyl Chloride	1400	U	79-01-6	Trichloroethene	710	U
75-00-3	Chloroethane	1400	U	124-48-1	Dibromochloromethane	710	U
75-09-2	Methylene Chloride	710	U	79-00-5	1,1,2-Trichloroethane	710	U
67-64-1	Acetone	1400	U	71-43-2	Benzene	710	U
75-15-0	Carbon Disulfide	710	U	10061-01-5	cis-1.3-Dichloropropene	710	U
75-35-4	1.1-Dichloroethene	710	U	110-75-8	2-Chloroethylvinylether	1400	U
75-35-3	1.1-Dichloroethane	710	U	75-25-2	Bromoform	710	U
156-60-5	Trans-1.2-Dichloroethene	710	U	108-10-1	4-Methyl-2-Pentanone	1400	U
67-66-3	Chloroform	710	U	591-78-6	2-Hexanone	1400	U
107-06-2	1,2-Dichloroethane	710	U	127-18-4	Tetrachloroethene	710	U
78-93-3	2-Butanone	1400	U	79-34-5	1.1,2,2-Tetrachloroethane	1400	U
71-55-6	1,1,1-Trichloroethane	710	U	108-88-3	Toluene	710	U
56-23-5	Carbon Tetrachloride	710	U	108-90-7	Chlorobenzene	710	U
108-05-4	Vinyl Acetate	1400	U	100-41-4	Ethylbenzene	710	U
75-27-4	Bromodichloromethane	710	U	100-42-5	Styrene	710	U
					Total Xylenes	710	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MEEIXX8910

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME1096
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82987
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 0.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	630	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	630	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	630	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	630	U
75-09-2	Methylene Chloride	630	U	79-00-5	1,1,2-Trichloroethane	630	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	630	U
75-15-0	Carbon Disulfide	630	U	10061-01-5	cis-1,3-Dichloropropene	630	U
75-35-4	1,1-Dichloroethene	630	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	630	U	75-25-2	Bromoform	630	U
156-60-5	Trans-1,2-Dichloroethene	630	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	630	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	630	U	127-18-4	Tetrachloroethene	630	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	630	U	108-88-3	Toluene	630	U
56-23-5	Carbon Tetrachloride	630	U	108-90-7	Chlorobenzene	630	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	630	U
75-27-4	Bromodichloromethane	630	U	100-42-5	Styrene	630	U
					Total Xylenes	630	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

APPENDIX B-1

DOSE-RESPONSE ASSESSMENT

POLYNUCLEAR AROMATIC HYDROCARBONS

In this section, various issues relating to the incremental excess cancer risk from exposure to PAHs are discussed. These issues include a discussion of PAH mixtures and how they are treated in a risk assessment, and reviews of the studies used by USEPA to derive the cancer potency factors.

Polynuclear Aromatic Hydrocarbon Mixtures

Many PAH-containing mixtures are carcinogenic in humans and animals. Some pure PAH components have been tested in animals and found to have carcinogenic activity, while others have been repeatedly tested and found to have no carcinogenic activity. Quantitative dose/response data exist only for a few well-studied PAHS. Benzo(a)Pyrene (B(a)P) is well-studied and is often used as a surrogate for PAHs as a class. USEPA and ICF-Clement Associates cancer potency factors have been derived for B(a)P for both the oral and inhalation routes.

PAHs are routine analytes at former coal gasification sites. Several are carcinogenic, while several are not considered by USEPA or the International Agency for Research on Cancer (IARC) to be carcinogenic. There are three possible approaches for performing quantitative risk assessment of this subset of PAHs for which there are analytical data:

- Total all the PAHs and apply the cancer potency factor for B(a)P.

an environmental mixture of PAHs by assuming that other PAHs are equal in potency to B(a)P. The comparative potency approach (ICF-Clement Associates, 1987a; Chu and Chen, 1984) has merit for assessing the risks of a specific PAH mixture of known composition. An important criticism of the comparative potency approach such as that proposed by ICF-Clement Associates is that it ignores the myriad of other carcinogenic PAHs normally found in PAH-contaminated samples. Table B-2 shows a list of some individual PAHs that have been identified in coal tar and related products and that have been found to be carcinogenic. Many of these compounds are present in hazardous waste samples for which risk assessment must be performed. When samples of these wastes are sent to Contract Laboratory Program laboratories for analysis, however, data on only 14 PAHs will be collected. Only six of these are considered by USEPA to be probable human carcinogens. The comparative potency approach totally ignores these compounds. The USEPA approach of totaling the carcinogenic PAHs does not explicitly consider these other probable contaminants. However, the application of the B(a)P factor to the subset of the carcinogenic PAHs may provide an appropriate margin of safety, given that not all carcinogenic PAHs are as potent as B(a)P.

Scientific reviewers of the ICF-Clement Associates approach, while applauding the authors' theoretical treatment of the topic, also pointed out the limitations of using such a method for complex environmental samples. For example, Dr. Roy Albert (ICF-Clement Associates, 1987b) made the following comment:

> The section that tests the comparative potency method using a synthetic mixture of PAHs is fine but needs to include a mixture found in real life such as products of combustion, extracts of shale tar, or cigarette smoke condensate. USEPA's use of B(a)P as a surrogate could cover unknown carcinogenic constituents in such mixtures, so may have some validity. Some realistic complex mixtures should be examined to see if the comparative potency method works. It is not necessary to include such an examination as part of this effort, but it should be done at some point.

In a similar vein, Dr. Jeffrey Harris (ICF-Clement Associates, 1987b) of Massachusetts Institute of Technology made the following comment:

> I am concerned that a great many environmental mixtures (e.g., smoke from fossil fuel combustion, leachates from hazardous waste sites) will not consist purely of PAHs. In such cases, I am not sure that the proposed methodology will address the central problem of evaluating the potency of the overall mixture. If, as suggested by the current report, most PAHs are of equal or lesser potency than B(a)P, then the real uncertainties will arise not from the PAHs but from the remaining compounds, either alone or in combination with PAHs. Suppose that a mixture contains PAHs,

TABLE B-1

PAH ANALYTES AT HAZARDOUS WASTE SITES

PAHS ON USEPA'S HSL (TCL)	PAHS CONSIDERED CARCINOGENIC BY USEPA	PAHS FOR WHICH ICF-DERIVED COMPARATIVE POTENCY FACTOR EXISTS
Benzo(a)pyrene	x	x
Indeno(1,2,3-cd)pyrene	x	x
Dibenzo(a,h)anthracene	x	
Benzo(a)anthracene	x	x
Chrysene	x	x
Benzo(b)fluoranthene	x	x
Benzo(k)fluoranthene		x
Benzo(g,h,i)perylene		x
Fluorene		
Acenaphthene		
Phenanthrene		
Anthracene		
Fluoranthene		
Pyrene		

prime assumption built into the whole process.

The ICF-Clement Associates report clearly states that their approach does not address the issue of antagonism or synergism, but such effects have been documented and can have important implications for risk assessment when complex environmental mixtures are involved. The following paragraphs summarize several selected reports of synergism found in a cursory review of the scientific literature.

In the IARC report on coal tars and derived products (IARC, 1985), there is a report on the co-carcinogenic properties on a noncarcinogenic fraction of creosote. A basic fraction of creosote was tested in mice by Sall and Shear (IARC, 1985) for modifying effects of B(a)P-induced tumorigenesis. A group of 100 female strain A mice was divided into five subgroups and painted three times a week (124 to 145 times) with a 1 percent solution of the basic fraction in benzene, 0.2 or 0.05 percent B(a)P in benzene, or 0.05-percent B(a)P in benzene containing 1 percent of the basic creosote fraction alone. Tumors were not produced in any of the mice receiving the basic creosote fraction alone. However, the latent period for tumor appearance was shorter in the groups receiving B(a)P and the basic fraction of creosote as compared with that for mice receiving B(a)P alone, suggesting that the basic fraction of creosote decreased the latency of the tumorigenic effects of B(a)P.

In addition, many studies on co-carcinogenesis have been concerned with the identification of tumor-accelerating substances present in cigarette smoke. These compounds are generally tested for co-carcinogenic activity by repeated

TABLE B-2

COAL-TAR CONSTITUENTS OF INTEREST
THAT ARE NOT ROUTINE ANALYTES
AT HAZARDOUS WASTE SITES

CARCINOGENIC PAHS	
Carbazole	(USEPA category B2 carcinogen)
Quinoline	
Dibenzocarbazoles	
2-aminopyrene	
Benzo(c)acridine	(USEPA category C; IARC-limited animal data)
Benzo(e)pyrene	(IARC-limited short-term data)
Benzo(j)fluoranthene	(IARC-sufficient animal data)
Benzo(a)fluoranthene	(IARC-sufficient animal data)
Dibenz(a,h)anthracene	(IARC-limited animal data)
Dibenz(a,c)anthracene	(IARC-limited animal data)
Dibenz(a,i)pyrene	(IARC-sufficient animal data)
5,6-benzoquinoline	
Methyl pyrene	
Dibenzo(a,h)pyrene	
Dibenzo(c,g)carbazole	
Cyclopenta(c,d)pyrene	(IARC-limited animal data)
Benzo(c)phenanthrene	

carcinogenic PAHs detected at the site may overestimate actual risk, Jordan considers it the most suitable alternative for assessing risks of exposure to a mixture of PAHs. While not used to quantitatively assess carcinogenic risks in this report, Jordan will refer to the comparative potency approach developed by ICF-Clement Associates in a qualitative manner, when discussing the results of the risk assessment and interpreting their significance. Drawbacks to the use of the USEPA cancer potency factors are briefly summarized in the following paragraphs.

Derivation of the Oral Cancer Potency Factor

The current cancer potency factor (oral) for B(a)P is based on a quantitative analysis of the dose-response data presented in a study by Neal and Rigdon (1967). In this study, male and female mice (CFW strain) were repeatedly fed B(a)P in their diet. The carcinogenic endpoint was forestomach tumors.

Numerous other studies similarly demonstrate that orally administered B(a)P can cause gastric tumors in several strains of mice (Collins et al., 1943; Peacock and Kirby, 1944; Nau et. al. 1958; Rigdon and Neal, 1966; Federenko and Yanysheva, 1966). Previous studies, however, did not utilize large numbers of animals or multiple doses. Therefore, the study by Neal and Rigdon (1967), which used 608 mice and 10 dose levels, was chosen by USEPA for quantitative dose/response assessment. In this study, mice were dosed for varying periods of time with B(a)P incorporated into laboratory chow. The exact manner of preparing the diet was not reported. Animals were allowed to eat ad libitum. Dosimetry was not quantitatively performed by measuring food

which are known tumor initiators and also dioxins and PCBs, which are known tumor promoters. Refined analysis of PAH potencies will still not address the initiator-promoter interactions between PAHs and the other compounds. To take a simple example, would one expect to predict the carcinogenic potency of tobacco smoke from the PAH dose-additive model, when such smoke contains nitrosamines, metals, radioisotopes, etc.? The above objection can be rebutted, at least to some extent, if the authors can show that many relevant environmental mixtures consist of pure PAHs.

Another criticism of the comparative potency approach concerns the potential for synergistic effects when individual components are administered together. Dr. Norton Nelson (ICF-Clement Associates, 1987b) of New York University made the following comment upon reviewing the ICF-Clement Associates document:

> There are, of course, the usual concerns about cross-species extrapolation; the presence of inhibitory, enhancing as well as additive and neutral factors in the media in which the several agents are found; the uncertainty as to the sequence in which the biological action takes place in the several species and so forth and so forth [sic]. Most of these are, of course, covered in the discussion.
>
> It may be noted that published work has shown that in some instances when several carcinogenic agents, which are independently active, when administered together can produce either addition or inhibition and, perhaps, in some cases, synergistic action. This, of course, relates to the underlying premise of the additive nature of carcinogens which is a

potency factor is that the maximum period of the experiment was only 110 days for most dosage groups, and 70 to 197 days for several dosage groups. It is likely that the dose required to produce the observed effects would have been lower had the experimental dosing period been longer (USEPA, 1982). This assumption has basis in the study itself. Other animals were dosed for shorter periods of time and were observed to have reduced effects in proportion to the dosing time. Other experimental factors that are atypical of standard bioassay protocols include variable age of first exposure and an observation period that lasted on-fifth of a lifetime.

USEPA corrected for several of these experimental deficiencies in calculating its cancer potency factor. First, USEPA restricted its analysis of the data set to that subgroup of the experimental population that had been exposed continuously for the length of the experiment. Second, USEPA adjusted the experimental dose by averaging the actual daily dose for the dosing period over the entire experiment period.

$$\text{Adjusted dose} = \text{Actual daily dose} \times \frac{110 \text{ days}}{183 \text{ days}}$$

Lastly, the unadjusted cancer potency factor from the study was translated into a human potency value. First, the risk must be adjusted to account for constant exposure throughout one's entire lifetime. It was assumed that a normal mouse lifetime was 630 days. USEPA's standard procedures for less than full lifetime follow-up yield an adjustment factor of $(630/183)^3 = 40.8$.

Second, it is standard practice to calculate species-equivalent exposure units

application to mouse skin together with low doses of B(a)P. A positive response would be obtained in cases where the tumor yield of the combination exceeds that produced by either agent alone at the same doses. Van Duuren and co-workers (USEPA, 1979) established that a pronounced co-carcinogenic effect could be obtained with catechol and the noncarcinogens pyrene, benzo(e)pyrene, B(e)P, and benzo(g,h,i)perylene. Doses of 2,000, 12, 15, and 21 ug of catechol, pyrene, B(e)P, and benzo(g,h,i) perylene, respectively, were applied three times a week for 52 weeks to female ICR/Ha Swiss mice. Each animal also received 5 ug of B(a)P in 0.1 ml acetone with each dose of test substance. Fluoranthene has also been shown to possess co-carcinogenic activity. The application of a comparative potency approach to assessing the risks of PAHs would totally ignore the co-carcinogenic properties of some of the noncarcinogenic compounds.

Summary

Jordan reviewed the toxicologic data on the tumorigenesis of B(a)P and mixtures of PAH compounds, and concluded that (1) use of the cancer potency factors for B(a)P derived by USEPA and ICF-Clement Associates for the oral and inhalation routes is appropriate, and (2) these values should be used to assess the risks of the total concentration of carcinogenic PAHs. Jordan recognizes that there are some technical limitations to this approach; however, the limitations are not serious enough to justify selecting another approach.

Although using the cancer potency factor from assays on B(a)P for the seven

from the animal study to humans. The relevance of rodent forestomach tumors to humans has been examined (USEPA, 1982). While apparently relevant with respect to route of administration, the site of tumor production and probable underlying mechanism are possibly unique to laboratory rodents because of the anatomy of the rodent stomach. The forestomach in both rat and mouse is nonglandular and has a stratified squamous epithelium with a cornified covering. The fundus portion of the human stomach (homologous to the forestomach in rodents) is glandular and has a columnar epithelium. The similarities between the epithelium of rodents and that of skin suggest that the induction of forestomach tumors in mice may be analogous to the induction of skin tumors in skin-painting bioassays. This possibility calls into question the relevance of forestomach tumors in mice to the potential for human cancer from B(a)P ingestion.

B(a)P has been shown to cause distant site tumors where administered orally. This is consistent with the wide tissue distribution that has been observed in rodents following GI absorption. Rigdon and Neal observed pulmonary adenomas, thymomas, lymphomas, and leukemia in CFW mice fed B(a)P (Rigdon and Neal, 1966; Rigdon et al., 1967). Ingestion of B(a)P caused mammary tumors in Lewis rats (USEPA, 1979) and Sprague/Dawley rats (USEPA, 1982). Ovarian, lymphoid, mammary, and heptic tumors have also been observed in mice after oral administration of a related PAH (i.e., dimethylbenzanthracene).

For human risk assessment, an oral cancer potency factor based on gastric tumors and/or distant site tumors in a species anatomically more similar to humans than rodents would be desirable. In its absence, the current USEPA

consumption. The amount of B(a)P consumed was estimated assuming that each mouse consumed 4 g of food daily. This lack of quantitative dosimetry introduces uncertainty into the value of the cancer potency factor.

Stomach tissues were examined macroscopically and histologically. The frequency of papillomas and squamous cell carcinomas in the squamous portion of the stomach (forestomach) were recorded. Tumors did not occur in other parts of the GI tract. Other tissues were not examined. The authors concluded that the development of gastric tumors in CFW mice fed B(a)P is influenced by (1) the concentration of B(a)P per gram of food; (2) the number of days it is fed; and (3) the total amount of B(a)P ingested per day.

There are several aspects of the Neal and Rigdon study (1967), as well as USEPA's approach to deriving an oral cancer potency factor, which have been criticized in the scientific literature. These criticisms are presented to highlight some of the toxicological uncertainties associated with the use of the B(a)P potency factor for quantifying incremental excess cancer risk. Jordan considers these criticisms insufficient to warrant not using the potency values.

Critical comments on the Neal and Rigdon study (1967) are twofold. First, the mice were fed diets dosed with B(a)P, but actual food intake per animal was not measured. An average food intake was assumed. Second, the dosing period was not consistent across exposure groups.

A deficiency of the Neal and Rigdon study (1967) for derivation of a cancer

following oral exposure B(a)P.

The application of the USEPA oral cancer potency factor to dermal exposures in humans may be an appropriate use of the dose/response data. In the animals and in humans, the major anticipated site of action is the skin tissue itself. Both human and rodent skin exhibit the PAH-metabolizing activity required for tumorigenesis.

For over 200 years, it has been recognized that skin cancers are associated with occupational exposure to tars and pitches related to the destructive distillation of coal. Scrotal lesions represent a large fraction of the skin cancers reported in numerous studies. IARC (1985) has concluded that there is sufficient evidence that occupational exposures to coal tar, as they occur during the destructive distillation of coal, give rise to skin cancer in humans. In addition, there is sufficient evidence that coal tar pitches are carcinogens in humans, and limited evidence that coal tar-derived creosotes are carcinogenic in humans. These data are corroborated by the animal data. There is sufficient evidence for the carcinogenicity in experimental animals of coal tars, creosotes, creosote oils, anthracene oils, and coal tar pitches (IARC, 1985).

Little information exists on the potential for distant site tumors following dermal administration of PAHs to animals. In general, there has been inadequate reporting of the possible effects on internal organs of application to the skin of the text substances. The mouse skin assay, for instance, is restricted to observation of skin tumors.

on a unit mass/unit surface area basis. To convert the estimate to these units, it is multiplied by the additional adjustment factor of $(70/0.034)^{1/3}$ = 12.72, where 70 and 0.034 kg are the weights of an average human and CFW mouse, respectively. After making these two adjustments, the human cancer potency factor was estimated to be 11.53 $(mg/kg/day)^{-1}$.

In fitting the linearized model, no adjustments were made for the variable ages of the animals at first dosing or the ages attained at the end of the observation period. Using the standard USEPA approach, data on animals exposed to 50 ppm B(a)P or more were discarded because of "lack of fit." USEPA obtained a 95 percent upperbound estimate on the chemical's potency to humans of 11.53 $(mg/kg/day)^{-1}$. This number represents an upperbound on the slope of the cancer dose-response curve for this chemical.

USEPA is currently considering lowering the oral potency factor to 4.3 $(mg/kg/day)^{-1}$ based on a reanalysis of the available dose-response data regarding oral exposures to B(a)P. However, at this time, there is no way to predict either the likelihood that the cancer potency factor will, in fact, be changed or the scheduled date at which any potential agency changes would be finalized.

Other toxicological issues have been raised. One issue focuses on the relevance of the tumor endpoint between animals and humans, which is related to physiological differences of the target organs in animals and humans. When applying the current USEPA oral cancer potency factor to human risk assessment, it is important to question the relevance of the tumor endpoint

with B(a)P once every two weeks for 60 weeks by topical application to the shaved skin of the back. Therefore, total doses of as little as 0.19 mg per animal over 60 weeks produced significant carcinogenic responses. A similar result is observed when reviewing the results of a mouse skin study by Bingham and Falk (1969). A dose of 6.25 ug per animal given 3 times a week for 50 weeks caused 35 percent of the test animals to develop skin tumors. B(a)P was administered topically to the backs of C3H/He mice. The total dose of 0.94 mg resulted in a significant carcinogenic response. Habs et al. (1980) also showed that low doses of B(a)P can cause mouse skin tumors. B(a)P was topically applied to the backs of female NMRI mice for their lifetimes at a dose of 1.7 ug/animal, twice a week. It is not known what the lifetime of these animals was, but even assuming a full two years, the total dose per animal that caused a tumor incidence of 24 percent was only 0.35 mg per animal.

These total dermal doses of 0.2 to 0.9 mg per animal to produce a significant carcinogenic response are two orders of magnitude lower than the total orally administered dose of B(a)P that Neal and Rigdon (1967) gave over 100 days to produce a significant carcinogenic response. In that study of B(a)P in the diet, at 40 to 250 ppm, total doses of 13 to 165 mg per animal caused tumor incidences of 2.5 to 90 percent (gastric tumors).

It would appear that the application of the B(a)P oral cancer potency factor would underestimate the risk to mice dosed dermally with B(a)P.

The relevance of this finding to risk assessment is, however, questionable.

cancer potency factor may be used for oral exposures to humans. Although there is no information of cancers in humans following oral exposures to PAHs, members of this class of compounds have been shown to cause skin, lung, and perhaps bladder tumors in humans when administered by other routes of exposure (IARC, 1985; USEPA, 1982; USEPA, 1979).

Therefore, PAHs can be metabolically activated both at the site of entry (e.g., skin or lungs) and possibly at distant sites (e.g., bladder). Use of the oral cancer potency factor should be accompanied by a consideration of its limitations:

(1) The short duration of the experiment results is an unquantifiable uncertainty in the cancer potency factor.

(2) The possible oversensitivity of the mouse forestomach may overestimate the risk to humans of gastric tumors due to anatomical differences.

(3) The effect of the relative sensitivity of mouse and human stomachs regarding PAH metabolism and tumorigenesis has an unknown effect of the relative sensitivities of mice and humans to the formation of distant site tumors following oral exposures.

(4) The use of only gastric tumors in mice to derive the cancer potency factor and not the total of local and distant tumors introduces uncertainty in the estimates of total carcinogenic risks to humans

potency factor for benzo(a)pyrene (B(a)P) is based on local site-of-entry tumors in the gastrointestinal tract of rodents. These tissues are metabolically active and can cause PAH metabolism (EPA, 1979). Some studies have correlated tumorigenesis with arylhydrocarbon hydroxylase activity (EPA, 1979) in mouse gastric mucosa. Thus, systemic uptake and hepatic metabolism is not required for PAHs to cause gastric tumors in mice.

For the skin, where the risk assessor wishes to apply an orally derived dose/response value, the situation is similar. The expected carcinogenic endpoint is primarily cancer of the skin. Skin is also metabolically active, and systemic absorption is not required for skin tumorigenesis. B(a)P has been shown to cause distant site tumors when administered orally. Rigdon and Neal observed pulmonary adenomas, thymomas, and leukemia in mice fed B(a)P (Rigdon and Neal, 1966; Rigdon, et al., 1967). The current EPA cancer potency factor, however, does not consider distant site tumors. Thus, when making the direct comparison of dermal dosing situation to the EPA cancer potency factor, only local uptake into the tissues at the site of entry needs to be considered.

An appropriate dermal toxicokinetic factor would consider the comparative rates of uptake into the tissue, the rates of both toxifying and detoxifying metabolism, and the rates of systemic uptake of the parent compound and/or metabolites between the mouse gastrointestinal tract (diet) and the human skin (soil). Another issue to consider is the residence time of contact of the xenobiotic and the biological membrane. Quantitative information is not available to accurately derive a toxicokinetic factor at this time. It is

In conclusion, it is reasonable to presume, based on the available information, that the major target organ of PAHs following dermal exposure by animals and humans is the skin itself. Because the oral cancer potency factor for B(a)P is based on gastric tumors that did not require systematic uptake of the B(a)P and because the anatomy of the rodent forestomach is similar to rodent skin, the cross-route application of a cancer potency factor is reasonable in this case. The uncertainty in the public health risk assessment process cannot be quantified. To have optimal accuracy, the risk assessor may wish to use an appropriately derived toxicokinetic factor to consider the differences in the local uptake into human skin versus uptake into the membranes of the GI tract of the CFW mouse.

The use of an oral cancer potency factor for assessing the risks due to dermal exposures to PAHs has several limitations that have unknown effects on the resulting estimates of carcinogenic risks.

Regarding the ability of a mouse oral cancer potency factor to estimate mouse skin responses, many scientists argue that the oral potency factor underestimates the potency of B(a)P as a mouse skin carcinogen. There is evidence in the literature that PAHs are more potent carcinogens in mouse skin under the experimental conditions than in the mouse GI tract (Grimmer, 1985). Jordan has performed some preliminary calculations to demonstrate this fact.

In a summary of four skin-painting experiments with C57BL/6J female mice (USEPA, 1979), doses of 0.025 umoles and higher (to 0.4 umoles) resulted in 7 to 100 percent of the animals developing tumors. The animals were treated

A cancer potency factor for humans was derived by USEPA from the study of Thyssen et al. (1981). In this experiment, Syrian golden hamsters were exposed throughout their lives to B(a)P in a sodium chloride aerosol 4.5 hours/day, 7 days/week for 10 weeks, and then 3 hours/day thereafter. Respiratory tract tumors were induced in the nasal cavity, larynx, and trachea. The incidences of respiratory tumors were zero occurrences in a sample of 27 (0/27) for controls, 0/27 for the low-dose group, 9/26 for the mid-dose group, and 13/25 for the high-dose group. The highest exposure level had an adverse impact on survival time. Due to early mortality in the highest dose group, these data were excluded from the derivation of the cancer potency factor. Based on the respiratory tumor response of male hamsters and using the linearized multi-stage model, USEPA derived a potency factor from the study of 0.73 $(mg/kg/day)^{-1}$ (USEPA, 1984a). The cancer potency factor was translated into a human cancer potency factor by multiplying this value by the cube root of the body-weight ratio. This approach is empirically accepted to adjust for species-to-species extrapolation. The factor of $(70/0.12)^{1/3}$ was used to derive the human cancer potency factor of 6.11 $(mg/kg/day)^{-1}$.

USEPA is currently considering lowering the inhalation potency factor to 0.45 $(mg/kg/day)^{-1}$ based on a reanalysis of the available dose/response data regarding inhalation exposures to B(a)P. However, at this time there is no way to predict either the likelihood that the cancer potency factor will, in fact, be changed, or the scheduled date at which any potential agency changes would be finalized.

Some scientists arguethat potencies for these two dosing situations that vary drastically in their experimental details cannot be directly compared. In the oral experiment, food is consumed for a fraction of each day for the duration of the experiment; whereas, in skin-painting experiments, animals are exposed continuously to the agent. In addition, solvents are often used as vehicles in skin-painting experiments. These solvents may either injure the skin, causing modifications in uptake, or facilitate uptake directly. On the other hand, lipophilic contaminants are generally more efficiently absorbed through the membranes of the GI tract than through intact skin.

The more serious uncertainty involved in interpreting these data concerns the possible differences in sensitivity of mouse and human skin towards PAH carcinogenesis. The uncertainties involved in estimating human risks posed by dermal contact with PAHs using the mouse oral potency factor cannot be quantified.

Several studies have been reported that document the occurrence of tumors other than at the site of entry. However, studies (either for distant-site tumors or for dermal application) are not of a quality that permits the derivation of a potency factor. Because there is no cancer potency factor for dermal absorption, Jordan has used the oral potency factor.

When deriving an appropriate toxicokinetic factor to use for dermal risk assessment with PAHs, the risk assessor needs to be concerned with the local uptake into the skin and the membranes of the gastrointenstinal tract, but not the uptake and absorption into the system circulation. The oral cancer

addition, other supporting studies of oral toxicity are not known.

reasonable, however, to assume that local uptake of B(a)P into the gastrointestinal tract of mice exceeds the local uptake into the skin from PAH-contaminated soils. The skin is designed as a barrier, whereas the membranes of the gastrointestinal tract are designed to allow, if not facilitate, uptake of substances. It is common for risk assessments to use dermal toxicokinetic factors of 1-10 percent when qualtitatively assessing the risks due to dermal exposures to B(a)P and using its oral cancer potency factor. Thus, it is assumed that the net rate of local uptake of B(a)P into the skin of humans is 1-10 percent of the net rate of local uptake of B(a)P into the gastric mucosa of the mouse. In the absence of data to the contrary, these estimates are reasonable.

For carcinogenic PAHs, Jordan recommends that 0.5-1.0 be assumed as an oral TKF. The Neal and Rigdon study (1967) from which the EPA oral potency factor for B(a)P was derived was a dietary study in mice. B(a)P was administered as an ingredient in standard laboratory chow. No data are available on the effects of soils versus laboratory chow as vehicles. Likewise, no data exist on the comparative uptake or metabolism of B(a)P in membranes of gastrointestinal tracts of mice versus those of humans. Since there is no a priori reason to assume great differences, it is appropriate to use a toxicokinetic factor of 0.5-1.0 for B(a)P.

Basis of the USEPA Inhalation Cancer Potency Factor for B(a)P

per week for 120 weeks with 500 mg/kg styrene. Mice were once dosed per week for the same duration with 300 mg/kg styrene. The rats showed no significant effects. This study was deemed inappropriate for risk assessment of chronic toxicity due to the weekly dosing schedule.

Another study by Wolf et al. (1956) gave oral daily doses to rats over 185 days, which is not considered a chronic duration. While the rats receiving an oral dose of 95 mg/kg body weight/day showed no adverse effects, the rats receiving oral doses of 285 and 475 mg/kg/day showed reduced growth and increased liver and kidney weights.

Other subchronic studies in rats with orally administered doses reported Lowest-Observed-Effect Levels (LOELs) at 350 to 500 mg/kg/day and NOELs at 100 to 400 mg/kg/day.

The confidence rating for the styrene oral RfD is medium because the critical study, although well performed, used such a small number of animals. In addition, none of the studies supporting the RfD value are considered as chronic in duration.

BENZENE

Benzene has been classified by USEPA as a Class A known human carcinogen based on several studies showing increased incidence of nonlymphocytic leukemia from occupational exposure. These studies have also shown increased incidence of neoplasia in rats and mice exposed by gavage and inhalation.

Derivation of the Oral and Inhalation Cancer Potency Factors

The oral and inhalation cancer potency factors for benzene have been set by USEPA at 2.9×10^{-2} $(mg/kg/day)^{-1}$; they were derived from the human data for inhalation exposure.

The unit risk estimate is the geometric mean of four maximum likelihood point estimates using pooled data from two occupational studies (Rinsky and Young, 1981; Ott, 1978), which were then adjusted for the results of the Wong et al. (1983) study. The pooled cohorts were significantly large and were followed for an adequate period of time. Increases in leukemias were statistically significant and related to dose in one of these studies. The risk estimates derived from considering the Rinsky and Ott studies were very close in value to the risk factor based on Infante et al. (1977), Ott (1978), and Aksoy (1974).

In a retrospective cohort mortality study, Rinsky and Young (1981) observed seven deaths from leukemia among 748 workers exposed to benzene and followed for at least 24 years (17,020 person-years). This increased incidence was statistically significant; the standard mortality ratio (SMR) was 560. (An SMR

Two other subchronic studies, although not cited as specific supporting studies for the RfD, provide evidence of xylene's toxic effects. A rat dietary study by Bowers et al. (1982) reported a NOAEL of 10 mg/kg/day with an uncertainty factor of 1,000. An inhalation study by Jenkins et. al. (1970) on rats, guinea pigs, monkeys, and dogs was used by USEPA in 1985 to calculate an RfD of 0.06 mg/kg/day, where the effects seen at the high dose were deaths in rats and monkeys and tremors in dogs.

The only adjustment made to the NOAEL of 250 mg/kg/day to obtain the RfD of 2 mg/kg/day was to adjust the dose from 5 days/week to continuous. The uncertainty factor of 100 was chosen to give a factor of 10 for species-to-species extrapolation and 10 to protect sensitive individuals.

The oral xylene RfD is given a medium confidence level because the NTP study was considered adequate in size, duration of study, and comprehensiveness of histological examinations, but did not include clinical chemistries, analysis of blood enzymes, and urinalysis. In addition, no LOEL has yet been reported for chronic oral exposure to xylene for comparison with the NOAEL.

Derivation of the Inhalation Risk Reference Dose

The inhalation RfD is taken as the value listed in the Superfund Public Health Evaluation Manual. This value is 0.4 mg/kg/day based on a subchronic rat study (Carpenter et al., 1975 NTP; 1986b). A dose of 3,500 mg/m^3 was administered 6 hrs/day, 5 days/wk for 13 weeks. No effects were seen at this dose. Derivation of the RfD from this study is not known. An uncertainty factor of 1,000 was used.

STYRENE

The evaluation of the human carcinogenic potential for styrene is under review by a USEPA inter-office agency work group. Although it is currently classified by USEPA as a probable human carcinogen (i.e., Class B2), there is no USEPA cancer potency factor. Therefore, in this analysis noncarcinogenic risks are estimated. In IRIS, the RfD is calculated for noncarcinogenic endpoints for oral exposure only.

Derivation of the Oral Risk Reference Dose

The styrene oral RfD is 0.2 mg/kg/day, which is principally based on the subchronic oral study in dogs by Quast et al. (1979). This study showed evidence of a NOAEL of 200 mg/kg/day for red blood cell and liver effects. There are other supporting studies cited. There is no dose conversion factor applied to the NOAEL of 200 mg/kg/day from the Quast et al. (1979) study to obtain the RfD.

The chosen study exposed four female and four male beagle dogs to doses of zero, 200, 400, or 600 mg styrene/kg body weight/day by peanut oil gavage for 560 days. No adverse effects were noted in the dogs gavaged with doses of 200 mg/kg/day. The effects observed at the higher dose categories were increased numbers of Heinz bodies in the red blood cells and liver, and increased iron deposits. There were noteworthy differences in the variations of blood cell parameters in individual animals at the same dose level.

The supporting chronic study of Ponomarkov and Jomatis (1978) dosed rats once

mixed in the diet. Each dose was equal to an acute oral LD50. In addition, rats tolerated higher doses of KCN when administered in drinking water than when administered in bolus by gavage with water as the vehicle (USEPA, 1985d).

USEPA has also determined that the dog is not a good model for cyanide toxicity in humans. Dogs have been shown to be the most sensitive of the usual laboratory animals to cyanide's effects (ATSDR, 1988). This is due to the low level of cyanide metabolic capacity of the dog liver. Total rhodanese activity in all other species tested is higher than in dogs. Rhodanese is the enzyme that detoxifies cyanide. This is another reason that the low LOAEL for dogs in the Hertting study is not inconsistent with the cyanide toxicological data base.

In another study, Philbrick et al. (1979) identified a LOAEL in rats at doses of 30 mg/kg/day. Myelin degeneration was observed in spinal cords of rats fed this dose level. In addition, depressed thyroid function was observed. The NOAEL defined by the Howard and Hanzel study (1955) is not inconsistent with the LOAEL defined by the Philbrick study.

Application of the Oral Cyanide Risk Reference Dose to Inhalation Exposures

USEPA has not derived an RfD or an AIC level for inhalation exposure to cyanides. Animal studies pertaining to the chronic toxicity of inhaled cyanide were not located in the scientific literature. To assess quantitatively the human health risks due to inhalation of particulate cyanide compounds, Jordan therefore evaluated the suitability of using the oral RfD.

NAPHTHALENE

The dose/response value for naphthalene is used to evaluate the potential hazards of noncarcinogenic PAHs. Currently, there is inadequate evidence that naphthalene is carcinogenic. Its dose response value is an AIC as listed in the USEPA Health Effects Assessment (HEA) Quarterly Update (9/88) and the SPHEM update (8/88). The AIC is determined for noncarcinogenic adverse health effect for naphthalene.

Derivation of Oral Risk Reference Dose

The AIC for naphthalene is 0.4 mg/kg/day, which was derived from a study by Schmahl (1955). In this study rats (strain not specified) were exposed in the in their diet to a dose that ranged from 10-20 mg/day. The rats were dosed 6 days/week for 700 days. The equivalent lifetime dose for the rats was 41 mg/kg/day. The observed toxicological effects were ocular and internal lesions.

The NOEL for the Schmahl study was 41 mg/kg/day. The AIC was derived from this NOEL by applying an uncertainty factor of 100 (for inter and intraspecies extrapolation), resulting in an oral AIC for humans of 0.4 mg/kg/day.

detoxification of cyanide when ingested versus when inhaled. To properly utilize the oral RfD in assessing inhalation risks, the effects of these competing processes need to be estimated. Jordan has defined an inhalation toxicokinetic factor to evaluate these two processes.

Jordan assumes that the degree of pulmonary adsorption of cyanide particles retained in the lungs is the same as the degree of GI absorption in the Howard and Hanzel study (1955), and that pulmonary retention of 10 um particles is 75 percent of the inhaled particles. Further, Jordan assumes that the detoxifying hepatic metabolism after ingestion is 10 times that following inhalation. Therefore, the toxicokinetic factor is 7.5 relative to GI exposure in the study from which the RfD was derived.

The toxicokinetic factor is consistent with the available information about the toxicity of HCN gas. If it is assumed that the adsorption following inhalation of HCN gas is 10 times the absorption following ingestion of cyanide salts in the gut, and that metabolism following ingestion is 10 times that following inhalation exposure, then it could be predicted that inhaled HCN is 100 times more toxic than ingested cyanide ion. This prediction is consistent with the observed human lethal doses. The oral lethal dose in humans has been reported to be approximately 1 mg/kg, whereas the inhalation lethal dose for HCN is approximately 0.02 mg/kg (ATSDR, 1988). This increase in toxicity is due partly to the high pulmonary uptake of the agent and the decreased metabolism.

It is well known that inhalation of HCN gas is much more toxic than ingestion of bolus doses of cyanide salts or ingestion of cyanide salts as dietary or drinking water constituents (USEPA, 1984b; ATSDR, 1988). This is due both to the efficient pulmonary uptake of HCN and to the decreased first-pass metabolic identification of cyanide when inhaled compared to ingestion. It is inappropriate to assess the risks of inhalation of HCN gas by use of the USEPA oral RfD. On the other hand, the oral RfD can be used to assess risks due to inhalation of cyanide-containing particulates if an appropriate toxicokinetic factor is applied.

There is no information available on the uptake of cyanide salts by the lungs. All available inhalation toxicology studies use cyanide in the form of HCN. It is reasonable to anticipate that particular cyanide salts are absorbed in the lungs, but to a lesser degree than HCN. This conclusion is based on the knowledge that cyanide salts are absorbed through the skin. Cyanides are moderately lipid-soluble, which allows them to rapidly penetrate the epidermis. In addition, some cyanide compounds (e.g., potassium cyanide) have a corrosive effect on the skin that increases the rate of dermal absorption (ATSDR, 1988). It is expected that particulate cyanide salts would be absorbed more efficiently through pulmonary membranes that are constantly bathed with aqueous physiological solutions than through intact skin.

In addition, it has been reported that sodium cyanide and potassium cyanide are extremely toxic when inhaled (Sax and Lewis, 1986). Jordan is unaware of any studies that described the degree of uptake of cyanide salts when inhaled; nor is there any quantitative information available concerning the relative

to rats only at very high doses (1,600 mg/kg) after oral dosing (NIOSH, 1985). The lethal dose for 50 percent of rats tested (LD50) ranges from 1,600 to 3,200 mg/kg (Clayton and Clayton, 1982). It has also been reported that dogs, which are the most sensitive of the known laboratory animals, tolerated 2,626 mg/kg of ferrocyanide given intravenously. The complex was rapidly excreted in the urine (Clayton and Clayton, 1982). No reports of adverse effects in humans from the ferro- or ferricyanide could be found in the literature surveyed. Use of the USEPA RfD to estimate the human health risks posed by exposure to iron-complexed cyanide would therefore greatly overestimate the actual risks.

Application of the Cyanide Risk Reference Dose to Dermal Exposure

Because cyanides are known to be readily absorbed through skin, it is appropriate to use the RfD to assess the risks posed by dermal contact with cyanide containing soil. As with inhalation exposures, it is expected that the metabolic detoxification is 10 times more efficient for ingestion exposure compared to dermal exposure. No information is available on the efficiency of uptake of cyanide from contaminated soil. Jordan also assumes that the dermal uptake of cyanide from cyanide-containing soil is 10 percent as efficient as uptake of cyanide from HCN-treated food in the study from which the RfD was derived. Therefore, the relevant toxicokinetic factor is one.

Application of the Cyanide Risk Reference Dose to Oral Exposures

As discussed previously, the toxicity of cyanide when given as a dietary constituent is less than when given as a pure compound by gavage. There is no information available regarding the efficiency of adsorption when soil or diet is the vehicle. A conservative approach is to assume that the uptake is the same. Therefore, Jordan recommends that a toxicokinetic factor of one be used in assessing the risks to human health posed by ingestion of contaminated soil.

Cyanide Speciation

Jordan recommends that the USEPA oral RfD for cyanides only be applied to free cyanides. These would consist of HCN and cyanide salts, which result in the free cyanide ion being released in solution. Iron-complexed cyanides (e.g., ferro- and ferricyanide) are forms of cyanide in which the cyanide ion is not dissociable. Potassium ferrocyanide, for instance, has been shown to be fatal

Jordan feels that until more information is gained on trimethylbenzenes, the assumption of a similar toxicity to xylene is conservative and applicable in this risk assessment.

APPENDIX B-2

TOXICOLOGICAL PROFILES

POLYNUCLEAR AROMATIC HYDROCARBONS

Polynuclear aromatic hydrocarbons (PAHs) are a class of several hundred compounds, all of which consist of annelated benzene rings. While each compound has specific chemical properties, their fate in the environment can be summarized broadly.

Several of the PAHs are volatile enough to exist as vapors in the atmosphere, including naphthalene, phenanthrene, anthracene, fluoranthene, and pyrene. These compounds are subject to photochemical degradation and are expected to have an atmospheric half-life of less than one day. PAHs with low vapor pressure exist in the atmosphere adsorbed to particulate matter. The half-life of these compounds may be from less than one day to several weeks, depending on the composition of the particulate matter and extent of PAH degradation from ozonolysis reactions (USEPA, 1984a). Studies have indicated that particles less than 3.0 um have the highest PAH sorption (Pucknat, 1981).

The half-life of PAHs in the soil is highly variable and can range from less than one day to several decades. Because PAHs have low water solubility and adsorb to soil particles, they are not expected to be highly mobile in soils. No significant leaching of PAHs into the groundwater is expected, particularly if the soils have high organic carbon content (USEPA, 1984a).

PAHs are ubiquitous in the environment and most are formed during the combustion of organic compounds. Major sources of PAHs include incomplete combustion of fuels for heat and manufacturing; burning of coal, gasoline, and

diesel fuel; and burning of municipal and agricultural wastes. PAHs are associated with manufactured process gas residuals (Atlantic Environmental Services, 1988). Cigarette smoke also contains PAHs. To a limited extent, these compounds also occur naturally (i.e., plants and bacteria synthesize PAHs during growth, and naturally-caused brush and forest fires produce PAHs).

The carcinogenic properties of individual PAHs have been known for over 50 years, but not all PAHs are carcinogenic. Most carcinogenic PAHs are derived from the benzo(a)anthracene structure. Benzo(a)anthracene is weakly carcinogenic; however, the addition of benzene rings to specific positions substantially increases the carcinogenicity of the new compound. The substitution of methyl groups to specific carbons of the benzene ring also increases the carcinogenicity (Klaassen et al., 1986). Of the sixteen PAHs detected at this site, six are classified as potential human carcinogens (Carcinogen Assessment Group [CAG] B2 classification).

There are numerous animal studies of the carcinogenic potential of individual PAHs; however, limited information is available on the effects of complex mixtures of PAHs in the environment. It is not certain what effect interactions of carcinogenic and noncarcinogenic PAHs have on the carcinogenic potential of the mixture. Complex mixture information is largely derived from mouse skin-painting experiments with extracts of coal tar products and gasoline or diesel exhaust. Carcinogenic responses have been reported; however, problems with study design and reporting limit the interpretation of these findings.

PAHs are lipophilic and are absorbed from the gastrointestinal (GI) tract, lungs, and across the dermal membrane. Studies of benzo(a)pyrene (B(a)P) have found that it readily crosses the membranes of the GI tract, and tissue accumulation is exponential as B(a)P concentrations increase. B(a)P has also been found to be readily absorbed from the lungs (Kotin et al., 1969; Vaino et al., 1976; Mitchell and Tu, 1979).

Once PAHs have been absorbed, metabolic activation is required to convert PAHs to the reactive electrophilic species which are responsible for tumorigenesis. PAHs are metabolized by the cytochrome P-450 system to epoxides, which are subject to epoxide hydrolases, and form stereoisomeric diols. Diol epoxides bind to DNA (Klaassen et al., 1986).

PAHs are excreted via the bile and GI tract into the feces. Animal studies of injected PAHs found trace amounts of PAHs in the urine and expired air, but the majority was excreted in the feces (Heidelberger and Jones, 1948; Heidelberger and Weiss, 1951).

The carcinogenicity of PAHs has been demonstrated in both human and animal studies. Occupational studies involving worker exposure to PAHs from emissions of coke ovens, foundry processes, coal gas production, roofing tar, and coal combustion have reported increased risk of lung and other-site cancer mortality. While not proven, PAH exposures are believed to be the cause of the increased risk. Varying degrees of increased risk have been noted among different occupations and may be attributed to different durations and

intensities of exposures, the presence of other compounds, and different PAH mixtures to which the workers were exposed.

Epidemiologic studies of community populations are confounded by many factors (e.g., exposure to other chemicals, residence time in the community, varying levels of air pollution over time, and cigarette-smoking behavior). However, when cigarette smoking was controlled for, a study of urban residents found a two-fold increase in the risk of lung cancer when compared to rural residents. This increased risk may be attributed to the higher level of PAHs in city air (USEPA, 1979).

Numerous animal studies have reported tumorigenesis resulting from inhalation, oral, dermal/skin-painting, and injection exposures to PAHs. Lung, liver, mammary gland and digestive tract tumors, and leukemia have been reported. These studies involved exposures to separate PAHs, while the human studies involved exposures to mixtures. The animal studies were also high-dose exposures with a limited number of animals. Estimation of carcinogenesis from low-dose exposure is subject to considerable uncertainty, which is compounded when the exposure is to a mixture of PAHs rather than a single compound.

Noncarcinogenic effects of PAH exposure have also been reported in animal studies. These effects include weight loss, kidney and liver function changes, bronchitis, and serum enzyme changes (Knobloch et al., 1969). Animal studies have found PAHs to cross the placenta, and teratogenic effects have been reported (Pucknat, 1981).

Because the effects of PAH exposure are dependent on metabolism of the PAHs, exposure to any compound which either inhibits or induces the enzyme systems associated with PAH metabolism may potentially magnify or reduce the effects of the exposure. People who have altered metabolism or are exposed to compounds in the environment or dietary elements that may affect the cytochrome P-450 system may have increased health risks from PAH exposure.

Occupational standards have been established for PAH exposure associated with coal tar pitch volatiles. The following PAHs found at this site have been classified as probable human carcinogens (CAG B2 classification): benzo-(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, dibenzo-(a,h)anthracene, indeno(1,2,3-cd)pyrene. In addition, the State of New York considers benzo(k)fluoranthene to be a probable human carcinogen.

BENZENE

Benzene is a highly flammable volatile aromatic hydrocarbon that is used both as a gasoline additive and a chemical intermediate in the production of many compounds (e.g., styrene and phenol). Benzene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988). Volatilization appears to be the major transport process of benzene from surface waters and soils to the ambient air, and atmospheric transport of benzene occurs readily (USEPA, 1979). Data indicate that it may be photo-oxidized rapidly in the atmosphere. The atmospheric destruction of benzene is probably the most likely fate process. Values for benzene's log octanol/water partition coefficient (K_{ow}) indicate that adsorption onto organic material may be significant. Sorption processes are likely removal mechanisms in both surface water and groundwater. Gradual biodegradation by a variety of microorganisms probably occurs. The rate of benzene biodegradation may be enhanced by the presence of other hydrocarbons.

Benzene is a recognized human carcinogen (IARC, 1982). Several epidemiological studies provide sufficient evidence of a causal relationship between benzene exposure and leukemia in humans. Several occupational studies since 1969 on exposures to low benzene concentrations (i.e., less than 9 ppm) conducted 1969 have shown no excess leukemias among workers and no mortality findings directly attributable to benzene exposures. Benzene is a known inducer of aplastic anemia in humans, with a latency period of up to 10 years. It reduces the number of white blood cells and other blood components, which may progress to a reduction in all blood cell types. Similar adverse effects

on the blood-cell-producing system occur in animals exposed to benzene. In both humans and animals, benzene exposure is associated with chromosomal damage, although it has not been shown to be mutagenic. Benzene has been shown to be fetotoxic and to cause embryolethality in experimental animals.

Exposure to high concentrations of benzene in the air causes central nervous system (CNS) depression and cardiovascular effects. Benzene has been reported to cause subjective symptoms (e.g., headaches and nausea) with chronic exposure to as little as 100 parts per million (ppm). Acute exposures of 50 to 150 ppm for 5 hours or 500 ppm for 1 hour will cause headaches, lassitude, and fatigue. An hour-long exposure at 1,500 ppm can cause illness, and 5 to 10 minutes at 20,000 ppm may be lethal for humans (Clayton and Clayton, 1981). No data could be found on subjective symptoms caused by benzene exposures closer to the National Institute for Occupational Safety and Health (NIOSH) recommended workplace time-weighted average (TWA) standard of 1 ppm, or the American Conference of Governmental and Industrial Hygienists (ACGIH) threshold limit value (TLV) of 10 ppm, which are designed to prevent leukemia and other chronic health effects in worker populations.

Acute occupational exposures have occurred. Browning (1965) reported that severe exposures, such as would occur when working in a storage tank, cause convulsions, paralysis, unconsciousness, and death. Deaths from cardiac sensitization and cardiac arrhythmias have also been reported after relatively large exposures. Milder exposure produced giddiness, headache, and nausea, followed by unconsciousness.

Early workplace practices produced chronic exposures to benzene at levels of 500 to 1,000 ppm. These exposures caused headaches and other clinical signs of benzene poisoning. Helmer (1944) reported that 60 of 184 workers in one plant exhibited headaches, fatigue, and blood disorders. Benzene levels were measured at 140 to 220 ppm after changes in work practices and ventilation equipment was installed; initial concentrations had been estimated at more than 5,000 ppm. Greenburg et al. (1939) reported on chronic benzene poisoning in three rotogravure printing plants. Benzene concentrations ranged from 11 to 1,060 ppm, and workers were exposed for 4 to 7 days/week. Symptoms reported for the 286 of 332 workers with varying degrees of benzene poisoning included fatigue, dryness of mucous membranes, nausea or vomiting, and lethargy for medium-level exposures; and the same symptoms plus weakness, nose bleeds, loss of appetite, shortness of breath, dizziness, and lethargy for the highest concentration level.

TOLUENE

Toluene is an aromatic hydrocarbon that is flammable, practically insoluble in water, and fully miscible with many organic liquids. Toluene is produced primarily from petroleum sources. It is used to produce benzene and phenol. Also, toluene is used as a solvent and an intermediate in production of explosives and specialty organic chemicals. Toluene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

Almost all toluene discharged to the environment by industry is in the form of atmospheric emissions. Photo-oxidation is the primary atmospheric degradation process for toluene, and benzaldehyde is reported to be the principal organic by-product. Direct photolytic cleavage of toluene is energetically improbable in the atmosphere, and oxidation and hydrolysis are probably not important as aquatic fates.

Toluene is known to be degraded by microorganisms and can be detoxified and excreted by mammals. However, the available data do not allow estimation of the relative importance of biodegradation/biotransformation processes.

Acute and chronic inhalation exposures to 200 ppm or greater concentrations of toluene vapor cause eye irritation, headaches, nausea, and other Central Nervous System (CNS) effects in humans. In humans, acute exposures to very high concentrations can cause narcosis, but exposures to quantities sufficient to produce unconsciousness fail to produce organ damage.

Acute toluene exposure can cause subjective CNS symptoms (e.g., nausea, headache, and fatigue) as well as eye irritation, at levels equal to or exceeding 200 ppm. In a study of three subjects who were exposed for eight hours to various toluene levels, one subject reported a mild headache at levels of 50 or 100 ppm in the air. At 200 ppm the majority reported fatigue, muscular weakness, repeated headache, nausea, impaired coordination, eye irritation, and after-effects (including fatigue, general confusion, and moderate insomnia) (Von Oettigan et al., 1942). As the toluene concentration was increased, the severity of these effects increased. At 800 ppm, volunteers reported severe fatigue, pronounced nausea, mental confusion, uncoordination, and severe after-effects. In a similar experiment, two subjects exposed for eight hours reported slight exhilaration at 200 ppm, lassitude and nausea at 400 to 600 ppm, and headache, nausea, and severe lassitude at 800 ppm (Carpenter et al, 1944). In studies of 10 people, the majority of the subjects reported eye and throat irritation after a 3 to 5 minute exposure to 300 ppm toluene. The subjects considered 200 ppm to be acceptable for an 8-hour exposure (Nelson et al., 1943). Others reported that a single 7-hour exposure to 200 ppm caused CNS effects such as decreased coordination, prolonged reaction time, decrease in pulse, and decrease in systolic blood pressure (Ogata et al., 1970).

Chronic exposure to toluene was also reported to cause CNS disturbances. In 100 workers exposed to toluene for one to three weeks, and who sought medical attention, 30 percent were exposed to 200 to 500 ppm and complained of headache, nausea, anorexia, lassitude, impairment of coordination, and loss of memory (Wilson, 1942). The workers exposed to 500 to 1,500 ppm complained of

nausea, headache, dizziness, anorexia, extreme weakness, and pronounced impairment of coordination and reaction time. It was unclear whether toluene levels below 200 ppm caused adverse effects.

Other CNS alterations have been observed in workers. Parmeggiani and Sassi (1954) reported that six of 11 workers exposed to 200 to 800 ppm toluene for many years exhibited signs of nervous hyperexcitability. In another setting, one worker exposed for many years to 210 to 300 ppm showed symptoms of stupor, nervousness, and insomnia. However, in 17 other workers exposed to 80 to 160 ppm, no CNS effects were noted (Capellini and Alessio, 1971). Chronic occupational exposure to 300 to 430 ppm toluene was also reported to cause behavioral changes.

The most noted effect of toluene in animals is CNS depression following high-level exposure. Vapor levels at or below 1,000 ppm appear to have little effect on gross parameters, although more sensitive indicators (e.g., electroencephalogram [EEG] changes) were noted in rats. Several studies indicate that toluene exerts no adverse effects on the blood-forming organs in rats and dogs. However, leukocytosis, impaired leukopoiesis, and chromosomal damage in the bone marrow were reported by several other researchers for rats and mice. Most inhalation and ingestion studies produced no evidence of liver damage, but effects suggestive of liver damage were noted at higher inhalation exposures (i.e., 2,000 ppm) in rats and various animals dosed intraperitoneally. Several studies reported renal injury to rats, dogs, and guinea pigs after subchronic inhalation of toluene in excess of 600 ppm. Lung irritation effects were observed in some studies with dogs, guinea pigs, and

rats. The acute oral LD50 for rats ranges from 6 to 7.5 g/kg. Inhalation LD50 values range from 500 to 700 ppm for mice and 4,000 ppm for rats (USEPA, 1983a).

There is no conclusive evidence that toluene is carcinogenic or mutagenic in animals or humans (USEPA, 1980a). The National Toxicology Program (NTP) is currently conducting an inhalation carcinogenicity bioassay with rats and mice. Researchers have reported that toluene is embryotoxic but not teratogenic in laboratory animals. There are no accounts of teratogenic effects in humans after exposure to toluene.

ACGIH recommends a TLV of 100 ppm (375 mg/m^3) toluene. This value appears to be appropriate for the prevention of headache and nausea, as well as other CNS effects. A short-term exposure limit of 150 ppm (560 mg/m^3) has been recommended for exposures of less than 15-minute duration in an 8-hour day.

ETHYL BENZENE

Ethyl benzene is a volatile aromatic compound with a high log K_{ow}, indicating that it adsorbs onto organic particles in the soil, slowing its transport to groundwater and surface water. Small amounts of ethyl benzene can leach into groundwater from soil (especially sandy soil) and may biodegrade in subsurface soils. The half-life of ethyl benzene in air is 35 hours. The primary loss mechanisms from the soil surface is expected to be evaporation. Ethyl benzene is a chemical which is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

To date, ethyl benzene has not been evaluated by USEPA for human carcinogenicity potential. The target organs for health impacts from acute exposures are the eyes, upper respiratory system, skin, and CNS. No data on teratogenicity or mutagenicity of ethyl benzene were located by USEPA (1980b).

Human toxicity of ethyl benzene is characterized by its irritancy to the skin, and less markedly, to the mucous membranes (ACGIH, 1986). The TLV for ethyl benzene of 100 ppm was set to protect against its irritant effects. At this concentration, no systemic effects of ethyl benzene are expected to be produced (ACGIH, 1986).

Bardodej and Bardodejava (1970) reported no toxic effects in volunteers after inhalation exposure to 100 ppm ethyl benzene for 8 hours. Their exposure to an increased concentration of ethyl benzene resulted in fatigue, headache, and mild eye and respiratory irritation.

STYRENE

Styrene is a volatile aromatic compound produced primarily from the dehydrogenation of ethyl benzene. Styrene is used to produce polystyrene, which is a thermoplastic with excellent electrical properties and thermal stability.

The target organs for toxic effects are the CNS, the respiratory system, and the eyes and skin. There is some epidemiologic evidence of greater sensitivity of the human fetus than the adult to the systemic toxic effects of styrene. These studies are described in the following paragraphs.

The frequency of spontaneous abortions among Finnish chemical workers was analyzed by Hemminki et al (1980). Information on spontaneous abortions (15,482 cases), induced abortions (71,235 cases), and births (193,897 cases) for 1973 through 1976 was obtained from the Hospital Discharge Registry of the Finnish National Board of Health. The information was linked by social security number to the membership of the Finnish Union of Chemical Workers (approximately 900 female members). The rates of spontaneous abortion were 8.5 percent (N = 52) and 15.0 percent (N = 6) among the female union members and a subgroup in the styrene industry, respectively. These rates were significantly higher ($p < 0.01$) than the rate among all Finnish women (5.5 percent, N = 15, 482).

The information on the work histories of 43 Finnish mothers of children born with CNS defects from June 1, 1976, to March 1, 1977, were obtained through

personal interviews (Holmberg, 1977). Two mothers had been employed in the reinforced plastics industry with regular exposure to styrene, polyester resin, organic peroxides, and acetone. The defects in their two children were anencephaly and congenital hydrocephaly. The overall rates of anencephaly and congenital hydrocephaly were reported to be 0.2 and 0.3 respectively, per 1,000 live births in Finland. Based on these estimates, there appeared to be more than a 300-fold increased rate of these malformations in the reinforced plastics industry during the 9-month study period, compared to the general population (2/12 versus 0.5/1,000).

Retrospective cohort mortality and case-control studies were conducted on workers exposed to styrene in the styrene-polystyrene manufacturing industry and in the styrene-butadiene synthetic rubber industry (McMichael et al., 1976; Smith and Ellis, 1977; Meinhardt et al., 1978). Inadequate data are available at present to indicate that styrene is a human carcinogen. However, an elevated incidence of tumors of the hematopoietic and lymphatic tissues have been observed. Available studies are limited because of relatively small cohort sizes or multiple chemical exposures of workers (including exposure to benzene).

Styrene is classified by USEPA as a possible human carcinogen (Group C), meaning there are no human data and limited evidence of carcinogenicity from animal studies.

XYLENE(s)

Xylenes are volatile aromatic compounds used as a solvent for prints, ink, and adhesives. There are three isomeric forms of xylene: meta-xylene, ortho-xylene, and para-xylene. Xylenes are components of detergents and other household and industrial products. Xylene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

Xylenes readily volatilize from surface water and surface soil. Volatilization and subsequent photo-oxidation by reaction with hydroxyl radicals in the atmosphere are probably important transport and degradation processes for xylenes in the upper layer of soil and in aquatic environments. Xylenes bind to sediment in water and to organics in soils and undergo microbial degradation. Biodegradation is probably the most degradation fate process in both soils and the aquatic environment. Xylenes have been shown to persist for up to six months in soil. Because of their low water solubility and rapid biodegradation, xylenes are unlikely to leach into groundwater in high concentrations.

Short-term exposure can cause eye, nose, and throat irritation at 200 ppm. There is some evidence that chronic exposures to less than 50 ppm can cause headaches and other CNS effects. Xylene has not been shown to be carcinogenic when administered orally to rats or mice. Xylene was found to be mutagenic in a battery of short-term assays. Xylene is not teratogenic but has caused fetotoxicity in rats and mice.

Occupational exposure to xylene has been reported to cause headache, fatigue, lassitude, irritability, and GI disturbances (e.g., nausea, anorexia, and flatulence). Other researchers have also reported neurological disturbances and injury to the heart, kidney, and CNS among xylene workers.

Short-term exposures to xylene vapors have not been demonstrated to cause noticeable subjective effects at levels less than 200 ppm. When 10 volunteers were exposed for 3 to 5 minutes to xylene at 200 ppm, the majority reported eye, nose, and throat irritation (Nelson et al., 1943). At 100 ppm, the majority reported no symptoms and indicated that an 8-hour daily exposure at this level would be satisfactory. In another study, one of six people exposed for 15 minutes to 233 ppm experienced eye irritation, and four of six reported eye irritation at 460 ppm (Carpenter et al., 1975). Activities reported to cause eye and upper respiratory tract irritation from uncharacterized xylene levels include furniture polishing and demolition of epoxy resin concrete. Unconsciousness and death have been reported to result from xylene exposure in excess of 10,000 ppm (Morley et al., 1970). The workers who died had evidence of pulmonary edema and brain hemorrhage. The survivors suffered from amnesia, renal impairment, and hepatic dysfunction.

Long-term exposure to xylene may result in subjective symptoms at levels lower than 200 ppm. One-third of 45 xylene production workers exposed daily to 10 to 45 ppm reported headaches, irritability, insomnia, rapid heartbeat, and indigestion (Sukhanova et al., 1969). Intermittent exposure over 2 months to 270 to 350 ppm xylene caused acute vomiting, giddiness, and loss of appetite in one worker (Glass, 1961).

ACGIH believes the irritant effects of xylene are minimal at 100 ppm with no significant degree of narcosis or chronic injury from exposures at that level; consequently, they recommended a TLV of 100 ppm (435 mg/m^3). A short-term exposure limit of 150 ppm has been recommended by ACGIH for exposures of less than 15 minutes in an 8-hour work day.

NAPHTHALENE

Naphthalene is a white solid, also called naphthalin, naphthene, moth flake, tar camphor, or white tar, which exhibits the characteristic mothball odor. Chemically, it is composed of two fused benzene rings (Sandmeyer, 1981). Naphthalene occurs naturally in the roots of Radix and Herba ononids (Hesse et al. 1977). It is formed in cigarette smoke by pyrolysis (Johnstone, 1963) and is a photodecomposition produce of carbaryl, a naphthylcarbamate insecticide (Addison et al., 1975). Naphthalene also occurs in crude oil, cracked petroleum products, coke oven emissions, and high temperature carbonization of bituminous coal (American Petroleum Institute, 1959). Naphthalene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).In both solid and liquid form, naphthalene is flammable. The vapor or dust can make an explosive mixture with air. Molten naphthalene, in contact with water, may result in violent foaming or the formation of explosive mixtures (Manufacturing Chemists Association, 1956).

Ingestion of naphthalene, in the form of mothballs, has resulted in no adverse effects in a number of the cases described. The ingested material was excreted in the feces in unchanged form. The co-ingestion of fats facilitates the absorption and other systemic events (Moeschlin, 1965). In severe cases, ingestion caused gastroenteric distress, tremors and convulsions. Within 2 to 7 days, moderate to severe anemia may develop, hemoglobin damage occurs, and the serum takes on a yellowish brown color. In some cases, this leads to disruption of renal function and even death due to respiratory failure (Deichman and Gerade, 1969).

Naphthalene is acutely irritating to the eye. With skin contact, it is a primary irritant. Since naphthalene may volatilize and sublime at room temperature, inhalation is a primary exposure route. The signs and symptoms of toxicity due to inhalation of naphthalene vapors resemble those observed from oral or dermal exposure. Naphthalene vapors may cause eye and respiratory irritation, headache, nausea, and perfuse perspiration.

Chronic effects of oral administration of a naphthalene-isopropanol mixture resembled ethanol intoxication but subsided after a few days (Gadsden, 1958). The effects on the eye were more severe. Corneal ulceration and cataracts have been observed (Adams, 1930) as well as general opacities which were observed after 5 years of exposure. Repeated inhalation of naphthalene vapors may produce malaise, headache, and vomiting.

Daily oral administration of naphthalene to rabbits at 1 g/kg produced effects in the eye that were slightly visible after only three doses and definitely exhibited after 20 days. A dose of 1.5 g/kg day produced white spots in the rabbit eye periphery but were distributed over the whole retina of young animals (Shimotori, 1972). Naphthalene is rapidly metabolized in adults to alpha- and beta-naphthol and alpha- and beta-naphthoquinone. The most active metabolite is probably naphthalene-1,2-oxide (Juchau and Namkung, 1974).

Usually organic compounds that readily form epoxides are suspected mutagens or carcinogens. Although naphthalene has low DNA and RNA binding capacities (Brooks and Lawley, 1964) and previous studies have failed to show evidence of carcinogenic activity by naphthalene (Horning et al., 1976; Searle, 1976;

Skjaeggestad, 1964), NTP has recently tested naphthalene for carcinogenic activity in mice. The results of the study have not yet been published.

EPA (1982) determined that the dose at which acute effects have been observed in humans is three to five orders of magnitude higher than the exposure levels to specific subpopulations associated with mothball use and cigarette smoking. EPA, therefore, concluded that there appears to be little acute risk to humans from environmental exposure to naphthalene; however, severe adverse effects are possible from accidental ingestion of substantial quantities of naphthalene.

CYANIDE

Cyanide is a compound that may exist as a gas (e.g., hydrogen cyanide [HCN]), a salt (e.g., potassium cyanide [KCN] or sodium cyanide [NaCN]) a metal cyanide (ferro/ferri-cyanide), or as free cyanide. At coal gasification sites, cyanide is expected to be present mostly as ferro/ferri-cyanide, and to a lesser extent, as free or amenable cyanide. Most cyanides, with the exception of several metallocyanides, are relatively soluble in water. However, their environmental fate in water varies considerably by compound. The alkali metal cyanides (e.g., KCN and NaCN) readily dissociate upon release to the water and may form HCN or bond with metals present in the water. Ferro- and ferricyanides are relatively stable metallocyanides and may undergo photodissociation to the cyanide ion (CN-) and form HCN. The insoluble cyanides (i.e., copper and silver cyanide) are not expected to dissociate. They may become adsorbed to sediment, bioaccumulate in aquatic organisms, or biodegrade (ATSDR, 1988).

In both water and soils, volatilization is expected to be an important fate process. At a pH of less than 9.2, most of the free cyanide in water and soil is expected to exist as HCN (ATSDR, 1988). HCN has a vapor pressure of 264.3 mm mercury (mmHg) (0°C); however, volatilization is expected to vary with soil and water characteristics. A number of microorganisms biodegrade cyanide at low concentrations. HCN is expected to be highly mobile in soils and may leach into the groundwater when present in concentrations that may exceed the biodegradation capacity of the microorganisms.

Most atmospheric cyanide is HCN. It is expected to be resistant to photodecomposition and has a half-life of approximately 334 days (ATSDR, 1988). At coal gasification sites that have been inactive for decades, HCN would not be a major concern. Both cyanide gases and salts are used in industrial processes. HCN is manufactured at 14 sites in the U.S. and is used as an intermediate in the production of nylon and other compounds. Minor uses of HCN include insecticides and rodenticides for fumigating enclosed spaces (e.g., grain storage areas). Cyanide salts are used mainly in the electroplating and metal-finishing industries. Minor applications of the salts include the manufacture of dyes and pigments, as well as use as insecticides and rodenticides.

Cyanides also occur naturally in several foods and plants and are produced by certain bacteria, fungi, and algae. Cyanocobalamin, a form of vitamin B12, is a dietary requirement. However, most of the cyanide found in the environment is from industrial processes.

The exposure routes of concern for cyanide at this site are ingestion of cyanide-contaminated soils and inhalation of fugitive dust where cyanide has been adsorbed to the particles. There are no studies in the available literature that evaluate toxicity following these specific exposures. All the inhalation studies are of the effects of exposure to HCN; oral studies are generally on the effects of HCN, NaCN, or KCN exposure.

Epidemiological studies have also been undertaken in tropical climates where the cyanide-containing vegetable, cassava, is a dietary staple. Neurologic,

cardiovascular/respiratory, and/or thyroid effects were found following these exposures. However, care should be exercised when assuming the same effects will result from the defined routes of exposure at this site and from exposure to other cyanide compounds.

The fatal effects of exposure to high doses of cyanide over short periods of time are well known. Inhalation of 100 ppm HCN for 0.5 to 1 hour has been fatal to humans. The LD50 in humans for ingestion exposure has been reported to be 1.5 mg/kg/day of CN-. A lower fatal dose in humans has been reported at 0.6 mg/kg/day CN- (ATSDR, 1988).

Brief exposure to lower levels of cyanide has resulted in rapid, deep breathing, shortness of breath, convulsions, and loss of consciousness. Because cyanide is not sequestered in the body, these effects are reversible over time. However, longer-term exposure to these low levels has resulted in CNS, thyroid gland, and cardiovascular effects.

Cyanide is readily absorbed following inhalation and oral exposure. Human studies have reported 58 to 77 percent of inhaled HCN is retained in the lungs (Landahl & Hermann, 1950). Human and animal studies indicate cyanide is rapidly distributed by the blood following both inhalation and oral exposure.

The major metabolic pathway of cyanide is conversion to thiocyanate by either rhodanese or 3-mercaptopyruvate. There are also three minor metabolic pathways: conversion to 2-aminothiazoline-4-barboylic acid; incorporation into a 1-carbon metabolic pool; or combination with hydroxycobalamin to form

cyanocobalamin (B12) (ATSDR, 1988). Cyanide metabolites are primarily excreted in the urine. Small amounts are excreted in the expired air.

Inhalation Toxicity

Numerous occupational exposures to cyanide have been reported; however, no levels of exposure are available. Exposure to HCN resulted in palpitations, shortness of breath, pain over the heart, vertigo, and involuntary eye movements (Carmelo, 1955), cyanosis, headache, altered EEG, and left-sided blindness (Sandberg, 1967). A photographic laboratory worker was exposed to potassium cyanide when a bag of the compound burst in his face. He developed abdominal pain, pallor, and collapse, but recovered after treatment (Thomas and Brooks, 1970).

While many of the available animal studies involved inhalation of fatal doses of cyanide, several studies are available that demonstrate effects from exposure to lower doses.

When monkeys were exposed to 87 to 196 ppm HCN, severe disruptive changes in respiration and unconsciousness were noted (Purser et al., 1984). Tremors, convulsions, loss of equilibrium, dyspnea, nausea, exaggerated intestinal peristalsis, and diarrhea were noted in dogs exposed to 45 ppm HCN for varying durations (Valade, 1952).

All available human and animal studies involved exposure to HCN and not particulate matter. Acute exposure to inhaled HCN at high concentrations resulted in hyperventilation, unconsciousness, and death. The cardiovascular

effects are believed to be secondary to the CNS effects (ATSDR, 1988). A worker exposed to HCN by both inhalation and dermal routes developed left-sided blindness (Sandberg, 1967). HCN fumigators also exposed by inhalation and dermal contact developed palpitations, shortness of breath, pain over the heart, vertigo, and involuntary eye movements (Carmelo, 1955).

When rats were exposed to inhalation of HCN at low concentrations, cardiac enzyme changes resulted (O'Flaherty and Thomas, 1982). The previously cited Purser study of monkeys exposed to 87 to 196 ppm HCN from pyrolyzed polyacrylonitrile also found cardiovascular effects, including rapid induction of a semiconscious state and severe disruptive changes in respiration.

Several occupational studies of workers exposed to HCN produced thyroid abnormalities. In a case-control study of electroplating workers exposed to 6.4 to 10.4 ppm HCN for 5 to 15 years, 56 percent of the exposed group had enlarged thyroid glands and significantly elevated hemoglobin levels and lymphocyte counts. It should be noted that these workers were also exposed to volatiles, exposure levels varied, and unmatched controls were used (El Ghawabi et al., 1975).

Workers in a silver-reclaiming factory exposed an average of 10.5 months to a TWA of 16.6 mg/m^3 HCN developed headache, dizziness, and mild thyroid abnormalities (Blanc et al., 1985).

No studies of developmental effects in humans resulting form inhalation of cyanide are available.

The only available animal study is of hamsters exposed to acetonitrile, which has cyanide as a metabolic by-product. The hamsters were dosed with zero, 1,800, 3,800, 5,000, and 8,000 ppm for 60 minutes. Dose-related increases in maternal mortality, fetal resorptions, and malformations were found (Willhite, 1981).

Oral Toxicity

The risk assessment at this site quantitatively evaluates effects from ingestion of soil particles to which cyanide is adsorbed. There are a number of studies of CN- administered in the diet or by gavage; however, no studies in which soil was the vehicle are available.

Male rats were fed 30 mg/kg/day cyanide for 11.5 months and developed vacuolization and myelin degeneration of the spinal cord (Philbrick et al., 1979). No CNS effects were reported by Howard and Hanzell (1955) for rats fed up to 10.8 mg/kg/day of CN- in HCN-fumigated feed for two years.

Dogs fed 0.27 and 0.53 mg/kg/day cyanide in capsules for 16 weeks developed degenerative changes in the CNS ganglion cells, reduced ribonucleic acid (RNA) content, and inflammation (Hertting et al., 1960).

No studies describing cardiovascular or respiratory effects in humans or animals following long-term, low-dose oral exposure were found in the available literature. However, it is important to note that respiratory failure and death have resulted following continuous exposure to single, high doses of cyanide.

Qualitative surveys of African communities where people are exposed to cyanide from consumption of cassava have found a strong correlation between cassava consumption and endemic goiter and cretinism. Dietary deficiencies may have compounded this association (ATSDR, 1988).

In a 14-day study, male rats were fed the equivalent of 40 mg/kg/day CN- as potassium cyanide added to the diet. The diets varied by the amount of protein. Increased thyroid weights and increased plasma thyroid stimulating hormone levels were noted only in the low-protein diet group. These effects were not observed when protein levels were increased or when iodine was added to the drinking water of rats fed the low-protein diet (Kreutler et al., 1978).

Rats were fed the equivalent of 30 mg/kg/day CN- for 11.5 months. At the end of four months, the rats exhibited decreased plasma thyroxine and thyroxine secretion rates. At the end of the 11.5 months, these same effects were found, plus increased relative thyroid weight (Philbrick et al., 1979).

Epidemiologic studies were conducted in Zaire where cassava is a staple food. Congenital hypothyroidism was found in 15 percent of the newborns. This incidence is approximately 500 times that of industrialized countries. In addition to cassava consumption, iodine deficiencies may have contributed to this condition (ATSDR, 1988).

Numerous studies of orally exposed pregnant animals have found maternal toxicities and developmental abnormalities in the offspring. Pregnant

hamsters exposed to cyanide as D,L-amygdalin (a component of laetrile) exhibited maternal toxicity at 250 mg/kg and greater. Fetuses were examined at 15-days gestation, and dose-related abnormalities were observed in this group (Willhite, 1982).

Female rats were fed a basal casava diet containing 12 mg/kg HCN and a basal diet with 1.25 gm KCN per kg diet prior to mating, during gestation, and through lactation. The weanlings were subsequently fed these same diets. Those weanlings exposed to higher levels of cyanide in utero and during the post-weaning period had significantly decreased protein-efficiency ratios. Both the dams and weanlings fed the potassium cyanide-enhanced diet had significantly increased serum thiocyanate levels (Tewe and Maner, 1981).

Pregnant pigs were fed cassava diets with added cyanide. In the group with the highest exposure (520.7 mg/kg CN-), serum thiocyanate levels were increased in dams and fetuses. Reduced thyroid activity was found in the dams. Both the high and low groups (276 mg/kg CN-) had proliferation of glomerular cells in the kidneys.

Other Effects. No data on reproductive toxicity from cyanide exposure by any route are available in the literature. Cyanide has tested negative for mutagenic effects. There are no data available indicating that cyanide has any carcinogenic effects.

High Risk Populations. High-risk populations include those persons with a metabolic disturbance in the conversion of cyanide to thiocyanate and those

with dietary deficiencies (e.g., iodine, protein, vitamin B12, or riboflavin), as well as those nutritionally deprived.

TRIMETHYLBENZENE

Trimethylbenzenes are alkylated benzenes. This group of compounds, which include xylenes, toluene, and ethylbenzene, is a by-product of petroleum distillation and found in coke oven effluents. Trimethylbenzenes are primarily used in industry as solvents, paint thinners, and motor fuel components. One of the three trimethylbenzene isomers has been identified as an insect attractant (Clayton and Clayton, 1981). Trimethylbenzene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

Trimethylbenzene, as with most alkylated benzenes, seems to be relatively nontoxic except during acute exposures at very high concentrations (Klaasen et al., 1986). This is probably because alkylated benzenes are metabolized to compounds of lower toxicity, and there is no evidence that these metabolic pathways can be saturated, leading to the formation of toxic reactive intermediates. Trimethylbenzene is absorbed through the lungs and the GI tract; dermal absorption does not lead to systemic toxicity. The primary toxicologic effects seen at acute exposure to high concentration are CNS depressive effects such as nervousness, anxiety, fatigue, nausea, and irritation of the eyes, nose and throat. Skin irritation and chemical pneumonitis can occur at the site of contact (e.g., where deposition in lungs occurs). Workers exposed to trimethylbenzene in a solvent at concentrations of 10-60 ppm for many years have shown hypochromic anemia and some deviation from normal coagulation (ACGIH, 1986).

Little experimental work has been carried out on trimethylbenzene. Most studies are acute or subacute in duration, and the results were mostly CNS depressive effects with some incidence of thrombocytosis, thrombosenis, and inhibition of phagocytical activity in leukocytes.

There are no drinking water or OSHA standards for trimethylbenzene; however, the ACGIH recommends a threshold limit value of 25 ppm (125 mg/m^3) in air.

APPENDIX B

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APPENDIX C

RISK TEMPLATES

SSLC-RW

25-Jul-90

TABLE C-17
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Teenagers
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[\left(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1\text{mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}} \times 1000 \text{ ug}$$

$$\text{Incremental Risk} = \text{Body Dose ag/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
carc. PAHs - USEPA	38.20	9.1	0.1	0.05	0.1	45.0	10	10.0	3.32E-08	1.52E-06	1.15E+01	1.79E-05
carc. PAHs - ICF	38.20	9.1	0.1	0.05	0.1	45.0	10	10.0	3.32E-08	1.52E-06	3.20E+00	4.97E-06

SUMMARY CARCINOGENIC RISK	
USEPA	1.79E-05
ICF	4.97E-06

Note: TK - Toxicokinetic Factor

SEDC-MP
16-Jan-90

TABLE C-1
Direct Contact with and/or Ingestion of Sediment
Most Probable Case - Children
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[\left(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	12.94	2.5	0.050	0.01	0.50	45	1	1.95E-08	1.94E-08	4.00E-01	9.74E-08
ethylbenzene	0.0174	2.5	0.050	0.05	0.10	45	1	5.30E-12	1.32E-10	1.00E-01	1.37E-09
cyanide (total)	0.4330	2.5	0.050	1.00	0.50	45	1	6.59E-10	6.55E-08	2.00E-02	3.31E-06
									SUMMARY HAZARD INDEX		3.41E-06

Note: TK - Toxicokinetic Factor

SSLC-BW 16-Jan-90

TABLE C-16
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Teenagers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices.

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose}_{(mg/kg/day)} = \text{Soil Concentration}_{(ug/g)} \times \left[(\text{Amount Contacted}_{(g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested}_{(g/event)} \times \text{Ingestion TK Factor})\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ mg}{1000\ ug} \times \frac{1\ yr}{365\ days}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	37.41	9.1	0.1	0.05	0.10	45	10	2.28E-07	1.04E-05	4.00E-01	2.66E-05
Cyanide (amenable)	1.80	9.1	0.1	2.50	1.00	45	10	1.10E-07	2.51E-05	2.00E-02	1.26E-03
									SUMMARY HAZARD INDEX		1.28E-03

Note: TK - Toxicokinetic Factor

TABLE C-2
Direct Contact with and/or Ingestion of Sediment
Most Probable Case - Children
Carcinogenic effects
Mechanicville Site

*
SEDC-MP
25-Jul-90

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[\left(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1\text{mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	0.0330	2.5	0.050	0.05	0.10	45	1	5.0	7.18E-13	1.78E-11	2.90E-02	5.38E-13
carc. PAHs - USEPA	3.7600	2.5	0.050	0.01	0.50	45	1	5.0	4.09E-10	4.06E-10	1.15E+01	9.37E-09
carc. PAHs - ICF	3.7600	2.5	0.050	0.01	0.50	45	1	5.0	4.09E-10	4.06E-10	3.20E+00	2.61E-09

SUMMARY CARCINOGENIC RISK	
USEPA	9.37E-09
ICF	2.61E-09

Note: TK - Toxicokinetic Factor

SSLC-MP

25-Jul-90

TABLE C-15
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Teenagers
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}} \times 1000 \text{ ug}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
carc. PAHs - USEPA	20.00	9.1	0.1	0.05	0.1	45	5	5.0	4.35E-09	1.99E-07	1.15E+01	2.34E-06
carc. PAHs - ICF	20.00	9.1	0.1	0.05	0.1	45	5	5.0	4.35E-09	1.99E-07	3.20E+00	6.50E-07

SUMMARY CARCINOGENIC RISK	
USEPA	2.34E-06
ICF	6.50E-07

Note: TK - Toxicokinetic Factor

SEDC-3W
16-Jan-90

TABLE C-3
Direct Contact with and/or Ingestion of Sediment
Realistic Worst Case - Children
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\text{ mg}}{1000\text{ ug}} \times \frac{1\text{ yr}}{365\text{ days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	42.67	9.1	0.1	0.10	1.00	45	2	5.20E-07	4.75E-06	4.00E-01	1.32E-05
ethylbenzene	0.087	9.1	0.1	0.25	0.50	45	2	5.30E-10	2.42E-08	1.00E-01	2.47E-07
cyanide (total)	1.30	9.1	0.1	2.50	1.00	45	2	1.58E-08	3.62E-06	2.00E-02	1.82E-04
									SUMMARY HAZARD INDEX		1.95E-04

Note: TK - Toxicokinetic Factor

SSLC-MP

16-Jan-90

TABLE C-14
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Teenagers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices.

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	24.30	9.1	0.1	0.05	0.10	45	5	7.31E-08	3.34E-06	4.00E-01	8.53E-06
Cyanide (amenable)	0.69	9.1	0.1	1.00	0.50	45	5	1.05E-08	1.92E-06	2.00E-02	9.66E-05
									SUMMARY HAZARD INDEX		1.05E-04

noncar PAHs
car PAHs

Note: TK - Toxicokinetic Factor

TABLE D-4
Direct Contact with and/or Ingestion of Sediment
Realistic Worst Case - Children
Carcinogenic Effects
Mechanicville Site

SEDC-RW
25-Jul-90

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose (mg/kg/day)} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	0.0950	9.1	0.1	0.25	0.50	45	2	10.0	9.26E-11	3.78E-09	2.90E-02	1.12E-10
carc. PAHs - USEPA	10.2000	9.1	0.1	0.10	1.00	45	2	10.0	1.77E-08	1.62E-07	1.15E+01	2.07E-06
carc. PAHs - ICF	10.2000	9.1	0.1	0.10	1.00	45	2	10.0	1.77E-08	1.62E-07	3.20E+00	5.76E-07

SUMMARY CARCINOGENIC RISK	
USEPA	2.07E-06
ICF	5.76E-07

Note: TK - Toxicokinetic Factor

TABLE C-13
RISK CALCULATION SUMMARY
Mechanicville Site
Inhalation
Noncarcinogen

Compounds	Most Probable Case Child	Percent Total Risk	Realistic Worst Case Child	Percent Total Risk
Cyanide	3.50E-07	0.1%	2.04E-05	0.1%
Ethylbenzene	1.10E-04	31.4%	5.72E-03	31.4%
Noncarcinogenic PAHs	6.98E-06	2.0%	4.07E-04	2.2%
Styrene	1.01E-04	28.8%	5.21E-03	28.6%
Toluene	2.02E-05	5.8%	1.05E-03	5.8%
Trimethylbenzene	8.96E-06	2.6%	4.64E-04	2.5%
Total Xylenes	1.03E-04	29.4%	5.34E-03	29.3%
SUMMARY HAZARD INDEX		3.50E-04		1.82E-02

Inhalation
Carcinogen

Compounds	Most Probable Case Child	Percent Risk-USEPA	Percent Risk-ICF	Realistic Worst Case Child	Percent Risk-USEPA	Percent Risk-ICF
Benzene	3.47E-08	15.3%	70.8%	1.80E-06	13.9%	68.4%
Bis(2-ethylhexyl)phthalate	0.00E+00	0.0%	0.0%	0.00E+00	0.0%	0.0%
Methylene Cloride	7.41E-11	0.0%	0.2%	4.18E-09	0.0%	0.2%
Carcinogenic PAHs - USEPA	1.91E-07	84.6%		1.11E-05	86.1%	
Carcinogenic PAHs - ICF	1.42E-08		29.0%	8.28E-07		31.4%
SUMMARY INCREMENTAL CANCER RISK USEPA	2.26E-07			1.30E-05		
SUMMARY INCREMENTAL CANCER RISK ICF	4.90E-08			2.63E-06		

SEDWK-MP
16-Jan-90

TABLE C-5
Direct Contact with and/or Ingestion of Sediment
Most Probable Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	12.84	1.2	0.050	0.01	0.50	70	5	6.28E-08	2.89E-08	4.00E-01	2.29E-07
ethylbenzene	0.0174	1.2	0.050	0.05	0.10	70	5	1.70E-11	1.96E-10	1.00E-01	2.13E-09
cyanide (total)	0.43	1.2	0.050	1.00	0.50	70	5	2.12E-09	9.74E-08	2.00E-02	4.98E-06
									SUMMARY HAZARD INDEX		5.21E-06

Note: TK - Toxicokinetic Factor

Mechanicville
Inhalation Realistic Worst Case
Young Child Carcinogen

Carcinogenic Compound(s)	Zone 1 Body Weight (kilograms)	Zone 1 Concentration (ug/m^3)	Zone 1 Duration of Exposure (hrs/event)	Zone 1 Number of Exposure Events (events/yr)	Zone 1 Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)	Zone 2 Concentration (ug/m^3)	Zone 2 Duration of Exposure (hrs/event)	Zone 2 Number of Exposure Events (events/yr)	Zone 2 Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
Benzene	21	2.73E-03	8	25	0.8	4.88E-06	1.28E-02	6.0	25	2.0	4.29E-05
Bis(2-ethylhexyl)phthalate	21	0.00E+00	8	25	0.8	0.00E+00	0.00E+00	6.0	25	2.0	0.00E+00
Methylene Cloride	21	1.31E-05	8	25	0.8	2.34E-08	6.15E-05	6.0	25	2.0	2.06E-07
Carcinogenic PAHs - USEPA	21	9.65E-05	8	25	0.8	1.73E-07	3.70E-04	6.0	25	2.0	1.24E-06
Carcinogenic PAHs - ICF	21	9.65E-05	8	25	0.8	1.73E-07	3.70E-04	6.0	25	2.0	1.24E-06

Carcinogenic Compound(s)	Zone 3 Concentration (ug/m^3)	Zone 3 Duration of Exposure (hrs/event)	Zone 3 Number of Exposure Events (events/yr)	Zone 3 Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)
Benzene	1.28E-02	10.0	25	0.4	1.43E-05
Bis(2-ethylhexyl)phthalate	0.00E+00	10.0	25	0.4	0.00E+00
Methylene Cloride	6.15E-05	10.0	25	0.4	6.88E-08
Carcinogenic PAHs - USEPA	3.70E-04	10.0	25	0.4	4.14E-07
Carcinogenic PAHs - ICF	3.70E-04	10.0	25	0.4	4.14E-07

Carcinogenic Compound(s)	Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	CAG Potency Factor (mg/kg/day)^-1	Incremental Cancer Risk
Benzene	6.21E-05	1.0	2.90E-02	1.80E-06
Bis(2-ethylhexyl)phthalate	0.00E+00	0.8	1.40E-02	0.00E+00
Methylene Cloride	2.99E-07	1.0	1.40E-02	4.19E-09
Carcinogenic PAHs - USEPA	1.83E-06	1.0	6.10E+00	1.11E-05
Carcinogenic PAHs - ICF	1.83E-06	1.0	4.53E-01	8.29E-07

SUMMARY INCREMENTAL CANCER RISK	USEPA	1.29E-05
	ICF	2.63E-06

SEDWK-MP 25-Jul-90

TABLE C-6
Direct Contact with and/or Ingestion of Sediment
Most Probable Case - Workers
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose}_{(mg/kg/day)} = \text{Soil Concentration}_{(ug/g)} \times \left[\left(\text{Amount Contacted}_{(g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested}_{(g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 mg}{1000 ug} \times \frac{1 yr}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose}_{mg/kg/day} \times \text{CAG Potency Factor}_{(mg/kg/day)^{-1}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	0.0330	1.2	0.050	0.05	0.10	70	5	3.0	1.38E-12	1.59E-11	2.90E-02	5.02E-13
carc. PAHs - USEPA	3.7600	1.2	0.050	0.01	0.50	70	5	3.0	7.88E-10	3.63E-10	1.15E+01	1.32E-08
carc. PAHs - ICF	3.7600	1.2	0.050	0.01	0.50	70	5	3.0	7.88E-10	3.63E-10	3.20E+00	3.68E-09

SUMMARY CARCINOGENIC RISK	
USEPA	1.32E-08
ICF	3.68E-09

Note: TK - Toxicokinetic Factor

Mechanicville
Inhalation Most Probable Case
Young Child Carcinogen

	Zone 1					
Carcinogenic Compound(s)	Body Weight (kilograms)	Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)
Benzene	21	7.03E-05	9.0	20	0.8	1.01E-07
Bis(2-ethylhexyl)phthalate	21	0.00E+00	8.0	20	0.8	0.00E+00
Methylene Chloride	21	0.00E+00	8.0	20	0.8	0.00E+00
Carcinogenic PAHs - USEPA	21	1.41E-06	8.0	20	0.8	2.02E-09
Carcinogenic PAHs - ICF	21	1.41E-06	8.0	20	0.8	2.02E-09

	Zone 2				
Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
3.06E-04	6	20	2.0	8.21E-07
0.00E+00	6	20	2.0	0.00E+00
1.48E-06	6	20	2.0	3.97E-09
8.20E-06	6	20	2.0	2.20E-08
8.20E-06	6	20	2.0	2.20E-08

	Zone 3				
Carcinogenic Compound(s)	Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)
Benzene	3.06E-04	10.0	20	0.4	2.74E-07
Bis(2-ethylhexyl)phthalate	0.00E+00	10.0	20	0.4	0.00E+00
Methylene Chloride	1.48E-06	10.0	20	0.4	1.32E-09
Carcinogenic PAHs - USEPA	8.20E-06	10.0	20	0.4	7.34E-09
Carcinogenic PAHs - ICF	8.20E-06	10.0	20	0.4	7.34E-09

Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	CAG Potency Factor (mg/kg/day)^-1	Incremental Cancer Risk	
1.20E-06	1.0	2.90E-02	3.47E-08	
0.00E+00	0.8	1.40E-02	0.00E+00	
5.30E-09	1.0	1.40E-02	7.41E-11	
3.14E-08	1.0	6.10E+00	1.91E-07	
3.14E-08	1.0	4.53E-01	1.42E-08	
SUMMARY INCREMENTAL CANCER RISK		USEPA	2.26E-07	
		ICF	4.90E-08	

SEDWK-SW
16-Jan-90

TABLE C-7
Direct Contact with and/or Ingestion of Sediment
Realistic Worst Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[(\text{Amount Contacted (g/event)} \times \text{Dermal TX Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TX Factor})\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TX Factor	Ingestion TX Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	42.67	4.2	0.1	0.10	1.00	70	10	1.67E-06	7.09E-06	4.00E-01	2.19E-05
ethylbenzene	0.087	4.2	0.1	0.25	0.50	70	10	1.70E-09	3.61E-08	1.00E-01	3.78E-07
cyanide (total)	1.30	4.2	0.1	2.50	1.00	70	10	5.09E-08	5.40E-06	2.00E-02	2.73E-04
									SUMMARY HAZARD INDEX		2.95E-04

Note: TX - Toxicokinetic Factor

Mechanicville
Inhalation Realistic Worst Case
Young Child Noncarcinogen

Noncarcinogenic Compound(s)	Body Weight (kilograms)	Zone 1 Concentration (mg/m^3)	Zone 1 Duration of Exposure (hrs/event)	Zone 1 Number of Exposure Events (events/yr)	Zone 1 Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)	Zone 2 Concentration (mg/m^3)	Zone 2 Duration of Exposure (hrs/event)	Zone 2 Number of Exposure Events (events/yr)	Zone 2 Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
Cyanide	21	2.45E-07	8	25	0.8	5.11E-09	9.42E-07	6	25	2.0	3.69E-08
Ethylbenzene	21	2.15E-03	8	25	0.8	4.51E-05	1.01E-02	6	25	2.0	3.95E-04
Noncarcinogenic PAHs	21	9.80E-04	8	25	0.8	2.04E-05	3.77E-03	6	25	2.0	1.47E-04
Styrene	21	3.93E-03	8	25	0.8	8.20E-05	1.84E-02	6	25	2.0	7.20E-04
Toluene	21	3.97E-03	8	25	0.8	9.29E-05	1.86E-02	6	25	2.0	7.28E-04
Trimethylbenzene	21	6.99E-04	8	25	0.8	1.46E-05	3.28E-03	6	25	2.0	1.28E-04
Total Xylenes	21	8.04E-03	8	25	0.8	1.68E-04	3.77E-02	6	25	2.0	1.48E-03

Noncarcinogenic Compound(s)	Zone 3 Concentration (mg/m^3)	Zone 3 Duration of Exposure (hrs/event)	Zone 3 Number of Exposure Events (events/yr)	Zone 3 Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)	Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	Standard or Guideline (mg/kg/day)	Hazard Ratio
Cyanide	9.42E-07	10	25	0.4	1.23E-08	5.43E-08	7.5	2.00E-02	2.04E-05
Ethylbenzene	1.01E-02	10	25	0.4	1.32E-04	5.72E-04	1.0	1.00E-01	5.72E-03
Noncarcinogenic PAHs	3.77E-03	10	25	0.4	4.91E-05	2.17E-04	0.8	4.00E-01	4.07E-04
Styrene	1.84E-02	10	25	0.4	2.40E-04	1.04E-03	1.0	2.00E-01	5.21E-03
Toluene	1.86E-02	10	25	0.4	2.43E-04	1.05E-03	1.0	1.00E+00	1.05E-03
Trimethylbenzene	3.28E-03	10	25	0.4	4.28E-05	1.84E-04	1.0	4.00E-01	4.64E-04
Total Xylenes	3.77E-02	10	25	0.4	4.92E-04	2.14E-03	1.0	4.00E-01	5.34E-03

SUMMARY HAZARD INDEX	1.92E-02

TABLE C-8
Direct Contact with and/or Ingestion of Sediment
Realistic Worst Case - Workers
Carcinogenic Effects
Mechanicville Site

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SEDWK-RW
25-Jul-90

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[\left(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	0.0950	4.2	0.1	0.25	0.50	70	10	10.0	2.66E-10	5.64E-09	2.90E-02	1.71E-10
carc. PAHs - USEPA	10.2000	4.2	0.1	0.10	1.00	70	10	10.0	5.70E-08	2.42E-07	1.15E+01	3.44E-06
carc. PAHs - ICF	10.2000	4.2	0.1	0.10	1.00	70	10	10.0	5.70E-08	2.42E-07	3.20E+00	9.57E-07

SUMMARY CARCINOGENIC RISK

USEPA	3.44E-06
ICF	9.57E-07

Note: TK - Toxicokinetic Factor

Mechanicville
Inhalation Most Probable Case
Young Child Noncarcinogen

Noncarcinogenic Compound(s)	Body Weight (kilograms)	Zone 1 Concentration (mg/m^3)	Zone 1 Duration of Exposure (hrs/event)	Zone 1 Number of Exposure Events (events/yr)	Zone 1 Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)
Cyanide	21	3.58E-09	8	20	0.8	5.98E-11
Ethylbenzene	21	5.52E-05	8	20	0.8	9.22E-07
Noncarcinogenic PAHs	21	1.43E-05	8	20	0.8	2.39E-07
Styrene	21	1.02E-04	8	20	0.8	1.70E-06
Toluene	21	1.02E-04	8	20	0.8	1.70E-06
Trimethylbenzene	21	1.81E-05	8	20	0.8	3.02E-07
Total Xylenes	21	2.07E-04	8	20	0.8	3.46E-06

Zone 2 Concentration (mg/m^3)	Zone 2 Duration of Exposure (hrs/event)	Zone 2 Number of Exposure Events (events/yr)	Zone 2 Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
2.09E-08	6	20	2.0	6.54E-10
2.41E-04	6	20	2.0	7.55E-06
8.35E-05	6	20	2.0	2.61E-06
4.42E-04	6	20	2.0	1.38E-05
4.44E-04	6	20	2.0	1.39E-05
7.86E-05	6	20	2.0	2.46E-06
9.01E-04	6	20	2.0	2.82E-05

Noncarcinogenic Compound(s)	Zone 3 Concentration (mg/m^3)	Zone 3 Duration of Exposure (hrs/event)	Zone 3 Number of Exposure Events (events/yr)	Zone 3 Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)
Cyanide	2.09E-08	10	20	0.4	2.18E-10
Ethylbenzene	2.41E-04	10	20	0.4	2.52E-06
Noncarcinogenic PAHs	8.35E-05	10	20	0.4	8.71E-07
Styrene	4.42E-04	10	20	0.4	4.61E-06
Toluene	4.44E-04	10	20	0.4	4.63E-06
Trimethylbenzene	7.86E-05	10	20	0.4	8.20E-07
Total Xylenes	9.01E-04	10	20	0.4	9.40E-06

Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	Standard or Guideline (mg/kg/day)	Hazard Ratio
9.32E-10	7.5	2.00E-02	3.50E-07
1.10E-05	1.0	1.00E-01	1.10E-04
3.72E-06	0.8	4.00E-01	6.98E-06
2.02E-05	1.0	2.00E-01	1.01E-04
2.02E-05	1.0	1.00E+00	2.02E-05
3.58E-06	1.0	4.00E-01	8.96E-06
4.11E-05	1.0	4.00E-01	1.03E-04

SUMMARY HAZARD INDEX	7.50E-04

COILWKMP
16-Jan-90

TABLE C-9
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
toluene	151.00	1.2	0.050	0.025	0.05	70	1	1.48E-08	1.70E-07	3.00E-01	6.16E-07
xylene	306.00	1.2	0.050	0.05	0.10	70	1	5.99E-08	6.89E-07	2.00E+00	3.74E-07
ethyl benzene	82.10	1.2	0.050	0.05	0.10	70	1	1.61E-08	1.85E-07	1.00E-01	2.01E-06
cyanide (amenable)	0.525	1.2	0.050	1.00	0.50	70	1	5.14E-10	2.36E-08	2.00E-02	1.21E-06
noncarcinogenic PAHs	2785.00	1.2	0.050	0.01	0.50	70	1	2.73E-06	1.25E-06	4.00E-01	9.95E-06
styrene	150.00	1.2	0.050	0.05	0.10	70	1	2.94E-08	3.38E-07	2.00E-01	1.83E-06
trimethylbenzene	26.70	1.2	0.050	0.05	0.10	70	1	5.23E-09	6.01E-08	2.00E+00	3.27E-08
									SUMMARY HAZARD INDEX		1.60E-05

Note: TK - Toxicokinetic Factor

Zone 1 School, 750 ft Carcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)
Benzene	7.03E-05	8	20	2.73E-03	8	25
Bis(2-ethylhexyl)phthalate	0.00E+00	8	20	0.00E+00	8	25
Methylene Cloride	0.00E+00	8	20	1.31E-05	8	25
Carcinogenic PAHs - USEPA	1.41E-06	8	20	9.65E-05	8	25
Carcinogenic PAHs - ICF	1.41E-06	8	20	9.65E-05	8	25

Terminology
Inhalation
Most Probable Case
Realistic Worst Case
Young Child
Adult
Carcinogen
Noncarcinogen

Zone 2 Home, 100 ft (playing) Carcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)
Benzene	3.06E-04	6	20	1.28E-02	6	25
Bis(2-ethylhexyl)phthalate	0.00E+00	6	20	0.00E+00	6	25
Methylene Cloride	1.48E-06	6	20	6.15E-05	6	25
Carcinogenic PAHs - USEPA	8.20E-06	6	20	3.70E-04	6	25
Carcinogenic PAHs - ICF	8.20E-06	6	20	3.70E-04	6	25

Inhalation Rate (m^3/hr)
Child

	Zone 1	Zone 2	Zone 3
Most Probable	0.8	2.0	0.4
Realistic Worst	0.8	2.0	0.4

Zone 3 Home, 100 ft (sleeping) Carcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)
Benzene	3.06E-04	10	20	1.28E-02	10	25
Bis(2-ethylhexyl)phthalate	0.00E+00	10	20	0.00E+00	10	25
Methylene Cloride	1.48E-06	10	20	6.15E-05	10	25
Carcinogenic PAHs - USEPA	8.20E-06	10	20	3.70E-04	10	25
Carcinogenic PAHs - ICF	8.20E-06	10	20	3.70E-04	10	25

TABLE C-10
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Workers
Carcinogenic Effects
Mechanicville Site

\#
SOILWKMP
25-Jul-90

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1\text{mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	104.00	1.2	0.050	0.05	0.10	70	1	2.0	5.81E-10	6.69E-09	2.90E-02	2.11E-10
carc. PAHs - USEPA	271.00	1.2	0.050	0.01	0.50	70	1	2.0	7.58E-09	3.49E-09	1.15E+01	1.27E-07
carc. PAHs - ICF	271.00	1.2	0.050	0.01	0.50	70	1	2.0	7.58E-09	3.49E-09	3.20E+00	3.54E-08

SUMMARY CARCINOGENIC RISK	
USEPA	1.27E-07
ICF	3.56E-08

Note: TK = Toxicokinetic Factor

INHALATION RISK SCENARIOS

DISK: INHALATION
FILE: INH-MECH.WK1

DATE: 25-Jul-90

SITE: Mechanicville SUMMARY TABLE: TABLE C-13

Variables	Child
Body Weight (kilograms)	21
Duration of Total Exposure Period (years)	6

Noncarcinogenic Compound(s)	Toxicokinetic Factor (unitless)	Standard or Guideline (mg/kg/day)
Cyanide	7.50	2.00E-02
Ethylbenzene	1.00	1.00E-01
Noncarcinogenic PAHs	0.75	4.00E-01
Styrene	1.00	2.00E-01
Toluene	1.00	1.00E+00
Trimethylbenzene	1.00	4.00E-01
Total Xylenes	1.00	4.00E-01

Carcinogenic Compound(s)	Toxicokinetic Factor (unitless)	CAG Potency Factor (mg/kg/day)^-1
Benzene	1.00	2.90E-02
Bis(2-ethylhexyl)phthalate	0.75	1.40E-02
Methylene Chloride	1.00	1.40E-02
Carcinogenic PAHs - USEPA	1.00	6.10E+00
Carcinogenic PAHs - IDF	1.00	4.53E-01

Zone 1 School, 750 ft Noncarcinogenic Compound(s)	MOST PROBABLE CASE: Concentration (mg/m^3)	MOST PROBABLE CASE: Duration of Exposure (hrs/event)	MOST PROBABLE CASE: Number of Exposure Events (events/yr)	REALISTIC WORST CASE: Concentration (mg/m^3)	REALISTIC WORST CASE: Duration of Exposure (hrs/event)	REALISTIC WORST CASE: Number of Exposure Events (events/yr)
Cyanide	3.58E-09	8	20	2.45E-07	8	25
Ethylbenzene	5.52E-05	8	20	2.16E-03	8	25
Noncarcinogenic PAHs	1.43E-05	8	20	9.80E-04	8	25
Styrene	1.02E-04	8	20	3.93E-03	8	25
Toluene	1.02E-04	8	20	3.97E-03	8	25
Trimethylbenzene	1.81E-05	8	20	6.99E-04	8	25
Total Xylenes	2.07E-04	8	20	8.04E-03	8	25

Zone 2 Home, 100 ft (playing) Noncarcinogenic Compound(s)	MOST PROBABLE CASE: Concentration (mg/m^3)	MOST PROBABLE CASE: Duration of Exposure (hrs/event)	MOST PROBABLE CASE: Number of Exposure Events (events/yr)	REALISTIC WORST CASE: Concentration (mg/m^3)	REALISTIC WORST CASE: Duration of Exposure (hrs/event)	REALISTIC WORST CASE: Number of Exposure Events (events/yr)
Cyanide	2.09E-08	6	20	9.42E-07	6	25
Ethylbenzene	2.41E-04	6	20	1.01E-02	6	25
Noncarcinogenic PAHs	8.35E-05	6	20	3.77E-03	6	25
Styrene	4.42E-04	6	20	1.84E-02	6	25
Toluene	4.44E-04	6	20	1.86E-02	6	25
Trimethylbenzene	7.86E-05	6	20	3.28E-03	6	25
Total Xylenes	9.01E-04	6	20	3.77E-02	6	25

Zone 3 Home, 100 ft (sleeping) Noncarcinogenic Compound(s)	MOST PROBABLE CASE: Concentration (mg/m^3)	MOST PROBABLE CASE: Duration of Exposure (hrs/event)	MOST PROBABLE CASE: Number of Exposure Events (events/yr)	REALISTIC WORST CASE: Concentration (mg/m^3)	REALISTIC WORST CASE: Duration of Exposure (hrs/event)	REALISTIC WORST CASE: Number of Exposure Events (events/yr)
Cyanide	2.09E-08	10	20	9.42E-07	10	25
Ethylbenzene	2.41E-04	10	20	1.01E-02	10	25
Noncarcinogenic PAHs	8.35E-05	10	20	3.77E-03	10	25
Styrene	4.42E-04	10	20	1.84E-02	10	25
Toluene	4.44E-04	10	20	1.86E-02	10	25
Trimethylbenzene	7.86E-05	10	20	3.28E-03	10	25
Total Xylenes	9.01E-04	10	20	3.77E-02	10	25

SOILWKRW
16-Jan-90

TABLE C-11
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
toluene	840.00	4.2	0.1	0.125	0.25	70	2	1.64E-06	3.49E-05	3.00E-01	1.22E-04
xylene	1400.00	4.2	0.1	0.25	0.50	70	2	5.48E-06	1.16E-04	2.00E+00	6.09E-05
ethyl benzene	440.00	4.2	0.1	0.25	0.50	70	2	1.72E-06	3.66E-05	1.00E-01	3.83E-04
cyanide (amenable)	3.20	4.2	0.1	2.50	1.00	70	2	2.50E-08	2.66E-06	2.00E-02	1.34E-04
noncarcinogenic PAHs	10851.00	4.2	0.1	0.10	1.00	70	2	8.49E-05	3.61E-04	4.00E-01	1.11E-03
styrene	780.00	4.2	0.1	0.250	0.50	70	2	3.05E-06	6.48E-05	2.00E-01	3.39E-04
trimethylbenzene	170.00	4.2	0.1	0.25	0.50	70	2	6.65E-07	1.41E-05	2.00E+00	7.39E-06
									SUMMARY HAZARD INDEX		2.16E-03

Note: TK - Toxicokinetic Factor

TABLE C-12
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Workers
Carcinogenic Effects
Mechanicville Site

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SOILWKRW
25-Jul-90

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[\left(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	640.0000	4.2	0.1	0.25	0.50	70	2	4.0	1.43E-07	3.04E-06	2.90E-02	9.23E-08
carc. PAHs - USEPA	1305.0000	4.2	0.1	0.10	1.00	70	2	4.0	5.84E-07	2.48E-06	1.15E+01	3.52E-05
carc. PAHs - ICF	1305.0000	4.2	0.1	0.10	1.00	70	2	4.0	5.84E-07	2.48E-06	3.20E+00	9.80E-06

SUMMARY CARCINOGENIC RISK	
USEPA	3.53E-05
ICF	9.89E-06

Note: TK - Toxicokinetic Factor

APPENDIX D

AIR MODELING METHOD AND RESULTS

D.1 AIR QUALITY MODELING OF FUGITIVE AIR EMISSIONS

Emissions of contaminants are predicted for future hypothetical construction activities at the Mechanicville site. Both particle and volatile emissions are estimated.

D.1.1 Fugitive Dust Emissions

The fugitive dust emission equations used for this analysis are based on empirical studies of surface mines and storage piles for various materials (Cowherd, 1985). These equations can be used to estimate the emissions of contaminants based on the measured chemical concentrations in the surface soil at the Mechanicville site.

The emissions predicted from these equations are for inhalable particles (PM_{10}) that have an aerodynamic diameter smaller than or equal to 10um. Inhalable particles can be retained by the body upon inhalation and contribute to inhalation exposure.

Contaminant emission rates were estimated from PM_{10} emission factors, the mass fraction of contaminant in the Mechanicville site soil, and the hypothetical exposed surface area of the contaminated soil. The contaminant emission rate (Q_{10}; g/sec) of particles 10 um and smaller was determined by the following equation:

$$Q_{10}\ (g/sec) = [\ f \times E_{10} \times A_c\ ] \times 10^{-6} \qquad (D\text{-}1)$$

where:

Q_{10} = contaminant PM_{10} emission rate (g/sec)

f = mass fraction of contaminant in PM_{10} emissions (mg contaminant/kg PM_{10})

E_{10} = PM_{10} emission rate (g PM_{10}/m^2-sec)

A_c = contaminated surface area (m^2)

10^{-6} = conversion factor for (mg contaminant/kg PM_{10}) to (g contaminant/g PM_{10})

The first step in estimating the emission rate (Q_{10}) from the contaminated surface area is to evaluate the sources of the particle emissions. For the Mechanicville site, the main source of particle emissions is wind erosion.

For estimating emissions from wind erosion for surface areas not covered by vegetation, two emission factor equations have been recommended by Cowherd et al. (1985). Selection of an equation depends on whether the contaminated site's surface material is classified as having a "limited reservoir" or an "unlimited reservoir" of erodible surface particles. Nonhomogeneous exposed surfaces that are crusted and include nonerodible elements are characterized as having a "limited reservoir" of erodible particles and require high threshold wind speeds for wind erosion. Exposed surfaces with "unlimited" erosion potential are those that do not form a crust and consist of finely divided particles (e.g., sandy agricultural soil). For the "unlimited reservoir" category, a lower threshold wind speed is necessary to entrain the contaminated soil. Based on field studies, a threshold friction velocity of 75 cm/sec is considered as the dividing line between the two classes of wind erosion.

Based on a relationship derived by Gillette (1980), the threshold friction velocity for wind erosion can be estimated from the mode of the grain-size distribution for soil samples from the site. Based on representative soil samples from the Mechanicville site, a threshold friction velocity less than 75.0 cm/sec was determined using the Gillette curve as presented in Cowherd et al. (1985). Therefore, the "unlimited reservoir" emission equation was used for the Mechanicville site.

For the utility repair scenario described in Section 5.0, Jordan calculated a conservative estimate of the PM_{10} emission rate (E_{10}) for the contaminated surface with "unlimited" erosion potential; an emission factor derived by Gillette (1981) based on field measurements of highly erodible soil was used. Cowherd (1985) presents a simplified form of this equation to represent the worst-case (short-term) emission rates. This equation is:

$$E_{10}\ (g/m^2\text{-sec}) = (1.0 \times 10^{-5})\ (1 - V)[U_{6\text{-hour}}]^3 \qquad \text{(D-2)}$$

where: V = fraction of contaminated surface with vegetative cover (equal to 0.0 for bare soil)

$[\ U_{6\text{-hour}}\ ]$ = expected maximum 6-hour mean wind speed (m/sec)

Based on local climatological data presented in Cowherd et al. (1985), the fastest mile [U^*] and mean wind speed [U] recorded for Albany, New York, are 21.4 m/sec and 4.0 m/sec, respectively. Because the Mechanicville site is located approximately 15 miles north of Albany, the Albany meteorological data were assumed to be representative of the Mechanicville site. As proposed by the World

Meteorological Organization to account for different averaging periods, the expected maximum 6-hour mean wind speed during the year can be estimated by the following equation:

$$[U_{6\text{-hour}}]\ (m/sec) = [U^{+}]-2.0 \qquad (D\text{-}3)$$

For the Mechanicville site, with all of the uncovered contaminated soil assumed to be bare (V = 0.0), worst-case hourly emission rates (E_{10}) due to soil erosion were calculated for the following two wind speed conditions:

Maximum Hourly Wind Speed: 19.4 m/sec

Most Probable Hourly Wind Speed: 4.0 m/sec

The particulate emission rates (E_{10}), per unit surface area, for the two wind speed cases were calculated to be:

Maximum 6-hour Wind Speed: $E_{10} = 7.30 \times 10^{-2}$ g/m^2-sec

Most Probable Wind Speed: $E_{10} = 6.40 \times 10^{-4}$ g/m^2-sec

A summary of the assumptions and input parameters used to estimate the fugitive dust emission rates due to unlimited soil erosion are given in Table D-1.

TABLE D-1

ASSUMPTIONS AND INPUT PARAMETERS
USED IN FUGITIVE DUST EMISSION RATE CALCULATIONS
MECHANICVILLE SITE

Wind Erosion Emissions

Erosion Potential:	Unlimited
Volume of Contaminated Soil Removed:	
Utility Repair Excavation: (Realistic Worst Case)	4,800 cubic feet
Utility Repair Excavation Case: (Most Probable Case)	1,200 cubic feet
Fraction of Contaminated Surface (V) with Vegetative Cover	0.00
Roughness Height (Zo):	5.0 cm

Wind Speed Range	Wind Speed [m/s]	E_{10c} [g/m^2 -s]
High Wind Speed:	19.4	8.00×10^{-5}
Mean Wind Speed:	4.0	9.73×10^{-7}

The surface area of contaminated soil was assumed to equal that of the soil pile. The volume of contaminated soil brought to the surface and piled at the site was estimated for the following two scenarios:

Utility Repair Excavation - Realistic Worst Case: 4,800 cubic feet

Utility Repair Excavation - Most Probable Case: 1,200 cubic feet

The exposed surface areas of the soil piles were estimated based on the assumption that the storage piles were shaped similar to a solid cone.

The actual contaminant emission rates (Q_{10}), in grams per second, were obtained by Equation D-1 for the two wind speed cases.

D.1.2 Volatilization Rates from Soils

The volatilization of contaminants through the soil is a complex process involving the mass transfer of volatiles from the soil particles into the air pores in the soil, mass transfer through the soil pore spaces, and mass transfer from the soil surface into the ambient air. Before estimating the volatilization rates of organic chemicals from the contaminated soil, several empirical models were evaluated. For each model, values for several input parameters were not directly available for Mechanicville and would have had to be estimated. The volatilization rates calculated by the different models for specific contaminants ranged over several orders of magnitude. Because of the

uncertainty of the applicability of these models for the Mechanicville site, it was decided that a more simplified but conservative approach would be used.

Based on the mean contaminant soil concentration measured at the Mechanicville site, the mass of the contaminant (grams) in the soil for the two soil volume cases previously discussed was determined. The contaminant emission rates due to volatilization from the surface soils were calculated for the following two cases:

Most Probable: 10 percent of VOC mass emitted over 20-day period

Realistic Worst: 100 percent of VOC mass emitted over 30-day period

For the two cases, the emission rates due to volatilization from the exposed soil are assumed to remain constant. For the contaminants measured in the Mechanicville soil, Table D-2 provides the mean soil concentration (mg/kg) and the 20-day and 30-day average emission rates (g/sec).

D.2 AIR QUALITY DISPERSION MODELS

Once contaminant emission rates for the different scenarios have been estimated, air quality modeling is used to estimate ambient air concentrations at selected distances from the Mechanicville site. Jordan modeled the emissions from the exposed soil surface area as area sources. Jordan assumed that no plume rise will occur, and that the contaminant emissions are mixed uniformly over a height equal to the height of the soil pile.

TABLE D-2

SOIL CONCENTRATIONS AND EMISSION RATES
FOR VOLATILIZATION FROM SURFACE SOILS
MECHANICVILLE SITE

ASSUMPTIONS:

MOST PROBABLE: 10% OF VOC MASS EMITTED OVER 20 DAYS
WORST CASE: 100% OF VOC MASS EMITTED OVER 30 DAYS

SOIL DENSITY: 1440 KG/M^3
SOIL VOLUME: MOST PROBABLE: 1200 CU. FT. WORST CASE: 4800 CU. FT.

		MOST PROBABLE		WORST CASE	
CONTAMINANT COMPOUND	MEAN SOIL CONC. (MG/KG)	MASS OF CONTAMINANT IN SOIL[a] (G)	20 DAY AVG. E[b] (G/S)	MASS OF CONTAMINANT IN SOIL (G)	30 DAY AVG. E (G/S)
Benzene	104	5.09E+03	2.94E-04	2.03E+04	7.85E-03
Toluene	151	7.38E+03	4.27E-04	2.95E+04	1.14E-02
Ethylbenzene	82.1	4.01E+03	2.32E-04	1.61E+04	6.20E-03
Styrene	150	7.34E+03	4.25E-04	2.93E+04	1.13E-02
Total Xylenes	306	1.50E+04	8.66E-04	5.99E+04	2.31E-02
Trimethylbenzene	26.7	1.31E+03	7.56E-05	5.22E+03	2.01E-03
Methylene Chloride	0.5	2.45E+01	1.42E-06	9.78E+01	3.77E-05

[a] Mass of contaminant in soil (g) = mean soil concentration $\left(\frac{\text{mg contaminant}}{\text{kg soil}}\right)$ x soil density $\left(\frac{\text{kg soil}}{m^3}\right)$ x soil volume (m^3)

[b] Average E(g/s) = $\frac{\text{mass of contaminant in soil (g)}}{20 \text{ days}} \times \frac{1 \text{ day}}{24 \text{ hour}} \times \frac{1 \text{ hour}}{60 \text{ min.}} \times \frac{1 \text{ min}}{60 \text{ sec.}}$

Jordan evaluated two air dispersion modeling approaches to determine which modeling approach was appropriate for the Mechanicville site. The first modeling approach involves a simple box model to estimate ambient concentrations due to emissions from an area source. The box model is based on conservation of mass equations, requires steady-state conditions, and is widely used in exposure studies where the receptors are on-site or very close to the exposed surface area. The box itself encloses the area of interest, bounded by the ground, with a height estimated by an assumed mixing layer. Mixing within the box is assumed to be complete. The width of the box is set equal to the width of the exposed soil area. The box is oriented so that its length lies in the direction of the wind. The box model is limited in its application to area sources with a surface width much larger than the distance to the receptor of interest.

For the Mechanicville site, predicted concentrations are of interest at receptors located on-site or within 750 feet of the exposed contaminated area. The size of the exposed contaminated soil piles for the Mechanicville site are relatively small, with the largest pile estimated to have a diameter of only 31 feet. Because the distance to the receptors of interest is greater than the width of the soil pile, the box model is not appropriate for the Mechanicville site. Therefore, another modeling approach was considered for determining the ambient contaminant concentrations due to fugitive emissions.

The second modeling approach follows the basic modeling procedures described in D. B. Turner's Workbook of Atmospheric Dispersion Estimates (Turner, 1970). These procedures are based on the basic Gaussian plume equation. For a ground-level source with no effective plume rise, the Gaussian equation reduces to a

simplified form that has been widely used in screening assessments. For the Mechanicville site, the emissions from the soil piles are assumed to be spread over the area of the pile. Following Turner's recommendations, Jordan modeled the area source emissions from the soil pile as if they originated from a virtual point source. The virtual point source approach creates a point source located at an appropriate distance upwind such that the horizontal dispersion at the soil pile is equal to the soil pile width. The horizontal dispersion downwind of the facility can then be simulated as if all the soil pile emissions were being emitted from the virtual point source. The distance used in the calculation of ambient concentrations is the total distance from the virtual point to the receptor.

The calculation of the ambient concentrations due to emissions from the soil piles is simplified by using the virtual source approximation. Further simplification is possible by assuming that the emissions due to soil erosion and volatilization are initially spread over the height of the soil pile. Having calculated the contaminant emission rate of particles 10 um and smaller (Q_{10c}), the ambient contaminant concentration can be estimated by the following equation:

$$C10 = Q_{10c} / [\ pi * sigma_y * (sigma_z + H_p) * U\ ] \quad (D\text{-}6)$$

where:

C10 = Contaminant air concentration (g/m^3)

Q_{10c} = Contaminated emission rate (g/sec)

$sigma_y$ = Horizontal dispersion coefficient (m) at distance X + Xv

$sigma_z$ = Vertical dispersion coefficient (m) at distance X

H_p = Height of soil pile (m)

U = Average wind speed (m/sec)

X_v = Virtual source distance (m)

X = Distance from edge of soil pile to receptor (m)

For the Mechanicville site evaluation, downwind receptors were placed 10, 100, and 750 feet from the edge of the soil pile. The initial virtual horizontal dispersion coefficient is estimated by dividing the width of the soil surface pile by 4.3. From extrapolation of the horizontal dispersion coefficient curve in Turner's workbook for D atmospheric stability class, the virtual source distance (X_v) was determined for two different soil volume cases:

Case Description	Exposed Soil Volume
Utility Repair Excavation - Realistic Worst	4,800 cubic feet
Utility Repair Excavation - Most Probable	1,200 cubic feet

Different wind speeds were used with Equation D-6 to represent realistic worst and most probable conditions at the Mechanicville site. To represent the most probable conditions, a wind speed of 4.0 m/sec with a D atmospheric stability class was assumed. To represent the worst case conditions, two wind speed values were assumed. To simulate realistic worst conditions from emissions due to the volatilization of contaminants in the soil pile, a wind speed of 2.0 m/sec was selected. Because fugitive emissions due to unlimited soil erosion increase with wind speed, a wind speed of 19.4 m/sec was selected to represent worst case particulate emissions.

Based on the assumptions used in this analysis, the ambient air quality concentrations calculated using Equation D-6 predict hourly values of contaminant concentrations. To relate these predictions to longer averaging time periods, conservative scaling factors recommended by USEPA (1977) were used to estimate longer duration exposure concentrations. The 1-hour average box model predictions were multiplied by 0.40 to obtain 24-hour average off-site concentrations, and by 0.70 to obtain 8-hour average on-site concentrations.

Table D-3 presents the ambient air concentrations due to fugitive dust emissions from soil erosion for the realistic worst case utility repair scenario. Table D-4 presents the contaminant ambient air concentrations for the analogous most probable case.

Based on the emission rates for volatilization from surface soil given in Table D-2, Table D-5 provides the chemical-specific average concentrations for the two contaminated soil volume cases (i.e., two utility repair scenarios). The ambient 1-hour average concentrations were calculated based on an assumed D atmospheric stability class and wind speed values of 2.0 and 4.0 m/sec. From the predicted 1-hour average concentrations, 8-hour and 24-hour average concentrations were calculated using the scaling factors given previously.

4945D-3

TABLE D-3

AMBIENT AIR CONCENTRATIONS
FOR NONVOLATILE CONTAMINANTS:
REALISTIC WORST CASE
UTILITY REPAIR SCENERIO
MECHANICVILLE

ASSUMPTIONS:

	Wind Speed (m/sec)	Soil Surface Area (sq. meters)
For Unlimited Wind Erosion:	19.4	135.9

(Stability Class = D for all cases)

COMPOUND	DOWNWIND DISTANCE (feet)	REALISTIC WORST CASE AMBIENT AIR CONCENTRATIONS (ug/cu.m) WIND EROSION 1-hour	8-hour	24-hour
Acenaphthene	10	1.18E+00	8.26E-01	4.72E-01
	100	4.41E-01	3.09E-01	1.76E-01
	750	1.15E-01	8.04E-02	4.59E-02
Acenaphthylene	10	3.35E+00	2.34E+00	1.34E+00
	100	1.25E+00	8.75E-01	5.00E-01
	750	3.26E-01	2.28E-01	1.30E-01
Anthracene	10	1.67E+00	1.17E+00	6.69E-01
	100	6.25E-01	4.38E-01	2.50E-01
	750	1.63E-01	1.14E-01	6.51E-02
Carcinogenic PAHs	10	2.48E+00	1.73E+00	9.91E-01
	100	9.26E-01	6.48E-01	3.70E-01
	750	2.41E-01	1.69E-01	9.65E-02
Fluoranthene	10	2.61E+00	1.82E+00	1.04E+00
	100	9.74E-01	6.82E-01	3.90E-01
	750	2.54E-01	1.78E-01	1.01E-01
Fluorene	10	4.70E+00	3.29E+00	1.88E+00
	100	1.76E+00	1.23E+00	7.02E-01
	750	4.57E-01	3.20E-01	1.83E-01
Naphthalene	10	4.99E+00	3.49E+00	2.00E+00
	100	1.87E+00	1.31E+00	7.46E-01
	750	4.86E-01	3.40E-01	1.94E-01
Phenanthrene	10	2.94E+00	2.05E+00	1.17E+00
	100	1.10E+00	7.68E-01	4.39E-01
	750	2.86E-01	2.00E-01	1.14E-01
Pyrene	10	3.65E+00	2.55E+00	1.46E+00
	100	1.36E+00	9.54E-01	5.45E-01
	750	3.55E-01	2.49E-01	1.42E-01
2-Methylnaphthalene	10	1.19E-01	8.32E-02	4.75E-02
	100	4.44E-02	3.11E-02	1.78E-02
	750	1.16E-02	8.10E-03	4.63E-03
Total Cyanide	10	6.30E-03	4.41E-03	2.52E-03
	100	2.35E-03	1.65E-03	9.42E-04
	750	6.13E-04	4.29E-04	2.45E-04

TABLE D-4

AMBIENT AIR CONCENTRATIONS
FOR NONVOLATILE CONTAMINANTS:
MOST PROBABLE CASE
UTILITY REPAIR SCENERIO
MECHANICVILLE

ASSUMPTIONS:

	Wind Speed (m/sec)	Soil Surface Area (sq. meters)
For Unlimited Wind Erosion:	4.0	34

(Stability Class = D for all cases)

COMPOUND	DOWNWIND DISTANCE (feet)	MOST PROBABLE CASE AMBIENT AIR CONCENTRATIONS (ug/cu.m) WIND EROSION 1-hour	8-hour	24-hour
Acenaphthene	10	3.72E-02	2.60E-02	1.49E-02
	100	9.76E-03	6.83E-03	3.91E-03
	750	1.68E-03	1.17E-03	6.71E-04
Acenaphthylene	10	1.05E-01	7.38E-02	4.22E-02
	100	2.77E-02	1.94E-02	1.11E-02
	750	4.76E-03	3.33E-03	1.90E-03
Anthracene	10	5.27E-02	3.69E-02	2.11E-02
	100	1.38E-02	9.69E-03	5.54E-03
	750	2.38E-03	1.67E-03	9.52E-04
Carcinogenic PAHs	10	7.80E-02	5.46E-02	3.12E-02
	100	2.05E-02	1.44E-02	8.20E-03
	750	3.52E-03	2.47E-03	1.41E-03
Fluoranthene	10	8.21E-02	5.75E-02	3.28E-02
	100	2.16E-02	1.51E-02	8.63E-03
	750	3.71E-03	2.59E-03	1.48E-03
Fluorene	10	1.48E-01	1.04E-01	5.92E-02
	100	3.89E-02	2.72E-02	1.56E-02
	750	6.68E-03	4.68E-03	2.67E-03
Naphthalene	10	1.57E-01	1.10E-01	6.29E-02
	100	4.13E-02	2.89E-02	1.65E-02
	750	7.10E-03	4.97E-03	2.84E-03
Phenanthrene	10	9.24E-02	6.47E-02	3.70E-02
	100	2.43E-02	1.70E-02	9.72E-03
	750	4.17E-03	2.92E-03	1.67E-03
Pyrene	10	1.15E-01	8.04E-02	4.60E-02
	100	3.02E-02	2.11E-02	1.21E-02
	750	5.19E-03	3.63E-03	2.07E-03
2-Methylnaphthalene	10	3.74E-03	2.62E-03	1.50E-03
	100	9.84E-04	6.89E-04	3.94E-04
	750	1.69E-04	1.18E-04	6.76E-05
Total Cyanide	10	1.98E-04	1.39E-04	7.94E-05
	100	5.21E-05	3.65E-05	2.09E-05
	750	8.96E-06	6.27E-06	3.58E-06

TABLE D-5

AMBIENT AIR CONCENTRATIONS
FOR VOLATILE CONTAMINANTS:
UTILITY REPAIR SCENERIO
MECHANICVILLE

ASSUMPTIONS:

	Soil Pile Volume (cu. ft.)	Wind Speed (m/sec)
Most Probable Case:	1200	4.0
Realistic Worst Case:	4800	2.0

(Stability Class = D for all cases)

COMPOUND	DOWNWIND DISTANCE (feet)	AMBIENT AIR CONCENTRATIONS (ug/cu.m.) MOST PROBABLE 1-hour	8-hour	24-hour	REALISTIC WORST CASE 1-hour	8-hour	24-hour
Benzene	10	2.84E+00	1.99E+00	1.13E+00	8.56E+01	5.99E+01	3.42E+01
	100	7.64E-01	5.35E-01	3.06E-01	3.20E+01	2.24E+01	1.28E+01
	750	1.76E-01	1.23E-01	7.03E-02	6.83E+00	4.78E+00	2.73E+00
Toluene	10	4.12E+00	2.88E+00	1.65E+00	1.24E+02	8.70E+01	4.97E+01
	100	1.11E+00	7.77E-01	4.44E-01	4.65E+01	3.25E+01	1.86E+01
	750	2.55E-01	1.79E-01	1.02E-01	9.92E+00	6.94E+00	3.97E+00
Ethylbenzene	10	2.24E+00	1.57E+00	8.96E-01	6.76E+01	4.73E+01	2.70E+01
	100	6.03E-01	4.22E-01	2.41E-01	2.53E+01	1.77E+01	1.01E+01
	750	1.39E-01	9.70E-02	5.54E-02	5.39E+00	3.78E+00	2.16E+00
Styrene	10	4.10E+00	2.87E+00	1.64E+00	1.23E+02	8.62E+01	4.93E+01
	100	1.11E+00	7.74E-01	4.42E-01	4.60E+01	3.22E+01	1.84E+01
	750	2.54E-01	1.78E-01	1.02E-01	9.83E+00	6.88E+00	3.93E+00
Total Xylenes	10	8.36E+00	5.85E+00	3.34E+00	2.52E+02	1.76E+02	1.01E+02
	100	2.25E+00	1.58E+00	9.01E-01	9.41E+01	6.59E+01	3.77E+01
	750	5.17E-01	3.62E-01	2.07E-01	2.01E+01	1.41E+01	8.04E+00
Trimethylbenzene	10	7.30E-01	5.11E-01	2.92E-01	2.19E+01	1.53E+01	8.76E+00
	100	1.97E-01	1.38E-01	7.86E-02	8.19E+00	5.73E+00	3.28E+00
	750	4.52E-02	3.16E-02	1.81E-02	1.75E+00	1.22E+00	6.99E-01

APPENDIX D
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APPENDIX E

PAH SOLUBILITIES

TABLE E-1
SOLUBILITIES OF PAHs IN WATER (mg/L)[1]

COMPOUND	VERSCHUEREN[2]	USEPA TREATABILITY MANUALS[3]	SPHERE[4]
Acenaphthene	--	3.42	3.42
Acenaphthylene	3.93	3.93	3.93
Anthracene	1.29	0.073	0.045
Benzo(a)anthracene	0.044 at 24°C	0.014	0.0057
Benzo (a)pyrene	0.003 at 20°C	0.0038	0.0012
Benzo(b)fluoranthene	--	NA[5]	0.014
Benzo(k)fluoranthene	--	0.00055	0.0043
Benzo(g,h,i)perylene	0.00026	0.00026	0.0007
Chrysene	0.006	0.002	0.0018
Dibenzo(a,h)anthracene	--	0.0005	0.0005
Fluoranthene	0.120 at 24°C	0.26	0.26
Fluorene	1.9	1.98	1.69
Indeno(1,2,3-cd)pyrene	--	0.62	0.00053
Naphthalene	30.0 at 20°C	34.4	--
Phenanthrene	0.816 at 21°C	1.29	1.00
Pyrene	0.032 at 24°C	0.14	0.132
2-Methynaphthalene	28	--	--

NOTES:

1 All values are calculated at 25°C unless otherwise noted.

2 Verschueren, K., 1983. Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold Company; New York, New York.

3 USEPA, 1981. "Treatability Manual Volume I: Treatability Data"; Office of Research and Development; Washington, D.C.; USEPA-600/2-82-001a; September 1981 (Revised).

4 Superfund Public Health Evaluation Manual USEPA (1986).

5 NA - Not available

mg/L = milligrams per liter

Investigation of the Former Coal Gasification Site at Mechanicville, New York

Phase II Remedial Investigation Report and Work Plan for Phase IIA Supplemental Remedial Investigation and Feasibility Study

Volume I of II - Text

Prepared for:

NEW YORK STATE
ELECTRIC & GAS CORPORATION
4500 Vestal Parkway East
Binghamton, New York

Prepared by:

ABB ENVIRONMENTAL SERVICES, INC.
110 Free Street
Portland, Maine

Revised June 1992

ABB Environmental Services, Inc.

ABB
ASEA BROWN BOVERI

INVESTIGATION OF THE FORMER COAL GASIFICATION SITE AT MECHANICVILLE, NEW YORK

PHASE II REMEDIAL INVESTIGATION REPORT AND WORKPLAN FOR PHASE IIA SUPPLEMENTAL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

Prepared for:

New York State Electric & Gas Corporation
Binghamton, New York

Prepared by:

ABB Environmental Services, Inc.
Portland, Maine

Project No.: 4945-06

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The former Mechanicville manufactured gas plant (MGP) site is located in Mechanicville, New York, along the Anthony Kill (a small tributary of the Hudson River). The site is a quarter-mile upstream of the Hudson River, on the western side of North Central Avenue. A gas manufacturing plant was operated at the site by New York State Electric and Gas Corporation (NYSEG) and its predecessor companies from 1901 until 1955. Most of the structures utilized in the coal gas manufacturing operation were cleaned out and demolished at the time of closure in 1955. Between 1955 and 1990, NYSEG operated natural gas and electric service center. The site is currently unoccupied. The site is being investigated because it was formerly used for coal gas manufacturing.

This report, has been prepared by ABB Environmental Services, Inc. (ABB-ES) and presents the results of the four phase remedial investigation (RI) for the Mechanicville site conducted over the period 1986 through 1990. The RI consisted of a Preliminary Site Evaluation (Task 1), an Initial Field Investigation Program (Task 2), an Expanded Problem Definition Program (Task 3), and a Risk Assessment (Task 4). Separate reports have been prepared and previously submitted to the New York State Department of Environmental Conservation (NYSDEC) describing the results of each phase. This report presents a consolidation of these four reports into a single document which conforms to the requirements of the New York State Department of Environmental Conservation (NYSDEC) for submittal of RI reports.

In addition, this report also includes recommendations to conduct certain supplemental investigation activities and a focused feasibility study to further delineate the distribution of MGP constituents in subsurface soils and groundwater and to evaluate certain options to mitigate future off-site migration of contaminants which have been detected at the site.

Samples of soil, groundwater, surface water, stream sediments and air were collected at and adjacent to the site and analyzed. Chemicals related to former coal gasification activities were found in soil and groundwater samples collected near the former gas plant structures. The highest chemical concentrations were observed on the northern and eastern portions of the site. Sediment data from the Anthony Kill, as well as groundwater data, indicate that site-derived chemicals are migrating into the surface waters of the Anthony Kill. However, site-derived chemicals were not found at elevated levels in surface water samples collected downstream of the site,

which indicates that chemicals are not entering the stream in sufficient quantities to be detected.

Contaminants of concern were selected following the field investigations. The carcinogenic contaminants of concern which were identified are polynuclear aromatic hydrocarbons (PAHs) and benzene. The noncarcinogenic contaminants of concern which were identified are toluene, ethylbenzene, styrene, trimethylbenzene, xylenes, noncarcinogenic PAHs, and cyanide.

Several chemicals identified in the groundwater exceeded the applicable New York State standards for those chemicals, although presently, there are no known groundwater users near or downgradient of the site. Potential pathways for humans to come into contact with coal-gas-related chemicals are through skin contact, ingestion, and inhalation. Because most of the site is covered by structures or has been paved, exposure to site-derived chemicals is expected to be limited primarily to excavation-related activities that could create contact and inhalation hazards. Contact with Anthony Kill sediments may additionally cause exposure for people on- and off-site. Chemicals found in air samples were well below federal and industry standards for permissible exposure levels.

For the public health risk assessment, ABB-ES estimated the potential carcinogenic and noncarcinogenic risks from site-related exposures under baseline conditions (i.e., current conditions and future conditions, assuming no construction or remedial action). It was determined that direct contact with on-site soil (surface and subsurface) and Anthony Kill sediments by area residents (specifically, older children), construction workers, or utility workers, would not be expected to pose a significant health risk under the assumed exposure conditions. Both carcinogenic and noncarcinogenic risks were within target risk levels. Future on-site excavation could also expose nearby residents to inhalation of airborne volatile and particulate-bound contaminants. ABB-ES concluded that inhalation of contaminants, volatilized or aerosolized by potential future site activities involving soil excavation, also does not pose a significant health risk to the general population.

The Mechanicville site is not located over a water supply aquifer. The nearest water supply wells are about one mile southwest of the site in the town of Halfmoon. Because Mechanicville site groundwater is neither currently used nor expected to be used in the foreseeable future as a source of drinking water, public health risks associated with the groundwater are negligible. Groundwater beneath the site,

however, does contain several contaminants at concentrations which exceed both USEPA and NY drinking water standards.

An evaluation of the environmental risks posed by contaminants detected in the surface water, groundwater, and sediment suggests that some potential for negative impacts does exist for organisms in the Anthony Kill. These risks appear to be relatively minor, for several reasons. Few compounds were determined to exceed their media-specific protective criteria, and the extent of these exceedances were minimal. Moreover, negative impacts were associated only with "worst case" conditions (e.g., stream low-flow conditions and use of maximum analyte levels for criteria comparisons), with no impacts expected under more typical assumptions. Finally, there is no evidence that contaminants are impacting downstream receptors. Levels of contaminants detected in the downstream surface water and sediment samples never exceeded relevant protective criteria, even under the most conservative assumptions.

Although no significant public health or environmental risks were identified, NYSEG proposed plans to conduct a feasibility study to mitigate the discharge of coal tars and contaminated groundwater to the Anthony Kill in the Fall of 1991. In addition, a Phase IIA Supplemental Remedial Investigation workplan has been developed to address NYSDEC's request for additional site characterization information. Specifically, the work plan focuses on assessing site surface soils for PCB contamination, further investigation of the western portion of the site to assess soil and groundwater quality, and installation of soil borings, monitoring wells, piezometers and seepage meters downgradient of the site to assess off site migration of site-related contaminants.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This Phase I Remedial Investigation (RI) Report was prepared by ABB Environmental Services, Inc. (ABB-ES) for the New York State Electric and Gas Corporation (NYSEG) under contract No. 85S-159, "Investigation of Former Coal Gasification Sites". It presents the results of remedial investigation activities at the former Mechanicville manufactured gas plant (MGP) site located in the village of Mechanicville, New York.

In order to evaluate any possible impact and assess potential threats to public health and the environment, NYSEG contracted ABB-ES, formerly the E.C. Jordan Co., to perform the remedial investigation activities described herein. This four-phase remedial investigation, conducted over the period 1986 through 1990, consisted of a Preliminary Site Evaluation (Task 1), and Initial Field Investigation Program (Task 2), an Expanded Problem Definition Program (Task 3), and a Risk Assessment (Task 4). Separate reports have been prepared for each phase (task) of the investigation.

The Task 1 Preliminary Site Evaluation developed an understanding of the site's history, environmental setting, and current condition through detailed site reconnaissance, interviews, and file searches. The scope of work completed for Task 1 included:

1. A historical review of the site to develop an understanding of the former gasification plant layout, operations, and surrounding land uses.

2. An air assessment of existing site conditions and a preliminary prediction of airborne contaminant concentrations expected during the site investigation.

3. A detailed site reconnaissance to become familiar with the area and identify locations for explorations, access requirements, and potential conflicts with above and below ground utilities.

4. A geophysical investigation utilizing seismic refraction, terrain conductivity, and ground-penetrating radar (GPR) to: delineate the bedrock surface; determine the vertical stratigraphy of geologic materials; map the migration route of any conductive groundwater contaminant plume; and identify subsurface anomalies that warrant further investigation.

From the findings of Task 1, a workplan was developed for Task 2 detailing investigation activities to establish background conditions, characterize contamination sources, determine transport routes and identify potential receptors. Task 2 explorations included test pits, soil borings, monitoring well installations, air, soil, groundwater, surface water and sediment sampling, laboratory chemical analyses, and a preliminary land use investigation.

Task 3, the Expanded Problem definition Program, was designed to (1) confirm Task 2 analytical results; (2) obtain further data on chemical distribution in soil and shallow bedrock at the site and site environs; (3) further investigate the potential for chemical migration in groundwater; (4) assess the air quality within buildings on the site; and (5) identify potential chemical receptors and potentially sensitive land uses. Task 3 field activities included a GPR survey adjacent to the Anthony Kill, additional soil borings and monitoring well installations; collection of soil, groundwater, surface water and air samples for chemical analyses; and a location and elevation survey.

Based on information obtained in Tasks 1 through 3, Task 4, the Risk Assessment, was designed to (1) identify and assess the potential risk associated with exposure to the chemicals on site, and (2) evaluate the need for and develop, if necessary, the scope, budget, and schedule for a conceptual design of possible remedial alternatives.

This report has been prepared to consolidate the results of these four reports into a single document which conforms to the requirements of the New York State Department of Environmental Conservation (NYSDEC) for submittal of Remedial Investigation reports. In addition to reporting the results of previous studies, this report also includes recommendations to conduct certain supplemental investigation activities and focused feasibility studies to further delineate the distribution of MGP constituents in subsurface soils and groundwater and to evaluate certain options to mitigate future off-site migration of contaminants which have been detected at the site.

The remedial investigation activities performed to date have been conducted in accordance with contract specific Quality Control/Quality Assurance and Health and Safety Plans.

1.2 SITE BACKGROUND

1.2.1 Site Description

The site is located in the City of Mechanicville, Saratoga County, New York (Figure 1-1). It consists of an approximately 1.8-acre parcel of land situated along the southern bank of the Anthony Kill (Figure 1-2). The site is bordered on the east by North Central Avenue (formerly the Champlain Canal), on the south by Ferris Lane and on the west by a set of railroad tracks. As evident in Figure 1-2, structures associated with coal gasification operations were concentrated on the eastern 1-acre of the site; where NYSEGs investigation efforts have focused.

Saratoga County is in the Valley and Ridge physiographic province of east-central New York (Heath, et al., 1963; Waller, et al., n.d.). The Hudson River forms the northeastern and eastern boundaries of Saratoga County; the Mohawk River, the largest tributary to the Hudson, forms the southeastern boundary.

The nearest surface water body, the Anthony Kill, is a small tributary that flows into the Hudson River at Mechanicville. The Mechanicville site is located adjacent to the southern bank of Anthony Kill, approximately one-quarter-mile upstream from its confluence with the Hudson River. The site lies in a glacial outwash plain, at approximately 95 feet above mean sea level (MSL).

The area is characterized by the Hudson River and its tributaries, which fill pre-glacial valleys carved into the bedrock. Topographic terraces to the north and south of Mechanicville are over 300 feet above MSL (USGS, 1980).

Environmental Setting. The Hudson Valley Region is divided by two climatic divisions (Capital District Consortium, 1975). The southeast portion has a warm, temperate, rainy climate with no dry season but warm summers. The northwestern portion has a cool or snow forest climate with no dry season but hot summers. The climate in this region can change rather suddenly from season to season and at times from day to day (Peterssen, 1958). Mean monthly temperatures at Stillwater, New

York, three miles north of Mechanicville, range from 56°F to 65°F from June through September and 13°F to 25°F from December through March. The average annual precipitation is approximately 45 inches with snowfall averaging 179 inches per year (NOAA, 1975).

Wind data reported for the Albany County Airport, which is 10 to 12 miles south of the Mechanicville site, indicate that the wind is primarily from the south from May through June. The prevailing wind for the remainder of the year is from the west-northwest. Wind velocities are generally moderate over the Hudson Valley Region with an average annual wind speed reported at the Albany County Airport of 8.8 miles per hour (mph), with monthly averages ranging from 6.9 to 10.4 mph (NOAA, 1971).

This information is corroborated by five-year wind data supplied by NYSDEC (Taylor, 1986b). The Albany County Airport monitors are located at an elevation of 292 feet above MSL compared to the approximate 95 feet MSL elevation of the Mechanicville site. The airport data are likely to be representative of the general wind conditions in the Albany County area; however, local micrometeorological conditions might be different. Local topography would favor a prevailing northwesterly wind direction for Mechanicville, New York (Taylor, 1986a).

The Hudson River Valley and its tributaries overlie highly folded and faulted shales originally deposited as sediments along the continental margin during the Ordovician Period, approximately 500 million years ago. The preglacial Hudson River Valley and its drainage system were probably similar to their present configuration; however the valleys may have been widened or deepened by subglacial erosion when the Laurentide Ice Sheet flowed south from Canada, covering the area.

As the ice sheet began its northward retreat from the area approximately 10,000 to 15,000 years ago, sediment-laden meltwater streams flowed through the Anthony Kill Valley, depositing sands and gravel in higher energy zones, and clays and silts in quieter water. These glacial fluvial deposits form the terraces which lie along the southern border of Mechanicville. Kettle holes, such as Round Lake, formed where blocks of ice were embedded in the glacial drift (Van Diver, 1985). As the glaciers receded, a postglacial lake filled the Hudson River Valley for several hundred years, leaving glacial lacustrine beach deposits at different elevations which mark the different lake levels (Heath, et al., 1963; USGS, 1980; Ruedemann, 1930). Meltwater

drainage slowed, leaving a now much undersized stream flowing through the Anthony Kill Valley.

Boring logs from the lowlands section of the Mechanicville area and mapping by the New York State Geological Survey indicate that the underlying shale bedrock formation is very shallow, approximately 0 to 15 feet below ground surface (Dick Ferraioli, Inc., 1986; Mechanicville Sewer District, n.d.; New York Department of Public Works, 1942). Borings drilled less than 1,000 feet southeast of the Mechanicville site encountered bedrock at approximately 12 feet. At this location, a thin zone of weathered rock or till overlies the bedrock and the till is overlain by brown sand and silt (Mechanicville Sewer District, n.d.).

In some locations, a clay layer is found overlying bedrock. According to local well drillers, the bedrock is highly fractured and folded (Dente, n.d.). Bedrock outcrops have been mapped beneath the Hudson River from Stillwater south to Mechanicville, along the Anthony Kill Valley from Mechanicville to Coons Crossing, and throughout the City of Mechanicville (Dineen, 1986).

West of Mechanicville, the unconsolidated deposits thicken and the shale is interbedded with sandstone. East of the site, limestone underlies the shale. A well drilled in 1916 for the West Virginia Pulp and Paper Co., which was located one-half mile northeast of the site, encountered shale from the ground surface to 1,000 feet, underlain by at least 1,000 feet of limestone (Heath, et al., 1963).

Because of the thin veneer of unconsolidated deposits and the relatively impermeable bedrock, there are no major identified aquifers in the Mechanicville area. Pockets of unconsolidated sands and gravel, which are exposed along the stream valleys, represent localized sources of groundwater. Stratified silts and clays overlying the till and bedrock in some areas act as impermeable barriers between the overlying sands and gravel and the underlying bedrock. This discontinuous confining layer has created some low-yield artesian conditions in the water-bearing rock of the stream valleys. Yields from the faults and joints in the rock range from 0.5 to 80 gallons per minute (gpm) with the average yield being 10 gpm. The water is reported to be highly mineralized (Heath et al., 1963).

The City of Mechanicville has historically used surface water supplies for a drinking water source. A few residences outside the city limits, however, use groundwater for drinking water (Renaldi, 1986). The closest domestic wells are nearly a mile

southwest of the site in the Town of Halfmoon. Based on information obtained during the records search, there are no active industrial wells in the Mechanicville area. There are two abandoned industrial wells: the West Virginia Pulp and Paper Co. well (2,157 feet deep), and a well drilled into the shale which was used by the former Mintzer Petroleum Co. (29 feet deep). The latter is located approximately 1.5 miles south of the site (Heath, et al., 1963). The former yields of these wells were not reported.

The Anthony Kill and the Hudson River are the closest surface water bodies to the site. The Anthony Kill borders the site to the north and the Hudson River is 1,500 feet to the east. The Anthony Kill flows out of Ballston Lake in a northeast direction, then bends sharply southeast and flows through Round Lake before flowing past the site and emptying into the Hudson River at Mechanicville. Plumb and Baker Brooks are smaller streams that flow south out of the hills to the north and join the Anthony Kill near Willow Glen, almost two miles upstream of the Mechanicville site.

Surface water is used to supply drinking water to the City of Mechanicville. The surface water reservoir, known as the Mechanicville Reservoir, and a primary water treatment plant are located two miles northwest of Mechanicville, north of Willow Glen (Figure 1-3). The reservoir is at an elevation of 263 feet above MSL.

Approximately 750,000 gallons per day (gpd) of water are pumped from the reservoir to 10,000 people in Mechanicville, including some areas in Stillwater and Halfmoon located east of Willow Glen. Some residents may use private wells (groundwater) or the Anthony Kill (surface water) for other purposes such as lawn watering or washing cars. A town sewer system serves most of the homes in Mechanicville (Barber, 1986).

The buildings at the Mechanicville site are supplied with town water and sewer. The exact locations of the water and sewer lines under the site are unknown; however, according to workers at the site and Department of Public Works officials, the water line probably extends from Ferris Lane between the former distribution gas holder and the radiator shop to the boiler house (McBride, et al., 1986; Renaldi, 1986). The sewer line probably extends from North Central Avenue to the substation and boiler house building. Surface runoff from the site flows into two on-site drainage catch basins that empty via underground culverts into the Anthony Kill. The locations of the drainage culverts are shown in Figure 1-2.

The section of the Anthony Kill from the Mechanicville city line to the Hudson River is a Class D stream in the New York State Stream Classification System. Class D waters are designated for secondary contact recreation but not for higher uses because of intermittent flow or water conditions that are not conducive to the propagation of game fish. Further upstream, between Coons Crossing and Mechanicville, the Anthony Kill is designated Class C (t). Class C waters are suitable for fishing and all other uses except as a source of water supply for drinking, culinary, or food processing purposes and primary contact recreation. The "(t)" denotes that this section is a trout stream (Environmental Conservation Law 17-0303).

NYSDEC has conducted water quality testing in the Anthony Kill downstream of Mechanicville at the Hudson River, and two miles upstream of the site at Plumb and Baker Brooks (NYSDEC, 1981). Water quality testing of several locations along the Hudson River in Saratoga County in 1981 cited water quality impairment from coliform bacteria, heavy metals, and polychlorinated biphenyls (PCBs). The water quality in Plumb Brook and Baker Brook is Class A, suitable for use as a water supply (NYSDEC, 1981).

The U.S. Geological Survey (USGS) maintains a full-time gauging station on the Hudson River at Mechanicville (Station #01335500). The drainage area upstream of the gauging station is 4,500 square miles. The minimum average 7-day, 10-year discharge for the water years 1931-1956 for the Hudson River at this station was 1,900 cubic feet per second (cfs). There are no full-time gauging stations on the Anthony Kill. The USGS has periodically taken base-flow measurements at the Anthony Kill station at Mechanicville (Station #01335700). The estimated low flow discharge at this station is 17 cfs for a drainage basin of 62.4 square miles (USGS, 1979).

Mechanicville was once a control station within the statewide ambient air monitoring network operated by the NYSDEC Bureau of Air Quality Surveillance. Budgetary constraints contributed to the deactivation of this control station in recent years. The station consisted of a high-volume air sampler operated monthly for the monitoring of total suspended particulates (TSP). The sampler was located on the roof of the High School at 10 North Main Street in the center of Mechanicville, at an elevation of 60 feet above grade. This location is about one to two miles south of the Mechanicville site.

The TSP results collected at this location from 1976 to 1982 range from 39 to 47 micrograms per cubic meter ($\mu g/m^3$). This range is below Federal Ambient Air Quality Standards of 75 $\mu g/m^3$. The value of 47 $\mu g/m^3$ was reported for 1981 and is the only year with a reading slightly above the pertinent New York State Ambient Air Standard of 45 $\mu g/m^3$. This increase in 1981 was believed to be due to local construction activities near the sampler location (NYSDEC, 1984; Delaware, 1986).

The air quality in Mechanicville is considered good by the NYSDEC Director of Air Quality for New York Region V. No volatile organic monitoring is known to have been conducted in the area. Poorer air quality was associated with the Tagson Paper Company and the local sewage treatment facility in the vicinity of Mechanicville (Hodgson, 1986; Stawarz, 1986; Savoys, 1986). Although no odor complaints have been recorded, minor odors have been detected from these facilities. Both facilities incinerate waste sludge intermittently, and are both located approximately one-half mile south of the Mechanicville city line in the small town of Halfmoon, New York.

The general southerly winds would most likely carry any aerial plume from these facilities to the east of the Mechanicville site environs; therefore no significant effects at the Mechanicville site are anticipated. A Boston and Maine Railroad line also runs near the northwest corner of the site. Diesel locomotive exhausts could impact the ambient air at the site. However, the difference between the coal tar materials and the diesel exhaust fumes will serve to eliminate any interference in the collected air samples. Also the intermittent nature of these diesel exhausts will further serve to minimize any effect from this source.

The most significant airborne migration pathway for coal gasification residues would be as absorbed organics on suspended particulate material. Although these compounds have a low odor threshold, their low vapor pressure suggests that volatilization is not a major concern. The Mechanicville site has been extensively modified since the coal gasification process ceased operation. A paved parking lot covers the areas where the gas holders, gas house, purifier, and oxide house were located. No significant air emissions are anticipated at these locations due to the paved surface.

Exposed surface soils exist only in small areas of the site, one of which is the former transformer storage area west of the present main office building. In the past, transformers known to contain PCBs were stored at this site. Surface soils from this area were removed in August 1984. The soil over the former filter beds is also

exposed. While sampling there in 1981, NYSEG employees encountered tar residues at depths of 5 to 6 feet. No coal tar residue-contaminated particulate emissions are expected from these small surface soil areas.

The northern boundary of the site is a steep bank which drops about 10 feet down to the Anthony Kill. This bank is covered with heavy vegetation with little exposed soil. Because contaminated groundwater could be released from seeps on this bank, vapor phase air emissions are possible. However, due to the low vapor pressure of the coal tar components, this type of emission is likely to be insignificant.

The Champlain Canal once bordered the site on the east. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) to Lake Champlain. The canal flowed through Mechanicville along what is now Central Avenue (Figure 1-4). Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. The hand-dug canal was approximately 12 feet deep and 30 feet wide. The canal was abandoned in 1916 when the Barge Canal opened and it became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the state dug up the canal, removed the trash and debris, and prepared the roadbed for Central Avenue (Sheehan, n.d.).

1.2.2 Site History

The site housed a coal gasification plant near the intersection of North Central Avenue and Ferris Lane (Figures 1-4 and 1-5). The plant was operated by NYSEG and its predecessor companies from 1901 until 1955, at which time coal gas production ended because of the availability of natural gas. Most of the plant's aboveground structures were demolished and removed at the time of closure, including the coal storage shed, gas house, purifier and oxide houses, gas holders, oil tanks, and tar dehydrator (see Figures 1-4 and 1-5). Only the boiler room, indoor substation, and an old office building remain on site. The filter beds and relief gas holder were left in the ground and covered with soil (E.C. Jordan Co, 1987; 1989).

The Mechanicville site is being investigated because of its former use as a coal gasification facility. By-products of the coal gasification process included coal ash, condensate material from the gas house, wood chips from the purifier house, coal tar, and oil sludges. Ashes and clinkers were spread on the site, as were some of the spent wood chips. Residual tar was left both in the filter beds and in the base of the

relief holder. ABB-ES' investigations focused on the eastern portion of the site (approximately 1 acre), where coal gas production activities occurred.

History of Gas Production. The history of coal gas production at the Mechanicville site dates from 1901. In that year, the Halfmoon Light, Heat & Power Co., founded in 1900, began distributing gas to the citizens of Mechanicville. Figure 1-4 shows the layout of the gas plant in its first years of operation, circa 1910 (Sheehan, n.d.).

The plant was expanded about 1911 when a 3.5-foot water gas set was added to the original 5-foot set. A set consisted of a gas generator and associated apparatus; the dimensions refer to the inside diameter of the generator (USWAG, 1984). A distribution gas holder was also added during the expansion. The new gas holder had a 100,000 cubic foot capacity while the original relief gas holder held only 40,000 cubic feet of gas. The distribution holder was constructed above grade and contained cooled gas. Residual tar condensation is not likely to be associated with cooled gas storage. In 1910, the company served approximately 325 gas customers (Sheehan, n.d.).

In 1924, the Halfmoon Light, Heat & Power Co. was acquired by the Associated Gas and Electric System, and in 1928 it became part of NYSEG (Sheehan, n.d.). The plant layout in 1951 is depicted in Figure 1-5. Coal gas production continued at the site until 1955 (Elvins, 1986). NYSEG operated a natural gas and electric service center from 1955 until 1990 when the operation was relocated to a new service center located in the town of Halfmoon on Route 146. The site is currently unoccupied. The portion of the site which contains the former MGP facilities is bordered by a 6-foot chain link fence on the east, south and west perimeters and the Anthony Kill on the north.

During the years of coal gas production, Pennsylvania coal was delivered to the site by rail along the spur depicted in Figure 1-4. Anthracite coal used to make gas was stored outside next to the gas house. Soft bituminous coal fed to the boilers was stored in the coal shed (Elvins, 1986).

The process used to manufacture gas at the site was the water gas process. There are two types of water gas: blue gas and carburetted water gas (USWAG, 1984). NYSEG employees who worked at the gas plant in the 1950s described using the carburetted water gas process to produce a gas with 850 British thermal units (Btus) per cubic foot (McBride, et al., 1986).

It is likely that the blue gas process, which produced a gas with a heating value of just below 300 Btus per cubic foot, was used in the earlier years of operation. The two processes are quite similar. Blue gas was produced by passing steam over incandescent coke to aid in the recovery of hydrogen and other gases by reacting with the carbon. Because the steam lowered the temperature of the fuel bed, air blasts were needed periodically to restore the temperature. Thus, the process involved alternating cycles of steam injection and air blasts. The carburetted water gas process was developed to raise the Btu content of blue gas. This was done by passing blue gas through a carburetor where a spray of oil was added and then thermally cracking the oil in a superheater (USWAG, 1984).

At the Mechanicville plant, gas reportedly flowed from the gas house to the purifier house to the relief holder, and from there to the larger distribution holder. All piping was located underground (Elvins, 1986; McBride, et al., 1986). This flow path differs from the typical water gas plant where the gas was stored in the relief holder prior to being purified. The oxide house was apparently used to store fresh and/or spent oxide material used to purify the gas.

The oil used in the carburetted water gas process was stored in three aboveground oil tanks underneath a platform supporting the oxide house. Because of the sharp grade at the site, there was room to fit these tanks under the building next to the tracks. A fourth aboveground oil tank (10,000 gallons) was located between the two gas holders as shown in Figure 1-5.

The following by-products were generated at the Mechanicville gas plant: ash and condensate from the gas house; wood chips from the purifier house; and coal tar and oily sludges. No information was found concerning the methods employed to handle these materials in the early days of gas production at Mechanicville. However, it was common practice to dispose of ashes and spent oxide material on site. Also, the tars produced in gas plants were an important raw material for the flourishing tar distillation industry in the early 1900s (USWAG, 1984). NYSEG employees provided the following information about waste disposal in the 1940s and 1950s (Elvins, 1986; McBride, et al., 1986).

The ashes and clinkers (chunks of noncombusted material) were shoveled out of the generator at night and spread in the area between the relief holder and Ferris Lane. From there, they were picked up by anyone who had a use for them. During

Mr. Elvins' employment at the plant (1946 to 1956), for example, they were used to stabilize the banks of the Hudson River (Elvins, 1986).

The condensate from the water gas process was treated in the tar dehydrator (tar separator) (Figure 1-5). This was a 1,000-gallon tank used to separate the oil in the condensate from the water. The oil was subsequently used for fuel and the water was piped through three filter beds in series located behind the coal storage building for treatment (Figure 1-5). The beds were described as being made of wood and being approximately 10 feet long, 6 feet wide, and 4 feet deep. These wooden troughs were set into the ground and filled with coke. Baffles directed the flow through coke, which filtered out residual oil. After passing through the filter beds, the water was discharged to the Anthony Kill. The oily coke in the beds was collected periodically and burned in the gas house.

Wood chips treated with iron oxide were used to remove hydrogen sulfide from the gas in the purifier house. As the iron oxide absorbed the sulfur from the hydrogen sulfide gas and formed iron sulfides, the wood chips became inactive and required regeneration. This was accomplished by exposing them to air. The oxygen in the air converted the sulfide to free sulfur and restored the iron to active iron oxide. The iron also reacted with cyanide to produce ferrocyanides which could not be regenerated and did not react with hydrogen sulfide.

When free sulfur accumulated to about 50 percent of the mass and much of the iron was tied up in the ferrocyanides, the spent wood chips were replaced by fresh ones. NYSEG employees recalled several different methods of disposing of spent wood chips at the Mechanicville plant. Spent chips were: (1) incinerated by the City of Mechanicville from 1951 to 1955; (2) piled along the road until someone came and hauled them away; and (3) spread on the lot just west of the active plant area. It is known that several truckloads of spent wood chips were dumped at a NYSEG substation on Route 67 near Coons Crossing in the mid-1950s (NYSEG, n.d.; E.C. Jordan Co., 1986a).

The purified gas still contained some residual coal tar. The coal tar would settle out of the gas in the relief holder and mix with water in the bottom of the holder. This coal tar/water mixture was reportedly pumped into a truck and hauled off site periodically. According to plant employees, coal tar did not accumulate in the base of the larger distribution holder. This is consistent with other MGP sites since the distribution holder stored purified and cooled gas.

Gas production at the Mechanicville plant ended in 1955 when natural gas became available. Most of the aboveground structures including the coal storage shed, gas house, purifier and oxide house, gas holders, oil tanks, and tar dehydrator were demolished. The boiler house, indoor substation, and old office building were left standing. Mr. Elvins reported that the purifier house was cleaned out after plant shutdown but that the accumulated tar was left in the base of the relief gas holder. Gravel was used to fill in the below grade portions of both gas holders. The filter beds were covered with soil, apparently without prior removal of the coke.

Recent Site Use. The Mechanicville site, as it appears today, is depicted in Figure 1-2. The approximate locations of the gas plant structures that have been removed are superimposed on the present day plan.

After the closure of the Mechanicville gas plant in 1955, NYSEG converted the site to a natural gas and electric service center. A natural gas regulator house was constructed over a portion of the old distribution gas holder foundation. The former boiler room/substation building was converted to offices, a garage, and a supply storage/maintenance shop. The old office was used as a storage shed and toolhouse.

There was a buried gasoline storage tank containing unleaded fuel just off of the southeast corner of the old office. The 3,000-gallon tank was installed around 1974, and replaced an older tank which was reportedly taking in water. No gasoline leaks were reported (McBride, et al., 1986). This tank was removed in 1991 in accordance with NYS underground storage tank regulations. Hope Oatman (NYSDEC Region 5 Division of Environmental Quality) was on-site to verify that the tank was properly removed.

A second tank, located on the western half of the property, installed in 1982, was also addressed. This tank was 3,000 gallons and was used for diesel fuel storage. In March 1991, the contents of the tank were pumped and the tank was subsequently filled with sand. A test pit was made on the eastern portion of the tank on July 25, 1991 and Hope Oatman was there to verify that the tank did not leak.

The remaining developed portion of the site is a paved parking lot. The pavement covers the old railroad siding. At the time of ABB-ES' initial site visit, there were pipes, cables on spools, and capacitors stored in the southwest corner of the site near the natural gas distribution shed. There were also large metal bins filled with cables and scrap metal in the northeast portion of the site, near the intake to the storm

drainage culvert which conducts runoff flow from paved portions of the site beneath the boiler room to the Anthony Kill.

NYSEG has extended its property boundaries over the years by reclaiming the Anthony Kill embankment. Therefore, the stream appears wider in Figure 1-4 than in Figure 1-5.

In 1922, NYSEG purchased a 0.25-acre lot on the corner of Ferris Lane and North Central Street (Bevis, 1986). This property was vacant during most of the years the coal gas plant was operating. In the 1950s, NYSEG built the electrical substation that now stands on the lot. NYSEG also owns property on the west side of the site (see Figure 1-3). The land between the railroad tracks and the Anthony Kill was purchased by NYSEG in 1952 (Bevis, 1986), and the parcel between the railroad tracks and Ferris Lane was acquired in October 1987.

As shown in Figure 1-6, various portions of the site have been used for pole storage, vehicle parking and electrical equipment storage. The electrical equipment included both new and used transformers (which may have contained PCBs), regulators, capacitors, and other electrical equipment. Prior to the late 1970s, electrical equipment was stored on two wooden platforms shown in Figure 1-6. After the removal of these platforms in the late 1970s, the electrical equipment was stored in the vicinity of the banks Anthony Kill. The top 8 to 12 inches of soil beneath this transformer storage area was removed by NYSEG in August of 1984 due to observed oil stains. The soil was not tested for contamination prior to disposal (Badertscher, 1986) but was assumed to be contaminated with PCBs. Twelve drums of excavated soil were hauled to an approved disposal facility in Ohio and the excavated area was back filled with gravel.

In the early 1980s, an area was designated to store transformers prior to being sent for repair (Figure 1-6). As a result of routine inspection which identified several locations with minor oil stains, an area approximately 12 feet by 24 feet was excavated to a depth of about 2 feet on October 28, 1991 to remove potentially oil contaminated soil. The 29 tons of excavated soil was disposed of (with the assumption that it was contaminated with PCBs) at a secure landfill in Utah (USPCI). Following excavation, five samples were collected from the excavated area. One sample in the center of the excavation contained 1.0 ppm PCBs (Aroclor-1248). The other 4 samples did not exhibit any detectable PCB contamination. Site

restoration was performed by placing plastic sheeting in the excavation and placing clean soil to original grade.

Surrounding Land Use. In the early 1900s, use of the land surrounding the Mechanicville gas plant site was closely linked with two water bodies: the Anthony Kill, also known as Tenandeho Creek, and the Champlain Canal.

A head drop of 34 feet between Round Lake and the Hudson River fostered heavy industrialization along the banks of the Anthony Kill in the late 1800s and early 1900s. An article by Hal Sheehan, a local historian, lists numerous industries in the vicinity of the site, including a brewery, nickel plating works, lumber yard, foundry, bedding company, and mills (e.g., knitting, hosiery, planing, flax, grist, saw, and cotton). The locations of a few of these industries are depicted in Figure 1-4. A map dating from 1911 shows a residential neighborhood established south of the plant site, between Ferris Lane and Burke Avenue. (Sheehan, n.d.).

The heavy industrialization of the Anthony Kill ended as electricity replaced the waterwheel. The land use in the area gradually changed from industrial in the early gas plant years to commercial in the later years. For example, the Mechanicville Fiber Co., located just west of the site, became a radiator shop and distributor of bottled LP gas.

The other important surface water body in the plant vicinity was the Champlain Canal. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) with Lake Champlain. The canal flowed through Mechanicville along what is now Central Avenue (Figure 1-4). Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. Potatoes were the primary product shipped on the canal from Mechanicville. Hal Sheehan reports the typical land uses along the canal were shops, inns, manufacturers, mills, and saloons. The canal was abandoned in 1916 when the Barge Canal was opened. The empty canal became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the state dug up the canal, removed the trash and debris, and prepared the road bed for Central Avenue.

Today, the area surrounding the gas plant site is in a mixed commercial/residential section of Mechanicville. The former nickel plating mill, located across the Anthony Kill north of the plant, is used by a car dealer as an overflow lot. A supermarket

and gas station occupy the property adjacent to the site on North Central Avenue and there are private residences along Ferris Lane to the south. Except for the car lot, the adjacent property north of the Anthony Kill is undeveloped.

1.2.3 Pertinent Site Investigative Activities

This section briefly describes site activities which occurred previous to and during the ABB-ES investigation which were outside the scope of ABB-ES's activities.

NYSEG collected soil samples from the filter beds area and the relief gas holder foundation in November 1981 (NYSEG, n.d.). Petroleum odors and tar residues were encountered at depths of 3 to 5 feet below ground surface (bgs) at both locations. The samples were analyzed for the four characteristics of hazardous wastes (as defined by 40 CFR Part 261, Subpart C): corrosivity, reactivity, ignitability, and extraction procedure (EP) toxicity. The samples did not exhibit the characteristics of hazardous waste, with the exception of the sample from the filter tanks which had a high level of sulfides (1,300 milligrams per kilogram [mg/kg]) and failed the reactivity test. The relief holder sample contained 40 milligrams per liter (mg/L) of total phenols (NYSEG, n.d.).

On August 15, 1986 an oily discharge was reported to NYSDEC in the Anthony Kill in the vicinity of the Central Avenue Bridge. DEC claimed that the discharge was associated with the construction activity which disturbed sediments in the Anthony Kill. The disturbance of the sediments resulted in an oily sheen. NYSDEC responded to the sheen by installing absorbent pads and an oil boom. NYSDEC requested that NYSEG reimburse the NYSDEC for the spill response cost associated with spill # 86-3241. NYSDEC sampling during the event found fuel oil in the sediments on the northern bank of the Anthony Kill across from the former manufactured gas plant site and low levels (10 ppm) of PAHs on the southern bank adjacent to the NYSEG site.

On September 9, 1986, NYSEG's environmental consultant, E. C. Jordan Co. (Jordan), was conducting a sampling event. Jordan's Robert Burger, observed and noted an oil sheen on the Anthony Kill. The Jordan crew followed the sheen upriver for approximately 200 feet and sampled the surface water. The contained 11 mg/l oil. Apparently, someone complained about the oil sheen and a NYSDEC contractor installed an oil boom along the northern bank of the Anthony Kill across from the

NYSEG manufactured gas plant site where DEC sampled the previous month. The location of the boom was not consistent with the upgradient source (Burger, 1986).

A similar spill event occurred in December of 1986. Although no samples were taken DEC claimed it was associated with the NYSEG site. NYSEG disagreed with NYSDEC claim that the September and December spills were associated with the NYSEG site. NYSDEC agreed that there are multiple upgradient sources in the area.

In September 1988, D.A. Collins Construction Company of Willow Glen began structural repairs to the Central Avenue Bridge. This work involved the construction of four new footings for the double archway and the installation of two new steel archways under the existing stone archway. During this construction program, the contractor built a temporary dam to diverge water from the archway while they were working on it. When the northern archway was dewatered an organic sheen was observed from the sediments. DEC informed NYSEG about the material and NYSEG installed an oil boom and absorbent pads to control the material. After reconstruction of the northern archway, debris and sediments were stockpiled on plastic on the property to the north of the Anthony Kill. This material was then sampled and analyzed to determine if it contained material associated with the former manufactured gas plant operations. The initial testing identified some low levels of organics that could have been associated with the former NYSEG operations. With verbal agreement from Jerry Bradley, the material was then transported to the NYSEG property.

Once NYSEG took responsibility for the sediments, NYSEG sampled the material for disposal purposes and found that the material was hazardous due to reactive sulfide. The material was manifested and disposed as a hazardous waste at an approved facility (Stablex Canada, Inc., Blainvelle, Quebec, Canada). **Insert Page 1-17a.**

1.3 REPORT ORGANIZATION

The remainder of this document is organized in the following manner:

Section 2.0 describes in detail site investigatory activities undertaken throughout the duration of Tasks 1 through 4. Section 3.0 contains the physical site characterization. Section 4.0 summarizes the chemical distribution in various media and the probable

On June 28, 1989 20,000 kg of coal tar contaminated material (USEPA hazardous waste number D003) was disposed under manifest number NYA5836293. On August 9, 1989, an additional 20,000 kg of coat tar contaminated material was disposed under manifest number NYA8370243.

sources of those chemicals. Section 5.0 is a physical and chemical data assessment including comparison with regulatory standards, the fate and transport of chemicals, and a description of the contaminants of concern. Section 6.0 is the baseline risk assessment for human and environmental receptors. Section 7.0 presents the summary and conclusions of our findings at the Mechanicville site, in which data needs are identified and remedial action objectives are recommended. Section 8.0 is a Phase IIA Remedial Investigation Work Plan outlining the approach for further remedial investigation activities. This work plan also contains a site-specific Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP), and Citizen Participation Plan (CPP). A Focused Feasibility Study Work Plan to mitigate the discharge of coal tars and contaminated groundwater to the Anthony Kill is presented in Section 9.0.

2.0 SITE INVESTIGATION

The Task 1 Preliminary Site Evaluation, conducted in 1986, developed an understanding of the site's history, environmental setting, and current condition through detailed Site reconnaissance, interviews, and file searches. The scope of work completed for Task 1 included:

1. A historical review of the site to develop an understanding of the former gasification plant layout, operations, and surrounding land uses.

2. An air assessment of existing site conditions and a preliminary prediction of airborne contaminant concentrations expected during the site investigation.

3. A detailed site reconnaissance to become familiar with the area and identify locations for explorations, access requirements, and potential conflicts with above and below ground utilities.

4. A geophysical investigation utilizing seismic refraction, terrain conductivity, and GPR to: delineate the bedrock surface; determine the vertical stratigraphy of geologic materials; map the migration route of any conductive groundwater contaminant plume; and identify subsurface anomalies that warrant further investigation.

Task 1 activities included a detailed site reconnaissance, interviews, and file searches. The site was visited by ABB-ES personnel on January 21, 1986 and May 5, 6, and 7, 1986. Conditions at the site were documented with field notes and photographs. Interviews were held on May 5, 6, and 7, 1986 with the following persons:

- Art Elvins, retired NYSEG employee, Mechanicville, New York.

- John McBride, Mike Gilbert, and John McNeil, current NYSEG employees, Mechanicville service center.

- Louie Fasoli, NYSEG employee, Granville office.

- Lucille Bevis, Supervisor of Real Estate for NYSEG, Mechanicville office.
- Harold Sheehan, local historian.
- Vincent Barber, Plant Manager, Mechanicville Water Department.
- Michael Renaldi, Commissioner of Public Works, City of Mechanicville.

The following people were also contacted for information about the site and surrounding area:

- John Hamilton, Manager, Saratoga County Soil and Water Conservation District, Ballston Spa, New York.
- Lloyd Wagner, Water Resources Division, U.S. Geological Survey, Albany, New York.
- Robert Dineen, Senior Scientist, New York State Geological Survey, Albany, New York.
- George Hodgson, Environmental Coordinator, Saratoga County Environmental Management Council, Ballston Spa, New York.
- Dick Ferraioli, Well Driller, Altamont, New York.

Records and documents on file at the following locations were reviewed:

- NYSEG, Corporate Headquarters in Binghamton and the regional office in Mechanicville (James Marean and Robert Badertscher).
- Real Property Tax Services, Saratoga County Office, Ballston Spa, New York.
- Agricultural Stabilization and Conservation Service, Saratoga County Office, Ballston Spa, New York.

Specifically, from the site reconnaissance, interviews, and file reviews, it was learned that:

- Coal gas was produced at the site for 54 years, from 1901 until 1955.
- Coal tar residues accumulated in the base of the relief gas holder. The coal tar reportedly was left in the holder when it was demolished in 1955.
- Condensate from the water gas process was treated in a tar dehydrator and filter bed system before discharge to the Anthony Kill.
- Residual ash from the gas generator was reportedly stored on the site before removal by various users.
- Wood chips and oxide wastes from the purifying house were hauled off site for final disposal. Some spent chips may have been spread on the lot just west of the active plant area.

The Task 1 report summarized the potential environmental problems in soils, groundwater, surface water, and air at the Mechanicville site (Table 2-1). These potential problems were summarized for these media based on a number of technical factors including the chemicals present at the site, the chemical transport mechanisms, the expected persistence of chemicals in the environment, and existing or potential receptors of those chemicals.

Task 2, the Initial Field Investigation Program was conducted during the period 1986 to 1987. Data requirements for this task fell into four general categories:

1. Establishment of background conditions.
2. Characterization of contamination sources.
3. Determination of transport routes.
4. Identification of potential receptors.

To investigate the presence or absence of coal gasification wastes at the Mechanicville site, the following analytical parameters were included in the Task 2 soil and water analytical program: volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total cyanide, ferro-ferri cyanide, total organic carbon

(TOC), total recoverable phenolics, iron, and zinc. Air samples were analyzed for polynuclear aromatic hydrocarbons (PAHs), iron, and VOCs.

The primary use of the Task 2 data was for problem identification, preliminary risk assessment, and preliminary in-house engineering rather than final engineering determinations. The explorations conducted for Task 2 consisted of test pits, soil borings, and monitoring well installations; air, soil, groundwater, surface water, and sediment sampling; laboratory chemical analyses; and a preliminary land use investigation. The detailed scope of work for Task 2 was described in the Work Plan for the Mechanicville site, submitted to NYSEG in April 1986.

Specifically, the Work Plan contained the following scope of work:

1. Prepare a site-specific Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP).

2. Excavate five test pits for characterization of the subsurface geology at the site; install piezometers in two of the test pits to obtain groundwater level data; collect six soil samples for laboratory chemical analysis; and prepare test pit logs.

3. Drill eight soil borings and obtain eight soil samples for laboratory chemical analysis and site characterization; install six monitoring wells and one piezometer; and prepare boring logs and well installation diagrams.

4. Perform in situ permeability tests at all wells and obtain five rounds of groundwater level data from monitoring wells and piezometers.

5. Collect groundwater samples from six monitoring wells on a quarterly basis for laboratory chemical analysis (four sampling rounds completed between September 1986 and June 1987).

6. Collect surface water and sediment samples at three locations along the Anthony Kill on a quarterly basis for laboratory chemical analysis (four sampling rounds completed between September 1986 and June 1987).

7. Perform laboratory analysis of soil, groundwater, surface water, and sediment samples.

8. Conduct a topographic survey to identify relative locations and elevations of test pits, borings, monitoring wells, piezometers, and other pertinent features at the site.

9. Conduct a preliminary land use survey within a half-mile radius of the site.

10. Evaluate the geologic, hydrogeologic, and chemical data to develop an understanding of site conditions and chemical distribution.

11. Perform a preliminary assessment of the potential health and environmental risks posed by chemical constituents found at the site, and identify remedial alternatives to control the effects and risks.

12. Identify additional data requirements and propose a Task 3 program (including schedule and costs) to obtain the necessary data.

The Expanded Problem Definition Program (Task 3), conducted during the period 1987 through 1989, was designed to (1) confirm Task 2 analytical results; (2) obtain further data on chemical distribution in soil and shallow bedrock at the site and site environs; (3) further investigate the potential for chemical migration in groundwater; (4) assess the air quality within buildings on the site; and (5) identify potential chemical receptors and potentially sensitive land uses.

Task 3 consisted of the following subtasks:

1. A GPR survey performed adjacent to the site on the northern side of the Anthony Kill to extend the area of bedrock surface contouring.

2. Four shallow and three deep borings drilled for further site characterization, including chemical analysis of the soils encountered and bedrock characterization.

3. Groundwater monitoring wells installed in six of the seven borings to obtain further information on groundwater flow direction and

chemicals present in groundwater. Two rounds of groundwater sampling and analysis and two sets of water level observations were conducted in Task 3.

4. Rising-head permeability tests performed in the completed wells to determine the in situ hydraulic conductivities of soils. Packer pressure tests were conducted in the deep bedrock wells to determine the hydraulic conductivity of the bedrock at the site.

5. Task 3 soil and water samples analyzed for VOCs and SVOCs, iron, lead, zinc, cyanide compounds, phenolics, and TOC. Organic analyses were performed using GC/MS methods rather than the HPLC/ultraviolet (UV) methods used in Task 2.

6. A location and elevation survey completed for the Task 3 borings, monitoring wells, and surface water and sediment sampling locations. The site plan developed in Task 1 was updated to include Task 3 explorations.

7. Air quality samples collected at three indoor locations and one background location at the property-line fence to assess volatilized contaminant risk.

8. Evaluation and interpretation of geologic, hydrogeologic, and chemical data to provide an understanding of site conditions.

9. Identification of potential receptors of site-derived chemicals.

10. A proposed Task 4 program for assessing risks on site and at the site boundaries was outlined.

The scope of the Risk Assessment (Task 4) was developed based on information obtained during Tasks 1 through 3. The Risk Assessment was designed to (1) identify and assess the potential risk associated with exposure to the chemicals present on site, and (2) evaluate the need for and develop, if necessary, the scope for a Conceptual Design (Task 5).

The subtasks completed as part of the Task 4 Risk Assessment included the following:

1. Review and summary of Tasks 2 and 3 field investigation findings on the distribution of chemicals present on site.

2. Selection of contaminants of concern identified on site that represent potential hazards at the site.

3. Identification of possible pathways of exposure and potentially exposed populations at and near the site.

4. Identification of the potential hazards associated with exposure to the contaminants of concern including acute and chronic toxic effects of the compounds.

5. Identification of the dose/response data used to quantitatively assess risk (e.g., U.S. Environmental Protection Agency [USEPA] cancer potency factors and reference doses).

6. Comparison of the environmental concentrations of chemicals on-site to existing state and federal health-based criteria and standards.

7. Characterization of human health and environmental risks associated with exposure to site-related chemicals.

8. Establishment, if necessary, of Target Clean-up Levels (TCLs) to protect against future potential exposure to contaminants of concern.

9. Evaluation of the need for a Conceptual Remedial Design (Task 5).

2.1 GEOPHYSICAL INVESTIGATION

A geophysical survey was conducted at the site during Task 1 between June 2 and June 5, 1986 to:

1. Delineate the bedrock surface, which may direct the flow of any subsurface contaminants associated with past site activities.

2. Determine the vertical stratigraphy of geologic materials underlying the site and the way in which these materials may vary laterally.

3. Map the migration route(s) of any conductive groundwater contaminant plume(s) (if present) that could be related to past site activities.

4. Map the presence of any buried structures (i.e. tanks, utilities, etc.) to avoid in future exploration activities.

The geophysical investigation used three exploration techniques: (1) GPR, (2) continuous seismic refraction profiling, and (3) terrain conductivity profiling, also referred to as electromagnetic (EM) profiling. These techniques were selected as being the most appropriate, given the geologic setting and field conditions.

Methodology. The geophysical survey at the Mechanicville site was conducted within the two parking lots of the NYSEG facility on North Central Avenue. The survey area was approximately one acre in size.

The GPR and seismic refraction surveys were conducted along the traverse lines indicated on Figures 2-1 and 2-2. A 10-foot grid was established throughout the area of investigation with a compass and cloth tape before the survey.

The shallow anomalies identified on Figure 2-3 are probably due to demolition rubble (steel reinforcing from concrete structures), railroad spikes or rails, boulders or other relatively small objects not considered significant in characterizing the site geology. The anomalies were also non-continuous (buried pipelines typically will show a continuous response over the length of the pipe) indicating that they were not detecting the presence of a continuous utility line.

The GPR survey used a Geophysical Survey Systems, Inc., Subsurface Interface Radar (SIR) System B, a microprocessor-equipped system with a 300 MHz transducer. Because the soil at the site was saturated with water in some areas, it produced "ringing" in the radar records. A real-time digital filter with a background

removal algorithm was used to minimize this extraneous "noise" and facilitate interpretation of the GPR data.

The depth of penetration of the radar system was set at two different levels. The primary target of the first setting was the bedrock surface, predicted to be as deep as 15 feet below the ground surface. The instrument was set at 140 nanoseconds (two-way travel time), equivalent to a penetration depth of approximately 20 feet. The second instrument setting of 70 nanoseconds, or roughly 10 feet of penetration, was used to obtain enhanced resolution of shallower features such as buried utilities. Approximately 3,575 lineal feet of GPR profiling at each level of penetration were covered during the survey (Figure 2-1).

Seismic refraction profiling was accomplished with a Geometrics ES-2415F Signal Enhancement Seismograph. Individual seismometers (geophones) were separated by 10 feet, and multiple impacts (up to 12) of a 10-pound sledgehammer were used for an energy source. Five impact points were utilized for each seismic spread. Due to the limited size of the site, the length of most of the seismic spreads was 120 feet, although one of the spreads was 240 feet long. A total of 1,590 lineal feet of seismic refraction profiling was completed during this portion of the survey (Figure 2-2).

Terrain conductivity measurements were attempted on two different occasions during the Task 1 field effort with a Geonics EM 31 terrain conductivity meter. Because there was too much electrical interference to obtain reliable terrain conductivity data, this portion of the field program was curtailed.

Results. High quality data resulted from the GPR survey. The features noted on the radar records include the bedrock surface and various subsurface anomalies. Notable features mapped on Figure 2-3 include:

- shallow subsurface features (and their approximate depth in feet) that could represent buried utilities
- other shallow features (less than 2 feet) of probable minor importance
- the locations of two buried gasoline tanks
- the limits of excavations for former structures associated with the coal gasification facility

- zones of higher reflectance in overburden/bedrock that indicate higher moisture content or saturation

The shallow anomalies identified on Figure 2-3 are probably due to demolition rubble (steel reinforcing from concrete structures), railroad spikes or rails, boulders or other relatively small objects not considered significant in characterizing the site geology. The anomalies were also non-continuous (buried pipelines typically will show a continuous response over the length of the pipe), indicating that they were not detecting the presence of a continuous utility line.

The GPR survey revealed that the bedrock is from 8 to 17 feet deep. These depths are based on an assumed velocity of the radar wave through overburden materials. If the assumed velocity value is different from the actual velocity, bedrock depths will vary accordingly.

The results of the seismic refraction survey are presented on Figure 2-4. The seismic profiles can be thought of as pseudo-geologic sections with two layers: (1) overburden (including natural soils, fill, and demolition materials), and (2) bedrock. The seismic velocity value of the overburden varies through a fairly wide range, from 1,200 to 4,000 feet per second (ft/sec). These velocity differences probably reflect to some degree the moisture content of the overburden materials, but undoubtedly also reflect the complex variety of fill materials associated with past site activities that blanket the site.

Bedrock velocity values measured during the seismic survey varied from 8,000 to 12,000 ft/sec, a typical range of values for a shale deposit. The lower end of this range of values probably reflects a higher degree of fracturing occurring locally in the shale bedrock.

The correlation between bedrock elevations derived from GPR, seismic refraction, and preliminary field data was generally quite good, particularly for the eastern portion of the site.

A generalized bedrock contour map was constructed from the data (Figure 2-5), depicting the surface of the competent rock, but not that of the moderately to highly weathered shale above the competent rock that is several feet thick. The seismic data were weighed more heavily in the construction of this map. This is because the complex and highly variable subsurface conditions could have affected the

transmission velocity of the radar waves to an extent that is not adequately accounted for by the assumption of a single velocity value for the site.

Results of the Task 1 GPR and seismic refraction surveys correlated well with depths to bedrock observed during the boring program. During Task 3, in the first week of November 1987, these same geophysical techniques were used again to extend the bedrock surface contour map slightly east and north of the site. Figure 2-6 defines the extent of the geophysical survey. A 10-foot grid was established throughout the GPR investigation area; seismic refraction work was conducted along 50-foot grid lines. The Price Chopper parking lot, located across North Central Avenue east of the site, was not included in the survey because access to the lot was denied by the property owners when this portion of the study was conducted.

2.2 SOIL INVESTIGATIONS

This subsection describes the soil investigations from test pits and borings during Task 2 and Task 3 field activities as well as the surface soil sampling conducted during Task 4. Field logs are presented in Appendices A and B, including descriptions of the soil layers and field observations. Exploration and sampling procedures are further documented in the QAPP (E.C. Jordan Co., 1985).

2.2.1 Shallow Subsurface Soil Sampling

On July 21, 1986, J.H. Maloy Co., contracted through Empire Soils Investigations, Inc. (Empire), excavated six test pits with a backhoe at the Mechanicville site ranging in depth from 3 to 7.7 feet below ground surface. One test pit, labeled "Decon Pit" in Figure 2-7 was used to capture fluids from decontamination (i.e., steam-cleaning) of equipment. The remaining test pits, TP-1 through TP-5, were used to investigate subsurface geology, distribution of coal gasification wastes, and depth to groundwater. These test pits are also shown in Figure 2-7.

Test pit completion was witnessed by a ABB-ES field geologist. Test pit logs and field observations are presented in Appendix A. Six soil samples were obtained for laboratory chemical analysis and forwarded to ERCO Laboratories, a division of ENSECO, Inc., in Cambridge, Massachusetts. One sample each was collected from TP-1, TP-2, and TP-4; two samples and one duplicate were taken from TP-5. No samples were obtained from TP-3 or the decontamination pit.

Analytical samples were selected from soil layers that (1) contained visual signs of coal gasification wastes, (2) had a coal tar odor, or (3) showed detectable levels of organic vapors as measured with a PID. Thus, the test pit samples were targeted for waste material in shallow soil, where present.

2.2.2 Deep Subsurface Soil Sampling

Task 2 Borings. Eight borings (B-1 through B-8) were drilled at the site by Empire between July 23 and August 6, 1986 (see Figure 2-7). The borings were drilled to (1) investigate the subsurface geology, (2) evaluate the effects of former coal gasification activities on subsurface soils, (3) investigate the foundations of the former gas holders, and (4) permit installation of monitoring wells.

Boring locations were selected following consideration of former coal gasification activities, the test pit observations, the anticipated direction of groundwater flow, and the results of the GPR survey.

Borings were drilled to bedrock using hollow-stem augers; NX-sized cores (3-inch diameter) were used to drill into the shale bedrock at four borings (i.e., B-1, B-2, B-5, and B-6). Total boring depths ranged from 9 to 32 feet below ground surface. Continuous (2-foot) split-spoon samples were collected above the bedrock and continuous (5-foot) core samples were taken in the bedrock. All samples were scanned with a PID for organic vapors.

Reference soil samples (for physical characteristics) and analytical soil samples (for chemical analysis by ERCO Laboratories) were collected from each boring except B-6. Soil sampling was not conducted at B-6 because of its close proximity to B-4. Core samples collected at B-1, B-2, B-5, and B-6 were logged and placed in core boxes stored at the site. (Boring logs completed by ABB-ES field geologists are presented in Appendix B-1, along with a table summarizing field observations.)

Task 3 Borings. Seven borings (i.e., B-9 through B-15) were drilled at the site by North Star Drilling of Cortland, New York, between November 9 and 19, 1987 (see Figure 2-7). The borings were drilled to (1) further define the shallow subsurface geology, (2) provide data on the distribution and migration of chemicals in soil and bedrock on site, and (3) permit installation of monitoring wells. Boring locations were selected following consideration of the Task 2 findings regarding geology,

hydrogeology, and chemical distribution, as well as the Task 3 geophysical survey data.

Borings were drilled to bedrock using hollow-stem augers; 3-inch-diameter holes were drilled into the shale bedrock at four borings (i.e., B-11, B-13, B-14, and B-15). Boring depths ranged from 5.5 to 55.5 feet below ground surface. Continuous 2-foot long split-spoon samples were collected above the bedrock (except in B-9), and continuous 10-foot long core samples were taken in the bedrock. Samples were scanned with a photoionization detector (PID) for organic vapors. Reference soil samples (for physical characteristics) and analytical soil samples (for laboratory chemical analysis) were collected from each boring except B-11 and B-13. An analytical sample was not collected at B-11 because of the unexpectedly shallow bedrock. No samples were collected at B-13 because of its close proximity to B-12.

Core samples collected at B-11, B-13, B-14, and B-15 were logged and placed in core boxes. Boring and rock coring logs completed by an ABB-ES field geologist are presented in Appendix B-1, along with a table summarizing field observations.

2.2.3 Surface Soil Sampling

As part of Task 4, nine surface soil samples plus one duplicate (SS-1 through SS-9, plus SS-3A) were collected at the site in August 1989 (Figure 2-7). These samples were taken to characterize the extent of contamination in surface soils at the site.

2.3 GROUNDWATER INVESTIGATIONS

Task 2

Monitoring wells were installed in six of the eight boreholes drilled between July 23 and August 14, 1986. Each monitoring well number (i.e., MW-1 through MW-6) corresponds to the number of the borehole in which it was installed; monitoring well locations are shown in Figure 2-7.

The monitoring wells were installed to obtain water level measurements, permeability data, and water samples for laboratory chemical analyses. MW-1 was installed to provide groundwater information upgradient of the site; MW-2 through MW-5 were installed in locations anticipated to be downgradient of former coal gasification

structures. The screened zone (including the sand backfill) for these five wells coincided approximately with the top 10 feet of the water table, and spanned both soil and bedrock strata (see Appendix B-2). The sixth well, MW-6, was installed to provide data on water levels, water quality, fracture patterns, and permeability in the bedrock. The top of the screened zone for this well was positioned 5 feet below the bedrock surface and extended 10 feet into the bedrock, to a depth of 31 feet below ground surface.

Monitoring wells were constructed of 2-inch diameter, stainless steel pipe; flush-mounted protective casings were used on all wells except MW-1 where the casing was above ground. A 5-foot stainless steel well screen with 0.01-foot slots was used in each monitoring well. Wells were backfilled with clean Jersey sand and sealed with a minimum of 2 feet of bentonite pellets. Well installation diagrams appear in Appendix B-2.

MW-1 through MW-3 were developed using a hydraulic pump. The remaining wells, MW-4 through MW-6, were flushed out with an air compressor system. Rising-head permeability tests were started initially on MW-1, MW-2, and MW-5, but were halted when contamination was encountered during development. As an alternative to pumping contaminated water, falling-head permeability tests were performed on MW-1 through MW-5 after well development. A packer test was conducted at MW-6 to characterize the permeability of bedrock at the site. Methods and results for both falling-head and packer tests are provided in Appendix B-3.

To augment the well measurements, three piezometers were installed to provide water level data. Two piezometers (P-1 and P-2) were installed in TP-1 and TP-2, respectively, to give groundwater information on the eastern and western portions of the site. The third piezometer (P-3) was placed in B-7 (inside the perimeter of the former gas distribution holder) to allow water level measurements in this region. Locations of these piezometers are shown in Figure 2-7. The piezometers were constructed of a single section of 1/2-inch inside diameter (ID) polyvinyl chloride (PVC) piping with 1- to 3-foot hand-slotted screens. Although the piezometers were capped, protective casings were not installed.

Groundwater Sampling. Four rounds of groundwater sampling were conducted at the site during Task 2: in September and December of 1986, and March and June of 1987. During each round, water level measurements were taken at each well and piezometer; these data are presented in Appendix C-1.

Using dedicated bailers, groundwater samples were collected from each well, and quality assurance/quality control (QA/QC) samples (i.e., duplicates, trip blanks, sampler blanks, and filtration blanks) were obtained. Monitoring well sampling procedures were followed as detailed in Appendix C-2. Round 1 laboratory chemical analyses were completed by ERCO Laboratories. The remaining three rounds of samples were analyzed by NYSEG.

Task 3

Monitoring wells were installed in six of the seven new boreholes (B-9 through B-15). Each monitoring well number (i.e., MW-10 through MW-15) corresponds to the number of the borehole in which it was installed; monitoring well locations are shown in Figure 2-7.

The monitoring wells were installed to obtain water level measurements, permeability data, and water samples for laboratory chemical analysis. MW-10, MW-11, and MW-12 are shallow overburden wells, and MW-13, MW-14, and MW-15 are deeper bedrock wells. The shallow wells were positioned in the soil and/or shallow bedrock, while the deeper wells were sealed below the bedrock surface. All the wells were located in areas of the site where data were needed to evaluate chemical migration. Two of the deeper wells, MW-13 and MW-15, are next to shallow wells. These well pairs provide data on vertical seepage gradients at the site.

The screened zones (including the sand backfill) in MW-10, MW-11, and MW-12 were positioned to coincide approximately with the top 10 feet of the water table, and span soil and/or shallow bedrock strata. The screened zones of bedrock wells MW-13, MW-14, and MW-15 were positioned to intersect the most permeable zones in the bedrock, as determined by the packer pressure tests performed before placement. Packer test data are presented in Appendix B-3.

Monitoring wells were constructed using 10-foot-long, 2-inch ID, stainless steel well screens with 0.01-foot slots, except for MW-11, where a 5-foot screen was used because of the shallowness of bedrock. Flush-mounted, locking protective casings were installed on all wells. Wells were backfilled with clean, graded, quartzite sand, and sealed with a minimum of 2 feet of bentonite pellets. Well installation diagrams are included in Appendix B-2.

The wells were developed using an air compression system. If development water appeared contaminated, it was collected and drummed in U.S. Department of Transportation (DOT)-approved containers that were labeled and stored on-site. Upon completion of the well development, rising-head permeability tests were conducted on the wells. Additionally, packer pressure tests were conducted in the deep bedrock wells to characterize permeability of the bedrock at the site. Methods and results of rising-head and packer tests are provided in Appendix B-3.

Groundwater Sampling. Two rounds of groundwater sampling of the 12 Task 2 and Task 3 wells were conducted in December 1987 and March 1988. During each round, water level measurements were taken at each well. The water level data are presented in Appendix C-1. Using dedicated bailers, groundwater samples were collected from each well, and QA/QC samples (i.e., duplicates, trip blanks, sampler blanks, and filtration blanks) were obtained.

The monitoring well sampling procedures followed are detailed in Appendix C-2. Samples were submitted to NYSEG's laboratory for groundwater analyses. The chemical QA data supporting the results are presented in Appendix D-2.

2.4 SURFACE WATER AND SEDIMENT INVESTIGATIONS

Task 2

Three surface water and three sediment sampling stations were selected to determine the distribution of organic and inorganic compounds along the Anthony Kill (see Figure 2-7). The sampling stations were upstream of the site (SW/SED-1), adjacent to the site near the outfall of the easternmost drainage culvert (SW/SED-2), and downstream of the site on the eastern side of the North Central Avenue Bridge (SW/SED-3).

Four rounds of surface water/sediment samples were collected in September and December of 1986, and March and June of 1987. During each round, one sample from each medium was collected at each sampling station; a duplicate sample from each medium was also collected in each round. Round 1 chemical analyses were completed by ERCO Laboratories. The remaining three rounds of samples were sent to NYSEG. NYSEG analyzed the surface water samples, but sent the sediment samples to ERCO Laboratories.

Task 3

Surface water and sediment samples were collected in December 1987 and March 1988 at the same locations as in Task 2 for SW/SED-1 and SW/SED-2. A third sampling location SW/SED-4, located downstream, was chosen based on the groundwater flow direction at the site, which suggests that site groundwater discharges to the Anthony Kill in the vicinity for SW-04. Two samples were collected from each medium at each sampling station and were submitted to NYSEG's laboratory for surface water and sediment analyses. The chemical QA data supporting the results are presented in Appendix D-2.

2.5 CONTAMINANT SOURCE INVESTIGATIONS

Maps of the Mechanicville site supplied by NYSEG identified the former locations of structures associated with the former MGP. The geophysical investigation conducted during Task 1 also helped in identifying the presence of buried structures such as fuel tanks, gas holder foundation and underground utilities.

Since the operational history of the site is fairly well documented, wastes associated with former MGP operations were expected to be found. Analysis of representative MAP waste sample (coal tar and spent oxide) were conducted (Appendix D-1). Samples were collected by NYSEG in November 1981 from the filter bed area and the former relief gas holder. Interviews with persons familiar with the former gas plant operations indicated that both these structures were filled-in without first removing MGP wastes which may have been present at the time of the backfilling (i.e. coke in the filter beds and coal tar in the relief gas holder). Soil sampling and soil removal actions have also occurred in areas in which transformers were stored and along the banks of the Anthony Kill.

2.6 AIR MONITORING PROGRAM

To evaluate levels of benzene, toluene, ethylbenzene, and xylenes in the indoor air at the site, samples were collected in the office, the adjacent storeroom area, the separate garage building, and an additional background location at the property-line fence. Each location was sampled in duplicate for QC. Samples were collected using charcoal sorbent tubes; sampling pumps were calibrated in accordance with NIOSH

Method 1501. Samples were collected over a six-hour period, from approximately 10 a.m. to 4 p.m. on December 28, 1989.

Upon completion of the sample collection, the charcoal tube samples were delivered to the subcontracted analytical laboratory for analysis by solvent desorption with GC flame ionization detection (FID), in accordance with NIOSH Method 1501. A field-biased blank sample was collected and submitted to the laboratory for quality control blank analysis.

2.7 TOPOGRAPHIC SURVEYS

Topography and exploration locations (i.e., test pits, borings, monitoring wells, piezometers, and geophysical control points) were surveyed by David A. Flanders Associates of Ballston Lake, New York, in late June of 1986 and early December of 1987. The surveyor determined exploration locations and ground elevations to the nearest 0.1 foot, and the uncapped riser elevations of the monitoring wells and piezometers to the nearest 0.01 foot.

The reference datum was a railroad spike in the utility pole located between the NYSEG substation and North Central Avenue, south of the site. This point was assumed to be at an elevation of 100 feet. Exploration locations were mapped on the base map developed in Task 1 (see Appendix E).

2.8 LAND USE SURVEY

General land uses and cover types were surveyed for the area within a half-mile radius of the Mechanicville site. Existing land use maps, street maps, and aerial photographs were used for the survey, along with field checking. Potentially sensitive land uses, identified with the assistance of local officials and published data, included facilities for the very young, the elderly, and the infirm; that is, populations particularly sensitive to contaminants.

Potential contributors of chemicals to groundwater and surface water were identified from aerial photographs and during field checking. Potential contributors include locations where chemical substances are typically used and/or disposed of.

3.0 PHYSICAL SITE CHARACTERIZATION

The geology, hydrogeology, and hydrology of the Mechanicville site, as interpreted from data gathered in Tasks 1, 2, and 3, are described in this section, along with descriptions of the air quality and results of the land use survey.

3.1 GEOLOGY

The Saratoga County area is drained by the Hudson River and its tributaries. The Hudson River Valley is formed by highly folded and faulted shales originally deposited as sediments along the continental margin during the Ordovician Period, approximately 500 million years ago. The preglacial Hudson River Valley and its drainage system were probably similar to the present configuration. However, the valleys may have been widened or deepened by subglacial erosion when the Laurentide Ice Sheet flowed south over this area from Canada.

As the ice sheet began its northward retreat, sediment-laden meltwater streams flowed through the Anthony Kill Valley, depositing sands and gravel in the higher energy zones, and clays and silts in quieter water. These glaciofluvial deposits form the terraces that lie along the southern border of Mechanicville.

Subsurface conditions at the Mechanicville site were investigated during Task 2 by means of test pit and boring explorations, and during Task 3 by boring explorations. The shallow geology consists of 3 to 25 feet of fill and silty shale overlying a fractured shale bedrock. The bedrock surface is deepest in the southeastern portion of the site. An interpretation of site stratigraphy is illustrated through geologic profiles located on a plan view of the site (Figure 3-1). The profiles, shown in Figures 3-2 through 3-4, are constructed with a 10:1 vertical scale exaggeration.

The fill, which includes a silty sand and gravel and a clayey silt and fractured shale, forms the upper 8 to 25 feet of the site. In the southeastern portion of the site, where excavation for the relief gas holder occurred, and in the area between the building and the Anthony Kill, a silty shale unit underlies the fill deposits. This silty shale unit, 8 to 9 feet thick in B-4 and B-8 and 1.5 feet thick in B-14, is loose, moist, and lacks structure, and is interpreted to represent fill material (possibly disturbed weathered bedrock from on-site).

Isolated gravelly sand and silty clay till units were also encountered at the site. The unconsolidated deposits overlie a shale bedrock, which is severely weathered in its upper 1 to 2 feet and highly fractured in the upper 5 to 10 feet. Subsurface geologic conditions investigated at the site are described in the following paragraphs.

Fill. The uppermost fill consists primarily of brown to black silty sand and gravel with organic matter, ash, brick fragments, glass, and wood chips. Within the fill, there is considerable heterogeneity, including zones of clayey silt and fractured shale. The fill averages 8 to 25 feet thick across the site, but thins at the Anthony Kill (see Figures 3-2 and 3-3). The off-site lateral extent of the fill is unknown, but is expected to occur east of the site along North Central Avenue where the old Champlain Canal was filled.

Gravelly Sand. A brown, dense, gravelly sand was encountered in only one boring (B-1) at a depth of 8 feet below ground surface (see Figure 3-2). The gravelly sand unit is 1.5 to 4 feet thick. At B-1, the gravelly sand overlies weathered bedrock. The gravelly sand may be fill or, if the area has not been disturbed, a glaciofluvial deposit.

Silty Shale. In the southeastern portion of the site, between the present-day office building and the Anthony Kill, a silty shale unit overlies the bedrock. This unit consists of black to gray platy shale fragments with silt. The silty shale is loose, saturated, and lacks a consistent structure. These properties indicate this area might have been disturbed by excavation, backfilling, and grading during construction of the gas plant. The silty shale in these areas, interpreted to be fill material, varies in thickness across the site from 1 to 9 feet. It is thickest in the area of the former relief gas holder, near B-4, B-6, and B-8 (see Figure 3-2). The off-site lateral extent of the silty shale layer is unknown.

Till. A thin, discontinuous tan to light gray silty clay till with fine gravel was encountered at the top of the bedrock surface in one boring (B-4). The pocket of till is less than 1 foot thick and is located along the northern edge of a small bedrock trough. The till contained some natural organic matter, suggesting that this remnant till was the original postglacial topsoil at the site. Because the till appears to be laterally discontinuous, it is not anticipated to significantly influence groundwater flow at the site.

Shale Bedrock. The bedrock at the Mechanicville site is a thinly bedded gray shale with calcite inclusions. The upper 1 to 2 feet of the bedrock is severely weathered and contains silt and dry platy shale fragments. Bedrock crops out at several locations along the southern bank of the Anthony Kill. Based on measurements taken from these outcrops, the bedrock strikes nearly east-west, and bedding dips approximately 30 degrees to the south.

Bedrock core was obtained in eight borings beneath the highly weathered zone. As observed in the core, the upper portion of the bedrock contains fractures spaced between 2 inches to a foot apart. The primary fractures are parallel to bedding and secondary fractures exist at angles up to 90 degrees to the primary fractures. Some weathering has occurred along the fracture faces. In the deeper borings, more competent bedrock was encountered (i.e., deeper bedrock contained fewer fractures than shallow bedrock). Some of the deeper bedrock fractures contained coal tar or had a distinct coal tar odor. Groundwater movement in the bedrock occurs primarily through the fractures in response to the hydraulic gradient.

A bedrock surface contour map interpreted from the GPR and seismic refraction surveys and boring exploration data collected during Tasks 1, 2, and 3 is shown in Figure 2-6. The contour map depicts the surface of the competent bedrock; 1 to 2 feet of weathered rock lie directly above this unit. A bedrock high is near the former distribution gas holder. Bedrock appears to slope downward from this high, toward both the Anthony Kill (north) and North Central Avenue (east).

A small east-trending bedrock depression, approximately 5 feet deep, occurs in the center of the site near the location of the former relief gas holder (B-4 and B-6). This small depression could represent a relic postglacial stream channel. Another bedrock low is located in the north-central portion of the site near MW-5 and MW-15. This bowl-shaped depression may represent a postglacial stream scour depression. On the northern side of the Anthony Kill, bedrock slopes to the south, toward the stream channel.

3.2 HYDROGEOLOGY

The interpretation of hydrogeologic conditions at the site is based on field and laboratory permeability data and water level observations. The raw data are presented in Appendices B-3 and C-1, respectively. A discussion of the data follows.

Based on observations made during the excavation of borings and test pits, and groundwater measurements from piezometers and monitoring wells, the water table at the site exists at a depth ranging from approximately 2 to 20 feet below ground surface. The water table occurs principally in the fill during both high and low water table conditions. The saturated thickness of soils at the site ranges from approximately 3 to 25 feet.

The screens of MW-1, MW-2, MW-5, MW-10, and MW-11 intercept groundwater in the fill and shallow bedrock. MW-3, MW-4, and MW-12 and piezometers P-1 through P-3 monitor groundwater levels in the fill. MW-6, MW-13, MW-14, and MW-15 monitor groundwater levels at depth in the fractured bedrock and therefore were not considered in developing water table contours.

The water table contours for the site are shown in Figure 3-5. The contours were developed using groundwater levels observed on March 29, 1988, from MW-1 through MW-5, MW-10 through MW-12, and P-3. Water level data from P-1 and P-2 were excluded from interpretation because of artificially high water levels (see next paragraph). Groundwater level data collected in August, September, and December of 1987, and in March, June, and December of 1988, resulted in similar contours. Although water level data within bedrock are limited, they indicate that groundwater contours for the deeper bedrock would be similar in shape to the water table contours.

Data obtained from the Task 3 field program suggested that water levels obtained from P-1 and P-2 are artificially high due to the test pit construction of the piezometers. It is believed that the test pits are acting as precipitation and groundwater collecting basins, resulting in elevated groundwater level readings. Therefore, the P-1 and P-2 data were omitted when identifying the groundwater contours for Task 2 and Task 3.

Groundwater Flow Conditions. In Task 2, the water table sloped to the northeast, toward the Anthony Kill. The groundwater flow direction in the southeastern corner of the site, near the former relief gas holder, appeared more easterly, toward the Hudson River. It was interpreted that the easterly flow was controlled by the silty shale fill, the bedrock depression, and shallow bedrock fractures.

Task 3 data shown in Figure 3-5 also indicate that groundwater flow in the fill and shallow bedrock is northeasterly toward the Anthony Kill across the western and

northern portion of the site, and to the east toward the Hudson River across the remainder of the site. Groundwater migration across the western and northern portions of the site appears to be part of a local flow system, controlled by the presence of the Anthony Kill. On the eastern portion of the site, groundwater is migrating easterly along the east-west trending bedrock channel (see Figure 2-6). The regional flow west of the Hudson River where the site is located is also easterly.

The average horizontal gradient of the water table was calculated to be 0.05 feet/feet (ft/ft) across the site in March 1988. As discussed, the primary direction of groundwater flow is northeasterly, toward the Anthony Kill.

Water level data collected from the fill and bedrock wells indicate the vertical seepage gradients for the system. Water levels collected from well clusters in the fill and bedrock at MW-12/MW-13 and MW-4/MW-6 indicate downward vertical gradients. The average vertical groundwater gradient (based on water level data collected between August 1986 and March 1988) at MW-12/MW-13 was 0.06 ft/ft downward from the fill into the bedrock. At MW-4/MW-6, the average vertical groundwater gradient (based on water level data collected in December 1987 and March 1988) was calculated to be 0.02 ft/ft downward from the fill into the bedrock.

Water level data collected (in March 1988) for MW-5 and MW-15, both screened in the shallow bedrock, indicated that the shallow bedrock near the Anthony Kill has an upward gradient, potentially indicating discharge to the Anthony Kill from the groundwater system for this period. The surface water elevation data collected in both December 1987 and March 1988 support the presence of a groundwater discharge zone along the Anthony Kill site boundary. Because no surface water elevation data are available during what may be considered high flow in the Anthony Kill, it is not possible to identify whether the gradient could reverse in the vicinity of the stream during high flows.

Groundwater flow within the fractured rock is controlled by the orientation, size, and interconnection of the fractures. Based on visual observations of rock core from the upper 5 to 31 feet of the bedrock formation at eight borings, the primary fractures are oriented 30 to 45 degrees from horizontal. Groundwater movement would occur primarily along these fractures, and these fractures would provide the interconnection for groundwater migration from the bedrock to the fill material and vice versa.

The impervious asphalt paving and buildings covering most of the site currently limit direct infiltration by precipitation. Two storm drains located in the northern portion of the site collect surface runoff and discharge to the Anthony Kill. Limited rainwater infiltration into the site subsurface soils over the years has minimized the potential for waste constituents to be flushed downward into the groundwater. However, during the coal gas production years, the site was not paved, and conditions were more favorable for the mobilization of waste constituents. The date of paving is not known.

In situ permeability and packer tests were conducted in the monitoring wells during the Task 2 and Task 3 exploration programs to estimate hydraulic conductivities and groundwater flow rates in the soil, the shallow bedrock, and the deep bedrock. The results of in situ, falling-head, and rising-head permeability tests on the shallow wells screened primarily in the silty shale (i.e., MW-3, MW-4, and MW-10) indicate hydraulic conductivities ranging from $2.2x10^{-5}$ to $1.9x10^{-4}$ centimeters per second (cm/sec), or 0.06 to 0.54 feet per day (ft/day).

In situ permeability tests in the wells screened primarily in shallow bedrock (i.e., MW-1, MW-2, MW-5, and MW-11) indicate hydraulic conductivities ranging from $2.0x10^{-4}$ to $1.1x10^{-3}$ cm/sec, or 0.57 to 3.1 ft/day. The in situ permeability and packer tests conducted in the deeper bedrock wells (i.e., MW-6, MW-13, MW-14, and MW-15) indicate hydraulic conductivities ranging from $1.4x10^{-5}$ to $9.0x10^{-4}$ cm/sec, or 0.04 to 2.55 ft/day.

The upper fill consists of a heterogeneous mixture of materials that could have a broad range of permeabilities. The upper fill is not saturated; therefore, the range was not defined. The saturated thickness of fill is limited at the site; most wells were installed below the upper fill to monitor the groundwater flow. One well (MW-12) was installed in the lower fill and produced a hydraulic conductivity of $4.0x10^{-4}$ cm/sec, or 1.1 ft/day. A laboratory permeability test was performed on a sample of lower fill collected from test pit TP-1. This sample yielded a hydraulic conductivity of $2.7x10^{-8}$ cm/sec, or $7.5x10^{-5}$ ft/day. The extreme variance in permeability is due to the inherent differences in the fill material; MW-12 is installed in silty sand and gravel, whereas the sample tested from TP-1 is a clayey silt.

Groundwater velocity is a function of hydraulic conductivity, effective porosity, and groundwater gradient. The hydraulic conductivity of the silty shale was determined from Task 2 and Task 3 field tests to range from $2.2x10^{-5}$ to $1.9x10^{-4}$ cm/sec, or 0.06

to 0.54 ft/day. The geometric mean hydraulic conductivity is calculated to be $1.0x10^{-4}$ cm/sec, or 0.28 ft/day. Using an effective porosity of 0.25 for the silty shale (Davis, 1969), and a groundwater gradient of 0.06 ft/ft, the corresponding horizontal groundwater flow rate in the silty shale is approximately 20 feet per year (ft/yr).

Limited published data are available to estimate the porosity of fractured rock; therefore, a 'best' estimate for the site was selected. An effective porosity of 0.10 was estimated for the shallow bedrock (Freeze and Cherry, 1979). The hydraulic conductivity of the shallow bedrock was found to range from $2.0x10^{-4}$ to $1.1x10^{-3}$ cm/sec, or 0.57 to 3.1 ft/day, with the geometric mean of the hydraulic conductivity being $4.0x10^{-4}$ cm/sec, or 1.10 ft/day. With a groundwater gradient of 0.06 ft/ft, the corresponding horizontal groundwater flow rate for the shallow bedrock is approximately 200 ft/yr.

For the deeper bedrock, the hydraulic conductivity ranged from $1.4x10^{-5}$ to $9.0x10^{-4}$ cm/sec, or 0.04 to 2.55 ft/day, with the geometric mean of the hydraulic conductivity being $2.0x10^{-4}$ cm/sec, or 0.57 ft/day. Using an effective porosity of 0.10 for the deep bedrock as well (Davis, 1969), and a groundwater gradient of 0.06 ft/ft, the corresponding horizontal groundwater flow rate for the deeper bedrock is approximately 104 ft/yr.

In summary, based on the permeability data and seepage gradients, the primary zone of groundwater movement at the site is interpreted to exist within the fractured zones of the shallow bedrock.

Groundwater Usage. Historically, the City of Mechanicville used surface water supplies for a drinking water source. The Mechanicville reservoir is approximately three miles northwest of the site, at an elevation approximately 160 feet higher than the site. The reservoir is drained by Plum Brook, which flows into the Anthony Kill a few miles upstream of the site. A few residences outside the city limits, however, use groundwater for drinking water (Renaldi, 1986). The closest domestic wells are nearly a mile southwest (upgradient) of the site in the Town of Halfmoon. Based on information obtained during the records search, there are no active industrial wells in the Mechanicville area. There are two abandoned industrial wells: (1) the West Virginia Pulp and Paper Co. well (2,157 feet deep), located a half-mile northeast of the site; and (2) a bedrock well used by the former Mintzer Petroleum Co. (29 feet deep), located 1.5 miles south (upgradient) of the site (Heath, et al., 1963). The records that were examined did not report the yields of these wells.

3.3 HYDROLOGY

The Anthony Kill and Hudson River are two major surface water bodies near the site. The Anthony Kill flows out of Round Lake in a southeasterly direction, then bends eastward, flowing past the site and emptying into the Hudson River at Mechanicville (see Figure 1-1). The Hudson River is located approximately 1,500 feet east of the site.

Surface runoff from the site flows into two drainage catch basins that empty via underground culverts into the Anthony Kill. Locations of the culverts are shown in Figure 1-2.

Discharge. There are no continuous-record gauging stations on the Anthony Kill. The USGS has periodically taken base-flow measurements at the partial-record stations on the Anthony Kill at Mechanicville (Station No. 01335700: latitude 42°55'05" and longitude 73°42'53") and Coons Crossing (Station No. 01335698: latitude 42°55'13" and longitude 73°44'50") (USGS, 1979).

Coons Crossing is located upstream of the site, 3.1 miles to the northwest. Based on base flow measurements, ABB-ES estimated the annual low flow at the Mechanicville Station at 17 cfs for a drainage basin of 62.4 square miles. The average annual low flow at the Coons Crossing Station was estimated at 15 cfs for a drainage basin of 52.9 square miles.

The USGS maintains a partial-record gauging station on the Hudson River at Mechanicville (Station No. 01335500: latitude 42°54'45" and longitude 73°40'45"). The drainage area upstream of this station is 4,500 square miles. Based on data collected from 1931 to 1956, the seven-day, 10-year low flow at this station is 1,900 cfs (USGS, 1979).

Stream Water Quality. NYSDEC assigned a Class D stream classification to the section of the Anthony Kill from the Mechanicville city line to the Hudson River (Hodgson, 1986). Class D waters are designated by NYSDEC for secondary contact recreation, but no higher uses because of intermittent flow or water quality conditions that are not conducive to the propagation of game fish. Farther upstream, between Coons Crossing and Mechanicville, the Anthony Kill is designated Class C(t). Class C waters are suitable for fishing and all other uses, except primary

contact recreation or as a source of water for drinking, culinary, or food processing purposes. The "(t)" denotes that the water body is a trout stream (NYSDEC, 1981).

NYSDEC has conducted water quality testing downstream of Mechanicville on the Hudson River, and two miles upstream of the site at Plum Brook (which drains the water supply reservoir) (NYSDEC, 1981). The Hudson River test results (1981) showed water quality impairment from coliform bacteria, heavy metals, and PCBs. No impairment was evident at Plum Brook, which has a Class A designation (i.e., suitable for use as a water supply source) (NYSDEC, 1981). It should be noted that the Hudson River drainage basin upstream of the test point encompasses an enormous land area containing numerous potential sources of chemical contamination.

3.4 AIR

VOC contamination in test borings and monitoring wells located near the combination office/storeroom building led to concern that these VOCs could result in volatilized or airborne contamination of indoor air quality. General wind data and air quality data were compiled in Task 1 to assess general background conditions at the site (E.C. Jordan Co., 1986b).

Wind data reported for the Albany County Airport, which is 10 to 12 miles south of the Mechanicville site, indicate that the wind is primarily from the south from May through June. The prevailing wind for the remainder of the year is from the west-northwest. Wind velocities are generally moderate over the Hudson Valley Region with an average annual wind speed reported at the Albany County Airport of 8.8 mph, with monthly averages ranging from 6.9 to 10.4 mph (NOAA, 1971). The airport data are likely representative of general wind conditions in the Albany County area; however, local micrometeorological conditions may be different. Local topography would favor a prevailing northwesterly wind direction for Mechanicville (Taylor, 1986a).

Mechanicville was once a control station within the statewide ambient air monitoring network operated by NYSDEC's Bureau of Air Quality Surveillance. The station consisted of a high-volume air sampler operated monthly for the monitoring of TSP, 60 feet above grade, one to two miles south of the Mechanicville site. TSP results collected from 1976 to 1982 ranged from 39 to 47 $\mu g/m^3$, and were below federal

Ambient Air Quality Standards of 75 $\mu g/m^3$. No volatile organic monitoring is known to have been conducted in the area.

3.5 AREA LAND USE

General land uses and cover types were surveyed during Task 2 for the area within a half-mile radius of the site (Figure 3-6). Existing land use maps, street maps, and aerial photographs, combined with field checking, were used to determine general land uses. Potentially sensitive land uses were identified with the assistance of local officials and published data. Potential contributors of chemicals to groundwater and surface water were identified from aerial photographs and during field inspection. The site is currently unoccupied and surround by a 6-foot fence on three sides and the Anthony Kill to the north. Current land uses around the site are described in the following paragraphs.

General Land Use. Figure 3-6 depicts present land use and cover types for the area within a half-mile radius of the site. Land uses in the immediate vicinity of the site are both residential and commercial. Mechanicville's central business district, located east and south of the site, is characterized by a mixture of commercial, residential, public, and semipublic land uses, including retail stores, offices, municipal buildings (e.g., city hall, fire station, library, and community services), the post office, and several churches. The central business district is bordered on the east by the Hudson River. The portion of the land use study area on the eastern side of the Hudson River is predominantly residential.

Southwest of the site, land uses are primarily residential with a few interspersed commercial sites and parks. Railroad yards of the Delaware and Hudson, and Boston and Maine railroads are located west of the site. Land northwest and north of the site is primarily open space, with a few private residences and commercial facilities. The area northeast of the site is a mixture of commercial, residential, and industrial properties.

Potentially Sensitive Land Use. Segments of the human population particularly sensitive to contaminants include the very young, the elderly, and the infirm. The young are particularly sensitive because a given dose of a harmful material will have a greater effect on a smaller, lighter child than on a larger, heavier adult. A child's immune system is also more susceptible to negative impacts as physiological systems

develop. The elderly and infirm typically suffer from other medical problems that decrease the body's ability to fight chemical intake. Additionally, the elderly and the infirm could take medication for other health problems; effects of chemicals on the body may be exacerbated by these drugs.

Therefore, land uses that foster concentrations of these populations are of particular concern in conducting a risk assessment. At the Mechanicville site, these uses include day-care centers, schools, recreational areas, nursing homes, and elderly housing projects. Figure 3-6 shows the proximity of these land uses to the site.

4.0 CHEMICAL DISTRIBUTION

This section presents the analytical results for groundwater, surface water, soil and air samples collected during Tasks 1 through 4. The sections describing chemical results for each media are organized such that a summary of the analytical results for samples of that media is presented first, followed by a separate detailed discussion of the results from each task.

Task 2 chemical analyses of samples from the Mechanicville site were conducted by two laboratories. ERCO Laboratories completed analyses on soil, groundwater, and surface water samples for Round 1 sampling, and sediment samples for all four rounds. The NYSEG laboratory performed the water analyses (groundwater and surface water) for the Round 2 through Round 4 samples. The analytical parameters and methods are listed in Appendix D-1 discussed briefly herein. The analytical program was designed to measure constituents of coal tar and coal gas purification wastes, if present. Appendix D-1 also provides representative waste characterizations for coal tar and spent oxide wastes.

Organic analyses of most soil and sediment samples and the first round of groundwater and surface water samples were performed using HPLC with a UV detector. Confirmatory analyses were performed on several replicate soil and Round 1 groundwater samples using GC and a mass spectrometer (MS) detector. The GC/MS method is more specific than the HPLC/UV method in identifying organic compounds, and more accurate in quantitation. Typically, nonspecific detectors (e.g., the UV detector) tend to yield higher concentrations of chemicals than the MS for a given sample. The NYSEG laboratory used GC/MS methods exclusively for organic analyses of water samples from Rounds 2, 3, and 4.

The Task 3 sampling and chemical analysis program for Mechanicville included soil, groundwater, surface water, sediment and air samples. All samples (except for the air samples) were submitted to NYSEG's laboratory. The air samples were shipped to ESA Laboratories of Bedford, MA for analysis. NYSEG forwarded all soil samples to ERCO Laboratories, Cambridge, MA for analysis. December 1987 groundwater, surface water, and sediment samples were also forwarded to ERCO Laboratories for VOC and SVOC analyses. NYSEG analyzed March 1988 samples for these parameters. Upstate Laboratory in Syracuse, New York, performed all other groundwater, surface water, and sediment analyses for NYSEG.

Analytical parameters and methods are listed in Appendix D-1 and discussed briefly herein. The analytical program for soil and groundwater samples was not varied from Task 2 to Task 3, with one exception. Task 3 organic chemical analyses were performed using GC/MS analytical techniques. Minimum detection limits for both sets of data are in Appendix D-4.

The Task 4 Sampling and Chemical Analysis program for Mechanicville consisted of surface soil samples. Chemical analyses were conducted by three laboratories. PCB and cyanide analyses were conducted by Upstate Laboratory in Syracuse, New York; SVOA analyses were conducted by RECRA Environmental, Inc.; and VOA analyses were conducted by the NYSEG Laboratory. Analytical parameters and methods are listed in Appendix D-5.

4.1 CHEMICAL SOURCES

Potential sources of chemicals in groundwater and surface water near the site include aboveground and below ground tanks used for storing petroleum products, vehicle maintenance yards, a railroad yard, a coal storage and sales facility, vacant industrial property, and a drum disposal area. The drums were observed on the vacant lot just west of the site. There are about a dozen 55-gallon drums in poor condition lying on their sides in the grass. The contents and origin of these drums are not known. The location of the potential contributors identified in the land use survey are depicted in Figure 3-6.

As noted in the Task 1 Report (E.C. Jordan Co., 1986b), the segment of the Anthony Kill adjacent to the site was heavily industrialized in the late 1800s and early 1900s. There was a fiber manufacturing company where NYSEG's mechanics shop now stands; a nickel-plating factory just north of the site on the Anthony Kill; and a textile mill across North Central Avenue where the Price Chopper supermarket is now located. These and other past industrial sites in the area were very likely sources of chemicals, some of which may still be evident in the environment.

4.2 SOILS

Chemical Distribution in Soils: Summary

Subsurface Soil. Subsurface soil samples collected at the Mechanicville site were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, total recoverable phenolics (phenols) and TOC. Sixteen locations were sampled.

Analyses of subsurface soil samples from the field investigation program showed the presence of coal tar and coal gasification-related compounds (i.e., VOCs, PAHs, and cyanide) near the former relief gas holder, purifier and oxide houses, and filter beds. The highest levels of VOCs and PAHs were detected in samples taken at or near these sites. Figure 4-1 shows the concentrations of total VOCs, total PAHs, and total cyanide in soil borings at the site, based on both Task 2 and Task 3 sampling results.

The highest levels of VOCs (3,800 and 3,410 mg/kg) were observed in samples taken at B-8 (at depths of 13.5 to 15.5 feet and 15.5 to 17.5 feet), which is located at the site of the former gas relief holder. The highest levels of PAHs were observed in samples taken from B-8 (5,440 mg/kg), TP-5 (8,500 mg/kg; adjacent to the filter beds), and B-3 (9,310 mg/kg in the vicinity of the former purifier and oxide houses). Deep soil samples (deeper than 15 feet) contained lower levels of organics than the samples collected from shallow soils.

Iron levels ranged from 18,000-35,000 mg/kg. The lower concentrations were in the deeper fine silty sand. Higher levels were seen in shallow fill samples. Zinc levels generally ranged from 32 to 390 mg/kg, except for one Task 2 sample (B-5/S-1), which contained 1,600 mg/kg.

Cyanide was detected in three subsurface soil samples at levels ranging from 1 to 3.2 mg/kg. These samples were collected in the vicinity of the former purifier and oxide houses. The concentration of cyanide in this area is most likely due to spillage during cleaning of the purifier house (Wilson and Stevens, 1981).

Phenolic compounds were found in four soil boring samples at depths of 4 to 11 feet. Concentrations ranged from 0.74 to 3.6 mg/kg. These samples were collected in the vicinity of the former filter beds and the former gas and purifier houses. Phenolics are widely distributed in the environment due to both natural (i.e., vegetative decomposition) and man-made processes. Tars and wastewaters at coal gas plants

are a source of phenolics; however, the tars produced by water gas plants such as the one at Mechanicville usually contain only negligible amounts of phenolics.

Surface Soil. Nine surface soil samples plus one duplicate sample were collected at the site in August 1989 to characterize the extent of contamination in site surface soils. The nine samples and one duplicate (SS-1 through SS-9, plus SS-3A), along with one trip blank, were sent to a laboratory for analysis. Samples SS-1, SS-2, SS-3, SS-3A, SS-4, and SS-5 were analyzed for cyanide, SVOCs, VOCs, and PCBs. The remaining samples, SS-6 through SS-9, were analyzed for PCBs only. Analytical methods and analysis results are shown in Appendix D-5.

The analytical results of the Task 4 surface soil sampling program were reviewed for QC/QA. Two issues were identified upon data review. The first relates to sample holding time. Although the soil samples were held for 50 days instead of the recommended 40 days, they were stored properly (in dark containers at 4° C) so that reliable analytical results are expected. The second issue relates to the relatively high detection limits for the VOC analyses. This is not thought to be a serious data issue at the Mechanicville site because VOCs would not be expected to be present at significant concentrations in surface soils. Volatilization over the many years since coal gasification activities terminated would most likely result in insignificant VOC levels in surface soils.

No PCBs were detected in any of the surface soil samples. This includes sample SS-5, which was taken next to the PCB waste oil drums (see Figure 2-7). Additionally, no VOCs were detected in samples SS-1 through SS-5. A trace of bromomethane was detected in sample SS-3, but at a concentration below the detection limit for that sample. In addition, this compound was not detected in the duplicate sample, SS-3A.

Cyanide was detected in two surface soil samples, SS-1 and SS-3A (no cyanide was detected in replicate sample SS-3) at 1.8 and 1.9 mg/kg, respectively. Both samples were collected from the area behind the garage offices and storeroom building, along the upper bank of the Anthony Kill. Several PAHs were detected in samples SS-1 through SS-4, including the duplicate sample. Concentrations of total PAHs ranged from 9.1 to 71 mg/kg. No PAHs were detected in sample SS-5.

Bis(2-ethylhexyl)phthalate (BEHP) was found in two samples plus the duplicate sample. Although this compound is a common laboratory contaminant, no BEHP

was detected in the laboratory blank; therefore, this compound could be present in the surface soil. One other SVOC, di-n-butyl phthalate, was detected in several samples. However, this is also a common laboratory contaminant and was found in the laboratory blank at similar concentrations. Therefore, this compound was not considered to be present in surface soils at the site.

4.2.1 Detailed Task 2 Description

Soil samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, total recoverable phenolics (phenolics), and TOC. The six test pit samples were collected from depths of 3 to 7.5 feet below ground surface, and the eight boring samples were collected from 4- to 17.5-foot depths. The test pit samples were taken from the silty sand and gravel and clayey silt fill soils. Samples from B-2, B-3, B-4, and B-7 were from the silty sand and gravel fill, just above the silty shale. Samples from B-5 and B-8 were collected from within the silty shale and the B-1 sample was from a gravelly sand stratum observed only at that boring. Tables 4-1 and 4-2 present analytical results of these soil samples. Concentrations of the chemicals detected are expressed in mg/kg (parts per million [ppm]). Figure 4-2 illustrates the Task 2 distribution of selected chemicals in soil in the study area.

Organic chemicals associated with coal tar were found at the site. The analyses of samples B-3 and B-8 indicated the highest levels of VOCs and PAHs present in subsurface soil samples. B-8 was drilled into the former relief gas holder itself, while B-3 was downgradient of both the gas holder and the former purifier and oxide houses. The samples from B-8 contained visible coal tar, which had been left in the holder when the plant closed. B-8 had the highest total VOC concentration (3,800 mg/kg), while the highest total PAH level was obtained at B-3 (9,310 mg/kg). The confirmatory GC/MS analysis performed on B-8 indicated comparable results at generally lower concentrations than those reported by the HPLC analysis. Methylene chloride and carbon disulfide were detected in the GC/MS analysis of sample TP-5. Both compounds were detected at concentrations at or below 1 mg/kg and could be indicative of laboratory contamination.

The samples from TP-5 and B-5, collected near the former filter beds, were the most downgradient sampling locations relative to site activities. The samples were similar in VOC and PAH concentrations: 16 and 4,654 mg/kg at B-5, and 24 and 4,630 mg/kg at TP-5, respectively. The duplicate HPLC analytical results for TP-5 were comparable for VOCs, but relatively dissimilar for PAHs. The differences in

PAH concentrations may be attributable to the inherent heterogeneity of soil samples. A confirmatory GC/MS analysis was also performed on a sample from TP-5; the concentrations of compounds detected by GC/MS were generally lower than HPLC results. Total VOC and PAH concentrations in the GC/MS sample were 13.84 mg/kg and 1,137 mg/kg, respectively.

Analysis of sample B-7, collected from beneath the former distribution holder, indicated the presence of several VOCs and PAHs. A total VOC concentration of 4.3 mg/kg and total PAH concentration of 11.21 mg/kg were found at B-7. Higher PAH concentrations were detected in samples B-4 (796 mg/kg) and TP-4 (412 mg/kg), located downgradient of the former relief holder and the former tar dehydrator, respectively. The VOC concentrations in these samples were 10.32 mg/kg in B-4 and 0.848 mg/kg in TP-4.

No VOCs were found in four of the subsurface soil samples: TP-1, TP-2, B-1, and B-2. PAHs were detected in TP-2 (120 mg/kg), B-1 (154.2 mg/kg), and B-2 (trace concentrations); no PAHs were found in TP-1. Three of the samples (TP-1, TP-2, and B-1) were collected near the site boundaries, away from the former on-site coal gasification activities. The fourth sample (B-2) was collected near the center of the site, downgradient from the former gas distribution holder.

The results of the metal analyses at TP-1, considered a background sample, were 27,000 mg/kg for iron and 260 mg/kg for zinc. Iron and zinc concentrations in the remaining soil samples were close to the background levels with one exception: the sample from B-5, located near the former filter beds, contained an elevated concentration of zinc (1,600 mg/kg). Sample B-5 was taken from the silty shale, 10 to 11 feet below ground surface. The sample from nearby TP-5, which was taken at a shallower depth (3 to 4 feet below ground surface and above the water table), contained only 79 mg/kg zinc. One possible source of zinc at former coal gas plant sites is zinc acetate, which was commonly used as a corrosion inhibitor in gas holder sealing waters (Wilson and Stevens, 1981).

Laboratory results indicate the presence of cyanide in three of the soil samples (TP-2, B-3, and B-4), all of which were collected near the former purifier and oxide houses. Cyanide compounds are major constituents of spent oxide wastes; their presence in these samples is most likely attributable to spillage during cleaning of the purifier house (Wilson and Stevens, 1981). The sample from TP-2 contained ferro-

ferricyanide, and the samples from B-3 and B-4 contained amenable cyanide. The total cyanide concentrations in these samples ranged from 1.0 to 3.2 mg/kg.

Phenolics were detected in only two soil samples, B-3 (3.6 mg/kg) and B-5 (2.6 mg/kg), both of which were collected in areas near former site activities. Phenolics are widely distributed in the environment, due to both natural (i.e., vegetative decomposition) and man-made processes. Tars and wastewater are the sources of phenolics at coal gas plants, although tars produced by water gas plants, such as the one at Mechanicville, typically contain only negligible amounts of phenolics (USWAG, 1984).

TOC analysis is a generic test for organic material and measures VOCs and SVOCs, as well as naturally occurring biological material. The concentration of TOC in the background soil sample (TP-1) was 8,300 mg/kg. Only two other subsurface samples (TP-2 and B-2) contained lower TOC levels than the background sample. TOC values in the remaining soil samples ranged from 10,000 to 190,000 mg/kg. TOC results were predictable, given the site use history and results of the VOC and SVOC analyses, with one exception: the TOC concentration of 110,000 mg/kg at B-1 was higher than expected. While samples B-1 and TP-2 contained comparable concentrations of PAHs and no VOCs, the TOC concentration was two orders of magnitude higher at B-1. This seems to indicate that the gravelly sand at B-1 is higher in organic content than the silty sand and gravel fill that cover the site.

Based on analytical results for the soil samples, it appears that coal-tar and coal-gasification-related chemicals (i.e., VOCs, PAHs, and cyanide) are present in the subsurface environment in the study area of the site. Coal tar was observed beneath the base of the relief gas holder where the highest concentrations of organic chemicals were found. Significant levels of organic compounds were also found downgradient of this holder and adjacent to the former filter beds. Coal tar was also observed in the silty shale during drilling at B-3, B-4, B-5, and B-6, and in the overlying sand and gravel fill soils during test pit excavation at TP-4 and TP-5.

4.2.2 Detailed Task 3 Description

Analyses for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, total recoverable phenolics (phenols), and TOC were requested for all Task 3 soil samples. The laboratory performed VOC analysis on only two of the six samples submitted, for reasons that were not explained. The Task 3 soil samples were collected from

depths of 4 to 24 feet below ground surface. All six samples were taken from the silty sand fill above the shale bedrock. Analytical results for Task 3 soil samples are presented in Table 4-3. Concentrations of detected chemicals are expressed in mg/kg (ppm).

Analyses of soil samples from the Task 2 investigation program at Mechanicville showed the presence of coal tar and coal-gasification-related chemicals (i.e., VOCs, PAHs, and cyanide) near the former relief gas holder, purifier and oxide houses, and filter beds. Task 3 soil sampling was targeted primarily at further defining the distribution of chemicals in deep soil (near the soil/ bedrock interface) and in areas adjacent to former site structures and activities. Figure 4-1 illustrates the concentrations of total VOCs, total PAHs, and total cyanide in soil borings at the site, based on both Task 2 and Task 3 sampling results.

Deep soil samples (below 15 feet deep) contained lower levels of organics than the samples collected from shallow soils. No VOCs and a low level of PAHs (7.6 mg/kg) were detected in the deepest sample collected (B-12). The sample was taken from silty fine sand, 22 to 24 feet below ground surface near the garage building, approximately 75 feet from the former purifier and oxide houses. The sample was not analyzed for VOCs, and PAHs were not detected.

The highest levels of VOCs and PAHs were present in samples collected in and near the former relief gas holder, near the former purifier and oxide houses, and in the filter bed area. The highest levels of VOCs (3,800 and 3,410 mg/kg) were observed in samples collected at B-8 (at depths of 13.5 to 15.5 feet and 15.5 to 17.5 feet). B-8 is located at the site of the former relief gas holder. The highest levels of PAHs (9,310, 8,500, and 5,440 mg/kg) were observed in samples taken from B-3, TP-5, and B-8 at approximate depths of 5, 3.5, and 14.5 feet, respectively.

Task 3 Sample B-15, collected just above the shale bedrock (a composite sample collected from a depth of 4 to 8 feet) adjacent to the former filter beds, contained low levels of VOCs (1.45 mg/kg) and no detectable PAHs. In contrast, the shallow soil samples collected nearby from TP-5 and B-5 had much higher levels of VOCs (13.8 and 16.0 mg/kg, respectively) and PAHs (6,565 and 4,654 mg/kg, respectively).

To further define the extent of contamination in the vicinity of the former gas house, Sample B-9 was collected in Task 3 from silty sand 4 to 5.5 feet below ground surface. Sample B-9 was not analyzed for VOCs but contained 118 mg/kg of PAHs.

The level of PAHs found at B-9 was within the same order of magnitude as those found in TP-4, but was an order of magnitude less than those observed in B-3 and B-6.

Task 3 included no additional soil sampling in the area of the former distribution gas holder. Task 2 sampling indicated moderate levels of VOCs and PAHs (4.3 and 11.2 mg/kg, respectively, at a depth of 7 to 9 feet) beneath the distribution holder, and trace levels of PAHs but no detectable levels of VOCs adjacent to it at B-2.

Samples B-10 and B-1 were collected away from former coal gasification activities, near Ferris Lane. While Sample B-10 was not analyzed for VOCs, 1.48 mg/kg of PAHs were detected. A duplicate sample from B-10 contained 2.08 mg/kg of PAHs. VOCs were not detectable at B-1, but PAHs were found in the 8- to 10-foot sampling interval at 154 mg/kg.

Results of the metals analyses for both Task 2 and Task 3 soil samples show fairly narrow ranges for iron levels in the natural soils on site (18,000 to 35,000 mg/kg). Task 3 Sample B-10 from soil 16 to 18 feet below ground surface, considered upgradient from site activities, contained 24,000 mg/kg of iron. There is no evidence that iron levels in on-site soils are elevated by historical or current site activities.

Zinc levels in Task 3 soil samples were consistent with Task 2 results, ranging from 32 to 390 mg/kg. While one Task 2 sample (B-5/S-1) showed a high zinc concentration (1,600 mg/kg); no similar zinc concentrations were found in Task 3 samples. The high concentration of zinc at B-5 could be a result of the use of zinc acetate as a corrosion inhibitor in gas holder sealing waters, a common practice at former coal gas plants (Wilson and Stevens, 1981). Metal concentrations were generally lower in the deeper silty sand than in the overlying fill. This may be more related to the nature of the fill that to any historical or current on-site activities.

Cyanide was only detected in three soil samples, all in the vicinity of the former purifier and oxide houses. The presence of cyanide in the soil (at levels of 1.0 to 3.2 mg/kg) is most likely attributable to spillage during cleaning of the purifier house (Wilson and Stevens, 1981).

Phenolics were detected in two Task 3 soil samples: B-9 (0.74 mg/kg) and B-15 (2.6 mg/kg). Sample B-9 was collected adjacent to the former gas house, and Sample B-15 was obtained near the former filter beds. Phenolics were detected in

two Task 2 samples at higher levels at B-3 and B-5 (3.6 and 2.6 mg/kg, respectively). Phenolics are widely distributed in the environment, due to both natural (i.e., vegetative decomposition) and man-made processes. Tars and wastewater are the sources of phenolics at coal gas plants, although tars produced by water gas plants, such as the one at Mechanicville, typically contain only negligible amounts of phenolics. Site activities may have contributed to the detectable levels of phenolics in soils at the gas house and filter beds (USWAG, 1984).

TOC analysis is a generic test for organic material and measures all VOCs and SVOCs, as well as naturally occurring biological material. The TOC concentration in the Task 3 soil samples ranged from 22,000 to 42,000 mg/kg. All Task 3 TOC levels were within the range established by Task 2 sampling (8,300 to 190,000 mg/kg). The highest TOC levels (greater than 100,000 mg/kg) typically correlated to soil samples where the highest levels of VOCs and/or PAHs were observed.

Based on results of Task 2 and Task 3 soil sample analyses and the drilling program, coal-tar- and coal-gasification-related chemicals (i.e., VOCs, PAHs, and cyanide) are present in the site's subsurface environment. Field logs of B-3, B-4, B-5, B-6, B-9, B-10, B-12, B-13, and B-15, and test pit excavations TP-4 and TP-5 further document this. Visible coal tar contamination was observed at depths up to 16.8 feet in soils, and stained bedrock was observed in B-13 at a depth of 55 feet. The logs of the test pits and borings are presented in Appendices A and B, respectively.

4.3 GROUNDWATER

Chemical Distribution in Groundwater: Summary

Groundwater samples were collected from 12 wells at the site, and analyzed for VOCs, SVOCs, dissolved iron and zinc, cyanide, phenolics, and TOC. Conductivity, pH, and temperature were measured in the field.

Cyanide was detected in all wells except MW-11. The highest levels of total cyanide (0.58 to 0.8 mg/L) were observed at MW-12 during Task 3. During Task 2, a maximum level of 0.42 mg/L was reported at MW-3. Well MW-12 is located downgradient from the former relief gas holder, while MW-3 is downgradient from the former purifier/oxide structures.

Volatile aromatic compounds, a subset of VOCs, were detected consistently in all wells except MW-1, MW-2, and MW-11. MW-1, MW-10, and MW-11 are located upgradient of the historical coal gasification plant. MW-2 is downgradient from the former distribution gas holder, but soils data from B-2 and B-7 suggest little or no contamination in this area. Concentrations in the deep bedrock wells (i.e., MW-6, MW-13, MW-14, and MW-15) were generally greater than those detected in the shallow wells. Other VOCs, including 1,1,1-trichloroethane, 1,1-dichloroethane, and trichloroethylene were detected in several samples but they are not believed to be site-derived (E.C. Jordan Co., 1989; GRI, 1987).

PAHs were observed in at least one sample from all wells except MW-1, MW-2, and MW-11. The average concentrations of all the samples collected at each well ranged from nondetectable (at MW-1, MW-2, and MW-11) to 750 mg/L at MW-12. The maximum levels of 1,500 and 1,564 mg/L were observed at wells MW-12 and MW-5, respectively. The distribution of PAHs in groundwater is similar to the distribution in the soil, indicating that contaminated soil is the source of PAHs in groundwater.

Groundwater sampling data indicate that the detected PAHs are particulate in nature, rather than dissolved species. Some concentrations greatly exceed the solubility of PAHs in water, which ranges from 0.50 (micrograms per liter) μg/L for dibenzo(a,h)anthracene to 620 μg/L for indeno(1,2,3-cd)pyrene. Thus, the groundwater concentrations must not be indicative of dissolved PAH concentrations. This conclusion is consistent with the sampling protocol, because groundwater samples for organics are not filtered before analysis for organic contamination.

Dissolved iron was present in at least one sample from every well. Wells MW-1, MW-2, MW-10, and MW-11, considered to provide the most representative background concentrations, contained concentrations ranging from 0.04 to 1.4 mg/L. The wells with the highest concentrations of dissolved iron were MW-3, MW-4, MW-5, MW-6, and MW-12. These were the same wells that had the highest concentrations of PAHs.

Dissolved zinc was detected at least once in every well. Samples from MW-4 and MW-5 contained unusually high levels (0.52 to 1.09 mg/L). This may be related to the past site usage of zinc acetate as a corrosion inhibitor in gas holding seal water (Wilson and Stevens, 1981). Samples at other wells were fairly uniform (0.01 to 0.11 mg/L). This uniformity suggests that zinc is a natural constituent of site groundwater which has not been elevated by site activities (E.C. Jordan Co., 1989).

Total recoverable phenolics were detected in all wells. The maximum concentration in shallow wells was 17 mg/L while the maximum concentration in deep wells was 0.3 mg/L.

4.3.1 Detailed Task 2 Description

Groundwater samples were collected from each of the six Mechanicville monitoring wells on four separate occasions (September and December of 1986 and March and June of 1987). These samples, plus duplicates and blanks, were analyzed for VOCs, SVOCs, selected metals (i.e., iron and zinc), cyanide, phenolics, TOC, and sulfate. Conductivity, pH, and temperature were also measured in the field. Quality assurance samples included (1) sampler blanks prepared in the field and analyzed for the same parameters as groundwater samples; (2) trip blanks prepared before the fieldwork and analyzed for VOCs only; and (3) filtration blanks prepared in the field by running deionized water through the filter apparatus and analyzed for selected inorganics.

Results of the Task 2 groundwater analyses are presented in Table 4-4 (expressed in mg/L [ppm]), and the quality assurance sample results are in Appendices D-2 and D-3. The distribution of selected chemicals detected in two sampling rounds (December 1986 and June 1987) in groundwater is depicted in Figure 4-3. These two rounds were selected to illustrate seasonal variations in the data, with December representing a wet season (high water table) and June representing a dry season (low water table).

Volatile aromatic compounds, a subset of VOCs, were detected in groundwater from each of the wells except MW-2, located downgradient of the former gas distribution holder. However, low concentrations of volatile aromatics (0.015 mg/L) were found in only one sample from MW-1, located upgradient of the site. VOCs were detected in samples from the four remaining wells in all four sampling rounds. The highest levels of volatile aromatics were detected in samples from MW-6, the deepest of the six wells. Excluding the Round 1 HPLC results (which are typically overestimations), the volatile aromatic concentrations at MW-6 were between 4 and 6 mg/L. At MW-4, the shallow well adjacent to MW-6, the aromatics totaled between 2 and 4 mg/L (again, excluding the HPLC results). Both MW-4 and MW-6 are downgradient of the former gas relief holder. At MW-3 and MW-5, the total volatile aromatic concentrations were generally below 2 mg/L.

Other VOCs detected in groundwater included acetone and methylene chloride, which were found sporadically in samples from three of the wells: MW-1, MW-2, and MW-6. With the exception of one acetone concentration of 3.78 mg/L (MW-1), the detected concentrations were below 1 mg/L. Acetone was detected in the Round 2 sampler blank and the Round 3 trip blank, at concentrations lower than those detected in the environment samples (less than 0.1 mg/L). Methylene chloride was also found in the Round 3 trip blank and the Round 4 sampler blank (less than 0.01 mg/L). Both compounds are common laboratory contaminants that often are reported in environmental sampling results and which are not typically associated with coal gasification wastes. Therefore, they are not believed to be site-derived chemicals.

Laboratory analyses indicated the presence of PAHs in all wells. The highest PAH readings were obtained from MW-5, where concentrations were between 17 and 1,565 mg/L over three sampling rounds. (MW-5 was not sampled during Round 3 because of snow cover.) Between the first and fourth sampling rounds, the PAH concentrations in the groundwater at MW-5 increased by two orders of magnitude. This phenomenon was not observed at any of the other wells at the site. In fact, at MW-1, MW-4, and MW-6, total PAH concentrations decreased over this period.

Based on ABB-ES' understanding of the site, the increase at MW-5 cannot be explained. However, the decrease in PAHs at the other wells may be attributable to disturbances caused during well installation and development, and to the fact that the Round 1 data were produced by HPLC, as opposed to GC/MS. Excluding the HPLC results, total PAH concentrations ranged from "not detected" (ND) to 0.44 mg/L at MW-1; ND to 9.69 mg/L at MW-2; 3.35 to 6.16 mg/L at MW-3; 2.93 to 6.36 mg/L at MW-4; and 6.98 to 43.07 mg/L at MW-6.

BEHP was detected in low concentrations (generally less than 0.1 mg/L) in samples from four of the six wells; none was found in MW-5 or MW-6. This compound, often detected in environmental samples, is not a typical constituent of coal gasification wastes and might be a laboratory contaminant. The compound was also detected in two of the three GC/MS sampler blanks, also at low levels (less than 0.1 mg/L). Therefore, it is not believed to be a site-derived chemical.

On the other hand, the compound 2-methylnaphthalene is a constituent of coal tar (USWAG, 1984). It was detected in all downgradient wells in Round 4 samples.

The concentrations reported at MW-5 (197 to 247 mg/L) were significantly higher than those reported for the other four wells (0.14 to 7.17 mg/L).

Iron and zinc are natural constituents of groundwater (Todd, 1980). Iron was reported in samples from all wells. Low concentrations of iron were found at MW-1 and MW-2 (less than or equal to 0.5 mg/L, with much higher concentrations detected at the other four wells (1 to 61 mg/L. Therefore, the iron content of the groundwater on site appears to have been elevated by site activities. Zinc concentrations do not vary significantly between the upgradient and downgradient wells. The highest reported zinc concentration was 0.33 mg/L at MW-5 (Round 4). The remaining values were almost all at or below 0.1 mg/L.

Cyanide is not a natural component of groundwater. Both amenable (free) cyanide and ferro-ferricyanide were detected in the Mechanicville groundwater samples. At MW-1, MW-2, and MW-5, the concentrations of total cyanide were always less than 0.03 mg/L. At the remaining three wells, located next to the former purifier/oxide house, total cyanide concentrations ranged from 0.05 to 0.46 mg/L, predominantly in the complex form (i.e., ferro-ferricyanide). Predictably, the highest cyanide concentrations were found at MW-3, downgradient of the former purifier/oxide structures.

Phenolics, which were only included in the Round 1 and 4 analytical programs, were not detected in the upgradient samples, and were found in only one sample from MW-2 at 0.008 mg/L. Elevated concentrations of phenolics were present in samples from the four remaining downgradient wells. The range of phenolic concentrations at these wells was from 0.014 to 0.43 mg/L.

Sulfate analysis was requested during Round 2 only. Sulfate was present in all wells at concentrations ranging from 14.5 to 84 mg/L (74.6 mg/L was detected at the upgradient well, MW-1). Sulfate is a natural constituent of groundwater resulting from the oxidation of sulfide ores, gypsum, and anhydrite. Concentrations up to 300 mg/L are common in natural waters (Todd, 1980).

Finally, TOC concentrations in the groundwater samples all fell within a relatively small range: 3.2 to 30 mg/L. Samples from MW-1 and MW-2 generally contained less than 10 mg/L of TOC, while those from MW-3 through MW-6 generally contained greater than 10 mg/L. The TOC results provide further evidence of the impact of site activities on organics in groundwater.

To summarize, coal gasification waste-related chemicals (i.e., VOCs, PAHs, iron, cyanide, and phenolics) are present in elevated concentrations in groundwater within the study area of the site. These chemicals were found in the highest concentrations near the former locations of the relief gas holder, the purifier and oxide houses, and the filter beds. They were detected not only in the wells spanning the fill soils and shallow bedrock, but also in the deep bedrock well (MW-6).

4.3.2 Detailed Task 3 Description

During Task 3, groundwater samples were collected in December 1987 and March 1988 from the 12 wells at the site. The six Task 2 wells were sampled on four previous occasions (i.e., September and December of 1986, and March and June of 1987). All groundwater samples were analyzed for VOCs, SVOCs, dissolved iron and zinc, cyanide, phenolics, and TOC (see Appendix D-1). Conductivity, pH, and temperature were also measured in the field. QA samples included (1) sampler blanks prepared in the field and analyzed for the same parameters as groundwater samples; (2) trip blanks prepared before fieldwork and analyzed for VOCs only; and (3) filtration blanks prepared in the field by running deionized water through the filter apparatus (used for dissolved metals samples) and analyzing for selected inorganics. Appendices D-2 and D-3 contain results of QA/QC sample analyses.

Results of the Task 3 groundwater analyses (expressed in mg/L [ppm]) are presented in Table 4-5 and discussed in the following paragraphs.

An interpretation of the distribution of total VOCs in shallow groundwater, based on maximum concentrations detected during Task 3 sampling, is presented in Figure 4-4. Bedrock wells (i.e., MW-6, MW-13, MW-14, and MW-15) typically yielded higher concentrations of VOCs, with the lowest concentration found at MW-15 (0.03 mg/L) and the highest concentration found at MW-13 (15 mg/L).

Volatile aromatic compounds, a subset of VOCs, were detected consistently in all wells except MW-1, MW-2, MW-10, and MW-11. MW-1, MW-10, and MW-11 are located upgradient of the historical coal gasification plant. MW-2 is downgradient from the former distribution gas holder, but soils data from B-2 and B-7 suggest that little or no organic contaminants are in this area. Volatile aromatics were detected consistently in shallow bedrock wells MW-3, MW-4, MW-5, and MW-12, but were only present in soil samples at the corresponding locations B-3, B-4, and B-5. Volatile aromatics were detected at each of the deep bedrock wells (MW-6, MW-13,

MW-14, and MW-15) at concentrations typically greater than those in the shallower wells.

PAHs were observed in at least one sample from every groundwater monitoring well except MW-11. Average concentrations (averaged over all the samples collected at each well) ranged from ND at MW-11 to 700 mg/L at MW-12. PAHs were observed at maximum concentrations exceeding 100 mg/L in four wells: MW-3, MW-6, MW-5, and MW-12 (at 190, 746.2, 1,564.4, and 1,518 mg/L, respectively). PAHs were observed at maximum concentrations exceeding 10 mg/L at MW-13 and MW-14 (11.09 and 64.7 mg/L, respectively).

The distribution of PAHs across the site is similar to the distribution in the soil samples, indicating that contaminated soils are source areas for PAH contaminants found in the groundwater.

The highest organic chemical concentrations in groundwater were found at MW-12 (downgradient of the former relief gas holder), MW-3 (downgradient of the former oxide and purifier houses), and MW-5 (downgradient of the former filter beds); the lowest organic chemical concentrations were found in MW-11 (upgradient of the site), MW-2 (adjacent to the former gas distribution holder), and MW-10 (upgradient of the site). On at least one occasion, no organics were detected in MW-1, MW-2, and MW-11.

Other organic chemicals, including 1,1,1-trichloroethane, chlorobenzene, 1,1-dichloroethane, trichloroethylene, benzoic acid, and BEHP, were detected in several groundwater samples at concentrations below 0.1 mg/L. These organic compounds showed no pattern of occurrence regarding shallow versus deep wells or upgradient versus downgradient wells, and are not typically associated with coal gasification wastes. These compounds are not believed to be coal gasification plant-derived chemicals; however, they may be associated with site use following closure of the gas plant, or have an off-site origin.

Dissolved iron was present in at least one sample from every groundwater monitoring well. Concentrations in MW-1, MW-2, MW-10, and MW-11, which are considered to provide the most representative background concentrations for the site, ranged from 0.06 to 1.0 mg/L. The wells with the highest concentrations of dissolved iron were MW-4, MW-5, MW-3, MW-6, and MW-12 (61, 25, 20, 11, and 4.4 mg/L, respectively). These are the same wells that had the highest concentrations of PAHs,

indicating that the elevated iron levels in the groundwater are related to on-site contamination.

Dissolved zinc concentrations were fairly uniform in all groundwater samples. Zinc was detected at least once in every well, in concentrations ranging from 0.01 to 0.11 mg/L, except for one sample from MW-4 and both samples from MW-5, which contained unusually high levels (0.52, 0.54, and 1.09 mg/L, respectively). The maximum zinc concentration at MW-11 (an upgradient well) was 0.01 mg/L. The elevated levels of zinc found at MW-4 and MW-5 could be related to past site usage of zinc acetate which was commonly used as a corrosion inhibitor in gas holder sealing waters (Wilson and Stevens, 1981). The uniformity of zinc concentrations at other sampling locations suggests it is a natural constituent of site groundwater that has not been elevated by site activities.

Cyanide was detected in all wells except MW-11 during Task 3. The highest levels of total cyanide were detected at MW-12 (0.8 and 0.58 mg/L), located downgradient of the former relief gas holder. Other shallow wells contained cyanide in concentrations ranging from ND to 0.27 mg/L, while deep wells contained cyanide in concentrations ranging from ND to 0.15 mg/L.

Total recoverable phenolics were detected in all wells. The maximum concentration in upgradient well MW-11 was 0.005 mg/L. Phenolics concentrations in the deep wells ranged from ND to 0.064 mg/L, while concentrations in shallow wells ranged from ND to 0.058 mg/L.

TOC concentrations in the groundwater samples ranged from 2.2 to 61 mg/L, except for three samples in which free product (coal tar) was noted in December 1987 sampling. In these three wells (i.e., MW-3, MW-5, and MW-6), TOC levels ranged from 8,000 to 50,000 mg/L. TOC results do not correlate well with the VOC and SVOC analytical results, indicating there were other organic materials in the samples analyzed.

4.4 SURFACE WATER

Chemical Distribution in Surface Water: Summary

Surface water samples were analyzed for VOCs, SVOCs, iron, zinc, phenolics, cyanide, and TOC. No volatile aromatics were detected in any surface water samples. PAHs were detected once at the location adjacent to the site at a concentration of 0.105 mg/L. Other organics detected during Task 2 included methylene chloride (upstream), acetone (adjacent), and bis(2-ethylhexyl)phthalate (all locations). These compounds were found at concentrations less than 0.1 mg/L. They were also found in some sampler and trip blanks. During Task 3, bis(2-ethylhexyl)phthalate was found upstream on both sampling occasions at concentrations less than 0.5 mg/L; it was not found adjacent or downstream of the site. These three contaminants (methylene chloride, acetone, and bis(2-ethylhexyl)phthalate), when present at low concentrations, are common laboratory contaminants. It is unlikely that they are derived from the site (GRI, 1987).

Iron was found at all four locations at levels ranging from 0.2 to 1.8 mg/L. The highest concentration was found adjacent to the site. Zinc was detected in at least one sample from three locations; only the downstream sample collected during Task 3 had no detectable zinc. Concentrations ranged from 0.01 to 0.03 mg/L. Phenolics were detected in at least one sample from all locations except the upstream and adjacent locations sampled during Task 3. Cyanide was not detected in any of the Task 3 samples. It was detected in at least one sample in each Task 2 location.

4.4.1 Detailed Task 2 Description

Surface water samples were collected from three locations along the Anthony Kill during four sampling episodes (September and December of 1986 and March and June of 1987). Samples were collected from stations located upstream (SW-1), adjacent (SW-2), and downstream (SW-3) relative to the site. Samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, phenolics, TOC, oil and grease, and sulfate. The analytical results are presented in Table 4-6 with concentrations expressed in mg/L (ppm). QA water samples included sampler blanks and trip blanks; the results are presented in Appendix D-2.

No volatile aromatics were detected in any surface water samples. PAHs were detected only at SW-2 in Round 4, with a total PAH concentration of 0.105 mg/L. Other organics detected in surface water included acetone (SW-2), methylene chloride (SW-1), and BEHP (all three stations). Because these compounds were found at low levels (less than 0.1 mg/L) and were also found in some sampler and trip blanks, their presence appears to be due to laboratory contamination. It is unlikely, then, that acetone, methylene chloride, and BEHP are site-derived chemicals.

The metals analyses indicate the presence of iron in samples from all three stations at comparable levels (0.037 to 1.09 mg/L). The highest concentration of iron was found at the upstream location (SW-1). Zinc was detected only in the Round 4 samples, and measured 0.01 mg/L at all three stations. Ferro-ferricyanide was found in Round 2 samples from each station (0.01 to 0.03 mg/L) and in Round 4 samples collected at SW-2 and SW-3 (0.01 mg/L). Phenolics were detected at the downstream sample (SW-3), in Round 1, and at SW-1 and SW-2 in Round 4. These results show no clear pattern of site contributions of these chemicals to the Anthony Kill.

Oil and grease analysis was performed at SW-1 and SW-3 during Round 1. This analysis was requested after an oily sheen originating upstream of the site was observed by ABB-ES samplers. The upstream sample contained 11 mg/L of oil and grease, but none was detected at the downstream station. This finding demonstrates that the source of the sheen was indeed upstream of the site.

Sulfate was analyzed during Round 2 only and was detected at similar concentrations in all three surface water samples (16.4 to 19.3 mg/L).

In summary, results of the analysis of surface water samples collected from the Anthony Kill do not show an adverse impact attributable to site activities. Even though it is likely that chemicals dissolved in groundwater are being discharged from the site to the stream, the resulting concentrations would be expected to be below detection limits due to volatilization and dilution. Compared to the low flow discharge of 17 cfs for the Anthony Kill, the site groundwater discharge is estimated to be less than 0.05 cfs (based on the average hydraulic conductivity of 1.9 ft/day for the unconsolidated soils and shallow bedrock). The Task 2 samples did provide evidence of chemical contributions to the Anthony Kill from upstream sources.

4.4.2 Detailed Task 3 Description

After Task 2 analytical results indicated that site-derived chemicals were not present in the Anthony Kill, Task 3 sampling was designed to further evaluate surface water conditions in the vicinity of the Mechanicville site.

Surface water samples were collected from three locations along the Anthony Kill during two sampling episodes (December 1987 and March 1988). Samples were collected upstream (SW-01), adjacent (SW-02), and downstream (SW-04) relative to the site. Locations SW-01 and SW-02 were sampled during Task 2. Downstream location SW-04 was chosen based on the groundwater flow direction at the site, which suggests that site groundwater discharges to the Anthony Kill in the vicinity of SW-04. Samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, phenolics, and TOC. Analytical results are presented in Table 4-7, with concentrations expressed in mg/L (ppm). QA water samples included sampler blanks and trip blanks; results are presented in Appendix D-2.

No VOCs or PAHs were detected in any surface water samples. The only organic compound detected in surface water was BEHP, found at SW-01 (the upstream location) on both sampling occasions. This compound was detected at low levels (less than 0.5 mg/L) in a range attributable to laboratory contamination. Because it is present only at the upstream sampling location and at a low concentration, and because it is a common laboratory contaminant, it is unlikely that BEHP is a site-derived chemical.

Metals analyses indicate the presence of iron in samples from all three stations at comparable levels (0.20 to 1.8 mg/L). The highest concentration of iron was found at the location adjacent to the site (SW-02) during both sampling rounds. Zinc was detected in December 1987 samples at SW-02 (0.014 mg/L), and in March 1988 samples at SW-01 and SW-02 (0.02 to 0.03 mg/L). Phenolics were detected in the downstream sample (SW-03) in December 1987, but were not detected in any samples during March 1988. These results show no clear pattern of site contributions of these chemicals to the Anthony Kill.

4.5 SEDIMENT

Chemical Distribution in Sediment: Summary

Sediment samples collected from the same locations as surface water samples were analyzed for VOCs, SVOCs, iron, zinc, phenolics, TOC, and cyanide. Three VOCs were detected in the sediments. During Task 2, Round 3 sampling, benzene and toluene were found at a concentration of 0.07 mg/kg, adjacent to and downstream from the site. During Task 3, ethylbenzene was detected at a level of 0.087 mg/kg adjacent to the site, along with a trace concentration of benzene. These contaminants are associated with coal tar wastes as well as petroleum products and industrial chemicals.

Analysis of Task 2 and Task 3 sediment samples indicated that PAH concentrations adjacent to the site are elevated compared to upstream and downstream sampling locations. Sampling location SD-02 contained trace levels up to 75.8 mg/kg of total PAHs during Task 2 sampling, and trace levels to 5.1 mg/kg during Task 3 sampling.

Concentrations of iron and zinc were fairly consistent in the four locations. Iron concentrations ranged from 7,100-33,100 mg/kg while zinc concentrations ranged from 25 to 100 mg/kg. Cyanide compounds were not detected in any Task 2 samples, while in Task 3 a cyanide level of 1.3 mg/kg was detected adjacent to the site. Phenolics were detected in Task 2 Round 4 samples at all three locations at comparable levels (1.8-6.1 mg/kg). During Task 3, phenolic levels ranged from 0.68 to 2.3 mg/kg.

4.5.1 Detailed Task 2 Description

Sediment samples were collected during four sampling episodes (September and December of 1986 and March and June of 1987) from the same locations along the Anthony Kill as surface water samples. The samples were analyzed for VOCs, SVOCs, selected trace metals (i.e., iron and zinc), cyanide, phenolics, TOC, and sulfate. Analytical results are presented in Table 4-8 with concentrations expressed in mg/kg (ppm).

No volatile aromatic compounds were detected in any samples collected from SED-1, the upstream location. The only volatile aromatics detected at the other stations were during Round 3: benzene was detected at SED-2 (0.07 mg/kg), the midstream

location; and toluene was found at SED-3 (0.07 mg/kg), the downstream location. Acetone and methylene chloride were found in all the Round 4 sediment samples in similar concentrations. These VOCs are common contaminants not typically associated with coal tar wastes.

Several PAHs were detected at all three sampling locations. PAHs were detected at the upstream location (SED-1) during the first and second rounds of sampling only (7.3 to 8.6 mg/kg). At SED-2 adjacent to the site, PAHs were detected during all four rounds of sampling. The first and second rounds of samples at SED-3 contained PAHs (16.78 to 45.64 mg/kg), while only trace amounts were detected in Round 3 and no PAHs were found in Round 4. The Round 2 sample from SED-2 contained the highest concentration of total PAHs found in any of the sediment samples (75.8 mg/kg). It is important to note that data for Rounds 1 and 2 were obtained by HPLC. Looking just at the GC/MS analytical results from Rounds 3 and 4, it appears that PAH concentrations in Anthony Kill sediment directly adjacent to the site are elevated compared to concentrations measured at the upstream and downstream sampling locations.

All three sediment samples contained iron and zinc in fairly consistent concentrations. Iron levels ranged from 8,320 to 33,100 mg/kg, while zinc concentrations ranged from 31 to 100 mg/kg. Cyanide compounds were not detected in any sediment samples. Phenolics were detected in Round 4 samples at all three stations at comparable levels (1.8 to 6.1 mg/kg). Sulfate was detected at the midstream (SED-2) and downstream (SED-3) locations, in concentrations of 30 to 60 mg/kg. Thus, there is evidence that sulfate concentrations of the Anthony Kill sediments are elevated above background levels (upstream) due to site activities.

4.5.2 Detailed Task 3 Description

After Task 2 sampling suggested that site-derived chemicals were present in Anthony Kill sediments adjacent to the site, Task 3 sampling was designed to further evaluate whether site-derived chemicals are present in the Anthony Kill sediments. Task 3 samples were collected during two episodes (December 1987 and March 1988) from the same locations along the Anthony Kill as surface water samples. The samples were analyzed for VOCs and SVOCs. Task 3 analytical results are presented in Table 4-9 with concentrations expressed in mg/kg (ppm).

One volatile aromatic compound, ethylbenzene, was detected at low levels (0.087 mg/kg) in December 1987 at SD-02, the location adjacent to the site. A trace concentration of benzene was detected at SD-02 during the March 1988 sampling round. No other VOCs were detected in any of the sediment samples collected and analyzed during Task 3. In Task 2 sampling, benzene was detected at SD-02 (0.07 mg/kg) and toluene was detected at SD-03 (0.07 mg/kg). Ethylbenzene, benzene, and toluene are VOCs typically associated with coal tar wastes.

No PAHs were detected above trace concentrations at SD-01 or SD-04 in Task 3 samples. At SD-02 (adjacent to the site), PAHs were detected in December 1987 (4.6 mg/kg), while only trace amounts were detected in March 1988. PAHs were detected at all three locations sampled in Task 2. GC/MS analysis of Task 2 and Task 3 sediment samples indicated that PAH concentrations adjacent to the site are elevated compared to upstream and downstream sampling locations. At the upstream location, di-n-octylphthalate was detected in March 1988 (25 mg/kg). Di-n-octylphthalate is a common environmental sample contaminant not typically associated with coal tar wastes.

March 1988 sediment samples were not analyzed for metals, cyanide, or phenolics because previous analytical results for these compounds were judged sufficient. Among the December 1987 samples, iron concentrations were fairly consistent (7,100 to 8,700 mg/kg), while concentrations of zinc, cyanide, and phenolics at SD-02 adjacent to the site are above the range detected in other sediment samples.

Zinc and phenolic concentrations at SD-02 were 45 and 2.3 mg/kg, respectively, while the ranges at other locations were 25 to 28 mg/kg for zinc and 0.68 to 1.3 mg/kg for phenolics. The three June 1987 sediment samples contained phenolics at comparable levels (1.8 to 6.1 mg/kg). Although cyanide was not detected at other locations, nor in any of the Task 2 samples, 1.3 mg/kg of total cyanide was detected at SD-02.

4.6 AIR

During Task 3, indoor air samples were analyzed for the presence of benzene, toluene, ethylbenzene, and xylenes. Results of the indoor air sampling program, presented in Table 4-10, revealed low levels of benzene and toluene at most sampling locations. The only exception was benzene not being detected in the background

sample. Ethylbenzene and xylenes were below analytical detection limits for all samples.

The highest indoor levels of toluene and benzene were found in the storeroom. A possible source of benzene in the storeroom may be a forklift which is used in this area. Although the engine was not running during the sampling period, it is possible that residual gasoline vapors had volatilized into the air. Toluene was detected in the background sample at higher levels than two of the indoor samples. It was highest in the garage. It is possible that the sample was affected by vehicle use in the area.

Duplicate samples showed consistent results for all sample locations, indicating reproducibility among the data collected.

5.0 PHYSICAL AND CHEMICAL DATA ASSESSMENT

Chemicals related to the coal gasification process and wastestreams were detected in the soil and groundwater at or near the site. This section focuses on the significance of the field investigation findings at the site.

5.1 COMPARISON OF DATA TO REGULATORY STANDARDS

In this section, analytical results are compared to relevant or applicable standards and guidelines identified from the following sources: (1) New York State standards and guidance values (**Insert Page 5-1a**), (2) National Drinking Water Regulations, (3) USEPA Health Advisories, and (4) New York State Air Guide No. 1. Relevant and applicable standards and guidelines are listed in Table 5-1 and Table 5-2.

Regulatory standards and guidelines are not available for the chemicals detected in on-site soils. For groundwater and air, New York State standards and guidance values are used in this assessment for several reasons. First, New York State has established standards and guidelines for many of the chemicals detected at the Mechanicville site, including all those chemicals regulated at the federal level. Second, where both federal and state criteria exist for a given chemical, the New York State standard is generally more stringent. New York State standards are enforced by regulation, while guidance values are not enforceable by law.

5.1.1 Groundwater

The Mechanicville site is not located over a water supply aquifer. The nearest known water supply wells are about one mile southwest (upgradient) of the site in the Town of Halfmoon. Because Mechanicville groundwater is not currently used as a public potable water supply, drinking water standards are not currently applicable. They are included for hypothetical comparison purposes only and are listed in Table 5-1.

The New York State standards and guidelines are for groundwater used as a source of potable water. The federal Maximum Contaminant Levels (MCLs) are enforceable standards for water supply systems promulgated under the authority of the federal Safe Drinking Water Act (SDWA). Maximum Contaminant Level Goals

(NYSDEC. Division of Water, Technical and Operational Guidance Series [1.1.1]; November 15, 1991)

(MCLGs) are nonenforceable health goals established under the same act to prevent any adverse health effects or risks, without considering the cost or feasibility of attainment.

USEPA Health Advisories are nonenforceable guidelines established by the Office of Drinking Water. They are set at levels where adverse health effects are not expected. Carcinogenic risks are not considered in setting USEPA Health Advisories. However, these advisories consider the length of exposure to the chemical in drinking water. The values shown in Table 5-1 are for lifetime adult exposure. Assumptions were made about the weight of the exposed individuals and the amount of water ingested in developing these values.

As shown in Table 5-1, groundwater (Class GA) standards have been promulgated by New York State for 15 of the chemicals detected in groundwater beneath the Mechanicville site: benzene, toluene, ethylbenzene, styrene, xylenes, methylene chloride, trimethylbenzene, benzo(a)pyrene, BEHP, total regulated organics, iron, zinc, cyanide, phenolic compounds, and sulfate. Concentrations in excess of the New York State standard were measured for each of these chemicals except sulfate. The exceedances are graphically depicted in Figures 5-1 through 5-12 .

During Task 2, the standard for benzo(a)pyrene (ND levels) was exceeded at MW-3, MW-4, and MW-6 in at least one sampling round. Except for one exceedance, all of these occurred during Round 1 when HPLC analysis was used. One Task 3 sample from MW-5 exceeded the standard and trace levels were detected in samples from MW-3, MW-6, MW-12, and MW-13.

The benzene standard for groundwater (ND levels) was exceeded at MW-1, MW-3, MW-4, MW-5, and MW-6 in Task 2. During Task 3, the standard was exceeded at MW-3, MW-4, MW-5, MW-6, MW-12, MW-13, MW-14, and MW-15.

The styrene standard was exceeded in the MW-6 and MW-4 samples collected during Task 2. During Task 3, all four samples from MW-13 exceeded the standard. Styrene was not detected in any other wells during Task 3.

During Task 2, the New York State standard for regulated organics (0.1 mg/L) was exceeded at MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6. During Task 3, the standard was exceeded at all wells except MW-2 and MW-11.

Phenolic compounds exceeded the 0.001 mg/L standard at MW-2, MW-3, MW-4, MW-5, and MW-6 during Task 2. In Task 3, the standard was exceeded in all wells except MW-11.

Total cyanide concentrations above the 0.1 mg/L standard were found at MW-3 and MW-6 during Task 2. During Task 3, the standard was exceeded in MW-3, MW-12, MW-13 and MW-14.

The iron standard of 0.3 mg/L was exceeded at MW-2, MW-3, MW-4, MW-5 and MW-6 during Task 2. During Task 3, concentrations above the standard were detected in all wells except MW-1, MW-2, MW-13, and MW-15.

The ethylbenzene standard of 0.005 mg/L was exceeded at MW-3, MW-4, MW-5 and MW-6 during Task 2. During Task 3, concentrations above the standard were detected at MW-3, MW-4, MW-5, MW-6, MW-12, MW-13, and MW-14.

The toluene standard of 0.005 mg/L was exceeded at MW-3, MW-4, MW-5 and MW-6 during Task 2. During Task 3, samples from MW-3, MW-4, MW-5, MW-6, MW-13, and MW-14 exceeded the standard.

Methylene chloride levels in MW-2 and MW-6 exceeded the standard of 0.005 mg/L during Task 2 and in MW-13 during Task 3.

Bis(2-ethylhexyl)phthalate was detected above the standard of 0.05 mg/L at MW-1, MW-2 and MW-3 during Task 2 and MW-10 during Task 3.

The trimethylbenzene standard of 0.005 mg/L was exceeded during Round 1 of Task 2 Sampling Data for trimethylbenzene was not available for subsequent sampling rounds.

The xylene standard of 0.005 mg/L was exceeded at MW-1, MW-3, MW-4, MW-5 and MW-6 during Task 2. During Task 3, the standard was exceeded at MW-3, MW-4, MW-5, MW-6, MW-10, MW-12 and MW-15.

The zinc standard of 0.3 mg/L was exceeded at the duplicate sample from MW-5 during Task 2. During Task 3, samples at MW-4 and MW-5 exceeded the standard.

The New York State Department of Health has also promulgated MCLs for most of the compounds of interest at Mechanicville. Table 5-3 identifies groundwater samples containing chemicals in excess of these drinking water standards.

New York State has guidance values for 16 chemicals detected at Mechanicville, all of which were exceeded at one or more monitoring wells. Groundwater samples containing chemicals in excess of the New York State guidance values are listed in Table 5-4.

5.1.2 Surface Water

Table 5-1 also contains relevant federal and state criteria for surface water. The New York State criteria are for Class D waters, the classification of the Anthony Kill near the Mechanicville site. USEPA Ambient Water Quality Criteria (AWQC) for aquatic life and human health are also listed.

Iron was the only chemical identified in Anthony Kill surface water samples that exceeded the New York State Class D standards. The iron standard of 0.3 mg/L was exceeded at all sampling locations (upstream, adjacent to the site, downstream) during both Task 2 and Task 3 sampling. The chronic AWQC for BEHP was exceeded during Task 2 sampling at all locations and, during Task 3, only at the upstream sampling location. BEHP was detected in a range attributable to laboratory contamination; therefore, it is unlikely to be a site-derived chemical.

5.1.3 Air

Modeled ambient air concentrations of site-derived chemicals can be compared to New York State Acceptable Ambient Levels (AALs). Measured indoor air concentrations of selected analytes (i.e., benzene, toluene, ethylbenzene, and xylene) can be compared to worker standards for indoor exposure.

Ambient Air. New York State has promulgated guidelines for various toxic air contaminants (NYSDEC, 1985-1986). There are no federal air regulations applicable to the atmospheric release of the contaminants of concern at the Mechanicville site.

The New York State Air Guide No. 1 establishes AALs and contaminant-specific levels for various air contaminants. Interim AALs are based on the threshold limit value/time-weighted average (TLV-TWA) concentration, adopted as guidance

criteria by the American Conference of Governmental Industrial Hygienists (ACGIH) (NYSDEC, 1985-1986). Contaminant-specific levels will be developed to replace interim AALs as more detailed data and information concerning these chemicals become available. Contaminant-specific AALs are based on an in-depth evaluation of the chemical in question; they are derived using a No Observed Effect Level (NOEL) and applying safety factors.

ACGIH criteria are for five-day, eight-hour workplace exposures and assume no exposure during nonworking hours. The New York State Interim AALs are equal to the ACGIH values divided by 300. This adjustment takes into account 24-hour exposure to the chemicals. AALs are annual average ambient concentrations that should not be exceeded for any off-site receptor. Table 5-2 shows AALs for contaminants of concern at the Mechanicville site. PAHs are considered "high" toxicity air contaminants. There are no chemical-specific AALs for this compound class.

A comparison of the modeled 24-hour ambient concentrations at the nearest off-site receptor (100 feet downwind) are compared to AALs in Table 5-5. For those compounds for which AALs exist, the modeled concentrations were several orders of magnitude lower than the respective AALs.

Indoor Air. Table 5-6 compares the results of the indoor air sampling program to various air standards and guidelines developed to protect workers exposed during an eight-hour workday. Permissible Exposure Levels (PELs) set by OSHA and guidelines established by ACGIH and NIOSH are identified. All samples with detectable levels of benzene and toluene were well below OSHA, NIOSH, and ACGIH standards or guidelines. Neither ethylbenzene nor xylene were detectable.

Regulatory standards and criteria are not available for chemicals detected in the soil or sediment, at either the federal or state levels.

5.2 FATE AND TRANSPORT

Environmental conditions at the Mechanicville site are summarized in Table 5-7 and described in the following paragraphs.

Levels of chemicals found in Task 3 soil samples across the site are consistent with Task 2 findings and the site coal gasification process history. The highest levels of VOCs, PAHs, and cyanide exist in the shallow soils near the former gas house, purifier and oxide houses, filter beds, and relief gas holder. PAH levels are generally higher than VOC levels in the soil samples. In general, VOCs are more soluble in water than PAHs; therefore, PAHs tend to resist leaching from soils more than VOCs.

Most of the site is paved, which prevents infiltration of rainfall and limits vertical migration of chemicals in the soil. However, the regional groundwater flow direction from west to east might be a vehicle for transporting chemicals beneath the site. Therefore, shallow on-site soils are considered a continuing source of chemicals for on- and off-site groundwater contamination.

Task 4 surface soil analytical results indicate that site activities impacted surface soils. Cyanide was detected in two surface soil samples collected from the area behind the garage offices and storeroom building along the upper bank of the Anthony Kill. Several PAHs were detected in surface soil samples as well as bis(2-ethylhexyl)phthalate (BEHP). Since these areas of the site are unpaved, vertical migration of the chemicals in soil is possible due to infiltration of groundwater. Therefore, surface soils in unpaved areas are considered a continuing source of chemicals for on- and off-site groundwater contamination.

Task 2 and Task 3 groundwater analytical results indicate that site activities impacted water quality in soils, as well as in shallow and deep bedrock. Coal gasification waste-related chemicals (i.e., VOCs, PAHs, iron, cyanide, and phenolics) are present in elevated concentrations in on-site groundwater with respect to upgradient groundwater levels. These chemicals were found in the highest concentrations downgradient of the former relief gas holder, purifiers and oxide houses, and the filter beds. The area downgradient of the former relief gas holder, where elevated VOC and PAH levels were detected, is characterized by a bedrock trough, indicating that chemicals are traveling preferentially along the surface of the bedrock trough in the silty shale and shallow bedrock fractures.

In paired wells, PAH levels generally decrease with depth, while VOC levels increase with depth. The heavier, less mobile, PAH chemicals are being partly retained on the soils and along the shallow bedrock fractures. The more soluble VOC chemicals are migrating with the groundwater. Downward seepage gradients, measured in

paired wells in the bedrock trough along the eastern edge of the site, indicate that these chemicals are carried into the shallow and deeper bedrock. The upward seepage gradient on the bank of the Anthony Kill indicates that dissolved chemicals are discharging to the stream. Shallow and deep groundwater migrating off site to the north and east appear to be carrying elevated levels of VOCs, PAHs, and other coal-gasification waste-related chemicals off site.

Analytical results of surface water samples collected from the Anthony Kill do not show an adverse impact attributable to site activities. Although it is likely that chemicals dissolved in groundwater are being discharged from the site to the stream, the resulting surface water concentrations are below detection limits, due to volatilization and dilution. The site groundwater discharge is estimated at less than 0.005 cfs, based on an average hydraulic conductivity of 0.28 ft/day for the unconsolidated soils and 1.1 ft/day for the shallow bedrock. This discharge is less than 0.03 percent of the estimated average annual low flow of 17 cfs on the Anthony Kill at Mechanicville.

Task 2 and Task 3 sediment sampling results indicate that PAH, zinc, cyanide, and phenolic concentrations in the Anthony Kill sediments adjacent to the site are elevated above background levels (upstream) due to site activities; however, downstream sediments do not show elevated levels.

Task 3 air sampling results indicate that benzene and toluene are present at low levels in buildings on-site.

5.3 CONTAMINANTS OF CONCERN

Summary tables of subsurface soil, sediment, and groundwater data at the Mechanicville site were prepared for selected sampling locations. Sampling locations were chosen for statistical analysis on the basis of human exposure potential. It should be noted that the sampling program was designed to investigate areas where residuals from the coal gasification processes would be expected. The summary statistics presented in Tables 5-8 through 5-16 were used to select the contaminants of concern for the public health risk assessment and to represent the exposure point concentrations for the estimation of contaminant body dose levels.

The summary statistics shown in these tables include the frequency of detection, and the minimum, maximum, and arithmetic mean of concentrations. In computing the mean, "non-detects" were assigned the value of zero. This assignment tends to lower the mean, although not significantly, unless a detection limit is high.

Sampling locations used to represent the potential for human exposure to subsurface soils (see Tables 5-8 through 5-10) include Task 2 soil borings B-2, B-3, B-4, B-7, and B-8, and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-9. As seen in Figure 2-7, these sampling locations correspond to the site parking lot (the area in front of the garage and offices) and the filter bed area. These areas were judged to represent locations on the site for possible future subsurface exploration and excavation.

Tables 5-11 through 5-13 contain summary statistics for selected sediment sampling locations. To model potential human exposure to sediments in the Anthony Kill, data for sampling locations adjacent to the site were selected. These include Task 2 and 3 data for sampling location SD-02, two NYSEG samples collected in November 1988, and one NYSDEC sample collected in October 1988.

Summary statistics that reflect the levels of site-related contaminants in on-site groundwater are presented in Tables 5-14 through 5-16. These data include all Task 2 and 3 monitoring well locations except upgradient wells MW-1, MW-10, and MW-11.

No contaminants of concern were chosen for surface water or groundwater. This is because there was no indication of site-related surface water contamination, based on the Task 2 and 3 surface water sampling results. Also, groundwater is not a current source of drinking water nor does it represent a potential source for the future. Therefore, ABB-ES' evaluation of the risks associated with groundwater consumption is limited to a comparison to groundwater or drinking water standards.

Chemicals were selected as contaminants of concern in subsurface soil, sediment, and indoor air based upon their concentrations, frequency of detection, and toxicologic properties. All chemicals detected in surface soil samples SS-1 through SS-4 were chosen as contaminants of concern for this medium. Table 5-17 lists the contaminants of concern selected for the risk assessment. All the contaminants of concern in Table 5-17 are associated with coal gasification activities (GRI, 1987).

Both carcinogenic and noncarcinogenic PAHs were detected at a high frequency and magnitude. Of the 16 PAHs detected at the site, seven have been classified as potential human carcinogens and were selected as contaminants of concern. These include benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. In addition, several PAHs were chosen as contaminants of concern to represent the noncarcinogenic hazards of PAHs. These include naphthalene, pyrene, acenaphthene, acenaphthylene, phenanthrene, fluoranthene, fluorene, anthracene, 2-methylnaphthalene, and benzo(g,h,i)perylene.

Although iron and zinc were found in all samples, they were not selected because they are of such low toxicity. In addition, levels in soil were similar to background levels at the site, while levels in sediment were within an average background range reported by Moore and Ramamoorthy (1984).

Other compounds such as acetone, bis(2-ethylhexyl)phthalate, butylbenzyl phthalate, di-n-octyl phthalate, carbon disulfide, 4-methylphenol, and propyl benzene were not chosen because of their low frequency of detection. In addition, some of these compounds are common laboratory contaminants and may not actually be present on the site.

6.0 BASELINE RISK ASSESSMENT

6.1 HUMAN HEALTH EVALUATION

6.1.1 Hazard Identification

In this section, the toxicological properties of the contaminants of concern, all of which are associated with coal gasification activities, are briefly reviewed. A detailed discussion of the health effects of all contaminants is presented in Appendix G.

Polynuclear Aromatic Hydrocarbons. Most PAHs in the environment are formed during the combustion of organic compounds. Major sources of PAHs include incomplete combustion of fuels for heating and manufacturing; burning of coals, gasoline, and diesel exhaust; and burning of municipal and agricultural wastes. Cigarette smoke also contains PAHs. To a limited extent, these compounds occur naturally (e.g., plants and bacteria synthesize PAHs during growth, and naturally caused brush and forest fires produce PAHs).

PAHs represent a class of several hundred compounds consisting of annelated (benzene) rings. PAHs are ubiquitous in the environment and most are formed during the combustion of organic compounds. Sixteen PAHs were detected at the Mechanicville site. Seven have been classified as potential human carcinogens (Carcinogen Assessment Group [CAG] B2 classification): benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene (USEPA, 1984).

Several other PAHs are genotoxic but have not been shown to be carcinogenic (i.e., anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, and pyrene). Numerous epidemiological studies of worker populations have shown a clear association between PAH-containing materials (e.g., soot, tars, and oils) and increased cancer risk (IARC, 1983).

Several noncarcinogenic PAHs were also detected at the site. One, naphthalene, was selected as a surrogate to represent noncarcinogenic PAH hazard potential. Except for naphthalene, little toxicological information exists on the other compounds.

PAHs are highly lipid-soluble and are absorbed via the gastrointestinal (GI) tract, skin, and lungs (USEPA, 1984). Many PAHs produce tumors in mouse skin when applied topically in solvents or as coal tar products. Therefore, dermal contact is a potentially important exposure route for these compounds. The degree of skin absorption of PAHs from contaminated soils, however, is not known (USEPA, 1984).

The USEPA cancer potency factors for oral and inhalation exposures of benzo(a)pyrene are 11.5 and 6.11 $(mg/kg/day)^{-1}$, respectively. These values are used to assess the carcinogenic risks associated with the mixture of carcinogenic PAHs found in the soil. (Potency factors are not available for the other carcinogenic PAHs.) Using the factor for benzo(a)pyrene to represent the potency of the seven identified carcinogenic compounds is widely practiced for risk assessment of PAHs. Although benzo(a)pyrene is one of the most potent carcinogenic PAHs, many other carcinogenic PAHs are known to be present in coal tar wastes that were not analytes in the methods used to test site soils.

The USEPA cancer potency factor is the upper 95 percent confidence limit of the slope of the dose-response curve for benzo(a)pyrene (using the linearized multistage extrapolation model). This means that, with 95 percent statistical certainty, the true potency is as stated or less. Therefore, it is highly unlikely that the true potency of benzo(a)pyrene is greater than stated, and it could be considerably lower. For these reasons, the calculated cancer risks associated with the various exposure levels are expected to represent upper limits of the true risk.

In addition to the USEPA-derived potency factors, ICF-Clement Associates developed new potency factors for benzo(a)pyrene using a different dose-response model than the USEPA. While the USEPA used the linearized multi-stage model, ICF-Clement used a newly-developed, two-stage biologically based model, which is a special case of the Moolgavkar and Knudson risk model (GRI, 1988a). These new oral and inhalation potency estimates for benzo(a)pyrene are 3.22 and 0.453 $(mg/kg/day)^{-1}$, respectively, and they can be used with the USEPA estimates to provide a range of possible cancer risks associated with PAHs.

ICF-Clement Associates also developed relative potency factors for other PAH compounds, based on their comparative potencies to that of benzo(a)pyrene. These comparative potencies are illustrated below:

PAH	Relative Potency
Benzo(a)pyrene	1.000
Benzo(a)anthracene	0.145
Benzo(b)fluoranthene	0.140
Benzo(k)fluoranthene	0.066
Benzo(g,h,i)perylene	0.022

PAH	Relative Potency
Chrysene	0.0044
Dibenzo(a,h)anthracene	1.1100
Indeno(1,2,3-c,d)pyrene	0.2320

Source: Atlantic Environmental Services (GRI, 1988a)

The merits and limitations of using the various cancer potency factors are discussed in detail in Appendix G-1.

Benzene. Benzene, a highly flammable volatile aromatic hydrocarbon, is used both as a gasoline additive and a chemical intermediate in the production of many compounds (e.g., styrene and phenol).

Benzene is recognized human carcinogen (IARC, 1982). Several epidemiological studies provided sufficient evidence of a causal relationship between benzene exposure and leukemia in humans. Benzene is a known inducer of aplastic anemia in humans, with a latency period of up to 10 years. It reduces the number of white blood cells and other blood components, which can progress to a reduction in all blood cell types. Similar adverse effects on the blood-cell-producing system occur in animals exposed to benzene. In both humans and animals, benzene exposure is associated with chromosomal damage, although it has not been shown to be mutagenic. Embryolethality has also been observed in experimental animals.

Exposure to high concentrations of benzene in the air causes central nervous system (CNS) depression and cardiovascular effects. Benzene has been reported to cause

subjective symptoms (e.g., headaches and nausea) with chronic exposure to as little as 100 ppm.

Naphthalene. Naphthalene is a PAH, and in this risk assessment, naphthalene is used to represent the toxicity of noncarcinogenic PAHs.

Naphthalene is absorbed most readily by the inhalation route in humans. Acute short-term exposure to naphthalene can lead to severe anemia. In severe exposure, ingestion causes gastroenteric distress, tremors, and convulsions. Corneal ulceration and cataracts have been observed in humans after repeated exposure to naphthalene vapors, which can also cause headache, nausea, and profuse perspiration. With dermal contact, naphthalene is a mild primary irritant. Naphthalene is not known to be a mutagen or carcinogen (Clayton and Clayton, 1981).

Toluene. Toluene is an important raw material for organic syntheses. It is used in the production of benzene, benzyl chloride, benzoic acid, phenol, cresols, vinyl toluene, TNT, and toluene diisocyanate. It is also used as a solvent for paints, rubber, and resins and as a component of motor and aviation fuels.

Acute and chronic exposures to 200 ppm or greater concentrations of toluene vapor cause eye irritation, headache, nausea, and other CNS effects in humans. In humans, acute exposures to very high concentrations can cause narcosis; however, exposures to quantities sufficient to produce unconsciousness fail to produce organ damage. There is no conclusive evidence that toluene is carcinogenic or mutagenic in animals or humans (USEPA, 1980a). The National Toxicology Program (NTP) is currently conducting an inhalation carcinogenicity bioassay in rats and mice.

Researchers have reported that toluene is embryotoxic and one study reported a high incidence of cleft palate in mice. There are no accounts of teratogenic effects in humans after exposure to toluene (USEPA, 1987).

Ethyl Benzene. The major use of ethyl benzene is as an intermediate in the production of styrene. It is also used in the manufacture of cellulose acetate and synthetic rubber. Significant quantities are consumed in connection with xylene, which may contain as much as 20 percent ethyl benzene as a solvent or diluent. These xylene/ethyl benzene mixtures are used as diluents in the paint industry, in agricultural sprays for insecticides, and in gasoline blends.

To date, ethyl benzene has not been evaluated by USEPA for human carcinogenicity potential. The target organs for health impacts from acute exposures are the eyes, upper respiratory system, skin, and CNS. No data on teratogenicity or mutagenicity of ethyl benzene were located by USEPA (1980b). Human toxicity of ethyl benzene is characterized by its irritancy to the skin and, less markedly, to the mucous membranes (ACGIH, 1986).

Xylene(s). Xylene is a VOC used as a solvent for prints, inks, and adhesives. Xylenes are components of detergents and other household and industrial products.

Xylene has not been found to be carcinogenic when administered orally to rats or mice. Xylene was not found to be mutagenic in a battery of short-term assays. Xylene is not teratogenic but has caused fetotoxicity in rats and mice. Acute exposure to high levels of xylene affects the CNS and irritates the mucous membranes. Short-term xylene exposure can cause eye, nose, and throat irritation at 200 ppm. There is some evidence that chronic exposures to less than 50 ppm can cause headaches and other CNS effects.

Cyanide. Both cyanide gases and salts are used in industrial processes. Hydrogen cyanide (HCN) is manufactured at 14 sites in the United States and is used as an intermediate in the production of nylon and other compounds. Minor uses of HCN include insecticides and rodenticides for fumigating enclosed spaces (e.g., grain storage areas). Cyanide salts are used mainly in the electroplating and metal-finishing industries. Minor applications of the salts include the manufacture of dyes and pigments, as well as use as insecticides and rodenticides.

Cyanide is a compound that can exist as a salt (e.g., potassium or sodium cyanide) or as a gas (e.g., HCN). Cyanides as a class are absorbed readily by the lungs, GI tract, and skin of animals and humans (USEPA, 1985). The fastest route of uptake for cyanide is the inhalation of gaseous HCN. Once cyanide is absorbed, it is readily distributed throughout the body. The liver can readily detoxify cyanide compounds. Therefore, cyanides absorbed from the GI tract first pass through the liver, where they are converted to less toxic compounds (usually thiocyanide), before systemic distribution. When inhalation is the route of exposure, systemic distribution occurs before the cyanide-containing blood passes through the liver. Therefore, the effective dose to target organs is higher for inhalation exposure than oral exposure for the same administered body dose.

Acute exposure to high levels of cyanides produces adverse effects on the central nervous, respiratory, and cardiovascular systems (ATSDR, 1988). Coma and/or death can be eventual outcomes. Lower level exposures produce rapid deep breathing, convulsions, and loss of consciousness (ATSDR, 1988). Skin irritation can result from contact with dust containing cyanide (ATSDR, 1988). Chronic exposures (months to years) to low levels of cyanides affect the CNS and the thyroid gland. No evidence exists to indicate that cyanide is carcinogenic (ATSDR, 1988).

Styrene. Styrene is a volatile aromatic compound produced primarily from the dehydrogenation of ethyl benzene. Styrene is used to produce polystyrene, which is a thermoplastic with excellent electrical properties and thermal stability.

Styrene is classified by USEPA as a possible human carcinogen (Group C) because there is limited evidence of carcinogenicity from animal studies but no human data. There is, however, no USEPA cancer potency factor for styrene.

The target organs for toxic effects are the CNS, the respiratory system, and the eyes and skin. There is some epidemiologic evidence suggesting reproductive effects.

Trimethylbenzene. Trimethylbenzenes are alkylated benzenes. This group of compounds, which include xylenes, toluene, and ethylbenzene, is a by-product of petroleum distillation and found in coke oven effluents. Trimethylbenzene is primarily used in industry as solvents, paint thinners, and motor fuel components. One of the three trimethylbenzene isomers has been identified as an insect attractant.

Little experimental work has been carried out on trimethylbenzene. It seems to have very similar properties to other alkylated benzenes, such as xylene and toluene. Like these compounds, trimethylbenzene is relatively nontoxic except with acute exposures to very high concentrations.

Trimethylbenzene, like other alkylated benzenes, is primarily a CNS depressant with such symptoms as irritability, nervousness, headache, nausea, and even narcosis. It is absorbed through the skin, gastrointestinal tract, and lungs; however, unlike other compounds of its class, it is not systemically toxic through dermal absorption. There have been reports of hypochromic anemia in peripheral blood and deviation from normal coagulation in workers exposed for many years to trimethylbenzene at air concentrations between 10 and 60 ppm.

6.1.2 Dose-Response Assessment

In risk assessments, the likely range of incremental risk associated with given levels and conditions of human exposure to a carcinogenic or noncarcinogenic substance is estimated. For carcinogens, the purpose of the dose-response assessment is to define the relationship between the dose of a substance and the likelihood of a carcinogenic effect. Noncarcinogens are thought to have a threshold level for health effects; therefore, USEPA has derived some guidelines based on acceptable exposure levels. The outcome of the dose-response assessment, when coupled with information or assumptions concerning the magnitude of human exposure, can provide a numerical estimate of risk.

Information derived from the hazard identification process is used to guide the dose-response assessment. This guidance is necessary for determining the appropriateness and limitations of the available data sets that might be used for dose/response extrapolation. Such guidance is important, because numerical risk estimates are not affected by the likelihood that an agent is in reality a human carcinogen. That is, a numerical risk estimate can often be derived for a substance even if the weight-of-evidence in support of human carcinogenicity is extremely weak.

Therefore, current USEPA guidelines state that agents classified in Groups A (human carcinogens) and B (probable human carcinogens), according to the weight-of-evidence stratification, are suitable for quantitative risk estimation. Agents categorized in Group C (possible human carcinogens) must be judged on a case-by-case basis, and agents in Groups D (not classified) and E (no evidence of human carcinogenicity) do not have risk estimates derived.

Regardless of the weight-of-evidence, there are major uncertainties in derived risk estimates, which are due to experimental and epidemiologic variability, as well as problems in extrapolating both from animals to humans and from high to low doses. Three major issues impact the validity of dose-response assessments used to derive risk estimates: (1) the selection of a study (i.e., data set) upon which to base the calculations; (2) the mathematical model used to extrapolate from experimental observations at high doses to predicted occurrences at very low doses; and (3) the conversion to an equivalent human dose corresponding to the animal dose used. USEPA provides guidance in these three areas.

than the USEPA factors. ICF-Clement's estimates can be used to provide a range of possible cancer risks associated with PAHs.

Toxicokinetic Factor. To estimate the risk to human health posed by the presence of chemicals in soil and sediment at the Mechanicville site, ABB-ES first estimated the exposure dose of each constituent. The exposure dose is similar to the administered dose of a laboratory experiment. The experimentally based cancer potency factors and reference doses used in quantitative risk assessment are based on administered doses in most cases.

The TKF is defined as the ratio of the estimated absorption factor for the site-specific medium and route of exposure to the known or estimated absorption factor for the laboratory study from which the cancer potency factor or the reference dose was derived. Use of this factor allows ABB-ES to make appropriate adjustments if the efficiency of absorption is known or expected to differ because of physiological effects and/or matrix or vehicle effects.

TKFs can be less than 1.0 or greater than 1.0, depending on the particular circumstances at hand. If it is thought that absorption from the site-specific exposure is the same as absorption in the laboratory study, then the TKF is 1.0.

In the absence of detailed toxicological information on every compound of interest, it has been common practice for risk assessors to use a default value of 1.0. This approach is not always adequately protective of public health, because there are many cases in which it is expected that absorption from the site-related exposure would be higher than that in the laboratory study. In this assessment, the absorption by inhalation of cyanide adsorbed to soil particles would be expected to be higher than in the diet study upon which its dose/response value is based.

For carcinogenic PAHs and cyanide, specific TKFs were derived based on a review of relevant toxicological data. These TKFs are described in the dose/response profile for each compound (see Appendix G-1).

For the other contaminants of concern, ABB-ES has estimated compound-specific TKFs based on a conservative, internally consistent algorithm as shown in Table 6-3. The procedure requires that the route of exposure and the vehicle be known for all studies from which CPFs or reference doses were derived by

USEPA. This information is discussed in the dose-response profile for each contaminant of concern. The algorithm requires the use of numerous assumptions regarding systemic absorption of the constituents. These assumptions are reasonable and are presented in the following paragraphs.

TKFs were derived for three situations: (1) dermal uptake from soil, (2) ingestion of soil, and (3) inhalation of volatilized compounds or particulates. The dose-response values listed in Tables 6-1 and 6-2 were derived from several types of studies. Most oral values were derived from studies in which animals were administered the test compound orally either by gavage, in drinking water, or in diet. However, some oral dose-response values (i.e., for benzene and toluene) were based on inhalation studies. Most inhalation dose/response values were based on inhalation studies.

The TKF values for situations 1 and 2 are listed in Tables 6-1 and Table 6-3. The assumptions employed in deriving them are discussed below:

- Absorption from gavage studies (in which feeding is by stomach tube) is similar to absorption from drinking water studies.

- Absorption of compounds from drinking water in humans is similar to absorption in laboratory animals from drinking water or gavage.

- Absorption of volatile compounds via inhalation in animals is similar to absorption from drinking water. That is, in both cases absorption is assumed to be very high.

The above assumptions are conservative and reasonable. Their application results in a series of TKFs that can be applied to specific contaminants of concern depending on the nature of the study from which the dose/response values were derived. In some cases, the TKFs are 1.0 or greater than 1.0. For instance, the GI absorption of a constituent such as PAHs from soil may be as great as it is from diet.

Because the CPF is based on a dietary study, a TKF of 0.5-1.0 is used to account for the difference in absorption expected for the estimated exposure at the Mechanicville site. In other cases, the TKFs are less than 1.0. For instance, dermal absorption of a compound such as xylene from soil is expected to be less

than absorption when the compound is administered by gavage. Thus, the TKF for this compound for dermal uptake from soil is 0.05-0.25.

In the derivation of TKFs, for most of the contaminants of concern, ABB-ES assumes the following:

- Absorption of vapors at the site is the same as absorption of vapors in a laboratory study.
- Absorption of vapors at the site is the same as absorption from gavage in a laboratory study.
- Absorption of inhaled particles at the site is the same as absorption of vapors in a laboratory study; however, 75 percent of the inhaled particles is assumed to remain in the lungs and be available for absorption.

Therefore, the TKFs for most of these compounds are 1.0 for volatilized compounds and 0.75 for particulates (see Table 6-2).

The exceptions are PAHs and amenable cyanide. The cancer inhalation potency factor for PAHs is based on an inhalation study where hamsters were exposed to benzo(a)pyrene in a sodium chloride aerosol. It is assumed that absorption from soil particulates is the same as absorption from the sodium chloride aerosol; therefore, the TKF is 1.0. ABB-ES assumed that 75 percent of PAH particulates are retained in the lungs compared to volatilized PAHs; thus, the TKF for volatilized PAHs is 1.33. The inhalation TKF for amenable cyanide (particulates) is 7.5 based on route-specific metabolic differences. Its derivation is explained in the dose-response section for cyanide in Appendix G-1. Table 6-2 also contains the inhalation TKFs used in the risk scenarios.

6.1.3 Exposure Assessment

The purpose of this exposure assessment is to identify and characterize potential exposures at the Mechanicville site. The exposure assessment consists of three steps. First, the exposure pathway analysis identifies potential pathways by which individuals could be exposed to site-related contamination. Second, the exposed population analysis identifies populations around the site who might be exposed.

Finally, the methods to calculate incurred body doses resulting from these exposures are presented, along with some of the assumptions and parameters that are used in these calculations.

Introduction. The Mechanicville site is currently unoccupied. However, NYSEG has other plans for the site. NYSEG does not intend to sell the site, but it expects to lease the site (O'Meara and Martin, 1989). There are currently two potential bidders to lease the property: the city (to use the site as a storage lot), and a private car dealership (to use it as a car lot). Leasing of the site may require regrading the site and removing existing underground and aboveground structures.

Because of the contamination found at the site, it is possible that individuals may be exposed to site-related contamination. Under current conditions, the potential for exposure of nearby residents and site trespassers is limited because the site is not easily accessible. The property is bordered on three sides by a fence, and on the fourth side by a steep embankment along the Anthony Kill Stream.

Exposure Pathway Analysis. There are several pathways by which individuals on or near the site may be exposed to site-related contamination. These pathways involve exposure to soil, groundwater, surface water, air, and sediment. Table 6-4 presents the exposure pathways evaluated in this risk assessment.

Soil Exposure Pathway. Contamination was found in surface and subsurface soil, thus individuals who might contact these soils could be exposed to site-related contamination. Surface soil along the Anthony Kill bank was found to contain SVOCs. Subsurface soils near the former gas plant structure locations were found to contain VOCs, SVOCs, and some inorganic compounds.

Because the area along the Anthony Kill is not fenced, the potential exists for trespassers to gain access to the site and contact soil contaminants. However, a steep embankment limits access to the site, making the potential for this exposure very low. Furthermore, most of the site is covered by asphalt or buildings. It is assumed that trespassers could only be exposed to surface soil behind the office building near the Anthony Kill, an area that is densely vegetated. If trespassers were to gain access to other areas of the site, it is unlikely that they would dig below the surface to contact contaminated soil. Because the exposure of

trespassers to contaminated subsurface soil is unlikely, only surface soil exposure will be assessed under this exposure scenario.

Subsurface soil could be uncovered during excavation activities in the future (or regrading if the site is leased). Such activities might include the servicing of underground sewer, water, or other utility lines. Workers could contact contaminated soil and uncovered stockpiled materials. Therefore, exposure of workers (i.e., utility workers) to excavated soil will be evaluated in this report.

Groundwater Exposure Pathway. Contamination was found in groundwater. However, there appear to be no exposures to this medium, for two reasons. First, as shown in the Tasks 2 and 3 Reports, most of the groundwater under the site appears to discharge directly into the Anthony Kill, except for groundwater in the southern and eastern portions of the site that moves easterly towards the Hudson River.

Second, there are no known current users of the groundwater near or downgradient of the Mechanicville site. The City of Mechanicville obtains its drinking water from a surface water reservoir approximately three miles northeast of the site, at an elevation approximately 160 feet higher than the site. The closest domestic wells are nearly a mile southwest (upgradient) of the site in the Town of Halfmoon, and no active industrial wells were identified in the Mechanicville area. Two abandoned industrial wells are located northeast and south of the site. Neither appear to be downgradient from the site. Although some groundwater moves east of the site before discharging into the river, there are no known receptors, so groundwater is not considered a potential current or future exposure pathway.

Surface Water Exposure Pathway. Surface water of the Anthony Kill represents another potential pathway for exposure to site-related contaminants. Surface water runoff from the site flows into two drainage catch basins that empty via underground culverts into the Anthony Kill. Another potential source of site-related contamination to Anthony Kill surface water is on-site shallow groundwater, which discharges to the stream.

NYSDEC has classified the section of stream from the Mechanicville city line to the Hudson River as Class D (usable for secondary noncontact recreation such as boating). Use of this section of the Anthony Kill for secondary recreation has

been confirmed by the City of Mechanicville (Erano, 1989). Every spring there is a canoe race down the Anthony Kill, going through Mechanicville, to the Hudson River.

Because of the proximity of residential neighborhoods to the site, and because the stream is used for recreational purposes, it is likely that people contact the surface water in the Anthony Kill. Surface water data collected from the Anthony Kill do not indicate that site-related contaminants are present at detectable levels. Therefore, exposure by this pathway will not be assessed further.

Sediment Exposure Pathway. Site-related contaminants were found in the sediments of the Anthony Kill, primarily in the samples collected adjacent to the site (SED-2). Individuals who might contact these sediments could be exposed to site-related contamination. In addition to the contaminants found in the sediments, there has been an unconfirmed report of coal tar from the site seeping into the Anthony Kill (E.C. Jordan Co., 1989).

Public contact with contaminated sediments is possible because the stream is used for recreational purposes. Also, each year residents of Mechanicville clear away debris that collects in the stream for an annual canoe race to the Hudson River (Erano, 1989). Sediment exposure could occur if canoeists get out of their boats and contact the contaminated sediments. On occasion, town workers enter the stream near the site to clear debris or to work on the North Central Avenue Bridge. During such activities, workers could be exposed to contaminated sediments. Therefore, potential exposures of both the general public and construction workers to contaminants in the sediments of the Anthony Kill will be assessed.

Inhalation Exposure Pathway. The possibility of current site users inhaling VOCs was investigated by monitoring indoor air on the site.

Residents living near the site could be exposed to site-related contaminants by the inhalation of fugitive dust. Coal tar contaminants could be released to the air during the excavation of contaminated soil from such activities as underground utility repair. If the excavated soil were to remain stockpiled on the site, the soil pile could act as a source of fugitive dust. Contaminants can become airborne by vaporizing or by aerosolizing as particulate-bound contaminants from wind erosion of excavated soil. These contaminants could potentially be inhaled by residents

downwind of the Mechanicville site during the period such activities occur. Therefore, exposure of residents to site-related compounds via the inhalation pathway will be evaluated.

Utility workers may also be exposed to these volatile compounds and particulate emissions. Worker exposure will be evaluated by comparing modeled ambient concentrations to worker health standards, to assess compliance with health and safety regulations.

Air Quality Monitoring of Fugitive Air Emissions. Future inhalation exposures at the Mechanicville site are possible during activities such as underground utility repair. This section presents the air modeling approach used to predict particle and VOC emissions and the resulting downwind air concentrations.

Currently, the Mechanicville site is not a source of fugitive air emissions because the site is covered with buildings and asphalt paving. However, if construction activities occurred (e.g., excavation of a trench to repair utility lines), contaminated shallow soils (at an average depth of 7 feet) could be dispersed into the air. In addition, VOCs could become airborne due to volatilization.

As discussed, two future potential scenarios involving excavation of soil have been identified in this risk assessment: removal of coal tar-related structures and utility repair. Because ABB-ES predicted the duration of volatile emissions to be 10 times longer for utility repair compared with tank removal, only utility repair activities are modeled.

ABB-ES used a two-step modeling process to estimate atmospheric concentrations of air contaminants potentially emitted from the Mechanicville site. In the first step, we estimated contaminant emission rates. In the second step, we estimated downwind ambient concentrations using air dispersion modeling.

The modeling process is summarized in the following paragraphs and is discussed in detail in Appendix G-4.

To predict emission rates for nonvolatile contaminants (i.e., PAHs and amenable cyanide), ABB-ES used USEPA-developed particle emission rates due to wind erosion and assumed the contaminant fraction of the particles to be equal to the soil fraction (Cowherd et al., 1985). For VOCs (assumed to be a source of

exposure only during utility repair work when subsurface soil is exposed for more than a couple of days), ABB-ES estimated volatilization emission rates based on the total mass of each contaminant that could be volatilized. ABB-ES found that emission rates for volatilized contaminants, under assumed conditions, greatly exceeded the contaminant emission rates for particles.

ABB-ES predicted emission rates of contaminants from the Mechanicville site for both particles (dust) and VOCs using the following modeling methods.

To predict total inhalable fugitive dust emissions, ABB-ES applied equations based on field research of surface mines and storage piles for various materials (Cowherd et al., 1985). These equations can be used to estimate contaminant emissions assuming contaminant concentration in the airborne dust equals the measured chemical concentrations in the surface soil.

Airborne inhalable particulate matter, defined as particles with an aerodynamic diameter equal to or smaller than 10 micrometers (μm), are denoted by the symbol PM_{10}. Inhalable particulates can be retained by the body upon inhalation and contribute to inhalation exposure.

Estimates of contaminant emission rates were based upon PM_{10} emission factors for wind erosion, the duration of construction activities, the mass fraction of contaminant in the soil, and the exposed surface area of the contaminated soil (see Appendix G-4).

The volatilization of contaminants through the soil is a complex process involving the mass transfer of volatiles from the soil particles into the air pores in the soil, mass transfer through the soil pore spaces, and mass transfer from the soil surface into the ambient air. To estimate the volatilization rates of organic chemicals from the contaminated soil, ABB-ES used a simplified but conservative approach.

Based on the mean soil concentration measured at the Mechanicville site, the mass (grams) of the contaminant in the soil for two soil volume cases was estimated. Contaminant emission rates due to volatilization from the surface soils were calculated (see Table G-4-2 in Appendix G-4) for the following two cases:

Most probable:	10 percent of VOC mass emitted over 20-day period
Worst case:	100 percent of VOC mass emitted over 30-day period

For the two cases, the emission rates due to volatilization from the exposed soil are assumed to remain constant over the specified period.

After estimating contaminant emission rates for the different scenarios, ABB-ES used air dispersion models to estimate ambient air concentrations at selected distances to the receptor from the Mechanicville site. For modeling purposes, ABB-ES considered the soil piles from the hypothetical future site construction to be area sources with dimensions equaling the exposed soil surface area. Contaminant emissions were assumed to be mixed uniformly over a height equal to the height of the soil pile.

The ambient air concentrations were predicted as hourly values of contaminant concentrations. To relate these predictions to longer averaging times, conservative scaling factors recommended by USEPA (1977) were used to estimate longer-duration exposure concentrations. The 1-hour average concentration predictions were multiplied by 0.40 to obtain 24-hour average off-site concentrations, and by 0.70 to obtain 8-hour average on-site concentrations (see Appendix G-4).

The estimated ambient air concentrations due to fugitive dust emissions from soil erosion for the utility repair scenario are presented in Tables G-4-3 and G-4-4 in Appendix G-4. The ambient 1-hour average concentration was calculated based on an assumed D atmospheric stability class, and windspeeds of 4.0 m/s and 21.4 m/sec. These windspeeds are based on local climatological data to represent the most-probable and maximum hourly windspeeds, respectively.

Based on the emission rates for volatilization from surface soil, Table G-4-5 provides the chemical-specific 1-hour average VOC concentrations for the two contaminated soil volume cases (i.e., two utility repair scenarios). The ambient 1-hour average concentrations were calculated based on an assumed atmospheric stability Class D and wind speed values of 2.0 and 4.0 m/sec. These assumed wind speeds are low, to be extremely conservative. It is unlikely that there would be 2.0 m/sec winds at a D stability class for extended periods.

Additional Potential Routes of Exposure. If the site were to be used in the future for other purposes, existing above- and below-ground structures would most likely be removed. The site could be regraded, which might lead to potential dermal and inhalation exposures.

Exposed Population Assessment. In this section, the general characteristics of the human population who represent potential receptors to site-related contamination will be discussed. The discussion includes identification of particularly sensitive subpopulations within the vicinity of the Mechanicville site, and land uses that would be associated with these populations.

Several subpopulations are particularly sensitive to chemical exposures: the very young, the very old, and the infirm. The young are particularly sensitive to chemical insult. This is because an equivalent dose of a harmful chemical will have a greater effect on a child than on an adult due to the child's smaller body weight (a dose is expressed as milligrams of contaminant per kilogram of body weight). A child's immature immune system is also more susceptible to insult than an adult's. The old and the infirm are sensitive because they typically suffer from other medical problems that decrease the body's ability to fight chemical insult. Also, the elderly and the infirm may take medication for health problems that can exacerbate the effects of harmful chemicals on the body.

According to the 1980 US Census, the population of Mechanicville was 5,500. Of these 5,500, 733 people were under the age of 10, 621 were ages 10 to 18, and 943 were over 65. Approximately half of the people of Mechanicville can be considered to be potentially sensitive individuals.

Potentially sensitive subpopulations are often associated with certain land uses. These include day-care centers, schools, recreational areas, nursing homes, hospitals, waterways used for drinking water, and agricultural land used for food production.

Figure 3-6 shows land use within a one-half mile radius of the Mechanicville site. The area surrounding the site is primarily residential. Potentially sensitive land uses within a one-half mile radius from the Mechanicville site include a nursery school, an elementary school, a special education school, a day-care center, an elderly housing project, several parks and playgrounds, and a large area of recreational/open space.

Calculation of Body Dose Levels. To estimate incurred body dose levels, two hypothetical exposure scenarios were developed (see Appendix G-3). These reflect realistic worst case and most probable case exposure conditions. These scenarios differ by varying exposure parameters (e.g., duration of exposure,

frequency of contact) and by varying environmental concentrations, using either the maximum concentration detected (realistic worst case) or the average concentration (most probable case). This approach provides a range of potentially incurred body dose levels that would presumably bracket actual exposures for a hypothetical individual. The hypothetical populations for these exposure scenarios are categorized as the general population, children (ages 1 to 6), older children (ages 8 to 18), and utility or construction workers.

Incurred body dose levels were calculated for dermal, oral, and inhalation exposures by multiplying the concentration of each contaminant by appropriate exposure parameters or factors. These factors include the following: frequency and duration of exposure, ventilation rate or sediment/soil contact rate, and the appropriate TKF. The equations used to calculate incurred body dose levels for carcinogenic and noncarcinogenic compounds are presented in Table 6-5.

Incurred body doses were estimated for both current and future potential exposures. Current exposures include the potential exposure of older children (ages 8 to 18) and workers to site-related contamination in sediments of the Anthony Kill (adjacent to the site) and older children (ages 8 to 18) to surface soil. These exposures could occur by direct contact with and incidental ingestion of sediments and soil. (Incidental ingestion can occur when sediment or soil on a person's hands is transferred to food or cigarettes, and is then ingested.)

Future exposures include potential exposures to contaminated subsurface soil on the site during excavation activities. Workers on the site could be exposed by direct contact with and incidental ingestion of subsurface soil, and inhalation of volatilized organic compounds and airborne particulate contaminants. Future exposures can also include the general population, residents downwind of the site who may be exposed to VOCs and airborne particulate contaminants during excavation activities.

As discussed, incurred body doses were calculated for current potential exposures to site-related contaminants in sediments from the Anthony Kill. These doses were estimated for two populations: older children (ages 8 to 18) and construction workers.

Sediment Exposure Scenarios. Parameters used for body dose calculations of older children exposed to sediments are presented in Table 6-6. For this scenario,

"children" refers to age 8 up to age 18 (children under 8 years of age would not be as likely to canoe the Anthony Kill). Older children were chosen to represent the general population because they are more sensitive to chemical insult than adults and because it is more probable for older children to get out of their canoes and contact the sediments than adults.

The average body weight of the 8 to 18 age group is 45 kilograms (kg) (Anderson, et al., 1985). The surface area exposed is assumed to be the hands, forearms, feet, and lower legs, and it is based on the 50th percentile (most probable) and 95th percentile (realistic worst). A frequency of one exposure per year was chosen to represent the most probable case because the canoe race occurs only once per year. Two exposures per year were assumed for the realistic worst case scenario.

Even though older children could be exposed to Anthony Kill sediments more than once a year, it is unlikely that they would be adjacent to the site during each exposure. In addition, because it is most likely that only older children (i.e., ages 13-18) would be allowed to canoe down the stream, five years was chosen as a most probable exposure duration, while 10 years was chosen as the realistic worst case. Ten years represents the maximum possible exposure duration for the ages of 8 to 18.

Table 6-7 presents the parameters used for calculating incurred body doses of construction workers exposed to sediments in the Anthony Kill. It is assumed that construction workers could be exposed to contaminated sediments while performing such activities as repairing the Central Avenue Bridge. Only hands and forearms were assumed to be exposed because workers would most likely wear long pants, boots, and shirts that would limit the exposed surface area. The 50th percentile was used to calculate the most probable case surface area, while the 95th percentile was used to calculate the realistic worst case surface area.

It was assumed that some sediment could remain on the hands after working and be incidentally ingested, and that the frequency of these exposures would be five or 10 days per year. The duration of exposure was assumed to be three years for the most probable case and 10 years for the realistic worst case. Although construction-type work could occur for several years, it is unlikely that a particular worker would return to the same place for more than 10 years.

Soil Exposure Scenario. Table 6-8 presents the parameters used for calculating incurred body doses of trespassers to surface soil. Many of these parameters are the same as for sediment exposures. The potentially exposed population was assumed to be the same – older children between the ages of 8 and 18 with an average body weight of 45 kg. Surface area, soil contacted, amount incidentally ingested, and the total exposure duration were also assumed to be the same. The frequency of exposure, however, differs in that exposure to surface soil is assumed to occur five days per year for a most probable case, and 10 days per year for a realistic worst case. Few exposures are assumed because access to the site is gained only by climbing a steep, highly vegetated slope.

Exposure Parameters for Future Potential Exposure. Incurred body doses were estimated for future potential exposures to both subsurface soil and air emissions. Subsurface soil exposure body doses were calculated for utility workers, while incurred body doses from inhalation of contaminants were estimated for the general population.

Subsurface Soil Exposure Scenario. Table 6-9 presents the exposure parameters used to estimate incurred body doses to utility workers via direct contact with and incidental ingestion of contaminated soil. Utility workers' hands and forearms only were assumed to be exposed to subsurface soil. It was also assumed that the frequency of utility repair activities in which the worker might be exposed to soil was relatively low (one or two days per year), although the pile of excavated soil could sit around for several days. The duration of exposure was assumed to be over a two- or four-year period, meaning that a worker could return to the site in subsequent years.

Inhalation Exposure Scenario. Exposure to VOCs on the site was evaluated by sampling indoor air. Table 6-10 presents the exposure parameters used to estimate incurred body doses due to inhalation of airborne particulates and volatile contaminants during utility repair activities. Although the general population downwind of the site could be exposed to particulate dust and volatiles, exposure doses were estimated for children only, ages 1 to 6, because they represent the most sensitive population. To estimate a child's incurred body dose due to inhalation exposure, ABB-ES assumed that the child could be exposed 24 hours a day at two different locations and during three different activities. These include attending pre-school and playing and sleeping at home. It is assumed that both locations are downwind of the site. The child was

assumed to attend the nearest identified school, which was at an estimated distance of 750 feet from the site. The child was also assumed to live at the nearest identified residence, which is approximately 100 feet from the site.

Inhalation rates for the three activities are different: light activity during school, moderate activity during play, and a resting rate while asleep. Although actual utility repair might only take one or two days, the soil pile that was assumed to be stockpiled on the site could potentially remain on the site for several days after the repair work. Thus, chemicals in the soil could volatilize, and particulates could be blown downwind, increasing the time that a child could be exposed to site-related contaminants. The soil pile was assumed to sit for 20 days (most probable case) or 25 days (realistic worst case), corresponding to exposure durations of 20 or 25 days.

As mentioned earlier, incurred body doses will not be estimated for workers on site. Instead, the estimated concentrations of contaminants in air will be compared to OSHA standards, specifically PELs.

Finally, although potentially contaminated subsurface soil could remain in a pile for several days at the site, incurred body doses for children due to direct contact with these soils will not be estimated. This is because, as stated, access to the site is restricted.

6.1.4 Air Quality Modeling of Fugitive Air Emissions

Future inhalation exposures at the Mechanicville site are possible during activities such as underground utility repair. This section presents the air modeling approach used to predict particle and VOC emissions and the resulting downwind air concentrations.

Introduction. Currently, the Mechanicville site is not a source of fugitive air emissions because the site is covered with buildings and asphalt paving. However, if construction activities occurred (e.g., excavation of a trench to repair utility lines), contaminated shallow soils (at an average depth of 7 feet) could be dispersed into the air. In addition, VOCs could become airborne due to volatilization. As discussed in Section 6.1.3, two future potential scenarios involving excavation of soil have been identified in this risk assessment: removal of coal tar-related structures and utility repair. Since ABB-ES predicted the

duration of volatile emissions to be 10 times longer for utility repair compared with tank removal, only utility repair activities are modeled.

ABB-ES used a two-step modeling process to estimate atmospheric concentrations of air contaminants potentially emitted from the Mechanicville site. In the first step, ABB-ES estimated contaminant emission rates. In the second step, ABB-ES estimated downwind ambient concentrations using air dispersion modeling.

The modeling process is summarized in the following paragraphs and is discussed in detail in Appendix G-4.

To predict emission rates for nonvolatile contaminants (i.e., PAHs and amenable cyanide), ABB-ES used USEPA-developed particle emission rates due to wind erosion and assumed the contaminant fraction of the particles to be equal to the soil fraction (Cowherd, 1985). For VOCs (assumed to be a source of exposure only during utility repair work when subsurface soil is exposed for more than a couple of days, ABB-ES estimated volatilization emission rates based on the total mass of each contaminant which could be volatilized. ABB-ES found that emission rates for volatilized contaminants, under assumed conditions, greatly exceeded the contaminant emission rates for particles.

Estimate of Emissions. ABB-ES predicted emission rates of contaminants from the Mechanicville site for both particles (dust) and VOCs using the modeling methods described in this section.

Fugitive Dust Emissions. To predict total inhalable fugitive dust emissions, ABB-ES applied equations based on field research of surface mines and storage piles for various materials (Cowherd, 1985). These equations can be used to estimate contaminant emissions assuming contaminant concentration in the airborne dust equals the measured chemical concentrations in the surface soil.

Airborne inhalable particulate matter, defined as particles with an aerodynamic diameter equal to or smaller than 10 micrometers (um), are denoted by the symbol PM_{10}. Inhalable particulates can be retained by the body upon inhalation and contribute to inhalation exposure.

Estimates of contaminant emission rates were based upon PM_{10} emission factors for wind erosion, the duration of construction activities, the mass fraction of

contaminant in the soil, and the exposed surface area of the contaminated soil (see Appendix G-4).

Volatilization Rates from Soil. The volatilization of contaminants through the soil is a complex process involving the mass transfer of volatiles from the soil particles into the air pores in the soil, mass transfer through the soil pore spaces, and mass transfer from the soil surface into the ambient air. To estimate the volatilization rates of organic chemicals from the contaminated soil, ABB-ES used a simplified but conservative approach.

Based on the mean soil concentration measured at the Mechanicville site, the mass (grams) of the contaminant in the soil for two soil volume cases was estimated. Contaminant emission rates due to volatilization from the surface soils were calculated (see Table G-6-2 in Appendix G-4) for the following two cases:

Most probable:	10 percent of VOC mass emitted over 20-day period
Worst case:	100 percent of VOC mass emitted over 30-day period

For the two cases, the emission rates due to volatilization from the exposed soil are assumed to remain constant over the specified period.

Air Quality Dispersion Models. After estimating contaminant emission rates for the different scenarios, ABB-ES used air dispersion models to estimate ambient air concentrations at selected distances to the receptor from the Mechanicville site. For modeling purposes, ABB-ES considered the soil piles from the hypothetical future site construction to be area sources with dimensions equaling the exposed soil surface area. Contaminant emissions were assumed to be mixed uniformly over a height equal to the height of the soil pile.

The ambient air concentrations were predicted as hourly values of contaminant concentrations. In order to relate these predictions to longer averaging times, conservative scaling factors recommended by USEPA (1977) were used to estimate longer-duration exposure concentrations. The 1-hour average concentration predictions were multiplied by 0.40 to obtain 24-hour average off-site concentrations, and by 0.70 to obtain 8-hour average on-site concentrations (see Appendix G-4).

Air Quality Modeling Results. The estimated ambient air concentrations due to fugitive dust emissions from soil erosion for the utility repair scenario are presented in Tables 6-4-3 and 6-4-4 in Appendix 6-4. The ambient 1-hour average concentration was calculated based on an assumed D atmospheric stability class, and windspeeds of 4.0 m/s and 21.4 m/sec. These windspeeds are based on local climatological data to represent the most-probable and maximum hourly windspeeds, respectively.

Based on the emission rates for volatilization from surface soil, Table 6-4-5 provides the chemical-specific 1-hour average VOC concentrations for the two contaminated soil volume cases (i.e., two utility repair scenarios). The ambient 1-hour average concentrations were calculated based on an assumed D atmospheric stability class and wind speed values of 2.0 and 4.0 m/sec. These assumed wind speeds are low, to be extremely conservative. It is unlikely that there would be 2.0 m/sec winds at a D stability class for extended periods.

6.1.5 Risk Characterization

This subsection characterizes the risks to those populations who could potentially be exposed to contamination found at the Mechanicville site. The type and extent of risks depend on the nature, duration, and frequency of exposure to contaminants, as well as the characteristics of the populations exposed. This exposure-related information combined with the dose-response data are the basis for this risk characterization.

Carcinogenic and noncarcinogenic risk estimates were calculated for each of the hypothetical exposure scenarios discussed in Subsection 6.1.3. Two types of hypothetical exposure scenarios were developed to reflect realistic worst and most probable case exposure conditions: older children (ages 8 to 18) being exposed to on-site surface soil and sediment in the Anthony Kill, construction workers exposed to sediment, utility workers exposed to on-site subsurface soil, and children exposed to off-site volatile compounds and particulate dusts emanating from excavated soil.

Carcinogenic risk estimates were determined by multiplying the body-dose level for each carcinogen by its USEPA carcinogenic potency value and, for PAHs, by the ICF-Clement potency value as well. This calculation results in an estimate of

an individual's incremental or excess cancer risk due to exposure to site-related contamination.

Noncarcinogenic risk estimates were determined by dividing the body-dose level for each noncarcinogen by the relevant standard, criterion, or guideline, resulting in a ratio called the risk ratio. Noncarcinogenic risk ratios for the individual compounds were then summed together to form a Hazard Index (see Appendix G-3). To put these risk estimates into perspective, they were evaluated against target risk levels.

Target risk levels for carcinogenic compounds have been adopted from USEPA guidelines stating that the total incremental carcinogenic risk for an individual resulting from exposure at a hazardous waste site should be between 10^{-4} and 10^{-6}. (A risk of 10^{-4} is interpreted as a 1 in 10,000 chance of an individual developing cancer during a lifetime, as a result of the exposure.) Based on these guidelines, the risk characterization in this report refers to the carcinogenic risk estimates as being "below the target range" when risks are less than 10^{-6}, "within the target range" when risks are between 10^{-4} and 10^{-6}, and "above the target range" when risks are above 10^{-4}. Historically, regulatory agencies have considered risks between 10^{-5} and 10^{-6} to be acceptable.

For noncarcinogenic compounds, the Hazard Index is compared to 1. If the Hazard Index is less than or equal to 1, no adverse health effects are anticipated from the predicted body-dose level. If the index is greater than 1, the predicted body-dose level could potentially result in adverse health effects. This determination is necessarily imprecise, because the derivation of the relevant standard or guideline involves the use of multiple safety factors. In addition, the risk ratios for individual compounds should properly be summed only if the target organ or mechanisms of action are identical for the compounds. Therefore, the potential for adverse health effects of a mixture having a Hazard Index greater than one must be evaluated on a case-by-case basis.

Risks Due to Soil Exposures. Both carcinogenic and noncarcinogenic risks were estimated for exposure to contaminated soil at the Mechanicville site. The two populations who could potentially be exposed are older children, ages 8 to 18, and utility workers. Risks were estimated for older children exposed to surface soil, and utility workers exposed to subsurface soil.

Potential Risks to Teenagers and Older Children. Risk estimates were calculated for teenagers and older children potentially exposed to contaminated surface soil at the Mechanicville site. This population (ages 8 to 18) was selected because it represents the one with the highest exposure potential; older children play unsupervised, are mobile, and could trespass onto the site and be exposed to surface soil. The risk estimates are presented in Table 6-11.

The incremental carcinogenic risk estimated for the most probable case scenario is 2.3×10^{-6} and for the realistic worst case, 1.8×10^{-5}. The excess risk is essentially due to exposure to the carcinogenic PAHs. Both estimates are within the USEPA target range. Using the CPF developed by ICF-Clement Associates (1987a and b), carcinogenic risks of 6.5×10^{-7} and 5.0×10^{-6} were estimated for the most probable and realistic worst cases, respectively. These estimates are below and within the USEPA target range.

Noncarcinogenic risks are 0.00011 for the most probable case scenario, and 0.0013 for the realistic worst case scenario. Both of these are well below 1. Therefore no significant adverse health effects would be expected due to the exposure of older children to contaminated soil under the assumed conditions of exposure.

Potential Risks to Utility Workers. Risk estimates were also calculated for utility workers who could be exposed to contaminated subsurface soil during future utility repair work (Table 6-12). Using the USEPA CPF, total incremental carcinogenic risks for the most probable case scenario were estimated at 1.3×10^{-7}. Although there were two carcinogenic compounds detected in the subsurface soil, more than 99 percent of the risk is attributed to the presence of carcinogenic PAHs. Risk for the realistic worst case was estimated at 3.5×10^{-5}. This is also attributable to the presence of carcinogenic PAHs. Both risk estimates are within the USEPA's target range.

Using the PAH potency factor developed by Clement Associates (1987a and b), carcinogenic risks were estimated at 3.6×10^{-8} and 9.9×10^{-6} for the most probable and realistic worst cases, respectively. These are below and within the USEPA target range.

The noncarcinogenic Hazard Indices were significantly less than 1 for both scenarios, with an index of 0.000016 for the most probable case and 0.0022 for the realistic worst case. Because the Hazard Index for both scenarios was well below

one, no adverse health effects would be expected in utility workers exposed to subsurface soil at the Mechanicville site under the assumed exposure conditions.

Risks Due to Sediment Exposures. Both carcinogenic and noncarcinogenic risks were estimated for exposure to sediment in the Anthony Kill. The two populations who could potentially be exposed are older children and construction workers.

Potential Risks to Older Children. Risk estimates were calculated for older children potentially exposed to site-related contamination in the sediments of the Anthony Kill adjacent to the site (Table 6-13). Using the USEPA potency factor for PAHs, total incremental carcinogenic risks were below the USEPA target range for the most probable case scenario (9.4×10^{-9}), and within the target range for the realistic worst case scenario (2.1×10^{-6}). Carcinogenic PAHs contributed to more than 99 percent of the total incremental risk in both cases.

Using the PAH potency factor developed by ICF-Clement Associates (1987a and b) carcinogenic risks were estimated at 2.6×10^{-9} and 5.8×10^{-7} for the most probable and realistic worst cases, respectively. Both estimates are below the USEPA target range. The Hazard Index was estimated at 0.000003 for the most probable case and 0.0002 for the realistic worst case. These Hazard Indices are significantly below 1. Therefore, no adverse health effects would be expected from the exposure of older children to contaminated sediments.

Potential Risks to Workers. Risks were estimated for construction workers potentially exposed to contaminated sediments of the Anthony Kill. They are presented in Table 6-14. Using the USEPA potency factor, incremental carcinogenic risk estimates were below the USEPA target range for the most probable case (1.3×10^{-8}) and within the target range for the realistic worst case (3.4×10^{-6}). Carcinogenic PAHs contributed to more than 99 percent of the total risk in both cases. Using the PAH potency factor developed by ICF-Clement Associates (1987a and b), carcinogenic risks were estimated at 3.7×10^{-9} and 9.6×10^{-7} for the most probable and realistic worst cases, respectively. Both estimates are below the USEPA target range.

Hazard Indices were below 1 for both the most probable and realistic worst case, with indices of 0.0000052 and 0.0003, respectively. Because both indices are

significantly below one, no adverse health effects would be expected due to contaminated sediments during assumed construction-type activities.

Risks Due to Inhalation of Volatile Organic Compounds and Particulates. Both carcinogenic and noncarcinogenic risk estimates were calculated for exposure to VOCs and particulate dust originating from a hypothetical soil pile excavated and stockpiled on-site during utility repair work. The population assumed to be exposed were young children living downwind of the site. This population was used because it represents the most sensitive group.

Potential Risks to Young Children. Risk estimates were calculated for young children, ages 1 to 6, assumed to inhale VOCs and particulates originating on site (Table 6-15). Using the USEPA potency factor for PAHs, the total incremental carcinogenic risk was estimated at 2.2×10^{-7} for the most probable case and 1.3×10^{-5} for the realistic worst case. Both estimates are within the USEPA target range. The major contributor to these estimates is carcinogenic PAHs, at 85 and 86 percent of the total risk for the most probable and realistic worst cases, respectively. Using the PAH potency factor developed by ICF-Clement Associates (1987a and b), carcinogenic risks were estimated at 4.9×10^{-8} and 2.6×10^{-6} for the most probable and realistic worst cases, respectively. Both estimates are below or within the USEPA target range.

The Hazard Index was estimated at 0.00035 for the most probable case and 0.018 for the realistic worst case. Both indices are well below 1. Therefore, no adverse health effects would be expected due to the inhalation of VOCs or fugitive dust particulates originating at the Mechanicville site under the assumed conditions of exposure.

Uncertainty/Limitations in Risk Assessment. Regardless of the type of risk estimate developed, it should be emphasized that all estimates of risk are based on numerous assumptions that introduce many uncertainties into the risk characterization process. Assumptions such as frequency and duration of exposure are subjective decisions based on knowledge of site conditions. Absorption rates are often unknown for specific chemicals, and the pharmacokinetics of a contaminant can differ between the specific site and the laboratory study from which the dose/response criterion was derived. In addition, the use of established standards or guidelines, such as the dose-response value,

introduces additional uncertainties into the risk estimates due to the following factors:

- potential adverse human health effects are extrapolated from effects seen in animal studies
- effects observed at low doses are often extrapolated from effects seen at high doses
- atmospheric concentrations of contaminants volatilizing from soil are often estimated using models
- dose-response effects are often estimated using models

By using a range of realistic exposure assumptions, it is ABB-ES' opinion that the uncertainty inherent in the risk characterization process has been minimized to the best extent possible. Both lower and upper bounds for risk have been provided for each exposure scenario. These estimates are designed to ensure human health protection. These should be used to determine the location and relative magnitude of risk at the site, and the relative magnitude of risk among media.

Summary. Table 6-16 presents a summary of estimated risks due to exposure to contamination in soil and sediment at the Mechanicville site. All incremental carcinogenic risks were either within or below the USEPA target range of 10^{-4} to 10^{-6}. Carcinogenic PAHs appear to be the major contributor to these risks. In addition, all Hazard Indices of noncarcinogenic risks were well below 1, indicating that no adverse noncarcinogenic health effects would be expected due to exposure.

Based on the results/conditions of this quantitative risk assessment, ABB-ES concludes that, under the assumed exposure conditions, contaminants found at this site do not pose a significant health risk to workers on the site or to residents around the site. As has been done in the past, the site health and safety plan should be followed during any future exploratory work on the Mechanicville site to prevent or minimize undue exposure.

6.2 ENVIRONMENTAL EVALUATION

The primary objectives of the environmental assessment for the Mechanicville site are to characterize the environmental receptors associated with the site; evaluate present and future impacts; and if appropriate, provide sufficient information to support remedial alternatives and develop mitigative measures to address any adverse effects. The risk assessment focused primarily on the Anthony Kill, as this stream is directly adjacent to the site. Potentially affected media investigated include soil, surface water, groundwater, and sediment.

Environmental Receptors. Environmental receptors potentially affected by site-related chemicals include aquatic organisms in the Anthony Kill, and terrestrial wildlife that use the area. Due to the industrialized nature of the area, and the lack of suitable habitats, it is unlikely that the site is significantly utilized by wildlife.

Although the surficial soil is contaminated with PAHs, the exposed soil consists primarily of packed gravel unsuitable for soil invertebrates. Consequently, a movement of contaminants through the terrestrial food web is considered unlikely. In addition, the relative importance of this exposure pathway is minimized by the small size of the site and the low wildlife-carrying capacity of the surrounding commercial area.

Aquatic habitats adjacent to the site are potentially at risk because these areas can function as contaminant sinks and groundwater discharge areas. As overland runoff and groundwater discharge to the Anthony Kill, potential contaminants transported in these flows can accumulate in sediment or be directly discharged to surface water. Accumulated contaminants in sediment can resist breakdown and contribute to water quality degradation over time. There is also the potential for impact to downstream areas. Potential aquatic receptor taxa include fish, macroinvertebrates, plankton, and amphibians. Limited data exist on the species present in adjacent aquatic areas.

NYSDEC has assigned two stream classifications to the Anthony Kill. The section upstream from the Mechanicville city line is classified as C(t). Class C waters are suitable for fishing and all other uses except as a source of water supply for drinking, culinary, or food processing purposes or primary contact recreation. The "t" denotes that this segment of the stream is a trout stream. In

Mechanicville, the stream is classified as D. Class D waters are designated for secondary contact recreation, but no higher classification uses because of intermittent flow or water conditions that do not support the propagation of game fish.

According to the records of the New York State Wildlife Resources Center, no endangered, threatened, or species of special concern occur in proximity of the site.

Environmental Risk Assessment. This subsection presents an assessment of risk to environmental receptors from contaminated surface water, groundwater, and sediments.

Surface Water. As part of the Task 2 field investigation, four rounds of surface water samples were collected at three locations along the Anthony Kill during 1986 and 1987. Location SW-1 is situated upstream of the site, location SW-2 is situated adjacent to the site, and location SW-3 is situated downstream. Samples were collected in September and December of 1986, and March and June of 1987.

In the Task 3 field investigation, two additional surface water sampling rounds were performed, again at three locations along the Anthony Kill. However, during this field investigation, a new sample location (SW-4) further downstream was chosen to replace SW-3, based on a more complete understanding of the extent of groundwater discharge to the stream. A statistical summary of compounds detected during the surface water sampling is presented in Table 6-17. Mean values presented in Table 6-17, as well as the tables which follow, were calculated using zeros for sample data reported as ND. The range of concentrations at which these compounds were detected are presented in Table 6-18, along with relevant water quality standards.

Only BEHP, 2-methylnaphthalene and two inorganics (cyanide and iron) were detected at levels exceeding the AWQC or the New York Class D Standards. However, the levels of BEHP and the two inorganic compounds were not elevated, compared with the upstream location.

In addition, 2-methylnaphthalene was only detected once (in a location adjacent to the site) during the surface water sampling program, and was not detected in a duplicate sample taken concurrently. Three other PAH compounds,

acenaphthene, acenaphthylene and pyrene, were also detected at levels below their respective AWQC in the surface water sample which contained 2-methylnaphthalene. These compounds were not detected in the associated duplicate sample. The presence of PAHs in surface water appears to be infrequent. Levels are low when detected adjacent to the site and are not detected in downstream surface water samples. Therefore, the impact of PAH releases on stream water quality is expected to be minimal.

Groundwater. Although no environmental receptors are exposed directly to groundwater at the site, the majority of groundwater beneath the site discharges to the Anthony Kill (E.C. Jordan Co., 1987 and 1989), and stream quality could potentially be affected. Therefore an assessment of the potential impact of groundwater constituents discharging in the Anthony Kill was conducted.

Data used in this evaluation included analytical results from groundwater samples collected from the 12 site wells during December 1987 and March 1988, as part of the Task 3 Investigation, and the six Task 2 wells sampled on four previous occasions (September and December of 1986, and March and June of 1987). A summary of these analytical data is presented in Table 6-19, and maximum levels of each chemical were used in conjunction with a dilution factor, described below, to estimate potential groundwater impacts on the Anthony Kill.

To conservatively assess potential impacts of groundwater discharge to the Anthony Kill, an estimate of stream water quality under low flow conditions was made. The estimated stream concentrations were conservatively computed using the reported average low flow over a seven-day period with a 10-year recurrence interval (i.e., 7Q10) and the estimated groundwater discharge rate to the stream. The reported 7Q10 for the Anthony Kill is 17 cfs.

The estimated groundwater discharge rate was computed using a 500-foot length of the stream and a stream bank depth of 1 foot. The stream bottom is composed primarily of competent bedrock, and given the relative permeability of the soil, it is reasonable to assume that most of the groundwater discharge occurs through the stream bank soils. Using the estimated hydraulic conductivity for the on-site soils (200 feet per year or 6.3×10^{-6} feet per second) and a stream bank area of 500 square feet, the groundwater discharge rate is 0.003 cfs. Therefore, under low flow conditions during which dilution effect would be minimized, the estimated stream dilution factor is 5,363.

Estimated low flow stream concentrations were computed for all chemicals detected in groundwater at the site. For chemicals detected at levels below their reported solubilities the maximum observed groundwater concentration was divided by the estimated dilution factor to calculate the low flow stream concentrations. For those chemicals detected at levels that exceeded the respective reported solubilities, the maximum solubility reported in the literature was divided by the estimated low flow dilution factor to calculate the low flow stream concentrations.

The estimated low flow stream concentrations and the AWQC are listed in Table 6-19 along with groundwater concentration ranges and maximum reported solubility values. The estimated low flow concentrations are below the respective water quality criteria for all listed chemicals. This correlates with available stream water quality data where only 2-methylnaphthalene was detected at a level (0.035 mg/L) slightly exceeding the ambient water quality criterion (0.027 mg/L). The sample was collected adjacent to the site where the dilution is incomplete. Downstream samples showed no exceedance of the AWQC as predicted by the dilution estimates.

Sediments. Task 2 sediment samples were collected during four sampling episodes at three locations in the Anthony Kill concurrently with surface water collections. Task 3 samples were collected during two episodes (December 1987 and March 1988) from the same locations along the Anthony Kill as surface water samples. Additional sediment samples were taken by NYSEG personnel on November 1988 from a location adjacent to the site, and two samples were collected by NYSDEC personnel under the Route 146 bridge.

These analytical results were divided into three groups (upstream, adjacent, and downstream) and statistically summarized (Table 6-20). A number of VOCs, PAHs, and metals were detected in these samples. Sediment concentrations of two VOCs, 18 SVOCs, and one inorganic compound were higher adjacent to the site than at the upstream reference location (E.C. Jordan Co., 1987 and 1989).

There are no final standards or criteria for the protection of aquatic life for chemical levels in sediment. However, interim sediment criteria values have been established (USEPA 1988). These interim criteria are based on the Equilibrium Partitioning Approach (USEPA 1988), which estimates the interstitial water concentration of the contaminant given the TOC sediment concentration and the

partitioning coefficient between the two media. From this relationship, chronic AWQC are used to establish the "no-effect" concentration in the interstitial water. Thus, toxicity to benthic organisms is correlated to the interstitial, or pore water concentration, and not directly to the total concentration of the contaminant in the sediment.

Interim sediment criteria have been developed for only six of the chemicals (all PAHs) found during the sediment sampling program conducted for the Mechanicville site. These criteria, presented in Table 6-21, can be directly compared to the TOC-normalized PAH concentrations detected in Anthony Kill sediment. Chemical concentrations must be normalized because the extent to which PAHs and other hydrophobic organic compounds are bound to sediment, and hence unavailable to biota, is directly related to the amount of organic carbon (USEPA, 1988). In addition, available Effect Range Low (ER-L) values (Long and Morgan, 1990) have been provided. These values are derived from an exhaustive compilation of the available sediment toxicological information, and are interpreted as levels at which most aquatic organisms would not likely be impacted due to exposure to contaminated sediment. ER-L values are available for 13 of the constituents detected in Anthony Kill sediment.

The normalized average sediment concentrations measured upstream, adjacent to, and downstream of the site, along with available Interim Sediment Quality Criteria (SQC), associated confidence intervals and ER-Ls, are listed in Table 6-21. The confidence interval represents the range within which (with 95 percent certainty) the actual sediment criterion should fall, and is based on the uncertainty associated with the derivation of the protective criteria. The lower value of the interval represents the sediment concentration that, with 97.5 percent certainty, will be protective of aquatic biota. Similarly, the upper value represents a concentration at which deleterious effects are to be expected, with a similar degree of certainty, in at least some aquatic species.

To evaluate the potential impacts associated with chemical levels in sediment, chemical concentrations were compared with the available SQC and associated confidence intervals. The potential for deleterious effects exists when the concentration at which a chemical is detected falls within the confidence interval of the particular SQC. Chemicals detected at concentrations in the sediment below the lower value of the confidence interval are likely having no deleterious effects upon aquatic receptor organisms; similarly, chemicals detected at

concentrations above the upper value are likely having an impact on at least some species.

For the sediment quality criteria presented, the maximum concentration of phenanthrene in sediments adjacent to the site exceeds the SQC. This indicates that there is a possibility that phenanthrene is impacting some components of the aquatic community in the Anthony Kill. Due to the fact that average concentrations(Table 6-20)do fall below the actual SQC itself, however, this possibility is considered of minor concern. Maximum concentrations of the other PAH concentrations, for which SQC are available, do not exceed SQCs and are predicted to represent no risk of adverse impacts to aquatic receptors and no ER-L value was exceeded by the maximum concentration of constituents detected in Anthony Kill sediment. The potential effect on aquatic life of other sediment chemical concentrations cannot be evaluated due to the lack of applicable standards or criteria. However, the chemicals evaluated are considered to be representative of other similar compounds.

Two site-specific factors further reduce the potential for negative impacts that elevated PAH levels in the sediments have on stream biota in the Anthony Kill. First, because the stream is fairly fast moving (17 cfs under low flow conditions) and the substrate is rocky, with exposed bedrock in places, it is not likely that the benthic community is well developed in the vicinity of the Mechanicville site. Consequently, the abundance and diversity of aquatic receptors is expected to be quite limited.

In addition, the significant reduction in PAH levels in sediment in the downstream locations indicates that there is, at present, little migration of contaminants down the Anthony Kill. These results suggest that while elevated PAH levels are present in sediments of the Anthony Kill adjacent to the site, the levels are likely having little or no impact on freshwater life. Moreover, any potential impacts would be limited to a small area adjacent to the site.

This evaluation suggests that any potential adverse effects, due to the presence of PAHs in sediments, are quite minimal.

Conclusions. There is no indication that any threatened, endangered or species of special concern occur in the general vicinity of the site. Aquatic organisms

(including benthic species) are the environmental receptors most likely to be affected by site-related contamination.

An evaluation of the risks posed by contaminants detected in the surface water, groundwater and sediment suggests that some potential for impacts does exist for organisms existing in the Anthony Kill in a limited area adjacent to the site. However, these risks appear to be relatively minor, for several reasons. Few compounds were determined to exceed their media-specific protective criteria, and the extent of these exceedances were minimal. Moreover, potential impacts were associated only with "worst case" conditions (e.g., stream low-flow conditions), with no impacts expected under more typical assumptions. Finally, there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants detected in the downstream surface water and sediment samples never exceeded relevant protective criteria, even under the most conservative assumptions.

7.0 SUMMARY AND CONCLUSIONS

7.1 SUMMARY

The findings of the field investigations and analytical programs conducted during Task 2, Task 3, and Task 4 at the Mechanicville site are summarized in this section.

In brief, the findings are as follows:

- The shallow geology consists of 8 to 25 feet of heterogeneous fill deposits including a silty sand and gravel, a clayey silt and fractured shale, and a silty shale, all overlying fractured shale bedrock.
- The water table is approximately 5 to 10 feet below ground surface. Groundwater movement is principally within the silty shale and underlying bedrock fractures.
- Regional groundwater flow is west to east across the site, toward the Hudson River. Locally, groundwater flows to the north-northwest, discharging to the Anthony Kill.
- Land use in the vicinity of the site is both residential and commercial. Day-care centers, schools, recreational areas, nursing homes, and elderly housing projects are located in the vicinity of the Mechanicville site.

7.1.1 Nature and Extent of Contamination

Subsurface Soil

Analyses of subsurface soil samples from the field investigation program showed the presence of coal tar and coal gasification-related compounds (i.e., VOCs, PAHs, and cyanide) near the former relief gas holder, purifier and oxide houses, and filter beds. The highest levels of VOCs and PAHs were detected in samples taken at or near these sites. The highest levels of VOCs (3,800 and 3,410 mg/kg) were observed in samples taken at B-8 (at depths of 13.5 to 15.5 feet and 15.5 to

17.5 feet) which is located beneath the foundation of the former gas relief holder. The highest levels of PAHs were observed in samples taken from B-8 (5,440 mg/kg), TP-5 (8,500 mg/kg; adjacent to the filter beds) and B-3 (9,310 mg/kg in the vicinity of the former purifier and oxide houses). Deep soil samples (lower than 15 feet deep) contained lower levels of organics than the samples collected from shallow soils.

Iron levels ranged from 18,000 to 35,000 mg/kg. The lower concentrations were in the deeper fine silty sand. Higher levels were seen in shallow fill samples. Zinc levels generally ranged from 32 to 390 mg/kg, except for one Task 2 sample (B-5/S-1), which contained 1,600 mg/kg.

Cyanide was detected in three subsurface soil samples at levels ranging from 1 to 3.2 mg/kg. These samples were collected in the vicinity of the former purifier and oxide houses. The concentration of cyanide in this area is most likely due to spillage during cleaning of the purifier house (Wilson and Stevens, 1981).

Phenolic compounds were found in four soil boring samples at depths of 4 to 11 feet. Concentrations ranged from 0.74 to 3.6 mg/kg. These samples were collected in the vicinity of the former filter beds and the former gas and purifier houses. Phenolics are widely distributed in the environment due to both natural (i.e., vegetative decomposition) and man-made processes. Tars and wastewaters at coal gas plants are a source of phenolics; however, the tars produced by water gas plants such as the one at Mechanicville usually contain only negligible amounts of phenolics.

Surface Soil

No PCBs were detected in any of the surface soil samples that were collected. This includes sample SS-5, which was obtained next to the PCB waste-oil drums. Additionally, no VOCs were detected in samples SS-1 through SS-5. A trace of bromomethane was detected in sample SS-3, but at a concentration below the detection limit for that sample. In addition, this compound was not detected in the duplicate sample, SS-3A.

Cyanide was detected in two surface soil samples, SS-1 and SS-3A (no cyanide was detected in replicate sample SS-3) at 1.8 and 1.9 mg/kg, respectively. Both samples were collected from the area behind the garage offices and storeroom

building, along the upper bank of the Anthony Kill. Several PAHs were detected in samples SS-1 through SS-4, including the duplicate sample. Concentrations of total PAHs ranged from 9.1 mg/kg to 71 mg/kg. No PAHs were detected in sample SS-5. BEHP was found in two samples plus the duplicate sample. Although this compound is a common laboratory contaminant, no BEHP was detected in the laboratory blank, therefore this compound is considered to be present in the surface soil. One other SVOC, di-n-butyl phthalate, was detected in several samples. However, this is also a common laboratory contaminant and was found in the laboratory blank at similar concentrations. Therefore this compound was not considered to be present in surface soils at the site.

Groundwater

Cyanide was detected in all wells except MW-11. The highest levels of total cyanide (0.58 - 0.8 mg/L) were observed at MW-12 during Task 3. During Task 2, a maximum level of 0.42 mg/L was reported at MW-3. Well MW-12 is located downgradient from the former relief gas holder while MW-3 is downgradient from the former purifier/oxide structures.

Volatile aromatic compounds, a subset of VOCs, were detected consistently in all wells except MW-1, MW-2, and MW-11. MW-1, MW-10, and MW-11 are located upgradient of the historical coal gasification plant. MW-2 is downgradient from the former distribution gas holder, but soils data from B-2 and B-7 suggest little or no contamination in this area. Concentrations in the deep bedrock wells (MW-6, MW-13, MW-14, and MW-15) were generally greater than those detected in the shallow wells. Other VOCs, including 1,1,1-trichloroethane, 1,1-dichloroethane, and trichloroethylene were detected in several samples but they are not believed to be site-derived (E.C. Jordan Co., 1989; GRI, 1987).

PAHs were observed in at least one sample from all wells except MW-1, MW-2, and MW-11. The average concentrations of all the samples collected at each well ranged from nondetectable (at MW-1, MW-2, and MW-11) to 750 mg/L at MW-12. The maximum levels of 1,500 and 1,564 mg/L were observed at wells MW-12 and MW-5, respectively. The distribution of PAHs in the groundwater is similar to the distribution in the soil, indicating that contaminated soil is the source of PAHs in the groundwater.

The groundwater sampling data indicate that the detected PAHs are particulate in nature, rather than dissolved species. Some concentrations measured greatly exceed the solubility of PAHs in water. The solubility of PAHs ranges from 0.50 μg/L for dibenzo(a,h)anthracene to 620 μg/L for indeno(1,2,3-cd)pyrene. Thus, the groundwater concentrations must not be indicative of dissolved PAH concentrations. This conclusion is consistent with the sampling protocol, because groundwater samples for organics are not filtered prior to analysis for organic contamination.

Dissolved iron was present in at least one sample from every well. Wells MW-1, MW-2, MW-10, and MW-11, considered to provide the most representative background concentrations, contained concentrations ranging from 0.04 to 1.4 mg/L. The wells with the highest concentrations of dissolved iron were MW-3, MW-4, MW-5, MW-6, and MW-12. These were the same wells that had the highest concentrations of PAHs.

Dissolved zinc was detected at least once in every well. Samples from MW-4 and MW-5 contained unusually high levels (0.52 to 1.09 mg/L). This may be related to the past site usage of zinc acetate. Samples at other wells were fairly uniform (0.01 to 0.11 mg/L). This uniformity suggests that zinc is a natural constituent of site groundwater which has not been elevated by site activities (E.C. Jordan Co., 1989).

Total recoverable phenolics were detected in all wells. The maximum concentration in shallow wells was 17 mg/L while the maximum concentration in deep wells was 0.3 mg/L.

Surface Water

No volatile aromatics were detected in any surface water samples. PAHs were detected once at the location adjacent to the site at a concentration of 0.105 mg/L. Other organics detected during Task 2 included methylene chloride (upstream), acetone (adjacent), and BEHP (all locations). These compounds were found at concentrations less than 0.1 mg/L. They were also found in some sampler and trip blanks. During Task 3, BEHP was found upstream on both sampling occasions at concentrations less than 0.5 mg/L; it was not found adjacent or downstream of the site. These three contaminants (methylene chloride,

acetone, and BEHP), when present at low concentrations, are common laboratory contaminants. It is unlikely that they are derived from the site (GRI, 1987).

Iron was found at all four locations at levels ranging from 0.2 to 1.8 mg/L. The highest concentration was found adjacent to the site. Zinc was detected in at least one sample from three locations; only the downstream sample taken during Task 3 had no detectable zinc. Concentrations ranged from 0.01 to 0.03 mg/L. Phenolics were detected in at least one sample from all locations except the upstream and adjacent locations sampled during Task 3. Cyanide was not detected in any of the Task 3 samples. It was detected in at least one sample in each Task 2 location.

Sediment

Three VOCs were detected in the sediments. During Task 2, Round 3 sampling, benzene and toluene were found at a concentration of 0.07 mg/kg, adjacent to and downstream from the site. During Task 3, ethylbenzene was detected at a level of 0.087 mg/kg adjacent to the site, along with a trace concentration of benzene. These contaminants are associated with coal tar wastes as well as petroleum products and industrial chemicals.

Analysis of Task 2 and Task 3 sediment samples indicated that PAH concentrations adjacent to the site are elevated compared to upstream and downstream sampling locations. Sampling location SD-02 contained trace levels up to 75.8 mg/kg of total PAHs during Task 2 sampling, and trace levels to 5.1 mg/kg during Task 3 sampling.

Concentrations of iron and zinc were fairly consistent in the four locations. Iron concentrations ranged from 7,100 to 33,100 mg/kg while zinc concentrations ranged from 25 to 100 mg/kg. Cyanide compounds were not detected in any Task 2 samples while in Task 3 a cyanide level of 1.3 mg/kg was detected adjacent to the site. Phenolics were detected in Task 2 Round 4 samples at all three locations at comparable levels (1.8 to 6.1 mg/kg). During Task 3, phenolic levels ranged from 0.68 to 2.3 mg/kg.

Indoor Air

The results of the indoor air program revealed low levels of benzene and toluene at most sampling locations. The only exception was benzene not being detected in the background sample. Ethyl benzene and xylenes were below analytical detection limits for all samples.

The highest indoor levels of toluene and benzene were found in the storeroom. A possible source of benzene in the storeroom may be a forklift used in this area. Although the engine was not running during the sampling period, it is possible that residual gasoline vapors had volatilized into the air. Toluene was detected in the background sample at higher levels than two of the indoor samples. It was highest in the garage. It is possible that the sample was affected by vehicle use in the area.

Contaminants of Concern

No contaminants of concern were chosen for surface water or groundwater. This is because there was no indication of site-related surface water contamination, based on the Task 2 and 3 surface water sampling results. Also, groundwater is not a current source of drinking water nor does it represent a potential source for the future. Therefore ABB-ES' evaluation of the risks associated with groundwater consumption is limited to a comparison of the concentrations found to groundwater or drinking water standards.

Chemicals were selected as contaminants of concern in subsurface soil, sediment, and indoor air based upon their concentrations, frequency of detection, and toxicologic properties. All chemicals detected in surface soil samples SS-1 through SS-4 were chosen as contaminants of concern for this medium. All of the contaminants of concern are associated with coal gasification activities.

Both carcinogenic and noncarcinogenic PAHs were detected at a high frequency and magnitude. Of the sixteen PAHs detected at the site, seven have been classified as potential human carcinogens and were selected as contaminants of concern. These include benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. In addition, several PAHs were chosen as contaminants of concern to represent the noncarcinogenic hazards of PAHs. These include

naphthalene, pyrene, acenaphthene, acenaphthylene, phenanthrene, fluoranthene, fluorene, anthracene, 2-methylnaphthalene, and benzo(g,h,i)perylene.

Although iron and zinc were found in all samples, they were not selected because they are of such low toxicity. In addition, levels in soil were similar to background levels at the site, while levels in sediment were within an average background range.

Other compounds such as acetone, bis(2-ethylhexyl phthalate), butylbenzyl phthalate, di-n-octyl phthalate, carbon disulfide, 4-methylphenol and propyl benzene were not chosen because of their low frequency of detection. In addition, some of these compounds are common laboratory contaminants and therefore may not actually be present on the site.

7.1.2 Fate and Transport

Chemicals related to former coal gasification activities are present in the soils and in the shallow and deep groundwater near the former gas plant structures; specifically, the purifier and oxide houses, the relief gas holder, and the filter beds.

The concentrations of seven chemicals (i.e., benzo(a)pyrene, benzene, styrene, total cyanide, iron, regulated organics, and phenolics) in shallow and deep groundwater exceeded the applicable state standards for these chemicals. Benzene and toluene were found in all air quality samples collected, but concentrations did not exceed applicable OSHA, ACGIH, and NIOSH standards.

The primary routes identified for off-site chemical migration are via groundwater in the shallow and deep bedrock fractures, and the silty shale fill. Chemical migration is influenced by an east-trending shallow bedrock trough located downgradient of the relief gas holder.

Migratory pathways for chemical migration or transport off-site include air (primarily during excavation of site soils), surface water, groundwater, and sediments.

Potential receptors for chemicals found at the site include more sensitive segments of the population, including the elderly, young children, and the infirm.

Additionally, people in the vicinity of the site may be exposed to airborne chemicals predominantly during excavation activities.

7.1.3 Risk Assessment

The significant findings of the Risk Assessment are as follows:

- The contaminants of concern identified in the soil and sediment at the Mechanicville site include carcinogenic PAHs and benzene and several noncarcinogens (toluene, ethyl benzene, styrene, PAHs, trimethylbenzene, xylenes, and cyanide).

- For the public health risk assessment, ABB-ES identified probable exposure pathways by which people could come in contact with site-derived chemicals under current and future conditions, assuming no remedial action at the site. These included the following: direct contact with and incidental ingestion of surface soil, subsurface soil, and Anthony Kill sediment, and inhalation of volatile compounds and soil particulates.

- Potential carcinogenic and noncarcinogenic risks to human health were estimated under these assumed exposure pathways. Estimated incremental lifetime carcinogenic risks were within the USEPA target risk range for both the most probable and realistic worst exposure scenarios, for all of the exposure pathways identified. (USEPA guidelines state that the total incremental carcinogenic risk for an individual resulting from exposure at a hazardous waste site should be between 10^{-4} and 10^{-6}; a risk of 10^{-4} is interpreted as an additional 1 in 10,000 chance of an individual developing cancer during a lifetime, as a result of the exposure.)

  The noncarcinogenic Hazard Indices were all well below the cutoff of 1.0 (Appendix G-3), indicating that no significant adverse noncarcinogenic effects would be expected.

- Because Mechanicville site groundwater is not currently used or expected to be used in the foreseeable future as a source of drinking water, public health risks associated with the groundwater are

negligible. Groundwater beneath the site, however, does contain several contaminants at levels above both USEPA and New York drinking water standards.

- It is unlikely that the site is significantly utilized by wildlife because of the industrial nature of the area and the lack of suitable habitats. Aquatic organisms in the Anthony Kill, immediately adjacent to the site, were determined to be the environmental receptors most likely to be affected by site-related contamination.

- Contaminated groundwater from the site is discharging to the Anthony Kill, however, due to the dilution, volatilization of VOAs, and sorption of PAHs to soils (PAHs are relatively insoluble in water), no detectable concentrations of site related contaminants are present in the Anthony Kill.

7.2 CONCLUSIONS

The conclusions from the Tasks 1 through 4 field investigations and analytical programs are summarized as follows:

- The soils and groundwater in the former active plant area contain chemicals related to the coal gasification process.

- Coal gasification wastes in the subsurface environment are a continuing source of chemicals to soil and groundwater, and groundwater is the vehicle of transport.

- Downward seepage gradients within the bedrock trough near North Central Avenue may be carrying chemicals down into shallow and deeper bedrock fractures.

- Chemicals are migrating northeasterly in the groundwater at the site, discharging to the Anthony Kill, and migrating easterly toward the Hudson River. The Anthony Kill is a groundwater discharge zone, however, dilution effects, volatilization and sorption to soils

result in the absence of detectable concentration of VOAs or PAHs in surface water.

- Under current site conditions, the potential for public exposure to the contaminants of concern is low, for two reasons: (1) most of the site is paved or covered with buildings and access to the site is limited, restricting the possibility of contact with contaminated soil or volatilized contaminants; and (2) the groundwater at the site is not used as a drinking water source.

  Therefore, ABB-ES concludes that, under the assumed conditions of exposure, no significant adverse health effects would be anticipated.

- As has been done in the past, the site health and safety plan should be followed during any future exploratory work on the Mechanicville site to prevent or minimize undue exposure.

- The results of the environmental risk assessment indicate that some potential for impacts does exist for aquatic organisms living in the Anthony Kill immediately adjacent to the site. However, these risks appear relatively minor, for several reasons. Few compounds were present at levels in excess of their environmental criteria, the extent of exceedances was minimal, and potential impacts were associated only with "worst case" conditions, with no impacts expected under typical conditions. Also, the amount of benthic habitat is limited due to the streambed morphology and exposed bedrock, with little sediment accumulation.

- Finally, there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants in the downstream surface water and sediment samples did not exceed protective criteria, even under the most conservative assumptions.

7.2.1 Data Needs and Recommendations for Future Work

Data needs have been identified that need to be addressed to meet the requirements of the Comprehensive Environmental Response, Compensation, and

Liability Act (CERCLA) for Remedial Investigations. These data needs are as follows:

- Investigate the property north of the Anthony Kill across from the site to determine if a hydraulic connection exists between site groundwater and groundwater north of the Anthony Kill. If a hydraulic connection exists, collection and chemical analyses of groundwater samples may be necessary to determine any impacts to groundwater quality caused by the site.

- Delineate the nature and extent of site-related contamination east of North Central Avenue. An east-trending bedrock trough was identified in the area of the former relief gas holder and a component of groundwater flow at the site is in an easterly direction.

- Investigate the western portion of the site for groundwater and soil contamination due to the possible disposal of wood chips and oxide wastes in this area. The nature of shallow subsurface anomalies identified during the Task 1 GPR survey will also be assessed.

- Several areas on the eastern and western portions of the site were identified as having been storage areas for PCB-containing transformers and capacitors as well as various electrical equipment. Sampling of these areas for PCB contamination is necessary.

7.2.2 Recommended Remedial Action Objectives

To address the data needs identified in the previous subsection, the Phase IIA Supplemental Remedial Investigation Work Plan was developed. On- and off-site investigation activities are proposed to (1) investigate the potential for PCB contamination on the site, (2) to determine the nature and effect of site-derived contamination east of the site, (3) to determine if a hydraulic connection exists between the site groundwater and groundwater north of the Anthony Kill, (4) to further define the areas and rates of site groundwater discharge to the Anthony Kill, and (5) to assess the potential for site related contamination on the western portion of the site.

8.0 PHASE IIA SUPPLEMENTAL REMEDIAL INVESTIGATION WORK PLAN

This section outlines the proposed supplemental Remedial Investigation (RI) activities to be implemented by NYSEG. A site-specific Health and Safety Plan (HASP), a Quality Assurance Project Plan (QAPP), and a Citizen Participation Plan (CCP) have been developed in conjunction with this proposed supplemental RI work plan and are contained in Appendices H, I and J, respectively.

8.1 REMEDIAL INVESTIGATION AND TECHNICAL APPROACH

ABB-ES has prepared this Phase IIA Supplemental Remedial Investigation Work Plan for NYSEG under Contract No. 85S-159, Investigation of Former Coal Gasification Sites. This work plan outlines the scope for site investigations to be performed under Task 5, as a supplement to previous site investigations conducted under Tasks 1 through 4 at the Mechanicville site. All supplemental RI work will be conducted under the site-specific HASP and QAPP developed in conjunction with this work plan.

8.1.1 Project Background

Previous work completed on the Mechanicville site has been described in Sections 1 through 7 of this report. The work consisted of four basic tasks. Task 1, the Preliminary Site Evaluation, included the collection of historical data, interviews, site reconnaissance, and a geophysical investigation. Task 2, the Initial Field Investigation Program, included test pits, soil borings, monitoring well and piezometer installation, groundwater, surface water, sediment, and soil sampling and analyses, a site survey, and a preliminary land use survey. Task 3, the Expanded Problem Definition Program, consisted of an additional geophysical survey, soil borings, monitoring well installation, groundwater, surface water and sediment sampling, air monitoring and a site survey. Task 4 was a Risk Assessment based on the findings in Tasks 1 through 3.

Although no significant public health or environmental risks were identified during Tasks 1 through 4, this Phase IIA Supplemental Remedial Investigation Work Plan has been developed to address NYSDEC's request for additional site characterization.

8.1.2 Objectives for Supplemental Work

The objective of this work plan is to establish a program of further investigation of the site that will address concerns offered by NYSDEC. ABB-ES has developed a scope of work to further define the distribution of coal gasification waste products off-site and PCB contamination both on-site and off-site. The objectives to be addressed by this supplemental remedial investigation and the scope of work proposed to meet each objective are shown in Table 8-1.

This work plan is organized as follows: Section 8.2 outlines the Field Sampling and Analysis Plan; Section 8.3 describes the report to be generated as a result of these investigations; and Section 8.4 presents the proposed project schedule.

8.2 FIELD SAMPLING AND ANALYSIS PLAN

8.2.1 Technical Approach

This subsection describes the technical approach for the supplemental RI to be conducted at the Mechanicville site and includes a summary of the following components:

- geophysical investigation
- soil investigation
- hydrogeologic investigation
- sediment investigation
- seepage meter investigation

Geophysical Investigation

A seismic refraction survey will be conducted on the property occupied by a Price Chopper supermarket east of the site, directly across North Central Avenue and adjacent to the Anthony Kill, to identify the depth and configuration of the bedrock surface and track the east-trending bedrock trough which was identified at the eastern site border across the Price Chopper property. The area to be covered by the seismic refraction survey is shown in Figure 8-1.

Soil Investigation

The soil investigation is designed to investigate, among other things, the presence of contaminants related to the former MGP operations in the subsurface soils. The soil investigation will gather information on:

- subsurface soil conditions east (downgradient) of the site where previous on-site investigations have indicated probable off-site migration of MGP contaminants;
- subsurface soil conditions west of the site in the upgradient portion of the property;
- shallow subsurface soil conditions in areas formerly used for transformer, capacitor and other miscellaneous electrical equipment storage; and
- shallow subsurface soil conditions west of the site (not historically occupied by MGP operations) where wood chips and spent oxide wastes may have been periodically disposed.

Three types of soil explorations will be conducted at the site: soil borings to the bedrock surface, bedrock coring, and shallow subsurface soil sampling. The locations of these explorations are shown in Figure 8-1. Permission from private property owners will be necessary to conduct explorations east of the site. A total of three soil borings are planned to be completed as monitoring wells. Three additional borings and two additional monitoring wells may be installed if visible evidence of contamination is encountered in the initial downgradient boring.

Generally, soil samples will be submitted for laboratory analyses based on field observations and PID screening results. A boring log will be prepared for each boring location containing among other things, the results of field observations and PID screening.

Shallow subsurface samples will be collected west of the site to assess the potential presence and impact of chemical residues from spent oxide wastes and wood chips on the soils. Wood chips were used as a bulking agent with iron oxides for hydrogen sulfide removal from the manufactured gas. Sample locations SS-20 through SS-24,

shown in Figure 8-1, will be sampled as composites for 0 to 12 inches below the surface if unpaved or from the 12 inch interval immediately below the pavement. It is not known for how long the site has been paved, but it was probably subsequent to closure of the MGP since the railroad tracks and demolished structures are buried and paved over.

Shallow subsurface samples will also be collected from the six electrical equipment storage areas shown on Figure 8-2. Each storage area will be subdivided into four equal-sized areas. Four samples will be collected from each sub-area from the 3- to 12-inch depth interval and for PCB analysis from each storage area. Additional samples will be collected at locations other than the six storage areas if visible evidence of oil stains is encountered.

Hydrogeologic Investigation

The objectives of the hydrogeologic investigation are to: characterize the quality of groundwater in the overburden and shallow bedrock east of the site; characterize the quality of upgradient groundwater west of the site; determine the groundwater flow direction west and east of the site; and determine the relationship between groundwater underlying the site, the Anthony Kill, and groundwater north of the Anthony Kill.

A total of three monitoring wells will be installed, two overburden wells (MW-16 and MW-17) and one bedrock well (MW-18). An additional two monitoring wells may be installed downgradient of MW-17/MW-18 if visible evidence of contamination is encountered in these borings.

A total of eight piezometers will be installed along the banks of the Anthony Kill (P-3 through P-10) to determine groundwater surface elevations adjacent to the Anthony Kill (see Figure 8-1). Four piezometers will be installed along each bank, two adjacent to the site and two downstream of the site. The exact locations of the downgradient piezometers will be determined through interpretation of seismic refraction survey data indicating probable areas of site groundwater discharge to the Anthony Kill. Water levels from each of these piezometers will be obtained during both groundwater sampling rounds. Water surface elevations in the Anthony Kill adjacent to the piezometers will also be measured to determine if recharging or discharging conditions exist.

Sediment Investigation

Sediment samples will be collected along the southern bank of the Anthony Kill to aid in the placement of seepage meters in groundwater discharge zones and to determine the presence of MGP related constituents. Sample locations will be determined through visual observations of stream bank conditions. A minimum of six sediment samples will be collected for laboratory analysis; approximate location are shown in Figure 8-1. Where sufficient sediment thickness allows, two to three depth intervals will be sampled at each location to profile potential discharge zones. These samples will be screened with a PID meter and also infrared spectroscopy (IR) and ultraviolet fluorescence (UV) methods to detect the presence of total petroleum hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAH), respectively. Samples to be submitted for laboratory analysis will be based on the screening results.

Seepage Meter Investigation

Seepage meters will be installed at approximately three locations along the southern bank of the Anthony Kill adjacent to the site and at approximately two locations downstream of the site, depending on the number of discharge areas identified based on piezometer levels and sediment sample field screening. Discharge rates will be measured and seep water analytical samples will be collected if discharging conditions are encountered.

8.2.2 Geophysical Investigation

The seismic refraction survey will be conducted on the property occupied by Price Chopper east of the site, directly across North Central Avenue. The area to be covered by the seismic refraction survey is shown in Figure 8-1. The seismic refraction profiling method is an indirect means of determining the thickness and velocity values of the various seismic layers underlying a site. There is often a direct correlation between geologic strata and the layers defined during a seismic refraction investigation. For the Mechanicville site, the focus of seismic refraction will be to characterize the bedrock surface.

Seismic refraction is based on the measurement of the time required for elastic waves, generated at a point source with either a weight impact (sledge hammer) or small buried charges of explosives to travel to a series of sensitive listening devices

called geophones, or seismometers. Geophones are placed at known intervals along a straight line on the ground surface and connected by special multi-conductor cables to the 24-channel seismograph. The seismograph records the elastic wave arrivals from the energy source along the seismic spread, acquiring separate data for each geophone position.

The data are interpreted by first accurately measuring the individual transit times at each geophone position, then constructing a graph of these times versus their distance from the energy source. The geophysicist then determines by inspection of the time-distance graphs the number of subsurface seismic layers present. Straight line segments of best fit are drawn onto the graph, each layer being represented by a line of different slope. The inverse of the slope of each line is the (apparent) velocity value for each layer. The distance from the origin (or energy source) of the "crossover point" between two layers is proportional to the thickness of the overlying layer.

The identification of various materials can be made with a knowledge of seismic velocity values based on other engineering studies, and on correlations with various test borings taken near seismic lines. The results of the seismic refraction survey will be used to place the downgradient borings/monitoring wells in the bedrock trough and/or the interpreted groundwater migration pathway and will be included in the Phase IIA Supplemental RI Report.

8.2.3 Soil Investigation

8.2.3.1 Soil Borings. The rationale for each soil boring is shown in Table 8-2. Anticipated boring locations are shown on Figure 8-1. Borings B-16 and B-17 will be completed to bedrock. The depth of these two borings are estimated to be 10 feet and 30 feet bgs, respectively. Boring B-18 will be drilled to bedrock, (approximately 30 feet bgs) then cored 15 feet into bedrock. Borings B-16 through B-18 will be completed as monitoring wells. If visible evidence of soil contamination is encountered in B-17, three additional borings (B-19, B-20, and B-21) will be completed to bedrock (estimated 40-foot depth) approximately 100 feet further east of the site in a line perpendicular to any bedrock valley observed to provide additional information on the extent of soil contamination east of the site. If visible evidence of contamination is encountered in the MW-17 or MW-18 borings, one to two additional borings/monitoring wells will be installed behind the Price Chopper

building downgradient from MW-17 and MW-18 to provide additional information on the extent of groundwater contamination further east of the site.

All borings completed to the bedrock surface (except B-18) will be drilled by using 4.25-inch inner diameter (ID) hollow-stem augers with continuous 3-inch outer diameter (OD) split-spoon sampling. B-18 will not be sampled since it is adjacent to B-17. Boring B-18 will be advanced 15 feet into bedrock by NX-coring. Core samples will be taken continuously. For boring B-18, the double-cased drilling technique will be used since it is anticipated that a confining silty sand layer potentially overlain by coal tar will be encountered 1 to 2 feet above the bedrock surface as observed in borings B-12 and B-13 completed during Task 3. Drilling methods are described in the NYSEG contract QAPP (Jordan, 1986c).

Field observations will be made on all soil samples collected from the borings and logged with respect to geologic/soil characterization. All information from soil borings will be logged by an ABB-ES geologist according to the procedures outlined in the NYSEG Contract QAPP (Jordan, 1986c). Split-spoon samples will also be field-screened for coal-tar related residues by visual observations and odor, and for VOCs by use of a PID. At a minimum, one soil sample from each boring will be submitted for laboratory analyses based on field observation and PID screening results.

Selected soil boring samples will be submitted to NYSEG for laboratory analysis of volatile organics (NYSDEC ASP 91-1), semivolatile organics (NYSDEC ASP 91-2), reactive cyanides (USEPA Method 9010) and reactive sulfide (USEPA Method 9030) and inorganics (see Section 8.2.8).

Cuttings generated by the hollow-stem auger technique will be placed into 55-gallon drums, labeled, covered, and stored within the site property boundaries, pending subsequent testing for hazardous waste characteristics and disposal by NYSEG. Wash water generated by the double-cased method will be transported to the site and, after settling of solids, the supernate along with the decontamination water, will be allowed to infiltrate into an on-site groundwater recharge pit. The area used as a recharge pit will be covered with clean soil when it is no longer needed in accordance with NYSDEC TAGM "Disposal of Contaminated Groundwater Generated During Remedial Investigation". Settled solids will be stored on-site in 55-gallon drums along with the drill cuttings.

8.2.3.2 Shallow Subsurface Soil Sampling. A total of six (five plus one duplicate) shallow subsurface soil samples will be collected from the west of the site (SS-20 through SS-24) as shown in Figure 8-1. The rationale for these samples, as indicated in Table 8-2, is to evaluate whether chemicals from reported disposal of spent oxide wastes and wood chips are present on this area of the NYSEG property. Samples will be collected with a stainless steel trowel or spoon or a spade from 0 to 12 inches below the pavement (or bgs if unpaved) and composited. Samples will be submitted to NYSEG for laboratory analyses of reactive cyanide (USEPA Method 9010) and sulfide (USEPA Method 9030).

A total of 27 shallow subsurface samples (SS-25 through SS-48 plus three duplicates) will be collected from the six electrical equipment storage areas shown on Figure 8-2. Each storage area will be subdivided into four equal-sized areas. Four samples will be collected from each sub-area from the 3- to 12-inch depth interval and composited, resulting in four composite samples for PCB analysis from each storage area. The sample grid spacing is further described in the QAPP (Appendix I). Additional samples will be collected at locations other than the six storage areas if visible evidence of oil stains is encountered. Samples will be collected with a stainless steel trowel or spoon or a spade. Samples will be submitted to the NYSEG laboratory for PCB analysis (NYSDEC ASP 91-3) (see Section 8.2.8).

8.2.4 Hydrogeologic Investigation

8.2.4.1 Monitoring Well/Piezometer Installation. This program is proposed to further characterize the distribution of the groundwater plume downgradient of the site (MW-17, MW-18, and possibly MW-21 and MW-22) and to provide additional upgradient groundwater quality information (MW-16). The monitoring wells will be constructed of 2-inch OD stainless steel. The final location of the downgradient wells will be based on a review of current on-site groundwater level measurements, the seismic refraction survey, and property access. All new monitoring wells will be surveyed into the existing Mechanicville site monitoring well network following their installation. These wells will also serve to better define the groundwater flow direction downgradient of the site. The monitoring well pair, MW-17/MW-18, will also be useful in determining the presence of vertical gradients between the bedrock and the overburden.

Proposed locations of the wells are shown in Figure 8-1. Permission from private property owners will be necessary to install all off-site wells and piezometers as they

are currently located. A description of the drilling methods to be used for the monitoring well borings is contained in Section 8.2.3.

In addition to the monitoring well installations, eight 1-inch PVC piezometers (P-3 through P-10) will be installed with a hand auger or hand driven into the ground to a depth of no greater than five feet along both banks of the Anthony Kill as shown in Figure 8-1. Well point piezometers will serve as groundwater level measurement points to be incorporated into the shallow groundwater flow contour maps for the Mechanicville site and, in conjunction with measured surface water elevations, used to indicate discharging or recharging conditions. This will enable better evaluation of shallow groundwater flow directions, gradients, and velocities from the site to these areas. These piezometers, in conjunction with water level data from the overburden/bedrock monitoring well pair MW-15/MW-5, will also indicate determine the presence of vertical gradients along the Anthony Kill, adjacent to the site. The rationale and proposed depths for all monitoring wells and piezometers are presented in Table 8-2.

In general, specific details of the monitoring well installations are provided in the QAPP (Appendix I). Any deviations from the installation specified in the QAPP must be approved by both NYSEG and NYSDEC. Monitoring wells will be installed according to NYSEG procedures for monitoring wells and piezometers of former coal gasification plant sites (NYSEG, 1989). Based on previous site information, it is anticipated that well screens will be stainless steel, 10-slot (0.010 inch screen), with silica sand filter pack. The sand will be No. 0 Morie sand, with the uppermost six inches of the sand pack being No. 00 Morie sand, a finer material. A monitoring well installation report, including individual well construction details, will be prepared.

The preferred well development technique will be the surge (or surge-block) technique. During this development technique, in situ well water is forced out, and pulled into the well screen. This technique will draw silt-sized material entrained within the sand filterpack during well installation into the well. The accumulated silt within the well can then be periodically removed by bailing or pumping the well. The advantage of this development technique is that it will generate less water than continuous pumping development or air-lift development and it effectively removes fine-grained sediments surrounding the well screen. If this technique is not effective, the pumping or air-lift methods will be used as alternates. The development water generated will be pumped into closed-top 55-gallon drums and transported to the

site. The development water will be allowed to infiltrate into an on-site groundwater recharge pit. The area used as a recharge pit will be covered with clean soil when it is no longer needed in accordance with NYSDEC TAGM "Disposal of Contaminated Groundwater Generated During Remedial Investigation".

8.2.4.2 Hydraulic Conductivity Testing. As part of this task, rising-head permeability tests will be conducted on all new wells to determine the horizontal hydraulic conductivities of the geologic strata being monitored. Rising-head tests will be performed by temporarily depressing the water level in the wells, using compressed air or a slug, and recording time and water level recovery using an in situ Hermit data logger and pressure transducer or water level indicator.

8.2.4.3 Water Level Measurements. Water level measurements will be taken at existing monitoring wells and piezometers associated with the site with an electronic water level meter using the top of the riser pipe as the reference datum. Elevations of top of risers of new monitoring wells will be surveyed subsequent to installation. Surface water elevations will be established in reference to adjacent piezometers. Water level measurement procedures are outlined in the site-specific QAPP in Appendix I.

8.2.4.4 Groundwater Sampling and Analysis. The well installation program will be followed by one round of groundwater sampling of all wells. Data quality requirements for the groundwater sampling are presented in Section 8.2.8. Sample collection procedures are described in the site-specific QAPP in Appendix I.

Groundwater samples will be analyzed in the field for temperature, pH, and conductivity and sent to a laboratory for analysis of volatile organics (NYSDEC ASP 91-1), semivolatile organics (NYSDEC ASP 91-2), inorganics, and turbidity. Subsection 8.2.8.1 details the sample analysis parameters.

8.2.5 Sediment Investigation

The sediment sampling and screening will be conducted on samples collected from the southern bank of the Anthony Kill, adjacent to and downstream of the site. Sample locations will be determined in the field through visual observation of the stream bank conditions (i.e., stained sediments, flowing seeps, stressed vegetation) and evaluation of the hydrogeology of the site incorporating the additional wells and piezometers. A minimum of seven sediment samples (SD-1 through SD-6 plus one

duplicate) will be collected for laboratory analysis of volatile organics (NYSDEC ASP 91-1), semivolatile organics (NYSDEC ASP 91-2), inorganics, total organic carbon, reactive cyanide (USEPA Method 9010) and reactive sulfide (USEPA Method 9030). Approximate locations are shown in Figure 8-1. Sediment sampling and field screening will be used to locate seepage meter investigation areas by identifying areas of the stream bank containing site-related chemicals. The sediment sampling rationale is contained in Table 8-2.

Sediment samples will be collected using stainless steel spoons or trowels, teflon or glass coring tubes in shallow surface water, and gravity cores in deeper waters as outlined in the site-specific QAPP in Appendix I. Samples will be collected at two to three depths at each location to profile sediment quality in potential discharge zones. If no sediment deposits are available, samples will be collected from the submersed interface of the bedrock and the streambank overburden.

All sediment samples will be examined in the field for visual signs of contamination and screened using a PID meter. Sediment samples collected will also be tested for the presence of PAH and TPH using the UV fluorescence and IR spectroscopy screening methods.

The UV fluorescence screening procedure involves the extraction of a soil sample in an organic solvent and comparison of the fluorescence of the extract to the fluorescence of a known standard which can be either a specific PAH or a mixture of PAH. Since many other extractable organics, including naturally occurring compounds, also fluoresce; this screening can produce false positive results. However, the absence of fluorescent matter in a sample generally confirms the absence of medium to high levels of manufactured gas plant contaminants. The degree to which false positives are encountered is related to subsequent site uses, presence of natural lignite in soils, and vegetation.

The IR screening procedure is an adaptation of the laboratory procedure for measuring TPH. The adaptations are primarily related to sample volumes and extraction protocols which result in reduced analytical times. The results of TPH screening are more variable than laboratory results but provide useful data, especially where elevated levels (i.e., greater than 250 parts per million) are encountered. These screening results will be used to select which sediment samples will be submitted for laboratory analysis.

8.2.6 Seepage Meter Investigation

The purpose of the seepage meter investigation is to determine seepage rates of site-derived groundwater into the Anthony Kill and determine the quality of seep water both adjacent to and downgradient of the site.

Seepage meters will be installed at approximately three locations adjacent to and two locations downstream of the site. The exact location and number of seepage meters actually installed will be determined by visual observation of the stream bank for stained sediments or flowing seeps and field screening of sediment samples for TPHs and PAHs. Therefore, seepage meter locations are not shown on Figure 8-1. The rationale for the seepage meter location is summarized in Table 8-2.

Design specifications and interpretative methods for the data collected from the seepage meters are contained in the site-specific QAPP located in Appendix I. A brief description of seepage meter construction follows.

Seepage meters are constructed of 55-gallon, steel drums, cut in half along the horizontal plane. A 3/8-inch ID section of threaded pipe is fitted through the end of the drum with rubber washers and two nuts on either side of the drum end. The nuts are tightened to create a water-tight seal around the pipe, and each drum is checked for leaks.

A rubber hose is then fitted to the pipe, the other end of which is connected to a plastic bladder bag obtained from a medical supplier. The bag is equipped with a one-way valve on the drum end of the bag, and a flip valve for emptying the other end of the bag. The drum and bag are then fully submersed in water and pressed firmly into the stream bottom. Because the drums have neutral buoyancy, they must be anchored. To ensure no disturbance or movement, a wooden stake is driven adjacent to each drum, and a 3-inch-thick cinder block is slipped over the stake, to rest on top of and secure the drum. The bag is then submersed under water with a sinker. This completes the seepage meter installation; each stake is marked to identify the meter.

Flow into the meter through the stream bed is measured by closing the flip valve on the bag and allowing the bag to fill for several hours or days. The volume of seepage water collected in the bag over a measured time interval provides a groundwater seepage rate into the Anthony Kill for the area covered by the seepage meter.

Seepage water will also collected and submitted for laboratory chemical analyses for volatile organics (NYSDEC ASP 91-4), semivolatile organics (NYSDEC ASP 91-2), and inorganics (see Section 8.2.8).

If seepage meters prove ineffective in collecting seepage water, surface water samples of the Anthony Kill will be collected from the approximate locations that the sediment samples will be collected.

8.2.7 Site Survey

Subsequent to field sampling activities described in Subsections 8.2.3 through 8.2.6, a location and elevation survey will be conducted to horizontally locate all Phase IIA exploration locations and vertically locate monitoring wells, and piezometers. The coordinate system established for Tasks 1 through 3 will be used for this survey.

8.2.8 Sample Analyses/Data Quality

8.2.8.1 Sample Analysis Plan. Table 8-3 presents the sample analysis plan, including samples to be collected, the media and investigation from which they are generated, expected number of samples, analyses, and data quality objective (DQO). Footnotes at the bottom of the table provide sample-specific information. NYSEG laboratories will coordinate all analytical services, and when analyses must be performed by a New York State certified laboratory (i.e., for Level IV data quality) they will subcontract, to one or more of the following: Galson Laboratories in Syracuse, New York; Friend Laboratories in Waverly, Pennsylvania; and UPSTATE in Syracuse, New York. All analytical laboratories used by NYSEG for this site will be certified by the NYSDOH for ELAP-CLP category and will maintain their certification throughout the duration of the project.

8.2.8.2 Data Quality Validation. Two levels of data quality, USEPA Level III and Level IV (USEPA, 1988; USEPA, 1989b), are needed for the soil, groundwater and seep samples submitted for analyses in order to perform the two levels of data validation required. The specific levels of validation for each individual sample are shown in Table 8-3. All samples undergoing NYSDEC ASP analyses will have Level IV validation; all other samples will have Level III validation. Level III allows the use of non-contract laboratory program (CLP) methods, but requires that the analytical methods be accepted by EPA; the data is typically used for risk assessment, site characterization, alternative evaluation, and engineering design. Level IV data

quality will require New York State Analytical Services Protocol (ASP) methods and data packages similar to the contract laboratory program (CLP), and the data is used for risk assessment, alternative evaluation, and engineering design for sites that are near heavily populated areas, or are likely to undergo litigation. For Level IV validation, 10% of the samples will undergo full validation and 90% will undergo blank validation only.

ABB-ES or another environmental consultant will be providing third-party validation and review of analytical results. The validation of analytical measurements consists of a systematic process of reviewing data to provide assurance that the data are adequate for their intended use. Performance verification will be done for all data. During performance verification, the Chain of Custody and Analytical Request Forms (ARFs) are reviewed to determine if the analytical method requested is the method the laboratory used. Blank corrections will also be made to the data based on instrument method blank results. These activities are included in Level III data validation procedures. Level IV or full validation (i.e., according to New York State ASP and USEPA CLP protocols) requires more thorough quality control (QA/QC) documentation. Level IV validation will include the following activities:

- reviewing measurement system calibration and calibration verification;
- reviewing quality control activities;
- reviewing field sample data records and chain-of-custody;
- reviewing intermediate calculations; and
- certifying the process.

8.3 DATA ANALYSIS/REPORT PREPARATION

The report on the Phase IIA Supplemental Remedial Investigation will present an expanded understanding of: the distribution of site-related chemical in soil, groundwater and sediments both on-site and off-site; the discharge rate of site-related chemicals to the Anthony Kill; and the relationship between groundwater beneath the site, north of the site, and the Anthony Kill. The report will also present a discussion of potential impacts on downgradient areas and proposed interim remedial

actions identified as a result of the proposed focused feasibility study (see Section 9.0). The report will first be issued as a draft to NYSEG for internal review and then for submittal to NYSDEC for review. The Phase IIA Supplemental Remedial Investigation Report will address the following issues:

- summary of previous investigations and reports; and Phase IIA activities
- summary of site history to include uses of western portion of the site;
- expanded understanding of site hydrogeology and downgradient hydrogeology;
- characterization of groundwater seepage areas in the Anthony Kill;
- distribution of site-related chemicals in surface soils across the site;
- distribution of chemicals in groundwater on- and off-site;
- review of regulatory standards and guidelines with respect to additional data;
- review of risk assessment with respect to additional data; and
- conclusions of supplemental investigations, review of proposed remedial actions, and recommendations for any further actions.

8.4 SCHEDULE

The tentative schedule for Phase IIA Supplemental RI activities and compilation of the associated report is shown in Figure 8-3. This supplemental site investigation and report preparation is anticipated to take 7 months, though the schedule presented in this report is subject to negotiation.

9.0 PHASE IIA FOCUSED FEASIBILITY STUDY WORK PLAN

This Focused Feasibility Study Work Plan was prepared by ABB-ES for a Focused Feasibility Study (FFS) for the Mechanicville former MGP site (the Site) located in the City of Mechanicville, Saratoga County, New York. The purpose of the FFS is to develop a remedial measure that will reduce or mitigate the release of site-related contaminants to the section of the Anthony Kill adjoining the Site.

Brief descriptions of the Mechanicville Site and the investigative activities performed to date are presented in Section 8.1 of this work plan. The remedial objectives for the Site are discussed in Section 8.2. The technical approach to the FFS, including a general description of the remedial alternatives to be evaluated, is presented in Section 8.3. ABB-ES' project organization and a proposed project schedule are provided in Sections 8.4 and 8.5, respectively.

9.1 BACKGROUND INFORMATION

The FFS will be based on Site data presented in five reports prepared previously: (1) Preliminary Site Evaluation - Task 1 (August 1986); (2) Quality Control/Quality Assurance and Health and Safety Plans (November 1986); (3) Initial Field Investigation Program - Task 2 (December 1987); (4) Expanded Problem Definition Program - Task 3 (September 1989); and (5) Final Risk Assessment Report - Task 4 (August 1990). The remainder of this section briefly summarizes findings from these documents.

The Site is located in Mechanicville, Saratoga County, New York. The Hudson River forms the northeastern and eastern boundaries of Saratoga County; the Mohawk River, which is the largest tributary to the Hudson, forms the southeastern boundary. The Anthony Kill, a small tributary, flows into the Hudson River at Mechanicville. The Mechanicville Site is adjacent to the Anthony Kill, one quarter-mile upstream from its confluence with the Hudson River.

The Champlain Canal once bordered the Site on the east. Completed in 1823, the canal connected the Hudson River at Waterford (south of Mechanicville) to Lake Champlain. The canal flowed through Mechanicville along what is now

Central Avenue. Like the present roadway, the canal was elevated and the water surface was approximately 10 feet above the gas plant site. The hand dug canal was approximately 12 feet deep and 30 feet wide. The Champlain Canal, abandoned in 1916 when the Barge Canal opened, became a receptacle for garbage, debris, and junk before it was completely filled with soil by the City of Mechanicville in 1917. Later, the state dug up the canal, removed the trash and debris, and prepared the roadbed for Central Avenue.

The Site housed a coal gasification plant operated by NYSEG predecessor companies from 1901 until 1955, at which time coal gas production was terminated because of the availability of natural gas. Most of the aboveground structures were demolished at the time of closure and removed. Only the original boiler room/substation building and office building remain on the Site.

After closure of the Mechanicville gas plant in 1955, NYSEG converted the Site to a natural gas and electric service center. The former boiler room/substation building was converted to offices, a garage, and a storeroom. The office was used as a storage building and tool house. Most of the Site is occupied by buildings or is paved. The service center operation was relocated in October of 1990 and the Site is currently unoccupied. Access to the Site is controlled by fencing to the east, south, and west, and the Anthony Kill to the north.

The Initial Field Investigation (Task 2) and Expanded Problem Definition (Task 3) Programs detected the presence of chemicals related to former coal gasification activities. They included VOCs, SVOCs including PAHs, and metals. These were found in both the soil and shallow and deep groundwater samples collected near the former plant structures, specifically the purifier and oxide houses, the relief gas holder, and the filter beds.

The subsurface MGP wastes are a source of chemicals to soil and groundwater, thus making groundwater a vehicle of transport. Compounds are migrating northeasterly in the groundwater potentially discharging to the Anthony Kill. However, Site-derived compounds were not found at elevated levels in surface water samples collected downstream of the Site, which suggests that compounds are not entering the stream in sufficient quantities to be detected. Notwithstanding, NYSEG wishes to evaluate, via the FFS, remedial alternatives which would reduce or eliminate the release of Site-related contaminants to the section of Anthony Kill adjoining the site.

9.2 RESPONSE OBJECTIVES

The purpose of the Mechanicville FFS is to develop, screen, and evaluate potential remedial alternatives to reduce or eliminate the release of Site-related contaminants to the section of Anthony Kill adjoining the Site. Specifically, the reduction or elimination of the release of Site-related contaminants to the Anthony Kill will be evaluated in terms of the following migration pathways:

- the movement of coal tar into Anthony Kill; coal tar was observed in subsurface explorations to be present above a confining silt layer 1 to 4 feet above the bedrock surface

- the discharge of Site-contaminated groundwater to the Anthony Kill or to downgradient areas.

The FFS will address primarily the contaminated flow component from the Site. Information from previous reports indicates separate flow components off Site to the north to the Anthony Kill and to the east toward North Central Avenue.

9.3 TECHNICAL APPROACH

The feasibility study will serve as the process to identify and evaluate remedial alternatives selected for the Site. Through guidance provided by the USEPA, the feasibility study offers a flexible process familiar to most environmental regulatory agencies that can be tailored to the specific response objectives determined for the Site. Because the Site objectives are well defined and restricted to source control only, a focused study is proposed.

The Mechanicville FFS alternatives development process begins with identification of technologies that will either stand alone or be combined to form remedial alternatives. A summary of the alternatives development planned for the Site follows.

9.3.1 Remedial Technologies Identification

Remedial technologies were identified based on a review of literature and experience in developing other feasibility studies. Three technologies have been

identified to control the migration of contaminated groundwater and/or coal tar: barrier walls, subsurface drains, and extraction wells. These technologies were determined to be potentially applicable to attain the stated response objectives.

Three types of barrier walls to restrict lateral coal tar flow in the overburden soils and divert or contain groundwater flow will be evaluated: grout curtains, slurry walls, and driven sheet piles. Grouting is a process in which a fluid material is injected into a soil or rock mass to reduce water movement or impart increased strength to the formation. Once in place within the formation voids, the fluids solidify or gel, thus greatly reducing the permeability and imparting increased mechanical strength to the grouted mass.

Slurry walls are formed through a slurry trench construction process. A trench is excavated through or under a slurry of bentonite clay and water. The trench is then backfilled with an engineered mixture of materials having the desired permeability properties.

Sheet pile driving can be used to construct a high strength, low-permeability barrier wall without the need for excavation. Interlocking steel sheet piles are driven into the ground with a drop or vibratory hammer. With time, fine soil particles are washed into the seams and water cutoff is affected. For applications in very coarse soils, it is possible to grout the piling seams.

Considerations in the barrier wall evaluation will be ease of installation, effectiveness at meeting the response objectives, costs, contaminated soil disposal, chemical interactions with site contaminants, and ease of maintenance or repair. A single barrier wall structure will be chosen from the three evaluated. The chosen barrier will be incorporated into those alternatives that include a barrier wall for containment or diversion of groundwater.

Subsurface drains are essentially a buried conduit used to collect groundwater by gravity flow. Subsurface drains can be used to contain or remove a leachate plume or to lower the groundwater table near a disposal site to prevent contact of water with waste materials. Subsurface drains can be applied with liners or other barrier materials to restrict inflow to one side of the drain (one-sided drain). They may also be used in conjunction with groundwater cutoff barriers to prevent buildup of groundwater upgradient of the barrier.

An evaluation of one-sided and two-sided subsurface drains will be conducted in the FFS to determine the most effective configuration for attaining the desired effect or hydraulic gradients and water levels.

Extraction wells may be applicable at the Mechanicville Site to: (1) lower the groundwater table to reduce water contact with Site contaminants; (2) contain the plume through manipulation of the hydraulic gradient; and (3) remove and treat the contaminated groundwater and flush the contaminated soil.

9.3.2 Remedial Alternatives Development

Six alternatives that have the potential to mitigate contaminant migration to the Anthony Kill, plus a no action alternative were identified. The seven alternatives are:

- No Action
- Downgradient Subsurface Drains
- Downgradient Barrier Wall
- Downgradient Extraction Wells
- Downgradient Barrier Wall with Extraction Wells
- Upgradient Subsurface Drains
- Upgradient Subsurface Drains with Downgradient Barrier Wall

1. No Action - The no action response does not consider the implementation of any remedial technologies or process options. Therefore, human health and environmental risks of exposure to existing contamination at the Mechanicville site would not change. The No Action option is retained for consideration in accordance with National Contingency Plan (NCP) regulations and CERCLA, as amended. The No Action Alternative provides a baseline of comparison for other technologies and process options.

2. Downgradient Subsurface Drains - This alternative involves the installation of a one-sided subsurface drain to intercept and collect contaminated groundwater and possibly coal tar, thereby minimizing the amount of contamination discharging from the site into the Anthony Kill. Major issues to consider include placement of drains relative to existing structures, disposal of contaminated soil, treatment of contaminated

groundwater, clogging the drain with coal tar, and evaluation of head differential across a one-sided drain system due to lowering of the groundwater table.

3. Downgradient Barrier Wall - In this alternative, the mitigation of coal tar discharge to the Anthony Kill will be evaluated. This alternative would potentially reduce the loading of coal tar on the Anthony Kill sediments. Major issues to be considered include mounding of coal tar behind the wall and possible excavation of contaminated soils (with slurry wall option).

4. Downgradient Extraction Wells - In this alternative, downgradient extraction wells would be installed to intercept contaminated groundwater discharge to the Anthony Kill. This alternative could also be designed to achieve contaminant flushing and aquifer restoration. Major issues include well spacing and placement relative to existing Site structures, and treatment of contaminated groundwater.

5. Downgradient Barrier Wall with Extraction Wells - This alternative involves the installation of a low-permeability downgradient barrier wall to minimize contaminated groundwater and coal tar migration to the Anthony Kill. Extraction wells would be utilized to remove the excess groundwater for treatment and maintain the desired water table elevation. This alternative could be modified to achieve a groundwater remediation scenario. Major issues to be considered include potentially contaminated soil excavation (with slurry wall option) and demolition of existing structures.

6. Upgradient Subsurface Drains - This alternative would be designed to intercept upgradient groundwater and divert it into the Anthony Kill, thereby minimizing flow across the Site and contaminant migration into the Anthony Kill. This would be the alternative with the lowest cost and could be upgraded at a later time to include groundwater extraction and treatment. Because the surface of the Site is paved, recharge would be minimal as would groundwater discharge from the Site. The major issue to contend with here is the maintenance of minimal head differential across a one-sided drain.

7. Upgradient Subsurface Drains with Downgradient Barrier Wall - In this alternative, an upgradient subsurface drain diverts uncontaminated groundwater away from the Site and a downgradient barrier wall prevents off-site migration of coal tar. This would result in a reduced volume of water migrating onto the Site and a reduction in the migration of coal tar off site. Major issues included possible head differential across a one-sided subsurface drain due to lowered water table and migration of contaminated groundwater resulting from incomplete diversion of the upgradient groundwater flow.

These six alternatives would be screened on the basis of effectiveness, implementability, and cost, leaving four alternatives to undergo detailed evaluation. Detailed evaluation will consist of evaluating the seven alternatives in terms of the following criteria:

- short-term effectiveness
- long-term effectiveness and permanence
- reduction of contaminant toxicity, mobility, or volume
- implementability
- cost
- compliance with regulatory criteria
- overall protection of human health and the environment
- regulatory acceptance
- community acceptance

Evaluation of remedial technologies (i.e., subsurface, drains, extraction wells, and barrier walls) designed to alter groundwater flow conditions will involve the use of an analytical model to assess the impact of the structure on the surrounding subsurface flow regime. The model will aid in determining what additional site data collection may be needed to better define groundwater flow east of the site toward and beyond North Central Avenue.

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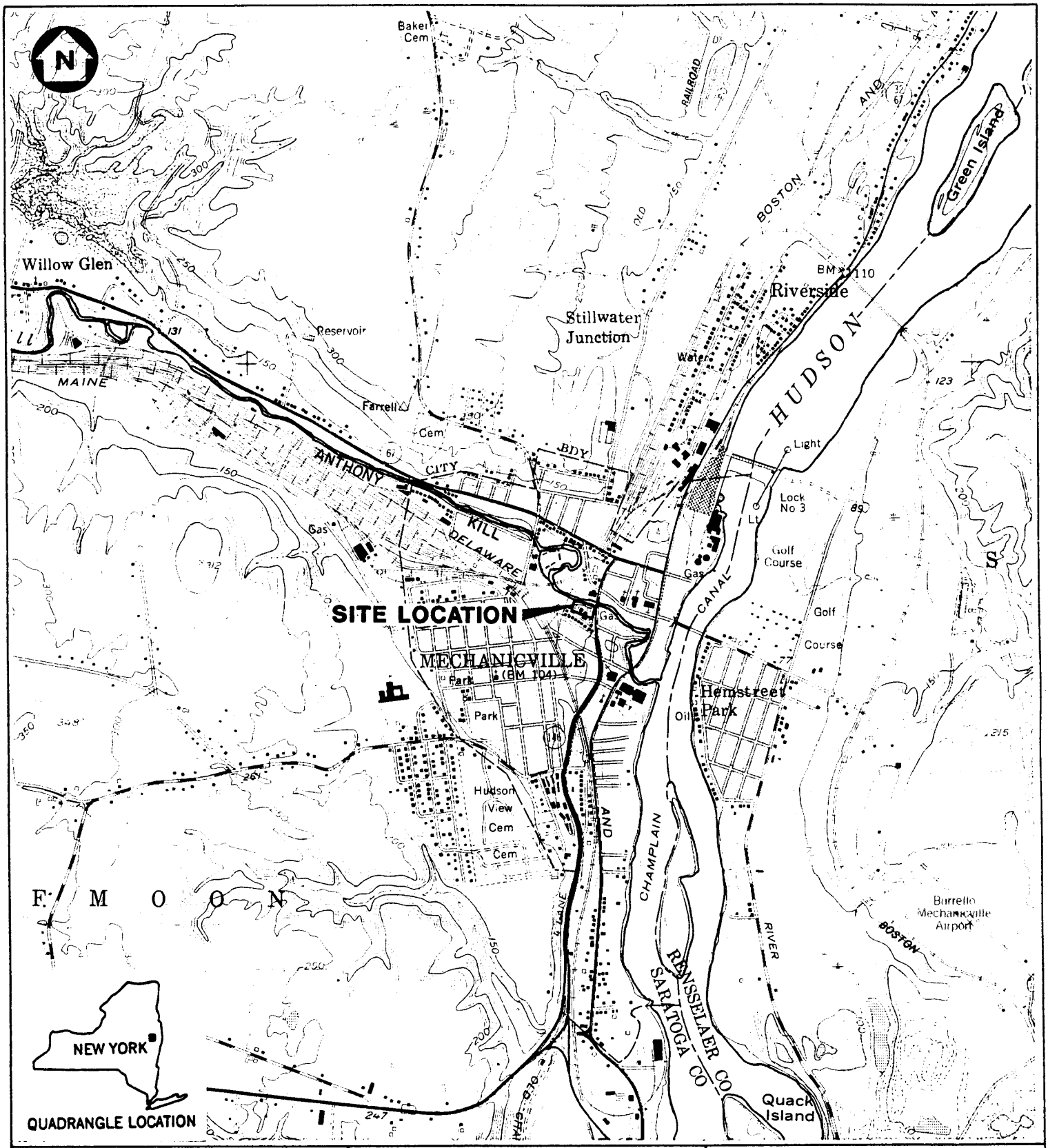
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ABB-ES	ABB Environmental Services, Inc.
AAL	Acceptable Ambient Level
ACGIH	American Conference of Governmental Industrial Hygienists
ARF	Analytical Request Form
ASP	Analytical Services Protocol
AWQC	Ambient Water Quality Criteria
BEHP	bis(2-ethylhexyl)phthalate
Btu	British thermal unit
bgs	below ground surface
CAG	Carcinogen Assessment Group
cfs	cubic feet per second
CLP	Contract Laboratory Program
cm/sec	centimeters per second
CNS	central nervous system
CPF	cancer potency factor
CPP	Citizen Participation Plan
DOT	Department of Transportation
DQO	Data Quality Objective
EM	electromagnetic
EP	Extraction Procedure
FFS	Focused Feasibility Study
FID	flame ionization detection
ft/ft	feet per foot
ft/sec	feet per second
ft/yr	feet per year
GC	gas chromatography
GI	gastrointestinal
gpd	gallons per day
gpm	gallons per minute
GPR	ground-penetrating radar
HASP	Health and Safety Plan

HCN	hydrogen cyanide
HPLC	high-performance liquid chromatography
ID	inside diameter
IR	infrared
IRIS	Integrated Risk Information System
kg	kilograms
MCLs	Maximum Contaminant Levels
MCLGs	Maximum Contaminant Level Goals
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MGP	manufactured gas plant
mph	miles per hour
MS	mass spectrometry
MSL	mean sea level
NCP	National Contingency Plan
ND	nondetected
NIOSH	National Institute for Occupational Safety and Health
NOEL	No Observed Effect Level
NTP	National Toxicology Program
NYSDEC	New York State Department of Environmental Conservation
NYSEG	New York State Electric and Gas Corporation
OD	outside diameter
OSHA	Occupational Safety and Health Administration
PAHs	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PEL	Permissible Exposure Level
PID	photoionization detector
PM_{10}	inhalable particulate matter
ppm	part per million
PVC	polyvinyl chloride

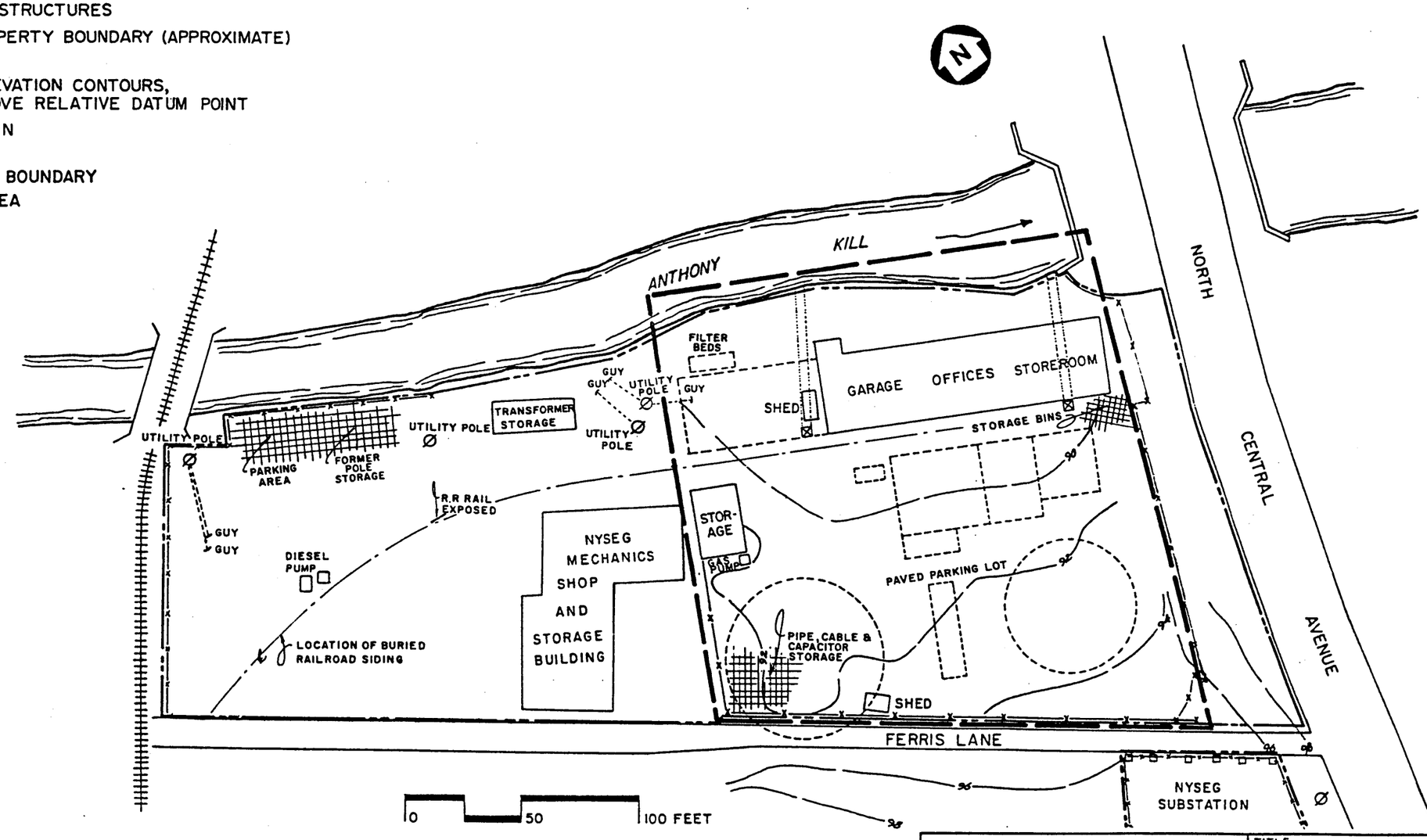
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RfD	reference dose
RI	Remedial Investigation
SDWA	Safe Drinking Water Act
SIR	Subsurface Interface Radar
SQC	sediment quality criteria
SVOCs	semivolatile organic compounds
TCL	target clean-up level
TKF	toxicokinetic factor
TLV	Threshold Limit Values
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TSP	total suspended particulates
TWA	time-weighted average
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UV	ultraviolet
VOCs	volatile organic compound
μg/L	micrograms per liter
μm	micrometers
$\mu g/m^3$	micrograms per cubic meter



BASE MAP SOURCE: **USGS QUADRANGLE** **MECHANICVILLE (1980)**	**E.C. JORDAN CO.** CONSULTING ENGINEERS	TITLE **MECHANICVILLE SITE LOCATION MAP**
SCALE IN FEET 0 — 2000 — 4000	CLIENT **NEW YORK STATE ELECTRIC AND GAS CORP.** **BINGHAMTON, NEW YORK**	**INVESTIGATION OF FORMER COAL GASIFICATION SITES** PROJECT NO. 4945-04 **FIGURE 1-1**

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- 90 GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

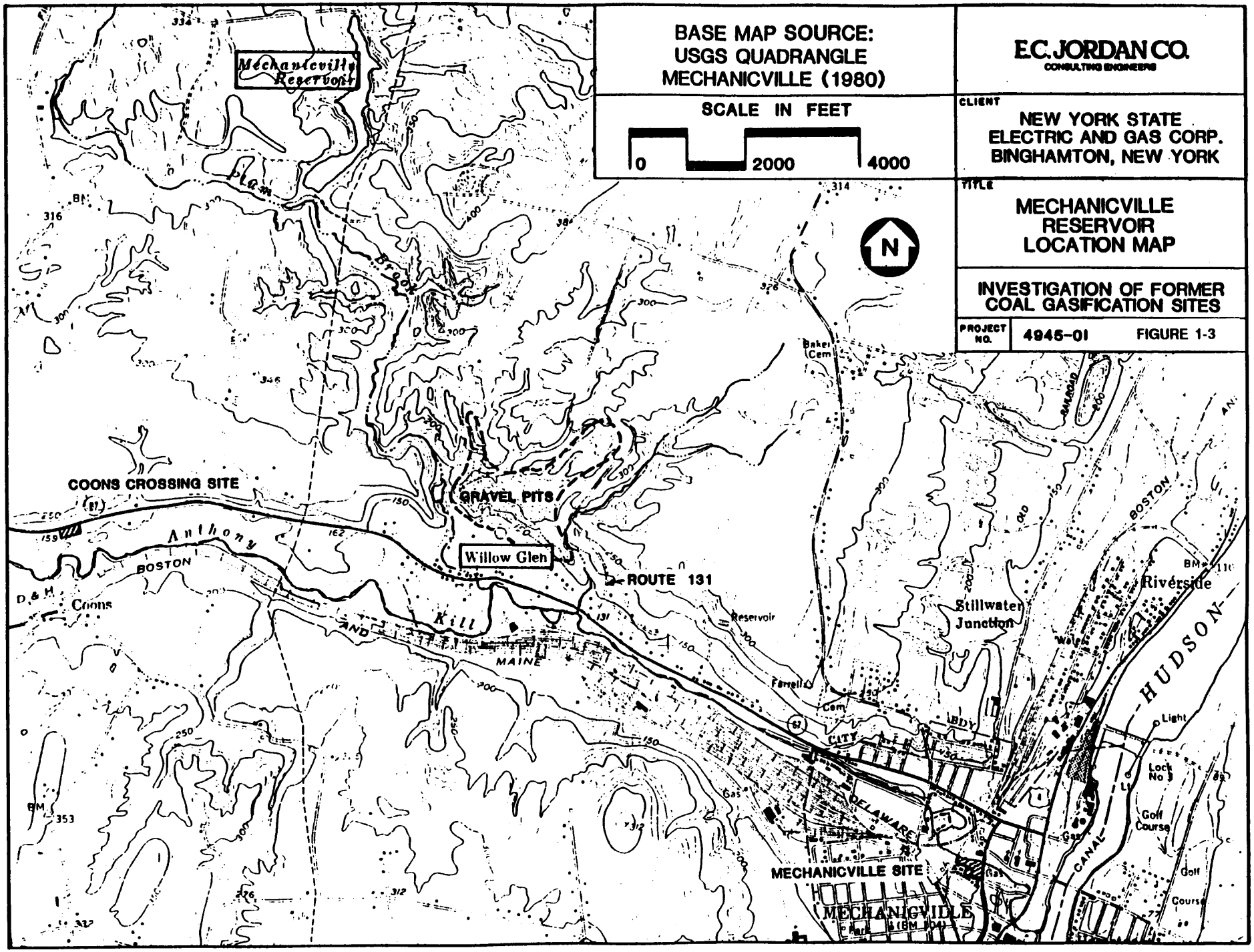
TITLE
MECHANICVILLE SITE PLAN - 1987
MECHANICVILLE, NEW YORK

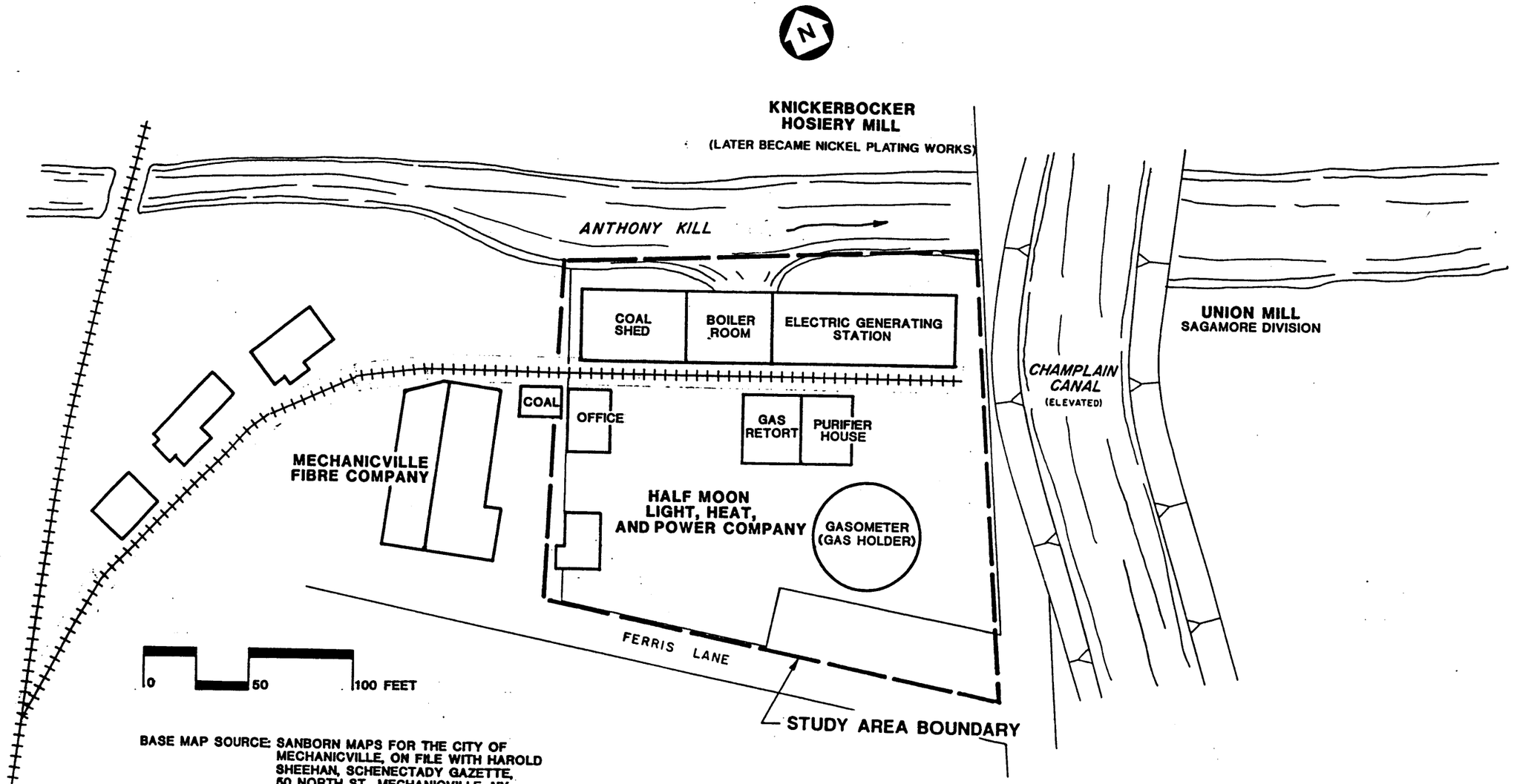
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 1-2


BASE MAP SOURCE:
USGS QUADRANGLE
MECHANICVILLE (1980)
SCALE IN FEET
0
2000
4000
E.C. JORDAN CO.
CONSULTING ENGINEERS
CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK
TITLE
MECHANICVILLE
RESERVOIR
LOCATION MAP
INVESTIGATION OF FORMER
COAL GASIFICATION SITES
PROJECT NO. 4945-01 FIGURE 1-3
N
Mechanicville Reservoir
COONS CROSSING SITE
GRAVEL PITS
Willow Glen
ROUTE 131
Anthony
BOSTON
D & H
Coons
Kill
AND
MAINE
Reservoir
Baker Cem
Stillwater Junction
Riverside
HUDSON
CITY
DELAWARE
CANAL
Lock No 1
Golf Course
MECHANICVILLE SITE
MECHANICVILLE
Light
Gas
BM 353



BASE MAP SOURCE: SANBORN MAPS FOR THE CITY OF MECHANICVILLE, ON FILE WITH HAROLD SHEEHAN, SCHENECTADY GAZETTE, 50 NORTH ST., MECHANICVILLE, NY.

E.C. JORDAN CO.
CONSULTING ENGINEERS

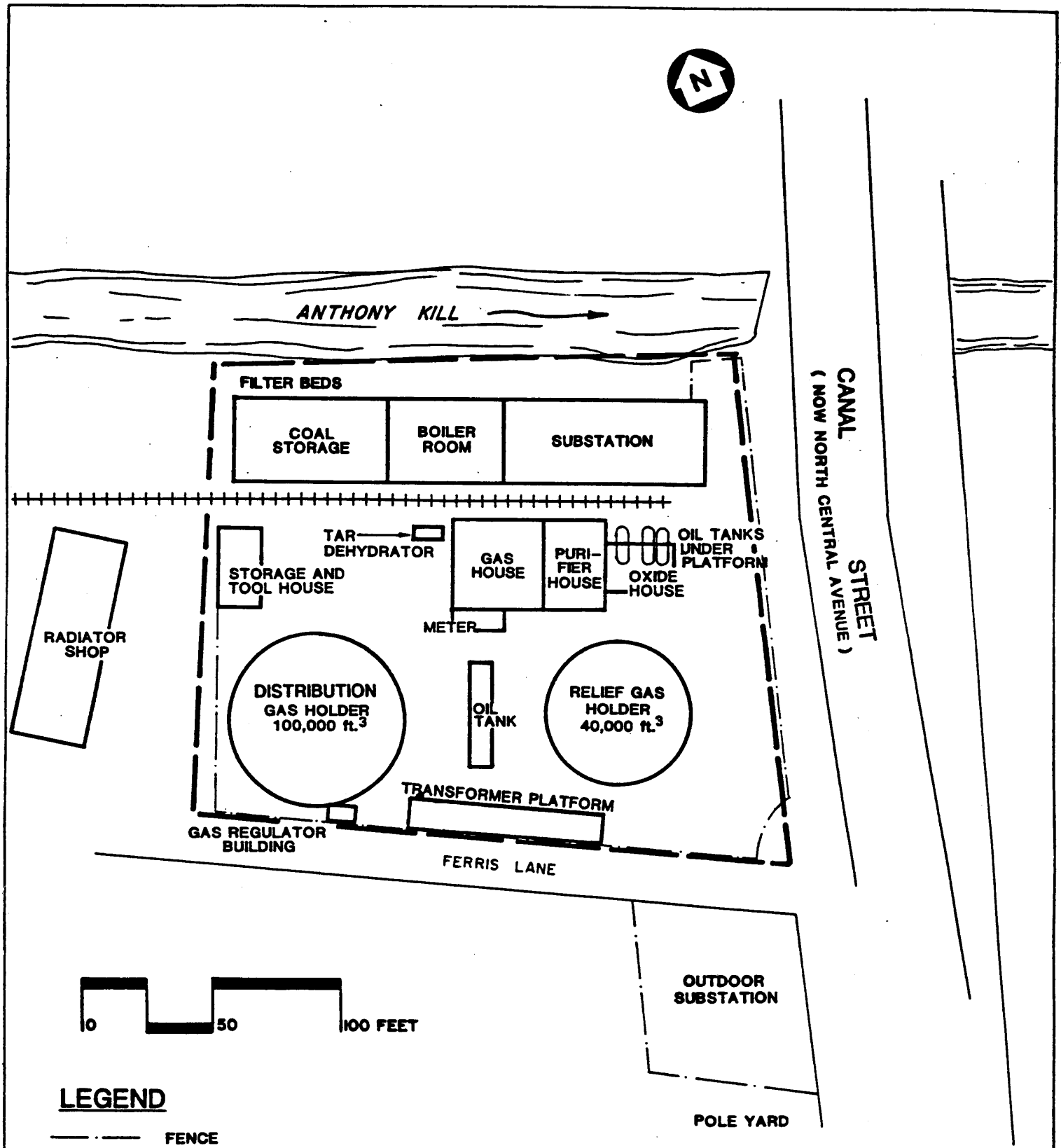
TITLE
PLAN OF MECHANICVILLE
COAL GASIFICATION PLANT
CIRCA 1910

CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 1-4



LEGEND

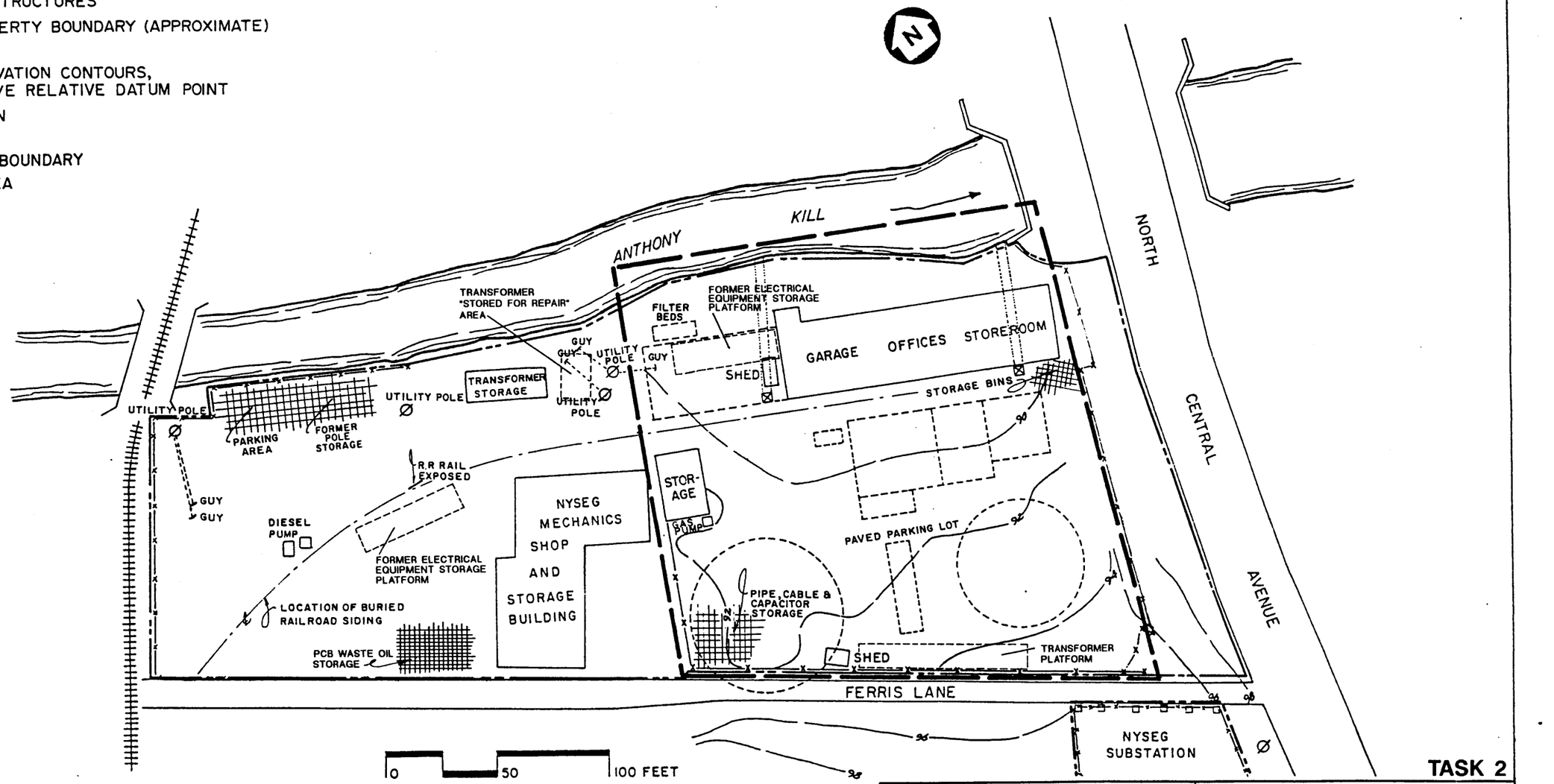
- FENCE
- RAILROAD SIDING
- STUDY AREA BOUNDARY

BASE MAP PREPARED BY BROWN, CROSBY, & CO., INC., ENGINEERING DEPARTMENT, 96 WALL ST., NEW YORK, APRIL 1951.

E.C. JORDAN CO. CONSULTING ENGINEERS	PLAN OF MECHANICVILLE COAL GASIFICATION PLANT CIRCA 1951
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
JOB NO. 4945-04	FIGURE 1-5

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

TASK 2

E.C. JORDAN CO.
CONSULTING ENGINEERS

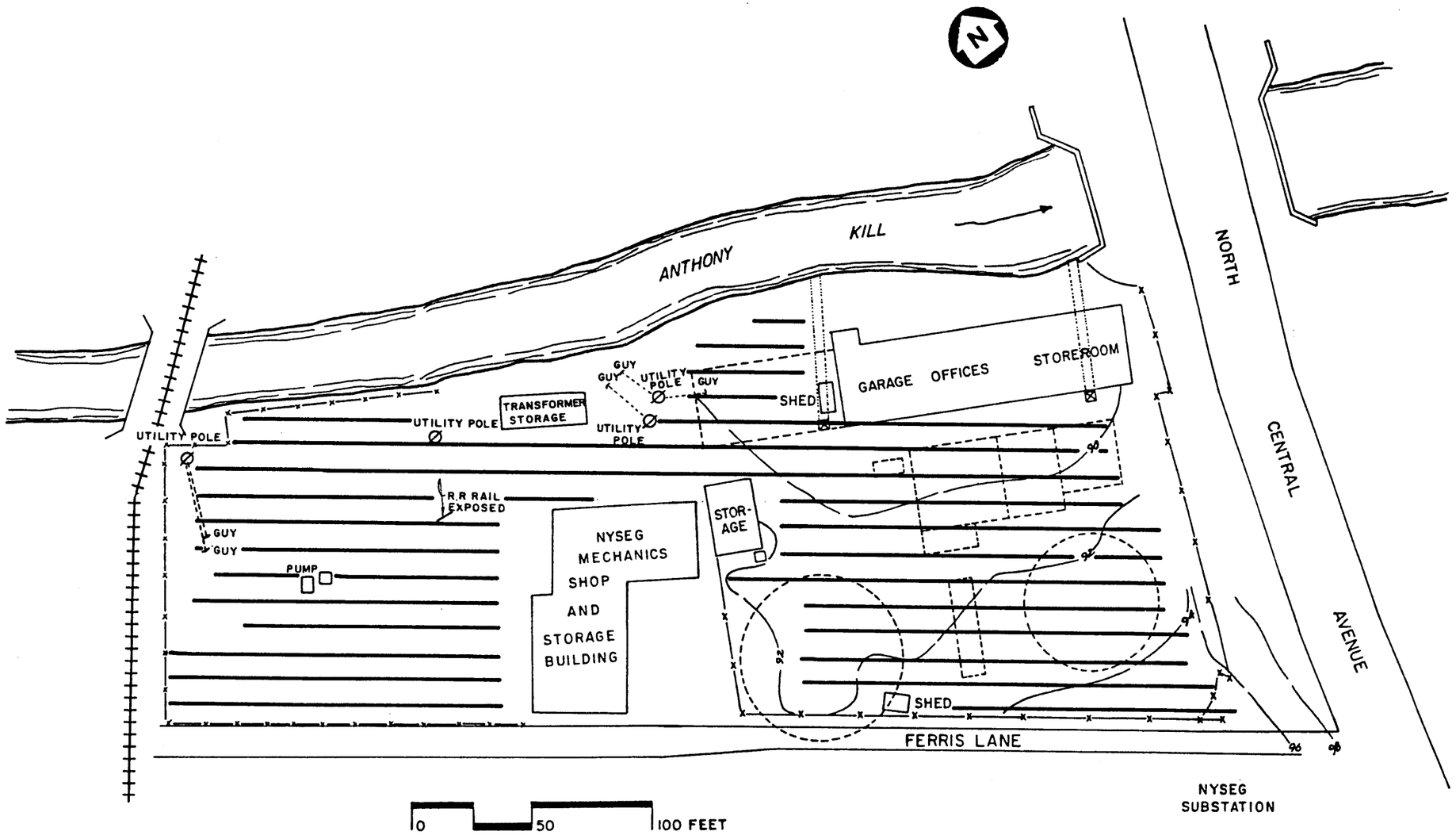
TITLE
FORMER ELECTRICAL EQUIPMENT STORAGE AREAS
MECHANICVILLE, NEW YORK

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 1-6



E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

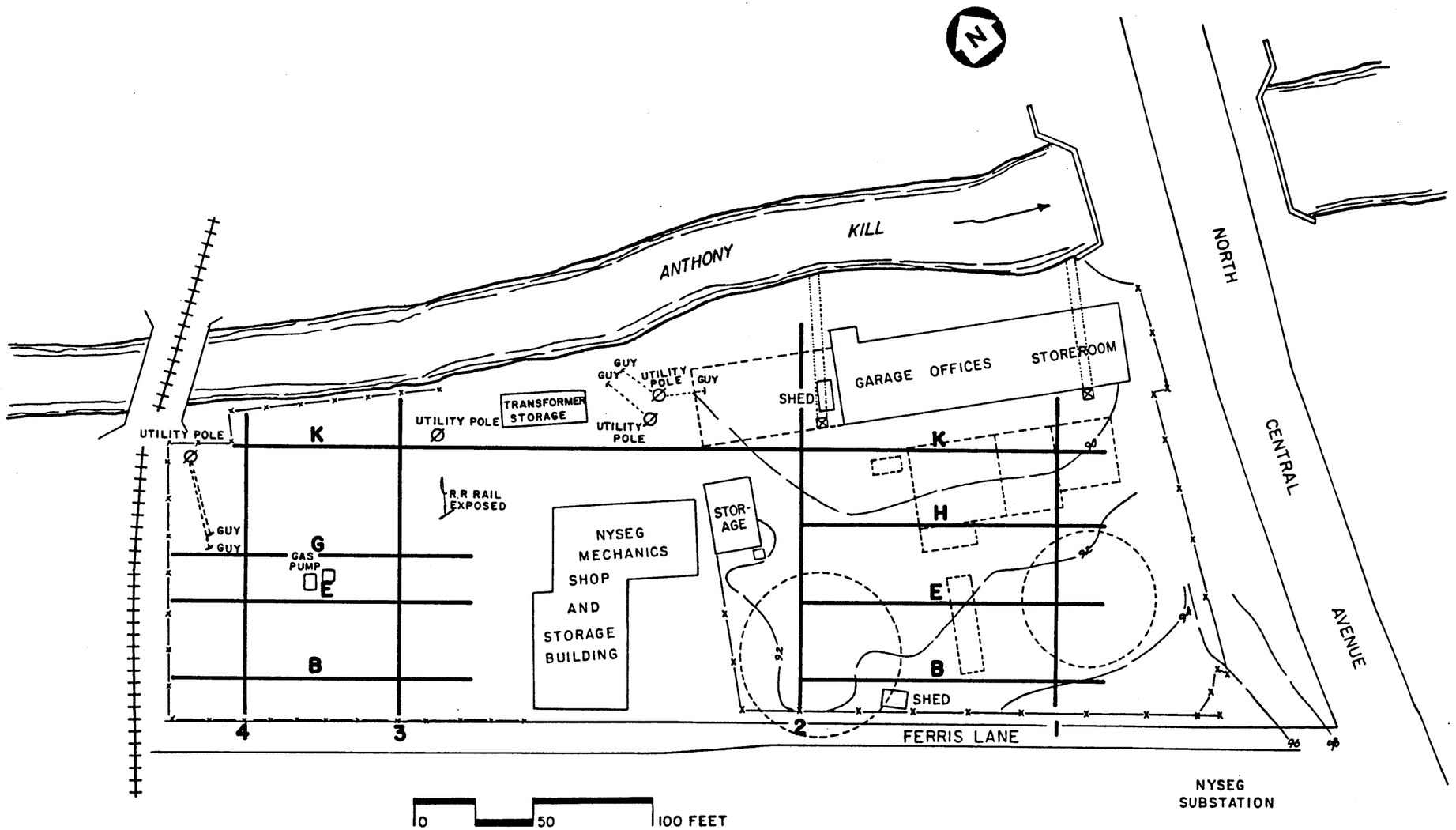
TITLE
GEOPHYSICAL SURVEY
GROUND PENETRATING RADAR COVERAGE
MECHANICVILLE, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-01 **FIGURE 2-1**

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).



E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
GEOPHYSICAL SURVEY
SEISMIC REFRACTION COVERAGE
MECHANICVILLE, NEW YORK

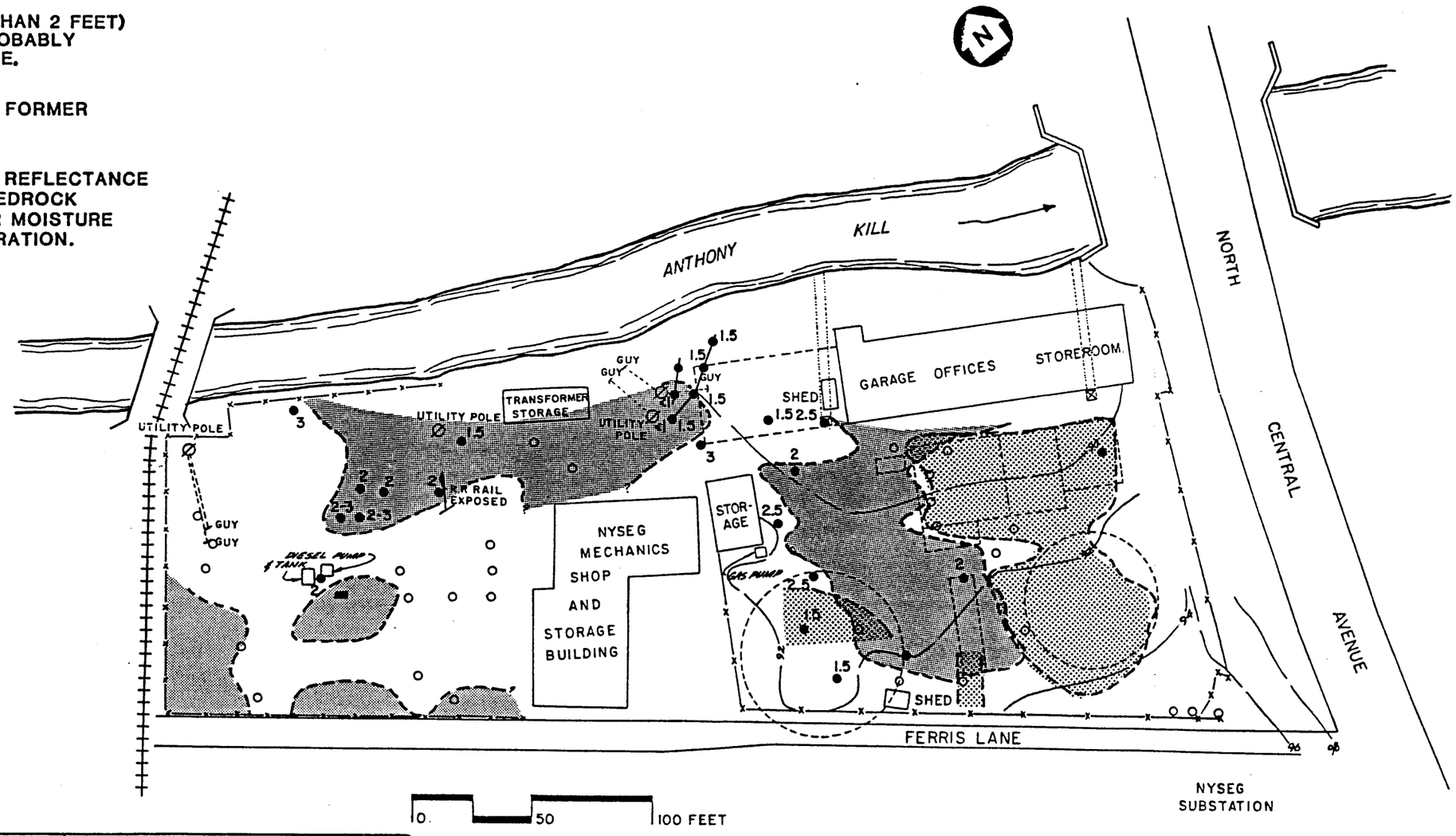
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-01 **FIGURE 2-2**

BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

LEGEND

- ● SUBSURFACE ANOMALIES AND DEPTH(FT) - POSSIBLE BURIED UTILITIES.
- ○ SHALLOW(LESS THAN 2 FEET) ANOMALIES OF PROBABLY MINOR IMPORTANCE.
- EXCAVATIONS FOR FORMER STRUCTURE.
- ZONES OF HIGHER REFLECTANCE IN OVERBURDEN/BEDROCK INDICATING HIGHER MOISTURE CONTENT OR SATURATION.

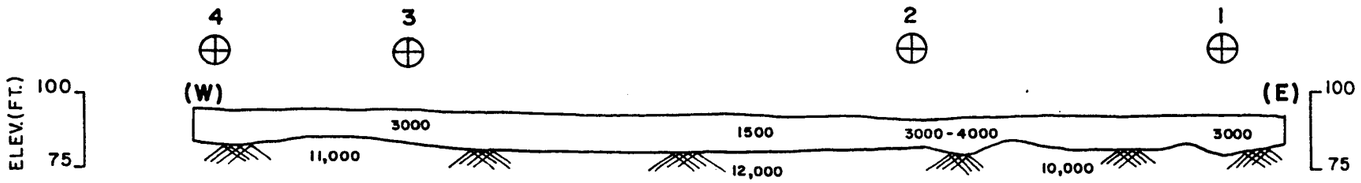


E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: SCHEMATIC OF RESULTS OF GPR INVESTIGATION MECHANICVILLE SITE
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-01 **FIGURE 2-3**

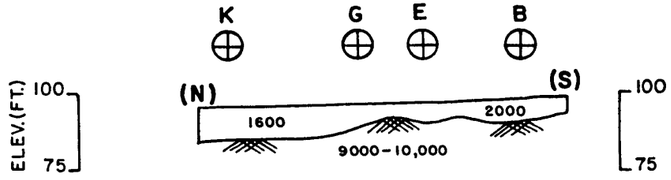
BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

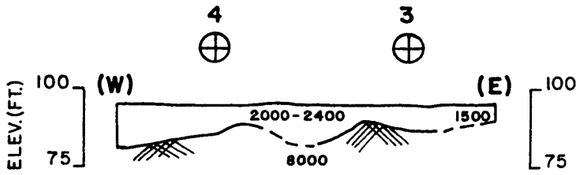
LINE K



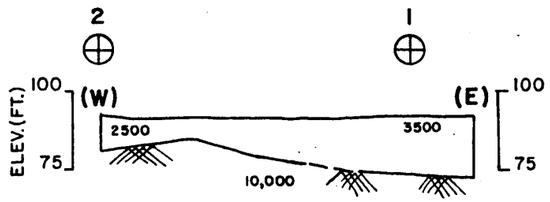
LINE 4



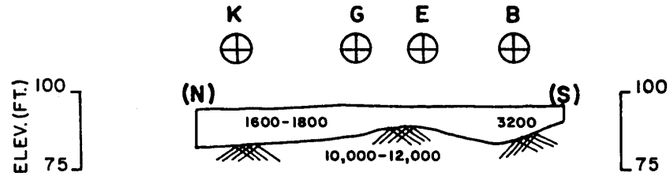
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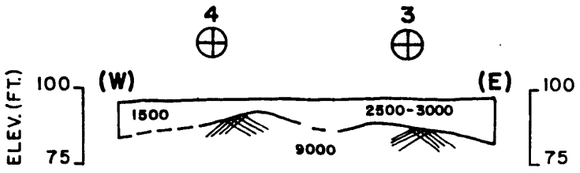
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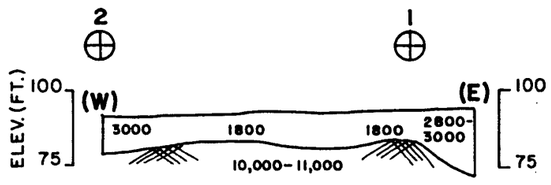
LINE 3



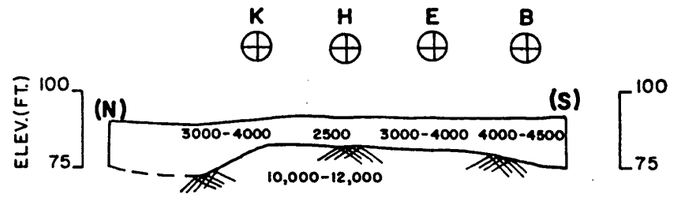
LINE E



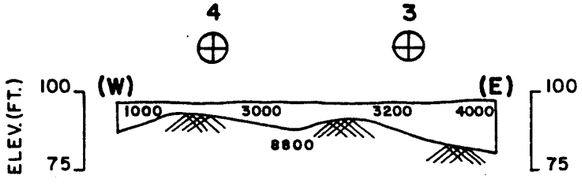
LINE E (con't.)



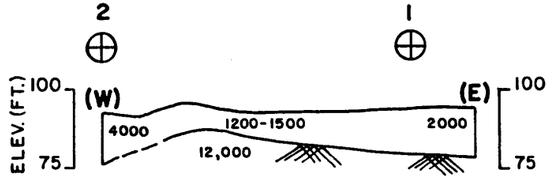
LINE 2



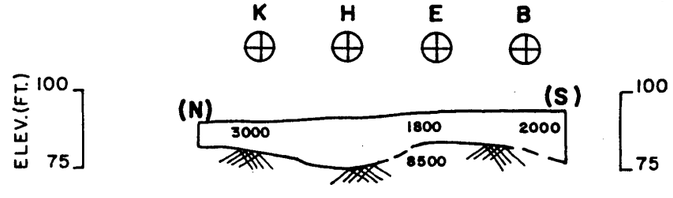
LINE B



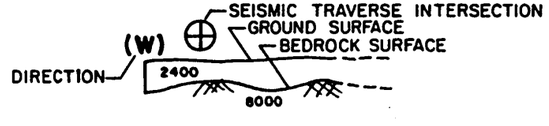
LINE B (con't)



LINE I



LEGEND



NOTES: 1. SEISMIC VELOCITY VALUES ARE IN FEET PER SECOND.

2. ELEVATIONS ALONG TRAVERSES ARE BASED ON SURVEY MAPS PROVIDED BY DAVID A. FLANDERS ASSOC.

3. SEE TEXT FOR A DISCUSSION OF THE RESULTS OF SEISMIC SURVEY.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
SEISMIC REFRACTION PROFILES
MECHANICVILLE SITE
MECHANICVILLE, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

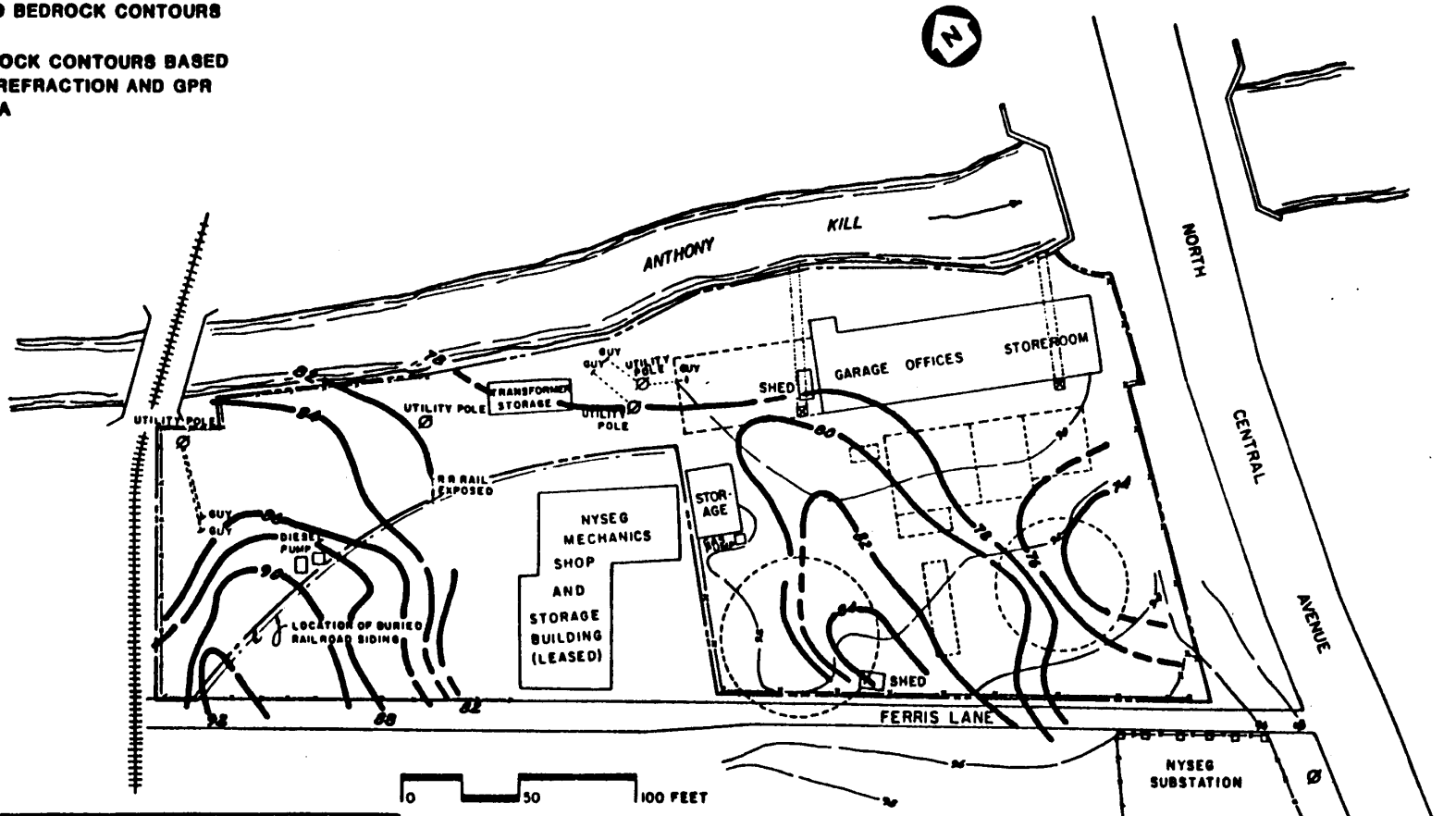
PROJECT NO. 4945-01 FIGURE 2-4

LEGEND

GROUND ELEVATION CONTOURS, IN FEET ABOVE MEAN SEA LEVEL

GENERALIZED BEDROCK CONTOURS

NOTE: BEDROCK CONTOURS BASED ON SEISMIC REFRACTION AND GPR SURVEY DATA

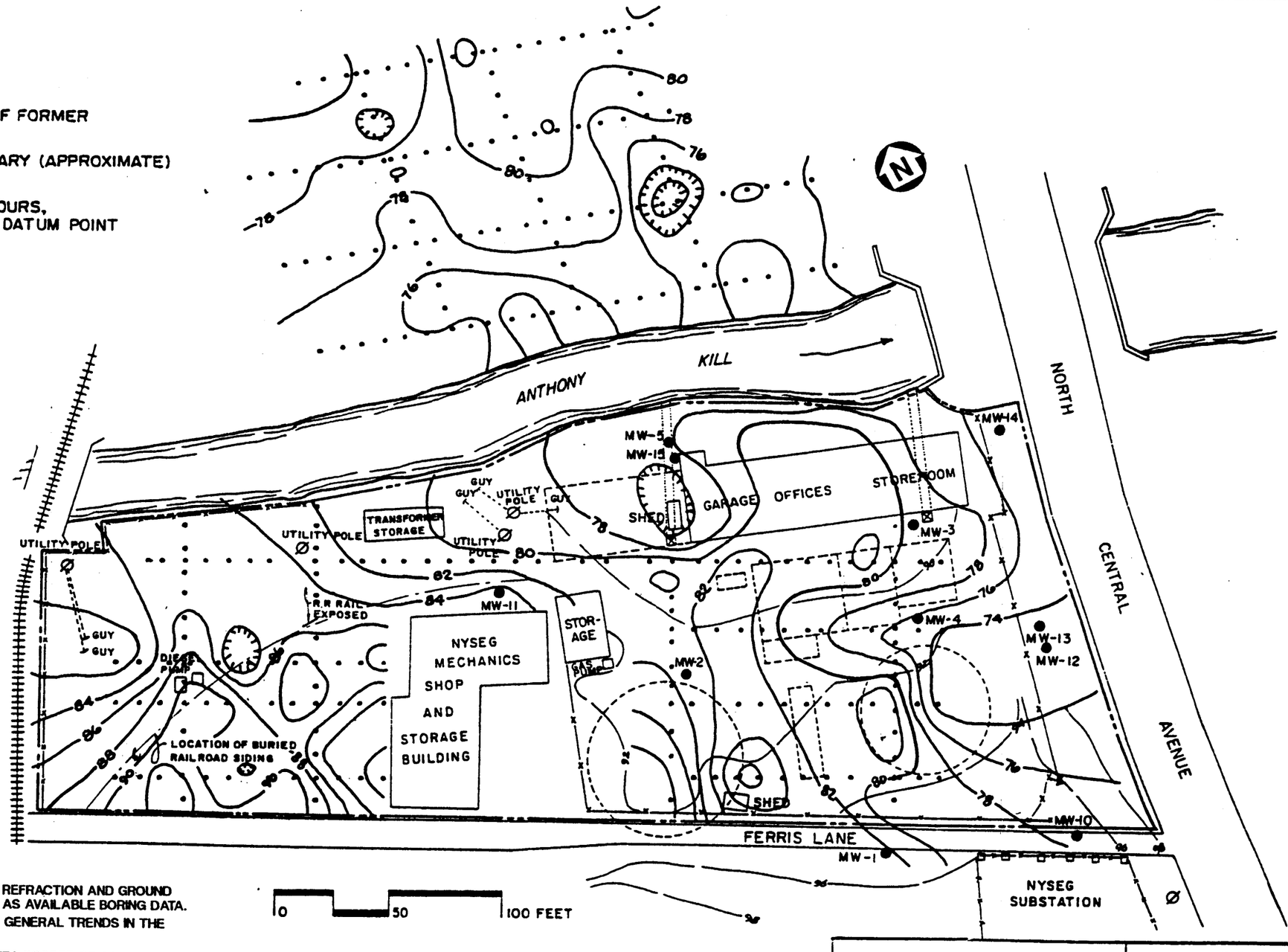


E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: GENERALIZED BEDROCK CONTOURS MECHANICVILLE SITE	
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES	
	PROJECT NO. 4946-01	FIGURE 2-5

BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- INTERPRETED BEDROCK SURFACE CONTOUR
- MONITORING WELL LOCATION
- LOCATION OF GEOPHYSICAL SURVEY LINE
- DEPRESSION



NOTES:
1. BEDROCK CONTOURS BASED ON SEISMIC REFRACTION AND GROUND PENETRATING RADAR SURVEYS AS WELL AS AVAILABLE BORING DATA.
2. CONTOURS INTERPRETED TO REPRESENT GENERAL TRENDS IN THE BEDROCK SURFACE.
3. THE CONTOUR INTERVAL (2 FEET) INDICATES DEGREE OF ACCURACY (±1 TO 2 FEET) REPRESENTED BY INTERPRETATION.

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

EC JORDAN CO. CONSULTING ENGINEERS	**BEDROCK SURFACE CONTOURS MECHANICVILLE SITE**
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-03	**FIGURE 2-6**

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY

TASK 2:

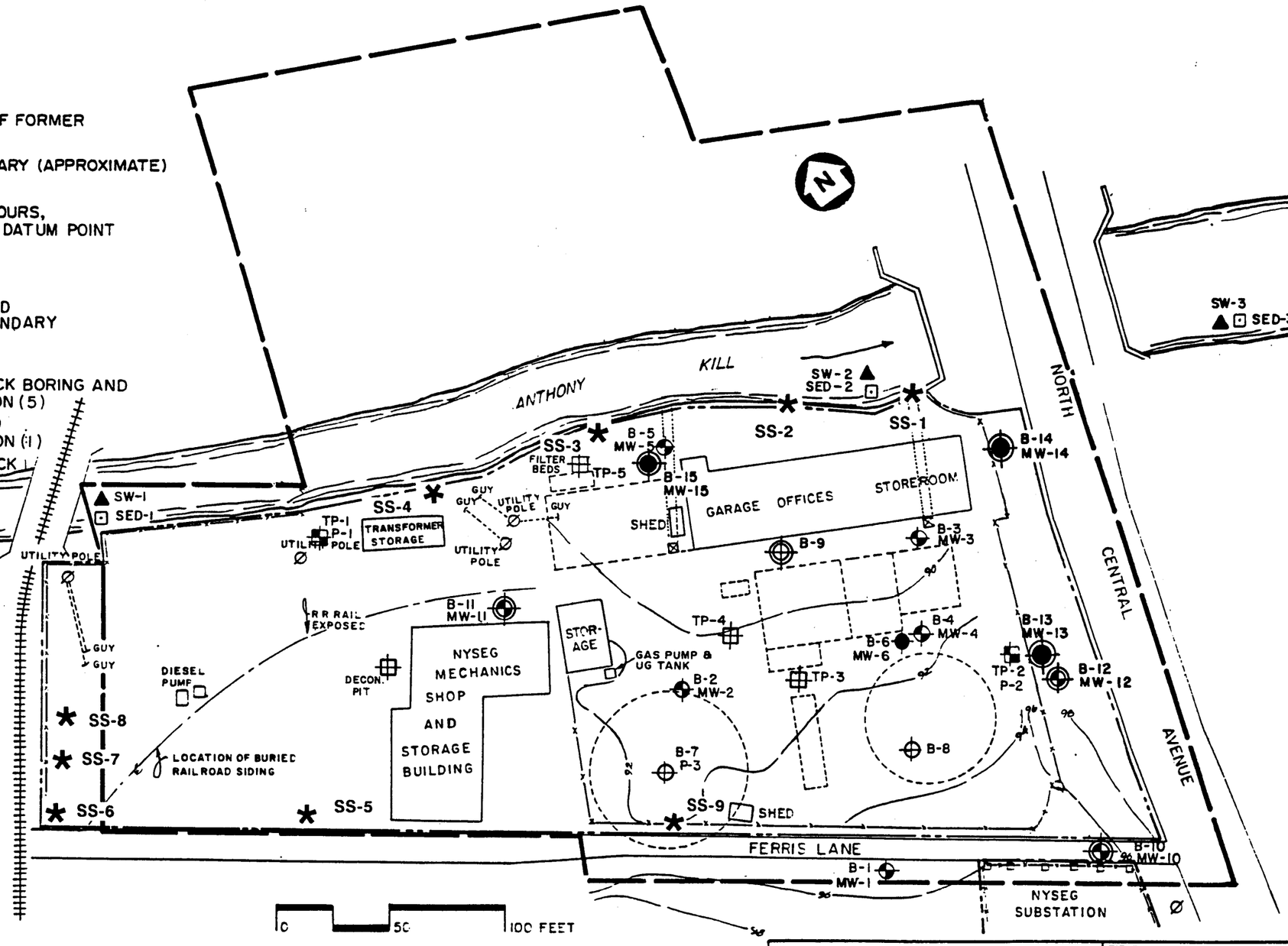
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TASK 4:

- SURFACE SOIL SAMPLE LOCATION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

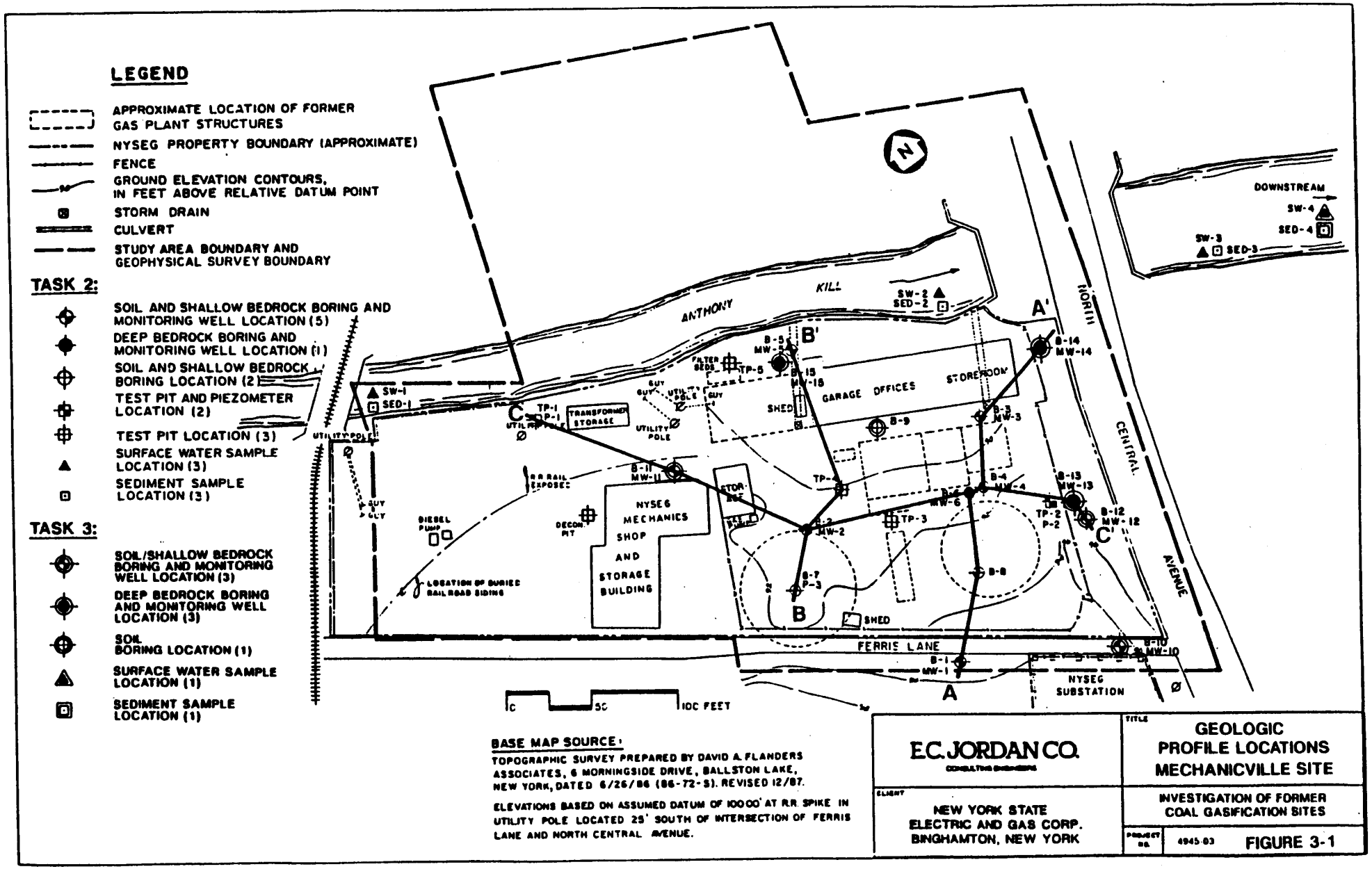
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TASKS 2, 3, AND 4
EXPLORATION LOCATIONS
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 2-7



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 10000' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

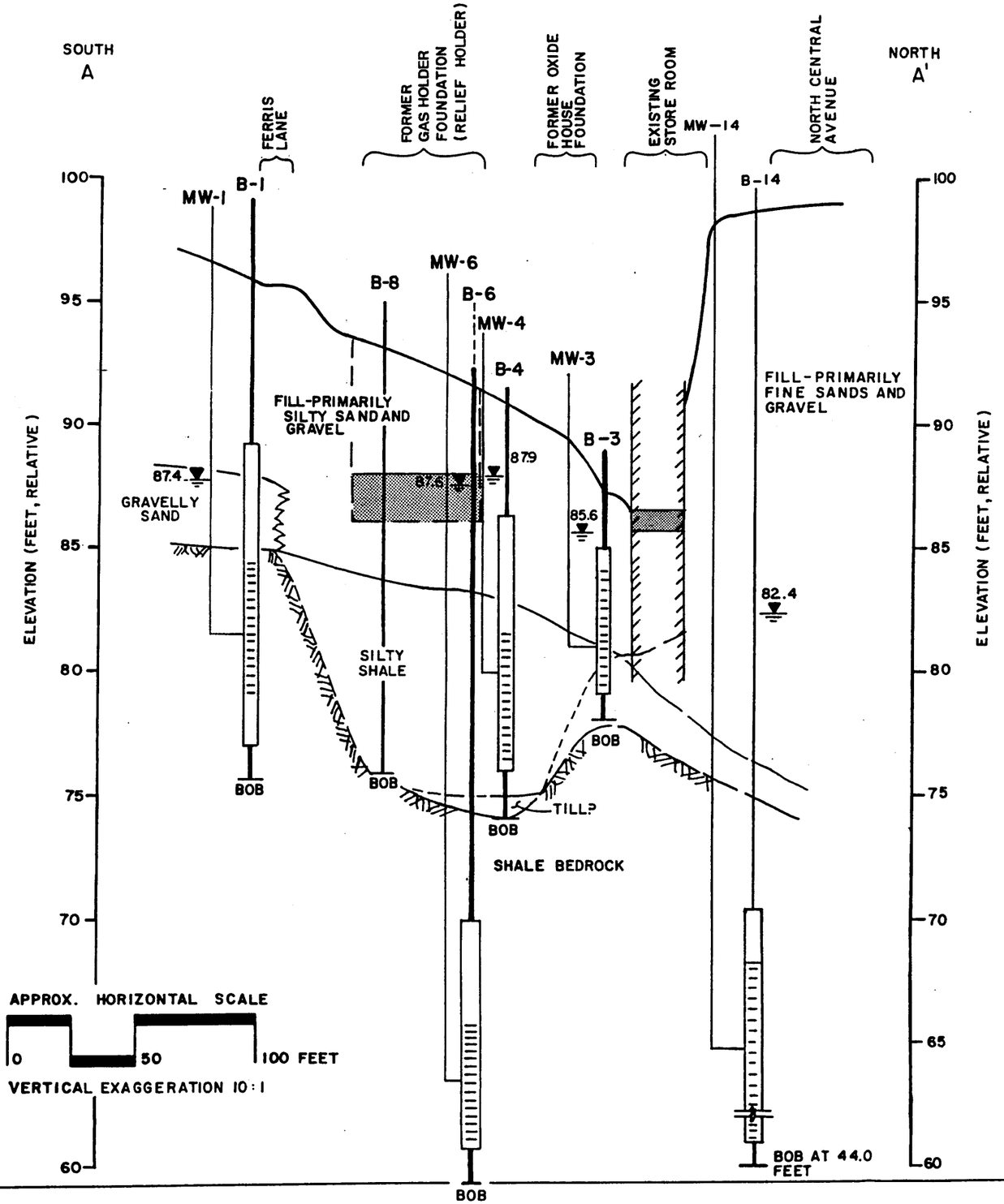
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
GEOLOGIC PROFILE LOCATIONS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-1



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

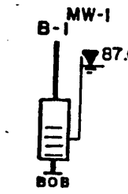
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▭)

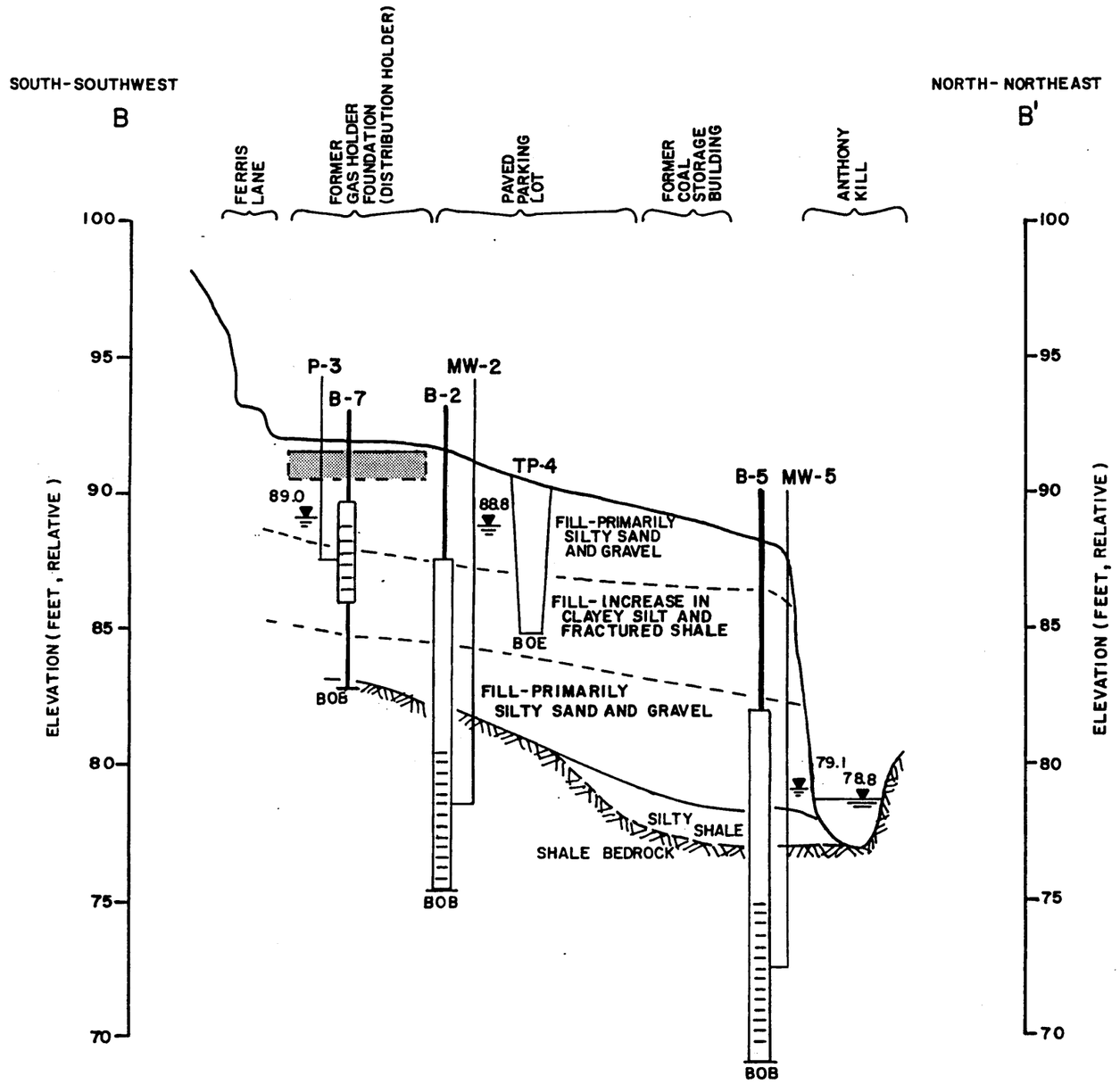
BOTTOM OF BORING

79.3 OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE A-A' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-04	FIGURE 3-2



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

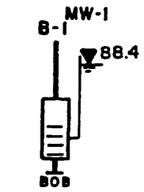
FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND

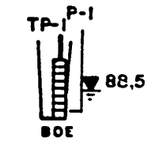


BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

BOTTOM OF BORING

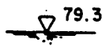


TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION



OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

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CONSULTING ENGINEERS

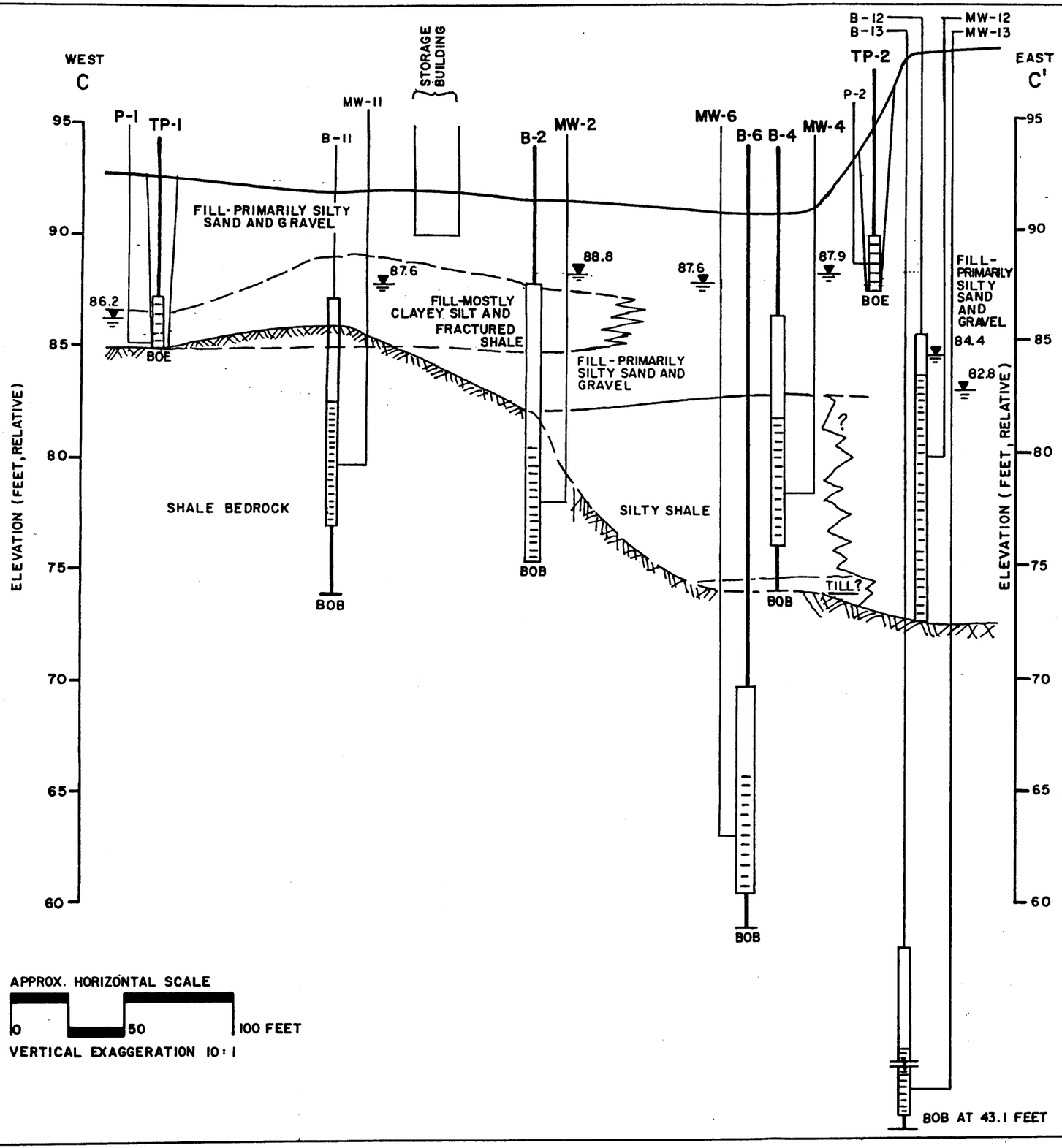
INTERPRETIVE GEOLOGIC PROFILE B-B'
MECHANICVILLE SITE

NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

4945-04

FIGURE 3-3



APPROX. HORIZONTAL SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

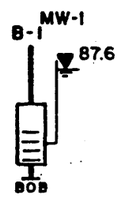
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ⊟)

BOTTOM OF BORING

TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

INTERPRETIVE GEOLOGIC PROFILE C-C'
MECHANICVILLE SITE

NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

4945-04

FIGURE 3-4

LEGEND

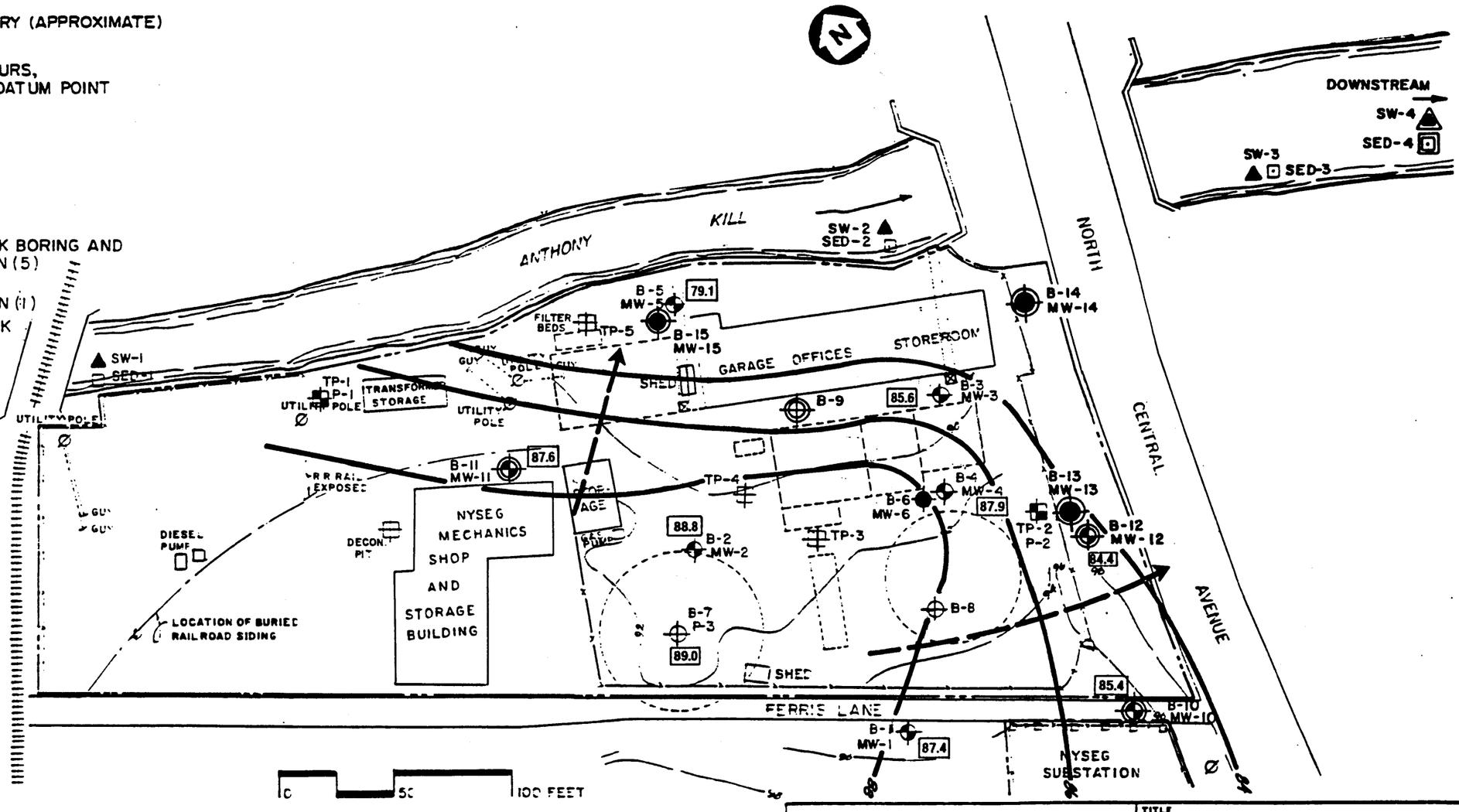
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- 90 GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)
- 89.0 WATER LEVEL (FT. RELATIVE) OBSERVED ON MARCH 29, 1988
- 84 INTERPRETED GROUNDWATER SURFACE CONTOUR
- INTERPRETED GROUNDWATER FLOW DIRECTION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

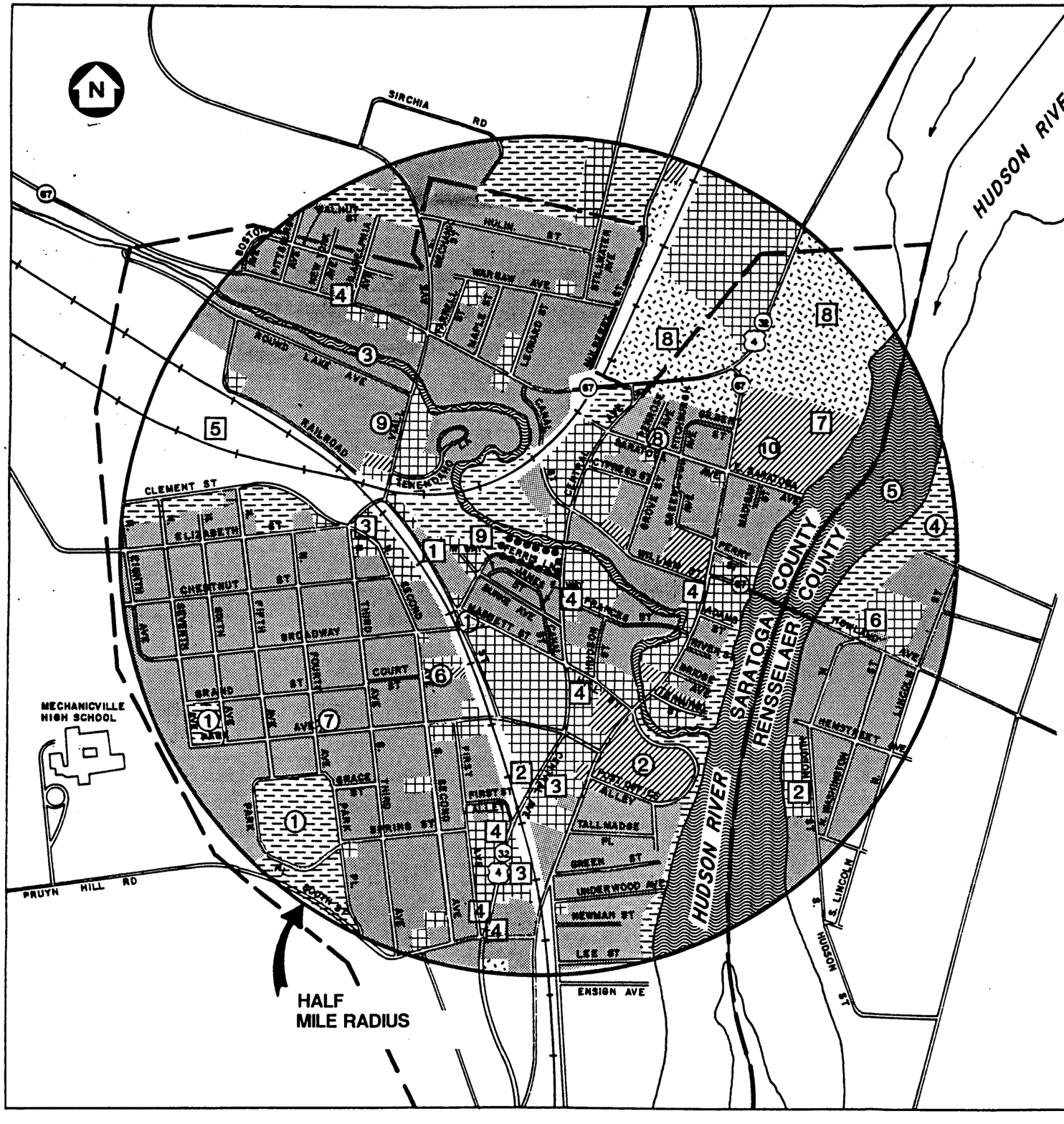
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
WATER TABLE CONTOURS
MECHANICVILLE SITE
MARCH 1988

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-5


N
SIRCHIA RD
HUDSON RIVER
SARATOGA COUNTY
RENSSELAER COUNTY
HUDSON RIVER
MECHANICVILLE HIGH SCHOOL
PRUYN HILL RD
CLEMENT ST
RAILROAD
HALF MILE RADIUS
MAIN ST
BROADWAY
GRAND AVE
GRACE ST
BURNING ST
FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
COURT ST
CHESTNUT ST
ELIZABETH ST
PARK PL
PARK AVE
WALNUT ST
HULIN ST
WARSAW AVE
MAPLE ST
LEDGE ST
WILLIAM ST
PEARL ST
ROUND LAKE AVE
CANAL
CENTRAL CITIZENS ST
BROWN ST
ELIZABETH ST
PEARL ST
MAPLE AVE
HOWARD ST
HUDSON ST
LINCOLN ST
S. LINCOLN
S. WASHINGTON
HEMSTREET AVE
N. BARRETTO AVE
TALLMADGE PL
GREEN ST
UNDERWOOD AVE
NEWMAN ST
LEE ST
ENSIGN AVE
POST OFFICE ALLEY
HAMMETT ST
PEARL ST
MAPLE AVE
HOWARD ST
ELIZABETH ST
PEARL ST
BROWN ST
CENTRAL CITIZENS ST
WILLIAM ST
PEARL

LEGEND

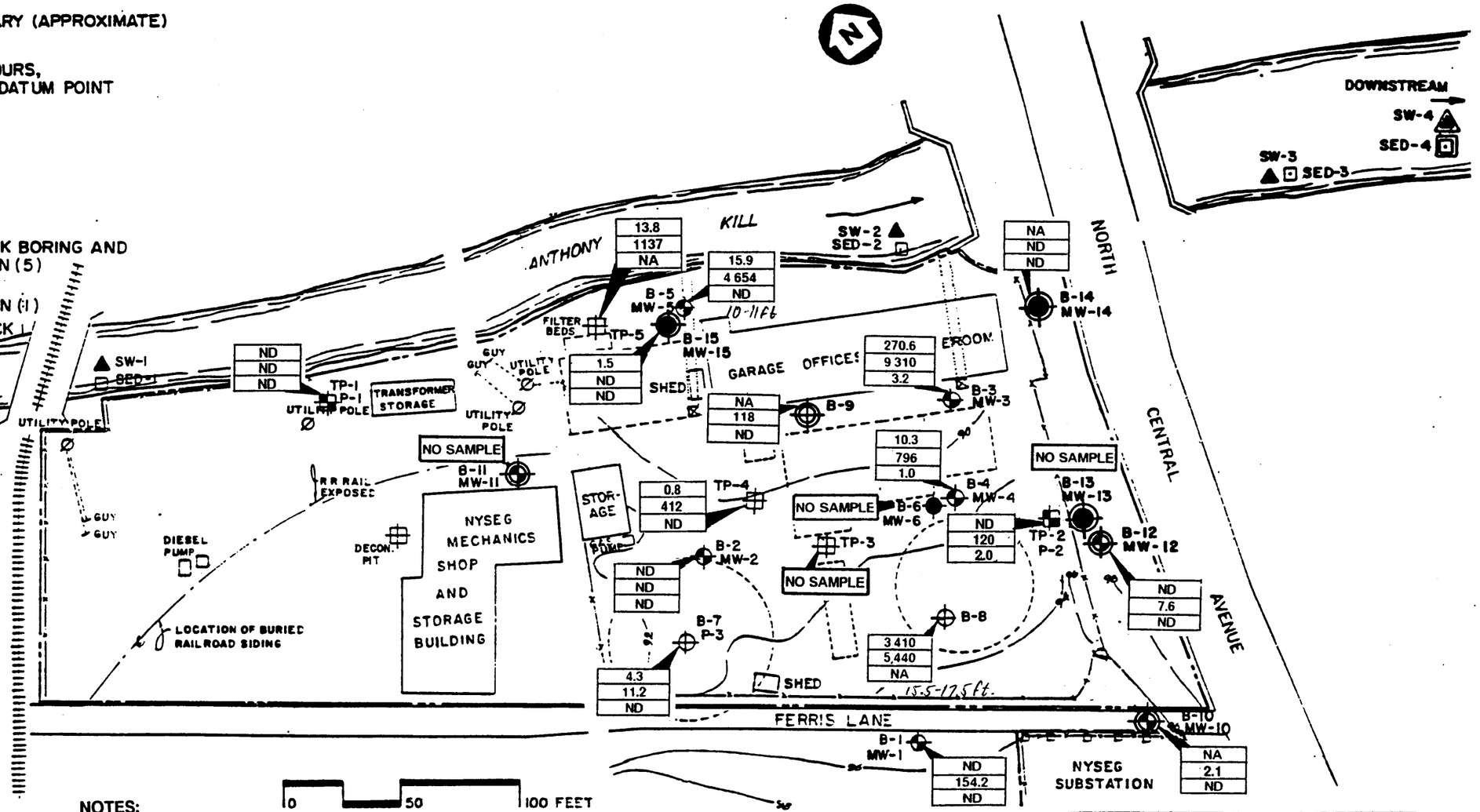
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)



TOTAL VOCs	CONCENTRATIONS DETECTED IN SOIL BORINGS IN mg/kg DURING TASK 2 AND TASK 3 SAMPLING EVENTS.
TOTAL PAHs	
TOTAL CN	
NA	NOT ANALYZED
ND	NOT DETECTED

NOTES:

1. HPLC ORGANIC ANALYSIS RESULTS ARE SHOWN EXCEPT WHERE GC/MS RESULTS ARE AVAILABLE (TP-5; B-8, B-9, B-10, B-12, B-14, AND B-15).
2. WHERE DUPLICATE SAMPLES WERE ANALYZED BY THE SAME TECHNIQUE, THE HIGHER VALUE IS SHOWN.
3. SAMPLES WERE COLLECTED AT DEPTHS BETWEEN 3 AND 24 FEET BELOW GROUND SURFACE.
4. ALL SAMPLES EXCEPT TP-5 AND B-9 WERE COLLECTED BELOW THE WATER TABLE.

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE: DISTRIBUTION OF CHEMICALS IN SOILS MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

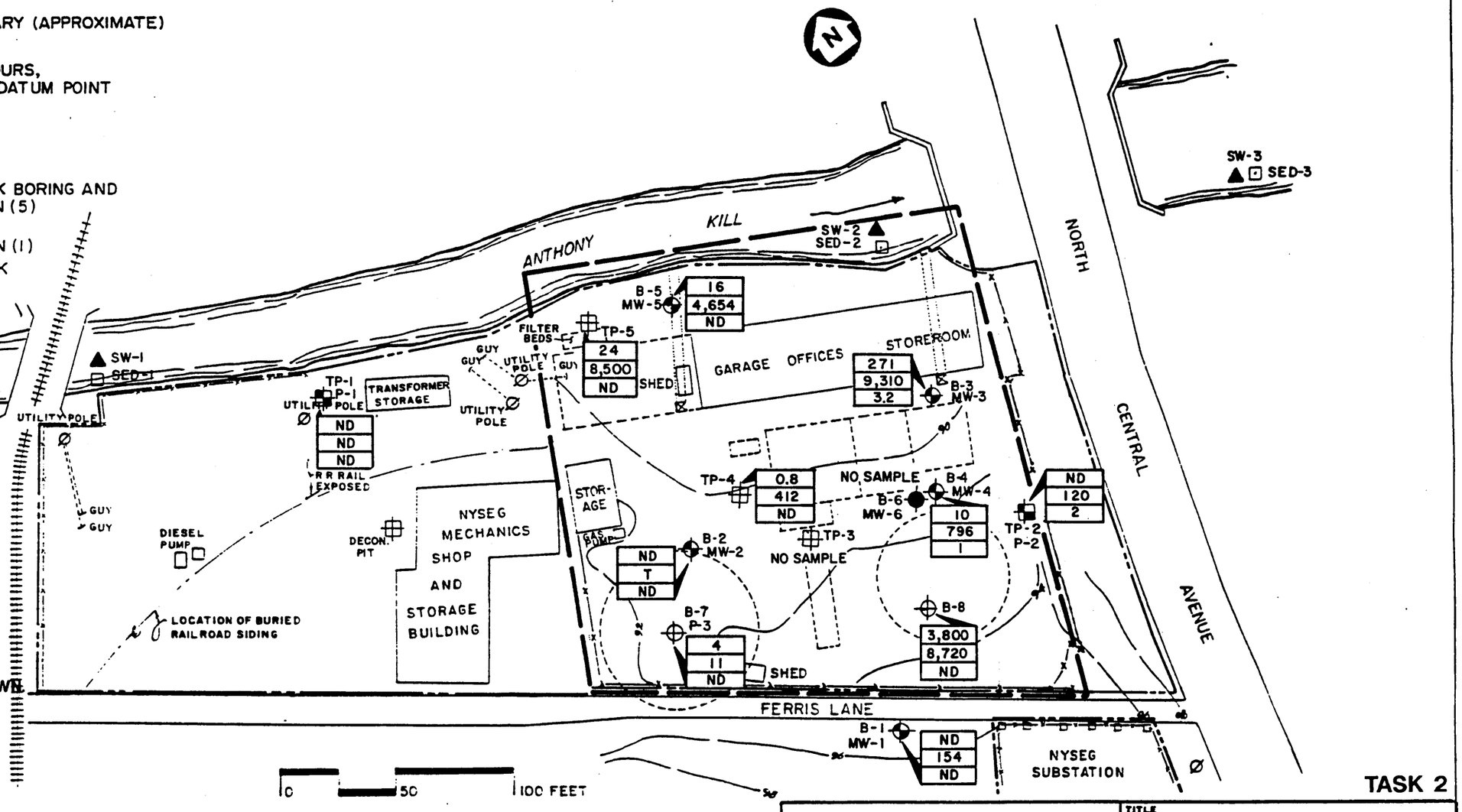
PROJECT NO. 4945-04

FIGURE 4-1

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TOTAL VOCs	CONCENTRATIONS DETECTED IN SOIL SAMPLES IN mg/kg. DURING JULY/AUGUST 1986 SAMPLING EVENT.
TOTAL PAHs	
TOTAL CN	



NOTES:

1. FOR CONSISTENCY, ONLY HPLC ORGANIC ANALYSES RESULTS ARE SHOWN.
2. WHERE DUPLICATE SAMPLES WERE ANALYZED, THE HIGHER VALUE IS SHOWN.
3. SAMPLES WERE COLLECTED AT DEPTHS BETWEEN 3 AND 11 FEET BELOW GROUND SURFACE WITH THE EXCEPTION OF B-8 WHICH WAS 13.5 TO 15.5 FEET DEEP.
4. ALL SAMPLES EXCEPT TP-5 WERE COLLECTED BELOW THE HIGHEST OBSERVED WATER TABLE LEVEL.

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

TASK 2

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE: DISTRIBUTION OF SELECTED CHEMICALS IN SOIL MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02 FIGURE 4-2

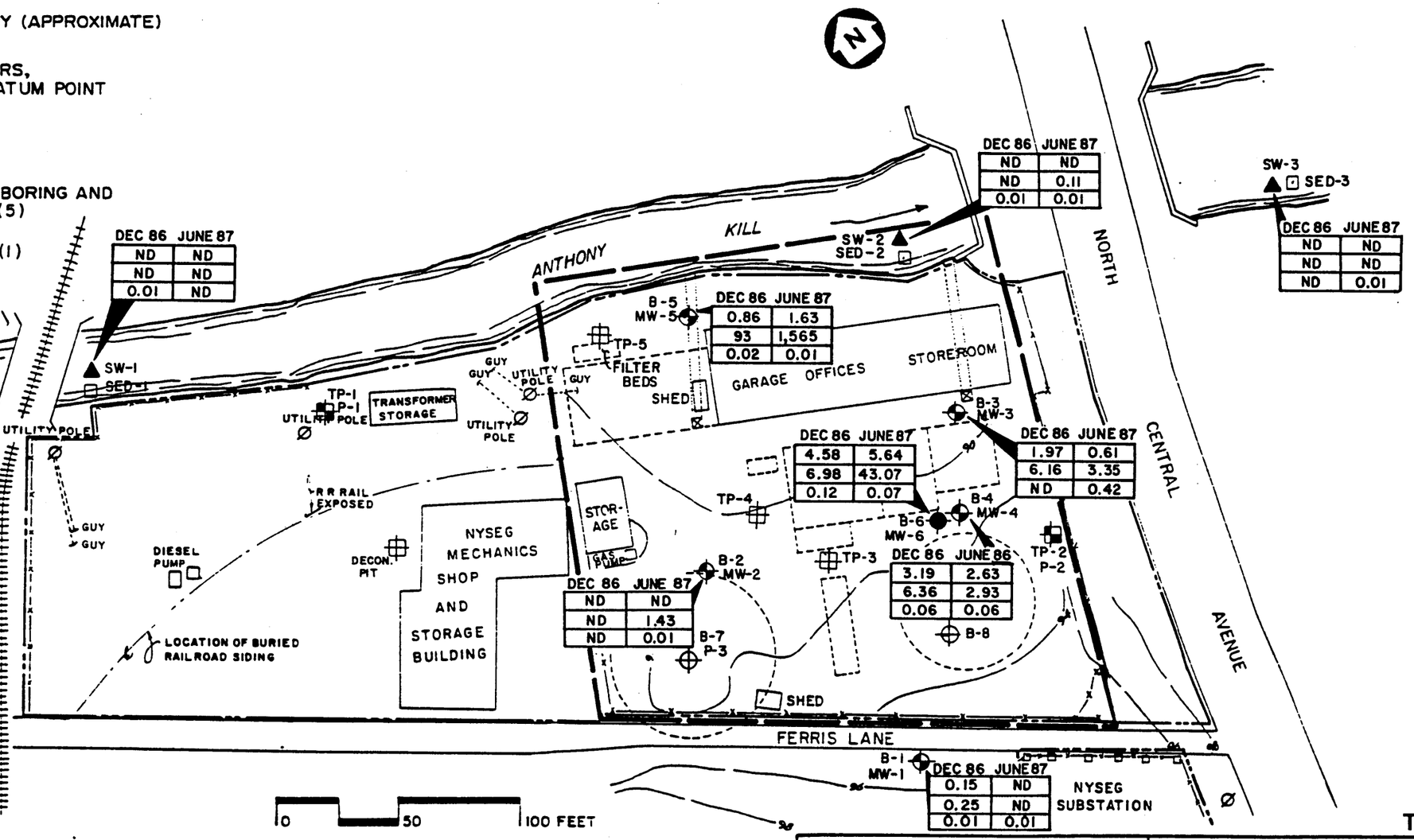
LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TOTAL VOCs	CONCENTRATIONS DETECTED IN GROUNDWATER SAMPLES IN mg/l.
TOTAL PAHs	
TOTAL CN	

NOTES:

1. ALL ORGANIC CONCENTRATIONS ARE FROM GC/MS ANALYSES.
2. WHERE DUPLICATE SAMPLES WERE ANALYZED, THE HIGHER VALUE IS SHOWN.
3. RESULTS ARE SHOWN FOR TWO SAMPLING EVENTS: DECEMBER 1986 AND JUNE 1987, AS LABELLED.
4. B-6 IS THE ONLY BEDROCK WELL; THE REMAINING WELLS SPAN BOTH SOIL AND BEDROCK ZONES.



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

TASK 2

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE: DISTRIBUTION OF SELECTED CHEMICALS IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-02 FIGURE 4-3

LEGEND

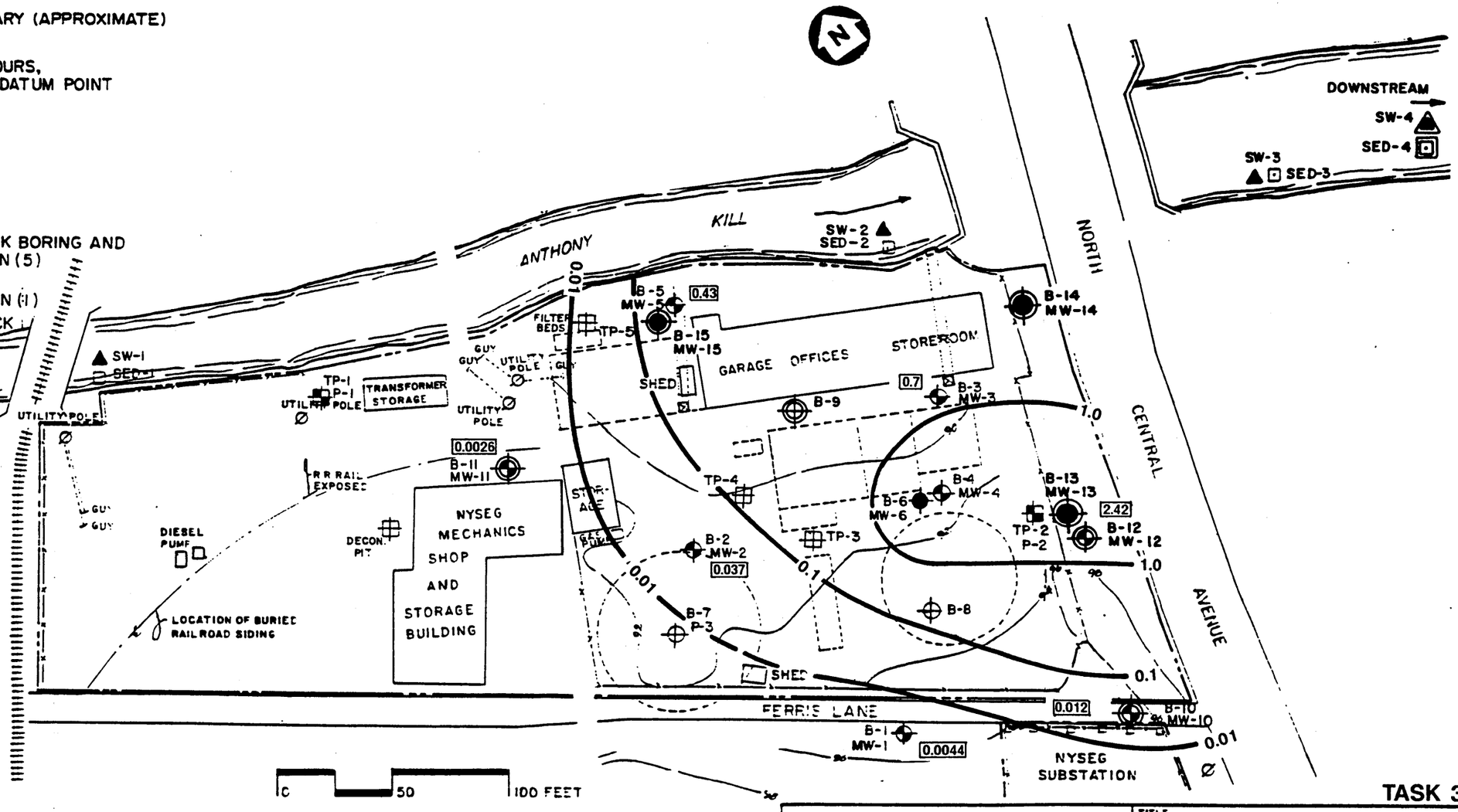
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- STUDY AREA BOUNDARY

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)
- 1.0 — INTERPRETIVE CONTOUR OF MAXIMUM CONCENTRATION (in mg/l) OF TOTAL VOCs IN SHALLOW GROUNDWATER DURING TASK 3
- 2.42 — MAXIMUM CONCENTRATION IN mg/l OF TOTAL VOCs IN SAMPLE COLLECTED DURING TASK 3



TASK 3

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

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CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

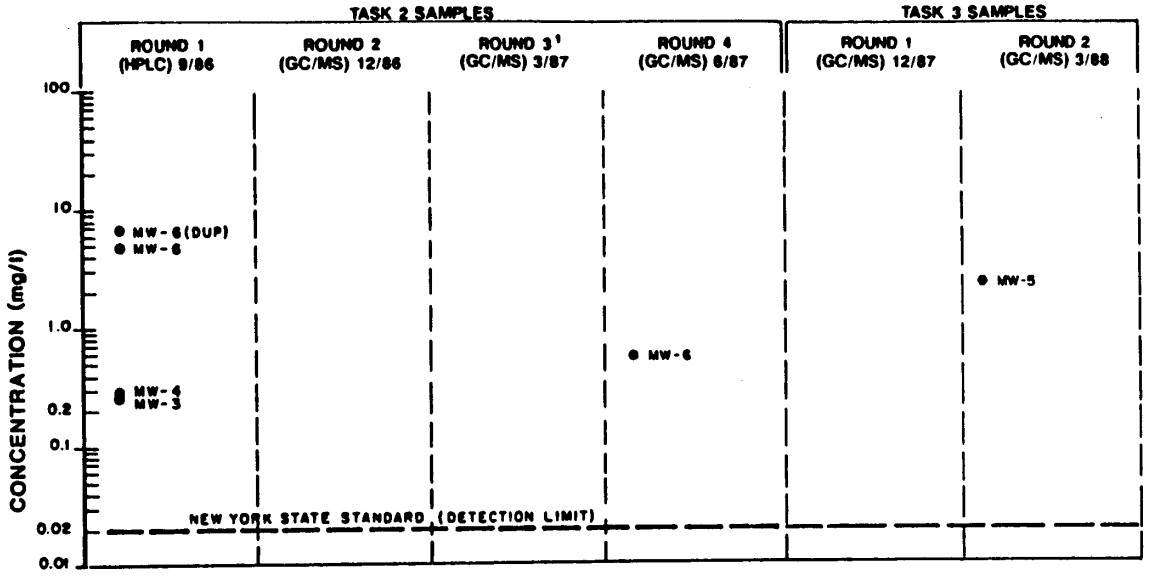
TITLE
DISTRIBUTION OF TOTAL VOCs IN SHALLOW GROUNDWATER MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 4-4

BENZO (a) PYRENE IN GROUNDWATER



SAMPLES IN WHICH BENZO (a) PYRENE WAS NOT DETECTED

ROUND 1 (HPLC) 9/86	ROUND 2 (GC/MS) 12/86	ROUND 3[1] (GC/MS) 3/87	ROUND 4 (GC/MS) 6/87	TASK 3 SAMPLES ROUND 1 (GC/MS) 12/87	TASK 3 SAMPLES ROUND 2 (GC/MS) 3/88
MW-1[2]	MW-1	MW-1	MW-1	MW-1	MW-1
MW-1(GC/MS)[2]	MW-2	MW-2	MW-2	MW-2	MW-2
MW-2	MW-2(DUP)	MW-3	MW-3	MW-3[2]	MW-2(DUP)
MW-3(GC/MS)[2]	MW-3	MW-4	MW-4	MW-4	MW-3[2]
MW-5	MW-4	MW-6	MW-5	MW-5	MW-4
	MW-5	MW-6(DUP)	MW-5(DUP)	MW-6[2]	MW-6
	MW-6			MW-10	MW-10
				MW-11	MW-11
				MW-11(DUP)	MW-12[2]
				MW-12	MW-13[2]
				MW-13	MW-13(DUP)[2]
				MW-14	MW-14
				MW-15	MW-15
				MW-15(DUP)	

[1] MW-5 WAS NOT SAMPLED IN ROUND 3.
[2] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT

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NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

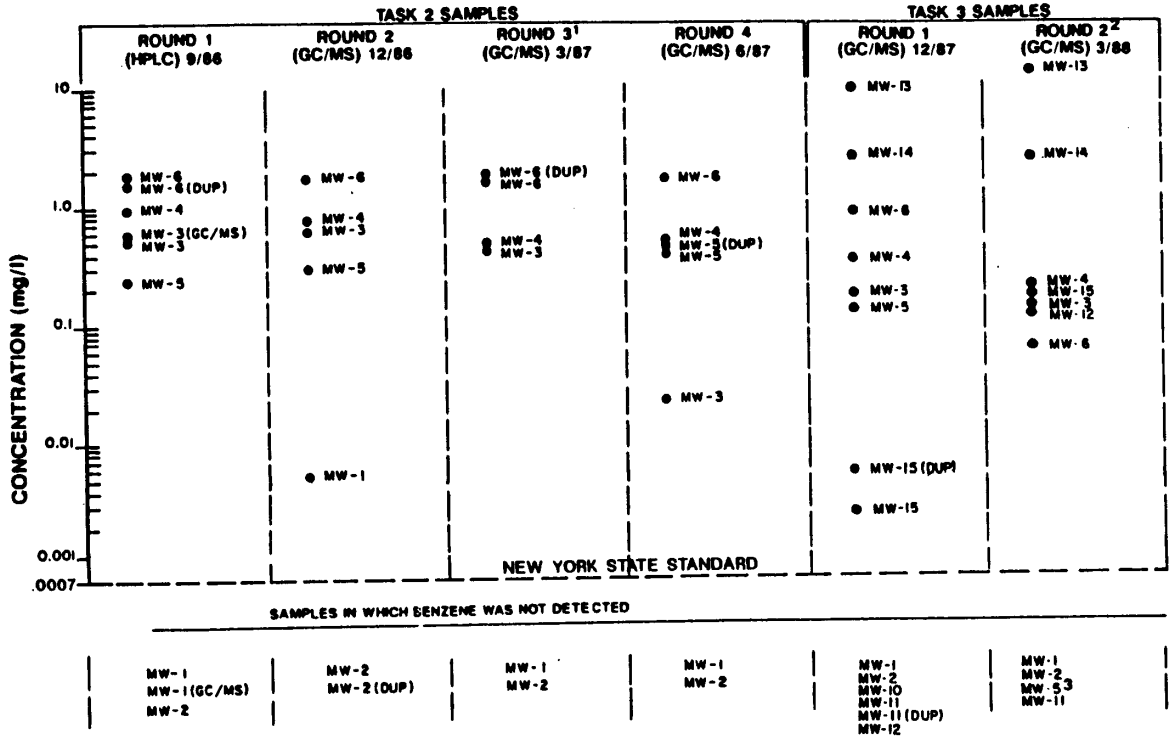
TITLE
BENZO (a) PYRENE IN GROUNDWATER
MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 5-1

BENZENE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED IN ROUND 3.

[2] BENZENE ANALYSIS WAS NOT PERFORMED ON ROUND 2 SAMPLES. MW-2(DUP), MW-10, AND MW-13(DUP).

[3] TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE
BENZENE IN GROUNDWATER
MECHANICVILLE SITE

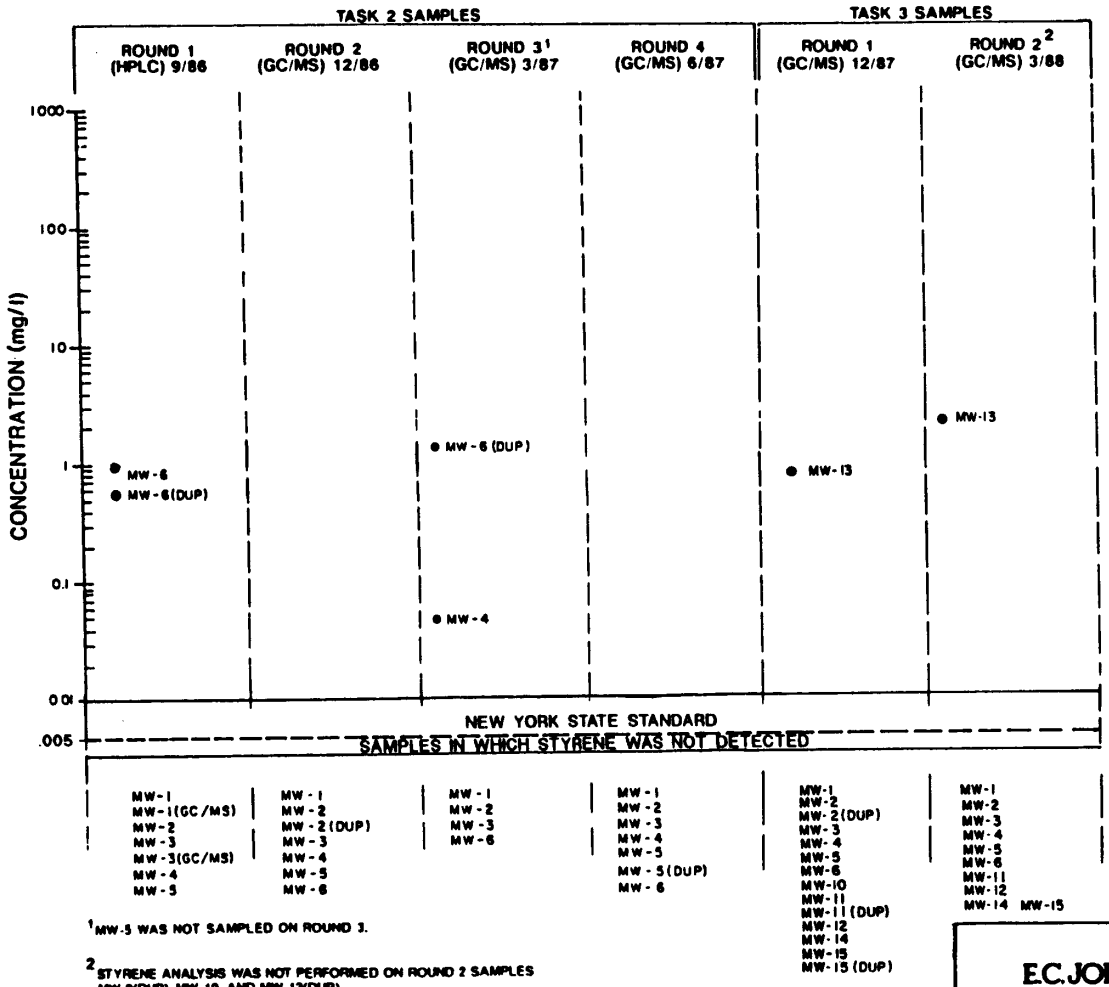
CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 5-2

STYRENE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

[2] STYRENE ANALYSIS WAS NOT PERFORMED ON ROUND 2 SAMPLES MW-2(DUP), MW-10, AND MW-13(DUP).

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CONSULTING ENGINEERS

TITLE
STYRENE IN GROUNDWATER
MECHANICVILLE SITE

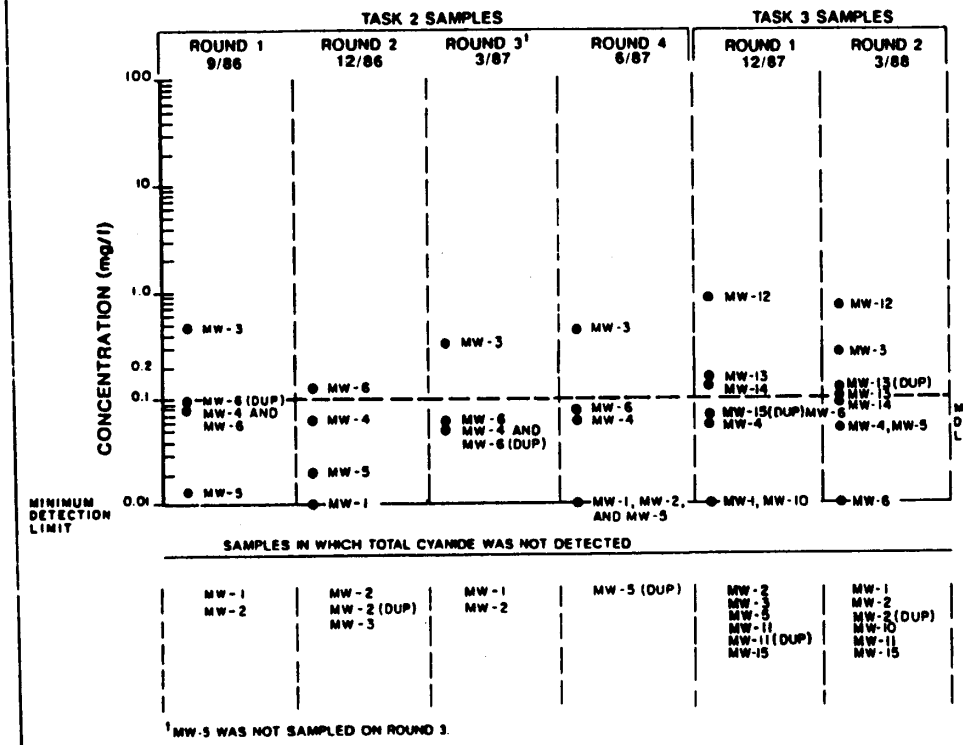
CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4945-04

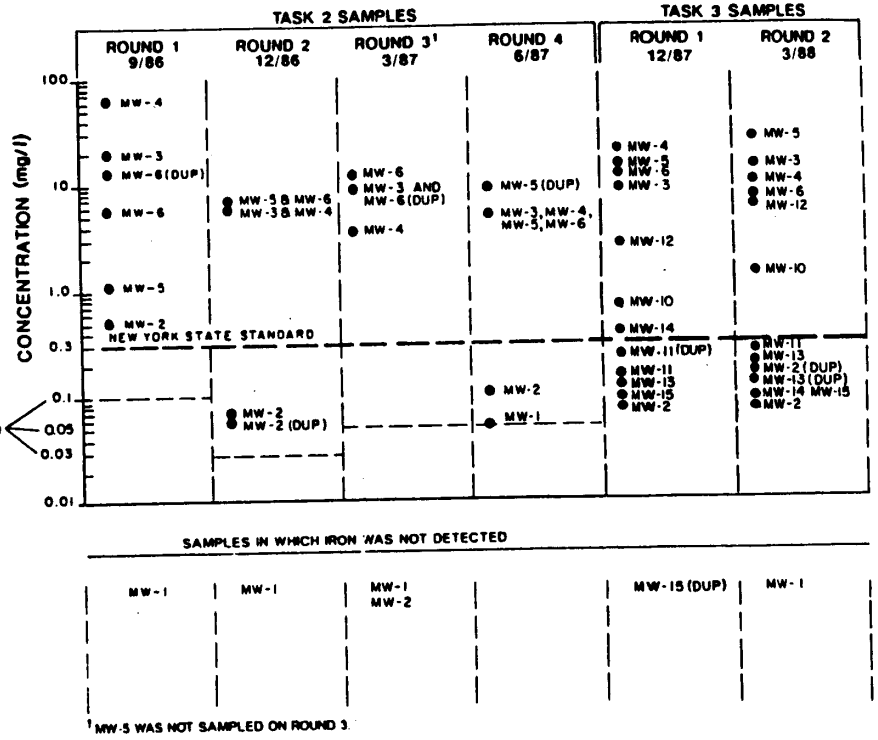
FIGURE 5-3

TOTAL CYANIDE IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

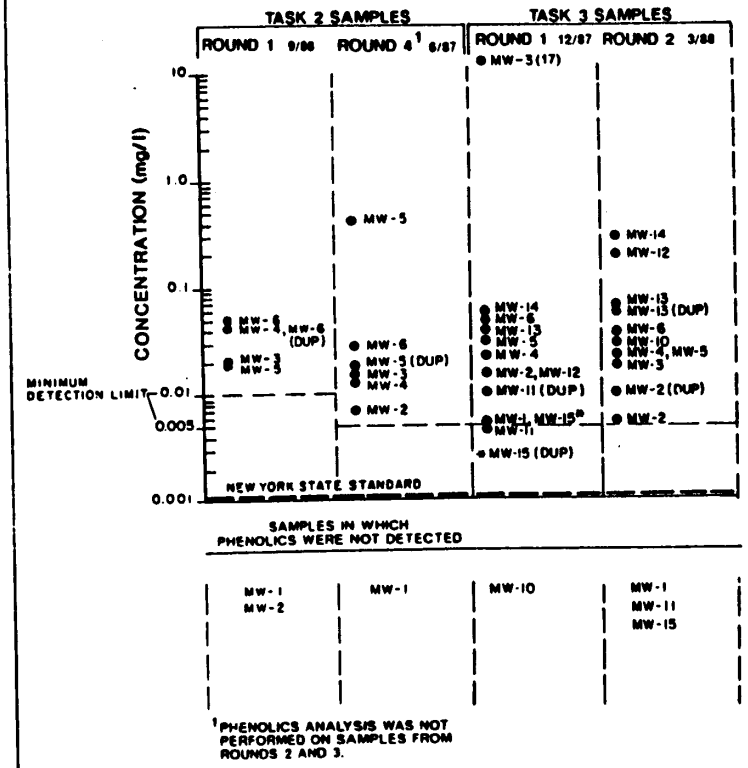
IRON IN GROUNDWATER



[1] MW-5 WAS NOT SAMPLED ON ROUND 3.

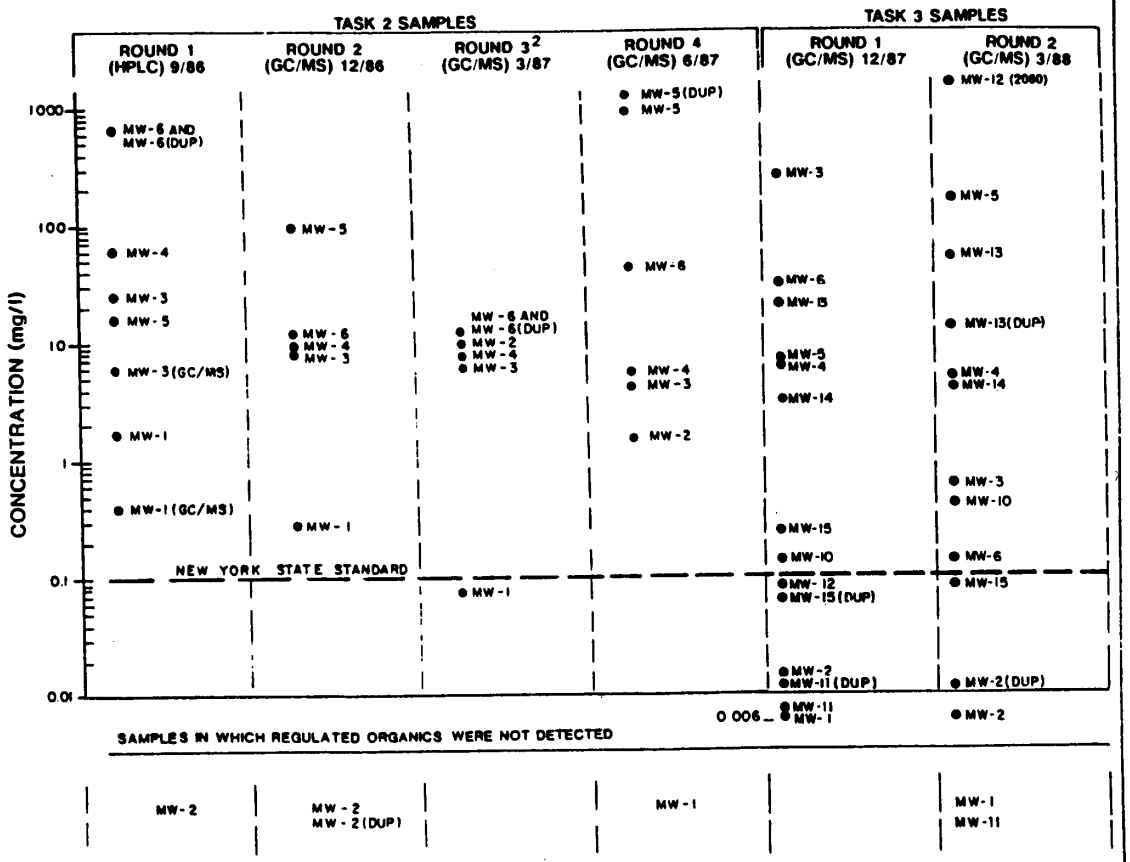
E.C. JORDAN CO. CONSULTING ENGINEERS	TITLE: TOTAL CYANIDE AND IRON IN GROUNDWATER MECHANICVILLE SITE
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-04 FIGURE 5-4

PHENOLICS IN GROUNDWATER



[1] PHENOLICS ANALYSIS WAS NOT PERFORMED ON SAMPLES FROM ROUNDS 2 AND 3.

TOTAL NEW YORK STATE REGULATED ORGANICS IN GROUNDWATER[1]



[2] MW-5 WAS NOT SAMPLED ON ROUND 3.

[1] THE N.Y. STATE CLASS 6A STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMI-VOLATILE ORGANICS, EXCEPT FOR ACETONE, STYRENE, ACENAPHTHYLENE, BENZO(G,H,I)PERYLENE, DIBENZO(A,H)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

TITLE
PHENOLICS AND TOTAL N.Y. STATE REGULATED ORGANICS IN GROUNDWATER
MECHANICVILLE SITE

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

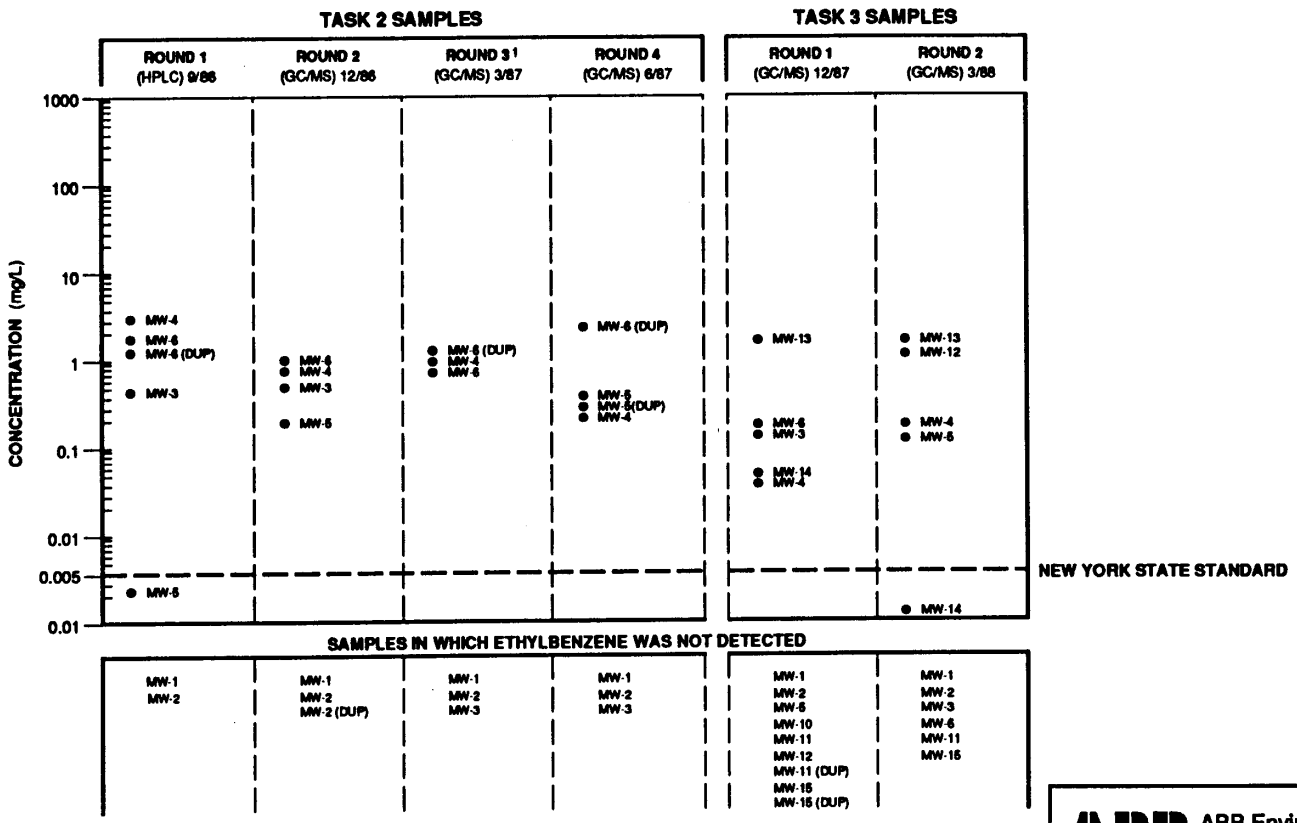
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 5-5

Q8002026

ETHYLBENZENE IN GROUNDWATER



NOTE: 1 - MW-5 WAS NOT SAMPLED IN ROUND 3.

ABB Environmental Services, Inc.

ASEA BROWN BOVERI

TITLE: ETHYLBENZENE IN GROUNDWATER MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

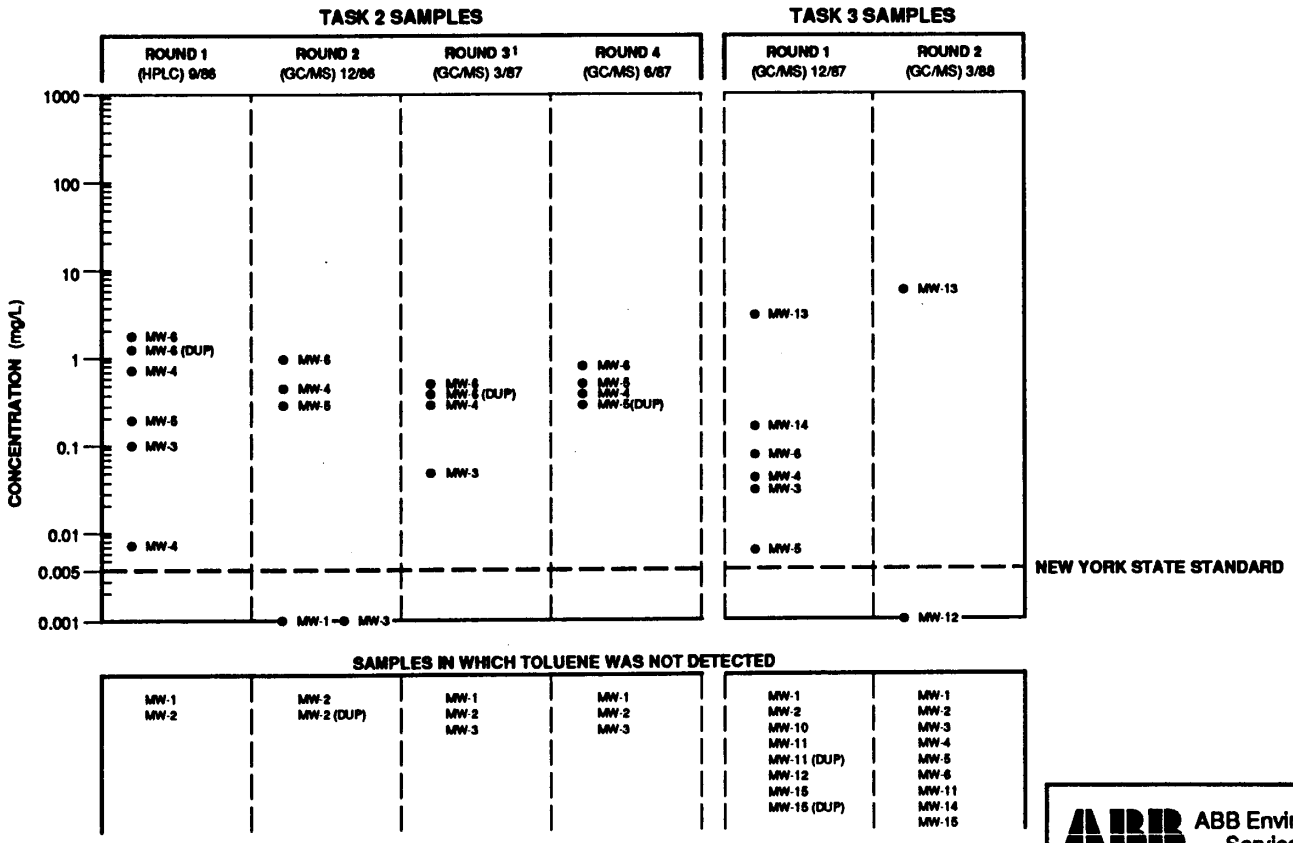
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 5-6

8220080

TOLUENE IN GROUNDWATER



NOTE: 1 - MW-5 WAS NOT SAMPLED IN ROUND 3.

ABB Environmental Services, Inc.

TITLE: TOLUENE IN GROUNDWATER MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

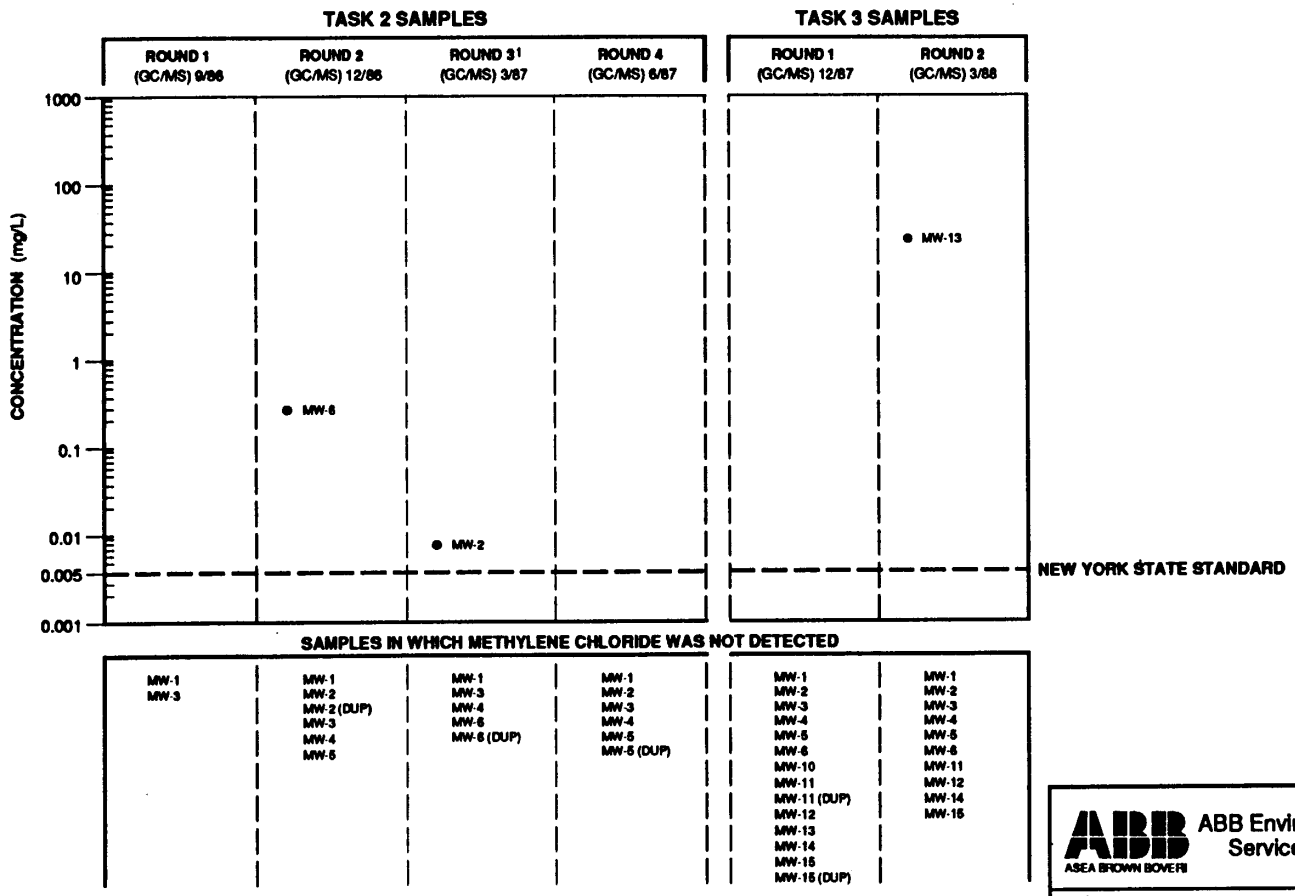
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 5-7

0902026

METHYLENE CHLORIDE IN GROUNDWATER



NOTE: 1 - MW-6 WAS NOT SAMPLED IN ROUND 3.

ABB Environmental Services, Inc.
ASEA BROWN BOVERI

TITLE
METHYLENE CHLORIDE IN GROUNDWATER MECHANICVILLE SITE

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

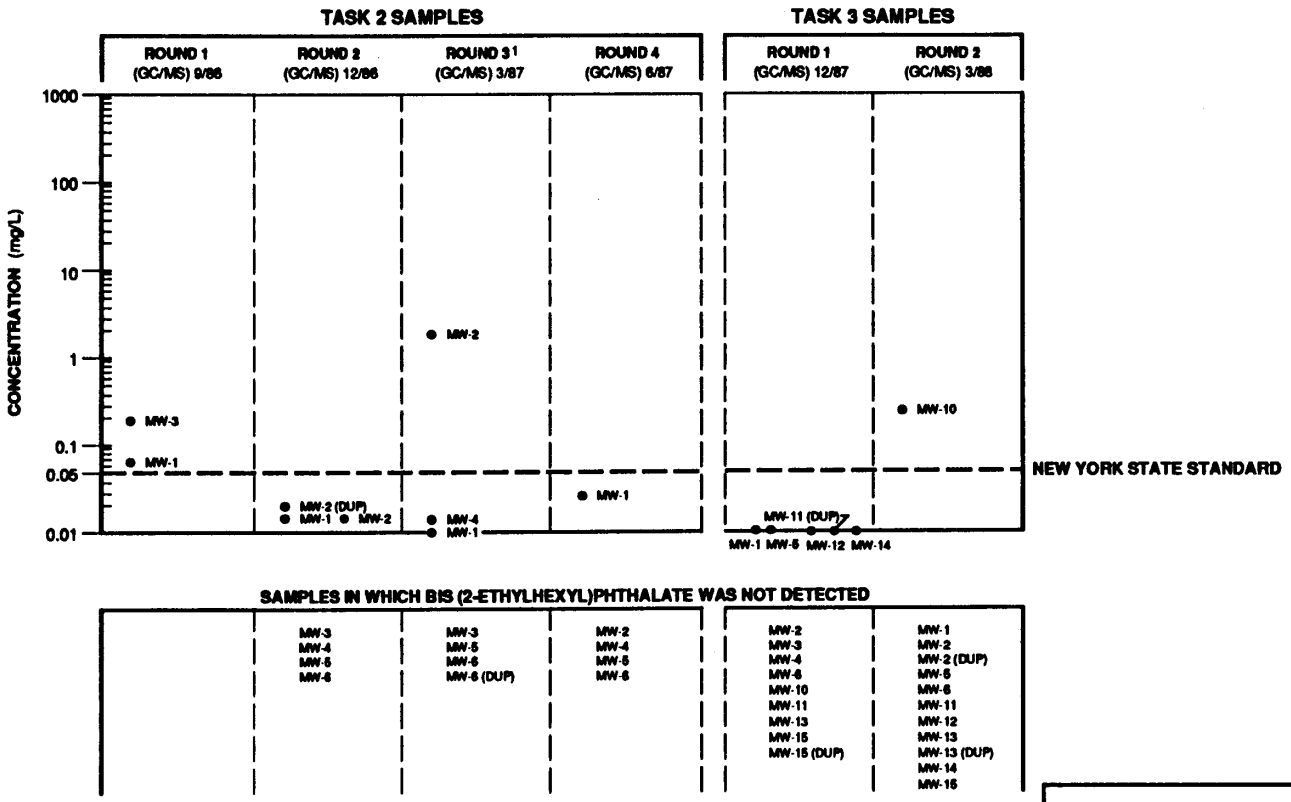
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 5-8

080023/28

BIS (2-ETHYLHEXYL) PHTHALATE IN GROUNDWATER



NOTE: 1 - MW-5 WAS NOT SAMPLED IN ROUND 3.

ABB Environmental Services, Inc.
ASEA BROWN BOVERI

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
BIS (2-ETHYLHEXYL) PHTHALATE IN GROUNDWATER MECHANICVILLE SITE

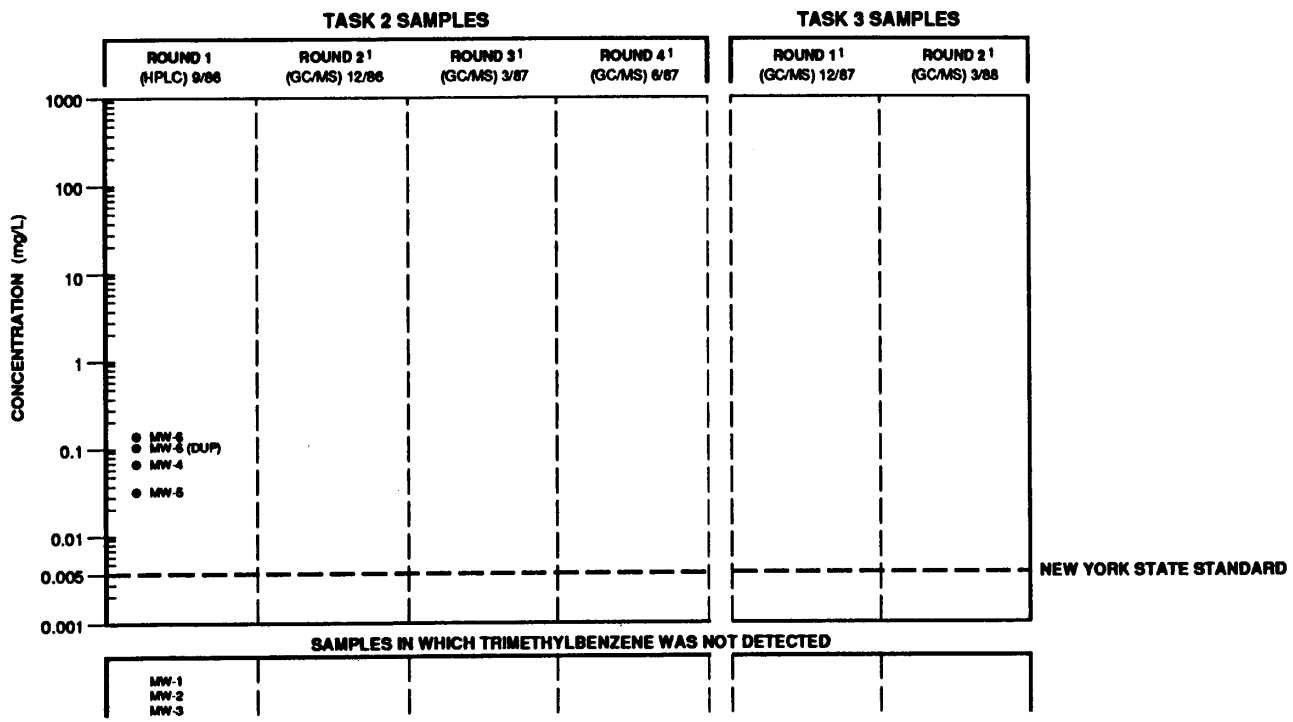
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 5-9

080020B

TRIMETHYLBENZENE IN GROUNDWATER



NOTE: 1 - TRIMETHYLBENZENE (HPLC) DATA ONLY AVAILABLE FROM TASK 2/ROUND 1.

ABB Environmental Services, Inc.
ABB ABEA BROWN BOVERI

CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TRIMETHYLBENZENE
IN GROUNDWATER
MECHANICVILLE SITE

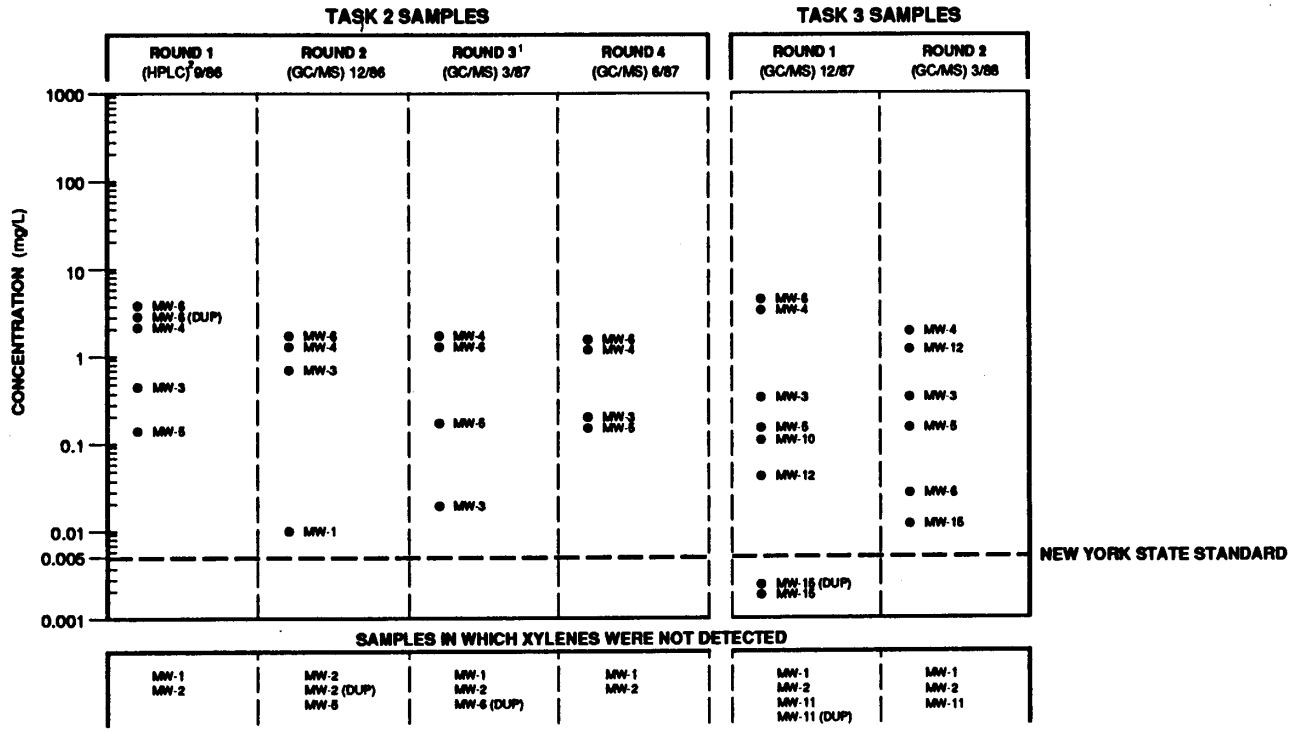
INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 5-10

09002026

TOTAL XYLENES IN GROUNDWATER



NOTE: 1 - MW-6 WAS NOT SAMPLED IN ROUND 3.
2 - HPLC RESULTS WERE SUMMED TO OBTAIN A TOTAL VALUE.

ABB Environmental Services, Inc.
ASEA BROWN BOVERI

CLIENT
NEW YORK STATE
ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TOTAL XYLENES
IN GROUNDWATER
MECHANICVILLE SITE

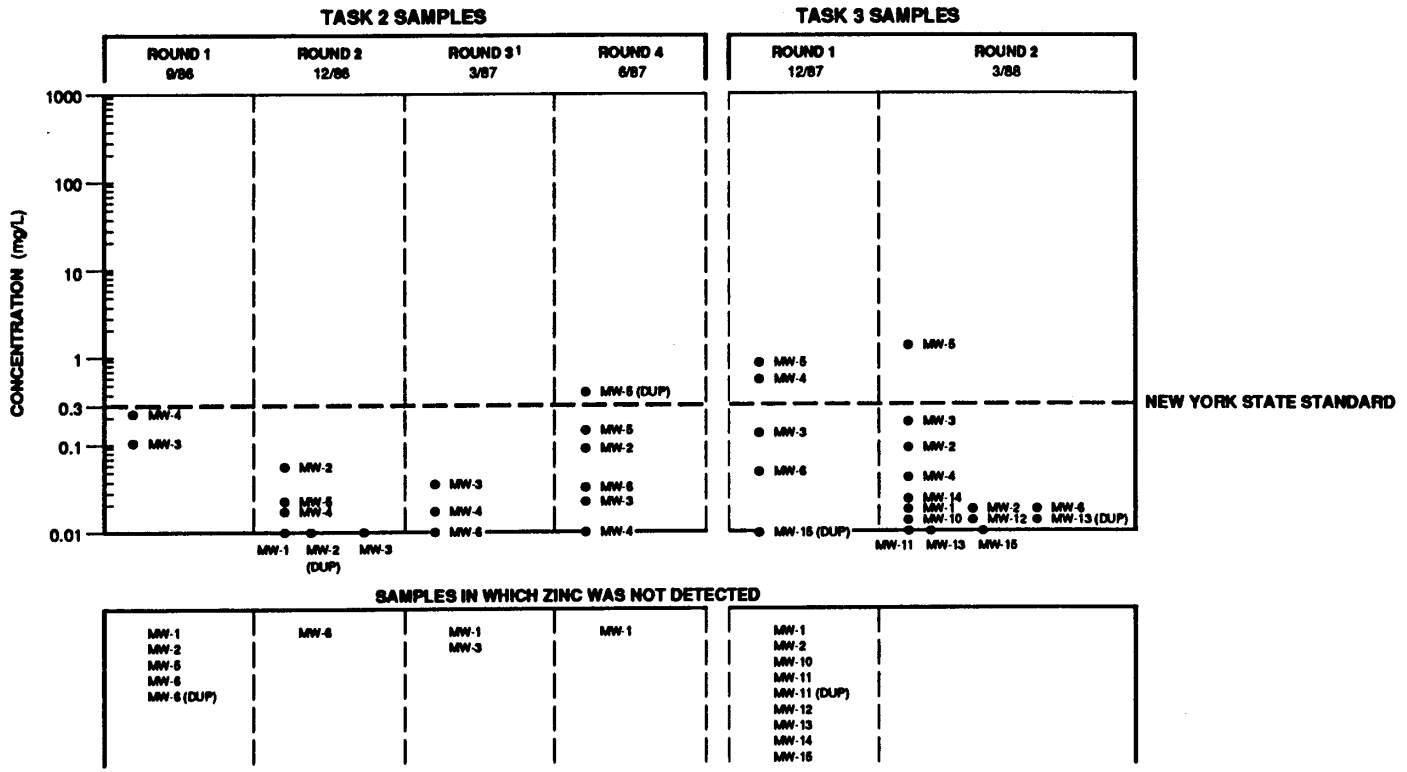
INVESTIGATION OF FORMER
COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 5-11

080020028

ZINC IN GROUNDWATER



NOTE: 1 - MW-6 WAS NOT SAMPLED IN ROUND 3.

ABB Environmental Services, Inc. (ASEA BROWN BOVERI)	TITLE: ZINC IN GROUNDWATER MECHANICVILLE SITE
CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
	PROJECT NO. 4945-06 FIGURE 5-12

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

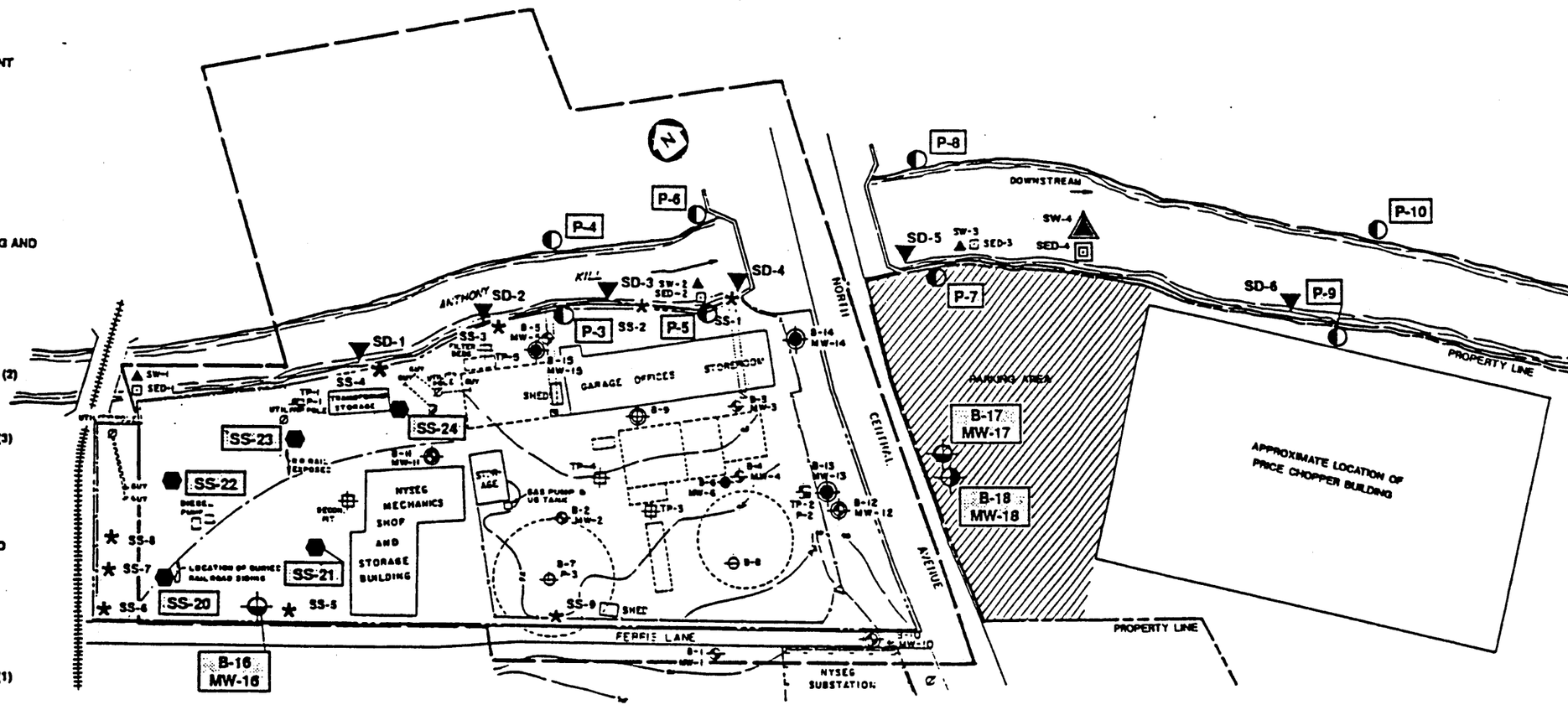
- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TASK 4:

- SURFACE SOIL SAMPLE LOCATION

PHASE IIA RI:

- AREA TO BE COVERED BY SEISMIC REFRACTION SURVEY
- SOIL BORING AND WATER TABLE MONITORING WELL
- SOIL/SHALLOW BEDROCK BORING AND BEDROCK MONITORING WELL
- SHALLOW SUBSURFACE SOIL SAMPLING LOCATION
- PIEZOMETER
- SEDIMENT SAMPLE LOCATION



0 50 100 FEET

BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

AREA EAST OF NORTH CENTRAL AVENUE INTERPRETED FROM AERIAL PHOTOGRAPHS AND TAX MAP 282.53, CITY OF MECHANICVILLE.

ABB Environmental Services, Inc.

ASEA BROWN BOVERI

PROPOSED PHASE IIA MGP - RELATED SAMPLING LOCATIONS MECHANICVILLE SITE

NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

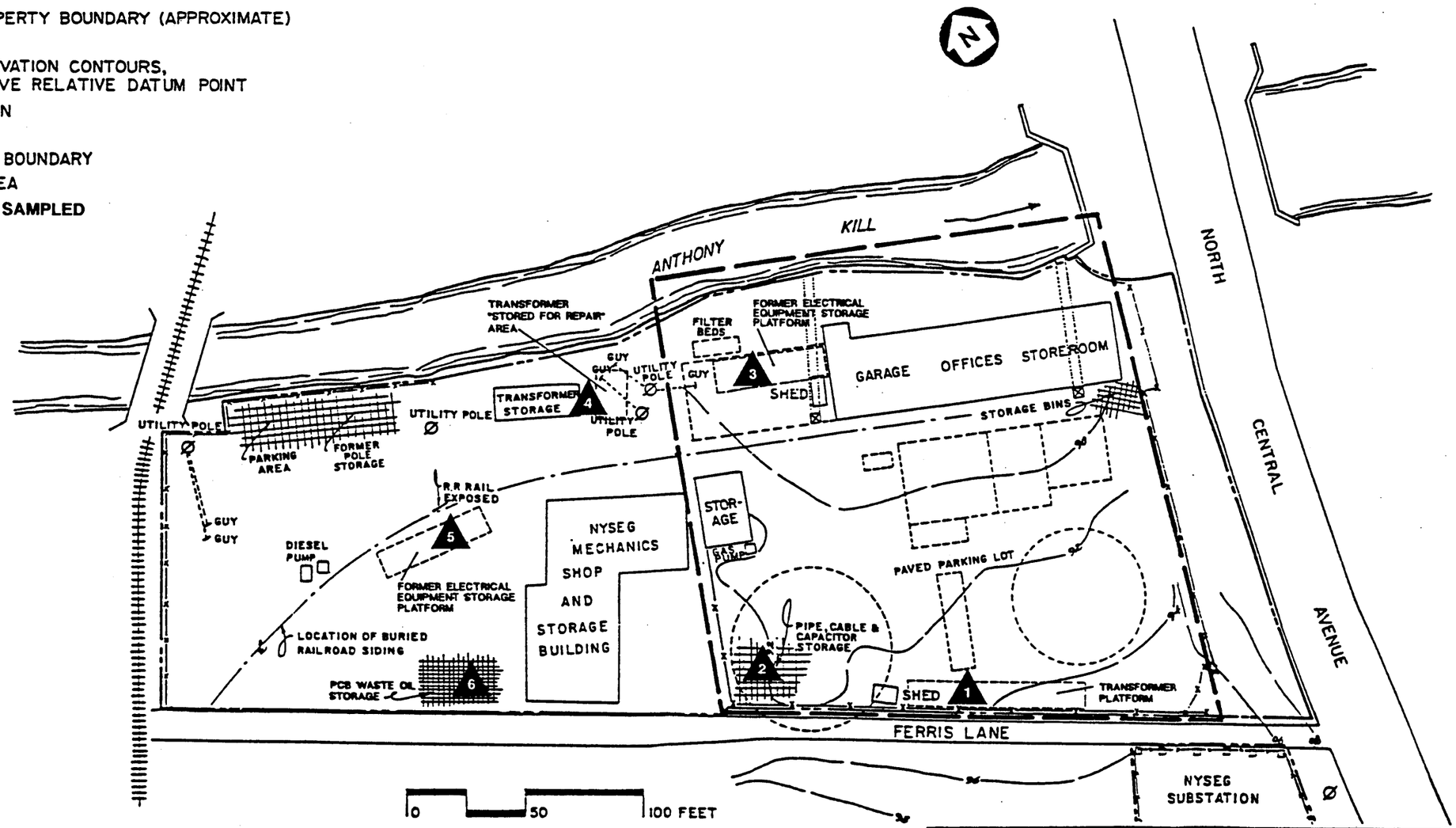
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 8-1

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA
- AREA TO BE SAMPLED FOR PCBs



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

ABB Environmental Services, Inc.

ASEA BROWN BOVERI

CLIENT

NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

TITLE

PROPOSED PHASE II PCB SAMPLING AREAS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-06

FIGURE 8-2

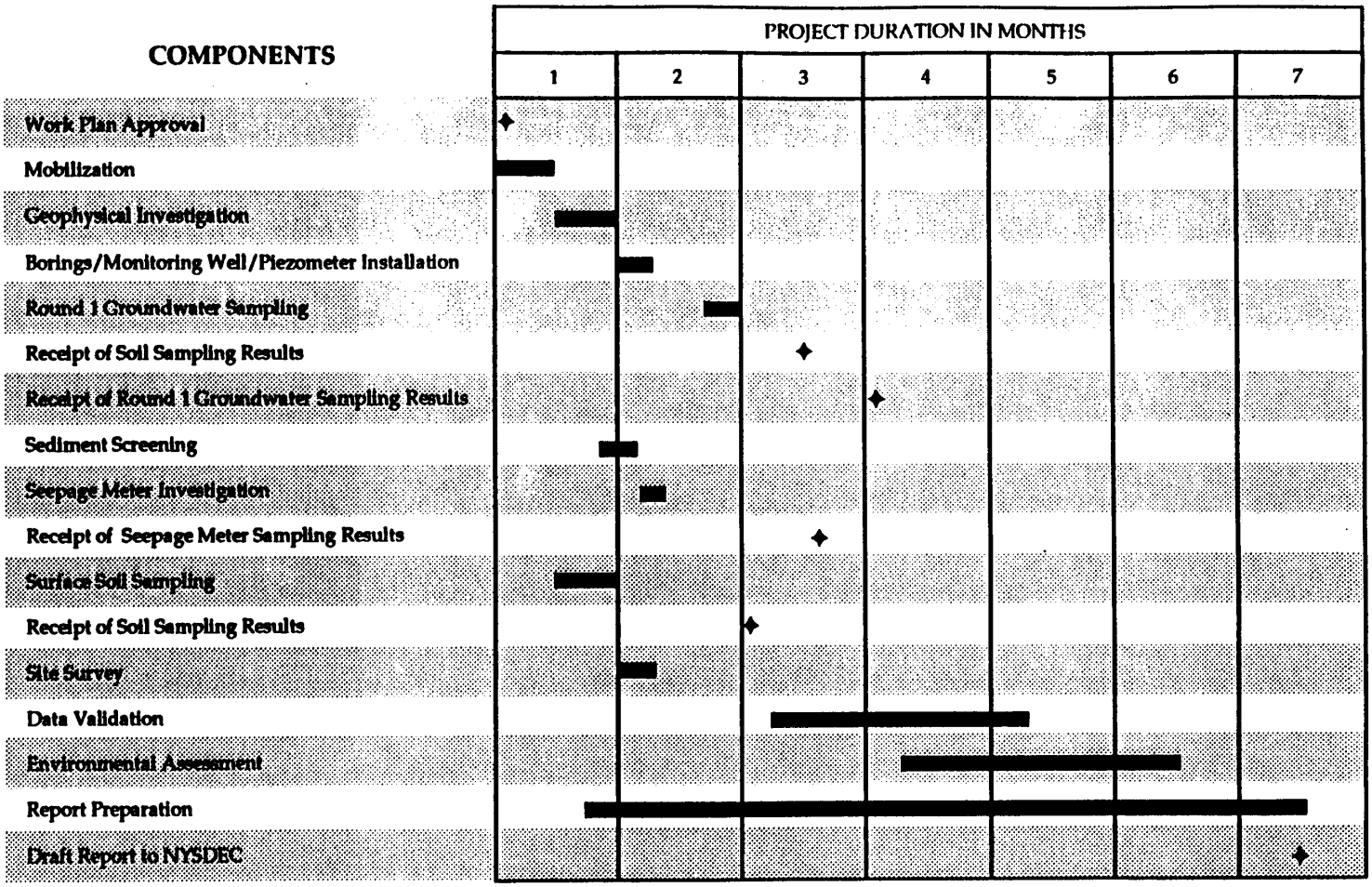


FIGURE 8-3
PROPOSED PROJECT SCHEDULE
PHASE IIA SUPPLEMENTAL REMEDIAL INVESTIGATION
MECHANICVILLE SITE
ABB Environmental Services, Inc.

TABLE 2-1

SUMMARY OF POTENTIAL ENVIRONMENTAL CONCERNS AT THE MECHANICVILLE SITE

TECHNICAL FACTORS	ON-SITE SOILS	GROUNDWATER	SURFACE WATER	AIR
Chemicals Present	The samples collected by NYSEG at the site appeared to contain coal gasification wastes. The following chemicals may be present in the soils: - benzene - toluene - ethylbenzene - xylenes - naphthalene - polynuclear aromatic hydrocarbons - heavy metals - phenols - cyanides - sulfides	There are no groundwater wells at the site and no groundwater samples have been collected. Chemicals that may be expected in groundwater if coal gasification wastes were deposited on site are: - benzene - toluene - ethylbenzene - xylenes - naphthalene - phenols - cyanide Low concentrations of polynuclear aromatic hydrocarbons may also be found in the groundwater.	The Anthony Kill borders the site on the north. No surface water or sediment samples have been collected. Chemicals that may be expected in these media if coal gasification wastes were deposited on-site are: - benzene - toluene - ethylbenzene - xylenes - naphthalene - polynuclear aromatic hydrocarbons - heavy metals - phenols - cyanides - sulfides	No air samples have been collected at the site. Because the site is paved, the probability that volatile chemicals present in the soil may also be present in the air is low as long as the paved surface is undisturbed. Volatile chemicals would be expected to be released during drilling or test pitting activities.
Chemical Transport Mechanism	Volatilization to air and/or seepage and leaching of soluble or free liquid wastes to groundwater.	The groundwater surface is expected to be within 10 feet of the ground surface, between the till and the shallow shale bedrock. Shallow groundwater movement is anticipated to be to the north with discharge to the Anthony Kill. There are no identified aquifers in the Mechanicville area.	Surface water drainage from the site is to the north into the Anthony Kill. Runoff is channeled to the stream through 2 culverts. Subsurface contaminants could be carried to the stream via groundwater discharge.	Volatilization and particulate migration occur via wind scour; however, most of the site is paved. Volatilization is the primary route when materials are exposed. Winds in the area are generally from the northwest.

TABLE 2-1 (continued)

SUMMARY OF POTENTIAL ENVIRONMENTAL CONCERNS AT THE MECHANICVILLE SITE

TECHNICAL FACTORS	ON-SITE SOILS	GROUNDWATER	SURFACE WATER	AIR
Expected Persistence of Chemicals in the Environment	Biodegration of coal tar present in the soils is very slow or nonexistent. The volatile fraction of the coal tar (benzene, toluene, ethylbenzene, and xylenes) is expected to leach slowly into groundwater or vaporize slowly into the air. Naphthalene, phenols, and cyanides are also expected to leach into the groundwater slowly. The polynuclear aromatic hydrocarbons and the heavy metals are not expected to vaporize or leach into the groundwater at any significant rate.	Any constituent of coal tar present in the groundwater is not expected to biodegrade very rapidly except perhaps the phenols. These constituents are expected to remain in groundwater until it discharges to a surface water body where vaporization will eventually occur.	Any constituents of coal tar present in the surface water are expected to move through the environment with the water. Coal tar constituents in the sediments are expected to remain for a long period of time. Biodegradation of these chemicals is predicted to be very slow.	Contaminants are rapidly dispersed and susceptible to photo-oxidation.
Existing or Potential Receptors of Chemicals	The probability of direct contact to humans or animals is low since the site is paved. However, leaching and volatilization may transport these chemicals to other media such as groundwater and expose humans and animals off-site.	Groundwater may discharge to the Anthony Kill. There are no active domestic or industrial water wells in Mechanicville. Residents of Halfmoon, west of Mechanicville, use well water. The closest domestic water wells are nearly a mile from the site in the southwest direction.	Direct contact with the surface water by humans is probable since the Anthony Kill is used for recreational boating during the warmer months of the year. There is a higher probability of contact by animals since they use the stream for a longer period during the year. The movement of surface water away from the site may expose humans and animals downstream. However, chemical concentrations will be rapidly diluted as the stream enters the Hudson River.	Humans or animals in the vicinity of the site are potential receptors of any chemicals present in the air.

01/19/88

TABLE 4-1

CHEMICALS FOUND IN TASK 2 TEST PIT SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER ORGANICS ANALYSIS (1)	TP-1/S-1 HPLC	TP-2/S-1 HPLC	TP-4/S-1 HPLC	TP-5/S-1 HPLC	TP-5/S-1 HPLC DUP	TP-5/S-1 GC/MS
DATE OF SAMPLE COLLECTION	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86
SAMPLE DEPTH (FT)	6.5-7.0	7.0-7.5	3.0-4.0	3.0-4.0	3.0-4.0	4.0-6.0
ZONE SAMPLED	FILL	FILL	FILL	FILL	FILL	FILL
VOLATILE ORGANICS (MG/KG)						
-VOLATILE AROMATICS-						
BENZENE	ND (2)	ND	0.220	ND	ND	ND
TOLUENE	ND	ND	0.160	1.000	0.750	0.640
ETHYLBENZENE	ND	ND	0.150	6.600	6.100	2.200
STYRENE	ND	ND	ND	ND	ND	ND
TOTAL XYLENES	-- (3)	--	--	--	--	11.000
m-XYLENE	ND	ND	0.091	4.100	3.100	--
o-XYLENE	ND	ND	0.082	3.900	3.000	--
p-XYLENE	ND	ND	0.062	2.100	1.600	--
TRIMETHYLBENZENE	ND	ND	ND	4.600	5.100	--
n-PROPYLBENZENE	ND	ND	0.083	2.100	2.000	--
-OTHER-						
ACETONE	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	1.000
CARBON DISULFIDE	--	--	--	--	--	0.110
TOTAL VOLATILE AROMATICS	ND	ND	0.848	24.400	21.650	13.840
SEMIVOLATILE ORGANICS (MG/KG)						
-PAH-						
ACENAPHTHENE	ND	(4)	ND	290.000	(4)	140.000
ACENAPHTHYLENE	ND	ND	(5)	(5)	(5)	33.000
ANTHRACENE	ND	ND	25.000	470.000	220.000	67.000
BENZO(b)FLUORANTHENE	ND	ND	23.000	ND	ND	13.000
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	21.000
BENZO(g,h,i)PERYLENE	ND	ND	18.000	ND	ND	13.000
BENZO(a)ANTHRACENE	ND	ND	(6)	(6)	ND	35.000
BENZO(a)PYRENE	ND	(4)	13.000	(4)	ND	36.000
CHRYSENE	ND	ND	59.000	110.000	ND	32.000
DIBENZO(a,h)ANTHRACENE	ND	ND	13.000	ND	ND	(4)
FLUORANTHENE	ND	45.000	84.000	980.000	220.000	78.000
FLUORENE	ND	18.000	31.000	620.000	2600.000	89.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	19.000	350.000	5200.000	120.000
PHENANTHRENE	ND	12.000	31.000	810.000	260.000	210.000
PYRENE	ND	45.000	96.000	1100.000	ND	250.000
-OTHER-						
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	ND
TOTAL PAH	ND	120.000	412.000	4630.000	9500.000	1137.000
OTHER CHEMICALS (MG/KG)						
-METALS-						
IRON	27000	35000	27000	31000	35000	--
ZINC	260	120	87	79	220	--
-CYANIDE-						
TOTAL CYANIDE	ND	2.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	2.0	ND	ND	ND	--
-OTHER-						
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	ND	--
TOTAL ORGANIC CARBON	8300	1400	10000	30000	26000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED OR NOT APPLICABLE.
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.

12/17/87

TABLE 4-2

CHEMICALS FOUND IN TASK 2 SOIL BORING SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	GC/MS
DATE OF SAMPLE COLLECTION	7/23/86	8/1/86	8/5/86	7/29/86	8/4/86	7/31/86	9/6/86	9/6/86
SAMPLE DEPTH (FT)	8.0-10.0	8.0-9.5	4.0-6.0	6.0-8.0	10.0-11.0	7.0-9.0	13.5-15.5	15.5-17.5
ZONE SAMPLED	GRAVELLY SAND	FILL	FILL AND SILTY SHALE	FILL AND SILTY SHALE	SILTY SHALE	FILL	SILTY SHALE	SILTY SHALE
VOLATILE ORGANICS (MG/KG)								
-VOLATILE AROMATICS-								
BENZENE	ND (2)	ND	13.000	ND	0.980	2.400	640.000	380.000
TOLUENE	ND	ND	8.600	0.310	1.600	1.300	840.000	660.000
ETHYLBENZENE	ND	ND	120.000	2.300	6.300	0.170	440.000	250.000
STYRENE	ND	ND	ND	ND	ND	0.180	780.000	720.000
TOTAL XYLENES	-- (3)	--	--	--	--	--	--	1400.000
m-XYLENE	ND	ND	25.000	0.640	1.500	0.180	400.000	--
o-XYLENE	ND	ND	44.000	2.400	ND	ND	320.000	--
p-XYLENE	ND	ND	25.000	0.370	1.500	0.075	210.000	--
TRIMETHYLBENZENE	ND	ND	35.000	3.800	4.200	ND	170.000	--
n-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
ACETONE	--	--	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	--	--	ND
CARBON DISULFIDE	--	--	--	--	--	--	--	ND
TOTAL VOLATILE AROMATICS	ND	ND	270.600	10.320	15.980	4.305	3300.000	3410.000
SEMIVOLATILE ORGANICS (MG/KG)								
-PAH-								
ACENAPHTHENE	9.000	(4)	380.000	42.000	250.000	(4)	600.000	(4)
ACENAPHTHYLENE	ND	(5)	(5)	(5)	(5)	(5)	(5)	670.000
ANTHRACENE	8.000	(4)	670.000	80.000	450.000	(4)	550.000	270.000
BENZO(b)FLUORANTHENE	5.700	ND	(4)	ND	120.000	(4)	200.000	(4)
BENZO(k)FLUORANTHENE	(4)	ND	240.000	ND	ND	0.930	ND	(4)
BENZO(g,h,i)PERYLENE	(4)	ND	(4)	ND	ND	1.400	140.000	(4)
BENZO(a)ANTHRACENE	(6)	(6)	(6)	(6)	ND	(6)	(6)	(4)
BENZO(a)PYRENE	6.200	ND	200.000	(4)	94.000	1.100	140.000	(4)
CHRYSENE	17.000	(4)	780.000	100.000	ND	0.800	490.000	(4)
DIBENZO(a,h)ANTHRACENE	6.300	ND	ND	ND	ND	1.300	ND	ND
FLUORANTHENE	44.000	(4)	1100.000	130.000	750.000	0.890	850.000	250.000
FLUORENE	34.000	(4)	1300.000	120.000	620.000	1.100	2100.000	590.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND	ND	(4)
NAPHTHALENE	ND	(4)	2300.000	44.000	760.000	1.900	1500.000	2500.000
PHENANTHRENE	13.000	(4)	940.000	110.000	630.000	0.870	760.000	570.000
PYRENE	11.000	(4)	1400.000	170.000	980.000	0.870	1400.000	460.000
-OTHER-								
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	ND
TOTAL PAH	154.200	(4)	9310.000	796.000	4654.000	11.210	8720.000	5440.000
OTHER CHEMICALS (MG/KG)								
-METALS-								
IRON	34000	30000	31000	35000	27000	26000	19000	--
ZINC	190	75	130	80	1600	320	61	--
-CYANIDE-								
TOTAL CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
TOTAL RECOVERABLE PHENOLICS	ND	ND	3.6	ND	2.6	ND	ND	--
TOTAL ORGANIC CARBON	110000	6800	100000	23000	110000	76000	190000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

TABLE 4-3

Task 3 Soil Boring Analytical Results
Mechanicville Site

SAMPLE IDENTIFIER:	B-09(S-1)	B-10(S-2)	B-10(S-2) DUP-503	B-12(S-2)	B-14(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/19/87	11/17/87	11/19/87
DEPTH (Ft.):	4-5.5	16-18	16-18	22-24	18-20	4-8
ZONE SAMPLED:	Silty sand	Silty sand	Silty sand	Silty fine sand	Silty fine sand	Fill
**** Volatile Organics (mg/kg) (1) ****						
-VOLATILE AROMATICS-						
Benzene	-- (2)	--	--	ND	--	ND
Toluene	--	--	--	ND	--	ND
Ethylbenzene	--	--	--	ND	--	0.570
Styrene	--	--	--	ND	--	ND
Total Xylenes	--	--	--	ND	--	0.880
- OTHER -						
Methylene Chloride	--	--	--	ND	--	ND
2-Butanone	--	--	--	ND	--	ND
Total Volatile Aromatics	--	--	--	ND	--	1.4
Total Volatile Organics	--	--	--	ND	--	1.4
**** Semi-Volatile Organics (mg/kg) (1) ****						
-PAH-						
Acenaphthene	T (3)	T	0.53	2.35	ND	ND
Acenaphthylene	ND (4)	T	T	ND	ND	ND
Anthracene	T	T	T	0.8	ND	ND
Benzo(b)Fluoranthene	T	T	ND	ND	ND	ND
Benzo(k)Fluoranthene	(5)	(5)	ND	ND	ND	ND
Benzo(g,h,i,)Perylene	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	T	T	ND	ND	ND
Benzo(a)Pyrene	T	T	T	ND	ND	ND
Chrysene	T	T	T	ND	ND	ND
Fluoranthene	T	T	T	1.01	ND	ND
Fluorene	T	T	T	1.25	ND	ND
Indeno(1,2,3-cd)Pyrene	T	ND	ND	ND	ND	ND
Naphthalene	60	T	0.45	ND	ND	ND
Phenanthrene	58	0.88	1.1	0.8	ND	ND
Pyrene	T	0.6	T	1.39	ND	ND
-OTHER-						
2-Methylnaphthalene	T	T	T	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	R (6)	T	R
Total PAH	120	1.5	2.1	7.6	ND	ND
Total Semi-Volatile Organic	120	1.5	2.1	7.6	T	ND
**** Other Chemicals (mg/kg) ****						
-METALS-						
Iron	28000	24000	22000	18000	21000	23000
Zinc	59	42	44	32	49	390
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (7)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	0.74	ND	ND	ND	ND	2.6
Total Organic Carbon	33000	22000	24000	22000	32000	42000

NOTES:
(1) VOCs and SVOCs analyzed by GC/MS (USEPA Method 8240 and 8270).
(2) -- = Not analyzed (Laboratory Error).
(3) T = Trace concentrations detected below the quantifiable reporting limit.
(4) ND = Not detected (See Appendix B-4 for minimum detection limits).
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Data rejected because analysis of blank indicated sampling or lab-derived contamination.
(7) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present.

01/19/88

TABLE 4-4
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)															
-VOLATILE AROMATICS-															
BENZENE	ND (2)	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	0.530	0.560	0.608	0.429	0.230
TOLUENE	ND	ND	(4)	ND	ND	ND	ND	ND	ND	ND	0.100	0.120	(4)	0.0576	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.640	0.910	0.715	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	0.010	ND	ND	--	ND	ND	ND	ND	--	0.770	0.640	0.0329	0.379
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.110	--	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.300	--	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.140	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--
-OTHER-															
ACETONE	--	0.220	3.780	0.059	ND	--	ND	ND	0.0536	ND	--	ND	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	ND	--	ND	ND	0.0086	ND	--	ND	ND	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	0.0155	ND	ND	ND	ND	ND	ND	ND	1.820	2.360	1.967	0.5195	0.609
SEMIVOLATILE ORGANICS (MG/L)															
-PAH-															
ACENAPHTHENE	0.110	0.022	0.012	ND	ND	ND	ND	ND	1.030	0.902	ND	0.420	ND	0.537	0.524
ACENAPHTHYLENE	0.250	0.048	0.018	ND	ND	ND	ND	ND	ND	0.084	2.500	(4)	ND	ND	ND
ANTHRACENE	(4)	(4)	0.031	ND	ND	ND	ND	ND	ND	ND	0.300	(4)	ND	0.226	0.140
BENZO(b)FLUORANTHENE	ND	(4,5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	(5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	(6)	(4)	ND	0.102	ND
BENZO(a)PYRENE	(4)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.280	(4)	ND	ND	ND
CHRYSENE	0.024	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.880	(4)	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.061	0.024	ND	ND	ND	ND	ND	ND	0.930	ND	2.700	(4)	0.680	0.223	0.174
FLUORENE	0.240	0.026	0.010	ND	ND	ND	ND	ND	ND	ND	4.700	(4)	0.660	0.197	0.198
INDENO(1,2,3,-cd)PYRENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	(4)	ND	ND	ND
NAPHTHALENE	1.200	0.260	0.136	ND	ND	ND	ND	ND	6.034	0.445	13.000	2.600	4.130	2.480	1.914
PHENANTHRENE	0.051	0.039	0.028	ND	ND	ND	ND	ND	1.700	ND	1.300	0.440	ND	0.624	0.140
PYRENE	0.044	0.025	0.017	(4)	ND	ND	ND	ND	ND	ND	0.660	0.200	0.690	0.431	0.264
-OTHER-															
BIS(2-ETHYLHEXYL)PHTHALATE	--	0.073	0.016	(4)	0.040	--	0.016	0.018	1.710	ND	--	0.250	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.144	--	ND	ND	ND	0.856
TOTAL PAH	1.980	0.444	0.252	(4)	ND	ND	ND	ND	9.694	1.431	26.320	3.660	6.160	4.820	3.354

TABLE 4-4 (continued)
CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS DUP	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)															
-METALS-															
IRON	ND	--	ND	ND	0.05	0.50	0.07	0.06	ND	0.10	20.00	--	6.60	9.70	4.90
ZINC	ND	--	0.007	ND	ND	ND	0.072	0.005	ND	0.09	0.11	--	0.008	0.03	0.02
-CYANIDE-															
TOTAL CYANIDE (12)	ND	--	0.01	ND	0.01	ND	ND	ND	ND	0.01	0.46	--	ND	0.320	0.42
AMENABLE CYANIDE	ND	--	--	ND	ND	ND	ND	--	ND	ND	ND	--	--	ND	ND
FERRO-FERRI CYANIDE	ND	--	0.03	ND	0.01	ND	ND	0.02	ND	0.01	0.46	--	0.05	0.320	0.42
-OTHER-															
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	ND	ND	--	--	--	0.008	0.020	--	--	--	0.015
TOTAL ORGANIC CARBON	4.1	--	14	3.2	4.2	4.6	9	6	3.7	4.1	11	--	24	15.3	11
SULFATE	--	--	74.6	--	--	--	65.2	60.6	--	--	--	--	17.7	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	1.730	0.396	0.250	0.000	ND	ND	ND	ND	9.694	1.355	25.660	6.020	8.127	5.340	3.978
FIELD MEASUREMENTS															
pH (8)	5.3	5.3	6.7	7.5	6.6	6.0	6.4	6.4	7.6	6.8	(11)	(11)	(11)	(11)	(11)
CONDUCTIVITY (9)	1830	1830	370	2040	1315	1680	786	786	1890	1225	(11)	(11)	(11)	(11)	(11)
TEMPERATURE (10)	11.2	11.2	8.4	5.9	10.0	17.8	13.3	13.3	3.2	12.6	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

TABLE 4-4 (continued)

CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
‡‡VOLATILE ORGANICS (MG/L)‡‡														
-VOLATILE AROMATICS-														
BENZENE	0.950	0.673	0.482	0.494	0.240	0.298	0.412	0.440	1.900	1.600	1.690	1.520	1.630	1.613
TOLUENE	0.760	0.487	0.335	0.409	0.200	0.295	0.400	0.362	1.600	1.200	0.815	0.353	0.353	0.616
ETHYLBENZENE	2.300	0.803	1.140	0.378	0.071	0.270	0.541	0.464	1.700	1.300	0.855	0.943	1.500	1.956
STYRENE	ND	ND	0.051	ND	ND	ND	ND	ND	0.920	0.610	ND	ND	1.370	ND
TOTAL XYLENE	--	1.230	1.440	1.347	--	ND	0.273	0.227	--	--	1.220	1.270	ND	1.452
o - XYLENE	0.850	--	--	--	0.065	--	--	--	1.200	1.000	--	--	--	--
m - XYLENE	0.810	--	--	--	0.120	--	--	--	0.940	0.770	--	--	--	--
p - XYLENE	0.430	--	--	--	0.058	--	--	--	0.570	0.450	--	--	--	--
TRIMETHYLBENZENE	0.088	--	--	--	0.046	--	--	--	0.120	0.100	--	--	--	--
-OTHER-														
ACETONE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.850	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.350	ND	ND	ND
TOTAL VOLATILE AROMATICS	6.188	3.193	3.448	2.628	0.800	0.863	1.626	1.493	8.950	7.030	4.580	4.086	4.853	5.637
‡‡SEMIVOLATILE ORGANICS (MG/L)‡‡														
-PAH-														
ACENAPHTHENE	0.980	0.240	0.187	0.218	0.260	17.300	150.280	195.500	37.000	48.000	ND	0.890	1.200	3.580
ACENAPHTHYLENE	8.300	ND	0.041	0.218	2.400	ND	150.280	197.200	26.000	59.000	ND	ND	ND	3.300
ANTHRACENE	0.510	ND	ND	ND	ND	7.600	178.330	227.800	11.000	16.000	ND	ND	ND	5.290
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	4.000	6.600	ND	ND	ND	0.540
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	7.200	4.100	ND	ND	ND	0.580
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	ND	ND	ND	ND	ND	18.360	23.970	(6)	(6)	ND	ND	ND	ND
BENZO(a)PYRENE	0.290	ND	ND	ND	ND	ND	ND	ND	4.800	6.500	ND	ND	ND	0.560
CHRYSENE	1.400	ND	ND	ND	ND	ND	ND	26.350	25.000	17.000	ND	ND	ND	0.680
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	4.200	ND	0.014	ND	0.150	6.300	43.860	59.500	93.000	74.000	ND	ND	1.310	2.510
FLUORENE	13.000	ND	0.026	0.100	3.900	7.600	62.220	80.920	120.000	140.000	ND	ND	ND	1.980
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	33.000	6.120	3.970	2.392	11.000	39.400	331.500	413.100	280.000	300.000	6.980	5.040	5.910	18.760
PHENANTHRENE	2.000	ND	ND	ND	ND	6.700	178.330	227.800	36.000	45.000	ND	1.340	1.530	5.290
PYRENE	1.000	ND	0.027	ND	(4)	8.100	93.450	112.370	36.000	30.000	ND	0.843	ND	ND
-OTHER-														
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	0.013	ND	--	ND	ND	ND	--	--	ND	ND	ND	ND
2-METHYLNAPHTHALENE	--	NE	ND	0.580	--	ND	197.200	247.690	--	--	ND	ND	ND	7.170
TOTAL PAH	64.680	6.360	4.265	2.928	17.710	93.000	1206.610	1564.510	680.000	746.200	6.980	8.113	9.950	43.070

TABLE 4-4 (continued)

CHEMICALS FOUND IN TASK 2 GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)														
-METALS-														
IRON	61.00	6.50	3.86	5.10	1.10	7.50	5.10	9.40	5.50	14.00	7.60	10.10	9.70	4.80
ZINC	0.29	0.02	0.02	0.01	ND	0.021	0.16	0.33	ND	ND	ND	0.01	0.01	0.03
-CYANIDE-														
TOTAL CYANIDE (13)	0.072	0.06	0.050	0.06	0.013	0.02	0.01	ND	0.075	0.061	0.12	0.060	0.050	0.07
AMENABLE CYANIDE	ND	0.04	ND	ND	0.013	--	ND	ND	0.026	0.024	0.10	ND	ND	ND
FERRO-FERRI CYANIDE	0.072	0.02	0.050	0.06	ND	0.06	0.01	0.01	0.049	0.057	0.02	0.060	0.050	0.07
-OTHER-														
TOTAL RECOVERABLE PHENOLICS	0.043	--	--	0.014	0.019	--	0.43	0.017	0.050	0.043	--	--	--	0.031
TOTAL ORGANIC CARBON	12	20	5.2	9.4	7.4	30	16	12	16	16	28	12.5	13.7	14
SULFATE	--	30.9	--	--	--	84.0	--	--	--	--	14.5	--	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	62.611	9.553	7.621	5.352	16.129	93.863	1058.366	1368.820	662.080	693.663	11.910	12.199	13.433	45.438
FIELD MEASUREMENTS														
pH (8)	(11)	(11)	(11)	(11)	5.8	6.4	(11)	(11)	5.7	5.7	6.9	7.7	7.7	6.7
CONDUCTIVITY (9)	(11)	(11)	(11)	(11)	1640	680	(11)	(11)	1930	1930	1136	2300	2300	1385
TEMPERATURE (10)	(11)	(11)	(11)	(11)	12.7	12.0	(11)	(11)	16.0	16.0	14.3	6.0	6.0	13.1

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) MW-5 ROUND 3 SAMPLING WAS NOT CONDUCTED DUE TO WEATHER OBSTRUCTIONS.
(13) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

TABLE 4-5

Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-01		MW-02		
SCREENED ZONE	SOIL/SHALLOW BEDROCK		SOIL/SHALLOW BEDROCK		
SAMPLE IDENTIFIER	MW-01	MW-01	MW-02	MW-02	MW-02 DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	12/22/87	3/29/88	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **			
Benzene	ND (2)	ND	ND	ND	-- (4)
Toluene	ND	ND	ND	ND	--
Ethylbenzene	ND	ND	ND	ND	--
Styrene	ND	ND	ND	ND	--
Total Xylenes	ND	ND	ND	ND	--
-OTHER-					
Methylene Chloride	ND	ND	ND	ND	--
2-Butanone	ND	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	ND	--
2-Hexanone	ND	ND	ND	ND	--
Chlorobenzene	ND	T	ND	T	--
1,1-Dichloroethane	ND	ND	ND	ND	--
Trichloroethene	ND	ND	ND	ND	--
Total Volatile Aromatics	ND	ND	ND	ND	--
Total Volatile Organics	ND	T	ND	T	--
		** Semi-Volatile Organics (mg/l) (1) **			
-PAH-					
Acenaphthene	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	T (3)	ND	T	ND	ND
Total PAH	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	T	ND	T	ND	ND
		** Other Chemicals (mg/l) **			
-DISSOLVED METALS-					
Iron	0.07	ND	0.04	0.12	0.23
Zinc	ND	0.02	ND	0.02	0.1
-CYANIDE-					
Total Cyanide (13)	0.01	ND	ND	ND	ND
Undistilled Cyanide (10)	ND	ND	ND	ND	ND
-OTHER-					
Total Recoverable Phenolics	0.006	ND	0.016	0.006	0.011
Total Organic Carbon	3.4	2.8	2.9	2.2	2.8
Total New York State Regulated Organics (5)	0.006	ND	0.0160	0.006	0.011
pH (6)	7.5	6.5	7.7	6.6	6.7
Conductivity (7)	1125	1389	1153	1159	1302
Temperature (8)	11.1	10.2	11.9	7.0	7.0

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 4-5 (continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-03		MW-04		MW-05	
SCREENED ZONE	SOIL		SOIL		SOIL/SHALLOW BEDROCK	
SAMPLE IDENTIFIER	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **					
Benzene	0.17	0.15	0.26	0.2	0.15	T
Toluene	0.021	ND	0.23	ND	0.094	ND
Ethylbenzene	0.11	ND	0.058	0.17	ND	0.054
Styrene	ND (2)	ND	ND	ND	ND	ND
Total Xylenes	0.40	0.42	2.2	1.3	0.19	0.16
-OTHER-						
Methylene Chloride	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	T	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.70	0.57	2.8	1.67	0.43	0.214
Total Volatile Organics	0.70	0.57	2.8	1.67	0.43	0.214
	** Semi-Volatile Organics (mg/l) (1) **					
-PAH-						
Acenaphthene	30	ND	T	T	0.51	22
Acenaphthylene	T (3)	ND	T	T	T	2.7
Anthracene	9.7	ND	ND	T	T	ND
Benzo(b)Fluoranthene	T	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	ND	1.3
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	ND	ND	ND	2.6
Benzo(a)Pyrene	T	T	ND	ND	ND	2.4
Chrysene	T	ND	ND	ND	ND	ND
Fluoranthene	12	T	ND	T	T	9.4
Fluorene	13	ND	T	T	T	10
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	64	ND	1.9	1.4	3.6	30
Phenanthrene	38	ND	T	T	0.32	26
Pyrene	21	ND	ND	ND	T	1.4
-OTHER-						
2,4 - Dimethylphenol	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	T	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND	ND	T
2-Methylnaphthalene	34	ND	0.65	0.78	1.1	35
2-Methylphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	T	ND	ND	ND	T
3-Nitroaniline	ND	ND	ND	ND	ND	T
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	T
4-Nitroaniline	ND	T	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	T	ND	ND
Dibenzofuran	T	T	ND	ND	T	2
Hexachloroethane	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	T
Nitrobenzene	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	T	ND
Total PAH	190	ND	1.9	1.4	4.4	110
Total Semi-Volatile Organics	220	ND	2.6	2.18	5.5	142.2
	** Other Chemicals (mg/l) **					
-DISSOLVED METALS-						
Iron	8.8	14.4	20	9.25	13	25
Zinc	0.11	0.2	0.52	0.05	0.54	1.09
-CYANIDE-						
Total Cyanide (13)	ND	0.27	0.05	0.05	ND	0.05
Undistilled Cyanide (10)	--	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	17	0.025	0.021	0.027	0.028	0.026
Total Organic Carbon	50,000 (12)	42	8.4	9.9	8,000 (12)	21
Total New York State Regulated Organics (5)	237.7	0.595	5.421	3.877	5.598	142.34
pH (6)	(11)	(11)	(11)	(11)	(11)	(11)
Conductivity (7)	(11)	(11)	(11)	(11)	(11)	(11)
Temperature (8)	(11)	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
e CN- present.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

02-Aug-89

TABLE 4-5 (continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-06	MW-06	MW-10	MW-10
SCREENED ZONE	BEDROCK	BEDROCK	SOIL	SOIL
SAMPLE IDENTIFIER	MW-06	MW-06	MW-10	MW-10
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/29/88
**** Volatile Organics (mg/l) (1) ****				
-VOLATILE AROMATICS-				
Benzene	0.88	0.06	ND (2)	-- (4)
Toluene	0.13	ND	ND	--
Ethylbenzene	0.14	ND	ND	--
Styrene	ND	ND	ND	--
Total Xylenes	2.4	0.04	0.012	--
-OTHER-				
Methylene Chloride	ND	ND	ND	--
2-Butanone	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	--
2-Hexanone	ND	ND	ND	--
Chlorobenzene	ND	ND	ND	--
1,1-Dichloroethane	ND	ND	ND	--
Trichloroethene	ND	ND	ND	--
Total Volatile Aromatics	3.6	0.1	0.012	--
Total Volatile Organics	3.6	0.1	0.012	--
**** Semi-Volatile Organics (mg/l) (1) ****				
-PAH-				
Acenaphthene	2.2	T	0.10	T
Acenaphthylene	T	T	T (3)	ND
Anthracene	0.89	T	T	ND
Benzo(b)Fluoranthene	T	T	ND	T
Benzo(k)Fluoranthene (9)	T	ND	ND	ND
Benzo(g,h,i)Perylene	T	ND	ND	ND
Benzo(a)Anthracene	T	T	ND	T
Benzo(a)Pyrene	T	ND	ND	ND
Chrysene	T	ND	ND	T
Fluoranthene	1.0	T	T	ND
Fluorene	1.1	ND	0.028	T
Indeno(1,2,3-cd)Pyrene	T	ND	ND	ND
Naphthalene	12	ND	ND	ND
Phenanthrene	3.5	T	T	ND
Pyrene	1.6	T	T	ND
-OTHER-				
2,4 - Dimethylphenol	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND
2-Methylnaphthalene	4.6	ND	T	ND
2-Methylphenol	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	T
4-Methylphenol	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	T
Benzoic Acid	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND
Dibenzofuran	T	ND	T	T
Hexachloroethane	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND
Phenol	ND	T	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	0.41
Total PAH	22	ND	0.13	ND
Total Semi-Volatile Organics	27	ND	0.13	0.41
**** Other Chemicals (mg/l) ****				
-DISSOLVED METALS-				
Iron	11	5.95	0.64	1.41
Zinc	0.048	0.02	ND	0.02
-CYANIDE-				
Total Cyanide (13)	0.06	0.01	0.01	ND
Undistilled Cyanide (10)	0.07	ND	ND	ND
-OTHER-				
Total Recoverable Phenolics	0.056	0.037	ND	0.029
Total Organic Carbon	10,000 (12)	31	61	11
Total New York State Regulated Organics (5)	30.656	0.137	0.142	0.439
pH (6)	7.7	(11)	7.5	6.6
Conductivity (7)	1154	(11)	1262	1576
Temperature (8)	12.0	(11)	12.4	9.6

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 4-5 (continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-11			MW-12	
SCREENED ZONE	SOIL/SHALLOW BEDROCK			SOIL	
SAMPLE IDENTIFIER	MW-11	MW-11 Dup	MW-11	MW-12	MW-12
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	12/22/87	3/29/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **				
Benzene	ND	ND	ND	ND	0.12
Toluene	ND	ND	ND	ND	T
Ethylbenzene	ND	ND	ND	ND	1.1
Styrene	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	0.075	1.2
-OTHER-					
Methylene Chloride	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	T
1,1,1-Trichloroethane	0.0026	0.0044	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Total Volatile Aromatics	ND	ND	ND	0.075	2.4
Total Volatile Organics	0.0026	0.0044	ND	0.075	2.4
	** Semi-Volatile Organics (mg/l) (1) **				
-PAH-					
Acenaphthene	ND	ND	ND	ND	210
Acenaphthylene	ND	ND	ND	ND	T
Anthracene	ND	ND	ND	ND	86
Benzo(b)Fluoranthene	ND	ND	ND	ND	T
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	T
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	T
Benzo(a)Pyrene	ND	ND	ND	ND	T
Chrysene	ND	ND	ND	ND	T
Fluoranthene	ND	ND	ND	ND	82
Fluorene	ND	ND	ND	ND	110
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	580
Phenanthrene	ND	ND	ND	ND	320
Pyrene	ND	ND	ND	ND	130
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	540
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	T	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	T
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	T	ND	T	ND
Total PAH	ND	ND	ND	ND	1500
Total Semi-Volatile Organics	ND	T	ND	ND	2100
	** Other Chemicals (mg/l) **				
-DISSOLVED METALS-					
Iron	0.15	0.26	0.28	2.7	4.45
Zinc	ND	ND	0.01	ND	0.02
-CYANIDE-					
Total Cyanide (13)	ND	ND	ND	0.8	0.58
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
-OTHER-					
Total Recoverable Phenolics	0.005	0.01	ND	0.016	0.2
Total Organic Carbon	5.4	8.9	4.9	18	13
Total New York State Regulated Organics (5)	0.0076	0.0144	ND	0.091	2060.6
pH (6)	7.6	7.6	6.9	7.4	(11)
Conductivity (7)	785	1098	939	1470	(11)
Temperature (8)	11.7	11.1	9.1	11.3	(11)

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported

TABLE 4-5 (continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-13	MW-13	MW-13	MW-14	MW-14
SCREENED ZONE	BEDROCK	BEDROCK		BEDROCK	
SAMPLE IDENTIFIER	MW-13	MW-13	MW-13 Dup	MW-14	MW-14
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	3/29/88	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **			
Benzene	9.6	12	-- (4)	2.3	2.2
Toluene	3.6	6.4	--	0.34	ND
Ethylbenzene	2.0	2	--	0.061	T
Styrene	0.94	1.8	--	ND	ND
Total Xylenes	2.2	3.5	--	0.79	0.16
-OTHER-					
Methylene Chloride	ND	36	--	ND	ND
2-Butanone	ND	ND	--	ND	ND
1,1,1-Trichloroethane	ND	ND	--	ND	ND
Vinyl Acetate	ND	ND	--	ND	ND
2-Hexanone	ND	ND	--	ND	ND
Chlorobenzene	ND	ND	--	ND	ND
1,1-Dichloroethane	ND	ND	--	ND	ND
Trichloroethene	0.053	ND	--	ND	ND
Total Volatile Aromatics	18	26	--	3.5	2.4
Total Volatile Organics	18	62	--	3.5	2.4
		** Semi-Volatile Organics (mg/l) (1) **			
-PAH-					
Acenaphthene	T	T	T	0.069	0.076
Acenaphthylene	T	0.94	0.72	T	T
Anthracene	ND	T	T	T	ND
Benzo(b)Fluoranthene	ND	T	T	ND	ND
Benzo(k)Fluoranthene (9)	ND	T	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	T	T	ND	ND
Benzo(a)Pyrene	ND	T	T	ND	ND
Chrysene	ND	T	T	ND	ND
Fluoranthene	ND	0.3	T	ND	ND
Fluorene	T	ND	ND	T	T
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	4.6	8.1	7.8	T	1.8
Phenanthrene	T	1.3	0.92	T	T
Pyrene	ND	0.45	0.33	ND	ND
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	T
2,4-Dinitrotoluene	ND	T	ND	ND	ND
2,6-Dinitrotoluene	ND	T	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	0.78	2.7	2.1	0.080	0.22
2-Methylphenol	T	ND	ND	T	T
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	T	ND	ND	0.029	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	0.58	ND	ND	0.36	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND	T	ND
Total PAH	4.6	11	9.8	0.069	1.9
Total Semi-Volatile Organics	6.0	14	12	0.54	2.1
		** Other Chemicals (mg/l) **			
-DISSOLVED METALS-					
Iron	0.14	0.26	0.18	0.4	0.16
Zinc	ND	0.01	0.02	ND	0.03
-CYANIDE-					
Total Cyanide (13)	0.15	0.1	0.13	0.12	0.09
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
-OTHER-					
Total Recoverable Phenolics	0.053	0.064	0.058	0.063	0.3
Total Organic Carbon	9	7.6	8.5	9.2	8.6
Total New York State Regulated Organics (5)	23.113	42.814	11.928	4.103	4.756
pH (6)	7.7	6.7	6.4	7.6	6.6
Conductivity (7)	1133	1332	1589	1157	1450
Temperature (8)	12.1	11.6	10.9	12.1	10.1

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported

TABLE 4-5 (continued)

Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-15		
SCREENED ZONE	BEDROCK		
SAMPLE IDENTIFIER	MW-15	MW-15 Dup	MW-15
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **	
Benzene	0.0026	0.0058	0.018
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
Styrene	ND	ND	ND
Total Xylenes	0.0027	0.0031	0.013
-OTHER-			
Methylene Chloride	ND	ND	ND
2-Butanone	ND	ND	ND
1,1,1-Trichloroethane	0.017	0.025	0.012
Vinyl Acetate	ND	ND	ND
2-Hexanone	ND	ND	T
Chlorobenzene	ND	ND	ND
1,1-Dichloroethane	0.0033	0.0031	ND
Trichloroethene	ND	ND	ND
Total Volatile Aromatics	0.0053	0.0089	0.031
Total Volatile Organics	0.026	0.037	0.043
		** Semi-Volatile Organics (mg/l) (1) **	
-PAH-			
Acenaphthene	0.040	0.026	0.031
Acenaphthylene	0.045	0.027	T
Anthracene	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND
Chrysene	ND	ND	ND
Fluoranthene	ND	ND	ND
Fluorene	T	T	0.011
Indeno(1,2,3-cd)Pyrene	ND	ND	ND
Naphthalene	0.091	T	T
Phenanthrene	T	T	T
Pyrene	ND	ND	T
-OTHER-			
2,4 - Dimethylphenol	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND
2-Methylnaphthalene	0.030	T	ND
2-Methylphenol	ND	ND	ND
2-Nitroaniline	ND	ND	ND
3-Nitroaniline	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND
4-Methylphenol	ND	ND	ND
4-Nitroaniline	ND	ND	ND
4-Nitrophenol	ND	ND	ND
Benzoic Acid	ND	ND	ND
Benzyl Alcohol	ND	ND	T
Butylbenzylphthalate	ND	ND	ND
Dibenzofuran	ND	ND	T
Hexachloroethane	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND
Nitrobenzene	ND	ND	T
Phenol	ND	ND	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND
Total PAH	0.18	0.053	0.042
Total Semi-Volatile Organics	0.21	0.053	0.042
		** Other Chemicals (mg/l) **	
-DISSOLVED METALS-			
Iron	0.13	ND	0.16
Zinc	ND	0.014	0.01
-CYANIDE-			
Total Cyanide (13)	ND	0.06	ND
Undistilled Cyanide (10)	ND	ND	ND
-OTHER-			
Total Recoverable Phenolics	0.006	0.006	ND
Total Organic Carbon	2.9	3.2	3.9
Total New York State Regulated Organics (5)	0.242	0.069	0.085
pH (6)	7.9	7.9	7.2
Conductivity (7)	949	1125	1029
Temperature (8)	12.1	11.4	13.4

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN^-; method used and detected most, but not necessarily all, of the amenable CN^- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-3
Task 3 Surface Water Analytical Results
Mechanicville Site

SITE IDENTIFIER:	------UPSTREAM------		------ADJACENT------		-----DOWNSTREAM------	
SAMPLE IDENTIFIER:	SW-01	SW-01	SW-02	SW-02	SW-04	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
** Volatile Organics (mg/l) **						
- VOLATILE AROMATICS -						
Benzene	ND (1)	ND	ND	-- (2)		
Toluene	ND	ND	ND	--	ND	--
Ethylbenzene	ND	ND	ND	--	ND	--
Styrene	ND	ND	ND	--	ND	--
Total Xylenes	ND	ND	ND	--	ND	--
- OTHER -						
Methylene Chloride	ND	ND	ND	--	ND	--
2-Butanone	ND	ND	ND	--	ND	--
Total Volatile Aromatics	ND	ND	ND	--	ND	--
Total Volatile Organics	ND	ND	ND	--	ND	--
** Semi-Volatile Organics (mg/l) **						
-PAH-						
Acenaphthene	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
-OTHER-						
bis (2-Ethylhexyl) Phthalate	0.39	0.034	ND	ND	ND	ND
Total PAH	ND	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	0.39	0.034	ND	ND	ND	ND
** Other Chemicals (mg/l) **						
-METALS-						
Iron	0.20	0.38	1.1	1.8	0.24	0.42
Zinc	ND	0.03	0.014	0.02	ND	ND
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (3)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	ND	ND	ND	ND	ND	0.011
Total Organic Carbon	6.1	4.2	6.1	4.9	4.8	4.7

NOTES:
(1) ND = Not detected (see Appendix B-4 for minimum detection limits).
(2) NA = Not analyzed (laboratory reported vial was received broken).
(3) Undistilled CN = Free dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present

TABLE 3-4
Task 3 Sediment Analytical Results
Mechanicville Site

SITE IDENTIFIER	----UPSTREAM----		----ADJACENT----		----------DOWNSTREAM----------			
SAMPLE IDENTIFIER	SD-01	SD-01	SD-02	SD-02	SD-04	DUP-01	SD-04	SD-DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	12/22/87	3/30/88	3/30/88
** Volatile Organics (mg/kg) **								
-VOLATILE AROMATICS-								
Benzene	ND (1)	ND	ND	T	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	0.087	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
-OTHER-								
Methylene Chloride	ND	R (3)	ND	R	ND	ND	R	R
2-Butanone	ND	R	ND	R	ND	ND	R	R
Total Volatile Aromatics	ND	ND	0.087	T	ND	ND	ND	ND
Total Volatile Organics	ND	ND	0.087	T	ND	ND	ND	ND
** Semi-Volatile Organics (mg/kg) **								
-PAH-								
Acenaphthene	ND	ND	T	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	T	ND	ND	ND	ND	ND
Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	0.53	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	0.94	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	(5)	ND	ND	ND	ND	ND
Benzo(g,h,i,)Perylene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	0.59	ND	ND	ND	ND	ND
Chrysene	T (2)	ND	0.58	ND	ND	ND	ND	ND
Dibenz(a,h)Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Fluoranthene	T	ND	T	ND	T	T	ND	ND
Fluorene	ND	ND	T	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	T	ND	ND	ND	ND	ND
Naphthalene	ND	ND	0.48	ND	ND	T	ND	ND
Phenanthrene	T	ND	0.9	T	T	T	ND	ND
Pyrene	T	ND	1.1	ND	T	T	ND	ND
-OTHER-								
4-Methylphenol	ND	ND	T	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	T	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	T	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	T	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	25	ND	T	ND	ND	T	T
Total PAH	T	ND	5.1	T	T	T	ND	ND
Total Semi-Volatile Organics	T	25	5.1	T	T	T	T	T
-METALS-								
Iron	7700	NR (4)	8400	NR	8700	7100	NR	NR
Zinc	27	NR	45	NR	25	28	NR	NR
-CYANIDE-								
Total Cyanide (ppm) (6)	ND	NR	1.3	NR	ND	ND	NR	NR
Undistilled Cyanide	ND	NR	ND	NR	ND	ND	NR	NR
-OTHER-								
Total Recoverable Phenolics	1.3	NR	2.3	NR	1.2	0.68	NR	NR
Total Organic Carbon	12000	NR	32000	NR	18000	11000	NR	NR

NOTES:

(1) ND = Not detected (See Appendix B-4 for minimum detection limits).
(2) T = Trace concentrations detected below the quantifiable reporting limits.
(3) R = Data rejected because analysis of blank indicated sampling or lab-derived contamination
(4) NR = Analysis not requested
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Undistilled CN = Free and dissociable CN^-; method used detected most, but not necessarily all, of the amenable CN^- present.

TABLE 4-2
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)				
	CLASS D SURFACE WATER		CLASS GA GROUNDWATER					AQUATIC LIFE(6)		HUMAN HEALTH(9)		
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION
VOLATILE ORGANICS (MG/L)												
OLATILE AROMATICS-												
NZENE	----	0.006	ND(11)	----	0.005(12)	0	----	5.3	----	0.00067	----	0.00066
LUENE	----	----	----	0.05	----	2 (12)	11	17.5	----	15	424	14.3
HYLBENZENE	----	----	----	0.05	----	0.68 (12)	3.40	32	----	2.40	3.28	1.4
YRENE	----	----	0.931	----	----	0.140(12)	----	----	----	----	----	----
TAL XYLENE	----	----	----	0.05	----	0.44 (12)	2.20	----	----	----	----	----
XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
XYLENE	----	----	----	----	----	----	----	----	----	----	----	----
IMETHYLBENZENE	----	----	----	0.05	----	----	----	----	----	----	----	----
THER-												
ETONE	----	----	----	----	----	----	----	----	----	----	----	----
HYLENE CHLORIDE	----	----	----	0.05	----	----	----	12	----	----	----	----
SEMIVOLATILE ORGANICS (MG/L)												
AH-												
ENAPHTHENE	----	----	----	0.02	----	----	----	0.52	----	0.02(13)	----	0.02(13)
ENAPHTHYLENE	----	----	----	----	----	----	----	----	----	----	----	----
NTHRACENE	----	----	----	0.05	----	----	----	----	----	----	----	----
NZO(b)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
NZO(k)FLUORANTHENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
NZO(g,h,i)PERYLENE	----	----	----	----	----	----	----	----	----	----	----	----
NZO(a)ANTHRACENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
NZO(a)PYRENE	----	0.0000012	ND	----	----	----	----	----	----	0.0000031	----	0.0000028
RYSENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
IBENZO(a,h,)ANTHRACENE	----	----	----	----	----	----	----	----	----	----	----	----
UORANTHENE	----	----	----	0.05	----	----	----	3.98	----	0.19	0.054	0.042
UORENE	----	----	----	0.05	----	----	----	----	----	----	----	----
NDENE(1,2,3-cd)PYRENE	----	----	----	0.000002	----	----	----	----	----	0.0000031	----	0.0000028
APHTHALENE	----	----	----	0.01	----	----	----	2.3	0.62	----	----	----
ENANTHRENE	----	----	----	0.05	----	----	----	----	----	----	----	----
YRENE	----	----	----	0.05	----	----	----	----	----	----	----	----
OTAL CARCINOGENIC PAH	----	----	----	----	----	----	----	----	----	0.0000031	----	0.0000028
THER-												
IS(2-ETHYLHEXYL)PHTHALATE	----	----	4.2	----	----	----	----	0.94	0.003	21	50	15
OTAL NEW YORK STATE EGULATED ORGANICS (14)	----	----	0.1	----	----	----	----	----	----	----	----	----

TABLE 4-2 (CONTINUED)
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER
MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA (5)				
	CLASS D -----SURFACE WATER--------		CLASS GA -----GROUNDWATER-------					--AQUATIC LIFE(6)--		----------HUMAN HEALTH(9)----------		
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION
OTHER CHEMICALS (MG/L)												
-METALS-												
IRON	0.03	----	0.3	----	----	0.3(15)	----	----	----	----	----	----
ZINC	(16)	----	5	----	----	5(15)	----	----	----	5(13)	----	5(13)
-CYANIDE-												
TOTAL CYANIDE	----	----	0.2	----	----	----	0.75	----	----	----	----	----
FERRO-FERRI CYANIDE	----	----	----	----	----	----	----	----	----	----	----	----
FREE CYANIDE	0.022	----	----	----	----	----	----	0.0035	0.052	0.2	----	0.2
-OTHER-												
TOTAL RECOVERABLE PHENOLICS (17)	----	----	0.001	----	----	----	----	----	----	3.5	----	3.5
TOTAL ORGANIC CARBON	----	----	----	----	----	----	----	----	----	----	----	----
SULFATE	----	----	250.0	----	----	----	----	----	----	----	----	----

NOTES:
(1) NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES 85-W-3B AS REVISED APRIL 1, 1987. CLASS D SURFACE WATERS ARE SUITABLE FOR SECONDARY CONTACT RECREATION; CLASS GA DENOTES FRESH GROUNDWATER WHICH IS A SOURCE OF POTABLE WATER SUPPLY.
(2) MCLs (MAXIMUM CONTAMINANT LEVELS) ARE ENFORCEABLE STANDARDS FOR PUBLIC WATER SUPPLY SYSTEMS PROMULGATED UNDER THE SAFE DRINKING WATER ACT (40 CFR PART 141).
(3) MCLGs (MAXIMUM CONTAMINANT LEVEL GOALS) ARE PROPOSED NON-ENFORCEABLE HEALTH GOALS AND HAVE BEEN SET AT A LEVEL OF NO KNOWN OR ANTICIPATED HEALTH AFFECTS.
(4) EPA HEALTH ADVISORIES (FORMERLY SNARLs) ARE NON-ENFORCEABLE CRITERIA ESTABLISHED BY THE OFFICE OF DRINKING WATER. THEY ARE SET AT LEVELS WHERE ADVERSE HEALTH EFFECTS ARE NOT EXPECTED.
(5) WATER QUALITY CRITERIA WERE FORMULATED TO PROTECT AQUATIC LIFE AND HUMAN HEALTH FROM POLLUTANTS IN SURFACE WATERS. (40 CFR SUMMARY, FRI, NOV. 28, 1980, P. 79318-79379). WATER QUALITY CRITERIA HAVE NO REGULATORY IMPACT, BUT ARE USEFUL IN ESTABLISHING WATER QUALITY-BASED EFFLUENT LIMITATIONS, WATER QUALITY STANDARDS, AND TOXIC POLLUTANT EFFLUENT STANDARDS.
(6) GUIDANCE CRITERIA FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE. CONCENTRATIONS SPECIFIED SHOULD PROTECT MOST (BUT NOT NECESSARILY ALL) AQUATIC FRESHWATER LIFE AND ITS USES.
(7) THE ACUTE TOXICITY LEVEL IS THE MAXIMUM TO WHICH ORGANISMS CAN BE EXPOSED WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(8) CHRONIC TOXICITY LEVEL IS THE 24-HOUR AVERAGE VALUE THAT ORGANISMS CAN BE EXPOSED TO WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(9) HUMAN HEALTH GUIDELINES WERE DERIVED BASED ON "GUIDELINES AND METHODOLOGY USED IN THE PREPARATION OF HEALTH EFFECT ASSESSMENT CHAPTERS OF THE CONSENT DEGREE WATER CRITERIA DOCUMENTS" DEVELOPED BY EPA'S OFFICE OF RESEARCH AND DEVELOPMENT.
(10) THESE ADJUSTED CRITERIA, FOR DRINKING WATER INGESTION ONLY, WERE DERIVED FROM PUBLISHED EPA AWQC FOR COMBINED FISH AND DRINKING WATER INGESTION AND FOR FISH INGESTION ALONE. THESE ADJUSTED VALUES ARE NOT OFFICIAL EPA AWQC, BUT MAY BE APPROPRIATE FOR SUPERFUND SITES WITH CONTAMINATED GROUNDWATER. (USEPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, OCTOBER 1986, PAGES 61-64).
(11) ND = DETECTABLE BY USEPA METHODS 602 OR 624 (BENZENE) OR METHODS 610 OR 625 (BENZO(a)PYRENE).
(12) PROPOSED
(13) TO PROTECT AGAINST TASTE AND ODOR EFFECTS; NOT HEALTH BASED.
(14) NEW YORK STATE HAS A MAXIMUM WATER QUALITY VALUE OF 0.1 MG/L OF DESIGNATED ORGANIC CHEMICALS FOR SURFACE WATER AND GROUNDWATER DISCHARGES REQUIRING PERMITS. THE DESIGNATED ORGANICS INCLUDE ALL OF THE ORGANIC CHEMICALS LISTED EXCEPT ACENAPHTHYLENE, BENZO(g,h,i)PERYLENE DIBENZO(a,h)ANTHRACENE, AND STYRENE.
(15) SECONDARY MAXIMUM CONTAMINANT LEVELS WHICH APPLY TO PUBLIC WATER SYSTEMS. THESE REGULATIONS CONTROL CONTAMINANTS IN DRINKING WATER THAT PRIMARILY AFFECT THE AESTHETIC QUALITIES RELATING TO THE PUBLIC ACCEPTANCE OF DRINKING WATER (40 CFR PART 143).
(16) ZINC STANDARD FOR CLASS D WATERS IS DETERMINED BY THE FORMULA EXP(0.83[LN(PPM HARDNESS)]+1.95) AND APPLIES TO THE ACID SOLUBLE FORM.
(17) AS MEASURE BY APHA METHOD 510.B WHICH IS EQUIVALANT TO EPA METHOD 420.1 (SEE APHA, 1985; USEPA, 1983).

TABLE 4-3

TASK 3 GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	GUIDANCE VALUE (mg/ℓ)[1]	WELL NUMBER	ROUND NUMBER
Volatile Aromatics			
Toluene	0.05	MW-4	1
		MW-5	1
		MW-6	1
		MW-13	1,2
		MW-14	1
Ethylbenzene	0.05	MW-3	1
		MW-4	1,2
		MW-5	2
		MW-6	1
		MW-12	2
		MW-13	1,2
		MW-14	1
Total Xylene	0.05	MW-3	1,2
		MW-4	1,2
		MW-5	1,2
		MW-6	1
		MW-12	1,2
		MW-13	1,2
		MW-14	1,2
Methylene Chloride		MW-13	2
PAHs			
Acenaphthene	0.02	MW-3	1
		MW-5	1,2
		MW-6	1
		MW-10	1
		MW-12	2
		MW-14	1,2
		MW-15	1,2
Anthracene	0.05	MW-3	1
		MW-6	1
		MW-12	2
Benzo(k)Fluoranthene	0.000002	MW-5	2

TABLE 4-3 (Continued)

TASK 3 GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	GUIDANCE VALUE (mg/ℓ)[1]	WELL NUMBER	ROUND NUMBER
Fluoranthene	0.05	MW-3	1
		MW-5	2
		MW-6	1
		MW-12	2
		MW-13	2
Fluorene	0.05	MW-3	1
		MW-5	2
		MW-6	1
		MW-12	2
Naphthalene	0.01	MW-3	1
		MW-4	1,2
		MW-5	1,2
		MW-6	1
		MW-12	2
		MW-13	1,2
		MW-14	2
		MW-15	1
Phenanthrene	0.05	MW-3	1
		MW-5	1,2
		MW-6	1
		MW-12	2
		MW-13	2
Pyrene	0.05	MW-3	1
		MW-5	2
		MW-6	1
		MW-12	2
		MW-13	2

[1]NYSDEC, Division of Water; Technical and Operational Guidance Series 86-W-38; April 1987.

TABLE 4-4

PERMISSIBLE EXPOSURE LIMITS - AIR (ppm)
MECHANICVILLE SITE

Substance	OSHA			NIOSH	ACGIH	
	TWA	CC	Peak	TWA	TLV	STEL
Benzene	10	25	50	1	10	25
Toluene	200	300	500	100	100	150
Ethylbenzene	100	--	--	--	100	125
Xylene	100	--	--	100	100	150

Notes:

TWA = Time Weighted Average (8-hr)

CC = Ceiling Concentration

Peak = Maximum Duration 10 minutes in 8 hours

TLV = Threshold Limit Value

STEL = Short-term (15-minute) Exposure Limit

TABLE 4-5

TOXICOLOGICAL PROPERTIES OF COMPOUNDS IDENTIFIED
IN VARIOUS MEDIA
MECHANICVILLE SITE

COMPOUND CLASS	MEDIA IDENTIFIED IN	SPECIFIC COMPOUNDS	TOXICOLOGICAL PROPERTIES[1]
latile Organic Compounds	Groundwater	Toluene, benzene, xylenes, ethylbenzene, trimethylbenzene, styrene	These aromatic compounds are absorbed readily through the respiratory and gastrointestinal (GI) tracts and can also be absorbed through the skin. Benzene has the potential to cause cancer. Depending on the dose received, the other compounds can exert toxic effects on the liver and kidneys; they can also act as central nervous system (CNS) depressants and respiratory irritants.
	Subsurface Soil	All of the above plus n-propylbenzene	
	Sediment	Toluene, benzene	
	Air	Toluene, benzene	
mivolatile Compounds			
o PAHs	Groundwater	Acenaphthene, acenaphthylene, anthracene, benzofluoranthenes, benzo(g,h,i)perylene, benzo(a) anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd) pyrene, naphthalene, phenanthrene, pyrene.	PAHs are a diverse group of compounds of varying toxicity. They are highly lipid-soluble and are absorbed through the GI and respiratory tracts, and to a lesser degree, through the skin. Many PAHs have been shown to be potentially carcinogenic. Other PAHs are thought to be noncarcinogenic; these include fluorene, anthracene, pyrene, naphthalene, phenanthrene, and fluoranthene. The acute toxicity and chronic toxicity of low level exposures are not well understood.
	Subsurface soil Sediment	All of the above plus dibenzo(a,h)anthracene	
o Phenolic compounds	Groundwater Subsurface soil Surface water	Total recoverable phenolics	Depending on the dose, these compounds can produce liver and kidney toxicity and CNS effects. They can act as respiratory and skin irritants.
norganic Compounds	Groundwater	Iron, zinc, cyanide, sulfate	Iron and zinc are essential nutrients. However, they can produce objectionable effects such as staining, bad taste, and GI irritation at high levels. Bioavailable cyanide can exert toxic effects on the liver, kidneys, CNS, and cardiovascular system at high levels. Sulfate is a natural constituent of groundwater which affects taste in high concentrations (500 mg/ℓ).
	Subsurface soil	Iron, zinc, cyanide	
	Surface water	Iron, cyanide, sulfate	
	Sediment	Iron, zinc, sulfate	

In assessing the risks to public health and the environment posed by these chemicals, not only toxicological properties but also potential receptors and probable exposure conditions must be considered. These factors will be addressed in the Task 4 risk assessment.

TABLE 4-5

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Soil/Sediment	Containment	Capping	Much of the site is presently covered with asphalt and structures. An impervious cap could further reduce infiltration and, therefore, the rate of leaching of chemicals from the soils into the groundwater. A cap would also reduce contact potential. Not applicable to sediment.
	Removal	Excavation and Transport	Involves excavation and removal with subsequent transportation to another location. Potential impact on air quality during excavation and long-term liability at disposal site should be considered. Dredging is also an option for sediment.
	Disposal	Landfilling	Landfill selection depends on whether wastes are hazardous or nonhazardous. If hazardous, they must be disposed of in a properly licensed RCRA landfill.
	Treatment	Incineration	A proven technology, it destroys organics effectively. On-site units require test burns prior to full-scale use.
		Biodegradation	Several recent applications of this technology to coal tar and coal-tar-contaminated soils have been reported in literature. This treatment requires experimentation to determine the proper organisms and optimal operating conditions. It can be applied in situ, through land-farming, or by use of a batch reactor vessel.
		Solidification	Involves mixing the waste with cement or similar additives to incorporate the waste into the cement matrix. Process improves waste handling and is inexpensive. Does not destroy compounds but reduces toxicity by reducing contaminant mobility and availability to biota. Method is currently commercially available.
		Soil Aeration	This process removes organic contaminants from soil/sediment by partitioning. Some further treatment system may be required to treat the air, and potential impacts on air quality must be evaluated. The effect of this process on semivolatile contaminants would have to be evaluated prior to implementation.
		Vacuum Extraction	Underground wells are operated under a vacuum to volatilize and extract soil gases. Vacuum system is constructed on-site to remove and collect volatile and semivolatile compounds from the unsaturated soil zone. May require extensive carbon air treatment system to treat the off-gases. Effectiveness on semivolatile compounds would have to be evaluated prior to implementation. Not applicable to sediment.
	Access Control	Posting Fencing Land Restrictions	Prevents contact with hazardous constituents. Will be considered in conjunction with other technologies. Not applicable to sediment.
	No Action		To be considered in conjunction with other technologies.

T... 4-6 ...inue...

PRELIMINARY IDENTIFICATION OF REMEDIAL ALTERNATIVES
MECHANICVILLE SITE

MEDIUM	CONCEPTUAL ACTION	REMEDIAL MEASURE	REMARKS
Groundwater	Containment	Capping	See soils.
	Diversion	Low Permeable Barriers	Retard lateral chemical migration within the soil and weathered bedrock zone by positioning on the competent bedrock surface. Would not retard vertical migration or chemical movement in bedrock fractures.
		Injection Wells/Interceptor Trenches	Control groundwater flow direction. Generally used in conjunction with groundwater extraction.
	In-situ Treatment	Biodegradation	Analysis/culture of the contaminated water to determine the present activity and nutrient levels needed to stimulate hydrocarbon-utilizing bacteria.
		Aquifer Flushing	May include the use of chemical additives. Often used in conjunction with groundwater removal.
		Other Technologies	Cost-effectiveness is dependent on concentration and types of contamination. Physical or physical/chemical technologies such as oxidation and precipitation may be applicable to highly contaminated waters.
	Removal	Extraction of Groundwater via Pumping	If large volumes of water are to be extracted, on-site treatment may be appropriate. May include recharge or discharge to surface drainage. Distribution of contamination and required operating period is not known. May require years of operation.
	Treatment	Carbon Adsorption	Contaminated carbon filters require appropriate disposal or regeneration. Data regarding process efficiency and applicability are available.
		Biodegradation	On-site biological treatment may be considered if large volumes of groundwater require treatment. Extracted groundwater may also be released to publicly owned treatment works for secondary biological treatment depending on present plant capacity, waste characteristics, and feasibility.
		Steam Stripping	Steam stripping is essentially a continuous fractional distillation process using steam to remove organics from aqueous wastes. Residuals, including steam condensate, recovered solvents, and "stripped" effluent must be disposed of or treated.
		Incineration	Likely to destroy organic wastes in groundwater, but process cost is expected to be high.
		UV/Oxidation	UV light is used to enhance the reactivity of oxidants (e.g., ozone or hydrogen peroxide) with organics. Hydrocarbons and chlorinated solvents are effectively destroyed. However, UV light cannot effectively catalyze reactions in opaque solutions. Process by products (e.g., off-gas, froth) are a concern with concentrated wastestreams.
	No Action		To be considered in conjunction with other technologies.

TABLE 6-1

COST OF RISK ASSESSMENT PROGRAM (TASK 4)
MECHANICVILLE SITE

Activity	Hours	Cost ($)
Labor		
Project Management	50	4,284
Data Analysis/Report Preparation		
Exposure Assessment	227	12,733
Dose Response Evaluation	47	2,562
Risk Characterization	227	12,733
Engineering Evaluation	115	5,552
Drafting	14	313
Secretarial	10	209
Total Labor Costs	690	$38,386
Other: Word Processing, Mailing, Reproduction		$ 850
TOTAL COSTS		$39,236

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TABLE 4-6
CHEMICALS FOUND IN TASK 2 SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	--					
-OTHER-																
ACETONE	--	ND	ND	ND	ND	--	ND	0.010	ND	ND	ND	--	--	ND	ND	ND
METHYLENE CHLORIDE	--	--	0.0054	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANICS (MG/L)																
-PAH-																
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND											
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	ND	ND	0.016	--	ND	ND	ND	ND	0.012	--	--	0.025	ND	0.030
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.069	ND	--	--	ND	ND	ND
TOTAL PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.105	ND	ND	ND	ND	ND	ND

TABLE 4-6 (continued)

CHEMICALS FOUND IN TASK 2 SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
						‡‡OTHER CHEMICALS (MG/L)‡‡										
-METALS-																
IRON	0.23	0.47	1.09	0.99	0.037	0.23	0.40	0.45	0.79	0.36	0.33	0.22	0.24	0.41	0.78	0.33
ZINC	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	0.01
-CYANIDE-																
TOTAL CYANIDE (4)	ND	0.01	ND	ND	ND	ND	0.01	ND	ND	0.01	ND	ND	ND	ND	ND	0.01
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	ND
FERRO-FERRI CYANIDE	ND	0.01	ND	ND	ND	ND	0.02	0.03	ND	0.01	ND	ND	ND	0.01	ND	0.01
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	0.24	ND	--	--	--	0.013	0.005	ND	0.037	--	--	ND
TOTAL ORGANIC CARBON	5.5	11	11.9	7.3	6.4	ND	10	9	7.5	6.0	6.0	5.0	5.4	10.0	6.2	5.5
OIL AND GREASE	11	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
SULFATE	--	16.4	--	--	--	--	19.3	18.6	--	--	--	--	--	16.4	--	--

NOTES:
(1) INDICATES SAMPLE VALUES WERE OBTAINED BY GC/MS (EPA METHODS 624 AND 625) OR BY HPLC (EPA METHODS 602 AND 610).
(2) ND = NOT DETECTED (SEE APPENDIX D-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TOTAL CYANIDE CONCENTRATION MAY BE LOWER THAN CYANIDE COMPONENTS DUE TO LOW DETECTION LEVELS AND ACCURACY OF ANALYTICAL METHODS

TABLE 4-7
Task 3 Surface Water Analytical Results
Mechanicville Site

SITE IDENTIFIER:	------UPSTREAM------		------ADJACENT------		-----DOWNSTREAM------	
SAMPLE IDENTIFIER:	SW-01	SW-01	SW-02	SW-02	SW-04	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
			** Volatile Organics (mg/l) **			
- VOLATILE AROMATICS -						
Benzene	ND (1)	ND	ND	-- (2)		
Toluene	ND	ND	ND	--	ND	--
Ethylbenzene	ND	ND	ND	--	ND	--
Styrene	ND	ND	ND	--	ND	--
Total Xylenes	ND	ND	ND	--	ND	--
- OTHER -						
Methylene Chloride	ND	ND	ND	--	ND	--
2-Butanone	ND	ND	ND	--	ND	--
Total Volatile Aromatics	ND	ND	ND	--	ND	--
Total Volatile Organics	ND	ND	ND	--	ND	--
			** Semi-Volatile Organics (mg/l) **			
-PAH-						
Acenaphthene	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
-OTHER-						
bis (2-Ethylhexyl) Phthalate	0.39	0.034	ND	ND	ND	ND
Total PAH	ND	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	0.39	0.034	ND	ND	ND	ND
			** Other Chemicals (mg/l) **			
-METALS-						
Iron	0.20	0.38	1.1	1.8	0.24	0.42
Zinc	ND	0.03	0.014	0.02	ND	ND
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (3)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	ND	ND	ND	ND	ND	0.011
Total Organic Carbon	6.1	4.2	6.1	4.9	4.8	4.7

NOTES:
(1) ND = Not detected (see Appendix B-4 for minimum detection limits).
(2) NA = Not analyzed (laboratory reported vial was received broken).
(3) Undistilled CN = Free dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present

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TABLE 4-8
CHEMICALS FOUND IN TASK 2 SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301 DUP	SED-401	SED-102	SED-202	SED-202 DUP	SED-302	SED-402	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/KG)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.070	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
o - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
m - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
p - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
-OTHER-																
ACETONE	--	--	ND	ND	5.300	--	--	--	ND	6.600	3.800	--	--	--	ND	4.200
METHYLENE CHLORIDE	--	--	ND	ND	2.400	--	--	--	ND	3.000	2.900	--	--	--	ND	2.300
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	0.07	ND
SEMIVOLATILE ORGANICS (MG/KG)																
-PAH-																
ACENAPHTHENE	(4)	ND	ND	ND	ND	(4)	ND	ND	ND	0.700	1.600	0.910	1.100	(4)	ND	ND
ACENAPHTHYLENE	0.740	ND	ND	ND	ND	0.900	ND	ND	ND	ND	1.300	2.700	3.500	8.800	ND	ND
ANTHRACENE	(4)	(4)	ND	ND	ND	(4)	(4)	(4)	(4)	ND	ND	1.100	1.200	(4)	(4)	ND
BENZO(b)FLUORANTHENE	(4)	0.580	ND	ND	ND	(4)	(4)	2.000	(4,5)	ND	ND	1.000	0.940	0.630	(4,5)	ND
BENZO(k)FLUORANTHENE	(4)	(5)	ND	ND	ND	(4)	(5)	4.800	(4,5)	ND	ND	0.930	1.000	(5)	(4,5)	ND
BENZO(g,h,i)PERYLENE	ND	3.100	ND	ND	ND	ND	(4)	15.000	ND	ND	ND	ND	ND	4.400	(4)	ND
BENZO(a)ANTHRACENE	(6)	(6)	ND	ND	ND	(6)	(6)	(6)	(4)	ND	ND	(6)	(6)	(5)	(4)	ND
BENZO(a)PYRENE	(4)	0.450	ND	ND	ND	(4)	(4)	6.100	(4)	ND	ND	0.740	0.800	0.650	(4)	ND
CHRYSENE	0.520	0.610	ND	ND	ND	0.460	(4)	6.500	(4)	ND	ND	2.000	2.100	(4)	(4)	ND
DIBENZO(a,h)ANTHRACENE	ND	0.930	ND	ND	ND	(4)	ND	7.100	ND	ND	ND	ND	1.600	2.300	ND	ND
FLUORANTHENE	0.960	0.470	ND	ND	ND	0.920	(4)	5.600	(4)	ND	ND	2.200	4.700	(4)	(4)	ND
FLUORENE	1.500	ND	ND	ND	ND	1.400	ND	ND	ND	ND	0.500	4.000	4.300	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	(7)	ND	ND	ND	(4)	ND	(7)	ND	ND	ND	(4)	(4)	(7)	(4)	ND
NAPHTHALENE	3.600	ND	ND	ND	ND	3.300	ND	19.000	(4)	4.400	13.000	10.000	19.000	ND	ND	ND
PHENANTHRENE	0.570	0.290	ND	ND	ND	(4)	(4)	1.800	(4)	ND	ND	2.000	2.300	(4)	(4)	ND
PYRENE	0.690	0.770	ND	ND	ND	0.960	(4)	5.900	(4)	ND	ND	1.900	3.100	(4)	(4)	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	(4)	ND	ND	--	--	--	(4)	ND	ND	--	--	--	(4)	ND
2-METHYLNAPHTHALENE	--	--	ND	ND	ND	--	--	--	ND	0.900	ND	--	--	--	ND	ND
DI-N-BUTYL PHTHALATE	--	--	--	--	2.100	--	--	--	--	ND	4.000	--	--	--	--	3.200
TOTAL PAH	8.580	7.300	ND	ND	ND	7.940	(3)	75.800	(4)	5.100	16.400	29.480	45.640	16.780	(4)	ND

TABLE 4-8 (continued)
CHEMICALS FOUND IN TASK 2 SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301	SED-401	SED-102	SED-202	SED-202	SED-302	SED-402	SED-402	SED-103	SED-103	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/KG)																
-METALS-																
IRON	16000	9200	10800	8320	15600	21000	19000	16000	9980	30800	23600	13000	13000	20000	13000	33100
ZINC	47	36	37	31	--	51	69	100	46	--	--	65	60	88	76	--
-CYANIDE-																
TOTAL CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	3.1	ND	ND	ND	ND	6.1	3.1	ND	ND	ND	ND	1.8
TOTAL ORGANIC CARBON	3000	4600	4790	3320	9700	7700	3500	7600	16100	11000	22000	4500	4600	4600	9350	15000
SULFATE	--	ND	--	--	--	--	60	40	--	--	--	--	--	30	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX D-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE REPORTING LIMIT.
(5) BENZO(b)FLUORANTHENE AND BENZO(k)FLUORANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) INDENO(1,2,3-cd)PYRENE AND BENZO(g,h,i)PERYLENE, COELUTED.

TABLE 4-9

Task 3 Sediment Analytical Results
Mechanicville Site

SITE IDENTIFIER	----UPSTREAM----		----ADJACENT----		----------DOWNSTREAM----------			
SAMPLE IDENTIFIER	SD-01	SD-01	SD-02	SD-02	SD-04	DUP-01	SD-04	SD-DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	12/22/87	3/30/88	3/30/88
** Volatile Organics (mg/kg) **								
-VOLATILE AROMATICS-								
Benzene	ND (1)	ND	ND	T	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	0.087	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
-OTHER-								
Methylene Chloride	ND	R (3)	ND	R	ND	ND	R	R
2-Butanone	ND	R	ND	R	ND	ND	R	R
Total Volatile Aromatics	ND	ND	0.087	T	ND	ND	ND	ND
Total Volatile Organics	ND	ND	0.087	T	ND	ND	ND	ND
** Semi-Volatile Organics (mg/kg) **								
-PAH-								
Acenaphthene	ND	ND	T	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	T	ND	ND	ND	ND	ND
Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	0.53	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	0.94	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	(5)	ND	ND	ND	ND	ND
Benzo(g,h,i,)Perylene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	0.59	ND	ND	ND	ND	ND
Chrysene	T (2)	ND	0.58	ND	ND	ND	ND	ND
Dibenz(a,h)Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Fluoranthene	T	ND	T	ND	T	T	ND	ND
Fluorene	ND	ND	T	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	T	ND	ND	ND	ND	ND
Naphthalene	ND	ND	0.48	ND	ND	T	ND	ND
Phenanthrene	T	ND	0.9	T	T	T	ND	ND
Pyrene	T	ND	1.1	ND	T	T	ND	ND
-OTHER-								
4-Methylphenol	ND	ND	T	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	T	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	T	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	T	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	25	ND	T	ND	ND	T	T
Total PAH	T	ND	5.1	T	T	T	ND	ND
Total Semi-Volatile Organics	T	25	5.1	T	T	T	T	T
-METALS-								
Iron	7700	NR (4)	8400	NR	8700	7100	NR	NR
Zinc	27	NR	45	NR	25	28	NR	NR
-CYANIDE-								
Total Cyanide (ppm) (6)	ND	NR	1.3	NR	ND	ND	NR	NR
Undistilled Cyanide	ND	NR	ND	NR	ND	ND	NR	NR
-OTHER-								
Total Recoverable Phenolics	1.3	NR	2.3	NR	1.2	0.68	NR	NR
Total Organic Carbon	12000	NR	32000	NR	18000	11000	NR	NR

NOTES:

(1) ND = Not detected (See Appendix B-4 for minimum detection limits).
(2) T = Trace concentrations detected below the quantifiable reporting limits.
(3) R = Data rejected because analysis of blank indicated sampling or lab-derived contamination
(4) NR = Analysis not requested
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of the amenable CN- present.

TABLE 4-10

TASK 3 AIR ANALYTICAL RESULTS - ppm
MECHANICVILLE SITE

	Office		Garage		Storeroom		Background	
Sample Identifier	OF-01	OF-02	GA-01	GA-02	ST-01	ST-02	BA-01	BA-01
Date of Sample Collection	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88
Volatile Aromatics[1]								
Benzene	0.03	0.031	0.016	0.015	0.043	0.043	ND[2]	ND
Toluene	0.009	0.009	0.048	0.048	0.012	0.012	0.037	0.028
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.039	0.040	0.064	0.063	0.055	0.055	0.037	0.028

NOTES:

[1] Samples analyzed by NIOSH Method 1501 by ESA Laboratories in Bedford, MA.

[2] ND = Not detected. The minimum detection limits are: benzene - 0.013 ppm; ethylbenzene and xylenes - 0.01 ppm.

TABLE 5-1
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES(1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA(5)					N Y STATE DRINKING WATER REGULATIONS
	CLASS D ---SURFACE WATER--- STANDARDS	GUIDANCE VALUES	CLASS GA --GROUNDWATER--- STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	AQUATIC LIFE(6) ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION	MAXIMUM CONTAMINANT LEVELS(18)
						OTHER CHEMICALS (mg/l)							
-METALS-													
IRON	0.3	------	0.3	------	------	0.3(15)	------	------	------	------	------	------	0.3(15)
ZINC	(16)	------	0.3	------	------	5(15)	------	------	------	5(13)	------	5(13)	5.0(15)
-CYANIDE-		------		------	------	------	------	------	------	------	------	------	------
TOTAL CYANIDE	------	------	0.1	------	------	------	0.2	------	------	------	------	------	------
FERRO-FERRI CYANIDE	------	------	------	------	------	------	------	------	------	------	------	------	------
FREE CYANIDE	0.022	------	------	------	------	------	------	0.0035	0.052	0.2	------	0.2	------
-OTHER-		------		------	------	------	------	------	------	------	------	------	------
TOTAL RECOVERABLE PHENOLIC	0.005(19)	------	0.001	------	------	------	------	------	------	3.5	------	3.5	------
TOTAL ORGANIC CARBON	------	------	------	------	------	------	------	------	------	------	------	------	------
SULFATE	------	------	250	------	------	------	------	------	------	------	------	------	250(15)

NOTES:
(1) NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES (1.1.1) AS REVISED NOVEMBER 1991. CLASS D SURFACE WATER ARE SUITABLE FOR SECONDARY CONTACT RECREATION; CLASS GA DENOTES FRESH GROUNDWATER WHICH IS A SOURCE OF POTABLE WATER SUPPLY.
(2) MCLs (MAXIMUM CONTAMINANT LEVELS) ARE ENFORCEABLE STANDARDS FOR PUBLIC WATER SUPPLY SYSTEMS PROMULGATED UNDER THE SAFE DRINKING WATER ACT(40CFR PART 141).
(3) MCLGs(MAXIMUM CONTAMINANT LEVEL GOALS) ARE PROPOSED NON-ENFORCEABLE HEALTH GOALS AND HAVE BEEN SET AT A LEVEL OF NO KNOWN OR ANTICIPATED HEALTH AFFECTS.
(4) EPA HEALTH ADVISORIES(FORMERLY SNARLs) ARE NON-ENFORCEABLE CRITERIA ESTABLISHED BY THE OFFICE OF DRINKING WATER. THEY ARE SET AT LEVELS WHERE ADVERSE HEALTH EFFECTS ARE NOT EXPECTED.
(5) WATER QUALITY CRITERIA WERE FORMULATED TO PROTECT AQUATIC LIFE AND HUMAN HEALTH FROM POLLUTANTS IN SURFACE WATERS. (40 CFR SUMMARY, FRI, NOV. 28, 1980, P. 79318-79379). WATER QUALITY CRITERIA HAVE NO REGULATORY IMPACT, BUT ARE USEFUL IN ESTABLISHING WATER QUALITY-BASED EFFLUENT LIMITATIONS, WATER QUALITY STANDARDS, AND TOXIC POLLUTANT EFFLUENT STANDARDS.
(6) GUIDANCE CRITERIA FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE. CONCENTRATIONS SPECIFIED SHOULD PROTECT MOST (BUT NOT NECESSARILY ALL) AQUATIC FRESHWATER LIFE AND ITS USES.
(7) THE ACUTE TOXICITY LEVEL IS THE MAXIMUM TO WHICH ORGANISMS CAN BE EXPOSED WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.
(8) CHRONIC TOXICITY LEVEL IS THE 24-HOUR AVERAGE VALUE THAT ORGANISMS CAN BE EXPOSED TO WITHOUT SIGNIFICANT RISK
(9) HUMAN HEALTH GUIDELINES WERE DERIVED BASED ON "GUIDELINES AND METHODOLOGY USED IN THE PREPARATION OF HEALTH EFFECT ASSESSMENT CHAPTERS OF THE CONSENT WATER CRITERIA DOCUMENTS DEVELOPED BY EPA's OFFICE OF RESEARCH AND DEVELOPMENT.
(10) THESE ADJUSTED CRITERIA, FOR DRINKING WATER INGESTION ONLY, WERE DERIVED FROM PUBLISHED EPA AWQC FOR COMBINED FISH AND DRINKING WATER INGESTION AND FOR FISH INGESTION ALONE. THESE ADJUSTED VALUES ARE NOT OFFICIAL EPA AWQC, BUT MAY BE APPROPRIATE FOR SUPERFUND SITES WITH CONTAMINATED GROUNDWATER. (USEPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, OCTOBER 1986, PAGES 61-64.)
(11) ND = DETECTABLE BY USEPA METHODS 610 OR 625 (BENZO(a)PYRENE).
(12) PROPOSED
(13) TO PROTECT AGAINST TASTE AND ODOR EFFECTS; NOT HEALTH BASED.
(14) NEW YORK STATE HAS A MAXIMUM WATER QUALITY VALUE OF 0.1 MG/L OF DESIGNATED ORGANIC CHEMICALS FOR SURFACE WATER AND GROUNDWATER DISCHARGES REQUIRING PERMITS. THE DESIGNATED ORGANICS INCLUDE ALL OF THE ORGANIC CHEMICALS LISTED EXCEPT ACENAPHTHYLENE, BENZO(g,h,i)PERYLENE DIBENZO(a,h)ANTHRACENE, AND STYRENE.
(15) SECONDARY MAXIMUM CONTAMINANT LEVELS WHICH APPLY TO PUBLIC WATER SYSTEMS. THESE REGULATIONS CONTROL CONTAMINANTS IN DRINKING WATER THAT PRIMARILY AFFECT THE AESTHETIC QUALITIES RELATING TO THE PUBLIC ACCEPTANCE OF DRINKING WATER (40CFR PART 143).
(16) ZINC STANDARD FOR CLASS D WATERS IS DETERMINED BY THE FORMULA EXP(0.83[LN(PPH HARDNESS)] + 1.95) AND APPLIES TO THE ACID SOLUBLE FORM.
(17) AS MEASURE BY APHA METHOD 510.8 WHICH IS EQUIVALENT TO EPA METHOD 420.1 (SEE APHA 1985; USEPA, 1983).
(18) N.Y. DEPT. OF HEALTH REGULATIONS, SUBPART 5-1 OF PART 5 OF TITLE 10, EFFECTIVE 1/19/90.
(19) REFERS TO TOTAL UNCHLORINATED PHENOLIC COMPOUNDS.

TABLE 5-1 (continued)

CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER AND SURFACE WATER MECHANICVILLE SITE

	NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES(1)				NATIONAL DRINKING WATER REGULATIONS		EPA HEALTH ADVISORIES(4)	EPA AMBIENT WATER QUALITY CRITERIA(5)					N Y STATE DRINKING WATER REGULATIONS
	CLASS D ---SURFACE WATER---		CLASS GA --GROUNDWATER---					AQUATIC LIFE(6)					
	STANDARDS	GUIDANCE VALUES	STANDARDS	GUIDANCE VALUES	MAXIMUM CONTAMINANT LEVELS(2)	MAXIMUM CONTAMINANT LEVEL GOAL(3)	LIFETIME ADULT EXPOSURE	ACUTE (7)	CHRONIC (8)	DRINKING WATER ONLY (10)	FISH CONSUMPTION ONLY	DRINKING WATER AND FISH CONSUMPTION	MAXIMUM CONTAMINANT LEVELS(18)
						OTHER CHEMICALS (mg/l)							
-METALS-													
IRON	0.3	------	0.3	------	------	0.3(15)	------	------	------	------	------	------	0.3(15)
ZINC	(16)	------	0.03	------	------	5(15)	------	------	------	5(13)	------	5(13)	5.0(15)
-CYANIDE-		------		------	------	------	------	------	------	------	------	------	------
TOTAL CYANIDE	------	------	0.1	------	------	------	0.2	------	------	------	------	------	------
FERRO-FERRI CYANIDE	------	------	------	------	------	------	------	------	------	------	------	------	------
FREE CYANIDE	0.022	------	------	------	------	------	------	0.0035	0.052	0.2	------	0.2	------
-OTHER-		------		------	------	------	------	------	------	------	------	------	------
TOTAL RECOVERABLE PHENOLIC	0.005(19)	------	0.001	------	------	------	------	------	------	3.5	------	3.5	------
TOTAL ORGANIC CARBON	------	------	------	------	------	------	------	------	------	------	------	------	------
SULFATE	------	------	250	------	------	------	------	------	------	------	------	------	250(15)

NOTES:

(1) NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES (1.1.1) AS REVISED NOVEMBER 1991. CLASS D SURFACE WATER ARE SUITABLE FOR SECONDARY CONTACT RECREATION; CLASS GA DENOTES FRESH GROUNDWATER WHICH IS A SOURCE OF POTABLE WATER SUPPLY.

(2) MCLs (MAXIMUM CONTAMINANT LEVELS) ARE ENFORCEABLE STANDARDS FOR PUBLIC WATER SUPPLY SYSTEMS PROMULGATED UNDER THE SAFE DRINKING WATER ACT(40CFR PART 141).

(3) MCLGs(MAXIMUM CONTAMINANT LEVEL GOALS) ARE PROPOSED NON-ENFORCEABLE HEALTH GOALS AND HAVE BEEN SET AT A LEVEL OF NO KNOWN OR ANTICIPATED HEALTH AFFECTS.

(4) EPA HEALTH ADVISORIES(FORMERLY SNARLs) ARE NON-ENFORCEABLE CRITERIA ESTABLISHED BY THE OFFICE OF DRINKING WATER. THEY ARE SET AT LEVELS WHERE ADVERSE HEALTH EFFECTS ARE NOT EXPECTED.

(5) WATER QUALITY CRITERIA WERE FORMULATED TO PROTECT AQUATIC LIFE AND HUMAN HEALTH FROM POLLUTANTS IN SURFACE WATERS. (40 CFR SUMMARY, FRI, NOV. 28, 1980, P. 79318-79379). WATER QUALITY CRITERIA HAVE NO REGULATORY IMPACT, BUT ARE USEFUL IN ESTABLISHING WATER QUALITY-BASED EFFLUENT LIMITATIONS, WATER QUALITY STANDARDS, AND TOXIC POLLUTANT EFFLUENT STANDARDS.

(6) GUIDANCE CRITERIA FOR THE PROTECTION OF FRESHWATER AQUATIC LIFE. CONCENTRATIONS SPECIFIED SHOULD PROTECT MOST (BUT NOT NECESSARILY ALL) AQUATIC FRESHWATER LIFE AND ITS USES.

(7) THE ACUTE TOXICITY LEVEL IS THE MAXIMUM TO WHICH ORGANISMS CAN BE EXPOSED WITHOUT SIGNIFICANT RISK OF ADVERSE IMPACT.

(8) CHRONIC TOXICITY LEVEL IS THE 24-HOUR AVERAGE VALUE THAT ORGANISMS CAN BE EXPOSED TO WITHOUT SIGNIFICANT RISK

(9) HUMAN HEALTH GUIDELINES WERE DERIVED BASED ON "GUIDELINES AND METHODOLOGY USED IN THE PREPARATION OF HEALTH EFFECT ASSESSMENT CHAPTERS OF THE CONSENT WATER CRITERIA DOCUMENTS DEVELOPED BY EPA's OFFICE OF RESEARCH AND DEVELOPMENT.

(10) THESE ADJUSTED CRITERIA, FOR DRINKING WATER INGESTION ONLY , WERE DERIVED FROM PUBLISHED EPA AWQC FOR COMBINED FISH AND DRINKING WATER INGESTION AND FOR FISH INGESTION ALONE. THESE ADJUSTED VALUES ARE NOT OFFICIAL EPA AWQC, BUT MAY BE APPROPRIATE FOR SUPERFUND SITES WITH CONTAMINATED GROUNDWATER. (USEPA SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, OCTOBER 1986, PAGES 61-64.)

(11) ND = DETECTABLE BY USEPA METHODS 610 OR 625 (BENZO(a)PYRENE).

(12) PROPOSED

(13) TO PROTECT AGAINST TASTE AND ODOR EFFECTS; NOT HEALTH BASED.

(14) NEW YORK STATE HAS A MAXIMUM WATER QUALITY VALUE OF 0.1 MG/L OF DESIGNATED ORGANIC CHEMICALS FOR SURFACE WATER AND GROUNDWATER DISCHARGES REQUIRING PERMITS. THE DESIGNATED ORGANICS INCLUDE ALL OF THE ORGANIC CHEMICALS LISTED EXCEPT ACENAPHTHYLENE, BENZO(g,h,i)PERYLENE DIBENZO(a,h)ANTHRACENE, AND STYRENE.

(15) SECONDARY MAXIMUM CONTAMINANT LEVELS WHICH APPLY TO PUBLIC WATER SYSTEMS. THESE REGULATIONS CONTROL CONTAMINANTS IN DRINKING WATER THAT PRIMARILY AFFECT THE AESTHETIC QUALITIES RELATING TO THE PUBLIC ACCEPTANCE OF DRINKING WATER (40CFR PART 143).

(16) ZINC STANDARD FOR CLASS D WATERS IS DETERMINED BY THE FORMULA EXP(0.83[LN(PPH HARDNESS)] + 1.95) AND APPLIES TO THE ACID SOLUBLE FORM.

(17) AS MEASURE BY APHA METHOD 510.8 WHICH IS EQUIVALENT TO EPA METHOD 420.1 (SEE APHA 1985; USEPA, 1983).

(18) N.Y. DEPT. OF HEALTH REGULATIONS, SUBPART 5-1 OF PART 5 OF TITLE 10, EFFECTIVE 1/19/90.

(19) REFERS TO TOTAL UNCHLORINATED PHENOLIC COMPOUNDS.

TABLE 5-2

POTENTIALLY APPLICABLE STANDARDS AND GUIDELINES
FOR AIRBORNE CHEMICALS MODELED FROM TASK 2 AND TASK 3 SOIL SAMPLES
MECHANICVILLE SITE

CONTAMINANT	NEW YORK STATE AALs (ug/m3)
-VOLATILE AROMATICS-	
Benzene	100 (1)
Toluene	7,500 (1)
Ethyl Benzene	1,450 (1)
Styrene	716 (1)
Xylene	1,450 (1)
-OTHER-	
Methylene Chloride	1,167 (1)
-PAH-	
Acenaphthene	-- (2)
Acenaphthylene	--
Anthracene	--
Benzo(b)Fluoranthene	--
Benzo(k)Fluoranthene	--
Benzo(g,h,i)Perylene	--
Benzo(a)Anthracene	--
Benzo(a)Pyrene	--
Chrysene	--
Dibenzo(a,h)Anthracene	--
Fluoranthene	--
Fluorene	--
Ideneo(1,2,3-cd)Pyrene	--
Naphthalene	167
Phenanthrene	--
Pyrene	--
-OTHER-	
Bis(2-Ethylhexyl)Phthalate	--

TABLE 5-2 (continued)

POTENTIALLY APPLICABLE STANDARDS AND GUIDELINES
FOR AIRBORNE CHEMICALS MODELED FROM TASK 2 AND TASK 3 SOIL SAMPLES
MECHANICVILLE SITE

CONTAMINANT	NEW YORK STATE AALs (ug/m^3)
-METALS-	
Iron	0.167 (3)
Zinc	--
-CYANIDE-	
Total Cyanide	16.7 (1)(4)
Ferro-Ferri Cyanide	--
Amenable Cyanide	--
-OTHER-	
Total Recoverable Phenolics	--
Total Organic Carbon	--
Total New York State Regulated Organics	--

NOTES:

(1) Interim Ambient Air Level (AAL), Derived from American Conference of Governmental and Industrial Hygienists Time-weighted Average Threshold Limit Value (ACGIH TWA-TLV).

(2) Not available

(3) Proposed AAL - Personal Communication with Stanley Byer, NYSDEC, 12/14/88.

(4) As cyanide.

PAH - Polynuclear Aromatic Hydrocarbon.

TABLE 5-3

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE DEPARTMENT OF HEALTH
MAXIMUM CONTAMINANT LEVELS
MECHANICVILLE SITE

CHEMICAL	MCL (mg/L)[1]	WELL NUMBER
Volatile Aromatics		
Benzene	0.005	MW-1, MW-3, MW-4, MW-5, MW-6 MW-12, MW-13, MW-14, MW-15
Toluene	0.005	MW-3, MW-4, MW-5, MW-6, MW-13, MW-14
Ethylbenzene	0.005	MW-3, MW-4, MW-5, MW-6, MW-12, MW-13, MW-14
Styrene	0.005	MW-4, MW-6, MW-13
Total Xylenes	0.005	MW-1, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-13, MW-14, MW-15
Trimethylbenzene	0.005	MW-4, MW-5, MW-6
Methylene Chloride	0.005	MW-2, MW-6,MW-13
PAHs		
Acenaphthene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-14
Acenaphthylene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-13
Anthracene	0.05	MW-3, MW-4, MW-5, MW-6, MW-12
Benzo(b)fluoranthene	0.05	MW-6
Benzo(k)fluoranthene	0.05	MW-5, MW-6
Benzo(a)anthracene	0.05	MW-3, MW-5
Benzo(a)pyrene	0.05	MW-3, MW-4, MW-6
Chrysene	0.05	MW-3, MW-4, MW-5, MW-6
Fluoranthene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-12, MW-13

TABLE 5-3 (continued)

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE DEPARTMENT OF HEALTH
MAXIMUM CONTAMINANT LEVELS
MECHANICVILLE SITE

CHEMICAL	MCL (mg/L)[1]	WELL NUMBER
Naphthalene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-12, MW-13, MW-14
Phenanthrene	0.05	MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-12, MW-13
Pyrene	0.05	MW-3, MW-4, MW-5, MW-6, MW-12, MW-13
Other Chemicals		
Bis (2-Ethylhexyl) Phthalate	0.05	MW-1, MW-2, MW-3, MW-10
Iron	0.3*	MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12
Zinc	5.0*	MW-4, MW-5

Notes:

(1) NY Dept. of Health Regulations, Title 1C, Part 5, Subpart 5-1; effective 1/19/90
(2) POL - Principal Organic Contaminant
UOL - Unspecified Organic Contaminant
* - Secondary MCL

TABLE 5-4

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE STANDARDS/GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	STANDARDS/GUIDANCE VALUE (mg/l)[1,2]	WELL NUMBER
Volatile Aromatics		
Benzene	0.0007(S)	MW-1 MW-3 MW-4 MW-5 MW-6 MW-12 MW-13 MW-14 MW-15
Toluene	0.005(S)	MW-3 MW-4 MW-5 MW-6 MW-13 MW-14
Ethylbenzene	0.005(S)	MW-3 MW-4 MW-5 MW-6 MW-12 MW-13 MW-14
Styrene	0.005(S)	MW-4 MW-6 MW-13
Total Xylene	0.05(G)	MW-3 MW-4 MW-5 MW-6 MW-12 MW-13 MW-14
Trimethylbenzene	0.005(S)	MW-4 MW-5 MW-6
Methylene Chloride	0.005(S)	MW-2 MW-6 MW-13

TABLE 5-4 (continued)

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	STANDARDS/GUIDANCE VALUE (mg/l)[1,2]	WELL NUMBER
Naphthalene	0.01(G)	MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-12 MW-13 MW-14 MW-15
Phenanthrene	0.05(G)	MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-12 MW-13
Pyrene	0.05(G)	MW-3 MW-4 MW-5 MW-6 MW-12 MW-13
Chrysene	0.000002(G)	MW-1 MW-3 MW-4 MW-5 MW-6
OTHER		
Bis(2-ethylhexyl)Phthalate	0.05(S)	MW-1 MW-2 MW-3 MW-10

[1]NYSDEC, Division of Water; Technical and Operational Guidance Series (1.1.1) November 1991
[2](S) denotes standard, (G) denotes guidance value

TABLE 5-4 (continued)

GROUNDWATER SAMPLES CONTAINING CHEMICALS
IN EXCESS OF NEW YORK STATE STANDARDS/GUIDANCE VALUES
MECHANICVILLE SITE

CHEMICAL	STANDARDS/GUIDANCE VALUE (mg/l)[1,2]	WELL NUMBER
PAHs		
Acenaphthene	0.02(G)	MW-1 MW-2 MW-3 MW-5 MW-6 MW-10 MW-12 MW-14 MW-15
Anthracene	0.05(G)	MW-3 MW-4 MW-5 MW-6 MW-12
Benzo(k)Fluoranthene	0.000002(G)	MW-5 MW-6
Benzo(a)Anthracene	0.000002(G)	MW-3 MW-5
Benzo(b)Fluoranthene	0.000002(G)	MW-6
Benzo(a)Fluoranthene	0.000002(G)	MW-3 MW-5
Fluoranthene	0.05(G)	MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-12 MW-13
Fluorene	0.05(G)	MW-1 MW-3 MW-4 MW-5 MW-6 MW-12

TABLE 5-5

COMPARISON OF MODELED AMBIENT CONCENTRATIONS
AT 100 FT. DOWNWIND
OF SITE TO NEW YORK STATE
ACCEPTABLE AMBIENT LEVELS (ug/m^3)
MECHANICVILLE SITE

CONTAMINANT	NY AAL (ug/m^3)	MODELED 24-HOUR AVERAGE CONCENTRATION	
		MOST PROBABLE	REALISTIC WORST
CARCINOGENS			
Benzene	100	0.3	12.8
Methylene chloride	1167	0.001	0.06
NONCARCINOGENS			
Cyanide	16.7	0.00002	0.0009
Ethylbenzene	1450	0.2	10.1
Styrene	716	0.4	18.4
Toluene	7500	0.4	18.6
Xylenes	1450	0.9	37.7

TABLE 5-6

COMPARISON OF INDOOR AIR SAMPLING RESULTS
TO WORKER STANDARDS AND GUIDELINES
MECHANICVILLE SITE

	Worker Standards and Guidelines						Air Analytical Results - ppm							
							Office		Garage		Storeroom		Background	
	OSHA			NIOSH	ACGIH		OF-01	OF-02	GA-01	GA-02	ST-01	ST-02	BA-01	BA-02
Substance	TWA	CC	Peak	TWA	TLV	STEL	12/88	12/88	12/88	12/88	12/88	12/88	12/88	12/88
Benzene	10	25	50	1	10	25	0.03	0.031	0.016	0.015	0.043	0.043	ND	ND
Toluene	200	300	500	100	100	150	0.009	0.009	0.048	0.048	0.012	0.012	0.037	0.028

ND = Not detected. The minimum detection limits are: benzene - 0.013 ppm; ethylbenzene and xylenes - 0.01 ppm.

TWA = Time Weighted Average (8-hr)

CC = Ceiling Concentration

Peak = Maximum Duration 10 minutes in 8 hours

TLV = Threshold Limit Value

STEL = Short-Term (15 minute) Exposure Limit

TABLE 5-7
SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE

TECHNICAL FACTORS	SURFACE SOILS	SUBSURFACE SOILS	GROUNDWATER
Chemicals Present	The following chemicals were detected in the surface soils at the site - cyanide - PAHs	The following chemicals were detected in the subsurface soils near former coal gasification structures: - VOCs - PAHs - iron and zinc - cyanide compounds - phenolic compounds These chemicals were found in samples collected from the fill soils and silty sand.	The following chemicals were detected in groundwater at the site: -VOCs -PAHs -iron and zinc -cyanide compounds -phenolic compounds -sulfate These chemicals were found in samples collected from roughly the top 10 feet of the water table and from the deeper bedrock.
Chemical Transport Mechanism	PAHs are highly insoluble in water and therefore fairly immobile in the soil environment. Amenable cyanide is soluble and may be mobilized in the soil.	Because chemicals were detected below the water table, transport of soluble chemicals(VOCs, metals, phenolics) in shallow groundwater is likely. Both PAHs and complex cyanides are highly insoluble in water and therefore fairly immobile in the soil environment.	The interpreted direction of shallow groundwater flow is to the north-northeast, with an easterly component in the southeastern corner of the site. Shallow groundwater discharges to the Anthony Kill; regional groundwater flows easterly, toward the Hudson River. Groundwater flow within the fractured rock is controlled by the orientation, size, and interconnection of the fractures. A downward gradient was observed at two multi-level well clusters, while an upward gradient exists at the cluster adjacent to the Anthony Kill.

(continued)

TABLE 5-7
SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE

TECHNICAL FACTORS	SURFACE SOILS	SUBSURFACE SOILS	GROUNDWATER
Expected Persistence of Chemicals in the Environment	PAHs strongly adsorb to soil particles, especially soils high in organic content. PAHs undergo microbial degradation and are readily metabolized by multi-cellular organisms. The lower molecular weight PAHs (e.g., naphthalene, acenaphthene, fluorene) are degraded more rapidly than the higher molecular weight compounds (benzo(a) pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene). Amendable cyanide is soluble and biodegradable.	There is only a slight tendency for most VOCs to adsorb to soil particles and they are expected to move with groundwater or slowly volatilize. They also are easily biodegradable by soil bacteria. PAHs strongly adsorb to soil particles, especially soils high in organic content. PAHs undergo microbial degradation and are readily metabolized by multi-cellular organisms. The lower molecular weight PAHs (e.g., naphthalene, acenaphthene, fluorene) are degraded more rapidly that the higher molecular weight compounds (benzo(a) pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene). Trace metals are non-volatile. Their environmental fate depends on soil/water interactions which are controlled by pH, cation exchange capacity, and organic matter content, among other factors. Amendable cyanide is soluble and biodegradable. Ferro-ferricyanides are stable compounds which are difficult to degrade. Therefore, they will persist in the soil environment. Under highly acidic or highly alkaline conditions, fero-ferricyanides may become soluble. They can be transformed to amenable cyanide and hydrogen cyanide gas under highly acidic conditions. Phenolic compounds have a relatively low volatility and high solubility.	VOCs in ground water are expected to biodegrade over time. PAHs are relatively insoluble in water, but leaching to groundwater does occur. Dissolved PAHs in groundwater are subject to microbial degradation. However, biodegradation probably occurs more slowly in aquatic systems than in soil. Dissolved PAHs may also undergo rapid, direct photolysis when oxidants are available. The volatility of PAH compounds is low. The behavior of trace metals in groundwater is complex. However, their mobility in groundwater can be significantly retarded by adsorption and precipitation reactions. Amenable cyanide forms a single anion in water which is biodegradable. Ferro-ferricyanides in water form a metal cyanide radical which is difficult to degrade and likely to persist. Phenolic compounds are soluble and biodegradable.

(continued)

TABLE 5-7
SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE

TECHNICAL FACTORS	SURFACE SOILS	SUBSURFACE SOILS	GROUNDWATER
Existing or Potential Receptors of Chemicals	The potential for exposure to chemicals in surface soils is low since most of the site is paved and fenced off.	The probability of direct exposure of humans or animals to chemicals in the soil is low because the site is paved. If excavation were made at the site, however, workers and area residents could be exposed to these chemicals.	Exposure to chemicals in the shallow groundwater may occur during building and utility excavations or through basement seeps in the site vicinity. The only direct groundwater usage in the are is through a few domestic wells nearly 1 mile southwest (upgradient) of the site. Because shallow groundwater appears to flow north-northeast from the site, these wells are unlikely to be receptors of site-derived chemicals.

(continued)

TABLE 5-7
SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE

TECHNICAL FACTORS	SURFACE WATER	SEDIMENT	AIR
Chemicals Present	The following chemicals were found in the Anthony Kill, adjacent to the site: - iron and zinc - cyanide compounds - phenolic compounds - sulfate These chemicals were primarily detected adjacent to the site. Higher concentrations of iron were detected adjacent to the site in Task 3. Higher concentrations of iron and phenols were detected upgradient of the site during Task 2.	The following chemicals were detected in sediments from the Anthony Kill, adjacent to the site: - benzene, toluene, and ethylbenzene - PAHs - iron and zinc - sulfate Benzene, toluene, and sulfate were found in samples adjacent to and /or downstream of the site. PAHs, iron, and zinc were detected upstream as well as downstream and adjacent to the site; with higher concentrations detected adjacent to and downgradient of the site.	The following chemicals were detected in indoor air samples at the site: - benzene - toluene Toluene was also found in the background samples.
Chemical Transport Mechanism	Dissolved and sediment-attached chemicals in the Anthony Kill may be transported downstream to the Hudson River (approximately a quarter mile).	Sediments deposited in the Anthony Kill may be resuspended during high flow/high energy conditions and carried farther downstream of the site.	Volatile and semivolatile organics found in the soils and sediments at the site may volatilize if these chemicals are exposed to the atmosphere by excavation. Similarly, winds may suspend soil and sediment particles containing site-derived contamination and carry these particles off-site, if exposed.

(continued)

TABLE 5-7
SUMMARY OF ENVIRONMENTAL CONDITIONS
MECHANICVILLE

TECHNICAL FACTORS	SURFACE WATER	SEDIMENT	AIR
Expected Persistence of Chemicals in the Environment	See Groundwater	See Soil	VOCs in air are expected to disperse quickly outdoors. In a closed environment with poor ventilation, the VOC dispersion rate would be much slower.
Existing or Potential Receptors of Chemicals	Direct contact with the surface water by humans is likely in this highly populated area, even though this section of the Anthony Kill is designated for secondary contact recreation only (Class D). Aquatic organisms in the stream are also potential receptors of chemicals.	As with surface water, direct contact with chemicals in sediments is a concern in this urban area, especially for recreational users of the Anthony Kill.	Workers and area residents could be exposed to a airborne contaminants during excavation of contaminated soil.

S2soil

TABLE 5-8

SUMMARY STATISTICS OF SELECTED SUBSURFACE SOIL SAMPLING LOCATIONS
VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

VOLATILE ORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
BENZENE	103.6	640	0	5/10
TOLUENE	151.2	840	0	8/10
ETHYLBENZENE	82.1	440	0	8/10
STYRENE	150.0	780	0	3/10
TOTAL XYLENES	306.0	1400	0.235	8/8
TRIMETHYLBENZENE	26.7	170	0	4/8
n-PROPYLBENZENE	0.3	2.05	0	2/8
ACETONE	0.0	0	0	0/2
METHYLENE CHLORIDE	0.5	1	0	1/2
CARBON DISULFIDE	0.1	0.11	0	1/2
2-BUTANONE				0

NOTES:

Includes Task 2 soil borings B-2, B-3, B-4, B-7, and B-8
and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-09.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S2soil

TABLE 5-9

SUMMARY STATISTICS OF SELECTED SUBSURFACE SOIL SAMPLING LOCATIONS
SEMI-VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

SEMI-VOLATILE ORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
ACENAPHTHENE	128.8	600	0	10/11
ACENAPHTHYLENE	365.8	1388	0	9/11
ANTHRACENE	183.0	670	0	10/11
BENZO(b)FLUORANTHENE	35.4	200	0	7/11
BENZO(k)FLUORANTHENE	30.0	240	0	5/11
BENZO(g,h,i)PERYLENE	29.3	140	0	7/11
BENZO(a)ANTHRACENE	76.5	390	0	10/11
BENZO(a)PYRENE	45.2	200	0	10/11
CHRYSENE	76.2	390	0	10/11
DIBENZO(a,h)ANTHRACENE	1.3	13	0	3/11
FLUORANTHENE	285.2	1100	0.28	11/11
FLUORENE	514.3	2100	0.28	11/11
INDENO(1,2,3-cd)-PYRENE	6.1	65	0	2/11
NAPHTHALENE	545.5	2500	0	10/11
PHENANTHRENE	320.7	940	0.28	11/11
PYRENE	398.7	1400	0.28	11/11
BIS(2-ETHYLHEXYL)PHTHALATE	0.0	0	0	0/3
2-METHYLNAPHTHALENE	13.0	13	13	1/11
DIBENZOFURAN	-	-	-	
TOTAL CARCINOGENIC PAHS	271.0	1305	0.28	11/11
TOTAL PAHS	3040.0	9480	2.38	11/11

NOTES:

Includes Task 2 soil borings B-2, B-3, B-4, B-7, and B-8 and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-09.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

S2soil

TABLE 5-10

SUMMARY STATISTICS OF SELECTED SUBSURFACE SOIL SAMPLING LOCATIONS
INORGANIC COMPOUNDS
MECHANICVILLE SITE

INORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
IRON	29333.3	35000	19000	9/9
ZINC	120.2	320	59	9/9
-CYANIDE-				
TOTAL CYANIDE	0.7	3.2	0	3/9
AMENABLE CYANIDE	0.5	3.2	0	2/8
FERRO-FERRI CYANIDE	0.3	2	0	1/8
-OTHER-				
TOTAL RECOVERABLE PHENOLICS	0.5	3.6	0	2/9
TOTAL ORGANIC CARBON	51133.3	190000	1400	9/9

NOTES:

Includes Task 2 soil borings B-2, B-3, B-4, B-7, and B-8
and test pits TP-2, TP-4, and TP-5, and Task 3 boring B-09.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S2tbls

TABLE 5-11

SUMMARY STATISTICS FOR SELECTED SEDIMENT SAMPLING LOCATIONS
VOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

VOLATILE ORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
Benzene	0.0330	0.095	0	2/5
Toluene	0.0000	0	0	0/5
Ethylbenzene	0.0174	0.087	0	1/5
Styrene	0.0000	0	0	0/5
Total Xylenes	0.0000	0	0	0/5
Acetone	2.6000	5.2	0	1/2
Methylene Chloride	0.7375	2.95	0	1/4
2-Butanone	0.0000	0	0	0/2

NOTES:

Includes Task 2 samples SED-302 and SED-402;Task 3 sample at SD-02;
two NYSEG samples collected in 11/88, and ; the NYSDEC sample of 10/88.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S2tbls

TABLE 5-12

SUMMARY STATISTICS FOR SELECTED SEDIMENT SAMPLING LOCATIONS
SEMIVOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

SEMI-VOLATILE ORGANICS	ARITHMETIC (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
Acenaphthene	0.5093	1.6	0	4/7
Acenaphthylene	0.8664	3	0	4/7
Anthracene	0.7593	1.63	0	5/7
Benzo(b)Fluoranthene	0.2371	0.95	0	3/7
Benzo(k)Fluoranthene	0.9729	3.1	0	4/7
Benzo(g,h,i,)Perylene	0.1307	0.4	0	3/7
Benzo(a)Pyrene	0.8386	2	0	5/7
Benzo(a)Anthracene	0.8143	2.5	0	4/7
Chrysene	0.7643	2.3	0	4/7
Dibenz(a,h)Anthracene	0.0307	0.215	0	1/7
Fluoranthene	2.8486	10	0	5/7
Fluorene	0.4364	1.59	0	4/7
Indeno(1,2,3-cd)Pyrene	0.1021	0.3	0	3/7
Naphthalene	2.0543	8.7	0	6/7
Phenanthrene	2.0871	5.49	0	6/7
Pyrene	2.4743	7.6	0	5/7
4-Methylphenol	0.0430	0.215	0	1/5
2-Methylnaphthalene	0.6750	2.66	0	5/7
Butylbenzylphthalate	0.0430	0.215	0	1/5
bis(2-Ethylhexyl)phthalate	0.8264	2.8	0	4/7
Di-n-octylphthalate	0.0330	0.165	0	1/5
Dibutyl phthalate	1.1750	2	0	3/4
Total Carcinogenic PAHs	3.7600	10.2	0	5/7
Total PAHs	16.0	38.9	0.95	7/7

NOTES:

Includes Task 2 samples SED-302 and SED-402;Task 3 sample at SD-02;
two NYSEG samples collected in 11/88, and ; the NYSDEC sample of 10/88.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was anlayzed.

S2tbls

TABLE 5-13

SUMMARY STATISTICS FOR SELECTED SEDIMENT SAMPLING LOCATIONS
INORGANIC COMPOUNDS
MECHANICVILLE SITE

INORGANICS	ARITHMETIC MEAN (mg/kg)	MAXIMUM (mg/kg)	MINIMUM (mg/kg)	FREQUENCY OF DETECTION
Iron	15193.3	27200	8400	3/3
Zinc	45.5	46	45	2/2
-CYANIDE-				
Total Cyanide (ppm)	0.4	1.3	0	1/3
-OTHER-				
Total Recoverable Phenolics	2.3	4.6	0	2/3
Total Organic Carbon	21533.3	32000	16100	3/3
Sulfate	-	-	-	-

NOTES:

Includes Task 2 samples SED-302 and SED-402;Task 3 samples at SD-02;
two NYSEG samples collected in 11/88, and; the NYSDEC sample of 10/88.

Frequency of detection equals the number of times a compound was found
(above the detection limit) over the number of samples in which it was analyzed.

S-2tabs

TABLE 5-14

SUMMARY STATISTICS FOR GROUNDWATER FROM SELECTED DOWNGRADIENT WELLS

VOLATILE ORGANIC COMPOUNDS

MECHANICVILLE SITE

VOLATILE ORGANICS	ARITHMETIC MEAN (mg/l)	MAXIMUM (mg/l)	MINIMUM (mg/l)	FREQUENCY OF DETECTION
BENZENE	1.12774	12.000	0	27/33
TOLUENE	0.44912	6.400	0	19/33
ETHYLBENZENE	0.43933	2.000	0	20/33
STYRENE	0.10533	1.800	0	4/33
TOTAL XYLENE	0.74081	3.500	0	27/33
TRIMETHYLBENZENE	-	-	-	0
ACETONE	0.06071	0.850	0	1/14
METHYLENE CHLORIDE	1.13594	36.000	0	2/32
2-BUTANONE	0.00139	0.025	0	1/18
1,1,1-TRICHLOROETHANE	0.00183	0.021	0	2/18
VINYL ACETATE	0.00556	0.100	0	1/18
2-HEXANONE	0.00028	0.005	0	1/18
CHLOROBENZENE	0.00007	0.001	0	1/18
1,1-DICHLOROETHANE	0.00018	0.003	0	1/18
TRICHLOROETHENE	0.00294	0.053	0	1/18

NOTES:

Includes all Task 2 and 3 monitoring wells except upgradient wells MW-1, MW-10, and MW-11.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

S-2tabs

TABLE 5-15

SUMMARY STATISTICS FOR GROUNDWATER FROM SELECTED DOWNGRADIENT WELLS
SEMIVOLATILE ORGANIC COMPOUNDS
MECHANICVILLE SITE

SEMIVOLATILE ORGANICS	ARITHMETIC MEAN (mg/l)	MAXIMUM (mg/l)	MINIMUM (mg/l)	FREQUENCY OF DETECTION
BENZO(b)FLUORANTHENE	0.8308	25.000	0	6/33
BENZO(k)FLUORANTHENE	0.8680	25.000	0	6/33
BENZO(g,h,i)PERYLENE	0.0121	0.400	0	1/33
BENZO(a)ANTHRACENE	1.5607	25.000	0	8/32
BENZO(a)PYRENE	0.9665	25.000	0	8/33
CHRYSENE	1.2873	25.000	0	7/33
DIBENZO(a,h)ANTHRACENE	0.0000	0.000	0	0/33
FLUORANTHENE	5.1082	82.000	0	19/33
FLUORENE	6.5798	110.000	0	21/33
INDENO(1,2,3,-cd)PYRENE	0.0152	0.400	0	2/33
NAPHTHALENE	35.7671	580.000	0	27/33
PHENANTHRENE	18.4497	320.000	0	22/33
PYRENE	8.1093	130.000	0	16/33
2,4-DIMETHYLPHENOL	0.0014	0.025	0	1/18
2,4-DINITROTOLUENE	0.0207	0.310	0	2/18
2,6-DINITROTOLUENE	0.0202	0.300	0	2/18
2-CHLORONAPHTHALENE	0.0167	0.300	0	1/18
2-METHYLNAPHTHALENE	25.7826	540.000	0	17/33
2-METHYLPHENOL	0.0297	0.300	0	4/18
2-NITROANILINE	0.1722	1.550	0	2/18
3-NITROANILINE	0.0861	1.550	0	1/18
4,6-DINITRO-2-METHYLPHENOL	0.0000	0.000	0	0/18
4-METHYLPHENOL	0.0202	0.200	0	3/18
4-NITROANILINE	0.0861	1.550	0	1/18
4-NITROPHENOL	0.0000	0.000	0	0/18
BENZOIC ACID	0.0875	1.550	0	2/18
BENZYL ALCOHOL	0.0003	0.005	0	1/18
BUTYLBENZYLPHTHALATE	0.0069	0.125	0	1/18
DIBENZOFURAN	1.7089	25.000	0	8/18
HEXACHLOROETHANE	0.0000	0.000	0	0/18
N-NITROSODIPHENYLAMIME	0.0167	0.300	0	1/18
NITROBENZENE	0.0003	0.005	0	1/18
PHENOL	0.0622	0.580	0	6/18
BIS(2-ETHYLHEXYL)PHTHALATE	0.0648	1.710	0	8/33
TOTAL CARCINOGENIC PAHS	5.4800	125.000	0	11/33
TOTAL PAHS	109.0000	1668.000	0	29/33

NOTES:

Includes all Task 2 and 3 monitoring wells except upgradient wells MW-1, MW-10, and MW-11.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

TABLE 5-16

SUMMARY STATISTICS FOR GROUNDWATER FROM SELECTED DOWNGRADIENT WELLS
INORGANIC COMPOUNDS
MECHANICVILLE SITE

INORGANICS	ARITHMETIC MEAN (mg/l)	MAXIMUM (mg/l)	MINIMUM (mg/l)	FREQUENCY OF DETECTION
IRON	5.930	25.000	0	31/32
ZINC	0.102	1.090	0	26/32
-CYANIDE-				
TOTAL CYANIDE	0.111	0.800	0	24/32
AMENABLE CYANIDE	0.012	0.100	0	2/12
FERRO-FERRI CYANIDE	0.083	0.420	0	13/14
UNDISTILLED CYANIDE	0.006	0.070	0	3/17
TOTAL RECOVERABLE PHENOLICS	0.793	17.000	0	22/23
TOTAL ORGANIC CARBON	1679.662	50000.000	2.500	30/30
SULFATE	42.000	84.000	14.500	5/5
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	120.670	2060.600	0	32/33

NOTES:

Includes all Task 2 and 3 monitoring wells except upgradient wells MW-1, MW-10, and MW-11.

Frequency of detection equals the number of times a compound was found (above the detection limit) over the number of samples in which it was analyzed.

TABLE 5-17

CONTAMINANTS OF CONCERN
MECHANICVILLE SITE

CARCINOGENS	MEDIUM IN WHICH DETECTED
Carcinogenic PAHs[1]	Soil, Sediment
Benzene	Soil, Sediment, Indoor Air
NONCARCINOGENS	
Toluene	Soil, Indoor Air
Xylene	Soil
Ethyl Benzene	Soil, Sediment
Styrene	Soil
Noncarcinogenic PAHs[2]	Soil, Sediment
Cyanide	Soil, Sediment
Trimethylbenzene	Soil

NOTES:

1 Include benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

2 Include acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, and 2-methylnaphthalene (sediment only).

mechdr

TABLE 6-1

ORAL DOSE RESPONSE DATA
MECHANICVILLE SITE

COMPOUND	DOSE-RESPONSE VALUE	UNIT	SOURCE	DATE	STUDY TYPE *	TOXICOKINETIC FACTORS Most Probable/Realistic Worst: SOIL (oral)	SOIL (dermal)
CARCINOGENS							
PAHs (1)	11.5	(mg/kg/day)-1	SPHEM (6)	Oct 87	diet	0.50 / 1.00	0.01 / 0.10
PAHs (2)	3.22	(mg/kg/day)-1	AES (9)	1988	diet	0.50 / 1.00	0.01 / 0.10
Benzene	0.02	(mg/kg/day)-1	IRIS (7)	Aug 89	inhalation	0.10 / 0.50	0.05 / 0.25
NONCARCINOGENS							
Toluene (3)	0.3	mg/kg/day	IRIS	Aug 89	inhalation	0.05 / 0.25	0.025 /0.125
Xylenes	2.0	mg/kg/day	IRIS	Aug 89	gavage	0.10 / 0.50	0.050 /0.250
Ethylbenzene (4)	0.1	mg/kg/day	IRIS	Aug 89	gavage	0.10 / 0.50	0.050 /0.250
Cyanide	0.02	mg/kg/day	IRIS	Aug 89	diet	0.5 / 1.00	1.000 / 2.50
Styrene	0.2	mg/kg/day	IRIS	Aug 89	gavage	0.1 / 0.5	0.050 / 0.25
Noncarcinogenic PAHs (5)	0.4	mg/kg/day	SPHEM	Sept 88	diet	0.5 / 1.00	0.010 / 0.10
Trimethylbenzene (5)	2.0	mg/kg/day	IRIS	Aug 89	gavage	0.10 / 0.50	0.050 / 0.25

(1) USEPA dose/response value for benzo(a)pyrene
(2) ICF-Clement dose/response value for benzo(a)pyrene
(3) Toluene study based on 50% absorption
(4) Ethylbenzene administered in olive oil
(5) Dose/response value for naphthalene
(6) Dose/response value for xylenes
(7) Superfund Public Health Evaluation Manual
(8) USEPA Integrated Risk Information System
(9) Atlantic Environmental Services (AES), 1988

mechdri

TABLE 6-2

INHALATION DOSE RESPONSE DATA
MECHANICVILLE SITE

COMPOUND	DOSE-RESPONSE VALUE	UNIT	SOURCE	DATE	STUDY TYPE *	TOXICOKINETIC FACTORS: INHALATION TKF Volatile	TOXICOKINETIC FACTORS: INHALATION TKF Particulate
CARCINOGENS							
PAHs (1)	6.1	(mg/kg/day)-1	SPHEM(6)	Oct 87	inhalation	N/A (8)	1.00
PAHs (2)	0.453	(mg/kg/day)-1	AES (9)	1988	inhalation	N/A (8)	1.00
Benzene	0.029	(mg/kg/day)-1	IRIS(7)	Aug 89	inhalation	1.00	N/A
NONCARCINOGENS							
Toluene	1.0	mg/kg/day	IRIS	Sept 88	inhalation	1.00	N/A
Xylenes	0.4	mg/kg/day	AIC	Sept 88	inhalation	1.00	N/A
Ethylbenzene (3)	0.1	mg/kg/day	IRIS	Aug 89	gavage	1.00	N/A
Cyanide (3)	0.02	mg/kg/day	IRIS	Nov 88	diet	N/A	7.50
Styrene (3)	0.2	mg/kg/day	IRIS	Sept 88	gavage	1.00	N/A
Noncarcinogenic PAHs (4)	0.4	mg/kg/day	SPHEM	April 89	diet	N/A	0.75
Trimethylbenzene (5)	0.4	mg/kg/day	AIC	Sept 88	inhalation	1.00	N/A

(1) USEPA dose/response value for benzo(a)pyrene
(2) ICF-Clement dose/response value for benzo(a)pyrene
(3) Inhalation dose/response value is not available for this compound; therefore, the oral dose/response value was used
(4) Dose/response value for naphthalene
(5) Dose/response value for xylene
(6) Superfund Public Health Evaluation Manual
(7) USEPA Integrated Risk Information System
(8) Not applicable
(9) Atlantic Environmental Services (AES), 1988

TABLE 6-3

TOXICOKINETIC FACTORS (TKFs)
MECHANICVILLE SITE

STUDY TYPE	DERMAL/SOIL	ORAL/SOIL
Gavage	0.05/0.25[1]	0.1/0.5
Drinking Water	0.05/0.25	0.1/0.5
Diet	.01/0.10	0.5/1.0
Inhalation	0.05/0.25[2]	0.1/0.5[2]

Notes:
[1] Most probable case/realistic worst case.

[2] Multiplied by the absorption-factor from inhalation study, if any.

TABLE 6-4

EXPOSURE PATHWAYS
MECHANICVILLE SITE

MEDIUM	POINT OF EXPOSURE	ROUTE OF EXPOSURE	EXPOSED POPULATION	STATUS
Subsurface Soils	On-Site	-Dermal absorption -Incidental ingestion	Utility Workers	Future
Surface soils	On-Site (Stream bank area)	-Dermal absorption -Incidental ingestion	Trespassers	Current
Air Emissions	On-Site,	-Inhalation	Site Residents	Current
			Construction Workers	Future
	Off-Site, dispersion		Children	Future
Sediments	Off-Site (adjacent to site)	-Dermal absorption -Incidental ingestion	Recreational river users	Current
			Construction Workers	

TABLE 6-5

EQUATIONS USED TO ESTIMATE BODY DOSES

MECHANICVILLE SITE

CARCINOGENS

1. Inhalation:

$$\text{Average Daily Dose Over Lifetime (mg/kg/day)} = \text{Concentration in Medium } (ug/m^3) \times \text{Amount of Air Inhaled } (m^3) \text{ per Event} \times \frac{1}{\text{Body Wt. (kg)}}$$

$$\times \frac{\text{Events/yr}}{365 \text{ days/yr}} \times \frac{\text{Yrs. Exposure}}{70 \text{ years}} \times \text{TKF}^{1} \times \frac{1 \text{ mg}}{1{,}000 \text{ ug}}$$

2. Direct Contact and Incidental Ingestion, Soil or Sediment

$$\text{Average Daily Dose Over Lifetime (mg/kg/day)} = \text{Concentration in Medium } (ug/g) \times [(\text{Soil Contacted } (g) \text{ per Event} \times \text{Dermal TKF}) + (\text{Soil Ingested } (g) \text{ per Event} \times \text{Oral TKF})] \times \frac{1}{\text{Body Wt. (kg)}}$$

$$\times \frac{\text{Events/yr}}{365 \text{ days/yr}} \times \frac{\text{Yrs. Exposure}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1{,}000 \text{ ug}}$$

TABLE 6-5 (continued)

EQUATIONS USED TO ESTIMATE BODY DOSES
MECHANICVILLE SITE

NONCARCINOGENS

1. Inhalation:

$$\text{Average Daily Dose Over Period of Exposure (mg/kg/day)} = \text{Concentration in Medium } (ug/m^3) \times \text{Amount of Air Inhaled } (m^3) \text{ per Event} \times \frac{1}{\text{Body Wt. (kg)}} \times$$

$$\frac{\text{Events/yr}}{365 \text{ days/yr}} \times \text{TKF} \times \frac{1 \text{ mg}}{1{,}000 \text{ ug}}$$

2. Direct Contact and Incidental Ingestion, Soil or Sediment:

$$\text{Average Daily Dose Level Over Period of Exposure (mg/kg/day)} = \text{Concentration in Medium (ug/g)} \times (\text{Soil Contacted (g) per Event} \times \text{Dermal TKF}) + (\text{Soil Ingested (g) per Event} \times \text{Oral TKF})) \times \frac{1}{\text{Body Wt. (kg)}}$$

$$\times \frac{\text{Events/yr}}{365 \text{ days/yr}} \times \frac{1 \text{ mg}}{1{,}000 \text{ ug}}$$

Note: TKF = Toxicokinetic Factor

TABLE 6-6

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SEDIMENTS DURING RECREATIONAL ACTIVITIES (1) MECHANICVILLE SITE

	MOST PROBABLE CASE	WORST CASE
Average Body Weight (2)	45 kg	45 kg
Surface Area Exposed (3)	4970 cm^2	6097 cm^2
Soil Contacted (unit deposition) (4)	0.5 mg/cm^2	1.5 mg/cm^2
Incidental Ingestion (5)	50 mg/event	100 mg/event
Frequency of Exposure	1 events/yr	2 events/yr
Total Exposure Duration	5 yrs	10 yrs

Notes:

(1) Older children, ages 8 through 18

(2) Average body weight, males and females, Anderson et al., 1985

(3) Hands, forearms, feet, and lower legs, USEPA, 1989

(4) Shaum, 1984

(5) Lagoy, 1987

TABLE 6-7

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SEDIMENTS DURING CONSTRUCTION WORK IN THE ANTHONY KILL (1) MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight	70 kg	70 kg
Surface Area Exposed (2)	2300 cm^2	2830cm^2
Sediment Contacted (unit deposition) (3)	0.5 mg/cm^2	1.5 mg/cm^2
Sediment Ingestion (4)	50 mg/event	100 mg/event
Frequency of Exposure	5 events/yr	10 events/yr
Total Exposure Duration	3 yrs	10 yrs

Notes

(1) Construction Workers

(2) Hands and forearms, Anderson et al., 1985

(3) Shaum, 1984

(4) Lagoy, 1987

TABLE 6-8

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SURFACE SOIL DURING RECREATIONAL ACTIVITIES (1) MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight (2)	45 kg	45 kg
Surface Area Exposed (3)	4970 cm^2	6097 cm^2
Soil Contacted (unit deposition) (4)	0.5 mg/cm^2	1.5 mg/cm^2
Incidental Ingestion (5)	50 mg/event	100 mg/event
Frequency of Exposure	5 events/yr	10 events/yr
Total Exposure Duration	5 yrs	10 yrs

Notes:

(1) Older children, ages 8 through 18

(2) Average body weight, males and females, Anderson et al., 1985

(3) Hands, forearms, feet, and lower legs, USEPA, 1989

(4) Shaum, 1984

(5) Lagoy, 1987

TABLE 6-9

DERMAL AND ORAL EXPOSURE TO CONTAMINATED SOILS
DURING UTILITY WORK (1)
MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight	70 kg	70 kg
Surface Area Exposed (2)	2300 cm^2	2830 cm^2
Soil Contacted (unit deposition) (3)	0.5 mg/cm^2	1.5 mg/cm^2
Incidental Soil Ingestion (4)	50 mg/event	100 mg/event
Frequency of Exposure	1 day/yr	2 days/yr
Total Exposure Duration	2 yrs	4 yrs

Notes:

(1) Utility Workers

(2) Hands and forearms, Anderson et al., 1985

(3) Shaum, 1984

(4) Lagoy, 1987

TABLE 6-10

FUTURE INHALATION EXPOSURES (1)
DURING UTILITY WORK AND EXCAVATION
MECHANICVILLE SITE

	MOST PROBABLE CASE	REALISTIC WORST CASE
Average Body Weight	21 kg	21 kg
Duration of Utility Repair Activity	20 days	25 days
I. Child at Preschool		
Distance from Activity	750 ft	750 ft
Duration of Exposure	8 hrs	8 hrs
Inhalation Rate (light activity) (2)	0.8 m^3/hr	0.8 m^3/hr
II. Child at Home		
Distance from Activity	100 ft	100 ft
Duration of Exposure	6 hrs	6 hrs
Inhalation Rate (moderate activity) (2)	2.0 m^3/hr	2.0 m^3/hr
III. Child Asleep		
Distance from Activity	100 ft	100 ft
Duration of Exposure	10 hrs	10 hrs
Inhalation Rate (2)	0.4 m^3/hr	0.4 m^3/hr

Notes:

(1) Child 1 - 6 years of age, inhalation of volatile compounds and particulates

(2) USEPA, 1987

TABLE 6-11

RISK ESTIMATES FOR EXPOSURE OF OLDER CHILDREN
TO SURFACE SOIL
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Carcinogenic PAHs	2.3×10^{-6}(1) 6.5×10^{-7}(2)	1.8×10^{-5}(1) 5.0×10^{-6}(2)
Total:	2.3×10^{-6}(1) 6.5×10^{-7}(2)	1.8×10^{-5}(1) 5.0×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (amenable)	9.7×10^{-5}	1.3×10^{-3}
Noncarcinogenic PAHs	8.5×10^{-6}	2.7×10^{-5}
Total:	1.1×10^{-4}	1.3×10^{-3}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

TABLE 6-12

RISK ESTIMATES FOR EXPOSURE OF UTILITY WORKERS
TO SUBSURFACE SOIL
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	2.1×10^{-10}	9.2×10^{-8}
Carcinogenic PAHs	1.3×10^{-7}(1) 3.5×10^{-8}(2)	3.5×10^{-5}(1) 9.8×10^{-6}(2)
Total:	1.3×10^{-7}(1) 3.6×10^{-8}(2)	3.5×10^{-5}(1) 9.9×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (amenable)	1.2×10^{-6}	1.3×10^{-4}
Ethyl Benzene	2.0×10^{-6}	3.8×10^{-4}
Noncarcinogenic PAHs	9.9×10^{-6}	1.1×10^{-3}
Styrene	1.8×10^{-6}	3.4×10^{-4}
Toluene	6.2×10^{-7}	1.2×10^{-4}
Trimethylbenzene	3.3×10^{-8}	7.4×10^{-6}
Xylene (total)	3.7×10^{-7}	6.1×10^{-5}
Total:	1.6×10^{-5}	2.2×10^{-3}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

TABLE 6-13

RISK ESTIMATES FOR EXPOSURE OF CHILDREN
TO SEDIMENT
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	5.4×10^{-13}	1.1×10^{-10}
Carcinogenic PAHs	9.4×10^{-9}(1) 2.6×10^{-9}(2)	2.1×10^{-6}(1) 5.8×10^{-7}(2)
Total:	9.4×10^{-9}(1) 2.6×10^{-9}(2)	2.1×10^{-6}(1) 5.8×10^{-7}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (total)	3.3×10^{-6}	1.8×10^{-4}
Ethyl Benzene	1.4×10^{-9}	2.5×10^{-7}
Noncarcinogenic PAHs	9.7×10^{-8}	1.3×10^{-5}
Total:	3.4×10^{-6}	2.0×10^{-4}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

TABLE 6-14

RISK ESTIMATES FOR EXPOSURE OF WORKERS
TO SEDIMENT
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	5.0×10^{-13}	1.7×10^{-10}
Carcinogenic PAHs	1.3×10^{-8}(1) 3.7×10^{-9}(2)	3.4×10^{-6}(1) 9.6×10^{-7}(2)
Total:	1.3×10^{-8}(1) 3.7×10^{-9}(2)	3.4×10^{-6}(1) 9.6×10^{-7}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (total)	5.0×10^{-6}	2.7×10^{-4}
Ethyl Benzene	2.1×10^{-9}	3.8×10^{-7}
Noncarcinogenic PAHs	2.3×10^{-7}	2.2×10^{-5}
Total:	5.2×10^{-6}	3.0×10^{-4}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

TABLE 6-15

RISK ESTIMATES FOR EXPOSURE OF YOUNG CHILDREN
TO SOIL CONTAMINATION VIA INHALATION
MECHANICVILLE SITE

Compound	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Benzene	3.5×10^{-8}	1.8×10^{-6}
Carcinogenic PAHs	1.9×10^{-7}(1) 1.4×10^{-8}(2)	1.1×10^{-5}(1) 8.3×10^{-7}(2)
Total:	2.2×10^{-7}(1) 4.9×10^{-8}(2)	1.3×10^{-5}(1) 2.6×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Cyanide (amenable)	3.5×10^{-7}	2.0×10^{-5}
Ethyl Benzene	1.1×10^{-4}	5.7×10^{-3}
Noncarcinogenic PAHs	7.0×10^{-6}	4.1×10^{-4}
Styrene	1.0×10^{-4}	5.2×10^{-3}
Toluene	2.0×10^{-5}	1.1×10^{-3}
Trimethylbenzene	9.0×10^{-6}	4.6×10^{-4}
Xylene (total)	1.0×10^{-4}	5.3×10^{-3}
Total:	3.5×10^{-4}	1.8×10^{-2}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

TABLE 6-16

SUMMARY OF RISK ESTIMATES BY MEDIUM
MECHANICVILLE SITE

Medium	Most Probable Case	Realistic Worst Case
	Incremental Lifetime Carcinogenic Risk Estimates	
Surface Soil, Children	2.3×10^{-6}(1) 6.5×10^{-7}(2)	1.8×10^{-5}(1) 5.0×10^{-6}(2)
Subsurface Soil, Worker	1.3×10^{-7}(1) 3.6×10^{-8}(2)	3.5×10^{-5}(1) 9.9×10^{-6}(2)
Sediment, Children	9.4×10^{-9}(1) 2.6×10^{-9}(2)	2.1×10^{-6}(1) 5.8×10^{-7}(2)
Sediment, Workers	1.3×10^{-8}(1) 3.7×10^{-9}(2)	3.4×10^{-6}(1) 9.6×10^{-7}(2)
Inhalation, Children	2.2×10^{-7}(1) 4.9×10^{-8}(2)	1.3×10^{-5}(1) 2.6×10^{-6}(2)
	Noncarcinogenic Hazard Ratios	
Surface Soil, Children	1.1×10^{-4}	1.3×10^{-3}
Subsurface Soil, Worker	1.6×10^{-5}	2.2×10^{-3}
Sediment, Children	3.4×10^{-6}	2.0×10^{-4}
Sediment, Workers	5.2×10^{-6}	3.0×10^{-4}
Inhalation, Children	3.5×10^{-4}	1.8×10^{-2}

(1) Using USEPA Potency Factor
(2) Using ICF-Clement (1987) Potency Factor

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TABLE 6-17

SUMMARY OF CHEMICALS DETECTED IN SURFACE WATER
MECHANICVILLE SITE

CHEMICAL	UPSTREAM			ADJACENT			DOWNSTREAM		
	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY
ACETONE	ND	-	0/3	3.3E-03	1.0E-02	1/3	ND	-	0/3
METHYLENE CHLORIDE	1.1E-03	5.4E-03	1/5	ND	-	0/4	ND	-	0/4
ACENAPHTHENE	ND	-	0/5	4.2E-03	2.1E-02	1/5	ND	-	0/5
ACENAPHTHYLENE	ND	-	0/5	4.4E-03	2.2E-02	1/5	ND	-	0/5
PYRENE	ND	-	0/5	2.0E-03	1.0E-02	1/5	ND	-	0/5
BIS(2-ETHYLHEXYL)PHTHALATE	8.8E-02	3.9E-01	3/5	1.2E-03	6.0E-03	1/5	1.1E-02	3.0E-02	2/5
2-METHYLNAPHTHALENE	ND	-	0/3	1.1E-02	3.5E-02	1/3	ND	-	0/5
CYANIDE (total)	2.0E-03	1.0E-02	1/5	2.0E-03	1.0E-02	2/5	2.0E-03	1.0E-02	1/5
IRON	4.2E-01	1.0E+00	5/5	8.9E-01	1.8E+00	5/5	4.4E-01	7.8E-01	5/5
ZINC	8.0E-03	3.0E-02	2/5	7.8E-03	2.0E-02	3/5	2.0E-03	1.0E-02	1/5

NOTES:
a Only chemicals found above detection limits presented.
b All compounds expressed in mg/l unless otherwise noted.
c ND = Not detected.

MP_TAB-2.WK1

TABLE 6-18

COMPARISON OF CHEMICALS FOUND IN SURFACE WATER SAMPLES WITH STANDARDS AND CRITERIA FOR THE PROTECTION OF AQUATIC LIFE
MECHANICVILLE SITE

COMPOUND	RANGE OF CONCENTRATIONS	CHRONIC AWQC		NEW YORK STATE CLASS D STANDARDS	NEW YORK STATE CLASS C STANDARDS
ACETONE	ND - 0.01	9.7	f	---	---
METHYLENE CHLORIDE	ND - 0.0054	11	g	---	---
ACENAPHTHENE	ND - 0.021	0.52		---	---
ACENAPHTHYLENE	ND - 0.022	0.037	f	---	---
PYRENE	ND - 0.01	0.013		---	---
BIS(2-ETHYLHEXYL)PHTHALATE	ND - 0.39	0.012	f	---	0.0006
2-METHYLNAPHTHALENE	ND - 0.035	0.027	f	---	---
CYANIDE	ND - 0.01	0.0052		0.022	0.0052
IRON	0.037 - 1.8	1.0		0.3	0.3
ZINC	ND - 0.02	0.11		0.23	0.03

NOTES:
a Only those compounds found above detection limits presented.
b All compounds expressed in mg/l unless otherwise noted.
c Ambient Water Quality Criteria (USEPA, 1986) for freshwater species, assuming hardness of 100mg/l.
d NYSDEC (1986). Creek is currently graded Class D in the vicinity of the site. Assuming hardness of 100mg/l.
e Not detected (see Task 2 Report Appendix for minimum detection limits [Jordan, 1987]).
f Based on a 10-fold safety factor of an estimated EC50 value for Daphnia magna, using a QSAR equation from Hermens et al., 1984
g Criterion for total halomethanes.

MP_TAB-3.WK1

TABLE 6-19

COMPARISON OF CHEMICALS FORUND IN GROUNDWATER SAMPLES WITH STANDARDS AND CRITERIA FOR THE PROTECTION OF AQUATIC LIFE ASSUMING DILUTION WITH RECEIVING WATER DURING LOW FLOW CONDITIONS

COMPOUND	RANGE OF CONCENTRATIONS IN GROUNDWATER	REPORTED MAXIMUM SOLUBILITY	ESTIMATED CONCENTRATION IN ANTHONY KILL ASSUMING DILUTION	CHRONIC AWQC	NEW YORK STATE CLASS D STANDARDS/ GUIDANCE VALUES
BENZENE	ND-12.0		2.003-03	0.0530 i	0.0060000
TOLUENE	ND-6.4		1.00E-03	0.1750 i	---
ETHYLBENZENE	ND-2.0		4.00E-04	0.3200 i	---
TOTAL XYLENES	ND-3.5		7.00E-04	0.0530 h	---
ACENAPNTHENE	ND-210.0	3.42000	6.38E-04	0.5200	---
ACENAPHTHYLENE	ND-173.74	3.93000	7.33E-04	0.0370 h	---
ANTHRACENE	ND-203.07	1.29000	2.41E-04	0.0120 h	---
BENZO(b)FLUORANTHENE	ND-25.0	0.14000	2.61E-05	0.0010 h	---
BENZO(k)FLUORANTHENE	ND-25.0	0.00055	1.03E-07	0.0010 h	---
BENZO(a)ANTHRACENE	ND-25.0	0.04400	8.20E-06	0.0030	---
BENZO(A)PYRENE	ND-25.0	0.00380	7.09E-07	0.0012	0.0000012
CHRYSENE	ND-25.0	0.00600	1.12E-06	0.0020 h	---
FLUORANTHENE	ND-82.0	0.26000	4.85E-05	0.0130 j	---
FLUORENE	ND-110.0	1.98000	3.69E-04	0.0120 h	---
NAPHTHALENE	ND-580.0	34.40000	6.41E-03	0.6200	---
PHENANTHRENE	ND-320.0	1.29000	2.41E-04	0.0360	---
PYRENE	ND-130.0	0.14000	2.61E-05	0.0130	---
2-METHYLNAPHTHALENE	ND-540.0	28.00000	5.22E-03	0.0270 h	---
PHENOL	ND-0.58		1.00E-04	2.5600	0.0050000
BIS(2-ETHYLHEXYL)PHTHALATE	ND-1.71	0.40000	7.46E-05	0.0120 h	---
IRON	ND-25.0		5.00E-03	1.0000	0.3000000
TOTAL CYANIDE	ND-0.8		2.00E-04	0.0052	0.2200000
ZINC	ND-1.09		2.00E-04	0.1100	0.2300000

NOTES:

a See text for criteria for selecting compounds.
b All compounds expressed in mg/l unless otherwise noted.
c Including all wells sampled in 1986 and 1987.
d dilution factor of 5363 used; from ratio of annual low-flow estimate in Anthony Kill (17cfs) to groundwater flow(0.003 cfs) in shallow bedrock. See text for assumptions.
e Ambeint Water Quality Criteria(USEPA, 1986) for freshwater species, assuming hardness of 100mg/l.
f NYSDEC (1986). Creek is currently graded Class D in the vicinity of the site. Assuming hardness of 100mg/l.
g Not detected(see task 2 Report Appendix for minimum detection Limits [Jordan, 1987]).
h Based on a 10-fold safety factor applied to the estimated EC50 value for Daphnia magna using a QSAR equation from Hermens et al., 1984
i Estimated from acute AWQC using a ratio of 100:1.
j EPA, 1988.
k See Appendix F for references to PAH solubility data.

MC_TAB-4.WK1

TABLE 6-20

SUMMARY OF CHEMICALS DETECTED IN ANTHONY KILL SEDIMENT
MECHANICVILLE SITE

CHEMICAL	UPSTREAM			ADJACENT			DOWNSTREAM		
	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY	MEAN	MAX	DETECTION FREQUENCY
ACETONE	2.6E+00	5.3E+00	1/2	2.6E+00	5.2E+00	1/2	2.0E+00	4.0E+00	1/2
BENZENE	ND	-	0/4	1.8E-02	7.0E-02	1/4	ND	-	0/4
ETHYLBENZENE	ND	-	0/4	2.2E-02	8.7E-02	1/4	ND	-	0/4
METHYLENE CHLORIDE	6.0E-01	2.4E+00	1/4	7.4E-01	3.0E+00	1/4	5.7E-01	2.3E+00	1/4
TOLUENE	ND	-	0/4	ND	-	0/4	1.8E-02	7.0E-02	1/4
ACENAPHTHENE	ND	-	0/4	5.9E-01	1.6E+00	4/6	ND	-	0/4
ACENAPHTHYLENE	ND	-	0/4	1.0E+00	3.0E+00	4/6	ND	-	0/4
ANTHRACENE	ND	-	0/4	7.5E-01	1.6E+00	5/7	1.2E-01	4.7E-01	1/4
BENZO(b)FLUORANTHENE	ND	-	0/4	2.8E-01	4.8E-01	3/5	1.2E-01	4.7E-01	1/4
BENZO(k)FLUORANTHENE	ND	-	0/4	1.1E+00	3.1E+00	5/7	1.2E-01	4.7E-01	1/4
BENZO(g,h,i)PERYLENE	ND	-	0/4	1.4E-01	4.0E-01	3/6	1.2E-01	4.7E-01	1/4
BENZO(a)ANTHRACENE	4.1E-02	1.7E-01	1/4	9.5E-01	2.5E+00	4/6	1.2E-01	4.7E-01	1/4
BENZO(a)PYRENE	ND	-	0/4	8.4E-01	2.0E+00	5/7	1.2E-01	4.7E-01	1/4
CHRYSENE	4.1E-02	1.7E-01	1/4	8.9E-01	2.3E+00	4/6	1.2E-01	4.7E-01	1/4
DIBENZO(a,h)ANTHRACENE	ND	-	0/4	2.8E-02	1.7E-01	1/6	ND	-	0/4
FLUORANTHENE	4.1E-02	1.7E-01	1/4	2.7E+00	1.0E+01	5/7	1.6E-01	4.7E-01	2/4
FLUORENE	ND	-	0/4	1.0E-01	4.0E-01	3/5	ND	-	0/4
INDENO(1,2,3-cd)PYRENE	ND	-	0/4	1.1E-01	3.0E-01	3/6	1.2E-01	4.7E-01	1/4
NAPHTHALENE	ND	-	0/4	2.1E+00	8.7E+00	6/7	4.1E-02	1.7E-01	1/4
PHENANTHRENE	4.1E-02	1.7E-01	1/4	2.1E+00	5.5E+00	6/7	1.6E-01	4.7E-01	2/4
PYRENE	4.1E-02	1.7E-01	1/4	2.5E+00	7.6E+00	5/7	1.6E-01	4.7E-01	2/4
BIS(2-ETHYLHEXYL)PHTHALATE	1.4E-01	5.5E-01	1/4	9.6E-01	2.8E+00	4/6	1.1E-01	4.5E-01	1/4
2-METHYLNAPHTHALENE	ND	-	0/4	6.7E-01	2.7E+00	5/7	ND	-	0/4
DI-N-BUTYL PHTHALATE	2.1E+00	2.1E+00	1/1	2.0E+00	2.0E+00	1/1	3.2E+00	3.2E+00	1/1
DI-N-OCTYL PHTHALATE	1.3E+01	1.3E+01	1/1	5.0E-01	5.0E-01	1/1	5.8E-01	9.0E-01	1/1
CYANIDE (total)	ND	-	0/3	4.3E-01	1.3E+00	1/3	ND	-	0/3
IRON	1.1E+04	1.6E+04	3/3	1.5E+04	2.7E+04	3/3	1.8E+04	3.3E+04	3/3
ZINC	3.2E+01	3.4E+01	2/2	4.6E+01	4.6E+01	2/2	5.1E+01	7.6E+01	2/2

NOTES:
a Only those compounds found above detection limits are presented.
b All compounds expressed in mg/kg unless otherwise noted.
c ND = Not detected.

TABLE 6-21

COMPARISON OF CHEMICAL CONCENTRATIONS WITH EFFECT RANGE LOW VALUES (ER-Ls) AND INTERIM SEDIMENT QUALITY CRITERIA FOR THE PROTECTION OF AQUATIC LIFE
MECHANICVILLE SITE

			UPSTREAM		ADJACENT		DOWNSTREAM	
COMPOUND	ER-L (a) (mg/kg)	SQC (b) (mg/kg C)	MAXIMUM CONCENTRATION (mg/kg)	NORMALIZED CONCENTRATION (mg/kg C) (c)	MAXIMUM CONCENTRATION (mg/kg)	NORMALIZED CONCENTRATION (mg/kg C)	MAXIMUM CONCENTRATION (mg/kg)	NORMALIZED CONCENTRATION (mg/kg C)
Acenaphthene	150	140 (64-300)	nd		1.63	75.8	nd	
Anthracene	85	na	nd		1.6	74.4	0.47	36.4
Benzo(a)anthracene	230	1317 (217-7,999)	0.17	19.8	2.5	116.3	0.47	36.4
Benzo(a)pyrene	400	1063 (225-5018)	nd		2	93.0	0.47	36.4
Chrysene	400	na	0.17	19.8	2.3	107.0	0.47	36.4
Dibenzo(a,h)anthracene	60	na	nd		0.17	7.9	nd	
Fluoranthene	600	1020 (470-2,190)	0.17	19.8	10	465.1	0.47	36.4
Fluorene	35	na	nd		0.4	18.6	nd	
2-Methylnaphthalene	65	na	nd		2.7	125.6	nd	
Naphthalene	340	na	nd		8.7	404.7	nd	
Phenanthrene	225	120 (56-260)	0.17	19.8	5.5	255.8	0.47	36.4
Pyrene	350	1311 (265-6465)	0.17	19.8	7.6	353.5	0.47	36.4
Zinc	120	na	34		46		76	

NOTES:

a Effects Range Low, the concentration at the low end of the range at which effects have been observed, equivalent to the 10th percentile concentration (Long and Morgan, 1991).

b Interim Sediment Quality Criterion, expressed as mg per kg of sediment carbon. Figures in brackets are the lower and upper 95% confidence interval values.

c Chemical concentration expressed in terms of kilograms of carbon, obtained by multiplying the chemical concentration by the total organic carbon concentration of 0.86%, 2.15%, and 1.29% for the upstream, adjacent, and downstream locations, respectively.

d "na" = none available; "nd" = not detected; shaded areas indicate concentrations that exceed either the criterion/guideline.

TABLE 8-1

SCOPE OF ACTIVITIES
PHASE IIA SUPPLEMENTAL REMEDIAL INVESTIGATION
MECHANICVILLE SITE

	OBJECTIVE		SCOPE OF WORK
A.	Characterize contamination east of North Central Avenue	1.	Map bedrock topography east of site (on Price Chopper property) using seismic refraction to trace east trending bedrock valley.
		2.	Install boring and one shallow/deep monitoring well pair in bedrock valley on western portion of Price Chopper property, east of North Central Avenue
		3.	Collect shallow and deep soil samples form boring and groundwater samples from monitoring well.
		4.	Install three deep soil borings further downgradient of monitoring well pair if visible evidence of contamination is observed.
		5.	Install one to two additional soil borings/monitoring wells behind the Price Chopper building if visible evidence of contamination is encountered.
B.	Assess PCB contamination in former electrical equipment storage areas	1.	Conduct PCB sampling and analysis of each storage area at depths of approximately 3 and 12 inches below the surface.
		2.	Sample areas showing visible evidence of oil stains.
C.	Assess the area west of the former MGP location for contamination	1.	Define site history of "Mechanics Shop/Storage Building" (former radiator shop) to determine potential contaminant sources.
		2.	Conduct surface/shallow subsurface sampling.
		3.	Install boring/monitoring well to assess deep subsurface soils and groundwater quality at an upgradient location.
D.	Evaluate hydraulic connection between site groundwater, the Anthony Kill and groundwater north of the Anthony Kill	1.	Install piezometers on both banks of the Anthony Kill adjacent and downstream of the site.
		2.	Survey elevations of newly installed piezometers and monitoring wells (Objectives A, C and D) and measure stream and groundwater elevations.
		3.	Screen (UV/IR) sediment samples along southern bank of Anthony Kill to locate discharge zones and to place seepage meters.
		4.	Sample sediments to profile discharge areas.
		5.	Install seepage meters and measure discharge rate and groundwater (seep) quality if discharging conditions are encountered.

TABLE 8-2
TECHNICAL APPROACH RATIONALE

PHASE IIA REMEDIAL INVESTIGATION WORK PLAN
MECHANICVILLE SITE

TYPE/ID	LOCATION	ESTIMATED DEPTH (FEET)	RATIONALE
SOIL INVESTIGATION			
SOIL BORINGS			
B-16	West of site, adjacent to southern property line.	10 (to bedrock)	Obtain information on the subsurface soil in an upgradient location on the west of the site where previous investigations did not focus. To be completed as a water table monitoring well.
B-17	In bedrock trough, east and adjacent to North Central Avenue.	30 (to bedrock)	Obtain information on the subsurface soil downgradient of the site where coal tar and related chemicals could potentially migrate. To be completed as a water table monitoring well.
B-18	Same as B-17.	45	Obtain information on the bedrock quality and structure in the bedrock trough. To be completed as a bedrock monitoring well.
B-19 through B-21	Downgradient of B-17 and B-18.	40 (to bedrock)	To be completed only if soil contamination is encountered in B-17. These borings will form a line transecting the bedrock trough (if discernable) to obtain information on the extent of subsurface soil contamination further downgradient of the site.

TABLE 8-2 (cont'd)
TECHNICAL APPROACH RATIONALE

PHASE IIA REMEDIAL INVESTIGATION WORK PLAN
MECHANICVILLE SITE

TYPE/ID	LOCATION	ESTIMATED DEPTH (FEET)	RATIONALE
B-22 through B-23	Behind Price Chopper building.	Unknown	Exact location currently unknown. If groundwater contamination is encountered in wells installed in B-17 and B-18, these borings will be completed as monitoring wells to obtain information on groundwater quality further downgradient of the site.
SHALLOW SUBSURFACE SOIL SAMPLING			
SS-20 through SS-24	West of site.	0-1	Obtain information to characterize surface soil contamination (cyanides and PAHs) due to reported spent oxide disposal in this area.
SS-25 through SS-28	PCB Sampling Area 1 (see Figure 8-1).	0-1	Obtain information on potential PCB soil contamination due to former storage of PCB containing electrical equipment.
SS-29 through SS-32	PCB Sampling Area 2 (see Figure 8-1).	0-1	Obtain information on potential PCB soil contamination due to former storage of PCB containing electrical equipment.
SS-33 through SS-36	PCB Sampling Area 3 (see Figure 8-1).	0-1	Obtain information on potential PCB soil contamination due to former storage of PCB containing electrical equipment.

TABLE 8-2 (cont'd)
TECHNICAL APPROACH RATIONALE

PHASE IIA REMEDIAL INVESTIGATION WORK PLAN
MECHANICVILLE SITE

TYPE/ID	LOCATION	ESTIMATED DEPTH (FEET)	RATIONALE
SS-37 through SS-40	PCB Sampling Area 4 (see Figure 8-1).	0-1	Obtain information on potential PCB soil contamination due to former storage of PCB containing electrical equipment.
SS-41 through SS-44	PCB Sampling Area 5 (see Figure 8-1).	0-1	Obtain information on potential PCB soil contamination due to former storage of PCB containing electrical equipment.
SS-45 through SS-48	PCB Sampling Area 6 (see Figure 8-1).	0-1	Obtain information on potential PCB soil contamination due to former storage of PCB containing electrical equipment.
HYDROGEOLOGIC INVESTIGATION			
MONITORING WELLS			
MW-16 (B-16)	West of site, adjacent to southern property line.	10	Well will be screened to straddle the water table. Characterize upgradient groundwater west of the site and provide additional groundwater surface measuring point to better define groundwater flow across the site.
MW-17 (B-17)	In bedrock trough, east and adjacent to North Central Avenue.	30	Will be screened above any confining soil strata or on top of bedrock. Characterize groundwater in bedrock trough, expected to be migrating from the site and to contain coal tar constituents.

TABLE 8-2 (cont'd)
TECHNICAL APPROACH RATIONALE

PHASE IIA REMEDIAL INVESTIGATION WORK PLAN
MECHANICVILLE SITE

TYPE/ID	LOCATION	ESTIMATED DEPTH (FEET)	RATIONALE
MW-18 (B-18)	Same as MW-17.	45	Will be screened in the top 10 to 15 feet of bedrock. Characterize bedrock groundwater quality in expected plume migration pathway and determine vertical hydraulic gradients.
MW-22 through MW-23 (B-22 through B-23)	Behind Price Chopper building.	Unknown	Exact location unknown. Will be installed in expected plume migration pathway to monitor groundwater quality further downgradient of the site if contamination is encountered in MW-17 or MW-18.
PIEZOMETERS			
P-3, P-5	Southern bank of Anthony Kill, adjacent to the site.	—	Evaluate relationship of groundwater levels to surface water levels adjacent to the site to determine if discharging or recharging conditions exist.
P-4, P-6	Northern bank of Anthony Kill, across from the site.	—	Evaluate relationship of groundwater levels to surface water levels adjacent to the site to determine if discharging or recharging conditions exist.
P-7, P-9	Southern bank of Anthony Kill, downgradient of the site.	—	Exact locations to be determined in the field. Evaluate relationship of groundwater levels to surface water levels downgradient of the site to determine if discharging or recharging conditions exist.

TABLE 8-2 (cont'd)
TECHNICAL APPROACH RATIONALE

PHASE IIA REMEDIAL INVESTIGATION WORK PLAN
MECHANICVILLE SITE

TYPE/ID	LOCATION	ESTIMATED DEPTH (FEET)	RATIONALE
P-8, P-10	Northern bank of the Anthony Kill, downgradient of the site.	—	Exact locations to be determined in the field. Evaluate relationship of groundwater levels to surface water levels downgradient of the site to determine if discharging or recharging conditions exist.
SEDIMENT SAMPLING	Locations to be determined in the field.	—	Assess chemical quality of sediments in areas anticipated to be groundwater discharge locations from the site. Sediment sampling and screening to be used to determine locations of seepage meters.
SEEPAGE METER INVESTIGATION	Locations to be determined in the field.	—	Assess discharge rates of site groundwater to the Anthony Kill adjacent to and downgradient of the site.

TABLE 8-3
NYSEG MECHANICVILLE SITE

PHASE IIA REMEDIAL INVESTIGATION
SAMPLE ANALYSIS PLAN

TYPE OF INVESTIGATION	MEDIUM	TOTAL EXPECTED NO. OF SAMPLES	VOAs NYSDEC ASP 91-1	VOAs NYSDEC ASP 91-4	SVOAs NYSDEC ASP 91-2	INORGANICS (SEE NOTES 2 AND 3) FILTERED	INORGANICS (SEE NOTES 2 AND 3) TOTAL	REACTIVE CYANIDE USEPA METHOD 9010	REACTIVE SULFIDE USEPA METHOD 9030	PCBs (9) USEPA METHOD 8080	TURBIDITY	MATRIX SPIKE	MATRIX SPIKE DUPLICATE	LEVEL OF DATA QUALITY(5)
Borings (1)	Soil	2 samples 1 duplicate 3 total (1)	3		3		3	3	3			1	1	IV
Shallow Subsurface Soil Sampling	Soil	5 samples 1 duplicate 6 total						6	6	27		1	1	IV
		24 samples 3 duplicates 27 total										2	2	III
Sediment	Soil	6 samples 1 duplicates 7 total	7		7		7	7	7			1	1	IV
Monitoring Wells: (6, 8)	Water	15 samples 2 duplicate 17 total	14	3	17	17	17				17	1	1	IV
Seep Meters or Surface Water (7)	Water	5 samples 1 duplicate 6 total		6	6	6	6				6	1	1	IV

Notes:

1. A minimum of one sample from each boring sampled will be submitted for laboratory analysis from the contaminated area or the well screen depth or both if different.
2. Analytes include Fe, Zn, Al, Cd, Sb, Co, Cu, Mn, Ni, Pb, Cr, and total amenable, and ferro-ferric cyanide. ASP Superfund CLP analytical methods will be used.
3. Filtered/unfiltered applicable to groundwater samples for metals.
4. ASP denotes NYSDEC Analytical Services Protocol, December 1991 revision.
5. All data validation performed according to USEPA protocol. 10% of samples will be subject to full validation, 90% to blank validation.
6. Samples from MW-22 and MW-23 behind Price Chopper will only be collected if these wells are deemed necessary and installed. Therefore, they are not included in this table.
7. Five seep meter/surface water samples will be collected. Surface water samples will be taken inplace of seepage meter samples where seepage meters prove ineffective.
8. All existing monitoring wells are to utilize NYSDEC ASP 91-1 for VOAs. All proposed wells (i.e., MW-16, MW-17, MW-18, MW-22 and MW-23) are to utilize NYSDEC ASP 91-4.
9. All PCB analyses will be performed using USEPA Method 8080 by NYSEG laboratories or NYSDOH ELAP-CLP certified laboratories.

Investigation of the Former Coal Gasification Site at Mechanicville, New York

Phase II Remedial Investigation Report and Work Plan for Phase IIA Supplemental Remedial Investigation and Feasibility Study

Volume II of II - Appendices

Prepared for:

NEW YORK STATE
ELECTRIC & GAS CORPORATION
4500 Vestal Parkway East
Binghamton, New York

Prepared by:

ABB ENVIRONMENTAL SERVICES, INC.
110 Free Street
Portland, Maine

Revised June 1992

ABB Environmental Services, Inc.

ASEA BROWN BOVERI

LIST OF APPENDICES
(continued)

Appendix No.	Title
J	Citizen Participation Plan

LIST OF APPENDICES

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D-3	Analytical Data for Laboratory Quality Control Samples
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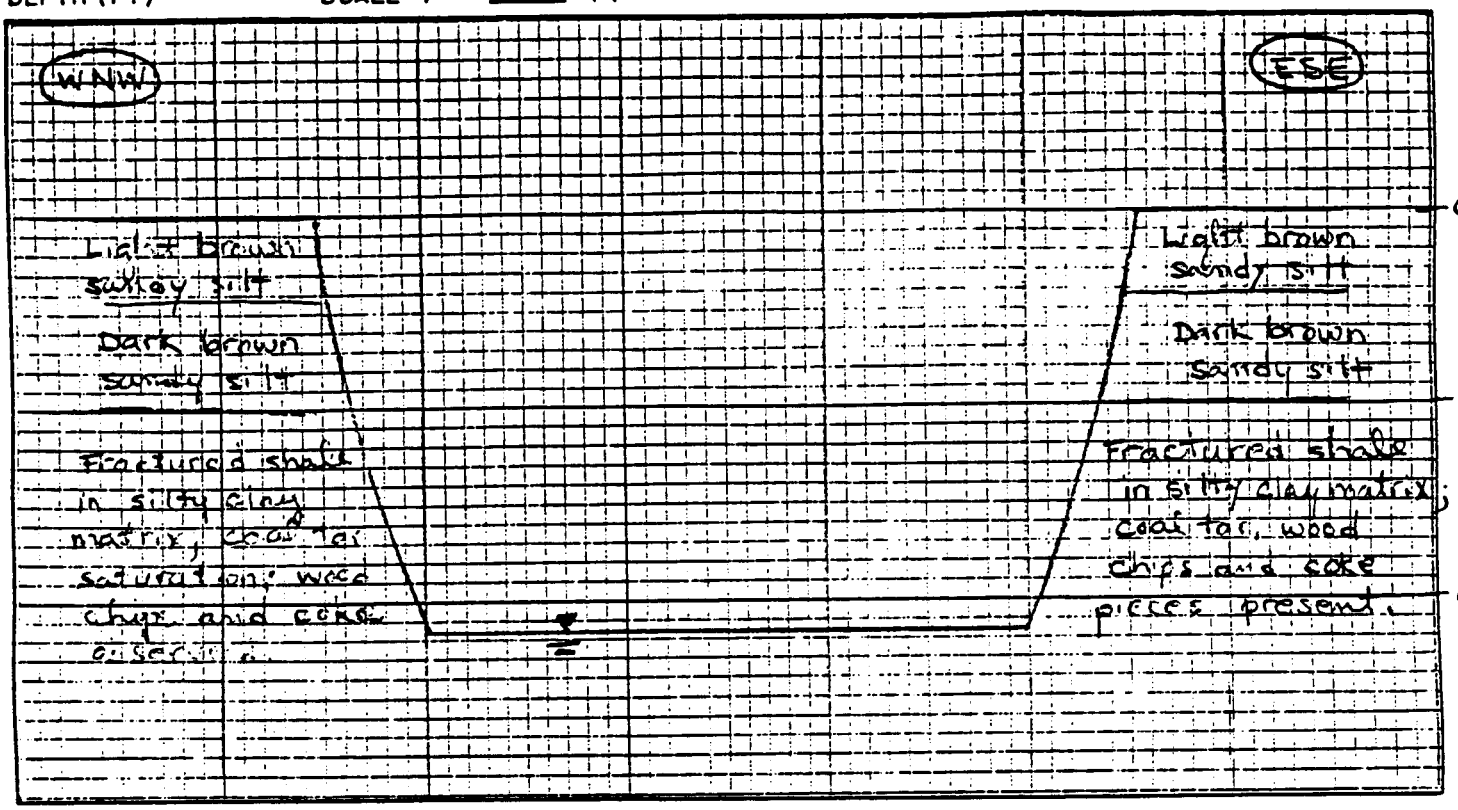
Appendix A

Test Pit Logs and Field Observations

TEST PIT RECORD
PROFILE ALONG TEST PIT- S

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 12.5' x 2' x 6.5'

Coal tar saturation from 3' to bottom of pit.

PI meter reading of 50 ppm over saturated soil.

Groundwater seepage observed at bottom of pit.

Tile drain uncovered at approx. 2'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEXTPXXOS/11	
S-2	4.0'-6.0'	MEEITPXXOS/21	
S-3		(GC/MS)	
S-4			
S-5			
S-6			
S-7			
S-8			
Dup of S1	3.0'-4.0'	MEEXTPXXDU/11	

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

TEST PIT OBSERVATIONS
MECHANICVILLE SITE

Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
TP-1	7.7	Brown fill with cobbles from 0 to 0.8 ft. and black ash with clinkers and cinders from 0.8 to 2.0 ft. Reddish brown fine sandy silt, small cobbles, large boulders, organic material, bricks and clinkers from 2.0 to 3.0 ft., and brown sandy silt with cobbles, clinkers, glass, wood, and bricks from 3.0 to 6.0 ft. From 6.0 to 7.7 ft., light brown clayey silt with dark stains in root channels and highly fractured shale fragments. Wet, oily sheen at 7.7 ft. No visible coal tar.	Slight odor in black ash layer from 0.8 to 2.0 ft. Slight odor in light brown clayey silt layer from 6.0 to 7.7 ft. PID-background levels.**	Sample TP-1/S-1 at 6.5 to 7.0 ft.*
TP-2	7.5	Brown to dark brown silty sand with sharp angular cobbles from 0 to 1.3 ft. Brown sandy fill with bricks from 1.3 to 2.6 ft. Angular cobbles and boulders from 2.6 to 5.5 ft. with less weathered angular rocks in sand matrix from 5.5 to 7.0 ft. Angular cobbles (>50%) with gray clayey silt and brown sandy silt lenses from 7.0 to 7.5 ft. No visual signs of coal tar wastes.	PID readings of background levels in ambient air. Readings of 10 ppm from sampled material.	Sample TP-2/S-1 at 7.0 to 7.5 ft.*

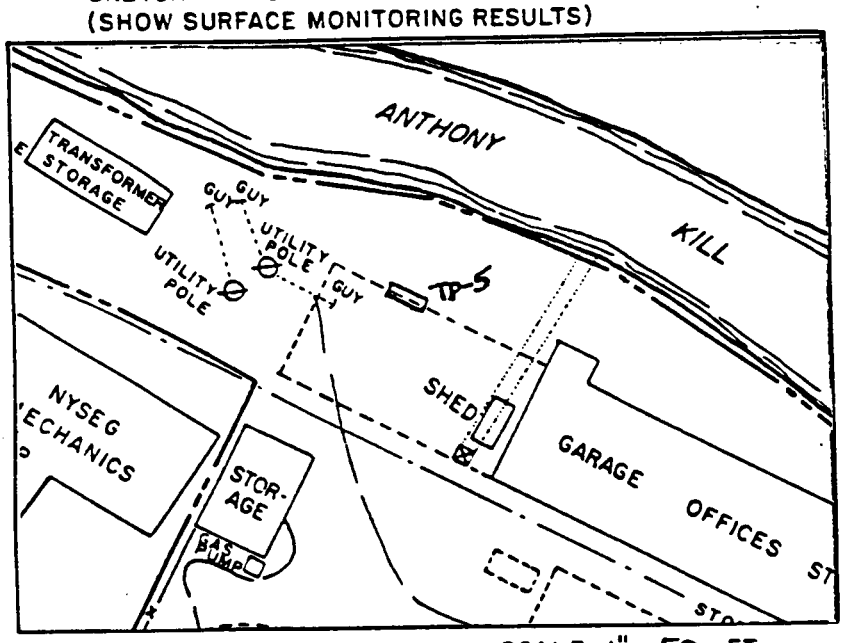
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-5 DATE 7/21/86 TIME ST. 12:50 END 13:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #2,3,4,5

NOTES 0'-1.3' Light brown sandy silt with cobbles

1.3'-3.0' Dark brown sandy silt with angular cobbles (Exposed tile drain at approx 2')

3.0-6.5' Highly fractured shale, weathered with silt and clay soil, loose. Wood chips and coke fragments present, saturated with coal tar.

▽ 6.5' Fractured bedrock surface; coal tar saturation; groundwater seepage.

TEST PIT OBSERVATIONS (continued)

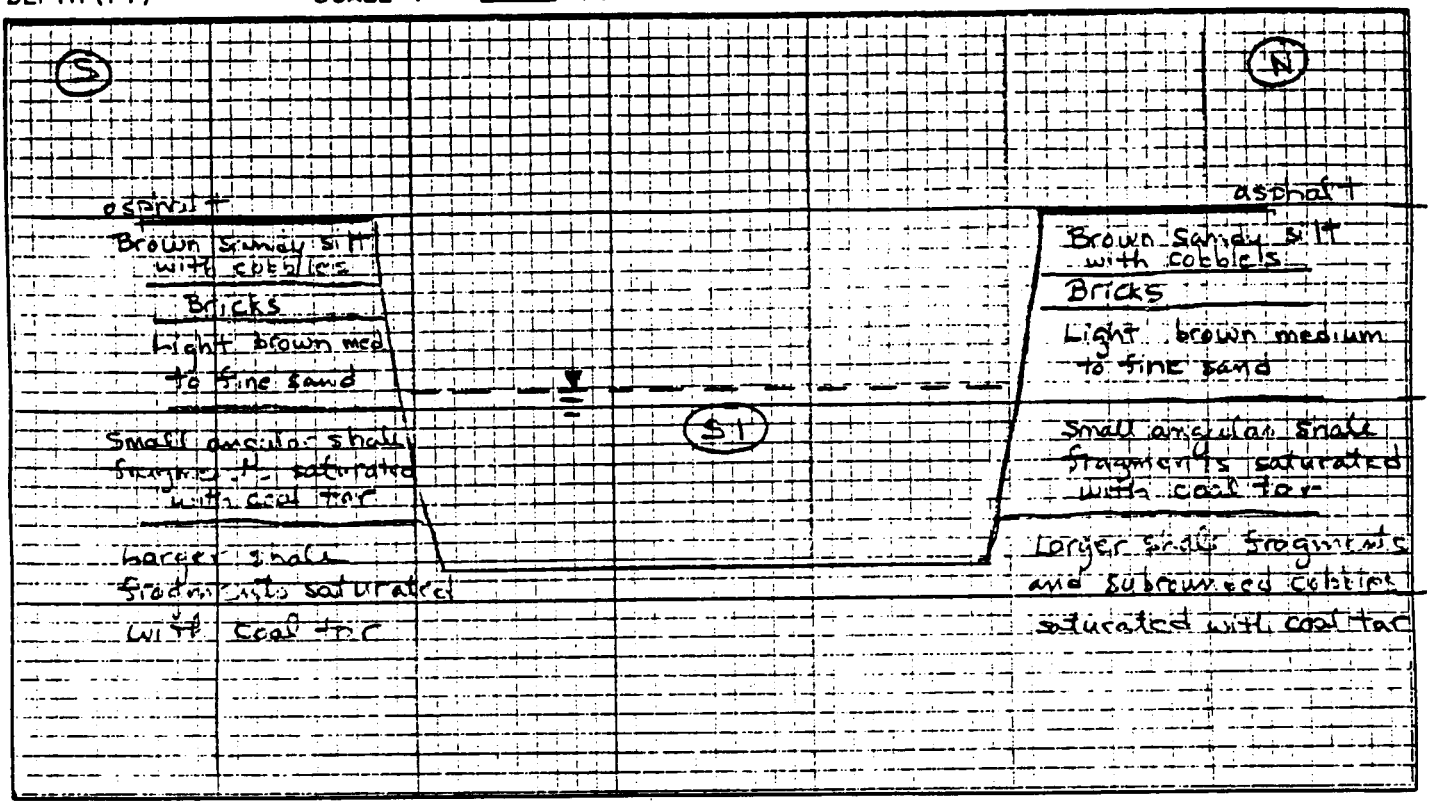
Test Pit	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
TP-3	3.0	Light brown sandy silt with cobbles from 0.2 to 1.0 ft., and dark brown silty fill with cobbles, bricks, concrete from 1.0 to 3.0 ft. Concrete obstruction at 3.0 ft. No visible signs of coal tar or other contamination encountered.	PID readings at background level in ambient air and for soil.	No samples collected due to concrete obstruction.
TP-4	5.5	Light brown sandy silt with cobbles from 0.1 to 0.3 ft. and dark brown sandy silt with cobbles from 0.3 to 1.0 ft. Bricks from 1.0 to 1.5 ft. Light brown sand from 1.5 to 3.0 ft. Angular shale saturated with coal tar from 3.0 to 4.5 ft. and larger angular shale fragments from 4.75 to 5.5 ft. (saturated with coal tar).	PID readings of 30-40 ppm near sampled soil (3 to 4 feet below ground surface).	TP-4/S-1 at 3.0 to 4.0 ft. *
TP-5	6.5	Light brown sandy silt with cobbles from 0 to 1.3 ft and dark brown sandy silt with angular cobbles from 1.3 to 3.0 ft. Highly fractured shale, silt and clay soil, wood chips, and coke fragments saturated with coal tar from 3.0 to 6.5 ft. At 6.5 ft., silt and fractured shale saturated with coal tar.	PID reading of 50 ppm over saturated soil.	TP-5/S-1 from 3.0 to 4.0 ft.* TP-5/S-2 from 4.0 to 6.0 ft.* Duplicate sample TP-5/S-1 Dup.*

* Samples analyzed by ERCO.
** Background PID levels represent ambient air levels obtained outside and upwind of the site boundaries. At the Mechanicville site, background levels were generally less than 5 ppm.

TEST PIT RECORD
PROFILE ALONG TEST PIT- 4

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 10'x2'x5.5'

PI meter readings of 30-40 ppm near sampled soil.

Coal tar observed from 3' to bottom of pit.

Water flowed rapidly into the pit from the SE corner

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEITPXX04/1	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

EC JORDAN CO

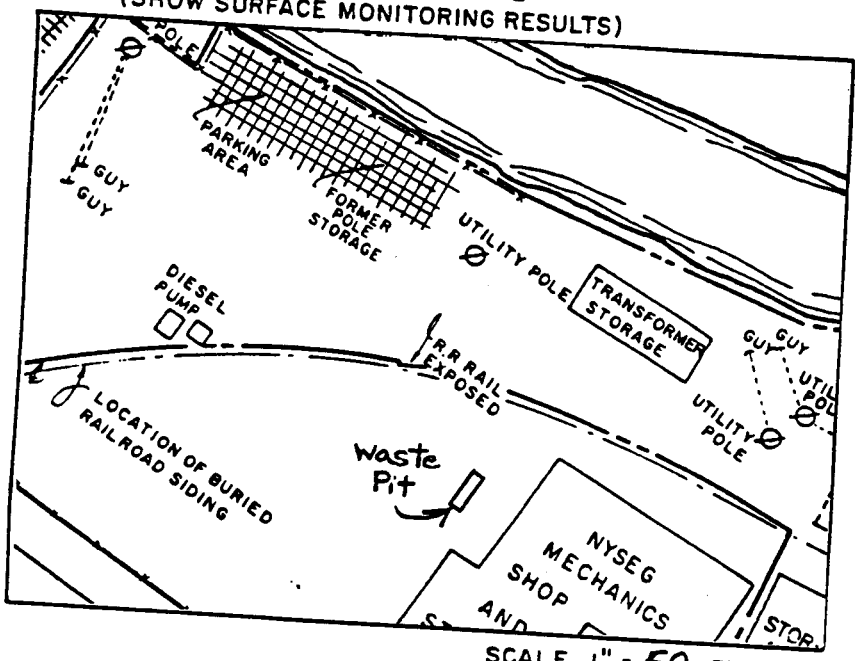
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT Waste Pit DATE 7/21/86 TIME ST. 1000 END 1030

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS
1. S. Wibby
2. C. Moore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation Meter

PHOTOGRAPHS, ROLL #1

EXPOSURE # 0

NOTES

0'-0.3' Brown sandy fill with cobbles.

0.3'-0.7' Asphalt

0.7'-1.2' Brown sandy fill with cobbles

1.2'-4.0' Brown to black sandy fill with clinkers, cobbles brick fragments, cobbles, and white/gray ash.

4.0'-5.0' White/gray ash containing coke, clinkers, some wood, cobbles, and cinders grading back into cobbly brown fill.

$\bar{x}$ at 4.5'

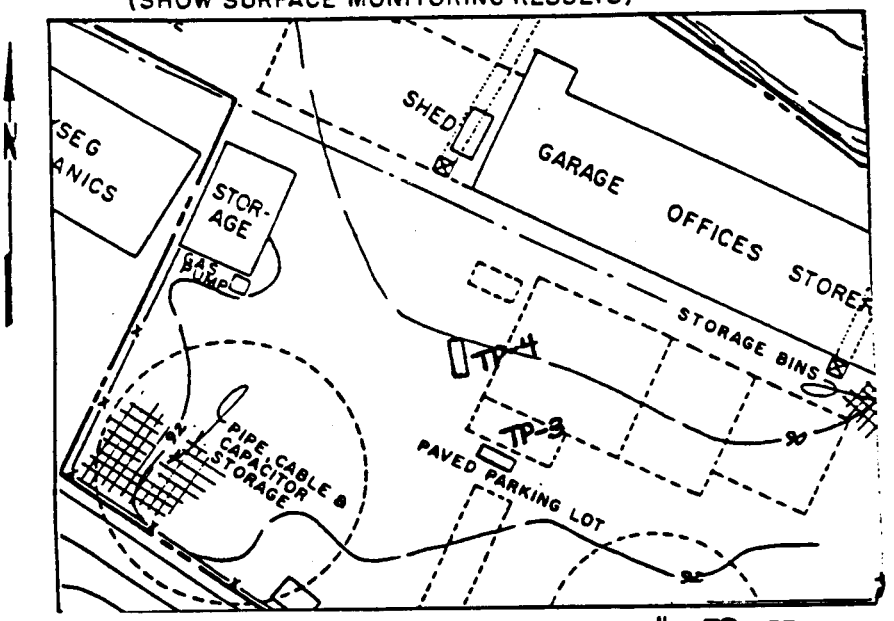
TEST PIT RECORD

SITE Mechanicville NYSEG

TEST PIT TP-4 DATE 7/21/86 TIME ST. 14:40 END 15:00

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #6, 7, 8

NOTES 0.1' – 0.3' Light brown sandy silt w/ cobbles
Loose and dry.

0.3' - 1.0' Dark brown sandysilt w/ cobbles.
Loose, dry.

1.0' - 1.5' Bricks

▽ 2.75' 1.5' - 3.0' Light brown sand, medium to fine

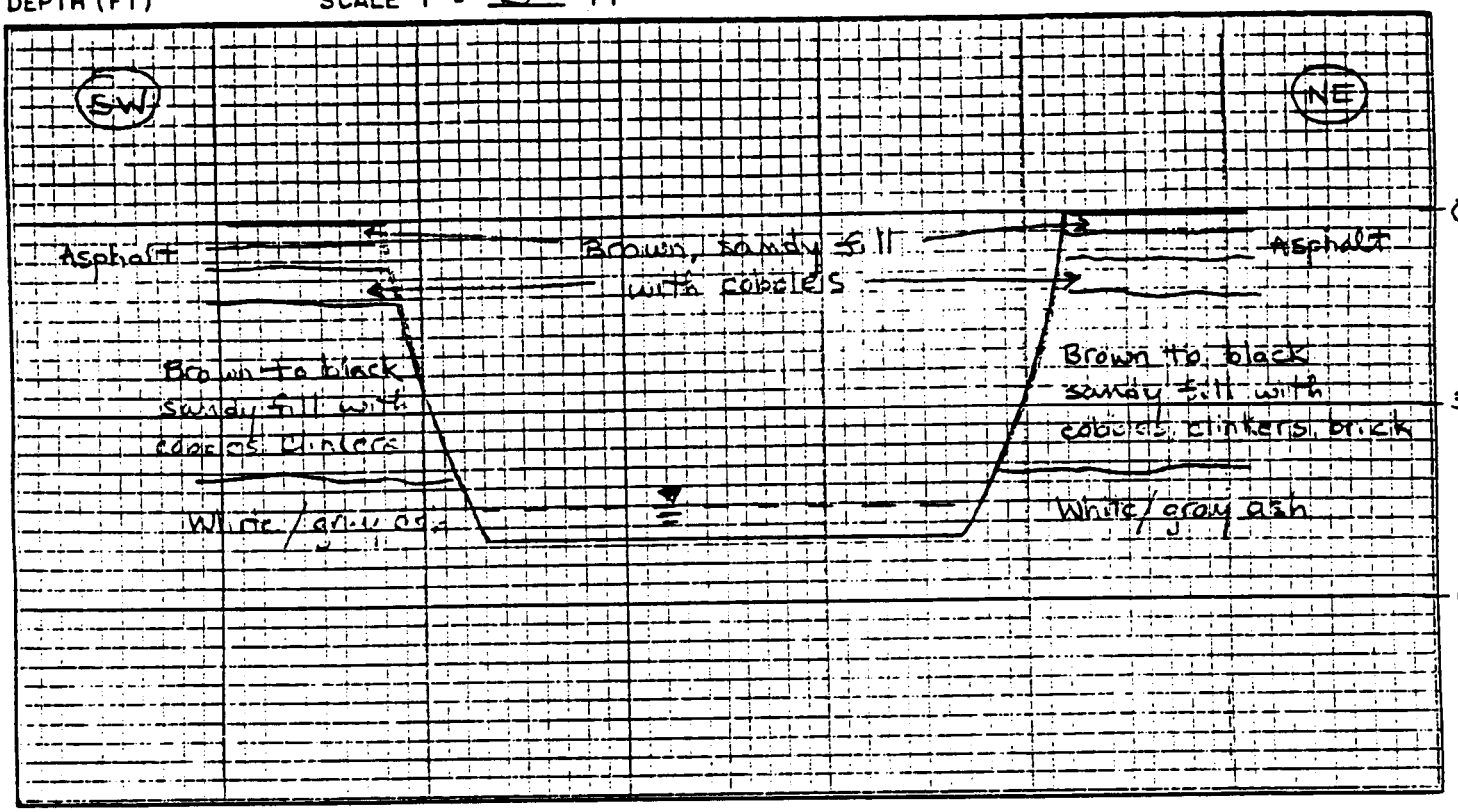
PI - 30 → 40ppm 3.0' - 4.75' angular shale rock fragments saturated with coal tar

4.75' - 5.5 Larger angular shale fragments and subrounded cobbles within clayey silt matrix. Saturated with coal tar

TEST PIT RECORD
PROFILE ALONG TEST PIT- Waste Pit

SITE Mechanicsville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

W x L x D

Test pit dimensions: 2.5' x 10' x 5'

No visible coal tar but ash, coke and clinkers present.

PI readings at background level.

SAMPLES OBTAINED No Samples

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

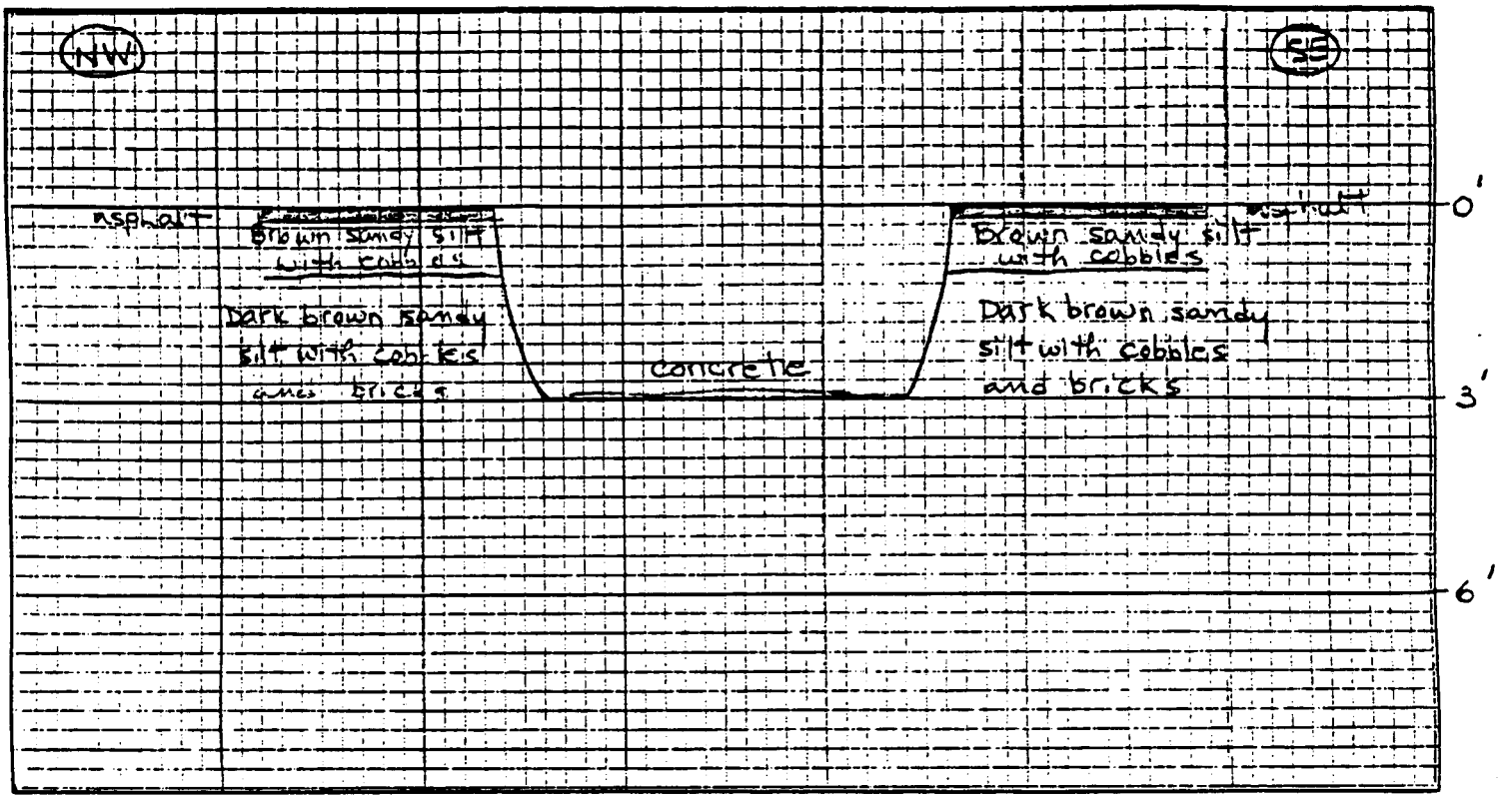
SIGNATURE

EC JORDAN CO

TEST PIT RECORD
PROFILE ALONG TEST PIT- 3

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (L x W x D): 7' x 2' x 3'

PI meter readings at background in ambient air and at soil. No visible signs of coal tar or other contamination. Test pit was abandoned after numerous attempts to break through a concrete obstruction encountered at 3.0'.

No groundwater seepage

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4		No Samples	
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

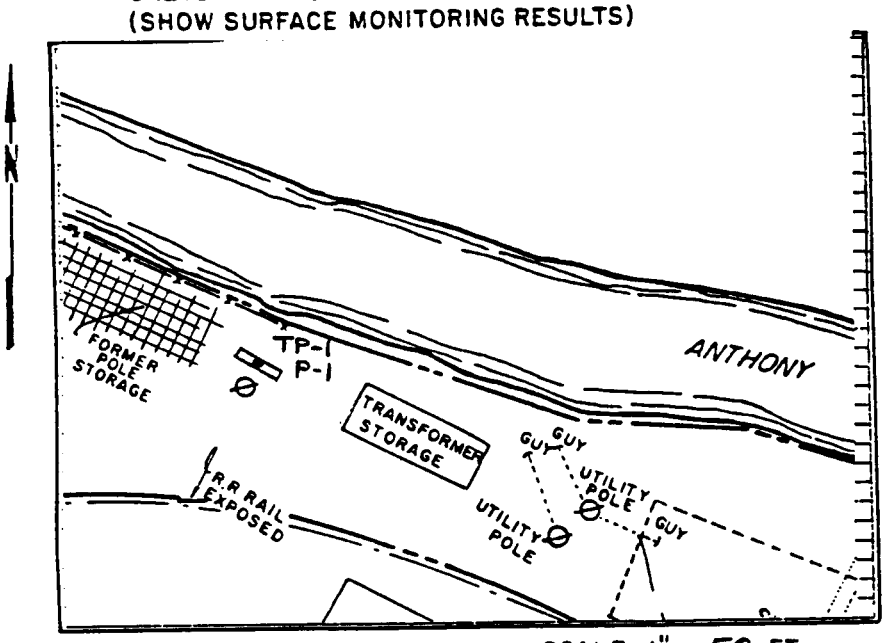
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-1 DATE 7/21/86 TIME ST. 10:50 END 11:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Webby
2. C. Moore
3. P. Tierney } Maloy (Empire)
4. R. Ciccateri }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE 1

NOTES

FILL

0'-0.8' Brown sandy fill with cobbles loose, dry

0.8'-2.0' Black ash with clinkers and cinders oxidized, loose, dry. Slight odor.

2.0'-3.0' Reddish brown fine sandy silt with small cobbles, large rounded boulders, organic material (roots), bricks and clinkers

3.0'-6.0' Brown sandy silt with cobbles, clinkers glass, wood bricks. Dry and loose.

6.0'-7.7' Light brown clayey silt, cohesive, moist with mottling and slight odor. Dark stains in root channels.

7.7' Bedrock. Highly fractured shale, wet oil

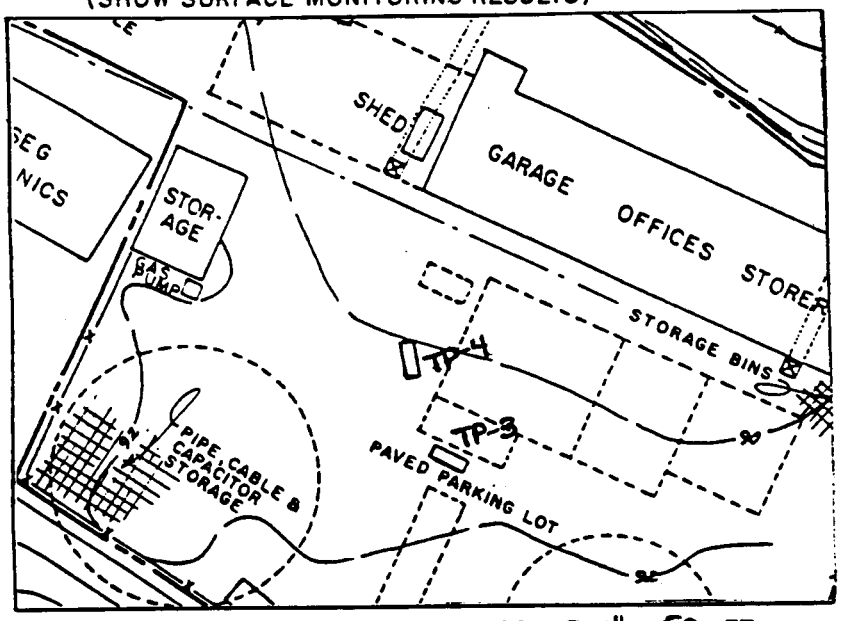
TEST PIT RECORD

SITE Mechanicville NYSE G 4945-02

TEST PIT TP-3 DATE 7/21 TIME ST. 14:15 END 14:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C Moore
2. S Wibby
3. PT } Maley (empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N Background
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL —

EXPOSURE —

NOTES 0.2'-1' Light brown sandy silt with cobbles loose, granular, dry.

1'-3' Dark brown silty fill with cobbles, bricks, and concrete. loose, dry. and granular.

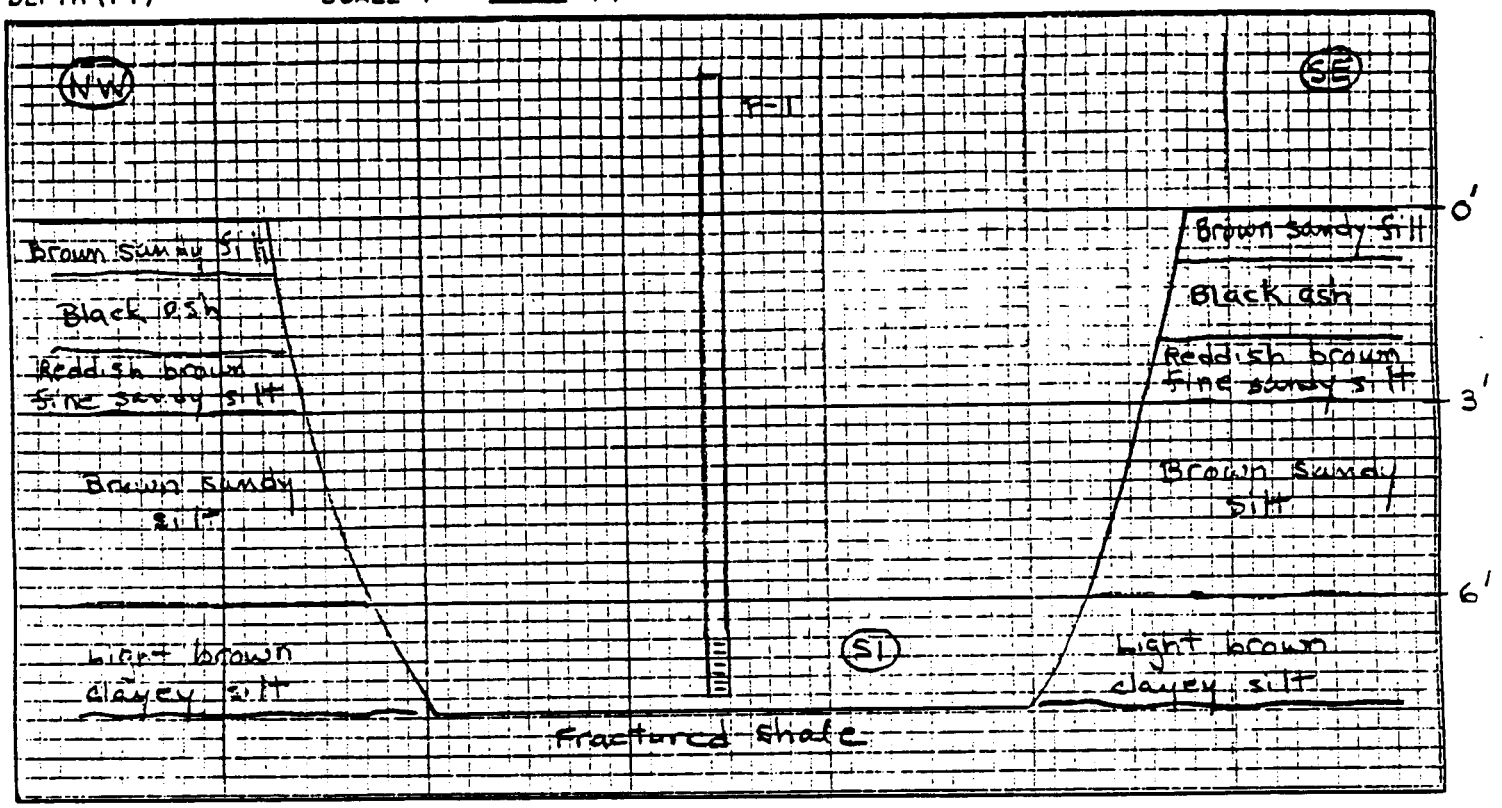
3' Concrete obstruction - refusal.

FILL

TEST PIT RECORD
PROFILE ALONG TEST PIT- 1

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (L x W x D)
14' x 1.5' x 7.7'
No groundwater seepage.
PI readings at background level.
No visible coal tar but ash & clinkers present.
Piezometer (P-1) installed behind utility pole - screened from 6.5' to 7.5'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	6.5'-7.0'	MEEXTPXX01/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			
	Collected soil for		
	lab permeability test.		

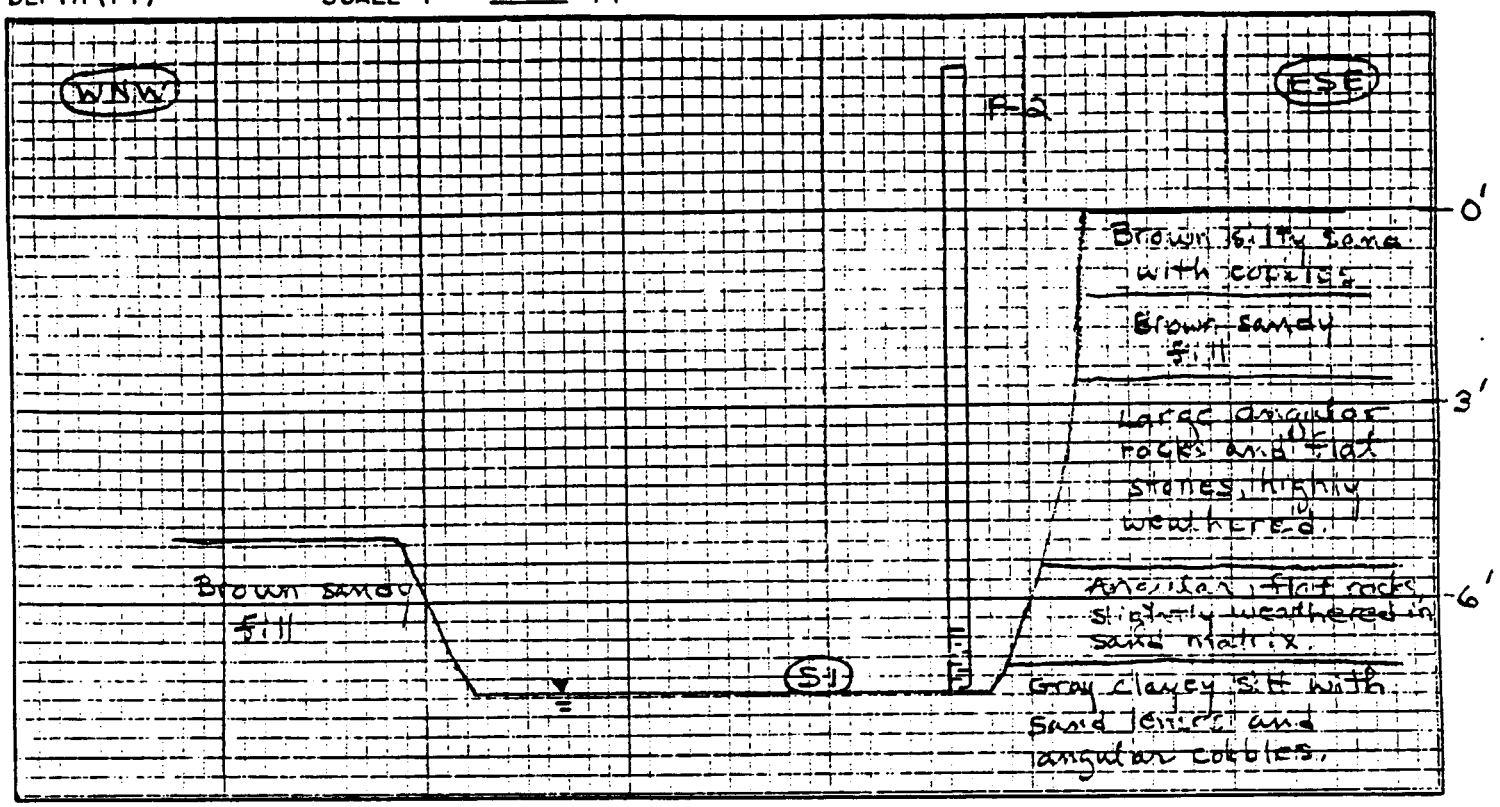
REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

TEST PIT RECORD
PROFILE ALONG TEST PIT- 2

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD):
11' x 2' x 7.5'

PI readings at background level in ambient air - 10 ppm from sampled material.

No visible coal tar.

Piezometer (P-2) installed on bank - screened from 6.5'-7.5'.

Test pit was dug into the bank.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	7.0'-7.5'	MEEXTPXX02/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

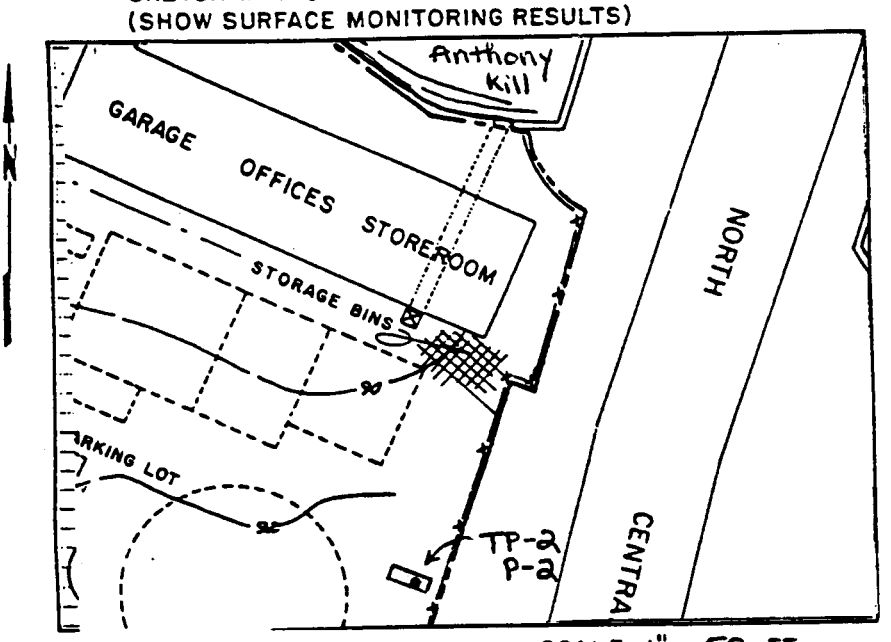
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT TP-2 DATE 7/21/86 TIME ST. 15:30 END 16:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C.Moore
2. S.Wibby
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #9, #10

NOTES 0'-1.3' Brown to dark brown silty sand with sharp angular cobbles (>50%)

1.3'-2.6' Brown sandy fill with bricks, oxidized

2.6'-5.5' Angular cobbles and boulders with some sandy fill. Highly weathered. (75% rock material)

5.5'-7.0' angular rocks, less weathered, with sand matrix

7.0'-7.5' & light gray clayey silt matrix with brown sandy silt lenses with angular cobbles (>50%). mottling

▽ 7.5'

Appendix B

B-1 Boring Logs and Field Observations

B-2 Monitoring Well Installation Diagrams

B-3 Permeability and Discharge Test Methods and Calculations

Appendix B-1

Boring Logs and Field Observations

DRILLING OBSERVATIONS
MECHANICVILLE SITE

st Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-1	20.2	Black coke ash up to 3mm diameter, from 3.5 to 4.0 ft. Brick fragments and glass encountered from surface to 8.0 ft. Dark gray shale bedrock at 12.2 ft.	No unusual odors. PID-background levels.[a]	Sample B-1/S-1[b] from 8.0 to 10.0 ft.
B-2	16.2	Sandy to gravelly fill with shale fragments from 0.5 to 6.0 ft. Weathered shale bedrock at 9.4 feet. No visual signs of coal tar wastes encountered in boring.	No unusual odors. PID-headspace reading of 13 ppm on soil from 4.0 to 6.0 feet. Background levels elsewhere.	Sample B-2/S-1[b] from 8.0 to 9.5 ft.
B-3	9.2	Black, stained wood chips from 2.0 to 4.0 ft. Trace coal tar-stained organics and fly ash from 4.0 to 6.0 ft., and coal tar staining in sandy silt and shale chips from 6.0 to 8.0 ft. Coal tar stains from 8.0 to 9.2 ft. on weathered bedrock with little silt and fine sand.	PID headspace readings of 270 ppm and 250 ppm from 4.0 to 6.0 ft. and 6.0 to 8.0 ft., respectively.	Sample B-3/S-1[b] from 4.0 to 6.0 ft. Sample B-3/S-2 from 6.0 to 8.0
B-4	16.8	Brick chips from 4.0 to 6.0 ft. Coal tar staining noted from 6.0 to 14.0 ft. and 16 to 16.8 ft. Weathered bedrock and shale fragments predominant from 8 to 16 ft.	Coal tar odor from 4.0 - 6.0 ft. PID-ambient air readings of 10 ppm and 2 ppm at 6.0 to 8.0 ft. and 8.0 to 12.0 ft. PID-headspace readings of 10 to 70 ppm from depths of 4.0 to 12.0 ft.	Sample B-4/S-1 from 6.0 to 8.0 ft.[2]

5.88.10T
0001.0.0

DRILLING OBSERVATIONS (continued)
MECHANICVILLE SITE

Test Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
B-5	19.4	Fill material with brick, coal clinkers, fly ash and shale chips from 6.0 to 8.0 ft. Predominantly sand and gravel with organics, coal clinkers, and wood chips from 8.0 to 9.6 ft. Coal tar sheen on brown silt with shale chips from 10.5 to 11.5 ft. Bedrock at 11.5 ft.	PID background levels for ambient air. PID headspace readings of 22 ppm and 175 ppm from 10.0 to 10.9 ft and 10.5 to 11.5 ft., respectively.	Sample B-5/S-1 from 10.0 to 10.9 ft.[b] Sample B-5/S-2 from 10.5 to 11.5 ft.
B-6	32.0	Casing driven to bedrock at 17 ft. Dark gray shale bedrock thinly laminated, hard, broken, and unweathered.	PID ambient air readings at background levels. 250 - 450 ppm off of augers at 1.5 to 2.5 ft. PID headspace readings of 300 ppm at 9.2 ft. and background levels from 17.0 to 22.0 ft.	No samples collected.
B-7	9.0	Casing spun through concrete pad (0 to 3.0 ft) and spoon pounded to 7.0 ft. Coarse sandy fill with pebbles and shale fragments from 7.0 to 9.0 ft.	No ambient air or headspace readings taken.	Sample B-7/S-1[b] from 7.0 to 9.0 ft.
B-8	17.4	Trace organics from 4.0 to 5.2 ft. Black stains on silt fill and shale fragments from 6 to 6.3 ft. Some coal tar visible on silt with cobbles from 9.5 to 13.5 ft. Extensive coal tar from 13.5 to 15.5 ft. on silty fill and shale fragments. Black, stained silty sand from 15.5 to 17.4 ft.	Slight odor from 4.0 to 6.3 ft. and 9.5 to 11.5 ft. PID ambient air readings of 1-2 ppm from 4.0 to 5.2 ft. PID headspace readings of 1-2 ppm, 20 ppm, and 30 ppm from 4.0 to 5.2 ft., 6 to 6.3 ft, and 7.5 to 9.5 ft, respectively.	Sample B-8/S-1 from 9.5 to 11.5 ft. Sample B-8/S-2 from 13.5 to 15.5 ft.[2] Sample B-8/S-3 from 15.5 to 17.5 ft.[2]

DRILLING OBSERVATIONS (continued)
MECHANICVILLE SITE

st Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
-9	5.5	1½" of bituminous material over cobbley to gravelly silty sand (fill) to 4 ft; observable contamination at 2.7 ft, over thinly bedded and weathered rock.	PID headspace readings of 65 ppm from 4 to 5.5 ft; ambient air readings at low levels.	Sample B-9/S-1[c] from 4.0 to 5.5 ft.
-10	19.7	Brown and black ash fill, cinders, coal, and glass, over tan to black silt (fill) to 9 feet. Observable contamination at 10 ft in gravelly silty sand; becomes less contaminated with depth. Oxidized rock begins near 18.5 ft.	PID headspace readings at background to 10 ft., increasing to 10 ppm and gradually diminishing to 6 ppm at 19 ft.	Sample B-10/S-1[c] from 16.0 to 18.0 ft.
-11	18	Brown to olive brown silty sand to sandy silt (fill) to weathered rock at 3 ft. Hit solid rock near 6 ft.	No unusual odors. PID readings at background levels.	No analytical samples collected.
-12	25.5	Black and yellow sand and silty sand over gray, brown and olive brown silty fine sand. Observable contamination below 14 ft.	Observable tar smell below 16 ft. PID headspace readings at background levels to 14 ft.; readings ranged from 9 ppm to 54 ppm down to 25.5 ft.	Samples B-12/S-1[c] from 16.0 to 18.0 ft.
-13	55.5	See B-12 description. B-13 contains more gravel. Visible coal tar at 16 ft. Large cobble at 16.5 to 18.5 ft. Highly contaminated at 24 ft. Shale bedrock from 25.5 to 55.5 ft. Fracture at 55 ft. shows contamination on faces.	Coal tar odor at 16 ft. PID ranged from 10 to 50 ppm from 15 to 25.5 ft.	No analytical samples collected.

DRILLING OBSERVATIONS (continued)
MECHANICVILLE SITE

st Boring	Total Depth (ft)	Visual Appearance	Odor and PID Characterization	Samples Collected
-14	55	Brown, orange, and olive brown fine sands and silts. Weathered rock from 22 to 23.5 ft.	No unusual observations. PID readings at background levels.	Sample B-14/S-1 [c] from 18.0 to 20.0 ft.
-15	39	Black cinder, ash, brick (fill) to bedrock at 9.0 ft.	No unusual odors but visual evidence of contamination. PID readings of 1.2 ppm at surface to 36 ppm at 6.0 to 8.0 ft.	Sample B-15/S-1 [c] from 4.0 to 7.8 ft. (Collected in a boring 6 ft. south of B-15).

Background PID levels represent ambient air levels obtained outside and upwind of the site boundaries. At the Mechanicville site, background levels were generally less than 5 ppm.
Samples analyzed by ERCO.
Samples analyzed by NYSEG.

BORING NO. B-1

MECHANICVILLE BORING LOG

PROJECT NO. 4945-02

CLIENT NYSEG

CONTRACTOR EMPIRE SOILS | DATE STARTED 7/23/86 | COMPLETED 7/24/86

METHOD HSA/NX CORE | CASING SIZE 4.25 I.D. | HNU (1.7) 10.2 | PROTECTION LEVEL D

GROUND EL. 96' MSL | SOIL DRILLED 11.0' | ROCK DRILLED 9.2' | TOTAL DEPTH 20.2'

LOGGED BY L. ESPY | CHECKED BY CM | DATE 9/22/86 | ▽ BELOW GROUND 8.65' 7-25-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0	Bkgd.	D.J. S-1					Bkgd.	0-2.0' Light brown sandy FILL with trace clay, loose, dry. Some glass, moderate amount of roots, and organics. Iron staining on surface. Recovery: .5/2.0	FILL	3 6 7 10	
2.5	Bkgd	D.J. S-2					Bkgd	2-3.5' Brown FILL same as above. 3.5-4.0' Black coke ASH, up to 3mm diameter, loose, dry. Highly oxidized from 3.75' to 3.8'. .7/2.0	FILL	7 4 3 3	
5.0	Bkgd.	D.J. S-3					Bkgd.	4-6.0' Dark brown to black silty FILL with up to 1" diameter gravel, some organics, brick fragments and glass, dense, moist, some iron staining. .6/2.0	FILL	4 3 2 3	
7.5	Bkgd.	D.J. S-4					Bkgd.	6-8.0' Brown, silty FILL grading upwards to dark brown silty FILL, some gravel and glass, loose, very moist. .2/2.0	FILL	5 5 3 3	
10	Bkgd.	ANYL S-1 D.J. S-5					Bkgd.	8-10.0' Brown, gravelly SAND, up to 4 mm diameter, somewhat dense, dry. 9.4-9.6' - Black, organic matter with grass 1.0/2.0	SAND	5 5 4 4	
12.5	Bkgd.	R-1					Bkgd.	10-11.9' Brown, gravelly SAND with dry shale fragments up to 1 inch throughout, dense to very dense, dry. 11-11.9' - weathered shale with some silt, little oxidation. Refusal at 11.9' 1.5/2.0	SAND	12 32 77 100/.4	
								BEDROCK AT 12.2'			
								R-1 12.2-13.6' 30B 12.2'. SPIN CASING TO 12.6'. Recovery = 0"/1.4' = 0%	SHALE		
15.0	Bkgd.	R-2					Bkgd.	R-2 13.6-17.2' Dark grey SHALE, laminated (1/5" bedding units), hard, very broken, weathering (staining) along bedding planes only. Bedding dips 30°. Primary fractures along bedding planes, secondary, hairline, fractures perpendicular to primary fractures and 1/2" in length. Recovery = 85% RQD = .7'/3.6' = 19%	SHALE	19%	
17.5	Bkgd.	R-3					Bkgd.	R-3 17.0-20.2' (1.1 FT. CAVE-IN) Dark grey SHALE, same as above. Recovery = 95% RQD = 23%	SHALE	23%	CAVE-IN
20.0											

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

BORING NO. B-1

MECHANICVILLE BORING LOG

PROJECT NO. 4945-~~78~~

CLIENT NYSEG

CONTRACTOR EMPIRE SOILS	DATE STARTED 7/23/86	COMPLETED 7/24/86	
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL. 96' MSL	SOIL DRILLED 11.0'	ROCK DRILLED 9.2'	TOTAL DEPTH 20.2'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 8.65' 7-25 86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLA	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % 20 40 60 80 100	WELL DATA
20.0		R-3					R-3 Cont.	SHALE		CAVE-IN
							BOB 20.2 FT. CAVE-IN TO 18.9			
22.5										

X = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

CONVENTIONAL ROCK DRILLING

PROJECT NO. 4945-02
BORING NO. B-1 (M)
PAGE 1 OF 1
LOGGED BY L. ESPY — DATE 7/23/86 /7/24/86
CHECKED BY JWP — DATE 9/22/86

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT IN.	RECOVERY FT IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
	R-1	12.2'	1.4'	0	0	0	0	U	-	NA	1.4 FEET OF Granular material caved in. washed out of R-2. Redrilled 12.2 - 13.6'.
	R-2	13.6'	3.6'	3.06'	85%	.7'	19%	U	Approx 6 min/ft	NA	Return water muddy brown color.
			ROD FOR R-2 - 2				PIECES				
	R-3	17.2	3.0'	2.9'	95%	.7'	23%	U	6-7 min/ft	NA	1.1 FT. CAVE-IN BEFORE STARTING 17.2.
			ROD FOR R-3 - 1				PIECE				
	EOS	20.2									

MECHANICVILLE BORING LOG

BORING NO. B-2

CLIENT NYSEG			PROJECT NO. 1945-03
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/1/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (ILT) 10.2	PROTECTION LEVEL D
GROUND EL. 90' MSL	SOIL DRILLED 9.5'	ROCK DRILLED 6.7'	TOTAL DEPTH 16.2
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 5.94' 8-1-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR	SAMPLE GC	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)
0	Bkgd.	D.J. S-1			Bkgd.	0.5-2.0' Black, sandy to gravelly FILL, with rounded pebbles, Loose, dry.	FILL	12 | 14 | 8
2.5	Bkgd.	D.J. S-2			Bkgd.	2-4' FILL, with 3 discrete layers: 2-3.4' Calcite, blocky (2" dia.) dry, angular chunks 3.4-3.9' Brown silty SAND, loose, dry 3.9-4.0' - Dark grey SHALE fragments in moist silty matrix. Very Wet at 3.8'. REC. 55%	FILL	6 | 10 | 3 | 4
5.0	Bkgd.	D.J. S-3			13 ppm	4-6' Sandy to gravelly FILL with 2" pebbles, subrounded to 5.7'. 5.7-6.0' - Greenish-grey SILT to clayey SILT with some iron staining, trace organics, dense, moist. RECOVERY 35%	FILL / SILT	3 | 3 | 1 | 2
7.5'	Bkgd.	D.J. S-4			Bkgd.	6-8' Orangish-grey clayey SILT with subrounded pebbles, dense, moist grading downwards to orangish grey silty coarse SAND with angular SHALE fragments, dense, damp. REC. 50%	SILT	3 | 12 | 6 | 14
		D.J S-5 ANYL S-1			Bkgd.	8-9.5' Dark grey silty coarse SAND, angular to 9.4' At 9.4' - Dark grey angular SHALE fragments, very thinly bedded, dry. REC. 45%	SAND	12 | 40 | 100/.5
10.0						Weathered BEDROCK AT 9.4' SET CASING AT 10.6 WASH OUT HOLE. BEGIN CORING		
12.5	Bkgd.	R-1			Bkgd.	R-1 9.5-13.5' Dark grey SHALE with 25% calcite in top 3/10 ft., V. thinly bedded (1/4-1"), hard, V. broken to broken, some weathering along bedding fractures (staining), calcite veins along bedding planes, bedding dips 30°. Recovery = 4.5/4.0' (CAVE-IN) RQD = 54%	SHALE	
15.0	Bkgd.	R-2			Bkgd.	R-2 13.5-16.2' Dark grey SHALE, massive, hard, unweathered, only 2 mechanical breaks which are along bedding planes. Recovery = 100% RQD = 100%	SHALE	
17.5						BOB 16.2'		
20.0'								

WELL DIA

T = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

NYSEG Mechanicville, NY

PROJECT NO. 4945-02
BORING NO. B-2
PAGE 1 OF 1
LOGGED BY L. ESPY DATE 8/1/86
CHECKED BY JVP DATE 9/22/86

BIT USE
N - NEW
R - RESET
U - USED

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT. IN.	RECOVERY FT. IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
9.5	R-1	9.5'	4'	4.5'	100+	NA	54%	U	6/FT	NA	4' RUN.
	R-2	13.5'	2.7'	2.5	93%	NA	100%	U	6/FT	NA	2.7' Run
		16.2									

MECHANICVILLE BORING LOG

BORING NO. B-3

CLIENT NYSEG — PROJECT NO. 4995-02

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/5/86 — COMPLETED 8/6/86

METHOD H.S. AUGER — CASING SIZE 4.25' ID — HNU (11.7)/10.2 — PROTECTION LEVEL C

GROUND EL. ~89' MSL — SOIL DRILLED 9.2' — ROCK DRILLED N/A — TOTAL DEPTH 9.2'

LOGGED BY JNW — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 2.5' 8/14/86

PI METER MALFUNCTIONING
INSPECT AMBIENT AIR DATA

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA	ELEV. (FT)
0								0.5' Asphalt				
		D.J. S-1						0.5'-2.0' Black, fn-cs sand, some gravel and angular shale chips, grading to Sandy silt and shale chips; Dry; med. dense (.75'/1.5)	Fill	5 4 3		
		D.J. S-2						2.0'-4.0' Tan to gray silty Sand w/ angular shale chips; some black stained wood chips. loose; moist. 50% shale chips. Recovery (.8Z'/2.0')	Fill	5 4 3 3		
5		Anly. S-1					270 (8/11)	4.0'-6.0' Black silt (75%) w/ little angular shale chips grading to silt w/ some shale chips; trace coal tar stained org., wood and fly ash; loose; wet. (1.8'/2.0')	Fill	1 1 1 1		
		Anly S-2					250 (8/11)	6.0'-8.0' Black Sandy silt w/ shale chips and wood fragments; loose; wet; friable; Coal tar stained; dry very fractured shale in the end of the sample; iron stained; horiz. and vertical fractures (Rec. 1.3'/2.0')	Fill & WX BdK			
								8.0-9.2' Weathered bedrock w/ little silt and fine sand; Horiz. and vert. fractures; platy and angular rock fragments; Coal tar stains, loose and wet at 8.0-8.3'; Tan, dry and dense at 8.3'-9.2'	WX BdK	15 72 100/.2		
10								Bottom of boring at 9.2'				
								Weathered bedrock at 8.0'-9.2'				
								Bedrock at 9.2'				
15												
20												

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

MECHANICVILLE BORING LOG

BORING NO. B-4

CLIENT NYSEG — PROJECT NO. 4045-02

CONTRACTOR EMPIRE SOILS — DATE STARTED 7/29/86 — COMPLETED 7/30/86

METHOD HSA/NX CORE — CASING SIZE 4.25 I.D. — HNU 11.3/10.2 — PROTECTION LEVEL D/C

GROUND EL. 92' MSL — SOIL DRILLED 16.8 — ROCK DRILLED NONE — TOTAL DEPTH 16.8

LOGGED BY SNW — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 3.2' (7-29-86)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO. SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	Bkgd						Auger through Pavement to .5			
	Bkgd	D.J. S-1				Bkgd	.5-2.0' Light Brown Sand Fill w/ angular to sub-rounded gravel. Ash, brick chips, Black staining at 1-2' below G.S. Loose and dry. .7/1.5	Fill	13 9 6	
2.5	Bkgd	N.R.				Bkgd.	2.0-4.0' No Recovery Boulder was dug out by hand. 0/2.0	Fill	13 12 7 3	▽
5.0	Bkgd	D.J. S-2				10	4.0-6.0' Black to Dark Gray Sandy Silt Fill w/ sub rounded Fine gravel and brick chips. Coal tar odor. Loose and Friable. Dry. 1.5/2.0	Fill	2 4 2 2	
7.5	10ppm	D.J. S-3 Analy GC Conf/ms				70+	6.0-8.0' Black to Brown Sandy Fill w/ small sub rounded to angular gravel, brick chips, loose - wet. grades into - Silty weathered bedrock w/ shale fragments, heavily coal tar stained and moderately oxidized. 1.5/2.0	Fill	4 8 11 14	
10.0	2	D.J. S-4				20+	8.0-10.0' Black to Brown Silty Weathered Bedrock (50% silt), angular gravel (shale). grading into less Silty Clay weathered bedrock, coal tar present throughout - 85% Rock Material 2.0/2.0	Fill	14 19 21 31	
		D.J. S-5				70+	10-12' Clayey Silt weathered Bedrock, 75% angular gravel (shale), Coal tar stained loose, wet. 1.5/2.0	Fill	11 12 12 3	
12.5	Bkgd.	D.J. S-6				Bkgd.	12'-14' Gray Broken Shale Fragments w/ Silt, heavily stained w/ Coal tar. Loose, wet. 1.0/2.0	Fill	1 1 30 47	
15.0	Bkgd.	D.J. S-7				Bkgd.	14-16' Black Silt w/ angular shale chips gravel size. Loose. Wet 50% silt 50% Rck .2/2.0	Fill	2 1 0 2	
17.5	Bkgd.	D.J. S-8				Bkgd.	16-16.8 Tan to Lgt Gray Silt Clay Till w/ small sub rounded pebbles & Fine gravel in the till matrix. Organics w/ Coal tar staining in root canals. Dry. Dessicated. Tight .6/1.1	Till	2 1 100/.1	
20.0							Refusal @ 16.8' EOB - 16.8'			

* U = THIN WALL TUBE S = SPLIT SPOON = = ROCK

MECHANICVILLE BORING LOG

BORING NO. B-5

CLIENT NYSEG | PROJECT NO. 4945-02

CONTRACTOR EMPIRE SOILS | DATE STARTED 8/4/86 | COMPLETED 8/5/86

METHOD HSA/NX CORE | CASING SIZE 4.25 I.D. /NX40 | HNU 11.7/10.2 | PROTECTION LEVEL D/C

GROUND EL. 89' MSL | SOIL DRILLED 11.5' | ROCK DRILLED 7.9' | TOTAL DEPTH 19.4

LOGGED BY SNW | CHECKED BY CM | DATE 9/22/86 | BELOW GROUND 10.0' 8/5/86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO. SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	BKGd.	D.J. S-1				Bkgd	0-2.0 Dk. Brown Silty Sand Fill w/angular gravel, organics, loose, moist. Rec. 1.6/2.0	Fill	3 6 6 4	
2.5	Bkgd.	D.J. S-2				Bkgd	2.0-4.0 Lgt. Brown angular gravel Fill w/ Sand and silt interbedded, oxidation staining on shale chips. Loose. Dry. 80% Rock Material. 1.0/2.0	Fill	3 3 3 2	
5.0	Bkgd	D.J. S-3				Bkgd	4.0-6.0 Dk. Brown to Brown Silty Gravel Fill w/ Fine Sand w/some Black Stained lenses. Loose. moist. 65% angular shale gravel. 1.2/2.0	Fill	4 2 2 3	
7.5	P.I. MALFUNCTIONING	D.J. S-4					6.0-8.0' Fill - Brick, Coal Clinkers, Brown Sandy Silt, fly ash, shale chips. Mostly Brick (75%) 1.0/2.0	Fill	4 7 11 7	
		D.J S-5					8-9.6' Dk. Brown to Brown Sand Silt Fill w/ gravel, organics, coal clinkers, wood chips. predominately Sand + gravel. 9/1.6	Fill	7 12 19 100/1.1	
10.0							Auger to 10'			
		Any S-1				22	10.0-10.9' Dk. Brown Silt w/ Rock (shale) chips-gravel size organics, Mod. Loose, wet .5/.9	SILT	15 100/.4	
		Any S-2				175	10.5-11.5 Dk. Brown Silt w/angular shale chips (gravel) Coal tar sheen, loose, wet .9/1.0	SILT	21 52 100/0	
							Bedrock at 11.5			
12.5							R-1 10.6-11.6 Metasedimentary Erratic Boulder 11.6-12.9 - Void Space - Sediment, wood chips shale fragments 12.9-15.3 - Gray shale, thin dolier laminations (1-2 mm thick spaced every 1/2" to 1", Hard, Massive Calcite inclusions. Unweathered to trace weathering, 30-40° Bedding planes. Fractures occur at 60° across bedding planes. Rec. 4.95/5.0 = 99%	SHALE		
15.0							R-2 15.34-16.1 Gray Shale same as above No Natural Fractures Rec-76%	SHALE	Not Determinable Due to Coring Problems	
17.5							R-3 16.1-19.5 Gray shale same as above, No Natural Fractures. Rec. = 100% RQD = 86%	SHALE		
							BOB - 19.4			
20.0										

T = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

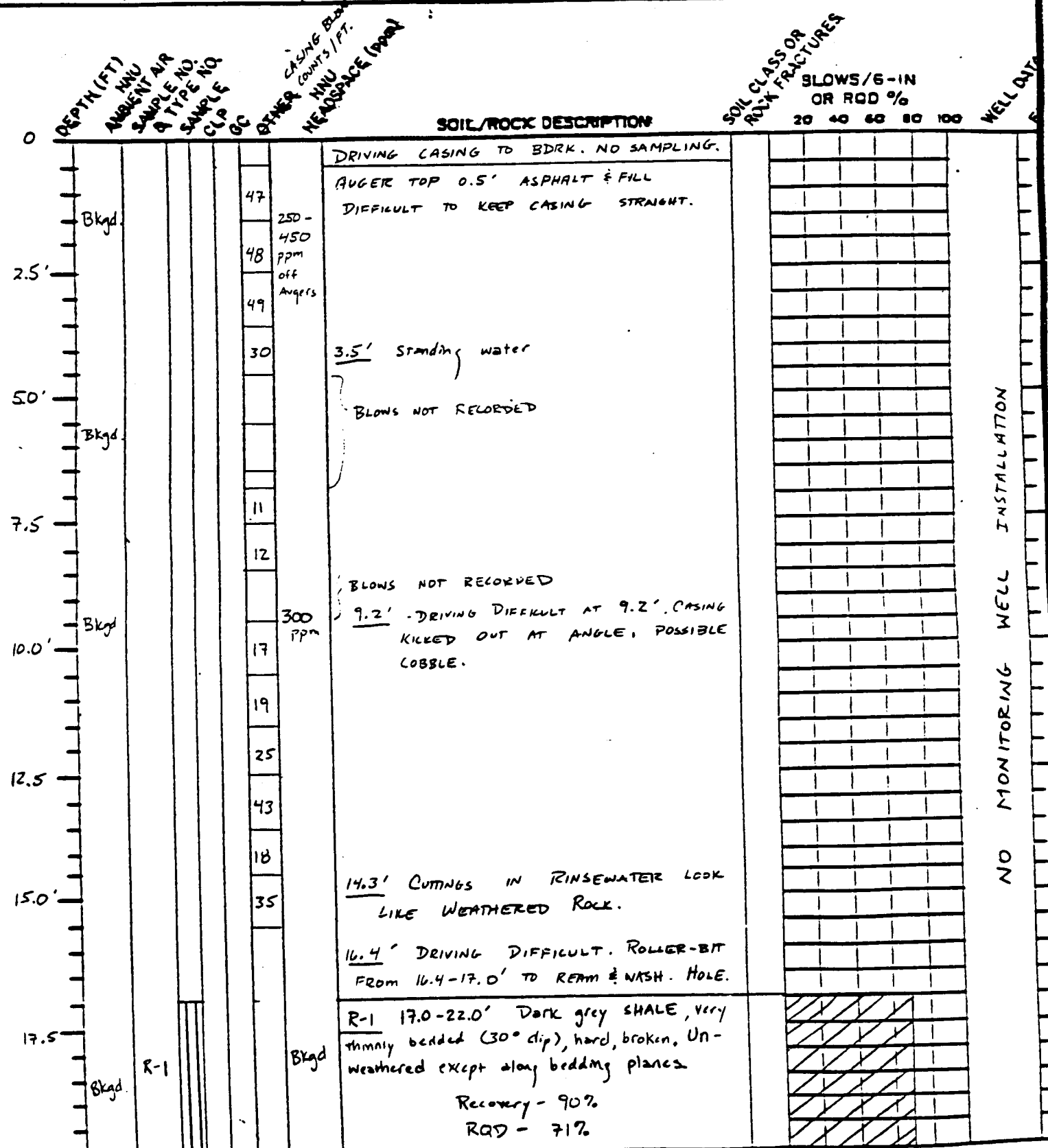
PROJECT NO. 4945-02
BORING NO. B-5
PAGE 1 OF 1
LOGGED BY SNW DATE 8/4/86 - 8/5/86
CHECKED BY TWD DATE 9/22/86

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
	R-1	10.	6	5.0	4.45	89%		89%	U	9/ft		
	R-2	15.	34	1.3	1.0	76%		NA*	U	*		* Due to mechanical problems RQD cannot be accurately interpreted
	R-3	16.	1	3.4	3.5	100%		86%	U	9/ft		

BORING NO. B-6

MECHANICVILLE BORING LOG

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (1.7) 10.2	PROTECTION LEVEL C/D
GROUND EL. 92' MSL	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND Unknown



* = THIN WALL TUBE S = SPLIT SPOON R = ROCK

MECHANICVILLE BORING LOG

BORING NO. B-6

CLIENT NYSEG			PROJECT NO. 4945-72
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (LT) 10.2	PROTECTION LEVEL C/D
GROUND EL 92' MSL	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	BELOW GROUND Unknown

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
20.0		R-1 (con't)					R-1 (con't) See page 1 for description.	SHALE BDRK		
22.5	Bkgd	R-2				Bkgd.	R-2 22.0-27.0' Dark grey SHALE, thinly laminated (.03-.1"), hard, broken, unweathered. Iron oxidation staining in upper (17-18) fractures. Bedding laminae offset by vertical, discontinuous fractures and foldmy. Fractures occur along calcite (30-40°) inclusions. Minor amount of inclusions, concoidal in shape. Recovery - 102% RQD - 80%	SHALE 24.7		
25.0										
30.0	Bkgd.	R-3				Bkgd.	R-3 27.0-32.0' Dark grey SHALE, same as above except fewer inclusions than in R-2. Fractures perpendicular to bedding at 45-90°. Some evidence of deformation. Recovery = 100% RQD = 83%	SHALE		
35.0							BOB 32.0'			

* = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

PROJECT NO. 4995-02
BORING NO. B-6
PAGE 1 OF 1
LOGGED BY SNW/L.ESPY DATE 7/28/86-7/29/86
CHECKED BY JWP DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
17.0'	R-1	17.	0	5'	4.5'	90%	NA	71%	U	NA	NA	MANY MECHANICAL Breaks in Rock, Few Natural
22.0	R-2	22.	0	5'	5.0	102%	NA	80%	U	9/ft	NA	Mechanical breaks, fractures along calcite inclusions
32.0	R-3	32.	0	5'	5.0	100%	NA	83%	U	8/ft.	NA	Vertical to Near Vertical discontinuous fractures present.

BORING NO. B-7

MECHANICVILLE BORING LOG

PROJECT NO. 1945-02

CLIENT NYSEG			
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/31/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25" ID	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL 92' MSL	SOIL DRILLED 8.8'	ROCK DRILLED NONE	TOTAL DEPTH 9.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 3.9

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	SAMPLE GC	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR ROD % (20 40 60 80 100)	WELL DIAGRAM
0						SPIN CASING THRU. CONCRETE PAD.	ASPHALT		
						0-.3 - ASPHALT	CONCRETE		
						.3-1.2 CONCRETE PAD	VOID		
						1.2-2.1 VOID	FILL		
2.5					3.0 ▽	2.1-3.0 BOULDER FILL			
						3-5' Pound spoon. 0% Recovery	3.9 ▽	2 2 2 2	
5.0		NO RECOVERY				5-7' Pound spoon. Recovery 5% - all wash		8 5 3 3	
7.5		ANYL. S-1				7-9' Dark grey coarse sandy FILL with some 1-2" pebbles, trace clay. Trace wood (may have fallen into hole), calcite piece (1" diam), weathered shale fragments at 8.8-9' - Dark grey, thinly bedded 1" long.	FILL	7 15 53 85	CAVE-IN
		DJ S-1				BOB 9.0'	Bdrk		
10.0									
15.0									
20.0									

T = TUBE S = SPLIT SPOON R = ROCK

BORING NO. B-8

MECHANICVILLE BORING LOG

CLIENT NYSEG — PROJECT NO. 1945-.2

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/6/86 — COMPLETED 8/6/86

METHOD HSA/NX CORE — CASING SIZE 4.25" I.D. — HNU (LT/10.2) TIP-11.7 HNU-10.7 — PROTECTION LEVEL D/C

GROUND EL 92' MSL — SOIL DRILLED 17.4' — ROCK DRILLED NONE — TOTAL DEPTH / 17.4'

LOGGED BY SNW — CHECKED BY CM — DATE 9/22/86 — BELOW GROUND 7.5-13.5' (APPROX)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DIAGRAM
0							AUGER THRU ASPHALT TO 0.5'			NO MONITORING WELL INSTALLATION
.5	Bkgd	D.J. S-1				Bkgd.	.5-2' Lgt. brown to brown Sandy FILL with cobbles and pebbles, platey to rounded, loose, dry, oxidized sediments. Broken rock Rec. 1.0/1.5	FILL	10 12 8	
2.5	Bkgd	D.J. S-2				Bkgd.	2-4' Lgt. brown to brown sandy SILT FILL w/ coal clinkers (oxidized) and trace subrounded brick and cobbles. Platey shale chips, loose to compact, dry. REC. 1.3/2.0	FILL	12 29 13 14	
5.0	1-2 ppm	D.J. S-3				1-2 ppm	4-5.2' Brown sandy FILL grading to silt Fill with depth, with concrete chips, dry, oxidized shale fragments, subrounded boulder pebbles at 4.7'. Trace organics. Compact, moist. Slight coal tar odor throout. .9/1.2	FILL	10 20 100/.2	
	Bkgd.	DJ S-4				20 ppm (shoe)	5.2-6.3' Brown silt FILL w/ rounded cobbles, platey shale fragments, and brick shards. Coal tar odor and black stains. Loose and moist. Obstruction from 5.2-7.2. Augered thru. .3/.3	FILL	100/.3	
7.5	Bkgd.	D.J. S-5 NO REC.				30 ppm (shoe)	7.5-9.5' Brown silt on outside of spoon. No Recovery. 30 ppm off spoon, no staining. Rec. 0/2.0	UNK.	3 2 3 3	
10.0	Bkgd	ANYL. S-1 DJ. S-6				Bkgd	9.5-11.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Slight coal tar odor, some coal tar present. REC. 2.0/2.0	SILT FILL	4 6 7 9	
12.5		D.J. S-7 (wood) S-8 (soil)				Bkgd.	11.5-13.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Coal tar present at 13.3-13.5'. Wood fibers at 13.0' Rec. .9/2.0	SILT FILL	9 12 32 8	
15.0		ANYL. S-2				Bkgd.	13.5-15.5' - Silty FILL w/ shale fragments and subrounded cobbles, loose, saturated. Extensive COAL TAR. REC. 1.2/2.0	FILL	6 2 2 3	
	Bkgd.	GC/MS ANYL. S-3				50-100 ppm	15.5-17.4' Black stained silty SAND with subrounded cobbles, pebbles and shale chips, loose, saturated. REFUSAL AT 17.4'. REC. 1.3/2.0	SILT-SAND	3 3 2 100/.4	
17.5							BOB 17.4'			
20.0										

T = TUBE S = SPLIT SPOON R = ROCK

MECHANICVILLE	TASK 3		BORING NO. B-9
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-11-87	COMPLTD. 11-11-87
METHOD H.S.A.	CASING SIZE 4.25" ID	PID TIP #1	PROTECTION LEVEL D
GROUND EL 88.5 Rel.	SOIL DRILLED 5.5'	ROCK DRILLED NA	TOTAL DEPTH 5.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN NA (FT)	RISER NA (FT)	MATERIAL NA PVC SS TF	ID NA

PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD%	WELL DATA	EL. (FT)
0	Bg.						AUGERED TO 4'					
							COAL TAR OBVIOUS AT 2.7'					
1							VERY GRAVELLY & COBBLY; SHAKES RIG					
							CUTTINGS ARE WET W/ COAL TAR.					
2							SURFACE IS 1½" OF BITUMINOUS OVER COBBLY SILTY SAND - FILL					
3												
4		S-1		1.3	Y	65	BLACK SILTY SAND(?) W/ SLUDGE & COAL TAR, SATURATED OVER VARVED WEATHERED ROCK, OLIVE GRAY TO BLACK W/ UNWEATHERED ROCK FRAGMENTS & SILT	SM-GW		23 56 40		
5							B.O.B. @ 5.5'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	**TASK 3**	**BORING NO. B-10**
CLIENT **NYSEG**		PROJECT NO. 4945-03
CONTRACTOR **NORTH STAR DRILLING CO.**	DATE STARTED 11-12-87	COMPLTD. 11-12-87
METHOD H.S.A.	CASING SIZE 6" I.D.	PID TIP # 1
GROUND EL 96.7 Rel.	SOIL DRILLED 19.2'	ROCK DRILLED .5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87
SCREEN 10.8 (FT)	RISER 8.7 (FT)	MATERIAL PVC (SS) TF
		ID 2"
		PROTECTION LEVEL D
		TOTAL DEPTH 19.7'
		▽ BELOW GROUND 10.2' 11-20-87
		PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
	BKG	S-1		1.1		BKG	FILL BR TO BLK MOIST SANDY SILT W/ CINDERS for 1', OVER BLK TO Br ASH FILL W/ CINDERS, COAL PIECES, DRY TO MOIST		ML	10 16 26 16		
		S-2		1.2			4'			7 6 5 7		
5		S-3		.5			SILTY SAND (FILL) TAN TO Br TO DARK Br, SAND IS F TO M, TR TO LITTLE GRAVEL, MOIST W/ SOME ASH FILL; SAND IS SUGARY IN APPEARANCE.		SM	3 2 3 3		
		S-4		.7						2 1 2 1		
		S-5		1.0			4' SANDY SILT Br, F. SAND, TR. CLAY, MOIST, W/ BRIGHT ORANGE MOTTLES 10		ML	2 2 4 2		
10		S-6		.7		100	SILTY SAND Bl TO RUSTY SILT & F TO M. Sand, LITTLE GRAVEL, SATURATED, CONTAMINATED			2 1 8 6		
		S-7		.7		99	Br TO DK. GRAY TO Bl. F. TO M. SAND, TR. GRAVEL, WEATHERED Shale FRAGS. below 15'		SM	3 6 8 5		
15		S-8		1.0		26				2 3 5 5		
		S-9		1.8	Y*	6	TAN TO YELLOW Br. V.F.S., WELL SORTED			6 2 5 3		
		S-10		1.3		6	WEATHERED ROCK 19' TO 19.3' 19.3' TOP OF ROCK AT 19.3'		GW/SM	WOR 50/0.0		
20							B.O.B. 19.7'					

* DUPLICATE SAMPLE

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND
WOR = WEIGHT OF RODS

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE TASK 3			BORING NO. B-11
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-12-87 COMPLTD. 11-13-87	
METHOD H.S.A. & CORING	CASING SIZE 4 1/4" ID.	PID TIP #1	PROTECTION LEVEL D
GROUND EL 92.1 Rel.	SOIL DRILLED 5.5'	ROCK DRILLED* 12.5	TOTAL DEPTH 18'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 4.17 (11-20-87)
SCREEN (FT)	RISER (FT)	MATERIAL PVC SS TF	ID PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
0	Bkg.	S-1		1.2		Bkg	SILTY SAND (FILL) BROWN TO BLACK, TR. GRAVEL W/ COAL FRAGS, GLASS, CINDERS		SM	4 4 2 4		
							SANDY SILT OLIVE BR TO ORANGE BR, LITTLE GRAVEL, MOIST		ML	4 3 6 10		
		S-2		1.3		Bkg	WEATHERED ROCK BR & BLK, LAYERED, FISSILE, HARD, DRY, LITTLE CLAY,					
5		S-3		1.2		Bkg	6.0 BEDROCK SHALE FRAGS, COMMON ONWARD		GW	12 36 40		
							SHALE					
10		R-1		86 %						0 %		
15		R-2		80 %								
							B.O.B. @ 18'					
20												

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

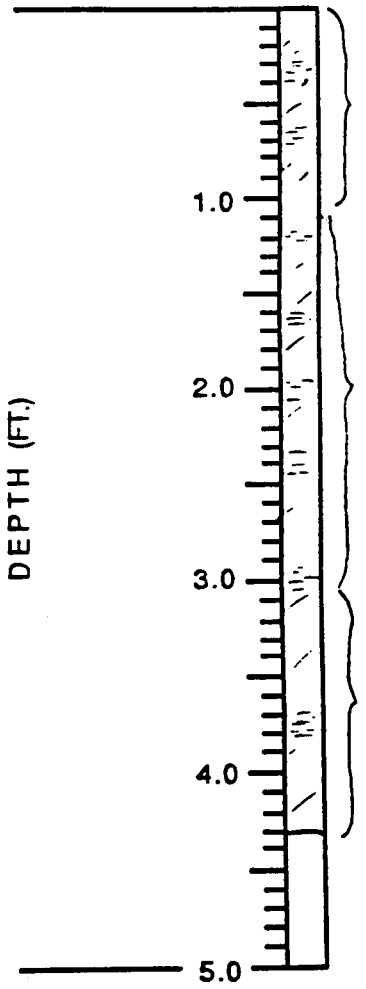
E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 2

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-12-87	CHK'D BY: CM 12/29/87
BORING NO.: B-11	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 8 TO 13
CORE LENGTH (FT.): 5	CORE RECOVERY : 4.3 (FT.) 86 (%)	RQD: 0 (%)	ROCK QUALITY : V. POOR

ROCK DESCRIPTION AND IDENTIFICATION

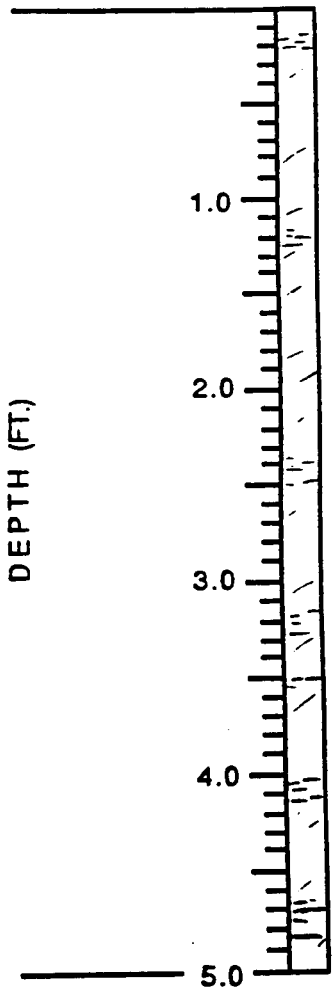


SHALE — DARK GRAY TO BLACK, THINLY BEDDED, W/ BEDS @ 35° TO 45° FROM HORIZONTAL. TOP 1' IS MODERATELY WEATHERED W/ MnO_2 & O_2 STAINING PROMINENT, BECOMES FRESH AT NEAR 11'. FRACTURE FACES AFTER 11' ARE FRESH & SHOW SLICKENSIDE FEATURES. BEDDING IS PARALLEL TO FRACTURES. NO PIECE IS AS LONG AS 3".

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 2

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-12-87	CHK'D BY: CN 12/29/87
BORING NO.: B-11	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 13 TO 18
CORE LENGTH (FT.): 5	CORE RECOVERY: 4 (FT.) 80 (%)	RQD: 80 (%)	ROCK QUALITY: V. GOOD



ROCK DESCRIPTION AND IDENTIFICATION

SHALE UNWEATHERED COMPETENT, FRESH, W/ BEDDING 15° TO 20° FROM HORIZONTAL

15.'-15.4' NATURAL JOINT - NO WEATHERING

17' HEALED V. THIN FRACTURE W/ CALCITE FILLING

MECHANICVILLE	TASK 3		BORING NO. B-12
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-18-87	COMPLTD. 11-18-87
METHOD H.S.A.	CASING SIZE 6" ID	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 98.3 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED NA	TOTAL DEPTH 25.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 13.45' (11-20-87)
SCREEN 11 (FT)	RISER 14.5 (FT)	MATERIAL PVC (SS) TF	ID 2" PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA
	BKG	S-1		1.6		BKG	SILTY SAND: BLACK, MOIST, FIRM IN PLACE w/ ASH FILL & CLINKERS over Br. SILTYS., TR. GRAVEL, SLIGHTLY PLASTIC		SM	5 6 5 5	
		S-2		1.2			2.5' SAND: YELLOW BROWN, FINE SAND, TR. TO LITTLE GRAVEL, MOIST		SP	3 3 3 3	
5		S-3		.2						3 2 3 3	
		S-4		.3			6' SILTY SAND: BROWN, MOIST, LITTLE GRAVEL, SLIGHTLY PLASTIC OVER BROWN WELL SORTED MED. SAND, LITTLE FINE SAND, TR. GRAVEL		SM	7 8 10 10	
		S-5		.6						27 10 17 20	
10		S-6		.9			10' SILTY FINE SAND: BROWN TO DULL YELLOW, TR. TO LITTLE GRAVEL, FIRM IN PLACE, MOIST; SATURATED w/ OBSERVABLE CONTAMINATION AFTER 15.5'			9 11 24 15	
		S-7		1.0						11 10 7 9	
		S-8		.6		45				7 7 7 5	
15		S-9		1.1		10	16' SANDY SILT: BROWN TO OLIVE BROWN, TR. GRAVEL - GRADES TO WELL SORTED SAND & SILT		ML	3 4 2 3	
		S-10		.9		13	18' SILTY SAND & GRAVEL: BLACK, OLIVE BROWN & BROWN w/ ANGULAR COARSE FRAGMENTS (AS IN A TILL), SATURATED; CONTAMINATION DESTROYS LITHOLOGY			4 5 3 4	
20		S-11		.6		54			SM	3 3 3 3	
		S-12		1.3	Y	12	22' SILTY FINE SAND: GRAY, BROWN, V. WELL SORTED, PERMEABLE, LOOSE			5 4 3 3	
25		S-13		0.4		9				2 5 10 50/0.0	
							B.O.B. @ 25.5'				

PROPORTION
trace (tr)
little (li)
some (so)
and

(-)AMOUNT(+)
0-10%
10-20%
20-35%
35-50%

ABBREVIATION
f-fine gr-gray
m-medium br-brown
c-coarse blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	**TASK 3**	**BORING NO.** B-13
CLIENT **NYSEG**		PROJECT NO. 4945-03
CONTRACTOR **NORTH STAR DRILLING CO.**	DATE STARTED 11-10-87	COMPLTD. 11-18-87
METHOD H.S.A., CASING, CORING	CASING SIZE 4" I.D.	PID TIP #1
GROUND EL 98.6 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED 30'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87
SCREEN 10.8 (FT)	RISER 44.7 (FT)	MATERIAL PVC/SS TF

PROTECTION LEVEL D
TOTAL DEPTH 55.5'
▽ BELOW GROUND 15.67' (11-20-87)
ID 2"
PAGE 1 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
0	BKG											
5												
10												
15		S-1		.6		10	GRAVELLY SILTY SAND (FILL) BROWN, WET, WITH VISIBLE COAL TAR SHEEN & ODOR		SM	27 30 50/.3		
20		S-2		1.2		50	SILTY SAND TAN, WET, TR. GRAVEL, W/ OBVIOUS COAL TAR CONTAMINATION			3 3 3 4		
25		S-3		2.0		22	23' GRAVELLY SILTY SAND BRN. TO GRAY BRN C. SAND TR. GRAVEL & SILT OVER WELL SORTED F. SAND, OVER WEATHERED ROCK,		SM/GM	2 2 2 5		
		S-4		1.0		10	25.5' BEDROCK LITTLE SLT, SAT., CONTAM.			4 50/.2		
30		R-1		97 %			SHALE BLACK, UNWEATHERED, HARD, THINLY LAMINATED					
35												

PROPORTION
trace (tr)
little (li)
some (so)
and

(-)AMOUNT(+)
0-10%
10-20%
20-35%
35-50%

ABBREVIATION
f-fine gr-gray
m-medium br-brown
c-coarse blk-black

BKG = BACKGROUND

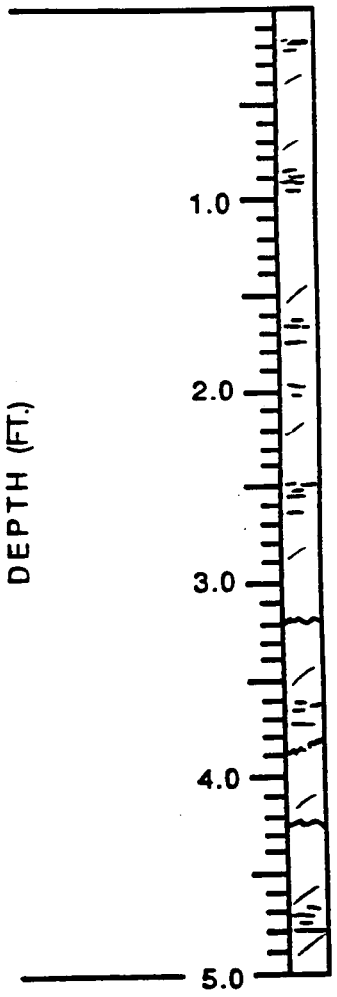
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-17-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 25 TO 35.5
CORE LENGTH (FT.): 10	CORE RECOVERY: 9.7 (FT.) 97 (%)	RQD: 95 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK, UNWEATHERED, HARD, THINLY LAMINATED,

BEDDING ∠'S FROM HORIZONTAL

DEPTH	∠
26'	45-50°
28'	10°
30'	15°
32'	15°
34'	15°

AT : 33.4', 34', 31.7' HAVE V. SMALL JOINTING, HEALED.

VISUAL IDENTIFICATION
ROCK CORES

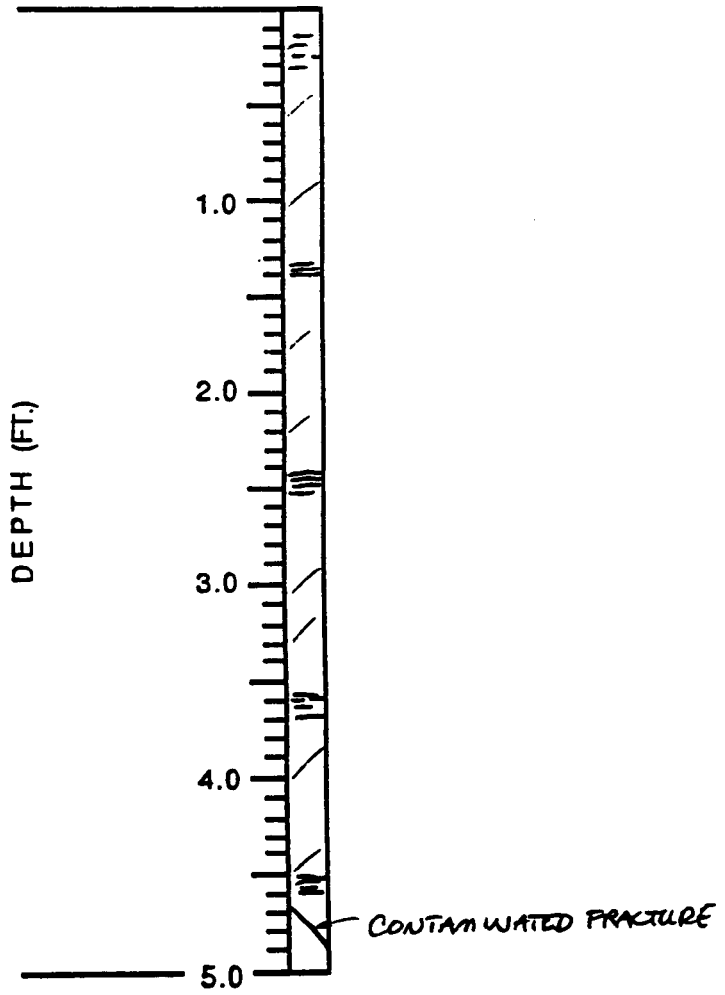
SHEET 3 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-18-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 45 TO 55.5
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.) 100(%)	RQD: 98 (%)	ROCK QUALITY : EXCELLENT

ROCK DESCRIPTION AND IDENTIFICATION

SHALE FRESH, UNWEATHERED, BLACK TO BLACKISH GRAY W/ THIN BEDDING ON MM SCALE

BEDDING AT 20° TO 25° FROM HORIZONTAL



55' - FRACTURE (ZONE) W/ GRAVEL SIZE SHALE FRAGMENTS & CALCITE FRAGMENTS HAS VISIBLE COAL TAR SMELL & SHEEN ON FRACTURE FACES (& RETURN WATER ALS.

55.3' - 2 HEALED FRACTURES @ 62°

55.5' - BEDDING OF 20° TO HORIZONTAL W/ FRACTURE @ 62° FROM HORIZONTAL

MECHANICVILLE	TASK 3		BORING NO. B-14
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-9-87	COMPLTD. 11-19-87
METHOD H.S.A. & CORING	CASING SIZE 4"ID	PID TIP #1	PROTECTION LEVEL D
GROUND EL 98.7 Rel.	SOIL DRILLED 23.5'	ROCK DRILLED 31.5'	TOTAL DEPTH 55'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN 11 (FT)	RISER 30 (FT)	MATERIAL PVC/SS/TF	ID 2" PAGE 2 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD% 20 40 60 80 100	WELL DATA	EL. (FT)
35	BKG						SHALE					
		R-2		97 %			SOME DRILLERS BREAKS IN AN OTHERWISE FRESH, UNWEATHERED BLACK, THINLY LAMINATED BLACK SHALE					
40												
		R-3		100 %								
45												
		R-4		100 %							CUTTINGS & SAND	
50												
55							BOB @ 55'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

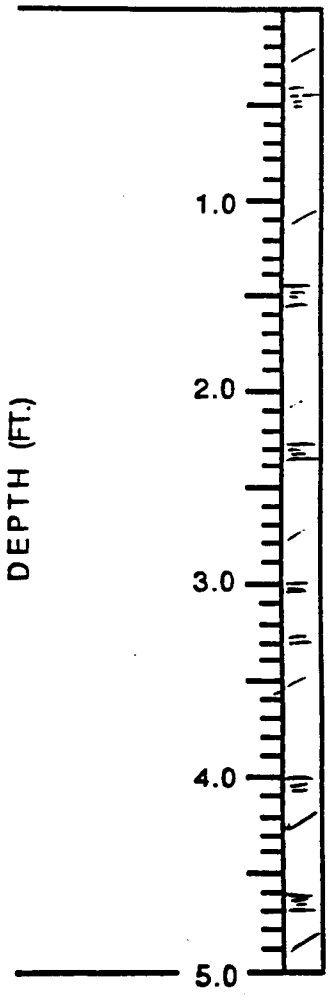
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 25 TO 35
CORE LENGTH (FT.): 10	CORE RECOVERY: 9.5 (FT.) 95 (%)	RQD: 83 (%)	ROCK QUALITY: GOOD



ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK THINLY LAMINATED, HARD, FRESH, UNWEATHERED

27.7' - 28.4' } MICRO FRACTURES THAT
31.4' - 32.4' } RETAIN WATER AS CORE DRIES

FROM 28' TO 35', NUMEROUS BREAKS - MOSTLY PARALLEL TO BEDDING

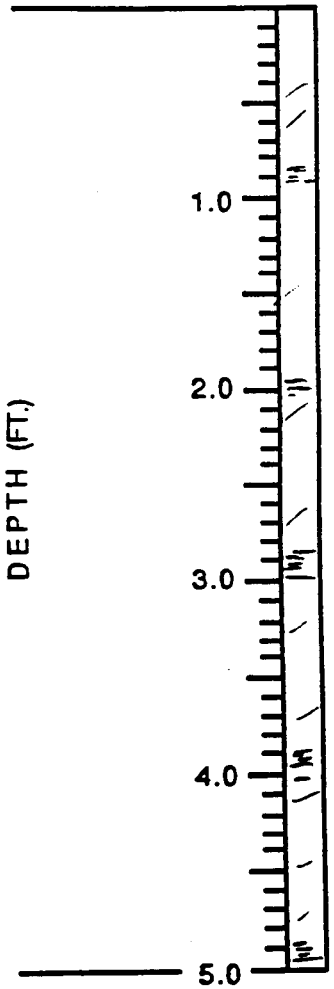
AT 33.8', HAVE A SET OF RANDOMLY ORIENTATED JOINTS; DURING DRILLING, THE RETURN WATER FROM THIS ZONE SHOWED A SHEEN; CORE GIVE NO TIP READINGS

BEDDING	DEPTHS	ANGLES
	26'	25°
	31'	35°
	34'	20°

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 35 TO 42
CORE LENGTH (FT.): 7	CORE RECOVERY: 6.8 (FT.) 97 (%)	RQD: 91 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

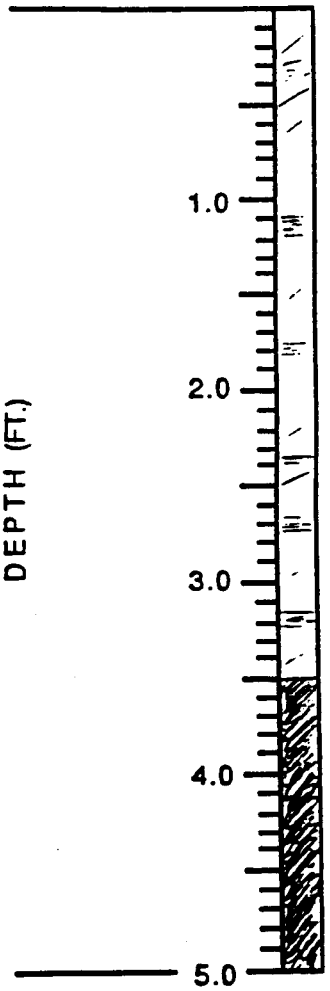
SHALE AS ABOVE

38.7' to 41' HIGH ANGLE FRACTURES 80° FROM HORIZONTAL - REHEALED & LINED W/ CALCITE - NO APPARENT WEATHERING - BROKE DUE TO DRILLING ACTION

VISUAL IDENTIFICATION
ROCK CORES

SHEET 3 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 42 TO 45
CORE LENGTH (FT.): 3	CORE RECOVERY: 3 (FT.)/100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE

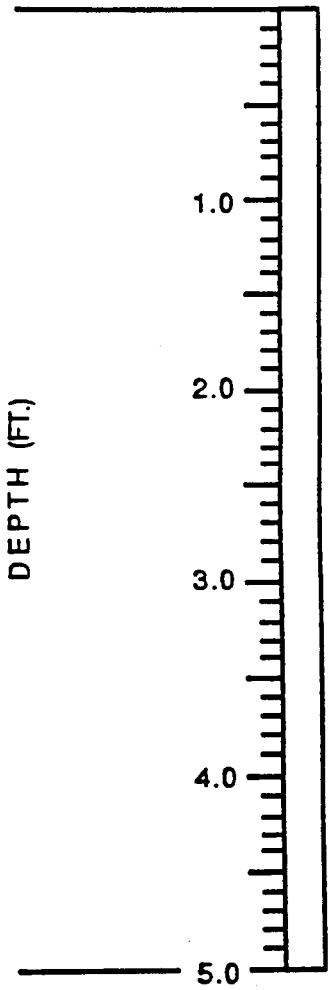
BEDDING	DEPTHS	ANGLES
	36'	20°
	40'	15°
	42'	15°

VISUAL IDENTIFICATION
ROCK CORES

SHEET 4 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-4	CORE DIA. (IN.): 2	DEPTH (FT.): 45 TO 55
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.) 100 (%)	RQD: 98 (%)	ROCK QUALITY : EXCELLENT

ROCK DESCRIPTION AND IDENTIFICATION

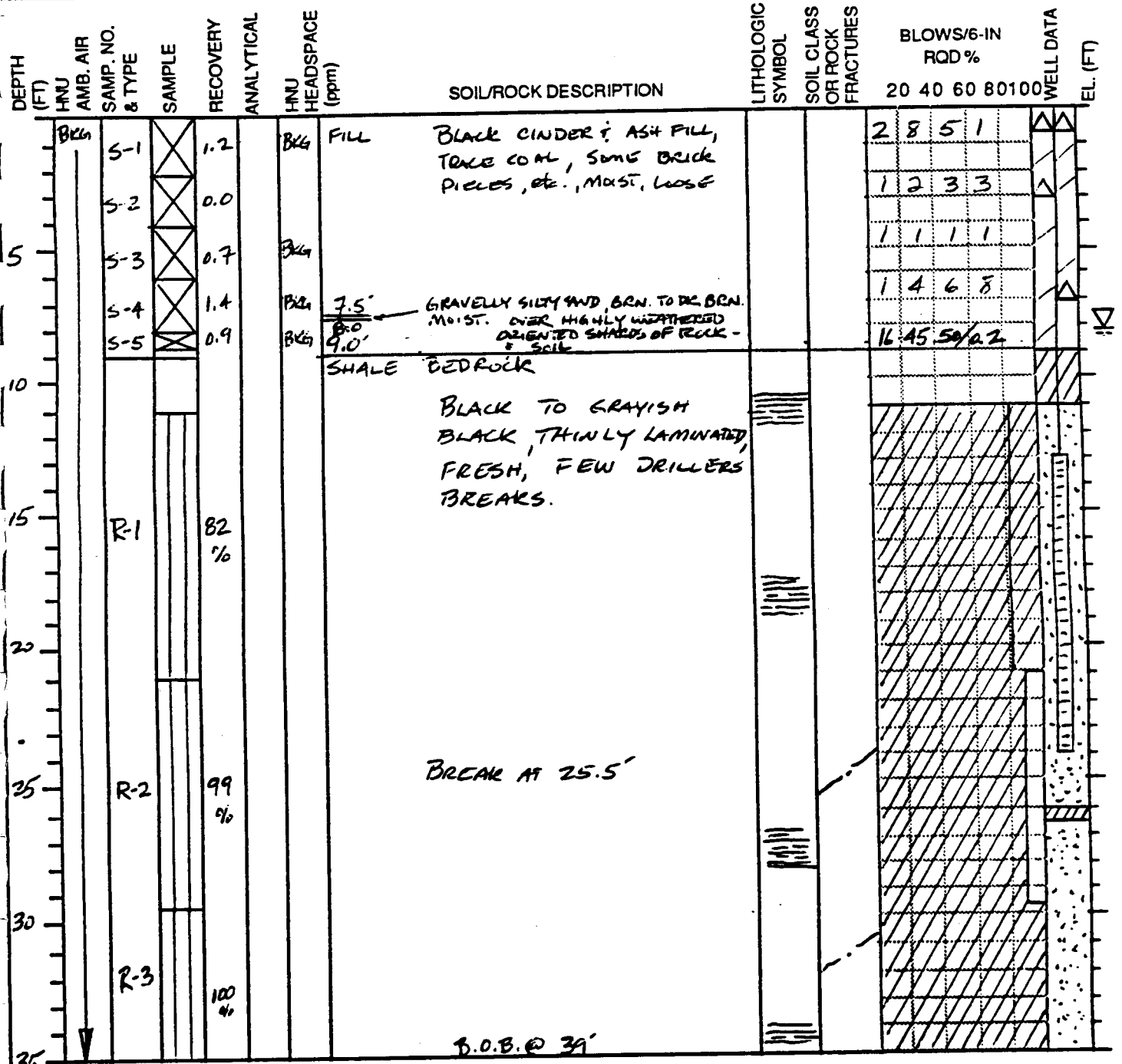


SHALE AS ABOVE
COMPETENT, FRESH, NO WEATHERING
HARD

SOME DRILLERS BREAKS

MECHANICVILLE	TASK 3		BORING NO. B-15
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-13-87	COMPLTD. 11-17-87
METHOD H.S.A. & CORING	CASING SIZE 4" I.D.	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 88.5 Rel.	SOIL DRILLED 8.7'	ROCK DRILLED 30.3'	TOTAL DEPTH 39'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 8.19' (11-20-87)
SCREEN 11 (FT)	RISER 13 (FT)	MATERIAL PVC (SS) TF	ID 2"

PAGE 1 OF 1



PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

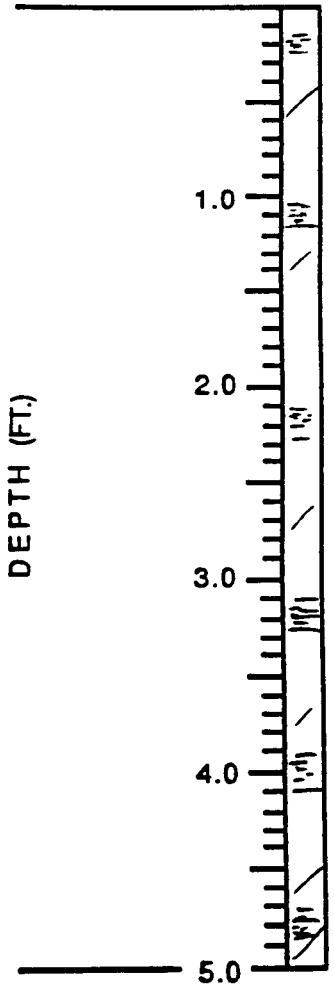
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CM 12/29/87
BORING NO.: B-15	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 11 TO 21
CORE LENGTH (FT.): 10	CORE RECOVERY: 10 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



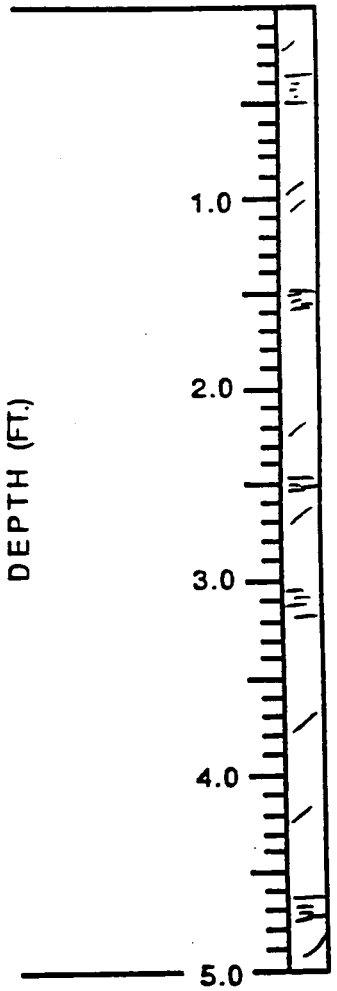
ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK TO GRAYISH BLACK, THINLY LAMINATED, FRESH, BEDDING AT 50° TO HORIZONTAL, HARD CALCITE LAYERS IN MM SCALE PARALLEL TO BEDDING. A FEW DRILLERS BREAKS.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CN 12/29/87
BORING NO.: B-15	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 21 TO 29.5
CORE LENGTH (FT.): 8.5	CORE RECOVERY : 8.4 (FT.) 99 (%)	RQD: 94 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

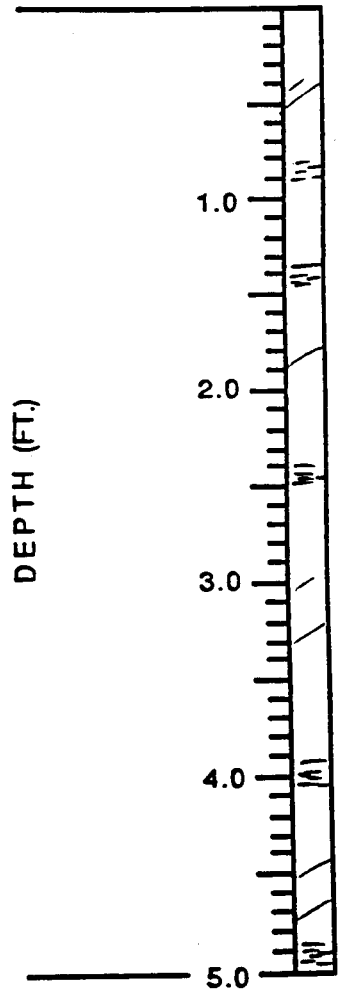
SHALE AS ABOVE; SOME DISSEMINATED PYRITE PRODUCED H_2S SMELL WHILE DRILLING

25.5' - NATURAL BREAK @ 40° FROM HORIZONTAL - IN REHEALED FRACTURE ZONE - SOME SERICITE HERE.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 3 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CM 12/29/87
BORING NO.: B-15	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 29.5 TO 39
CORE LENGTH (FT.): 9.5	CORE RECOVERY: 9.5 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE

BEDDING DEPTHS	∠ FROM HORIZ.
30'	45°
34'	40°
37'	35°
39.5'	25°

AT 31.8', 35.6, & 36.4' HAVE FRACTURES BUT THEY ARE FRESH & UNWEATHERED

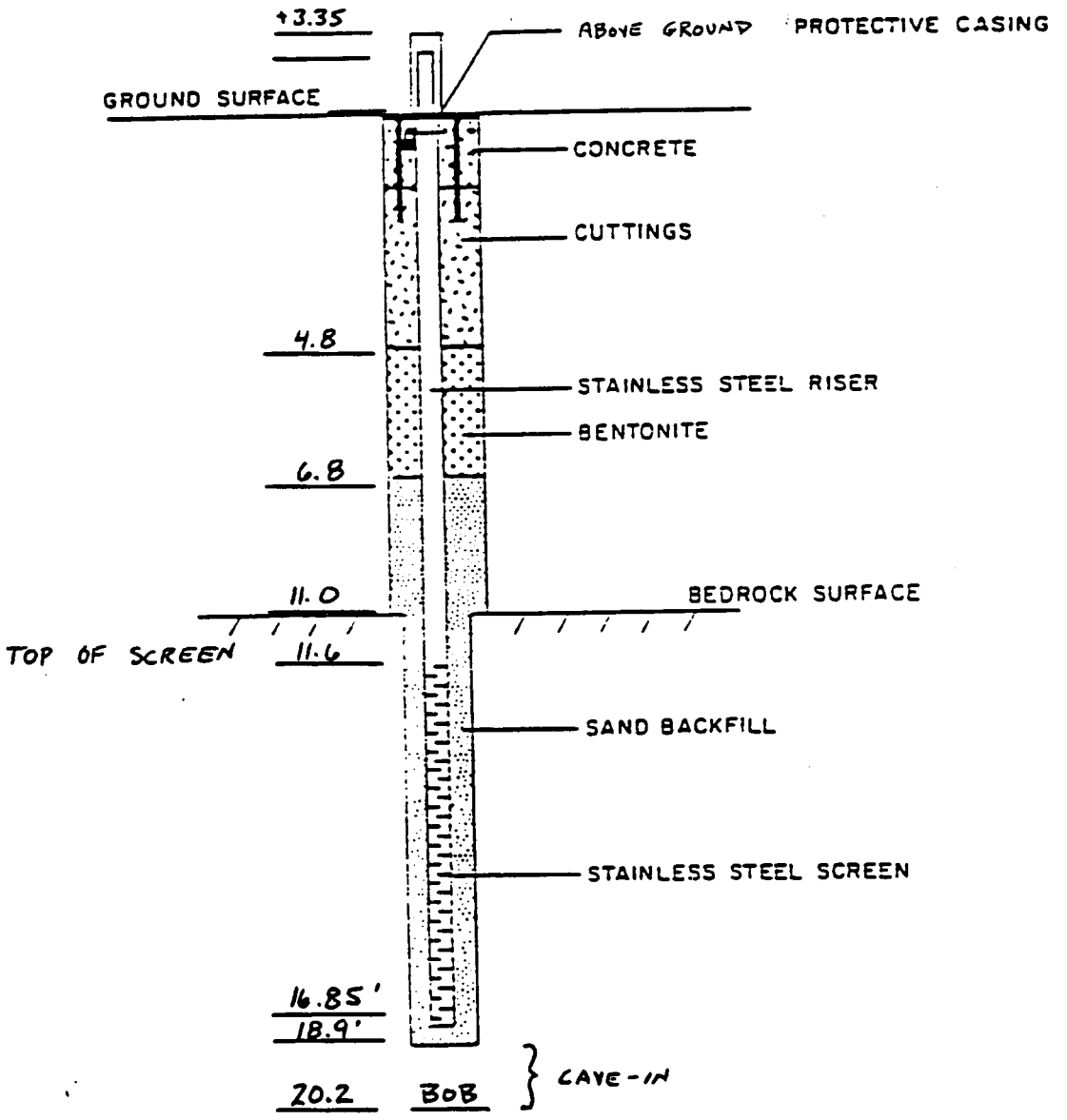
Appendix B-2

Monitoring Well Installation Diagrams

MONITORING WELL INSTALLATION DIAGRAM

ROJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-1
ILLED BY L. ESPY S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
E . DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

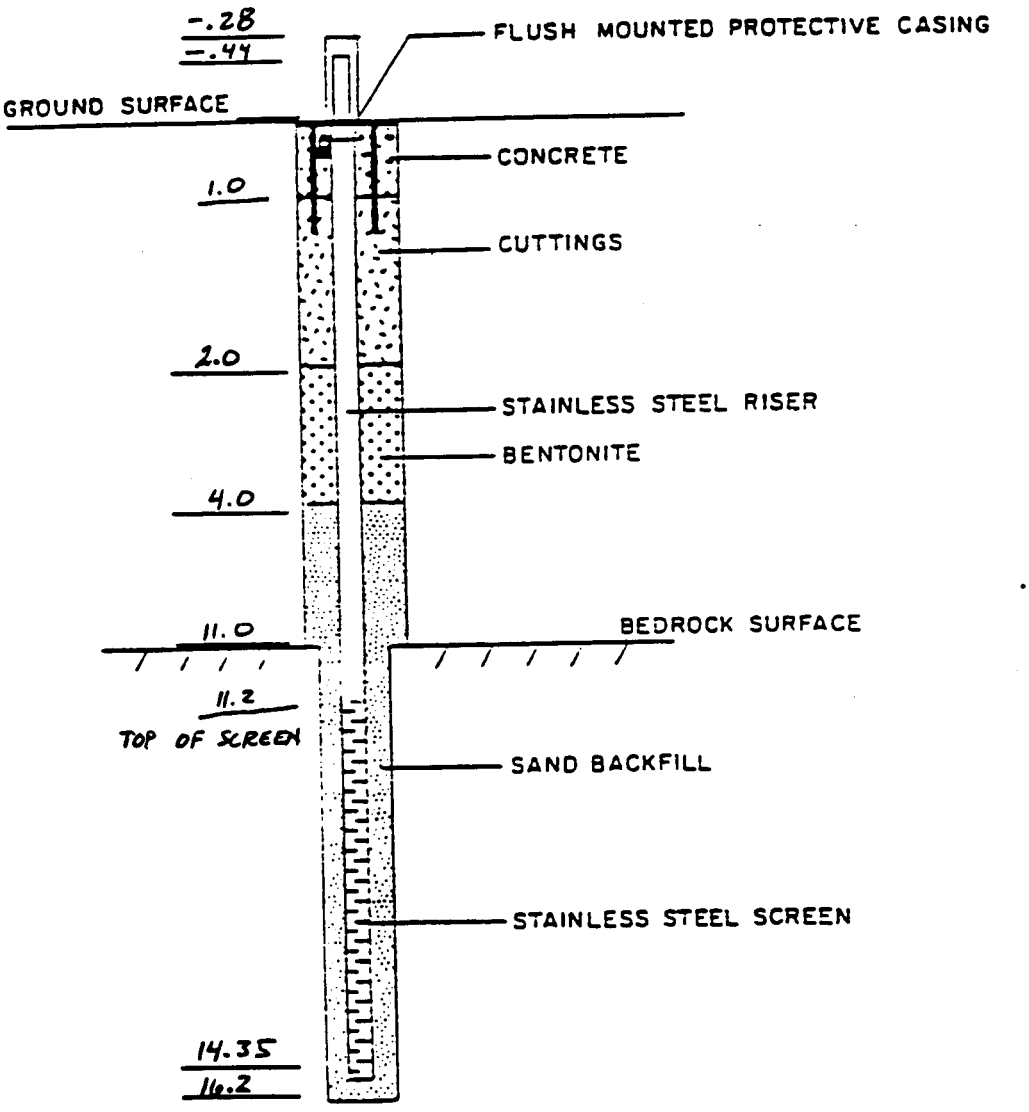
L , FT. DEPTH, FT.



MONITORING WELL INSTALLATION DIAGRAM

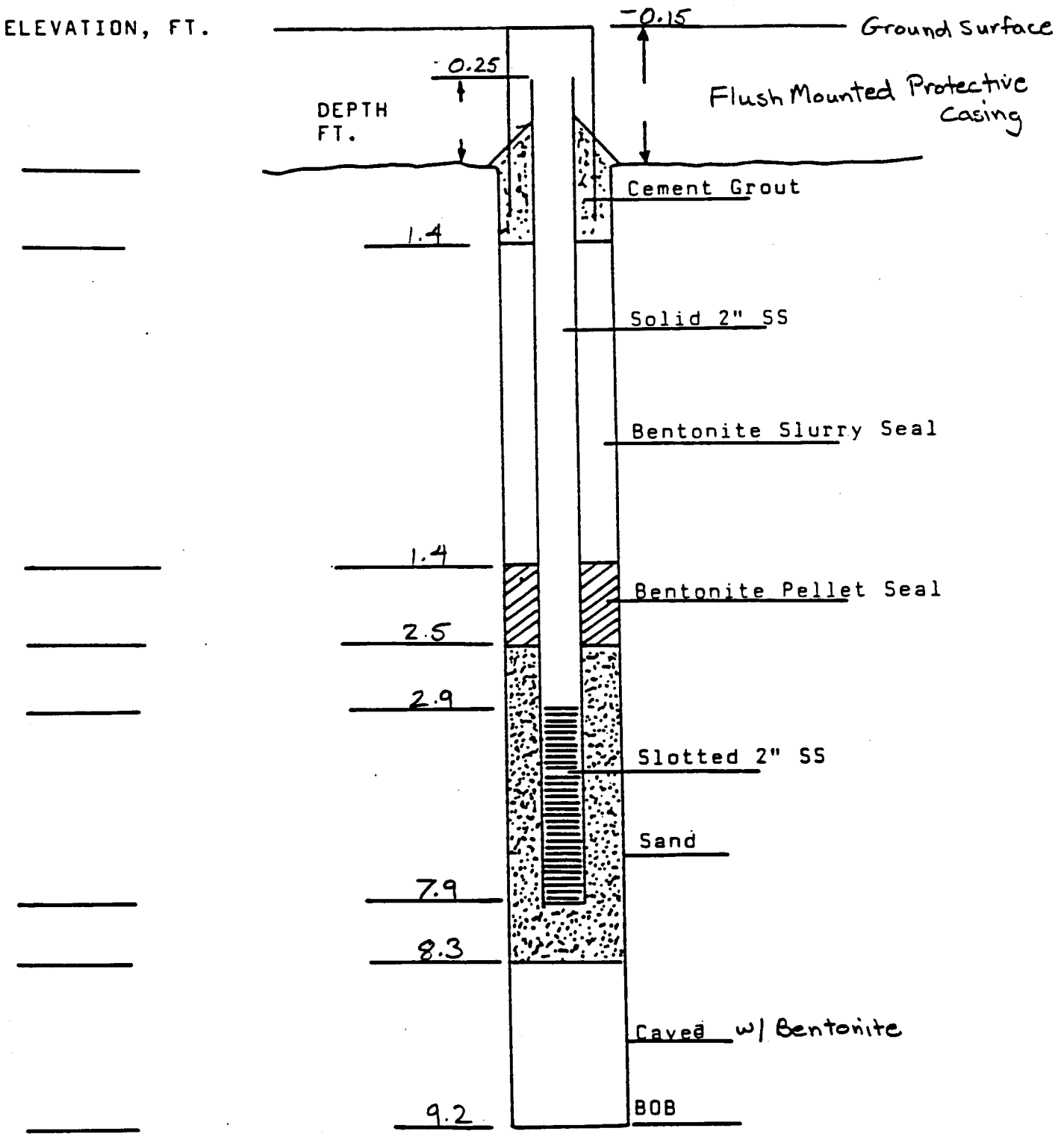
OJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-2
STALLED BY L. ESPY S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

EV., FT. DEPTH, FT.



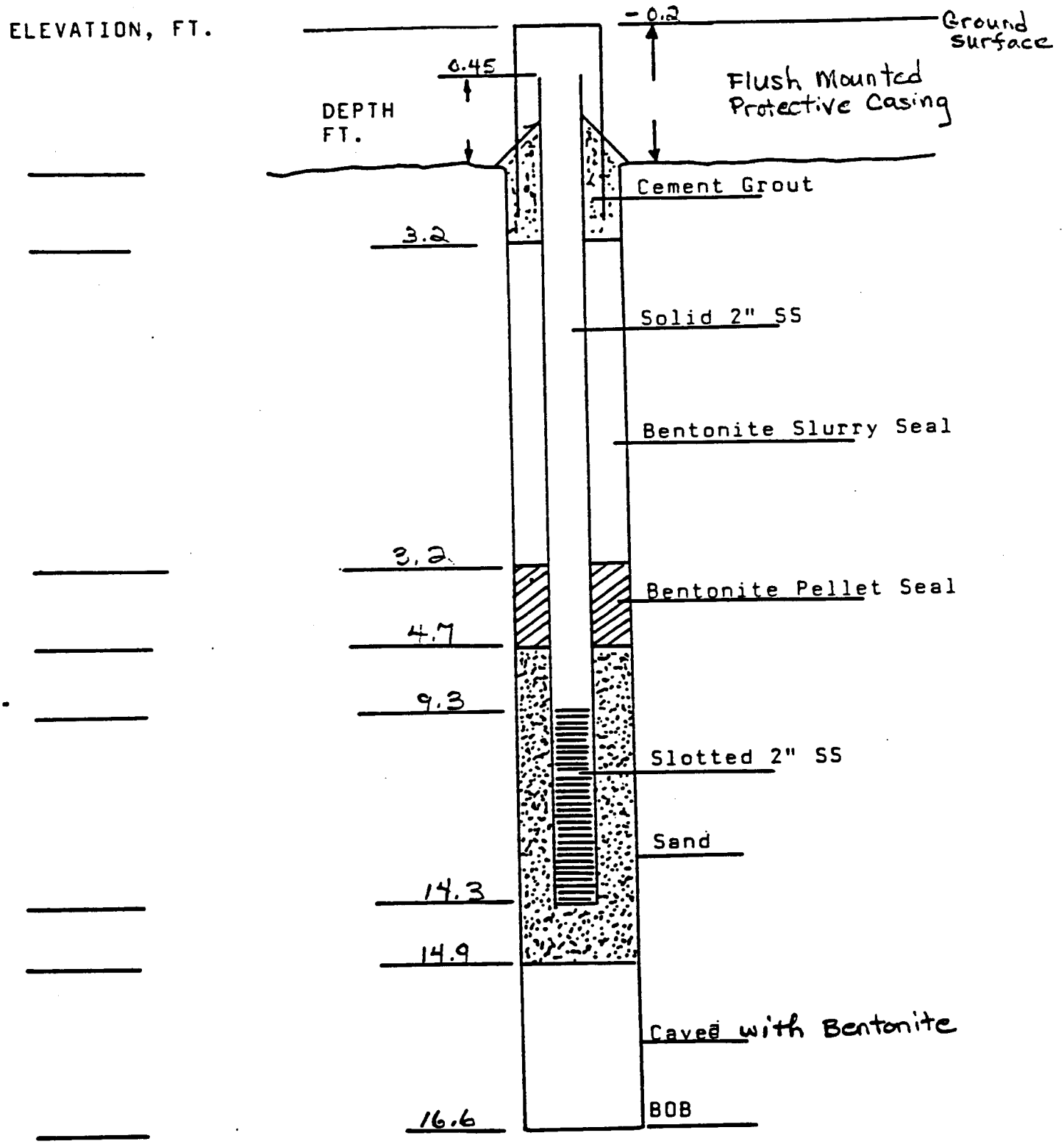
WELL INSTALLATION DETAILS

Project No. 4945-02	Project Name NYSEG MECHANICVILLE	Well No. MW-3
Installed By SNW/JWP	Date Installed 8/6/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material SS	Backfill Material #3 Jersey Sand



WELL INSTALLATION DETAILS

Project No. 4945-02	Project Name NYSEG Mechanicville	Well No. MW-4
Installed By SNW, LWE, ICM	Date Installed 7/30/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material Stainless Steel	Backfill Material #3 Jersey sand

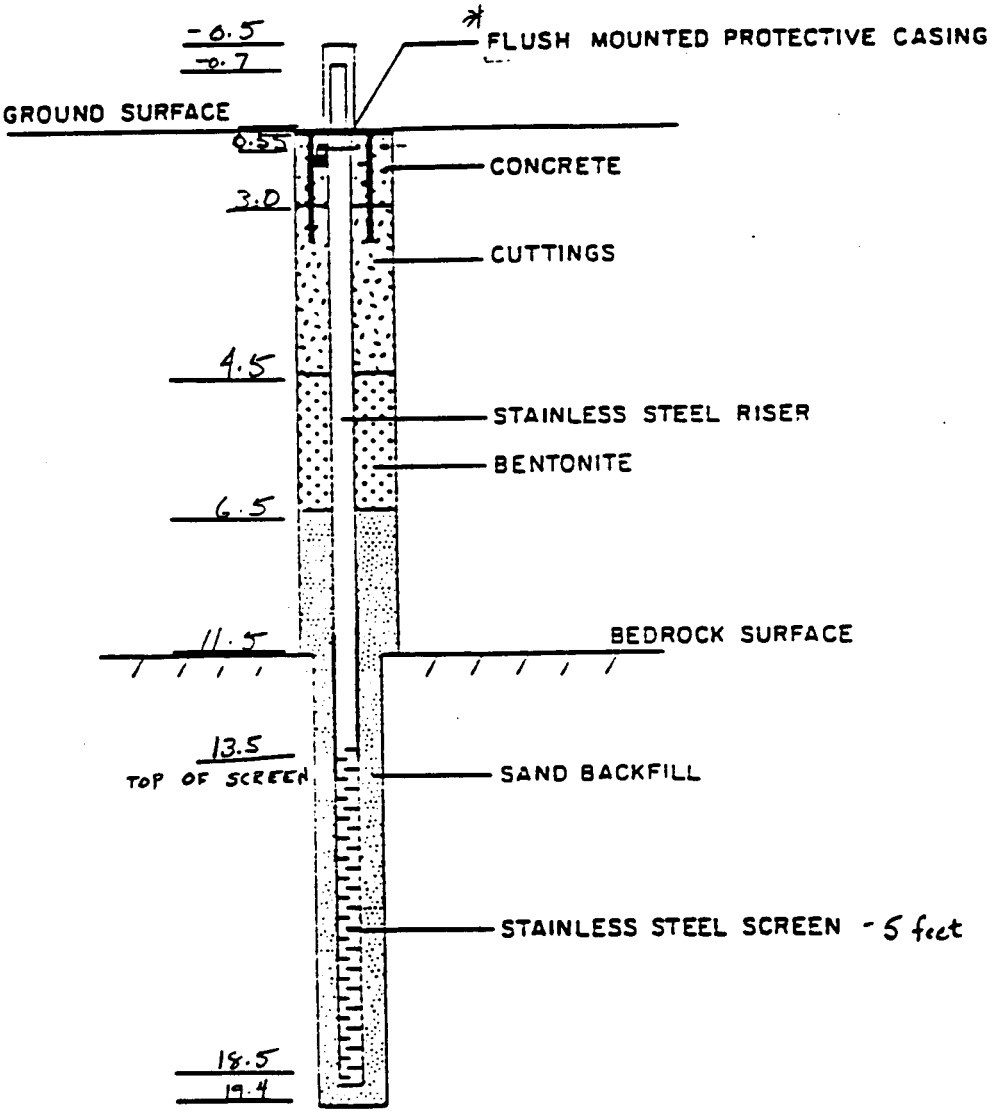


MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-5
INSTALLED BY	**DATE INSTALLED**	**BORING DIAMETER**
SNW; JWP	8/5/86	8.75"
WELL DIAMETER	**WELL MATERIAL**	**BACKFILL MATERIAL**
2.0"	SS	#3 Jersey Sand

ELEV., FT.

DEPTH, FT.



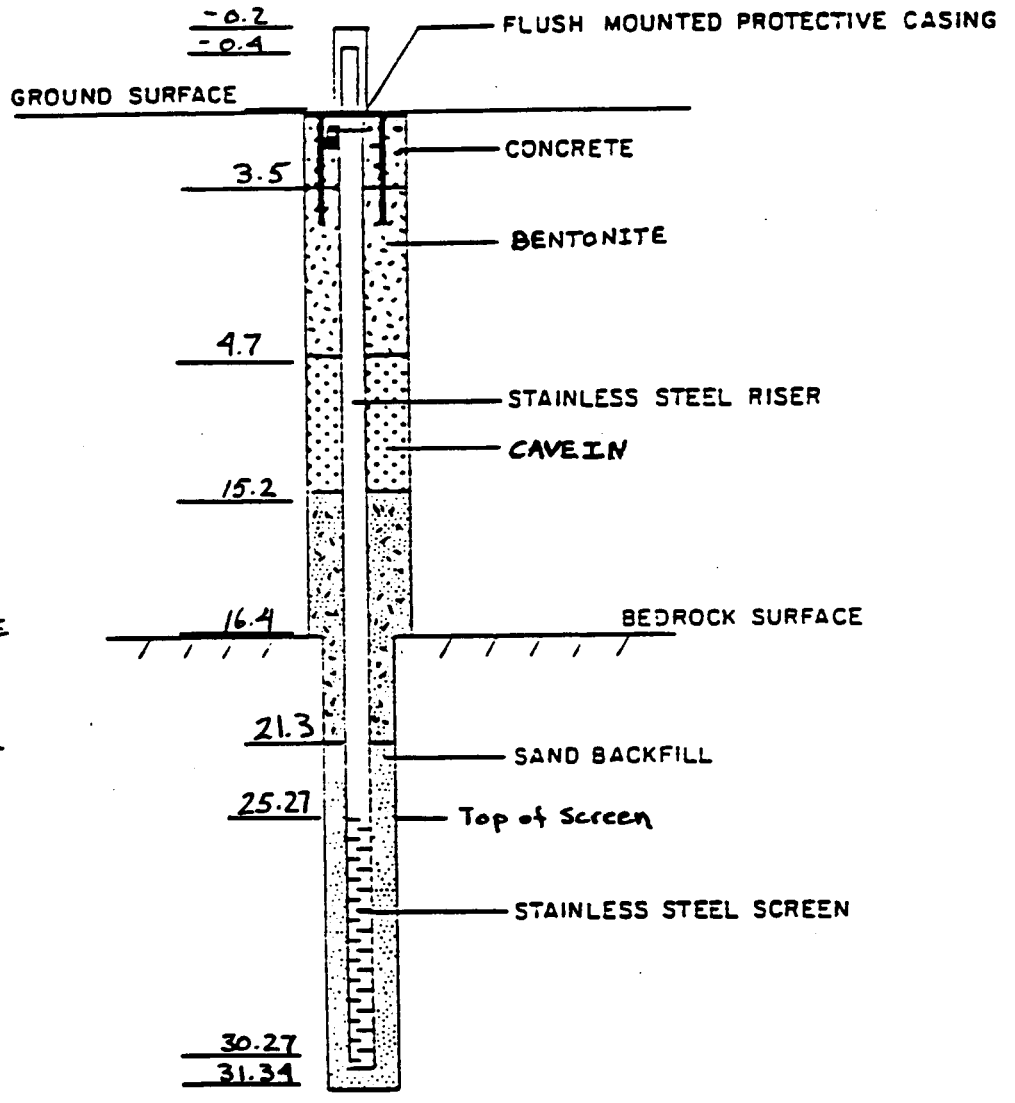
EC JORDANCO

MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-6
INSTALLED BY	**DATE INSTALLED**	**BORING DIAMETER**
SNW	7-29-86	4.0"
WELL DIAMETER	**WELL MATERIAL**	**BACKFILL MATERIAL**
2.0"	SS	#3 JERSEY SAND

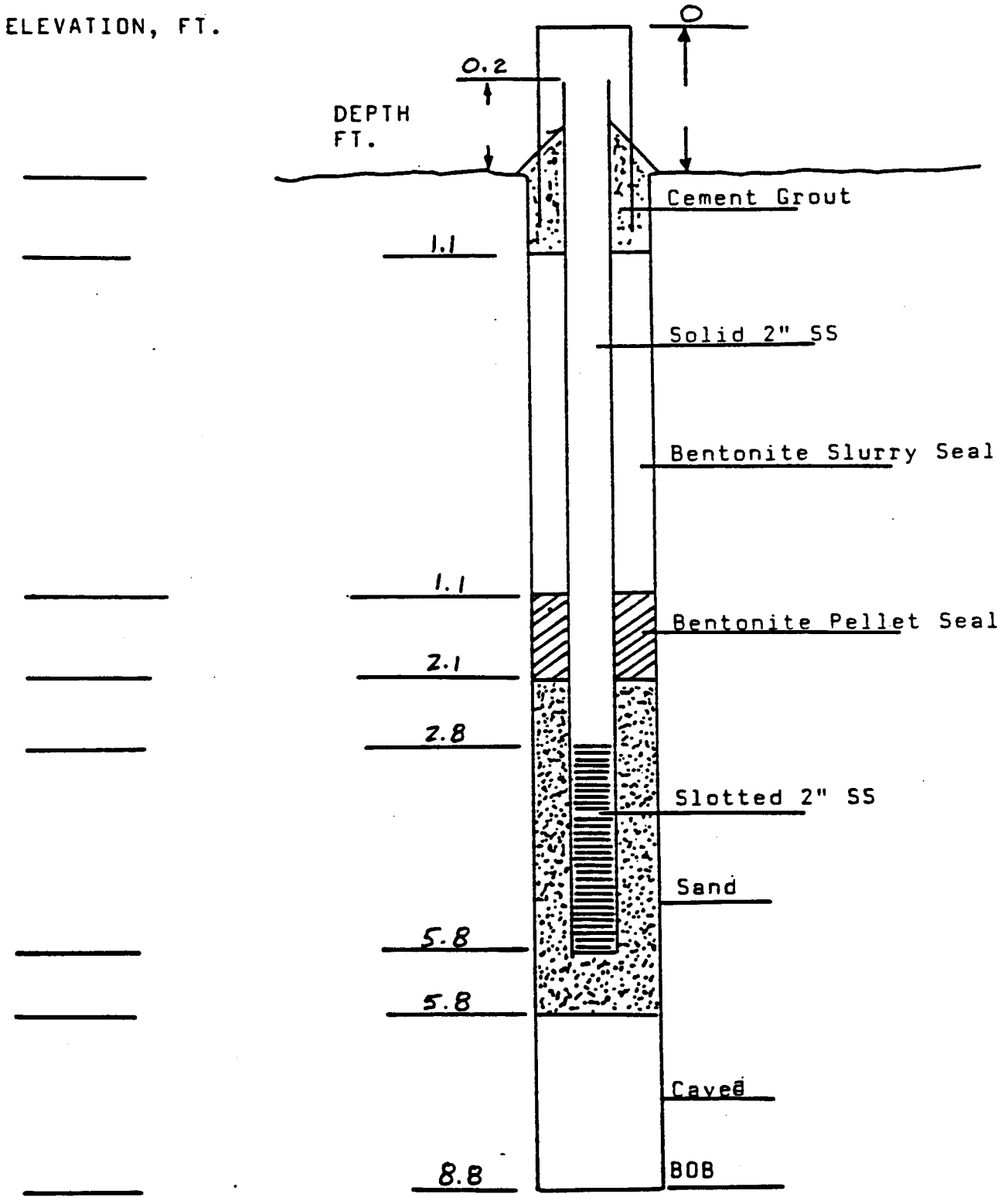
ELEV., FT.

DEPTH, FT.



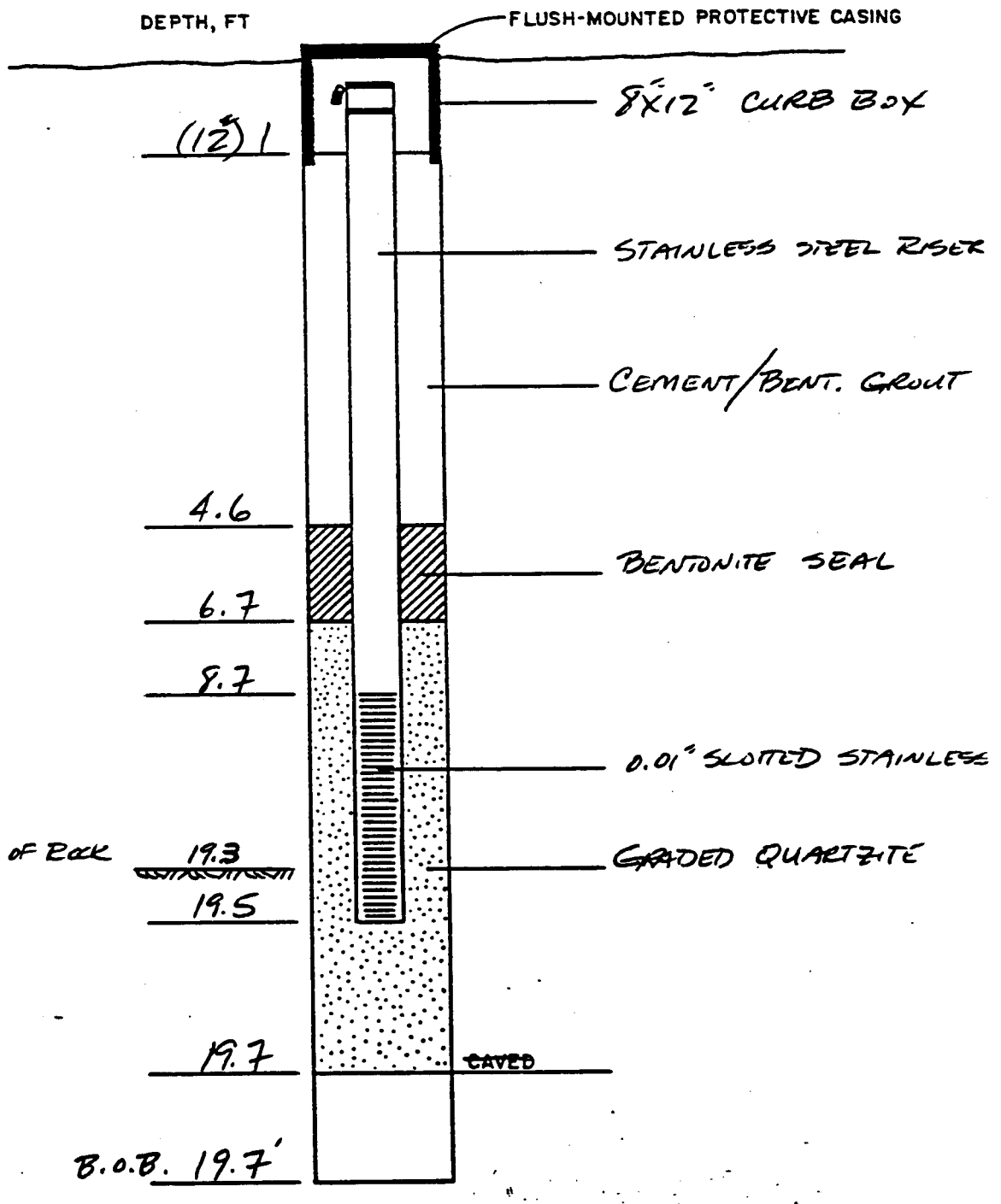
WELL INSTALLATION DETAILS

Project No. 4945 - 02	Project Name NYSEG MECHANICVILLE	Well No. Piezometer P-7
Installed By S. Wibby L. Espy	Date Installed 7-31-86	Boring Diameter 8.75"
Well Diameter 2.0"	Well Material PVC	Backfill Material #3 JERSEY SAND



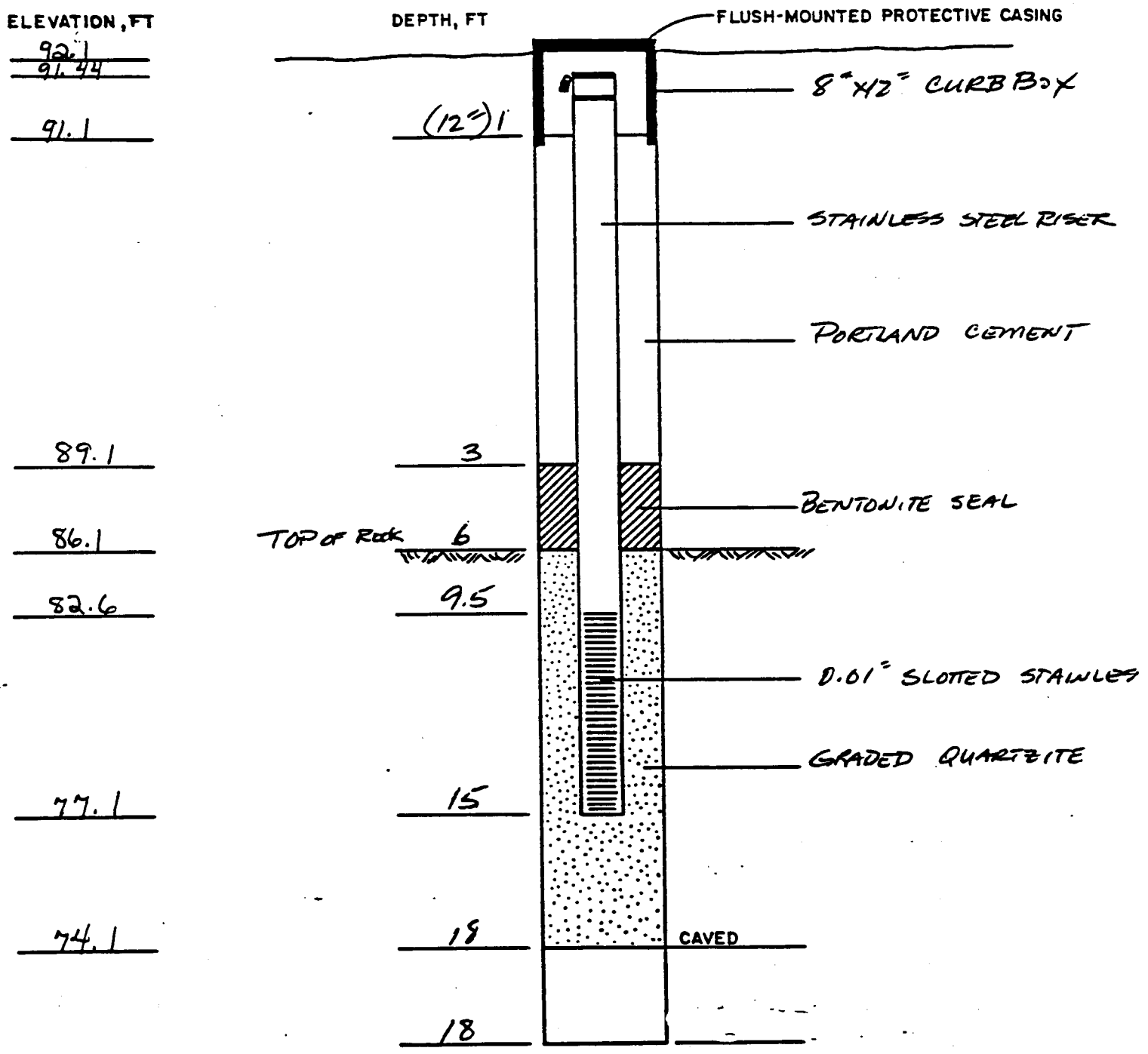
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-10
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-12-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCHEDULE 40 304 STAINLESS STEEL	BACKFILL MATERIAL #4 Q-Rok GRADED QUARTZITE



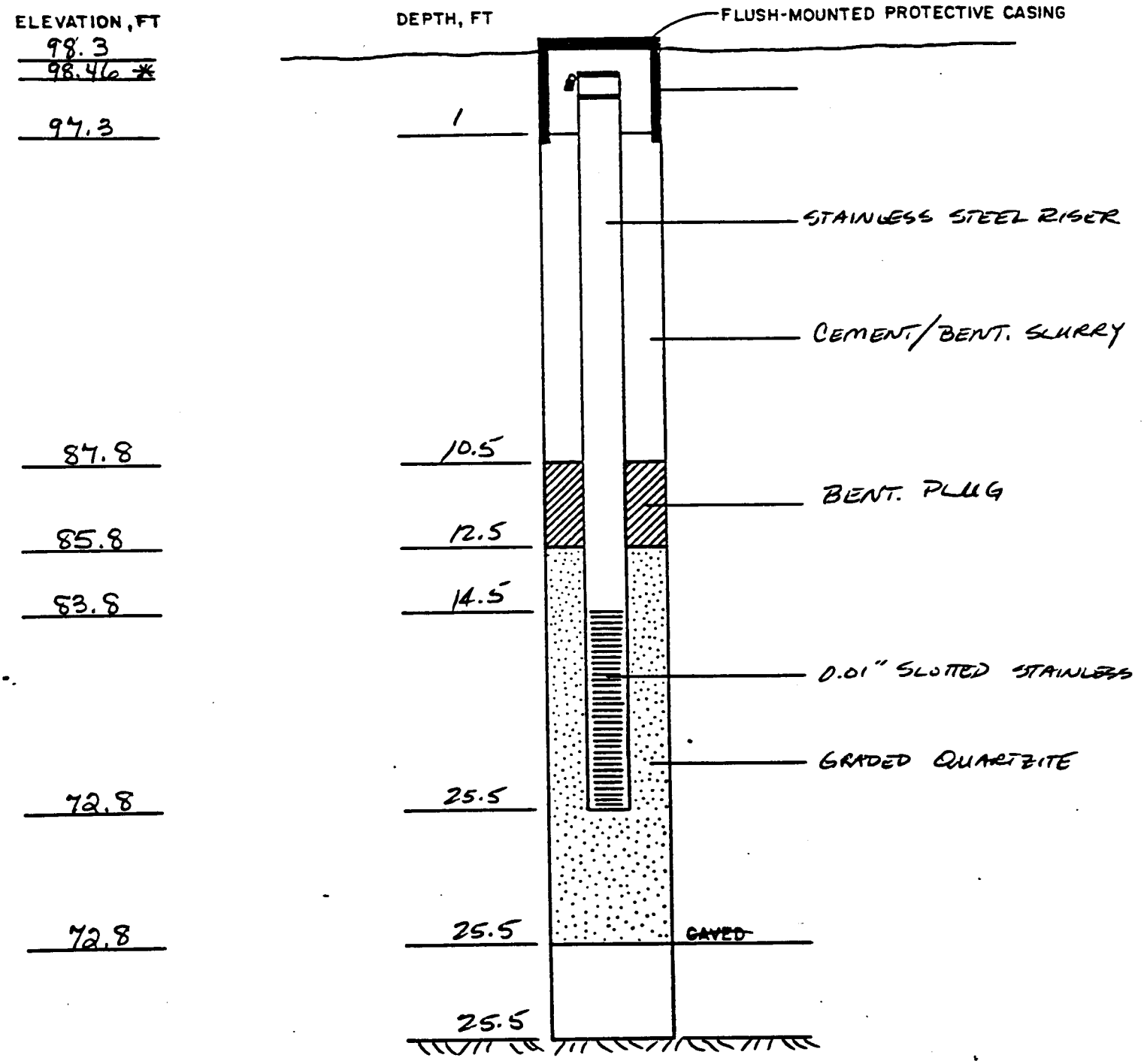
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-11
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-13-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCH. 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



WELL INSTALLATION DETAILS

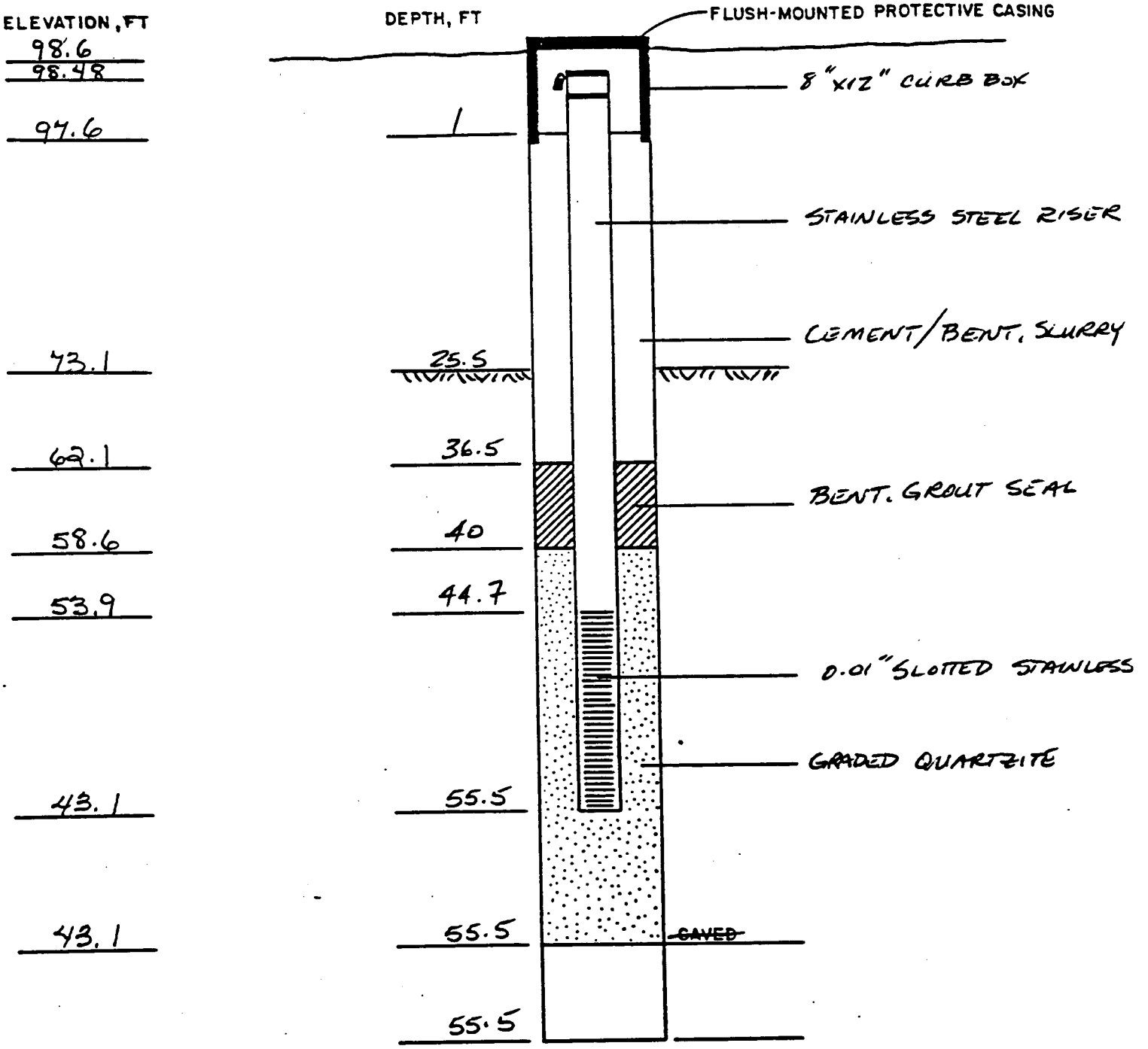
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-12
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-18-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



* Riser is slightly above the ground surface

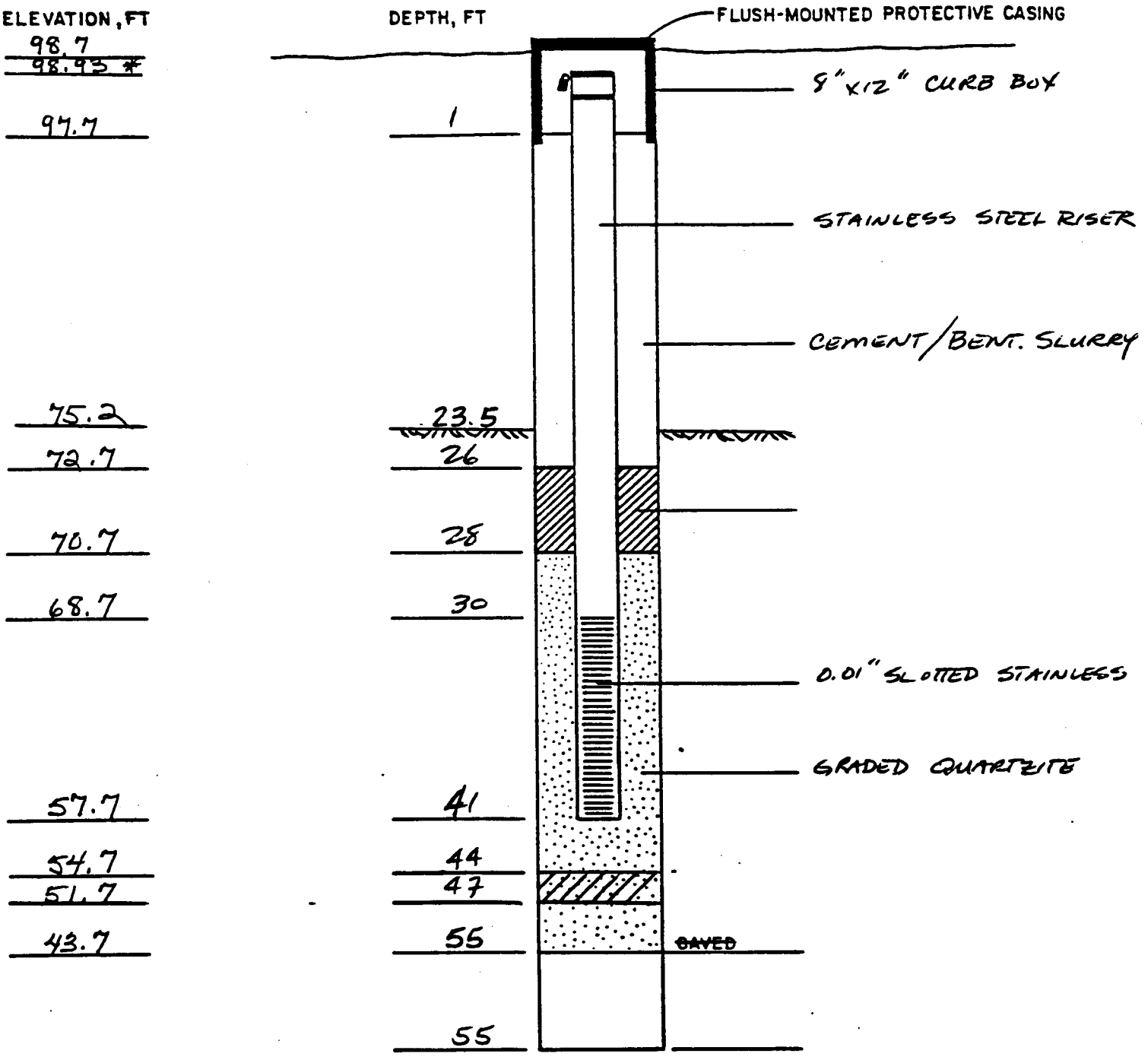
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-13
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-18-87	BORING DIAMETER 10" Soil 4" & 3" IN Rock
WELL DIAMETER 2"	WELL MATERIAL Sch. 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



WELL INSTALLATION DETAILS

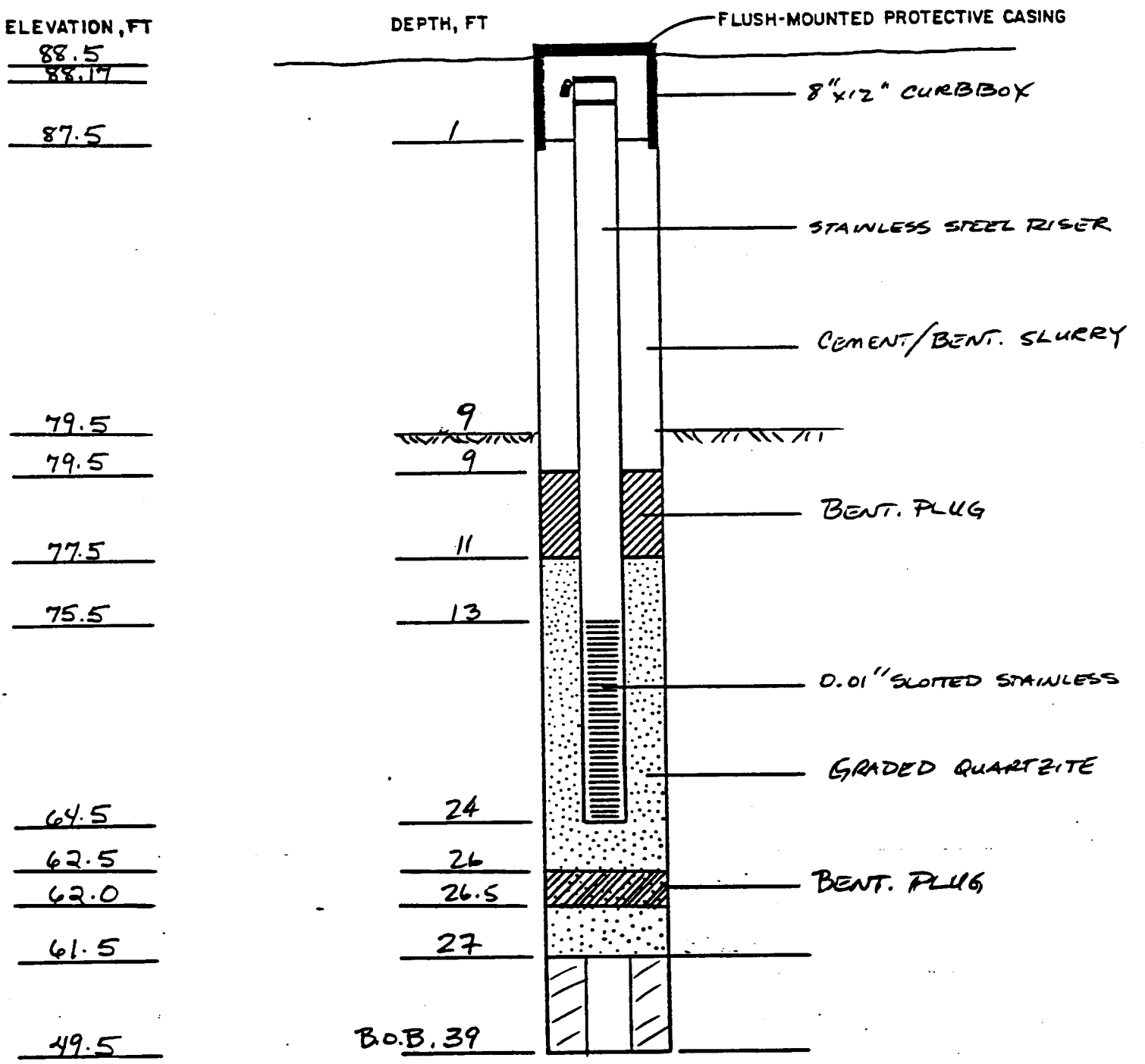
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-14
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-19-87	BORING DIAMETER 11" SOIL 4" & 3" IN ROCK
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



* Riser is slightly higher than the ground surface.

WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-15
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-17-87	BORING DIAMETER 10" Soil 4" & 3" in Rock
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



Appendix B-3

Permeability and Discharge Test Methods and Calculations

PERMEABILITY TEST METHODS

FALLING HEAD METHOD

In this method, an excess head is created in the monitoring well/piezometer by adding a volume of water which is then allowed to seep into the soil. Measurements are made of the water level in the monitoring well/piezometer over a given period of time. These measurements are continued until the rate of decrease or excess head becomes small.

RISING HEAD METHOD

In this method, water is removed from the monitoring well/piezometer and the rate of rise of the water level is observed until the rate of rise in water level becomes small.

PACKER TEST METHOD

This method is used to test the permeability of bedrock. Water is introduced under pressure to the borehole through tubing that discharges the water into a subsurface interval isolated by inflatable plugs. This allows water to seep only into the bedrock zone of interest. A flow meter was used to make measurements of the amount of water that the formation accepts.

PERMEABILITY DATA SHEET
EXAMPLE CALCULATION - FALLING HEAD TEST
MECHANICVILLE SITE

TYPE OF TEST: Falling head

Equation: $$K_h = \frac{(d^2)\ \ell n\ \frac{2mL}{D}}{8L\ (t_2 - t_1)} \times \ell n\ \frac{H_1}{H_2}$$ For uniform soil conditions

Test Data for MW-1:

m	=	Transformation Ratio = 1
L	=	Length of monitored zone = 12.1 feet = 368.8 cm
D	=	Diameter of borehole = 7.5 inches = 19.05 cm
d	=	Diameter of well pipe = 2 inches = 5.08 cm
t_1	=	Time when flow rate begins to stabilize = 50 seconds
H_1	=	Head at t_1 = 0.61 feet
t_2	=	Time when flow rate stabilization drops = 180 seconds
H_2	=	Head at t_2 = 0.03 feet

PERMEABILITY DATA SHEET
EXAMPLE CALCULATION - RISING HEAD TEST
MECHANICVILLE SITE

TYPE OF TEST: Rising head

Equation: $$K_h = \frac{(d^2)\ \ell n\ \frac{2mL}{D}}{8L\ (t_2 - t_1)} \times \ell n\ \frac{H_1}{H_2}$$ For uniform soil conditions

Test Data for MW-11:

m = Transformation Ratio = 1
L = Length of monitored zone = 5.5 feet = 167.64 cm
D = Diameter of borehole = 6 inches = 15.24 cm
d = Diameter of well pipe = 2 inches = 5.08 cm
t_1 = Time when flow rate begins to stabilize = 100 seconds
H_1 = Head at t_1 = 1.49 feet = 45.42 cm
t_2 = Time when flow rate stabilization drops = 390 seconds
H_2 = Head at t_2 = 0.61 feet = 18.59 cm

PERMEABILITY DATA SHEET
EXAMPLE CALCULATION - PACKER TEST
MECHANICVILLE SITE

TYPE OF TEST: Packer Test

Equation: $K_h = \frac{Q}{2\pi L H} \ell n \frac{L}{r}$ $L \geq 10r$

Test Data for MW-13:

Q = Constant rate of flow into the borehole = 7.4 gal/min = 481 cm^3/sec
L = Length of test section = 13 feet = 396.24 cm
H = Differential head on test section = 1,597.2 cm
r = Radius of the borehole = 2 inches = 5.08 cm

PERMEABILITY TEST RESULTS
MECHANICVILLE SITE

STRATA TESTED	APPROXIMATE DEPTH OF TEST INTERVAL[1]	TEST LOCATION	TYPE TEST	HYDRAULIC CONDUCTIVITY cm/sec	HYDRAULIC CONDUCTIVITY ft/day	REMARKS
Task 2 Wells						
Fill, Natural Soil, Weathered & Unweathered Rock	7'-19'	MW-1	In Situ	9.5×10^{-4}	2.7	Falling Head
Fill, Natural Soil, Weathered & Unweathered Rock	4'-16'	MW-2	In Situ	1.1×10^{-3}	3.1	Falling Head
Fill, Weathered Rock	2.5'-9'	MW-3	In Situ	1.6×10^{-4}	0.45	Falling Head
Fill, Weathered & Unweathered Rock	5'-16.5'	MW-4	In Situ	1.9×10^{-4}	0.54	Falling Head
Fill, Natural Soil, Weathered & Unweathered Rock	6.5'-19.5'	MW-5	In Situ	5.4×10^{-4}	1.5	Falling Head
Weathered & Unweathered Rock	21.5'-31.5'	MW-6	In Situ	7.5×10^{-5}	0.21	Falling Head
Unweathered Rock	25'-30'	MW-6	In Situ	1.8×10^{-4}	0.51	Packer Test (15 psi)
Unweathered Rock	25'-30'	MW-6	In Situ	2.0×10^{-4}	0.57	Packer Test (30 psi)
Task 3 Wells						
Natural Soil, Weathered Rock	7'-20'	MW-10	In Situ	2.2×10^{-5}	0.06	Rising Head
Unweathered Rock	6'-18'	MW-11	In Situ	2.0×10^{-4}	0.57	Rising Head
Natural Soil	12.5'-25.5'	MW-12	In Situ	4.0×10^{-4}	1.10	Rising Head
Unweathered Rock	40'-55.5'	MW-13	In Situ	3.0×10^{-4}	0.72	Rising Head
Unweathered Rock	28'-55'	MW-14	In Situ	2.0×10^{-4}	0.57	Rising Head

5.88.10T
0005.0.0

PERMEABILITY TEST RESULTS
MECHANICVILLE SITE
(continued)

STRATA TESTED	APPROXIMATE DEPTH OF TEST INTERVAL[1]	TEST LOCATION	TYPE TEST	HYDRAULIC CONDUCTIVITY cm/sec	HYDRAULIC CONDUCTIVITY ft/day	REMARKS
Unweathered Rock	11'-39'	MW-15	In Situ	1.0×10^{-4}	0.28	Rising Head
Unweathered Rock	32.5'-45.5'	MW-13	In Situ	5.0×10^{-4}	1.4	Packer Test (15 psi)
Unweathered Rock	32.5'-45.5'	MW-13	In Situ	9.0×10^{-4}	2.6	Packer Test (30 psi)
Unweathered Rock	27'-35'	MW-14	In Situ	9.0×10^{-4}	2.6	Packer Test (10 psi)
Unweathered Rock	27'-35'	MW-14	In Situ	4.0×10^{-4}	1.1	Packer Test (20 psi)
Unweathered Rock	35'-45'	MW-14	In Situ	2.0×10^{-4}	0.57	Packer Test (15 psi)
Unweathered Rock	35'-45'	MW-14	In Situ	2.0×10^{-4}	0.57	Packer Test (30 psi)
Unweathered Rock	13'-21'	MW-15	In Situ	4.0×10^{-4}	1.1	Packer Test (10 psi)
Unweathered Rock	13'-21'	MW-15	In Situ	4.0×10^{-4}	1.1	Packer Test (20 psi)
Unweathered Rock	21'-29.5'	MW-15	In Situ	1.0×10^{-4}	0.28	Packer Test (15 psi)
Unweathered Rock	21'-29.5'	MW-15	In Situ	1.0×10^{-4}	0.28	Packer Test (30 psi)
Unweathered Rock	29.5'-39'	MW-15	In Situ	2.6×10^{-5}	0.07	Packer Test (15 psi)
Unweathered Rock	29.5'-39'	MW-15	In Situ	1.4×10^{-5}	0.04	Packer Test (30 psi)

[1] For rising and falling head tests, interval defined from bottom of borehole to bottom of well seal; zone of influence may be larger or smaller due to hydraulic characteristics of formation.

EXAMPLE CALCULATION
SITE GROUNDWATER DISCHARGE TO THE ANTHONY KILL
MECHANICVILLE SITE

$Q = KiA$

For Mechanicville Site:

Q = groundwater discharge, ft^3/day

K = geometric mean hydraulic conductivity = 0.28 ft/day (silty shale) and 1.1 ft/day (shallow bedrock)

i = groundwater gradient = 0.06 ft/ft

A = aquifer cross sectional area = 200 ft^2 (site length = 200 ft; saturated aquifer thickness = 10 ft)

Q (silty shale) = 33.6 ft^3/day or 0.0004 cfs

Q (shallow bedrock) = 132 ft^3/day or 0.002 cfs

Calculated site groundwater discharge to the Anthony Kill is less than 0.003 cfs.

Appendix C

C-1 Groundwater Level Data

C-2 Monitoring Well Sampling Procedures

Appendix C-1

Groundwater Level Data

GROUNDWATER LEVEL DATA
MECHANICVILLE SITE

LOCATION	GROUND ELEVATION (Ft.-Relative[1])	RISER ELEVATION (Ft.-Relative[1])	WATER ELEVATION (Ft. Relative[1]) 8/5/86	9/9/86	12/2/86	3/10/87	6/2/87	12/22/87	3/29/88
MW-1	95.9	98.6	87.3	87.3	87.6	88.4	87.4	87.5	87.4
MW-2	91.6	91.3	88.1	88.9	89.0	89.0	88.4	88.8	88.8
MW-3	87.4	87.3	NA	84.6	85.1	85.7	83.6	85.1	85.6
MW-4	91.0	90.6	86.8	87.1	88.1	88.1	87.6	NM[2]	87.9
MW-5	88.4	87.9	78.4	78.2	78.9	NM	79.9	NM	79.1
MW-6	91.0	90.7	86.8	86.9	86.9	87.7	87.2	87.7	87.6
P-1	92.5	95.0	85.7	85.5	86.7	86.40	85.5	85.8	86.2
P-2	95.2	98.8	87.1	86.9	87.6	89.70	86.9	87.2	87.4
P-3	91.8	91.8	88.6	89.7	91.8	89.30	88.5	NM	89.0
MW-10	96.7	96.5						85.9	85.4
MW-11	92.1	91.4						87.5	87.6
MW-12	98.3	98.5						84.7	84.4
MW-13	98.6	98.5						82.6	82.8
MW-14	98.7	98.9						82.5	82.4
MW-15	88.5	88.2						80.3	81.0
Bridge[3]		86.3						77.7	78.8

NOTES:

[1] Elevation is relative to the assumed datum used to prepare the survey (see Appendix A-7).
[2] NM = Not measured due to well inaccessibility or heavy contamination.
[3] Surface water elevation of Anthony Kill at bridge.

Appendix C-2

Monitoring Well Sampling Procedures

C. PRESSURE FILTRATION

EQUIPMENT

1. Pressure filter apparatus consisting of 1 liter barrel filter, filter holder and pressure hose connectors
2. Source of pressurized gas, i.e., tank of nitrogen, argon, etc.
3. 147 mm filter papers, 0.45 µm membrane filter
4. Reagent rinse water (ASTM Type II or better)
5. 20% v/v nitric acid rinse solution

PROCEDURES

1. If filter barrel has sample valve, assemble filter assembly with 0.45 µm membrane filter and attach pressure hose.
2. If filter barrel does not have a sample valve, assemble filter paper on filter holder.
3. Turn barrel upside down and pour sample into barrel.
4. Place filter holder and filter onto barrel assembly, making sure to align O-ring for a positive seal.
5. Attach swing-away bolts and tighten hand-tight.
6. Turn over filter assembly and attach pressure hose assembly.
7. Slowly turn on pressurized gas and increase pressure regulator to a maximum of 20 psi.
8. Collect filtrate from bottom of barrel assembly.
9. Rinse barrel and filter holder assembly between samples with three rinses of reagent water. The rinse sequence when elemental parameters will be determined is: reagent water - 20% v/v nitric acid - reagent water.

MONITORING OF GROUNDWATER WELLS

1. Check the well for proper identification and location.

2. Measure and record the height of protective casing.

3. After unlocking the well and removing any well caps, measure and record the ambient and well-mouth organic vapor levels using the photoionization meter. If organic vapor levels at breathing height reach 5 ppm, the sampler shall utilize the appropriate safety equipment as described in the Health and Safety Plan.

4. Using the electronic water level meter, measure and record the static water level in the well to the nearest 0.01 foot. Measure also the depth to the well bottom from a constant reference point on the top of the well riser. Upon removing the water level wire, rinse it with laboratory-grade isopropanol or ethanol and then distilled water.

5. Calculate the volume of stagnant water in the well casing. Volume in liters equals 0.154 times the square of the inside diameter of the casing (in inches) times the depth of water (in feet).

SAMPLING OF GROUNDWATER MONITORING WELLS

Following the measurements and calculations described above, sampling will commence in the sequence below:

1. Lower the submersible pump or peristaltic pump intake into the well. For shallow groundwater situations, the intake of the suction tubing or of the submersible pump will be lowered to the top of the well screen and the well purged three to five times the calculated volume. Alternatives to this procedure may be necessary if one of the following conditions exist:

   a. If the well screen is very large, making pumping from the top impractical, the suction line or submersible pump should be lowered to the approximate mid-point of the screened portion of the well.

   b. If the well is situated in tight formations such as tills, clays or rock, the purging of the well should be performed from very near the bottom of the well screen. This will facilitate complete removal of standing well water.

2. Connect the instrumentation header to the pump discharge and begin flushing the well. Monitor the in situ parameters (pH, Eh, temperature, and specific conductivity) and measure the volume of groundwater being pumped. Alternately, in situ parameters may be monitored in a beaker filled from the pump discharge. Purging of the standing well water is considered complete when one of the following is achieved:

   a. at least three well volumes have been purged and in situ parameters stabilized, or

b. five well volumes have been purged, or

c. the well has been pumped dry.

3. Record the in situ parameters.

4. After purging, lower the pump intake or bailer, as appropriate for the parameters of concern (i.e. bailer for volatiles; and bailer, peristaltic or submersible pump for all other parameters) to the middle of the screened interval. If the analysis to be performed is for lighter-than-water chemical species, then the pump or bailer should be lowered to the top of the water column for sample collection.

5. Collect the sample(s).

   Volatile and semi-volatile samples are filled directly from the bailer with as little agitation as possible.

   Other samples will be placed directly into the appropriate container from the discharge tubing of the pump or bailer. Where filtration is required, an in-line filter should be used, if possible. Vacuum filtration is an alternative to an in-line device (see attached Table).

6. Remove the pump from the well and decontaminate the pump and tubing by flushing with isopropanol; up to one gallon of the solvent is used as needed. Rinse the pump and tubing with one liter of distilled water for every 40 feet of tubing.

7. Complete sample data records after each well is sampled.

8. Secure the well cap and lock.

STANDARD FIELD FILTRATION PROCEDURES

A. IN-LINE FILTRATION

EQUIPMENT

1. A portable 102-mm acrylic backflushing filter unit
2. 102-mm diameter filter papers, 0.45 µm membrane filters
3. Reagent rinse water (ASTM Type II or better)
4. 20% v/v nitric acid rinse solution

PROCEDURES

1. Attach in-line filter assembly, after assembling filter paper into filter holder, to discharge line of sampling pump. Open by-pass valve completely.
2. Turn sampling pump on, slowly turn by-pass valve closed, allowing flow into the filter. Remove trapped air through the filter bleed valve, if necessary.
3. Discard the initial 100 mℓ ± of filtrate. Collect subsequent filtrate into sample bottle.
4. Rinse barrel and filter holder assembly between samples with three rinses of reagent water. The rinse sequence when elemental parameters will be analyzed is: reagent water - 20% v/v nitric acid - reagent water.

B. VACUUM FILTRATION

EQUIPMENT

1. Two sets of either glass funnel type or self-contained polysulfone filters with sintered glass discs or polysulfone filter plates
2. 47-mm diameter filter papers, 0.45 µm membrane filters
3. Vacuum pump or ISCO peristaltic pump with silicone tubing
4. Reagent rinse water (ASTM Type II or better)
5. 20% v/v nitric acid rinse solution

PROCEDURES

1. Thoroughly rinse sintered glass disc, filter funnel, and stem or polysulfone filter units with reagent water.
2. On the basis of visual clarity of sample, prefiltering with larger pore filters may be required. If sample has a heavy clay content, organics, or suspended matter, prefiltration through a 3.0- or 5.0-µm membrane filter may be necessary.
3. Place membrane filter on filter holder with minimum handling.
4. Attach filter holder with filter to filter funnel and receiver.
5. Swirl and slowly pour sample bottle into filter funnel.
6. Attach suction tubing to filter flask and vacuum pump (or ISCO pump). Pump is turned on in the vacuum mode.
7. Filter a small portion of the sample and discard filtrate after rinsing flask with sample filtrate.
8. If prefiltering was required, pass sample through a 0.45-µm membrane filter using another filtering apparatus.
9. Transfer filtered sample to appropriate bottles.
10. Rinse filtration equipment between samples with at least three rinses of reagent water. The rinse sequence, when elemental parameters are to be analyzed, is: reagent water - 20% v/v nitric acid - reagent water.

Appendix D

D-1 Analytical Methods and Representative Waste Characterization

D-2 Analytical Data for Quality Assurance Samples

D-3 Analytical Data for Laboratory Quality Control Samples

D-4 Minimum Detection Limits for Task 2 and Task 3 Laboratory Data

D-5 Task 4 Surface Soil Data Laboratory Results

Appendix D-1

Analytical Methods and Representative Waste Characterization

TABLE D-1-1

ANALYTICAL METHODS[1]
TASK 2
MECHANICVILLE SITE

Analytical Parameter	Soils and Sediments	Groundwater and Surface Water
Volatile Organic Compounds	Method 8020 with confirmatory analysis of 2 soil samples and one round of sediments using Method 8240	Method 602 for Round 1 samples; Method 624 for subsequent sampling rounds
Semi-Volatile Organic Compounds	Method 8310 with confirmatory analysis of 2 soil samples and one round of sediments using Method 8270	Method 610 for Round 1 samples; Method 625 for subsequent sampling rounds
Cyanide - Total and Ferro-Ferricyanide	Method 9010	Method 335.2
Total Organic Carbon	Method 9060	Method 415.1
Total Phenolics	Method 420.1	Method 420.1
Iron and Zinc	Method 200.7 with 3050	Method 200.7

[1] Method numbers refer to USEPA methods (USEPA, 1983) unless otherwise noted.

TABLE D-1-2

ANALYTICAL METHODS[1]
TASK 3
MECHANICVILLE SITE

Analytical Parameter	Soil and Sediment	Groundwater and Surface Water
Volatile Organic Compounds	Method 8240	Method 624
Semi-Volatile Organic Compounds	Method 8270	Method 625
Cyanide - Total	Method 9010	Method 335.2
Total Organic Carbon	Method 9060	Method 415.1
Total Phenolics	Method 420.1	Method 420.1
Iron and Zinc	Method 200.7 with 3050	Method 200.7

[1] Method numbers refer to USEPA methods unless otherwise noted (USEPA, 1983).

ORGANIC COMPOUNDS IN COAL TAR STORAGE VESSELS
ITHACA-COURT STREET SITE

	Coal Tar Samples		Aqueous Sample
	Vessel A[1]	Vessel B[2]	Vessel B
Volatile Organics	(mg/kg)	(mg/kg)	(mg/ℓ)
Minimum Detection Limit (MDL)	(10)	(48)	(0.002)
Volatile Aromatics			
Benzene	1,900	1,800	80.0
Toluene	2,200	2,600	33.0
Ethylbenzene	120	140	ND[3]
Total Xylene	2,200	1,900	5.6
Styrene	910	1,100	4.2
Total Volatiles	7,330	7,540	122.8
Semivolatile Organics			
Minimum Detection Limit (MDL)	(1,500)	(2,800)	(1.6)
PAH			
Acenaphthene	T[4]	T	ND
Acenaphthylene	10,000	33,000	T
Anthracene	7,800	16,000	ND
Benzo(a)anthracene	4,200	5,600	ND
Benzo(a)pyrene	4,000	5,200	ND
Benzo(g,h,i)perylene	T	T	ND
Benzo(k)fluoranthene) coeluted Benzo(b)fluoranthene)	5,200	4,900	ND
Chrysene	4,300	6,300	ND
Dibenzo(a,h)anthracene	T	T	ND
Fluoranthene	12,000	16,000	ND
Fluorene	5,400	15,000	ND
Indeno(1,2,3-cd)pyrene	T	T	ND
Naphthalene	55,000	180,000	ND
Phenanthrene	24,000	40,000	ND
Pyrene	12,000	10,000	ND
Other			
Phenol	2,700	T	48.0
2,4-Dimethylphenol	ND	ND	2.6
2,4-Dichlorophenol	T	ND	ND
Total Semivolatiles	146,600	332,000	50.6

[1] Vessel A is located adjacent to Markles Flats.
[2] Vessel B is located next to the swimming pool.
[3] ND = Not Detected
[4] T = Detected in trace concentrations at or below the MDL.

6.87.14T
0019.0.0

METALS, TOTAL ORGANIC HALIDES, AND IGNITABILITY
RESULTS FOR COAL TAR STORAGE VESSEL SAMPLES
ITHACA-COURT STREET SITE

	Coal Tar Samples		Aqueous Sample
	Vessel A[1]	Vessel B[2]	Vessel B
EP Toxicity Metals[3]	(mg/ℓ)	(mg/ℓ)	(mg/ℓ)
Ag	ND	ND	0.0033
As	0.39[4]	2.1[4]	0.014
Ba	ND	ND	0.140
Cd	ND	ND	ND
Cr	ND	ND	0.015
Hg	ND	ND	0.0002
Pb	ND	3.7[4]	0.028
Se	ND	ND	ND
Other Metals			
Cu	ND	ND	0.023
Ni	ND	ND	0.011
Ti	1.7[4]	1.8[4]	ND
Zn	0.31[4]	1.4[4]	0.065
Total Organic Halides	(mg/kg)	(mg/kg)	(mg/ℓ)
TOX, as Chlorine	830	870	0.39
Ignitability	(°F)	(°F)	
Flash Point	99	81	NA[2]

[1] ND = Not Detected
[2] NA = Not Analyzed
[3] Metals in coal tar samples were analyzed following extraction procedure (EP).
[4] EP toxicity limits for the detected metals are: As and Pb, 5 mg/ℓ; Ti and Zn, none specified.

AN ANALYSIS OF SPENT OXIDE WASTES[1]

Component	Percent
Free sulfur	44.70
Moisture	17.88
Ferric monohydrate	5.26
Ferrous monohydrate	6.25
Basic ferric sulfate	1.25
Ferric ammonium ferrocyanide	3.80
Ferrosoferric ammonium ferrocyanide	2.50
Ferric pyridic ferrocyanide	1.20
Organic matter peat fiber	4.68
Tar	1.21
Silica	1.05
Naphthalene	0.72
Pyridine sulfate	0.77
Ammonium sulfate	2.06
Calcium sulfate	0.12
Ferrous sulfate	0.02
Ammonium thiocyanate	1.30
Sulfur otherwise combined	1.33
Ogranic matter soluble in alkalies (humus)	1.54
Combined water and loss (by difference)	2.36
	100.00

[1] Utility Solid Waste Activities Group (USWAG), 1984. Handbook on Manufactured Gas Plant Sites. Prepared by Environmental Research and Technology, Inc. and Koppers Co., Inc., for the USWAG Superfund Committee, Washington, D.C. p. 3-46.

Appendix D-2

Analytical Data for Quality Assurance Samples

01/19/88

TABLE D-2-1
CHEMICALS FOUND IN TASK 2 QUALITY ASSURANCE SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
SAMPLE IDENTIFIER	SB-101	SB-201	SB-301	SB-401	TB-101	TB-201	TB-301	TB-401	FB-101	FB-201	FB-301	FB-401
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	HPLC
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)												
-VOLATILE AROMATICS-												
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
TOLUENE	ND	ND	ND	ND	ND	0.006	ND	ND	--	--	--	--
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
TOTAL XYLENE	-- (3)	ND	ND	ND	--	ND	ND	ND	--	--	--	--
o - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
o - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
p - XYLENE	ND	--	--	--	ND	--	--	--	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	ND	--	--	--	--	--	--	--
-OTHER-												
ACETONE	--	0.0438	ND	ND	--	ND	0.0242	ND	--	--	--	--
METHYLENE CHLORIDE	--	ND	ND	0.006	--	(4)	0.0095	ND	--	--	--	--
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	0.006	ND	ND	--	--	--	--
SEMIVOLATILE ORGANICS (MG/L)												
-PAH-												
ACENAPHTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
ACENAPHTHYLENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(a)ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
BENZO(a)PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
CHRYSENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FLUORANTHENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FLUORENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
NAPHTHALENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
PHENANTHRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
PYRENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
-OTHER-												
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	0.015	0.080	--	--	--	--	--	--	--	--
2-METHYLNAPTHALENE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
TOTAL PAH	ND	ND	ND	ND	--	--	--	--	--	--	--	--

TABLE D-2-1 (continued)
CHEMICALS FOUND IN TASK 2 QUALITY ASSURANCE SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
SAMPLE IDENTIFIER	SB-101	SB-201	SB-301	SB-401	TB-101	TB-201	TB-301	TB-401	FB-101	FB-201	FB-301	FB-401
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	HPLC
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)												
-METALS-												
IRON	ND	ND	0.09	ND	--	--	--	--	ND	ND	ND	ND
ZINC	ND	0.012	ND	ND	--	--	--	--	ND	0.014	ND	ND
-CYANIDE-												
TOTAL CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	[illegible]	--
AMENABLE CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	--	--	--	--	--	--	--	--
-OTHER-												
TOTAL RECOVERABLE PHENOLICS	0.012	--	--	ND	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON	ND	1	2.3	1.0	--	--	--	--	ND	1	4.1	2.8
SULFATE	--	4.0	--	--	--	--	--	--	--	4.0	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-4 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.

TABLE D-2-2

Chemicals Detected in Task 3 Quality Assurance Samples
Mechanicville Site

SAMPLE TYPE:	------FILTRATION BLANK------		------SAMPLER BLANK------	
SAMPLE IDENTIFIER:	FB-01	FB-01	SB-01	SB-01
DATE OF SAMPLE COLLECTION:	12/22/87	3/29/88	12/22/87	3/29/88
** Volatile Organics (mg/l) **				
-VOLATILE AROMATICS-	NR	NR	ND	ND
-OTHER-				
Acetone	NR	NR	0.16	ND
Chlorobenzene	NR	NR	ND	ND
Total Volatile Aromatics	NR	NR	ND	ND
Total Volatile Organics	NR	NR	0.16	ND
** Semi-Volatile Organics (mg/l) **				
-PAH-	NR	NR	ND	ND
-OTHER-				
Phenol	NR	NR	ND	ND
bis (2-Ethylhexyl) Phthalate	NR	NR	ND	ND
Total PAH	NR	NR	ND	ND
Total Semi-Volatile Organics	NR	NR	ND	ND
** Other Chemicals (mg/l) **				
-METALS-				
Iron	ND	ND	0.24	ND
Zinc	ND	0.02	ND	ND
-CYANIDE-	NR	NR	ND	ND
-OTHER-				
Total Recoverable Phenolics	NR	NR	ND	0.009
Total Organic Carbon	3.8	4.9	2.1	1.2

NOTES:

(1) Trace concentrations detected below the quantifiable reporting limit.
ND = Not Detected.
NR = Not Requested.

TABLE D-2-2 (continued)

Chemicals Detected in Task 3 Quality Assurance Samples
Mechanicville Site

SAMPLE TYPE:	------TRIP BLANK------	
SAMPLE IDENTIFIER:	TB-01	TB-01
DATE OF SAMPLE COLLECTION:	12/22/87	3/29/88
**** Volatile Organics (mg/l) ****		
-VOLATILE AROMATICS-	ND	ND
-OTHER-		
Acetone	ND	
Chlorobenzene	ND	(1)
Total Volatile Aromatics	ND	ND
Total Volatile Organics	ND	ND
**** Semi-Volatile Organics (mg/l) ****		
-PAH-	NR	NR
-OTHER-		
Phenol	NR	NR
bis (2-Ethylhexyl) Phthalate	NR	NR
Total PAH	NR	NR
Total Semi-Volatile Organics	NR	NR
**** Other Chemicals (mg/l) ****		
-METALS-		
Iron	NR	NR
Zinc	NR	NR
-CYANIDE-	NR	NR
-OTHER-		
Total Recoverable Phenolics	NR	NR
Total Organic Carbon	NR	NR

NOTES:

(1) Trace concentrations detected below the quantifiable reporting limit.
ND = Not Detected.
NR = Not Requested.

Appendix D-3

Analytical Data for Laboratory Quality Control Samples
(To be Provided Under Separate Cover)

Appendix D-4

Minimum Detection Limits for Task 2 and Task 3 Laboratory Data

01/19/88

TABLE D-4-1
MINIMUM DETECTION LIMITS
MECHANICVILLE SITE

TEST PITS (MG/KG)

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-5/S-1	TP-5/S-1 DUP	TP-5/S-1 GC/MS
VOLATILE AROMATICS	0.022	0.051	0.024	0.099	0.094	0.096
ACETONE	-- (2)	--	--	--	--	2.4
METHYLENE CHLORIDE	--	--	--	--	--	0.2
CARBON DISULFIDE	--	--	--	--	--	0.4
SEMIVOLATILE ORGANICS	0.043	11.0	5.7	78.0	93.0	13.0
IRON	10.0	10.0	10.0	10.0	10.0	--
ZINC	2.0	2.0	2.0	2.0	2.0	--
CYANIDE (1)	0.3	0.3	0.3	0.3	0.3	--
TOTAL RECOVERABLE PHENOLICS	0.2	0.2	0.2	0.2	0.2	--
TOTAL ORGANIC CARBON	100	100	100	100	100	--

BORINGS (MG/KG)

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1 GC/MS
VOLATILE AROMATICS	0.042	0.052	0.56	0.028	0.54	0.052	10.0	3.6
ACETONE	--	--	--	--	--	--	--	90.0
METHYLENE CHLORIDE	--	--	--	--	--	--	--	9.0
CARBON DISULFIDE	--	--	--	--	--	--	--	3.6
SEMIVOLATILE ORGANICS	5	0.55	170	24	54	0.65	61	130
IRON	10	10	10	10	10	10	10	--
ZINC	2	2	2	2	2	2	2	--
CYANIDE (1)	1	1	1	1	1	1	1	--
TOTAL RECOVERABLE PHENOLICS	1	1	1	1	1	1	1	--
TOTAL ORGANIC CARBON	1000	1000	1000	1000	1000	1000	1000	--

GROUNDWATER (MG/L)

SAMPLE IDENTIFIER ORGANICS ANALYSIS	MW-101 HPLC	MW-101 GC/MS	MW-201 GC/MS	MW-301 GC/MS	MW-401 GC/MS	MW-102 HPLC	MW-202 GC/MS	MW-202 GC/MS DUP	MW-302 GC/MS	MW-402 GC/MS	MW-103 HPLC	MW-103 GC/MS	MW-203 GC/MS	MW-303 GC/MS	MW-403 GC/MS
VOLATILE AROMATICS	0.001	0.002	0.005	0.010	0.005	0.001	0.005	0.005	0.010	0.005	0.050	0.020	0.250	0.010	0.050
ACETONE	--	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010	0.010	--	0.500	0.500	0.010	0.100
METHYLENE CHLORIDE	--	0.050	0.050	0.010	0.005	--	0.050	0.050	0.010	0.005	--	0.050	0.250	0.010	0.050
SEMIVOLATILE ORGANICS	0.020	0.020	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.050	0.200	0.200	0.010	0.010	0.100
IRON	0.1	--	0.03	0.1	0.1	0.1	0.03	0.03	0.1	0.1	0.1	--	0.03	0.1	0.1
ZINC	0.01	--	0.005	0.02	0.020	0.01	0.005	0.005	0.02	0.02	0.01	--	0.005	0.02	0.02
CYANIDE (1)	0.01	--	0.01	0.02	0.010	0.01	0.01	0.01	0.02	0.01	0.01	--	0.01	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	--	0.005	0.01	--	--	--	0.005	0.01	--	--	--	0.005
TOTAL ORGANIC CARBON	0.5	--	5	5	5	0.5	5	5	5	5	0.5	5	5	5	5
SULFATE	--	--	1	--	1	--	1	1	--	1	--	--	1	--	1

(1) TOTAL CYANIDE

TABLE D-4-1 (continued)

MINIMUM DETECTION LIMITS (1) (CONT'D)
MECHANICVILLE SITE

#GROUNDWATER (MG/L)#

SAMPLE IDENTIFIER ORGANICS ANALYSIS	MW-104 HPLC	MW-204 GC/MS	MW-304 GC/MS	MW-404 GC/MS	MW-105 HPLC	MW-205 GC/MS	MW-405 GC/MS	MW-405 GC/MS DUP	MW-106 HPLC	MW-106 HPLC DUP	MW-206 GC/MS	MW-306 GC/MS	MW-306 GC/MS DUP	MW-406 GC/MS
VOLATILE AROMATICS	0.050	0.050	0.010	0.050	0.010	0.100	0.050	0.050	0.050	0.050	0.250	0.010	0.010	0.050
ACETONE	--	0.100	0.010	0.100	--	0.200	0.100	0.100	--	--	0.500	0.010	0.010	0.100
METHYLENE CHLORIDE	--	0.050	0.010	0.050	--	0.100	8.500	8.500	--	--	0.250	0.010	0.010	0.050
SEMIVOLATILE ORGANICS	0.200	0.010	0.010	0.100	0.200	0.010	0.100	0.100	4.000	4.000	0.010	0.010	0.010	0.500
IRON	0.1	0.03	0.1	0.1	0.1	0.03	0.1	0.1	0.1	0.1	0.03	0.1	0.1	0.1
ZINC	0.01	0.005	0.02	0.02	0.01	0.005	0.02	0.02	0.01	0.01	0.005	0.02	0.02	0.02
CYANIDE (3)	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	0.005	0.01	--	0.005	0.005	0.01	0.01	--	--	--	0.005
TOTAL ORGANIC CARBON	0.5	5	5	5	0.5	5	5	5	0.5	0.5	5	5	5	5
SULFATE	--	1	1	1	--	1	1	1	--	--	1	--	--	1

#SURFACE WATER (MG/L)#

SAMPLE IDENTIFIER ORGANICS ANALYSIS	SW-101 HPLC	SW-201 GC/MS	SW-301 GC/MS	SW-301 GC/MS DUP	SW-401 GC/MS	SW-102 HPLC	SW-202 GC/MS	SW-202 GC/MS DUP	SW-302 GC/MS	SW-402 GC/MS	SW-402 GC/MS DUP	SW-103 HPLC	SW-203 GC/MS	SW-303 GC/MS	SW-403 GC/MS
VOLATILE AROMATICS	0.001	0.005	0.010	0.010	0.005	0.001	0.005	0.005	0.010	0.005	0.005	0.001	0.005	0.010	0.005
ACETONE	--	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010	0.010	0.010	--	0.010	0.010	0.010
METHYLENE CHLORIDE	--	0.005	0.010	0.010	0.005	--	0.005	0.005	0.010	0.005	0.005	--	0.005	0.010	0.005
SEMIVOLATILE ORGANICS	0.020	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.010	0.020	0.010	0.010	0.010
IRON	0.1	0.03	0.1	0.1	0.1	0.1	0.03	0.03	0.1	0.1	0.1	0.1	0.03	0.1	0.1
ZINC	0.01	0.005	0.02	0.02	0.02	0.01	0.005	0.005	0.02	0.02	0.02	0.01	0.005	0.02	0.02
CYANIDE (3)	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	--	0.005	0.01	--	--	--	0.005	0.005	0.01	--	--	0.005
TOTAL ORGANIC CARBON	0.5	5	5	5	5	0.5	5	5	5	5	5	0.5	5	5	5
SULFATE	--	1	--	--	--	--	1	1	--	--	--	--	1	--	--

#SEDIMENTS (MG/KG)#

SAMPLE IDENTIFIER	SED-101	SED-201	SED-301 GC/MS	SED-301 DUP	SED-401 GC/MS	SED-102	SED-202	SED-202 DUP	SED-302 GC/MS	SED-402 GC/MS	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303 GC/MS	SED-403 GC/MS
VOLATILE AROMATICS	0.024	0.025	0.080	0.062	1.000	0.025	0.028	0.025	0.070	1.000	1.000	0.025	0.024	0.027	0.066	1.000
ACETONE	--	--	2.000	1.600	1.000	--	--	--	1.700	1.000	1.000	--	--	--	1.700	1.000
SEMIVOLATILE ORGANICS	0.420	0.360	1.100	1.100	0.600	0.410	0.510	0.900	0.940	0.600	0.600	0.500	0.520	0.310	0.990	0.600
IRON	0.1	9200	5	5	2	0.1	19000	16000	5	2	2	0.1	0.1	20000	5	2
ZINC	0.01	36	5	5	0.5	0.01	69	100	5	0.5	0.5	0.01	0.01	88	5	0.5
CYANIDE (3)	0.01	0.1	0.01	0.01	0.3	0.01	0.1	0.1	0.01	0.3	0.3	0.01	0.01	0.1	0.01	0.3
TOTAL RECOVERABLE PHENOLICS	0.01	0.01	0.01	0.01	0.2	0.01	0.01	0.01	0.01	0.2	0.2	0.01	0.01	0.01	0.01	0.2
TOTAL ORGANIC CARBON	0.5	4600	100	100	100	0.5	3500	7600	200	100	100	0.5	0.5	4600	100	100
SULFATE	--	32	--	--	--	--	32	32	5	--	--	--	--	32	--	--

(1) NOMINAL DETECTION LIMITS WERE USED WHEN MDLs WERE NOT REPORTED BY THE LABORATORY.
(2) -- NOT ANALYZED
(3) TOTAL CYANIDE

01/19/88

TABLE D-4-2

QUALITY ASSURANCE SAMPLES
MINIMUM DETECTION LIMITS (1)
MECHANICVILLE SITE

SITE IDENTIFIER	SAMPLER BLANK				TRIP BLANK				FILTRATION BLANK			
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/11/87	6/2/87	9/9/86	12/2/86	3/11/87	6/2/87	9/9/86	12/2/86	3/11/87	6/2/87
VOLATILE AROMATICS	0.001	0.005	0.010	0.005	0.001	0.005	0.010	0.005	-- (2)	--	--	--
ACETONE	0.002	0.010	0.010	0.010	0.002	0.010	0.010	0.010	--	--	--	--
METHYLENE CHLORIDE	0.001	0.005	0.010	0.005	0.001	0.005	0.010	0.005	--	--	--	--
SEMIVOLATILE ORGANICS	0.02	0.010	0.010	0.010	--	--	--	--	--	--	--	--
IRON	0.10	0.03	0.05	0.100	--	--	--	--	0.10	0.03	0.05	0.100
ZINC	0.010	0.005	0.01	0.020	--	--	--	--	0.010	0.005	0.01	0.020
TOTAL CYANIDE	0.010	0.01	0.01	0.01	--	--	--	--	--	--	--	--
TOTAL ORGANIC CARBON	0.50	5	5	5	--	--	--	--	0.50	5	5	5
TOTAL RECOVERABLE PHENOLICS	0.01	--	--	0.005	--	--	--	--	--	--	--	--
SULFATE	--	1	--	--	--	--	--	--	--	1	--	--

(1) NOMINAL DETECTION LIMITS WERE USED WHERE MDLs WERE NOT REPORTED BY THE LABORATORY.
(2) -- NOT ANALYZED

TABLE D-4-3

EXPLANATION OF TERMS AND ABBREVIATIONS
USED IN LABORATORY REPORTS

Term or Abbreviation	Explanation
Flagged Data Table	Presents analytical results corrected for errors and for method blank analysis as required.
RL	Reporting Limit. Indicates concentration at which laboratory can obtain accurate and repeatable results. Commonly referred to as the "Detection Limit."
J	Compound concentration estimated. Detected, but at a concentration below the Reporting Limit.
B	Compound detected in method blank.
U	Analysis performed for compound, but compound not detected.
D	Concentration determined by sample dilution.
R	Concentration value rejected because compound concentration in blank was greater than five times the Reporting Limit.
NA	Sample not analyzed for this compound.
NR	Sample analysis not requested.

Appendix D-5

Task 4 Surface Soil Data Laboratory Results

MECHANICVILLE SOILS PCB RESULTS

SAMPLE LOCATION	PCB	% MOISTURE
MEEIXX8901	< 6 PPB	0.0
MEEIXX8902	< 6 PPB	27.3
MEEIXX8903	< 6 PPB	13.3
MEEIXX8903A	< 6 PPB	6.7
MEEIXX8904	< 6 PPB	12.5
MEEIXX8905	< 6 PPB	11.8
MEEIXX8906	< 6 PPB	7.1
MEEIXX8906A	< 6 PPB	14.3
MEEIXX8907	< 6 PPB	13.3
MEEIXX8907A	< 6 PPB	20.0
MEEIXX8908	< 6 PPB	3.3
MEEIXX8908A	< 6 PPB	23.5
MEEIXX8909	< 6 PPB	6.7
MEEIXX8910		0.0

Sample location MEEIXX8910 = a trip blank

Analysis Results
Report Number 092089024
Date: September 20, 1989

JAL

ENT I.D. / JEG	ULI I.D.	Amenable Cyanide	Total Cyanide (distilled)	Total Cyanide (un-distilled)	
MECHANICSVILLE:					
SS-1 MEEIXX8901 8/29/89	24389090	1.8	1.8	<1.0	
SS-2 MEEIXX8902 8/29/89	24389091	<1.0	<1.0	<1.0	
SS-3 MEEIXX8903 8/29/89	24389092	<1.0	<1.0	<1.0	
SS-3A MEEIXX8903A 8/29/89	24389093	1.9	1.9	<1.0	
SS-4 MEEIXX8904 8/29/89	24389094	<1.0	<1.0	<1.0	
SS-5 MEEIXX8905 8/29/89	24389095	<1.0	<1.0	<1.0	
SS-10 MEEIXX8910 8/29/89	24389097	9.9	9.9	<1.0	

All results are expressed as ppm as received.
Sampled by client.

Approved: _____ 9/20/89

Note: See disclaimer on cover letter.

SOIL MATRIX
METHOD 8270 -- HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEI Blank (9/1/89)	MEEIXX8910 (9/1/89)
Acenaphthene	<0.33	<0.33
Acenaphthylene	<0.33	<0.33
Anthracene	<0.33	<0.33
Benzo(a)anthracene	<0.33	<0.33
Benzo(a)pyrene	<0.33	<0.33
Benzo(b)fluoranthene	<0.33	<0.33
Benzo(g,h,i)perylene	<0.33	<0.33
Benzo(k)fluoranthene	<0.33	<0.33
Benzoic acid	<0.33	<0.33
Benzyl alcohol	<0.33	<0.33
Bis(2-chloroethoxy)methane	<0.33	<0.33
Bis(2-chloroethyl)ether	<0.33	<0.33
Bis(2-chloroisopropyl)ether	<0.33	0.41
Bis(2-ethylhexyl)phthalate	<0.33	<0.33
4-Bromophenylphenylether	<0.33	<0.33
Butylbenzylphthalate	<0.33	<0.33
4-Chloroaniline	<0.33	<0.33
2-Chloronaphthalene	<0.33	<0.33
4-Chlorophenylphenylether	<0.33	<0.33
Chrysene	<0.33	<0.33
Dibenzo(a,h)anthracene	<0.33	<0.33
Dibenzofuran	<0.33	<0.33
1,2-Dichlorobenzene	<0.33	<0.33
1,3-Dichlorobenzene	<0.33	<0.33
1,4-Dichlorobenzene	<0.66	<0.66
3,3'-Dichlorobenzidine	<0.33	<0.33
Diethylphthalate	<0.33	<0.33
Dimethylphthalate	0.68	0.86
Di-n-butylphthalate	<0.33	<0.33
2,6-Dinitrotoluene	<0.33	<0.33
2,4-Dinitrotoluene	<0.33	6.6
Di-n-octylphthalate	<0.33	<0.33
Fluoranthene	<0.33	<0.33
Fluorene	<0.33	<0.33
Hexachlorobenzene	<0.33	<0.33
Hexachlorobutadiene	<0.33	<0.33
Hexachlorocylopentadiene	<0.33	<0.33
Hexachloroethane	<0.33	<0.33
Indeno(1,2,3-cd)pyrene	<0.33	<0.33
Isophorone		

(Continued)

SOIL MATRIX
METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEI Blank (9/1/89)	MEEIXX8910 (9/1/89)
2-Methylnaphthalene	<0.33	<0.33
Naphthalene	<0.33	<0.33
2-Nitroaniline	<1.6	<1.6
3-Nitroaniline	<1.6	<1.6
4-Nitroaniline	<1.6	<1.6
Nitrobenzene	<0.33	<0.33
N-nitrosodi-n-propylamine	<0.33	<0.33
N-nitrosodiphenylamine	<0.33	<0.33
Phenanthrene	<0.33	<0.33
Pyrene	<0.33	<0.33
1,2,4-Trichlorobenzene	<0.33	<0.33
2-Chlorophenol	<0.33	<0.33
2,4-Dichlorophenol	<0.33	<0.33
2,4-Dimethylphenol	<0.33	<0.33
4,6-Dinitro-o-cresol	<1.6	<1.6
2,4-Dinitrophenol	<1.6	<1.6
2-Methylphenol	<0.33	<0.33
4-Methylphenol	<0.33	<0.33
2-Nitrophenol	<0.33	<0.33
4-Nitrophenol	<1.6	<1.6
p-Chloro-m-cresol	<0.33	<0.33
Pentachlorophenol	<1.6	<1.6
Phenol	<0.33	<0.33
2,4,5-Trichlorophenol	<1.6	<1.6
2,4,6-Trichlorophenol	<0.33	<0.33
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards		
Level Added = 2.0 ug/g		
(% Recovery)		
Phenanthrene-D_{10}	122	111
Surrogates		
(% Recovery)		
2-Fluorophenol	70	83
Phenol-D_5	88	89
2,4,6-Tribromophenol	44	56
Nitrobenzene-D_5	94	87
2-Fluorobiphenyl	71	78
Terphenyl-D_{14}	93	98

I.D. #89-1665

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEIXX8901 * (9/1/89)	MEEIXX8902 * (9/1/89)
Acenaphthene	<0.66	<0.66
Acenaphthylene	2.1	5.2
Anthracene	1.1	2.8
Benzo(a)anthracene	4.5	5.4
Benzo(a)pyrene	3.4	4.9
Benzo(b)fluoranthene	2.7	8.7
Benzo(g,h,i)perylene	1.6	2.9
Benzo(k)fluoranthene	4.3	7.1
Benzoic acid	<0.66	<0.66
Benzyl alcohol	<0.66	<0.66
Bis(2-chloroethoxy)methane	<0.66	<0.66
Bis(2-chloroethyl)ether	<0.66	<0.66
Bis(2-chloroisopropyl)ether	<0.66	<0.66
Bis(2-ethylhexyl)phthalate	3.7	<0.66
4-Bromophenylphenylether	<0.66	<0.66
Butylbenzylphthalate	<0.66	<0.66
4-Chloroaniline	<0.66	<0.66
2-Chloronaphthalene	<0.66	<0.66
4-Chlorophenylphenylether	<0.66	<0.66
Chrysene	6.2	9.6
Dibenzo(a,h)anthracene	<0.66	<0.66
Dibenzofuran	<0.66	<0.66
1,2-Dichlorobenzene	<0.66	<0.66
1,3-Dichlorobenzene	<0.66	<0.66
1,4-Dichlorobenzene	<0.66	<0.66
3,3'-Dichlorobenzidine	<1.3	<1.3
Diethylphthalate	<0.66	<0.66
Dimethylphthalate	<0.66	<0.66
Di-n-butylphthalate	<0.66	0.99
2,6-Dinitrotoluene	<0.66	<0.66
2,4-Dinitrotoluene	<0.66	<0.66
Di-n-octylphthalate	<0.66	<0.66
Fluoranthene	7.4	5.3
Fluorene	0.71	<0.66
Hexachlorobenzene	<0.66	<0.66
Hexachlorobutadiene	<0.66	<0.66
Hexachlorocylopentadiene	<0.66	<0.66
Hexachloroethane	<0.66	<0.66
Indeno(1,2,3-cd)pyrene	1.4	2.5
Isophorone	<0.66	<0.66

(Continued)

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE) MEEIXX8901 * (9/1/89)	MEEIXX8902 * (9/1/89)
2-Methylnaphthalene	<0.66	<0.66
Naphthalene	<0.66	<0.66
2-Nitroaniline	<3.2	<3.2
3-Nitroaniline	<3.2	<3.2
4-Nitroaniline	<3.2	<3.2
Nitrobenzene	<0.66	<0.66
N-nitrosodi-n-propylamine	<0.66	<0.66
N-nitrosodiphenylamine	<0.66	<0.66
Phenanthrene	8.5	2.6
Pyrene	16	14
1,2,4-Trichlorobenzene	<0.66	<0.66
2-Chlorophenol	<0.66	<0.66
2,4-Dichlorophenol	<0.66	<0.66
2,4-Dimethylphenol	<0.66	<0.66
4,6-Dinitro-o-cresol	<3.2	<3.2
2,4-Dinitrophenol	<3.2	<3.2
2-Methylphenol	<0.66	<0.66
4-Methylphenol	<0.66	<0.66
2-Nitrophenol	<0.66	<0.66
4-Nitrophenol	<3.2	<3.2
p-Chloro-m-cresol	<0.66	<0.66
Pentachlorophenol	<3.2	<3.2
Phenol	<0.66	<0.66
2,4,5-Trichlorophenol	<3.2	<3.2
2,4,6-Trichlorophenol	<0.66	<0.66
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards Level Added = 2.0 ug/g (% Recovery)		
Phenanthrene-D_{10}	143	154
Surrogates (% Recovery)		
2-Fluorophenol	76	78
Phenol-D_5	73	74
2,4,6-Tribromophenol	53	58
Nitrobenzene-D_5	72	70
2-Fluorobiphenyl	69	68
Terphenyl-D_{14}	95	95

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE)	
	MEEIXX8903 * (9/1/89)	MEEIXX8903A * (9/1/89)
Acenaphthene	1.5	1.7
Acenaphthylene	<0.66	<0.66
Anthracene	1.3	1.1
Benzo(a)anthracene	2.8	2.5
Benzo(a)pyrene	1.8	1.9
Benzo(b)fluoranthene	2.3	1.9
Benzo(g,h,i)perylene	<0.66	0.69
Benzo(k)fluoranthene	2.1	2.4
Benzoic acid	<0.66	<0.66
Benzyl alcohol	<0.66	<0.66
Bis(2-chloroethoxy)methane	<0.66	<0.66
Bis(2-chloroethyl)ether	<0.66	<0.66
Bis(2-chloroisopropyl)ether	<0.66	<0.66
Bis(2-ethylhexyl)phthalate	1.1	0.92
4-Bromophenylphenylether	<0.66	<0.66
Butylbenzylphthalate	<0.66	<0.66
4-Chloroaniline	<0.66	<0.66
2-Chloronaphthalene	<0.66	<0.66
4-Chlorophenylphenylether	<0.66	<0.66
Chrysene	3.4	3.1
Dibenzo(a,h)anthracene	<0.66	<0.66
Dibenzofuran	<0.66	<0.66
1,2-Dichlorobenzene	<0.66	<0.66
1,3-Dichlorobenzene	<0.66	<0.66
1,4-Dichlorobenzene	<0.66	<0.66
3,3'-Dichlorobenzidine	<1.3	<1.3
Diethylphthalate	<0.66	<0.66
Dimethylphthalate	<0.66	<0.66
Di-n-butylphthalate	1.1	0.93
2,6-Dinitrotoluene	<0.66	<0.66
2,4-Dinitrotoluene	<0.66	<0.66
Di-n-octylphthalate	<0.66	<0.66
Fluoranthene	6.0	4.7
Fluorene	<0.66	<0.66
Hexachlorobenzene	<0.66	<0.66
Hexachlorobutadiene	<0.66	<0.66
Hexachlorocylopentadiene	<0.66	<0.66
Hexachloroethane	<0.66	<0.66
Indeno(1,2,3-cd)pyrene	<0.66	<0.66
Isophorone	<0.66	<0.66

(Continued)

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX

METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE) MEEIXX8903 * (9/1/89)	MEEIXX8903A * (9/1/89)
2-Methylnaphthalene	<0.66	<0.66
Naphthalene	<0.66	<0.66
2-Nitroaniline	<3.2	<3.2
3-Nitroaniline	<3.2	<3.2
4-Nitroaniline	<3.2	<3.2
Nitrobenzene	<0.66	<0.66
N-nitrosodi-n-propylamine	<0.66	<0.66
N-nitrosodiphenylamine	<0.66	<0.66
Phenanthrene	6.6	4.1
Pyrene	13	11
1,2,4-Trichlorobenzene	<0.66	<0.66
2-Chlorophenol	<0.66	<0.66
2,4-Dichlorophenol	<0.66	<0.66
2,4-Dimethylphenol	<0.66	<0.66
4,6-Dinitro-o-cresol	<3.2	<3.2
2,4-Dinitrophenol	<3.2	<3.2
2-Methylphenol	<0.66	<0.66
4-Methylphenol	<0.66	<0.66
2-Nitrophenol	<0.66	<0.66
4-Nitrophenol	<3.2	<3.2
p-Chloro-m-cresol	<0.66	<0.66
Pentachlorophenol	<3.2	<3.2
Phenol	<0.66	<0.66
2,4,5-Trichlorophenol	<3.2	<3.2
2,4,6-Trichlorophenol	<0.66	<0.66
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards Level Added = 2.0 ug/g (% Recovery)		
Phenanthrene-D_{10}	169	171
Surrogates (% Recovery)		
2-Fluorophenol	75	74
Phenol-D_5	77	75
2,4,6-Tribromophenol	40	49
Nitrobenzene-D_5	76	70
2-Fluorobiphenyl	64	74
Terphenyl-D_{14}	98	102

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

SOIL MATRIX
METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE) MEEIXX8904 * (9/1/89)	MEEIXX8905 * (9/1/89)
Acenaphthene	<0.66	<0.66
Acenaphthylene	<0.66	<0.66
Anthracene	<0.66	<0.66
Benzo(a)anthracene	1.3	<0.66
Benzo(a)pyrene	0.86	<0.66
Benzo(b)fluoranthene	1.4	<0.66
Benzo(g,h,i)perylene	<0.66	<0.66
Benzo(k)fluoranthene	1.3	<0.66
Benzoic acid	<0.66	<0.66
Benzyl alcohol	<0.66	<0.66
Bis(2-chloroethoxy)methane	<0.66	<0.66
Bis(2-chloroethyl)ether	<0.66	<0.66
Bis(2-chloroisopropyl)ether	<0.66	<0.66
Bis(2-ethylhexyl)phthalate	<0.66	<0.66
4-Bromophenylphenylether	<0.66	<0.66
Butylbenzylphthalate	<0.66	<0.66
4-Chloroaniline	<0.66	<0.66
2-Chloronaphthalene	<0.66	<0.66
4-Chlorophenylphenylether	<0.66	<0.66
Chrysene	2.3	<0.66
Dibenzo(a,h)anthracene	<0.66	<0.66
Dibenzofuran	<0.66	<0.66
1,2-Dichlorobenzene	<0.66	<0.66
1,3-Dichlorobenzene	<0.66	<0.66
1,4-Dichlorobenzene	<0.66	<0.66
3,3'-Dichlorobenzidine	<1.3	<1.3
Diethylphthalate	<0.66	<0.66
Dimethylphthalate	<0.66	<0.66
Di-n-butylphthalate	0.87	0.67
2,6-Dinitrotoluene	<0.66	<0.66
2,4-Dinitrotoluene	<0.66	<0.66
Di-n-octylphthalate	11	<0.66
Fluoranthene	0.70	<0.66
Fluorene	<0.66	<0.66
Hexachlorobenzene	<0.66	<0.66
Hexachlorobutadiene	<0.66	<0.66
Hexachlorocylopentadiene	<0.66	<0.66
Hexachloroethane	<0.66	<0.66
Indeno(1,2,3-cd)pyrene	<0.66	<0.66
Isophorone	<0.66	<0.66

(Continued)

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

SOIL MATRIX
METHOD 8270 - HAZARDOUS SUBSTANCE LIST BASE/NEUTRAL/ACID EXTRACTABLES

COMPOUND (Units of Measure = ug/g dry)	SAMPLE IDENTIFICATION (DATE) MEEIXX8904 * (9/1/89)	MEEIXX8905 * (9/1/89)
2-Methylnaphthalene	<0.66	<0.66
Naphthalene	<0.66	<0.66
2-Nitroaniline	<3.2	<3.2
3-Nitroaniline	<3.2	<3.2
4-Nitroaniline	<3.2	<3.2
Nitrobenzene	<0.66	<0.66
N-nitrosodi-n-propylamine	<0.66	<0.66
N-nitrosodiphenylamine	<0.66	<0.66
Phenanthrene	<0.66	<0.66
Pyrene	1.2	<0.66
1,2,4-Trichlorobenzene	<0.66	<0.66
2-Chlorophenol	<0.66	<0.66
2,4-Dichlorophenol	<0.66	<0.66
2,4-Dimethylphenol	<0.66	<0.66
4,6-Dinitro-o-cresol	<3.2	<3.2
2,4-Dinitrophenol	<3.2	<3.2
2-Methylphenol	<0.66	<0.66
4-Methylphenol	<0.66	<0.66
2-Nitrophenol	<0.66	<0.66
4-Nitrophenol	<3.2	<3.2
p-Chloro-m-cresol	<0.66	<0.66
Pentachlorophenol	<3.2	<3.2
Phenol	<0.66	<0.66
2,4,5-Trichlorophenol	<3.2	<3.2
2,4,6-Trichlorophenol	<0.66	<0.66
Extraction Date	9/1/89	9/1/89
Analysis Date	10/21/89	10/21/89
Internal Standards		
Level Added = 2.0 ug/g		
(% Recovery)		
Phenanthrene-D_{10}	143	133
Surrogates		
(% Recovery)		
2-Fluorophenol	75	74
Phenol-D_5	77	70
2,4,6-Tribromophenol	47	43
Nitrobenzene-D_5	64	62
2-Fluorobiphenyl	70	67
Terphenyl-D_{14}	102	94

* Elevated detection limits are the result of a dilution necessitated by sample matrix.

I.D. #89-1665

Sample Number
BLANK96

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NUSEG-CORP-LAB
Lab Sample ID No: BLANK96
Sample Matrix: SOIL
Data Release Authorized By:

Case No: MEB2969
QC Report No:
Contract No:
Date Sample Received: 09/06/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared:
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 0.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	630	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	630	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	630	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	630	U
75-09-2	Methylene Chloride	630	U	79-00-5	1,1,2-Trichloroethane	630	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	630	U
75-15-0	Carbon Disulfide	630	U	10061-01-5	cis-1,3-Dichloropropene	630	U
75-35-4	1,1-Dichloroethene	630	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	630	U	75-25-2	Bromoform	630	U
156-60-5	Trans-1,2-Dichloroethene	630	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	630	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	630	U	127-18-4	Tetrachloroethene	630	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	630	U	108-88-3	Toluene	630	U
56-23-5	Carbon Tetrachloride	630	U	108-90-7	Chlorobenzene	630	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	630	U
75-27-4	Bromodichloromethane	630	U	100-42-5	Styrene	630	U
					Total Xylenes	630	U

U – Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MEEIXX8901

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0196
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 0.0

CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	630	U
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
156-60-5	Trans-1,2-Dichloroethene	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U

CAS Number		UG/KG	
78-87-5	1,2-Dichloropropane	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
110-75-8	2-Chloroethylvinylether	1300	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	1300	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
	Total Xylenes	630	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

| Sample Number
| MEEIXX8903

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0396
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 13.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1400	U	78-87-5	1,2-Dichloropropane	720	U
74-83-9	Bromomethane	300	J	10061-02-6	Trans-1,3-Dichloropropene	720	U
75-01-4	Vinyl Chloride	1400	U	79-01-6	Trichloroethene	720	U
75-00-3	Chloroethane	1400	U	124-48-1	Dibromochloromethane	720	U
75-09-2	Methylene Chloride	720	U	79-00-5	1,1,2-Trichloroethane	720	U
67-64-1	Acetone	1400	U	71-43-2	Benzene	720	U
75-15-0	Carbon Disulfide	720	U	10061-01-5	cis-1,3-Dichloropropene	720	U
75-35-4	1,1-Dichloroethene	720	U	110-75-8	2-Chloroethylvinylether	1400	U
75-34-3	1,1-Dichloroethane	720	U	75-25-2	Bromoform	720	U
156-60-5	Trans-1,2-Dichloroethene	720	U	108-10-1	4-Methyl-2-Pentanone	1400	U
67-66-3	Chloroform	720	U	591-78-6	2-Hexanone	1400	U
107-06-2	1,2-Dichloroethane	720	U	127-18-4	Tetrachloroethene	720	U
78-93-3	2-Butanone	1400	U	79-34-5	1,1,2,2-Tetrachloroethane	1400	U
71-55-6	1,1,1-Trichloroethane	720	U	108-88-3	Toluene	720	U
56-23-5	Carbon Tetrachloride	720	U	108-90-7	Chlorobenzene	720	U
108-05-4	Vinyl Acetate	1400	U	100-41-4	Ethylbenzene	720	U
75-27-4	Bromodichloromethane	720	U	100-42-5	Styrene	720	U
					Total Xylenes	720	U

J - Reported value is less than the detection limit.
U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

| Sample Number
| MEEIXX8903A

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME3A96
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82789
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 7.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	670	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	670	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	670	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	670	U
75-09-2	Methylene Chloride	670	U	79-00-5	1,1,2-Trichloroethane	670	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	670	U
75-15-0	Carbon Disulfide	670	U	10061-01-5	cis-1,3-Dichloropropene	670	U
75-35-4	1,1-Dichloroethene	670	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	670	U	75-25-2	Bromoform	670	U
156-60-5	Trans-1,2-Dichloroethene	670	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	670	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	670	U	127-18-4	Tetrachloroethene	670	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	670	U	108-88-3	Toluene	670	U
56-23-5	Carbon Tetrachloride	670	U	108-90-7	Chlorobenzene	670	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	670	U
75-27-4	Bromodichloromethane	670	U	100-42-5	Styrene	670	U
					Total Xylenes	670	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MBEIA/09904

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSDEC-DOFF-LAS
Lab Sample ID No: MB0496
Sample Matrix: SOIL
Date Release Authorized By:

Case No: MB2899
NC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 12.0

CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1400	U	78-87-5	1,2-Dichloropropane	710	U
74-83-9	Bromomethane	1400	U	10061-02-6	Trans-1,3-Dichloropropene	710	U
75-01-4	Vinyl Chloride	1400	U	79-01-6	Trichloroethene	710	U
75-00-3	Chloroethane	1400	U	124-48-1	Dibromochloromethane	710	U
75-09-2	Methylene Chloride	710	U	79-00-5	1,1,2-Trichloroethane	710	U
67-64-1	Acetone	1400	U	71-43-2	Benzene	710	U
75-15-0	Carbon Disulfide	710	U	10061-01-5	cis-1,3-Dichloropropene	710	U
75-35-4	1,1-Dichloroethene	710	U	110-75-8	2-Chloroethylvinylether	1400	U
75-34-3	1,1-Dichloroethane	710	U	75-25-2	Bromoform	710	U
156-60-5	Trans-1,2-Dichloroethene	710	U	108-10-1	4-Methyl-2-Pentanone	1400	U
67-66-3	Chloroform	710	U	591-78-6	2-Hexanone	1400	U
107-06-2	1,2-Dichloroethane	710	U	127-18-4	Tetrachloroethene	710	U
78-93-3	2-Butanone	1400	U	79-34-5	1,1,2,2-Tetrachloroethane	1400	U
71-55-6	1,1,1-Trichloroethane	710	U	108-88-3	Toluene	710	U
56-23-5	Carbon Tetrachloride	710	U	108-90-7	Chlorobenzene	710	U
108-05-4	Vinyl Acetate	1400	U	100-41-4	Ethylbenzene	710	U
75-27-4	Bromodichloromethane	710	U	100-42-5	Styrene	710	U
					Total Xylenes	710	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

| Sample Number
| MEEIXX8905

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME0596
Sample Matrix: SOIL
Data Release Authorized By:

Case No: ME82989
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 12.0

CAS Number		UG/KG	
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	710	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
156-60-5	Trans-1,2-Dichloroethene	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U

CAS Number		UG/KG	
78-87-5	1,2-Dichloropropane	710	U
10061-02-6	Trans-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
108-88-3	Toluene	710	U
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	710	U
100-42-5	Styrene	710	U
	Total Xylenes	710	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Sample Number
MEEIXX8910

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: NYSEG-CORP-LAB
Lab Sample ID No: ME1096
Sample Matrix: SOIL
Data Release Authorized By:

Case No: MEB2987
QC Report No:
Contract No:
Date Sample Received: 08/30/89

VOLATILE COMPOUNDS

Concentration: MED
Date Extracted/Prepared: 09/06/89
Date Analyzed: 09/06/89
Dil Factor: 125 pH
Percent Moisture: (Not Decanted) 0.0

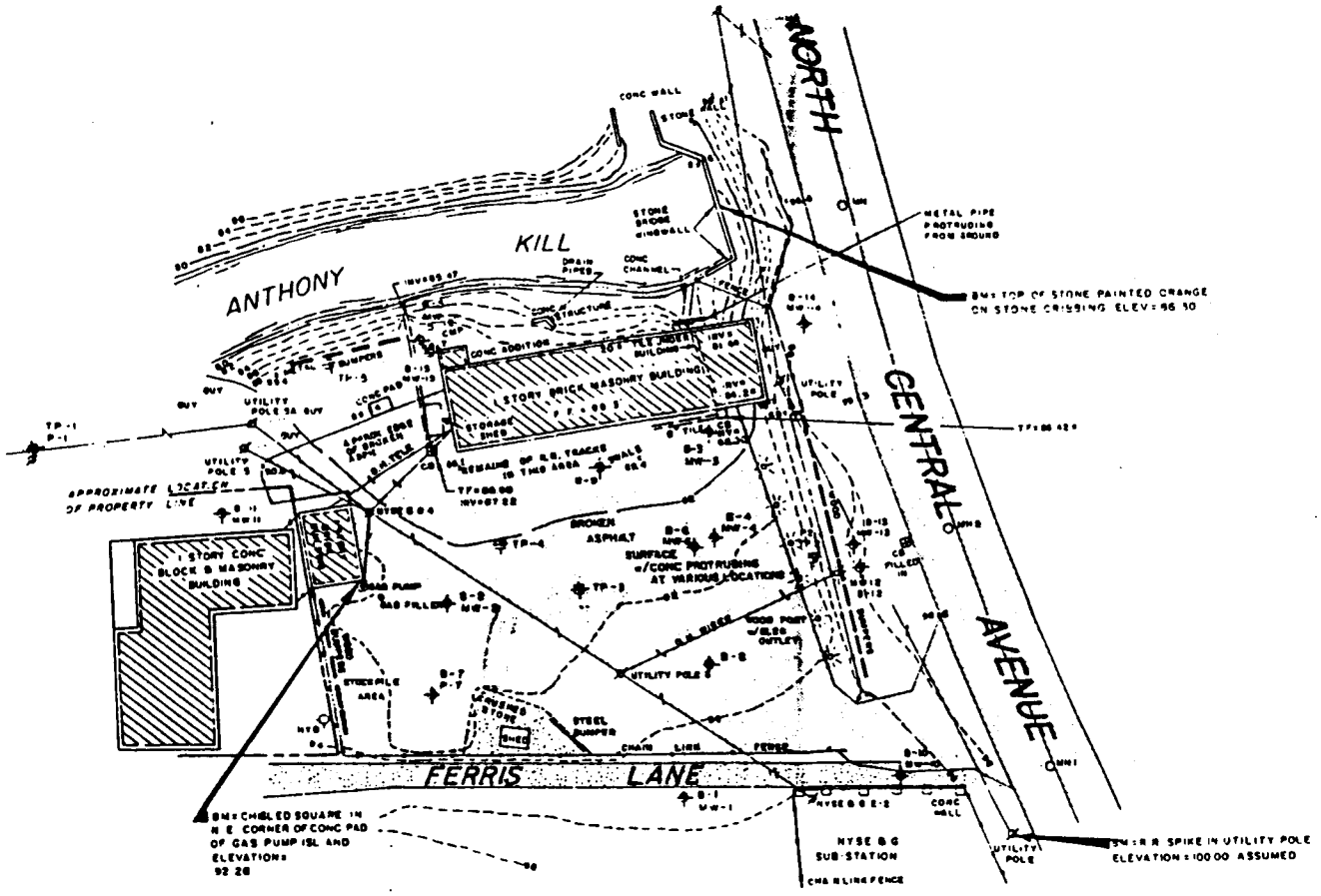
CAS Number		UG/KG		CAS Number		UG/KG	
74-87-3	Chloromethane	1300	U	78-87-5	1,2-Dichloropropane	630	U
74-83-9	Bromomethane	1300	U	10061-02-6	Trans-1,3-Dichloropropene	630	U
75-01-4	Vinyl Chloride	1300	U	79-01-6	Trichloroethene	630	U
75-00-3	Chloroethane	1300	U	124-48-1	Dibromochloromethane	630	U
75-09-2	Methylene Chloride	630	U	79-00-5	1,1,2-Trichloroethane	630	U
67-64-1	Acetone	1300	U	71-43-2	Benzene	630	U
75-15-0	Carbon Disulfide	630	U	10061-01-5	cis-1,3-Dichloropropene	630	U
75-35-4	1,1-Dichloroethene	630	U	110-75-8	2-Chloroethylvinylether	1300	U
75-34-3	1,1-Dichloroethane	630	U	75-25-2	Bromoform	630	U
156-60-5	Trans-1,2-Dichloroethene	630	U	108-10-1	4-Methyl-2-Pentanone	1300	U
67-66-3	Chloroform	630	U	591-78-6	2-Hexanone	1300	U
107-06-2	1,2-Dichloroethane	630	U	127-18-4	Tetrachloroethene	630	U
78-93-3	2-Butanone	1300	U	79-34-5	1,1,2,2-Tetrachloroethane	1300	U
71-55-6	1,1,1-Trichloroethane	630	U	108-88-3	Toluene	630	U
56-23-5	Carbon Tetrachloride	630	U	108-90-7	Chlorobenzene	630	U
108-05-4	Vinyl Acetate	1300	U	100-41-4	Ethylbenzene	630	U
75-27-4	Bromodichloromethane	630	U	100-42-5	Styrene	630	U
					Total Xylenes	630	U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Appendix E

Site Survey Map



RECORD OF WORK	DATE		
	6-26-86	PREPARED FOR E C JORDAN CO.	D.A.F.
	10 7 86	MONITORING LOCATIONS & DATA ADDED E.C. JORDAN	D.A.F.
	12 4 87	" " , BORING & GEOPHYSICAL	
		SIGHTS ADDED - E C JORDAN	D.A.F.
	12 10 87	ELEVATIONS AT GEOPHYSICAL SURVEY POINTS	
		ADDED	D.A.F.

TOPOGRAPHIC SURVEY
PORTION OF LANDS OF
NEW YORK STATE ELECTRIC & GAS CORP.
(MECHANICVILLE SITE)

TOWN OF MECHANICVILLE	COUNTY: SARATOGA, N.Y.
SCALE: 1"=50'	DATE: JUNE 26, 1986

DAVID A. FLANDERS ASSOCIATES
6 MORNINGSIDE DRIVE
BALLSTON LAKE, NEW YORK

MAP BY: DAVID A FLANDERS	LIC. NO: 49,134

86-72-S

MONITORING DEVICE		ELEVATION
MONITORING WELL	#1	98.56
" "	#2	91.31
" "	#3	87.31
" "	#4	90.61
" "	#5	87.89
" "	#6	90.65
" "	#10	96.49
" "	#11	91.44
" "	#12	98.46
" "	#13	98.48
" "	#14	98.93
" "	#15	88.17
BORING	#1 GROUND	95.9
"	#2 "	91.6
"	#3 "	87.4
"	#4 "	91.0
"	#5 "	88.4
"	#6 "	91.0
"	#7 "	91.8
"	#8 "	93.2
"	#9 "	88.5
"	#10 "	96.7
"	#11 "	92.1
"	#12 "	98.3
"	#13 "	98.6
"	#14 "	98.7
"	#15 "	88.5
PIEZOMETER	#1	95.02
"	#2	98.83
"	#7	91.76
TEST PIT	#1	92.5
" "	#2	95.2
" "	#3	91.4
" "	#4	90.3
" "	#5	89.1

NOTE: ELEVATION OF MONITORING WELLS AND PIEZOMETERS TAKEN AT TOP OF EXISTING NOTCH CUT IN TOP OF P.V.C. PIPE.

NOTES:

A. TOPOGRAPHIC INFORMATION SHOWN HEREON HAS BEEN COMPILED UTILIZING STANDARD FIELD SURVEY PROCEDURES. NO ATTEMPT HAS BEEN MADE TO SHOW THE SIZE AND LOCATION OF ANY UNDERGROUND UTILITIES OF SUBSURFACE FEATURES WHICH MAY EXIST.

B. ELEVATION DATUM USED IN CONNECTION WITH THE PREPARATION OF SURVEY IS FROM AN ASSUMED DATUM.

C. THE LIMITS OF OWNERSHIP OF LANDS OF NEW YORK STATE ELECTRIC AND GAS CORP., WHERE NOT READILY APPARENT AT THE TIME OF THIS TOPOGRAPHIC SURVEY. FOR LOCATION OF PERTINENT PROPERTY LINES A BOUNDARY SURVEY IS RECOMMENDED.

Appendix F

Solubility Data

SOLUBILITIES OF PAHs IN WATER (mg/ℓ)[1]

Compound	Verschueren[2]	EPA Treatability Manual[3]
Acenaphthene	--	3.42
Acenaphthylene	3.93	3.93
Anthracene	1.29	0.073
Benzo(a)anthracene	0.044 at 24°C	0.014
Benzo(a)pyrene	0.003 at 20°C	0.0038
Benzo(b)fluoranthene	--	NA[4]
Benzo(k)fluoranthene	--	0.00055
Benzo(g,h,i)perylene	0.00026	0.00026
Chrysene	0.006	0.002
Dibenzo(a,h)anthracene	--	0.0005
Fluoranthene	0.120 at 24°C	0.26
Fluorene	1.9	1.98
Indeno(1,2,3-cd)pyrene	--	0.62
Naphthalene	30.0 at 20°C	34.4
Phenanthrene	0.816 at 21°C	1.29
Pyrene	0.032 at 24°C	0.14

[1] All values are calculated at 25°C unless otherwise noted.

[2] Verschueren, K. Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold Company, New York, New York 1977.

[3] USEPA, Treatability Manual Volume I: Treatability Data, Office of Research and Development, Washington, DC EPA-600/2-82-001a. September 1981 (Revised).

[4] NA - Not available.

Appendix G

G-1 Dose Response Assessment

G-2 Toxicological Profiles

G-3 Risk Templates

G-4 Air Modeling Method and Results

Appendix G-1

Dose Response Assessment

POLYNUCLEAR AROMATIC HYDROCARBONS

In this section, various issues relating to the incremental excess cancer risk from exposure to PAHs are discussed. These issues include a discussion of PAH mixtures and how they are treated in a risk assessment, and reviews of the studies used by USEPA to derive the cancer potency factors.

Polynuclear Aromatic Hydrocarbon Mixtures

Many PAH-containing mixtures are carcinogenic in humans and animals. Some pure PAH components have been tested in animals and found to have carcinogenic activity, while others have been repeatedly tested and found to have no carcinogenic activity. Quantitative dose/response data exist only for a few well-studied PAHS. Benzo(a)Pyrene (B(a)P) is well-studied and is often used as a surrogate for PAHs as a class. USEPA and ICF-Clement Associates cancer potency factors have been derived for B(a)P for both the oral and inhalation routes.

PAHs are routine analytes at former coal gasification sites. Several are carcinogenic, while several are not considered by USEPA or the International Agency for Research on Cancer (IARC) to be carcinogenic. There are three possible approaches for performing quantitative risk assessment of this subset of PAHs for which there are analytical data:

- Total all the PAHs and apply the cancer potency factor for B(a)P.

- Total all the PAHs considered carcinogenic and apply the cancer potency factor for B(a)P.

- Use a comparative potency approach whereby each PAH is converted into B(a)P equivalents based on its potency relative to B(a)P in a mouse skin assay.

The first approach is not routinely used because it is believed by many that the actual risks to human health are overestimated by the method. The approach routinely adopted by USEPA as a basis of risk assessment is the second approach. The cancer potency factors calculated from assays on B(a)P are applied to the subclass of carcinogenic PAHs within the mixture that is to be assessed. Therefore, the B(a)P cancer potency factor is applied to all carcinogenic PAHs regardless of the extent of evidence of their carcinogenicity.

The merits of this approach are (1) it is very easy to accomplish and (2) a margin of safety is incorporated by assigning the cancer potency factor for B(a)P to all carcinogenic PAHs. This margin of safety is needed because hazardous waste samples that contain PAHs are likely to have many more PAHs than the 16 routine analytes.

However, there are critics of the current USEPA approach. Proponents of the comparative potency approach argue that B(a)P is known to be more potent in the mouse skin assay than several other common PAHs. The first and second approaches therefore overestimate the human carcinogenic risk from exposure to

an environmental mixture of PAHs by assuming that other PAHs are equal in potency to B(a)P. The comparative potency approach (ICF-Clement Associates, 1987a; Chu and Chen, 1984) has merit for assessing the risks of a specific PAH mixture of known composition. An important criticism of the comparative potency approach such as that proposed by ICF-Clement Associates is that it ignores the myriad of other carcinogenic PAHs normally found in PAH-contaminated samples. Table B-2 shows a list of some individual PAHs that have been identified in coal tar and related products and that have been found to be carcinogenic. Many of these compounds are present in hazardous waste samples for which risk assessment must be performed. When samples of these wastes are sent to Contract Laboratory Program laboratories for analysis, however, data on only 14 PAHs will be collected. Only six of these are considered by USEPA to be probable human carcinogens. The comparative potency approach totally ignores these compounds. The USEPA approach of totaling the carcinogenic PAHs does not explicitly consider these other probable contaminants. However, the application of the B(a)P factor to the subset of the carcinogenic PAHs may provide an appropriate margin of safety, given that not all carcinogenic PAHs are as potent as B(a)P.

TABLE G-1-1

PAH ANALYTES AT HAZARDOUS WASTE SITES

PAHS ON USEPA'S HSL (TCL)	PAHS CONSIDERED CARCINOGENIC BY USEPA	PAHS FOR WHICH ICF-DERIVED COMPARATIVE POTENCY FACTOR EXISTS
Benzo(a)pyrene	x	x
Indeno(1,2,3-cd)pyrene	x	x
Dibenzo(a,h)anthracene	x	
Benzo(a)anthracene	x	x
Chrysene	x	x
Benzo(b)fluoranthene	x	x
Benzo(k)fluoranthene		x
Benzo(g,h,i)perylene		x
Fluorene		
Acenaphthene		
Phenanthrene		
Anthracene		
Fluoranthene		
Pyrene		

TABLE G-1-2

COAL-TAR CONSTITUENTS OF INTEREST
THAT ARE NOT ROUTINE ANALYTES
AT HAZARDOUS WASTE SITES

CARCINOGENIC PAHS	
Carbazole	(USEPA category B2 carcinogen)
Quinoline	
Dibenzocarbazoles	
2-aminopyrene	
Benzo(c)acridine	(USEPA category C; IARC-limited animal data)
Benzo(e)pyrene	(IARC-limited short-term data)
Benzo(j)fluoranthene	(IARC-sufficient animal data)
Benzo(a)fluoranthene	(IARC-sufficient animal data)
Dibenz(a,h)anthracene	(IARC-limited animal data)
Dibenz(a,c)anthracene	(IARC-limited animal data)
Dibenz(a,i)pyrene	(IARC-sufficient animal data)
5,6-benzoquinoline	
Methyl pyrene	
Dibenzo(a,h)pyrene	
Dibenzo(c,g)carbazole	
Cyclopenta(c,d)pyrene	(IARC-limited animal data)
Benzo(c)phenanthrene	

Scientific reviewers of the ICF-Clement Associates approach, while applauding the authors' theoretical treatment of the topic, also pointed out the limitations of using such a method for complex environmental samples. For example, Dr. Roy Albert (ICF-Clement Associates, 1987b) made the following comment:

> The section that tests the comparative potency method using a synthetic mixture of PAHs is fine but needs to include a mixture found in real life such as products of combustion, extracts of shale tar, or cigarette smoke condensate. USEPA's use of B(a)P as a surrogate could cover unknown carcinogenic constituents in such mixtures, so may have some validity. Some realistic complex mixtures should be examined to see if the comparative potency method works. It is not necessary to include such an examination as part of this effort, but it should be done at some point.

In a similar vein, Dr. Jeffrey Harris (ICF-Clement Associates, 1987b) of Massachusetts Institute of Technology made the following comment:

> I am concerned that a great many environmental mixtures (e.g., smoke from fossil fuel combustion, leachates from hazardous waste sites) will not consist purely of PAHs. In such cases, I am not sure that the proposed methodology will address the central problem of evaluating the potency of the overall mixture. If, as suggested by the current report, most PAHs are of equal or lesser potency than B(a)P, then the real uncertainties will arise not from the PAHs but from the remaining compounds, either alone or in combination with PAHs. Suppose that a mixture contains PAHs,

which are known tumor initiators and also dioxins and PCBs, which are known tumor promoters. Refined analysis of PAH potencies will still not address the initiator-promoter interactions between PAHs and the other compounds. To take a simple example, would one expect to predict the carcinogenic potency of tobacco smoke from the PAH dose-additive model, when such smoke contains nitrosamines, metals, radioisotopes, etc.? The above objection can be rebutted, at least to some extent, if the authors can show that many relevant environmental mixtures consist of pure PAHs.

Another criticism of the comparative potency approach concerns the potential for synergistic effects when individual components are administered together. Dr. Norton Nelson (ICF-Clement Associates, 1987b) of New York University made the following comment upon reviewing the ICF-Clement Associates document:

> There are, of course, the usual concerns about cross-species extrapolation; the presence of inhibitory, enhancing as well as additive and neutral factors in the media in which the several agents are found; the uncertainty as to the sequence in which the biological action takes place in the several species and so forth and so forth [sic]. Most of these are, of course, covered in the discussion.
>
> It may be noted that published work has shown that in some instances when several carcinogenic agents, which are independently active, when administered together can produce either addition or inhibition and, perhaps, in some cases, synergistic action. This, of course, relates to the underlying premise of the additive nature of carcinogens which is a

prime assumption built into the whole process.

The ICF-Clement Associates report clearly states that their approach does not address the issue of antagonism or synergism, but such effects have been documented and can have important implications for risk assessment when complex environmental mixtures are involved. The following paragraphs summarize several selected reports of synergism found in a cursory review of the scientific literature.

In the IARC report on coal tars and derived products (IARC, 1985), there is a report on the co-carcinogenic properties on a noncarcinogenic fraction of creosote. A basic fraction of creosote was tested in mice by Sall and Shear (IARC, 1985) for modifying effects of B(a)P-induced tumorigenesis. A group of 100 female strain A mice was divided into five subgroups and painted three times a week (124 to 145 times) with a 1 percent solution of the basic fraction in benzene, 0.2 or 0.05 percent B(a)P in benzene, or 0.05-percent B(a)P in benzene containing 1 percent of the basic creosote fraction alone. Tumors were not produced in any of the mice receiving the basic creosote fraction alone. However, the latent period for tumor appearance was shorter in the groups receiving B(a)P and the basic fraction of creosote as compared with that for mice receiving B(a)P alone, suggesting that the basic fraction of creosote decreased the latency of the tumorigenic effects of B(a)P.

In addition, many studies on co-carcinogenesis have been concerned with the identification of tumor-accelerating substances present in cigarette smoke. These compounds are generally tested for co-carcinogenic activity by repeated

application to mouse skin together with low doses of B(a)P. A positive response would be obtained in cases where the tumor yield of the combination exceeds that produced by either agent alone at the same doses. Van Duuren and co-workers (USEPA, 1979) established that a pronounced co-carcinogenic effect could be obtained with catechol and the noncarcinogens pyrene, benzo(e)pyrene, B(e)P, and benzo(g,h,i)perylene. Doses of 2,000, 12, 15, and 21 ug of catechol, pyrene, B(e)P, and benzo(g,h,i) perylene, respectively, were applied three times a week for 52 weeks to female ICR/Ha Swiss mice. Each animal also received 5 ug of B(a)P in 0.1 ml acetone with each dose of test substance. Fluoranthene has also been shown to possess co-carcinogenic activity. The application of a comparative potency approach to assessing the risks of PAHs would totally ignore the co-carcinogenic properties of some of the noncarcinogenic compounds.

Summary

Jordan reviewed the toxicologic data on the tumorigenesis of B(a)P and mixtures of PAH compounds, and concluded that (1) use of the cancer potency factors for B(a)P derived by USEPA and ICF-Clement Associates for the oral and inhalation routes is appropriate, and (2) these values should be used to assess the risks of the total concentration of carcinogenic PAHs. Jordan recognizes that there are some technical limitations to this approach; however, the limitations are not serious enough to justify selecting another approach.

Although using the cancer potency factor from assays on B(a)P for the seven

carcinogenic PAHs detected at the site may overestimate actual risk, Jordan considers it the most suitable alternative for assessing risks of exposure to a mixture of PAHs. While not used to quantitatively assess carcinogenic risks in this report, Jordan will refer to the comparative potency approach developed by ICF-Clement Associates in a qualitative manner, when discussing the results of the risk assessment and interpreting their significance. Drawbacks to the use of the USEPA cancer potency factors are briefly summarized in the following paragraphs.

Derivation of the Oral Cancer Potency Factor

The current cancer potency factor (oral) for B(a)P is based on a quantitative analysis of the dose-response data presented in a study by Neal and Rigdon (1967). In this study, male and female mice (CFW strain) were repeatedly fed B(a)P in their diet. The carcinogenic endpoint was forestomach tumors.

Numerous other studies similarly demonstrate that orally administered B(a)P can cause gastric tumors in several strains of mice (Collins et al., 1943; Peacock and Kirby, 1944; Nau et. al. 1958; Rigdon and Neal, 1966; Federenko and Yanysheva, 1966). Previous studies, however, did not utilize large numbers of animals or multiple doses. Therefore, the study by Neal and Rigdon (1967), which used 608 mice and 10 dose levels, was chosen by USEPA for quantitative dose/response assessment. In this study, mice were dosed for varying periods of time with B(a)P incorporated into laboratory chow. The exact manner of preparing the diet was not reported. Animals were allowed to eat ad libitum. Dosimetry was not quantitatively performed by measuring food

consumption. The amount of B(a)P consumed was estimated assuming that each mouse consumed 4 g of food daily. This lack of quantitative dosimetry introduces uncertainty into the value of the cancer potency factor.

Stomach tissues were examined macroscopically and histologically. The frequency of papillomas and squamous cell carcinomas in the squamous portion of the stomach (forestomach) were recorded. Tumors did not occur in other parts of the GI tract. Other tissues were not examined. The authors concluded that the development of gastric tumors in CFW mice fed B(a)P is influenced by (1) the concentration of B(a)P per gram of food; (2) the number of days it is fed; and (3) the total amount of B(a)P ingested per day.

There are several aspects of the Neal and Rigdon study (1967), as well as USEPA's approach to deriving an oral cancer potency factor, which have been criticized in the scientific literature. These criticisms are presented to highlight some of the toxicological uncertainties associated with the use of the B(a)P potency factor for quantifying incremental excess cancer risk. Jordan considers these criticisms insufficient to warrant not using the potency values.

Critical comments on the Neal and Rigdon study (1967) are twofold. First, the mice were fed diets dosed with B(a)P, but actual food intake per animal was not measured. An average food intake was assumed. Second, the dosing period was not consistent across exposure groups.

A deficiency of the Neal and Rigdon study (1967) for derivation of a cancer

potency factor is that the maximum period of the experiment was only 110 days for most dosage groups, and 70 to 197 days for several dosage groups. It is likely that the dose required to produce the observed effects would have been lower had the experimental dosing period been longer (USEPA, 1982). This assumption has basis in the study itself. Other animals were dosed for shorter periods of time and were observed to have reduced effects in proportion to the dosing time. Other experimental factors that are atypical of standard bioassay protocols include variable age of first exposure and an observation period that lasted on-fifth of a lifetime.

USEPA corrected for several of these experimental deficiencies in calculating its cancer potency factor. First, USEPA restricted its analysis of the data set to that subgroup of the experimental population that had been exposed continuously for the length of the experiment. Second, USEPA adjusted the experimental dose by averaging the actual daily dose for the dosing period over the entire experiment period.

$$\text{Adjusted dose} = \text{Actual daily dose} \times \frac{110 \text{ days}}{183 \text{ days}}$$

Lastly, the unadjusted cancer potency factor from the study was translated into a human potency value. First, the risk must be adjusted to account for constant exposure throughout one's entire lifetime. It was assumed that a normal mouse lifetime was 630 days. USEPA's standard procedures for less than full lifetime follow-up yield an adjustment factor of $(630/183)^3 = 40.8$.

Second, it is standard practice to calculate species-equivalent exposure units

on a unit mass/unit surface area basis. To convert the estimate to these units, it is multiplied by the additional adjustment factor of $(70/0.034)^{1/3}$ = 12.72, where 70 and 0.034 kg are the weights of an average human and CFW mouse, respectively. After making these two adjustments, the human cancer potency factor was estimated to be 11.53 $(mg/kg/day)^{-1}$.

In fitting the linearized model, no adjustments were made for the variable ages of the animals at first dosing or the ages attained at the end of the observation period. Using the standard USEPA approach, data on animals exposed to 50 ppm B(a)P or more were discarded because of "lack of fit." USEPA obtained a 95 percent upperbound estimate on the chemical's potency to humans of 11.53 $(mg/kg/day)^{-1}$. This number represents an upperbound on the slope of the cancer dose-response curve for this chemical.

USEPA is currently considering lowering the oral potency factor to 4.3 $(mg/kg/day)^{-1}$ based on a reanalysis of the available dose-response data regarding oral exposures to B(a)P. However, at this time, there is no way to predict either the likelihood that the cancer potency factor will, in fact, be changed or the scheduled date at which any potential agency changes would be finalized.

Other toxicological issues have been raised. One issue focuses on the relevance of the tumor endpoint between animals and humans, which is related to physiological differences of the target organs in animals and humans. When applying the current USEPA oral cancer potency factor to human risk assessment, it is important to question the relevance of the tumor endpoint

from the animal study to humans. The relevance of rodent forestomach tumors to humans has been examined (USEPA, 1982). While apparently relevant with respect to route of administration, the site of tumor production and probable underlying mechanism are possibly unique to laboratory rodents because of the anatomy of the rodent stomach. The forestomach in both rat and mouse is nonglandular and has a stratified squamous epithelium with a cornified covering. The fundus portion of the human stomach (homologous to the forestomach in rodents) is glandular and has a columnar epithelium. The similarities between the epithelium of rodents and that of skin suggest that the induction of forestomach tumors in mice may be analogous to the induction of skin tumors in skin-painting bioassays. This possibility calls into question the relevance of forestomach tumors in mice to the potential for human cancer from B(a)P ingestion.

B(a)P has been shown to cause distant site tumors where administered orally. This is consistent with the wide tissue distribution that has been observed in rodents following GI absorption. Rigdon and Neal observed pulmonary adenomas, thymomas, lymphomas, and leukemia in CFW mice fed B(a)P (Rigdon and Neal, 1966; Rigdon et al., 1967). Ingestion of B(a)P caused mammary tumors in Lewis rats (USEPA, 1979) and Sprague/Dawley rats (USEPA, 1982). Ovarian, lymphoid, mammary, and heptic tumors have also been observed in mice after oral administration of a related PAH (i.e., dimethylbenzanthracene).

For human risk assessment, an oral cancer potency factor based on gastric tumors and/or distant site tumors in a species anatomically more similar to humans than rodents would be desirable. In its absence, the current USEPA

cancer potency factor may be used for oral exposures to humans. Although there is no information of cancers in humans following oral exposures to PAHs, members of this class of compounds have been shown to cause skin, lung, and perhaps bladder tumors in humans when administered by other routes of exposure (IARC, 1985; USEPA, 1982; USEPA, 1979).

Therefore, PAHs can be metabolically activated both at the site of entry (e.g., skin or lungs) and possibly at distant sites (e.g., bladder). Use of the oral cancer potency factor should be accompanied by a consideration of its limitations:

(1) The short duration of the experiment results is an unquantifiable uncertainty in the cancer potency factor.

(2) The possible oversensitivity of the mouse forestomach may overestimate the risk to humans of gastric tumors due to anatomical differences.

(3) The effect of the relative sensitivity of mouse and human stomachs regarding PAH metabolism and tumorigenesis has an unknown effect of the relative sensitivities of mice and humans to the formation of distant site tumors following oral exposures.

(4) The use of only gastric tumors in mice to derive the cancer potency factor and not the total of local and distant tumors introduces uncertainty in the estimates of total carcinogenic risks to humans

following oral exposure B(a)P.

The application of the USEPA oral cancer potency factor to dermal exposures in humans may be an appropriate use of the dose/response data. In the animals and in humans, the major anticipated site of action is the skin tissue itself. Both human and rodent skin exhibit the PAH-metabolizing activity required for tumorigenesis.

For over 200 years, it has been recognized that skin cancers are associated with occupational exposure to tars and pitches related to the destructive distillation of coal. Scrotal lesions represent a large fraction of the skin cancers reported in numerous studies. IARC (1985) has concluded that there is sufficient evidence that occupational exposures to coal tar, as they occur during the destructive distillation of coal, give rise to skin cancer in humans. In addition, there is sufficient evidence that coal tar pitches are carcinogens in humans, and limited evidence that coal tar-derived creosotes are carcinogenic in humans. These data are corroborated by the animal data. There is sufficient evidence for the carcinogenicity in experimental animals of coal tars, creosotes, creosote oils, anthracene oils, and coal tar pitches (IARC, 1985).

Little information exists on the potential for distant site tumors following dermal administration of PAHs to animals. In general, there has been inadequate reporting of the possible effects on internal organs of application to the skin of the text substances. The mouse skin assay, for instance, is restricted to observation of skin tumors.

In conclusion, it is reasonable to presume, based on the available information, that the major target organ of PAHs following dermal exposure by animals and humans is the skin itself. Because the oral cancer potency factor for B(a)P is based on gastric tumors that did not require systematic uptake of the B(a)P and because the anatomy of the rodent forestomach is similar to rodent skin, the cross-route application of a cancer potency factor is reasonable in this case. The uncertainty in the public health risk assessment process cannot be quantified. To have optimal accuracy, the risk assessor may wish to use an appropriately derived toxicokinetic factor to consider the differences in the local uptake into human skin versus uptake into the membranes of the GI tract of the CFW mouse.

The use of an oral cancer potency factor for assessing the risks due to dermal exposures to PAHs has several limitations that have unknown effects on the resulting estimates of carcinogenic risks.

Regarding the ability of a mouse oral cancer potency factor to estimate mouse skin responses, many scientists argue that the oral potency factor underestimates the potency of B(a)P as a mouse skin carcinogen. There is evidence in the literature that PAHs are more potent carcinogens in mouse skin under the experimental conditions than in the mouse GI tract (Grimmer, 1985). Jordan has performed some preliminary calculations to demonstrate this fact.

In a summary of four skin-painting experiments with C57BL/6J female mice (USEPA, 1979), doses of 0.025 umoles and higher (to 0.4 umoles) resulted in 7 to 100 percent of the animals developing tumors. The animals were treated

with B(a)P once every two weeks for 60 weeks by topical application to the shaved skin of the back. Therefore, total doses of as little as 0.19 mg per animal over 60 weeks produced significant carcinogenic responses. A similar result is observed when reviewing the results of a mouse skin study by Bingham and Falk (1969). A dose of 6.25 ug per animal given 3 times a week for 50 weeks caused 35 percent of the test animals to develop skin tumors. B(a)P was administered topically to the backs of C3H/He mice. The total dose of 0.94 mg resulted in a significant carcinogenic response. Habs et al. (1980) also showed that low doses of B(a)P can cause mouse skin tumors. B(a)P was topically applied to the backs of female NMRI mice for their lifetimes at a dose of 1.7 ug/animal, twice a week. It is not known what the lifetime of these animals was, but even assuming a full two years, the total dose per animal that caused a tumor incidence of 24 percent was only 0.35 mg per animal.

These total dermal doses of 0.2 to 0.9 mg per animal to produce a significant carcinogenic response are two orders of magnitude lower than the total orally administered dose of B(a)P that Neal and Rigdon (1967) gave over 100 days to produce a significant carcinogenic response. In that study of B(a)P in the diet, at 40 to 250 ppm, total doses of 13 to 165 mg per animal caused tumor incidences of 2.5 to 90 percent (gastric tumors).

It would appear that the application of the B(a)P oral cancer potency factor would underestimate the risk to mice dosed dermally with B(a)P.

The relevance of this finding to risk assessment is, however, questionable.

potency factor for benzo(a)pyrene (B(a)P) is based on local site-of-entry tumors in the gastrointestinal tract of rodents. These tissues are metabolically active and can cause PAH metabolism (EPA, 1979). Some studies have correlated tumorigenesis with arylhydrocarbon hydroxylase activity (EPA, 1979) in mouse gastric mucosa. Thus, systemic uptake and hepatic metabolism is not required for PAHs to cause gastric tumors in mice.

For the skin, where the risk assessor wishes to apply an orally derived dose/response value, the situation is similar. The expected carcinogenic endpoint is primarily cancer of the skin. Skin is also metabolically active, and systemic absorption is not required for skin tumorigenesis. B(a)P has been shown to cause distant site tumors when administered orally. Rigdon and Neal observed pulmonary adenomas, thymomas, and leukemia in mice fed B(a)P (Rigdon and Neal, 1966; Rigdon, et al., 1967). The current EPA cancer potency factor, however, does not consider distant site tumors. Thus, when making the direct comparison of dermal dosing situation to the EPA cancer potency factor, only local uptake into the tissues at the site of entry needs to be considered.

An appropriate dermal toxicokinetic factor would consider the comparative rates of uptake into the tissue, the rates of both toxifying and detoxifying metabolism, and the rates of systemic uptake of the parent compound and/or metabolites between the mouse gastrointestinal tract (diet) and the human skin (soil). Another issue to consider is the residence time of contact of the xenobiotic and the biological membrane. Quantitative information is not available to accurately derive a toxicokinetic factor at this time. It is

reasonable, however, to assume that local uptake of B(a)P into the gastrointestinal tract of mice exceeds the local uptake into the skin from PAH-contaminated soils. The skin is designed as a barrier, whereas the membranes of the gastrointestinal tract are designed to allow, if not facilitate, uptake of substances. It is common for risk assessments to use dermal toxicokinetic factors of 1-10 percent when qualtitatively assessing the risks due to dermal exposures to B(a)P and using its oral cancer potency factor. Thus, it is assumed that the net rate of local uptake of B(a)P into the skin of humans is 1-10 percent of the net rate of local uptake of B(a)P into the gastric mucosa of the mouse. In the absence of data to the contrary, these estimates are reasonable.

For carcinogenic PAHs, Jordan recommends that 0.5-1.0 be assumed as an oral TKF. The Neal and Rigdon study (1967) from which the EPA oral potency factor for B(a)P was derived was a dietary study in mice. B(a)P was administered as an ingredient in standard laboratory chow. No data are available on the effects of soils versus laboratory chow as vehicles. Likewise, no data exist on the comparative uptake or metabolism of B(a)P in membranes of gastrointestinal tracts of mice versus those of humans. Since there is no a priori reason to assume great differences, it is appropriate to use a toxicokinetic factor of 0.5-1.0 for B(a)P.

Basis of the USEPA Inhalation Cancer Potency Factor for B(a)P

A cancer potency factor for humans was derived by USEPA from the study of Thyssen et al. (1981). In this experiment, Syrian golden hamsters were exposed throughout their lives to B(a)P in a sodium chloride aerosol 4.5 hours/day, 7 days/week for 10 weeks, and then 3 hours/day thereafter. Respiratory tract tumors were induced in the nasal cavity, larynx, and trachea. The incidences of respiratory tumors were zero occurrences in a sample of 27 (0/27) for controls, 0/27 for the low-dose group, 9/26 for the mid-dose group, and 13/25 for the high-dose group. The highest exposure level had an adverse impact on survival time. Due to early mortality in the highest dose group, these data were excluded from the derivation of the cancer potency factor. Based on the respiratory tumor response of male hamsters and using the linearized multi-stage model, USEPA derived a potency factor from the study of 0.73 $(mg/kg/day)^{-1}$ (USEPA, 1984a). The cancer potency factor was translated into a human cancer potency factor by multiplying this value by the cube root of the body-weight ratio. This approach is empirically accepted to adjust for species-to-species extrapolation. The factor of $(70/0.12)^{1/3}$ was used to derive the human cancer potency factor of 6.11 $(mg/kg/day)^{-1}$.

USEPA is currently considering lowering the inhalation potency factor to 0.45 $(mg/kg/day)^{-1}$ based on a reanalysis of the available dose/response data regarding inhalation exposures to B(a)P. However, at this time there is no way to predict either the likelihood that the cancer potency factor will, in fact, be changed, or the scheduled date at which any potential agency changes would be finalized.

BENZENE

Benzene has been classified by USEPA as a Class A known human carcinogen based on several studies showing increased incidence of nonlymphocytic leukemia from occupational exposure. These studies have also shown increased incidence of neoplasia in rats and mice exposed by gavage and inhalation.

Derivation of the Oral and Inhalation Cancer Potency Factors

The oral and inhalation cancer potency factors for benzene have been set by USEPA at 2.9×10^{-2} $(mg/kg/day)^{-1}$; they were derived from the human data for inhalation exposure.

The unit risk estimate is the geometric mean of four maximum likelihood point estimates using pooled data from two occupational studies (Rinsky and Young, 1981; Ott, 1978), which were then adjusted for the results of the Wong et al. (1983) study. The pooled cohorts were significantly large and were followed for an adequate period of time. Increases in leukemias were statistically significant and related to dose in one of these studies. The risk estimates derived from considering the Rinsky and Ott studies were very close in value to the risk factor based on Infante et al. (1977), Ott (1978), and Aksoy (1974).

In a retrospective cohort mortality study, Rinsky and Young (1981) observed seven deaths from leukemia among 748 workers exposed to benzene and followed for at least 24 years (17,020 person-years). This increased incidence was statistically significant; the standard mortality ratio (SMR) was 560. (An SMR

is the ratio of the number of deaths observed in the study population to the number of deaths expected if it had the same rate structure as the chosen standard population.) For the five leukemia deaths that occurred among workers with more than 5 years exposure, the SMR was 2,100. Exposures ranged from 10 to 100 ppm (8-hour TWA).

Ott (1978) observed three deaths from leukemia among 594 workers followed for at least 23 years in a retrospective cohort mortality study, but the increase was not statistically significant. Exposures ranged from less than 2 to more than 25 ppm (8-hours TWA).

Wong et al. (1983) reported on the mortality of 3,036 male chemical workers who had been exposed to benzene for at least 3 days/week for 6 months during the years 1946 through 1975. The control subjects held jobs at the same plants for at least 6 months but were never subject to benzene exposure. Dose-dependent increases were seen in leukemia and lymphatic and hematopoietic cancer. The incidence of leukemia was responsible for the majority of the increase. It was noted that the significance of the increase was due largely to a less-than-expected incidence of neoplasia in the unexposed subjects.

TOLUENE

The evaluation of toluene for evidence of human carcinogenic potential is in progress. The dose/response assessment for toluene therefore is based on noncarcinogenic health endpoints.

Derivation of the Oral Risk Reference Dose

The oral RfD is 0.3 mg/kg/day where an uncertainty factor of 100 was applied (10 for sensitive individuals and 10 for interspecies extrapolation). The principal study from which the oral RfD was derived was that of the Chemical Industry Institute of Toxicology (CIIT, 1980). This was a 24-month inhalation toxicology study of Fischer-344 rats exposed to atmospheric toluene and is the only chronic toxicity study of toluene. The concentration levels of 30, 100, or 300 ppm (113, 377, and 1,130 mg/m^3) were administered to 120 male and 120 female rats 6 hours/day for 5 days/week. Equal numbers of each sex were used as controls. After 18 and 24 months, clinical chemistry, hematology, and urinalysis testing was performed. A No-Observed-Adverse-Effect Level (NOAEL) of 300 ppm was based on the finding that all measured parameters at the end of the study were normal except for a dose-related decrease in hematocrit value in females at 100- and 300-ppm exposure levels.

The oral RfD was derived by route-to-route extrapolation and expanding the exposure from 6 hours/day, 5 days/week to continuous exposure, and multiplying by 20 m^3/day for a human breathing rate, dividing by 70-kg human weight, and assuming a 0.5 absorption factor. This absorption factor is not used for all chemicals due to inconsistency in the development methods for RfDs.

An oral study by Wolf et al. (1956) reported no subchronic adverse effects of toluene at the maximum tested dose (590 mg/kg/day). Other subchronic inhalation and oral studies in rats and mice support the NOAEL. Although confidence in the principal study for the oral RfD is rated high due to the large sample size and number of measurements, the confidence of the oral RfD is only medium because it was based on an inhalation study.

Derivation of the Inhalation Risk Reference Dose

The AIC for inhalation has recently changed from 1.5 mg/kg/day to 1.0 mg/kg/day (USEPP, 1987). This is a reevaluation of the Chemical Industry Institute of Toxicology (CIIT) (1980) study, as mentioned in the discussion of the oral RfD. The derivation of this number is not known.

ETHYL BENZENE

Ethyl benzene has not yet been evaluated by USEPA for its human carcinogenic potential. Therefore, an RfD is calculated which assumes the health effect of concern is noncarcinogenic.

Derivation of the Oral Risk Reference Dose

The oral RfD for ethyl benzene is listed in IRIS as 0.1 mg/kg/day. It is based on a rat oral bioassay by Wolf et al. (1956) which showed liver and kidney toxicity. In the selected study, four groups of 10 albino female rats were administered doses of 13.6, 136, 408, or 680 mg/kg/day respectively of ethyl benzene in an olive oil gavage over 182 days. There were 20 rat controls.

The No-Observed-Effect Level (NOEL) of 136 mg/kg/day, from which the RfD is derived, is associated with histopathological changes seen in the liver and kidney. Other health endpoints examined in the study included: growth, mortality, appearance and behavior, hematological measurements, terminal concentration of urea nitrogen in the blood, final average organ and body weights, and bone marrow counts.

The RfD was derived from the NOEL by multiplying by 5 days/7 days to extrapolate to continuous exposure. No absorption factor was applied.

The chosen study is given a low confidence rating because only one sex was included in the study and because it was not a chronic duration study. In

addition, other supporting studies of oral toxicity are not known.

STYRENE

The evaluation of the human carcinogenic potential for styrene is under review by a USEPA inter-office agency work group. Although it is currently classified by USEPA as a probable human carcinogen (i.e., Class B2), there is no USEPA cancer potency factor. Therefore, in this analysis noncarcinogenic risks are estimated. In IRIS, the RfD is calculated for noncarcinogenic endpoints for oral exposure only.

Derivation of the Oral Risk Reference Dose

The styrene oral RfD is 0.2 mg/kg/day, which is principally based on the subchronic oral study in dogs by Quast et al. (1979). This study showed evidence of a NOAEL of 200 mg/kg/day for red blood cell and liver effects. There are other supporting studies cited. There is no dose conversion factor applied to the NOAEL of 200 mg/kg/day from the Quast et al. (1979) study to obtain the RfD.

The chosen study exposed four female and four male beagle dogs to doses of zero, 200, 400, or 600 mg styrene/kg body weight/day by peanut oil gavage for 560 days. No adverse effects were noted in the dogs gavaged with doses of 200 mg/kg/day. The effects observed at the higher dose categories were increased numbers of Heinz bodies in the red blood cells and liver, and increased iron deposits. There were noteworthy differences in the variations of blood cell parameters in individual animals at the same dose level.

The supporting chronic study of Ponomarkov and Jomatis (1978) dosed rats once

per week for 120 weeks with 500 mg/kg styrene. Mice were once dosed per week for the same duration with 300 mg/kg styrene. The rats showed no significant effects. This study was deemed inappropriate for risk assessment of chronic toxicity due to the weekly dosing schedule.

Another study by Wolf et al. (1956) gave oral daily doses to rats over 185 days, which is not considered a chronic duration. While the rats receiving an oral dose of 95 mg/kg body weight/day showed no adverse effects, the rats receiving oral doses of 285 and 475 mg/kg/day showed reduced growth and increased liver and kidney weights.

Other subchronic studies in rats with orally administered doses reported Lowest-Observed-Effect Levels (LOELs) at 350 to 500 mg/kg/day and NOELs at 100 to 400 mg/kg/day.

The confidence rating for the styrene oral RfD is medium because the critical study, although well performed, used such a small number of animals. In addition, none of the studies supporting the RfD value are considered as chronic in duration.

XYLENE(S)

The carcinogenic assessment of xylene by USEPA is awaiting the review of an inter-office agency work group. The toxicity of xylene is assessed for non-carcinogenic endpoints based on an RfD.

Derivation of the Oral Risk Reference Dose

The oral RfD listed in IRIS is 2 mg/kg/day; this value is based on a NOAEL of 250 mg/kg/day, reported by the NTP (1986b) in a study of chronic health effects on gavaged rats. This was selected as the primary study because it used a chronic exposure in two species by a relevant route of administration, and comprehensive histology was conducted. The critical effects noted by the NTP were hyperactivity, decreased body weight, and increased mortality. Xylene gavage doses of zero, 250, or 500 mg/kg/day were given to groups of 50 male and 50 female Fischer-344 rats for 5 days/week for 103 weeks. During the same time, groups of 50 male and 50 female B6C3F1 mice were gavaged with zero, 500, or 1,000 mg/kg/day.

Gross necropsy and comprehensive historical examinations were performed on all animals that died or were sacrificed. There were no compound-related histopathologic lesions in any of the exposed rats or mice. Therefore, the low dose of 250 mg/kg/day was set as the NOAEL. There was increased dose-related mortality in male rats that was significantly higher in the high-dose group compared with the controls; however, this effect was not significant in the low-dose group. The authors noted that the behavioral changes associated with xylene exposure may have caused rats to resist gavage.

Two other subchronic studies, although not cited as specific supporting studies for the RfD, provide evidence of xylene's toxic effects. A rat dietary study by Bowers et al. (1982) reported a NOAEL of 10 mg/kg/day with an uncertainty factor of 1,000. An inhalation study by Jenkins et. al. (1970) on rats, guinea pigs, monkeys, and dogs was used by USEPA in 1985 to calculate an RfD of 0.06 mg/kg/day, where the effects seen at the high dose were deaths in rats and monkeys and tremors in dogs.

The only adjustment made to the NOAEL of 250 mg/kg/day to obtain the RfD of 2 mg/kg/day was to adjust the dose from 5 days/week to continuous. The uncertainty factor of 100 was chosen to give a factor of 10 for species-to-species extrapolation and 10 to protect sensitive individuals.

The oral xylene RfD is given a medium confidence level because the NTP study was considered adequate in size, duration of study, and comprehensiveness of histological examinations, but did not include clinical chemistries, analysis of blood enzymes, and urinalysis. In addition, no LOEL has yet been reported for chronic oral exposure to xylene for comparison with the NOAEL.

Derivation of the Inhalation Risk Reference Dose

The inhalation RfD is taken as the value listed in the Superfund Public Health Evaluation Manual. This value is 0.4 mg/kg/day based on a subchronic rat study (Carpenter et al., 1975 NTP; 1986b). A dose of 3,500 mg/m^3 was administered 6 hrs/day, 5 days/wk for 13 weeks. No effects were seen at this dose. Derivation of the RfD from this study is not known. An uncertainty factor of 1,000 was used.

NAPHTHALENE

The dose/response value for naphthalene is used to evaluate the potential hazards of noncarcinogenic PAHs. Currently, there is inadequate evidence that naphthalene is carcinogenic. Its dose response value is an AIC as listed in the USEPA Health Effects Assessment (HEA) Quarterly Update (9/88) and the SPHEM update (8/88). The AIC is determined for noncarcinogenic adverse health effect for naphthalene.

Derivation of Oral Risk Reference Dose

The AIC for naphthalene is 0.4 mg/kg/day, which was derived from a study by Schmahl (1955). In this study rats (strain not specified) were exposed in the in their diet to a dose that ranged from 10-20 mg/day. The rats were dosed 6 days/week for 700 days. The equivalent lifetime dose for the rats was 41 mg/kg/day. The observed toxicological effects were ocular and internal lesions.

The NOEL for the Schmahl study was 41 mg/kg/day. The AIC was derived from this NOEL by applying an uncertainty factor of 100 (for inter and intraspecies extrapolation), resulting in an oral AIC for humans of 0.4 mg/kg/day.

CYANIDE

The USEPA-verified RfD for cyanides was derived from a NOAEL observed in an animal study conducted by Howard and Hanzel (1955). In this study, groups of 10 male and 10 female albino rats were maintained for 104 weeks on diets that had been fumigated with HCN. The food was analyzed by steam distillation into sodium hydroxide solution with subsequent titration of the resulting CN-ion. Because the HCN vaporized from the food, the diet was analyzed initially and after two days. The authors determined that fresh food needed to be prepared and fed on alternate days to maintain the HCN level within specified ranges.

The average measured HCN concentrations in the diet were 76 mg/kg of food for the low-dose level and 190 mg/kg of food for the high-dose level. A similar group of rats fed the basal diet were maintained as controls. The diets provided cyanide doses of zero, 3.2, and 7.8 mg/kg/day for males; and zero, 4.3, and 10.8 mg/kg/day for females. These doses were calculated from food consumption and body weight data provided by the authors. During the two years of study, the growth curves for all groups did not vary as a result of treatment. Food consumption, hematological values, and survival were also similar in all groups during the study. Except for changes associated with aging, pathological changes in the Central Nervous System (CNS) or other organ systems were not observed.

The highest NOAEL (10.8 mg/kg/day for female rats) is the basis of the USEPA RfD (USEPA, 1989a). According to USEPA guidelines, an uncertainty factor of 100 was used to derive the RfD (10 for species extrapolation; 10 for sensitive

populations). A modifying factor of 5 was used to account for the apparent tolerance to cyanide when it is ingested with food rather than when it is administered by gavage or drinking water. The RfD is, therefore, 2×10^{-2} mg/kg/day (USEPA, 1989a). USEPA's confidence in the Howard and Hanzel (1955) study is medium. Adequate records of food consumption and body weight were maintained, and animals of both sexes were tested at two doses for two years. The data base was rated medium because a small but sufficient number of studies support the chosen study. Therefore, USEPA has medium confidence in the RfD (USEPA, 1989a).

Upon first examination of other cyanide toxicity data, it might appear that the RfD is not adequately protective of public health. Jordan reviewed supporting toxicity information on cyanides, however, and has determined that the USEPA RfD is technically sound. According to ATSDR (1988), observed oral lethal doses for humans and rats are lower than 11 mg/kg. In addition, a Lowest-Observed-Adverse-Effect Level (LOAEL) for dogs based on neurotoxic effects has been defined by a study by Hertting et al. (1960). Both USEPA and ATSDR have determined that it is inappropriate to base the derivation of an RfD on the Hertting study for several reasons. Animals dosed at 0.27 mg/kg/day exhibited degenerative changes in Central Nervous System (CNS) cells. However, these animals were given bolus doses of NaCN by gavage (capsule). It is well- documented that animals can tolerate higher doses of cyanide when administered in the diet or drinking water over long periods of exposure (USEPA, 1985d). This fact also explains the observation of oral lethal doses in mammals at levels below the rat NOAEL. In a study by Hayes (1967), rats tolerated 25 daily doses of 4 mg cyanide/kg when the chemical was

mixed in the diet. Each dose was equal to an acute oral LD50. In addition, rats tolerated higher doses of KCN when administered in drinking water than when administered in bolus by gavage with water as the vehicle (USEPA, 1985d).

USEPA has also determined that the dog is not a good model for cyanide toxicity in humans. Dogs have been shown to be the most sensitive of the usual laboratory animals to cyanide's effects (ATSDR, 1988). This is due to the low level of cyanide metabolic capacity of the dog liver. Total rhodanese activity in all other species tested is higher than in dogs. Rhodanese is the enzyme that detoxifies cyanide. This is another reason that the low LOAEL for dogs in the Hertting study is not inconsistent with the cyanide toxicological data base.

In another study, Philbrick et al. (1979) identified a LOAEL in rats at doses of 30 mg/kg/day. Myelin degeneration was observed in spinal cords of rats fed this dose level. In addition, depressed thyroid function was observed. The NOAEL defined by the Howard and Hanzel study (1955) is not inconsistent with the LOAEL defined by the Philbrick study.

Application of the Oral Cyanide Risk Reference Dose to Inhalation Exposures

USEPA has not derived an RfD or an AIC level for inhalation exposure to cyanides. Animal studies pertaining to the chronic toxicity of inhaled cyanide were not located in the scientific literature. To assess quantitatively the human health risks due to inhalation of particulate cyanide compounds, Jordan therefore evaluated the suitability of using the oral RfD.

It is well known that inhalation of HCN gas is much more toxic than ingestion of bolus doses of cyanide salts or ingestion of cyanide salts as dietary or drinking water constituents (USEPA, 1984b; ATSDR, 1988). This is due both to the efficient pulmonary uptake of HCN and to the decreased first-pass metabolic identification of cyanide when inhaled compared to ingestion. It is inappropriate to assess the risks of inhalation of HCN gas by use of the USEPA oral RfD. On the other hand, the oral RfD can be used to assess risks due to inhalation of cyanide-containing particulates if an appropriate toxicokinetic factor is applied.

There is no information available on the uptake of cyanide salts by the lungs. All available inhalation toxicology studies use cyanide in the form of HCN. It is reasonable to anticipate that particular cyanide salts are absorbed in the lungs, but to a lesser degree than HCN. This conclusion is based on the knowledge that cyanide salts are absorbed through the skin. Cyanides are moderately lipid-soluble, which allows them to rapidly penetrate the epidermis. In addition, some cyanide compounds (e.g., potassium cyanide) have a corrosive effect on the skin that increases the rate of dermal absorption (ATSDR, 1988). It is expected that particulate cyanide salts would be absorbed more efficiently through pulmonary membranes that are constantly bathed with aqueous physiological solutions than through intact skin.

In addition, it has been reported that sodium cyanide and potassium cyanide are extremely toxic when inhaled (Sax and Lewis, 1986). Jordan is unaware of any studies that described the degree of uptake of cyanide salts when inhaled; nor is there any quantitative information available concerning the relative

detoxification of cyanide when ingested versus when inhaled. To properly utilize the oral RfD in assessing inhalation risks, the effects of these competing processes need to be estimated. Jordan has defined an inhalation toxicokinetic factor to evaluate these two processes.

Jordan assumes that the degree of pulmonary adsorption of cyanide particles retained in the lungs is the same as the degree of GI absorption in the Howard and Hanzel study (1955), and that pulmonary retention of 10 um particles is 75 percent of the inhaled particles. Further, Jordan assumes that the detoxifying hepatic metabolism after ingestion is 10 times that following inhalation. Therefore, the toxicokinetic factor is 7.5 relative to GI exposure in the study from which the RfD was derived.

The toxicokinetic factor is consistent with the available information about the toxicity of HCN gas. If it is assumed that the adsorption following inhalation of HCN gas is 10 times the absorption following ingestion of cyanide salts in the gut, and that metabolism following ingestion is 10 times that following inhalation exposure, then it could be predicted that inhaled HCN is 100 times more toxic than ingested cyanide ion. This prediction is consistent with the observed human lethal doses. The oral lethal dose in humans has been reported to be approximately 1 mg/kg, whereas the inhalation lethal dose for HCN is approximately 0.02 mg/kg (ATSDR, 1988). This increase in toxicity is due partly to the high pulmonary uptake of the agent and the decreased metabolism.

Application of the Cyanide Risk Reference Dose to Dermal Exposure

Because cyanides are known to be readily absorbed through skin, it is appropriate to use the RfD to assess the risks posed by dermal contact with cyanide containing soil. As with inhalation exposures, it is expected that the metabolic detoxification is 10 times more efficient for ingestion exposure compared to dermal exposure. No information is available on the efficiency of uptake of cyanide from contaminated soil. Jordan also assumes that the dermal uptake of cyanide from cyanide-containing soil is 10 percent as efficient as uptake of cyanide from HCN-treated food in the study from which the RfD was derived. Therefore, the relevant toxicokinetic factor is one.

Application of the Cyanide Risk Reference Dose to Oral Exposures

As discussed previously, the toxicity of cyanide when given as a dietary constituent is less than when given as a pure compound by gavage. There is no information available regarding the efficiency of adsorption when soil or diet is the vehicle. A conservative approach is to assume that the uptake is the same. Therefore, Jordan recommends that a toxicokinetic factor of one be used in assessing the risks to human health posed by ingestion of contaminated soil.

Cyanide Speciation

Jordan recommends that the USEPA oral RfD for cyanides only be applied to free cyanides. These would consist of HCN and cyanide salts, which result in the free cyanide ion being released in solution. Iron-complexed cyanides (e.g., ferro- and ferricyanide) are forms of cyanide in which the cyanide ion is not dissociable. Potassium ferrocyanide, for instance, has been shown to be fatal

to rats only at very high doses (1,600 mg/kg) after oral dosing (NIOSH, 1985). The lethal dose for 50 percent of rats tested (LD50) ranges from 1,600 to 3,200 mg/kg (Clayton and Clayton, 1982). It has also been reported that dogs, which are the most sensitive of the known laboratory animals, tolerated 2,626 mg/kg of ferrocyanide given intravenously. The complex was rapidly excreted in the urine (Clayton and Clayton, 1982). No reports of adverse effects in humans from the ferro- or ferricyanide could be found in the literature surveyed. Use of the USEPA RfD to estimate the human health risks posed by exposure to iron-complexed cyanide would therefore greatly overestimate the actual risks.

TRIMETHYLBENZENE

Trimethylbenzene has not been evaluated by the USEPA for its toxicity; however, it is believed to be comparable to other compounds of the alkybenzene class, such as xylene, tolune, and ethylbenzene. Because xylene is most closely structurally related to tremethylbenzene, the oral and inhalationn RFds for xylene of 2.0 and 0.4 mg/kg/day, respectively were also used for trimethylbenzene.

Although the ACGIH TLV is lower for trimethylbenzene than for xylene, the reasoning behind this is unclear. No other study seems to indicate that the toxicity of trimethylbenzene is higher than that of xylene. The LD50s (lethal dose - 50; the dose at which 50% of the dosed animals die) for the guinea pig are 2,000 mg/kg for xylene and 1,303 mg/kg for trimethylbenzene. The oral rat LD50s are 4,300 mg/kg and 8,970 mg/kg for xylenes and trimethylbenzenes, respectively. Thus, there is no significant difference in acute toxicity between the two compounds. Klaasen et al., (1986) describes the acute toxicity of all alkylbenzenes as Central Nervous System (CNS) depressant and toxic at levels that are relatively similar. They also conclude that all alkylbenzenes are relatively nontoxic except in acute exposures to high doses, and are metabolized to less toxic compounds via a nonsaturable pathway. Thus, the possibility of trimethylbenzene or any alkylated benzenes forming toxic reactive intermediate compounds is very slim.

Jordan feels that until more information is gained on trimethylbenzenes, the assumption of a similar toxicity to xylene is conservative and applicable in this risk assessment.

Appendix G-2

Toxicological Profiles

POLYNUCLEAR AROMATIC HYDROCARBONS

Polynuclear aromatic hydrocarbons (PAHs) are a class of several hundred compounds, all of which consist of annelated benzene rings. While each compound has specific chemical properties, their fate in the environment can be summarized broadly.

Several of the PAHs are volatile enough to exist as vapors in the atmosphere, including naphthalene, phenanthrene, anthracene, fluoranthene, and pyrene. These compounds are subject to photochemical degradation and are expected to have an atmospheric half-life of less than one day. PAHs with low vapor pressure exist in the atmosphere adsorbed to particulate matter. The half-life of these compounds may be from less than one day to several weeks, depending on the composition of the particulate matter and extent of PAH degradation from ozonolysis reactions (USEPA, 1984a). Studies have indicated that particles less than 3.0 um have the highest PAH sorption (Pucknat, 1981).

The half-life of PAHs in the soil is highly variable and can range from less than one day to several decades. Because PAHs have low water solubility and adsorb to soil particles, they are not expected to be highly mobile in soils. No significant leaching of PAHs into the groundwater is expected, particularly if the soils have high organic carbon content (USEPA, 1984a).

PAHs are ubiquitous in the environment and most are formed during the combustion of organic compounds. Major sources of PAHs include incomplete combustion of fuels for heat and manufacturing; burning of coal, gasoline, and

diesel fuel; and burning of municipal and agricultural wastes. PAHs are associated with manufactured process gas residuals (Atlantic Environmental Services, 1988). Cigarette smoke also contains PAHs. To a limited extent, these compounds also occur naturally (i.e., plants and bacteria synthesize PAHs during growth, and naturally-caused brush and forest fires produce PAHs).

The carcinogenic properties of individual PAHs have been known for over 50 years, but not all PAHs are carcinogenic. Most carcinogenic PAHs are derived from the benzo(a)anthracene structure. Benzo(a)anthracene is weakly carcinogenic; however, the addition of benzene rings to specific positions substantially increases the carcinogenicity of the new compound. The substitution of methyl groups to specific carbons of the benzene ring also increases the carcinogenicity (Klaassen et al., 1986). Of the sixteen PAHs detected at this site, six are classified as potential human carcinogens (Carcinogen Assessment Group [CAG] B2 classification).

There are numerous animal studies of the carcinogenic potential of individual PAHs; however, limited information is available on the effects of complex mixtures of PAHs in the environment. It is not certain what effect interactions of carcinogenic and noncarcinogenic PAHs have on the carcinogenic potential of the mixture. Complex mixture information is largely derived from mouse skin-painting experiments with extracts of coal tar products and gasoline or diesel exhaust. Carcinogenic responses have been reported; however, problems with study design and reporting limit the interpretation of these findings.

PAHs are lipophilic and are absorbed from the gastrointestinal (GI) tract, lungs, and across the dermal membrane. Studies of benzo(a)pyrene (B(a)P) have found that it readily crosses the membranes of the GI tract, and tissue accumulation is exponential as B(a)P concentrations increase. B(a)P has also been found to be readily absorbed from the lungs (Kotin et al., 1969; Vaino et al., 1976; Mitchell and Tu, 1979).

Once PAHs have been absorbed, metabolic activation is required to convert PAHs to the reactive electrophilic species which are responsible for tumorigenesis. PAHs are metabolized by the cytochrome P-450 system to epoxides, which are subject to epoxide hydrolases, and form stereoisomeric diols. Diol epoxides bind to DNA (Klaassen et al., 1986).

PAHs are excreted via the bile and GI tract into the feces. Animal studies of injected PAHs found trace amounts of PAHs in the urine and expired air, but the majority was excreted in the feces (Heidelberger and Jones, 1948; Heidelberger and Weiss, 1951).

The carcinogenicity of PAHs has been demonstrated in both human and animal studies. Occupational studies involving worker exposure to PAHs from emissions of coke ovens, foundry processes, coal gas production, roofing tar, and coal combustion have reported increased risk of lung and other-site cancer mortality. While not proven, PAH exposures are believed to be the cause of the increased risk. Varying degrees of increased risk have been noted among different occupations and may be attributed to different durations and

intensities of exposures, the presence of other compounds, and different PAH mixtures to which the workers were exposed.

Epidemiologic studies of community populations are confounded by many factors (e.g., exposure to other chemicals, residence time in the community, varying levels of air pollution over time, and cigarette-smoking behavior). However, when cigarette smoking was controlled for, a study of urban residents found a two-fold increase in the risk of lung cancer when compared to rural residents. This increased risk may be attributed to the higher level of PAHs in city air (USEPA, 1979).

Numerous animal studies have reported tumorigenesis resulting from inhalation, oral, dermal/skin-painting, and injection exposures to PAHs. Lung, liver, mammary gland and digestive tract tumors, and leukemia have been reported. These studies involved exposures to separate PAHs, while the human studies involved exposures to mixtures. The animal studies were also high-dose exposures with a limited number of animals. Estimation of carcinogenesis from low-dose exposure is subject to considerable uncertainty, which is compounded when the exposure is to a mixture of PAHs rather than a single compound.

Noncarcinogenic effects of PAH exposure have also been reported in animal studies. These effects include weight loss, kidney and liver function changes, bronchitis, and serum enzyme changes (Knobloch et al., 1969). Animal studies have found PAHs to cross the placenta, and teratogenic effects have been reported (Pucknat, 1981).

Because the effects of PAH exposure are dependent on metabolism of the PAHs, exposure to any compound which either inhibits or induces the enzyme systems associated with PAH metabolism may potentially magnify or reduce the effects of the exposure. People who have altered metabolism or are exposed to compounds in the environment or dietary elements that may affect the cytochrome P-450 system may have increased health risks from PAH exposure.

Occupational standards have been established for PAH exposure associated with coal tar pitch volatiles. The following PAHs found at this site have been classified as probable human carcinogens (CAG B2 classification): benzo-(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, dibenzo-(a,h)anthracene, indeno(1,2,3-cd)pyrene. In addition, the State of New York considers benzo(k)fluoranthene to be a probable human carcinogen.

BENZENE

Benzene is a highly flammable volatile aromatic hydrocarbon that is used both as a gasoline additive and a chemical intermediate in the production of many compounds (e.g., styrene and phenol). Benzene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988). Volatilization appears to be the major transport process of benzene from surface waters and soils to the ambient air, and atmospheric transport of benzene occurs readily (USEPA, 1979). Data indicate that it may be photo-oxidized rapidly in the atmosphere. The atmospheric destruction of benzene is probably the most likely fate process. Values for benzene's log octanol/water partition coefficient (K_{ow}) indicate that adsorption onto organic material may be significant. Sorption processes are likely removal mechanisms in both surface water and groundwater. Gradual biodegradation by a variety of microorganisms probably occurs. The rate of benzene biodegradation may be enhanced by the presence of other hydrocarbons.

Benzene is a recognized human carcinogen (IARC, 1982). Several epidemiological studies provide sufficient evidence of a causal relationship between benzene exposure and leukemia in humans. Several occupational studies since 1969 on exposures to low benzene concentrations (i.e., less than 9 ppm) conducted 1969 have shown no excess leukemias among workers and no mortality findings directly attributable to benzene exposures. Benzene is a known inducer of aplastic anemia in humans, with a latency period of up to 10 years. It reduces the number of white blood cells and other blood components, which may progress to a reduction in all blood cell types. Similar adverse effects

on the blood-cell-producing system occur in animals exposed to benzene. In both humans and animals, benzene exposure is associated with chromosomal damage, although it has not been shown to be mutagenic. Benzene has been shown to be fetotoxic and to cause embryolethality in experimental animals.

Exposure to high concentrations of benzene in the air causes central nervous system (CNS) depression and cardiovascular effects. Benzene has been reported to cause subjective symptoms (e.g., headaches and nausea) with chronic exposure to as little as 100 parts per million (ppm). Acute exposures of 50 to 150 ppm for 5 hours or 500 ppm for 1 hour will cause headaches, lassitude, and fatigue. An hour-long exposure at 1,500 ppm can cause illness, and 5 to 10 minutes at 20,000 ppm may be lethal for humans (Clayton and Clayton, 1981). No data could be found on subjective symptoms caused by benzene exposures closer to the National Institute for Occupational Safety and Health (NIOSH) recommended workplace time-weighted average (TWA) standard of 1 ppm, or the American Conference of Governmental and Industrial Hygienists (ACGIH) threshold limit value (TLV) of 10 ppm, which are designed to prevent leukemia and other chronic health effects in worker populations.

Acute occupational exposures have occurred. Browning (1965) reported that severe exposures, such as would occur when working in a storage tank, cause convulsions, paralysis, unconsciousness, and death. Deaths from cardiac sensitization and cardiac arrhythmias have also been reported after relatively large exposures. Milder exposure produced giddiness, headache, and nausea, followed by unconsciousness.

Early workplace practices produced chronic exposures to benzene at levels of 500 to 1,000 ppm. These exposures caused headaches and other clinical signs of benzene poisoning. Helmer (1944) reported that 60 of 184 workers in one plant exhibited headaches, fatigue, and blood disorders. Benzene levels were measured at 140 to 220 ppm after changes in work practices and ventilation equipment was installed; initial concentrations had been estimated at more than 5,000 ppm. Greenburg et al. (1939) reported on chronic benzene poisoning in three rotogravure printing plants. Benzene concentrations ranged from 11 to 1,060 ppm, and workers were exposed for 4 to 7 days/week. Symptoms reported for the 286 of 332 workers with varying degrees of benzene poisoning included fatigue, dryness of mucous membranes, nausea or vomiting, and lethargy for medium-level exposures; and the same symptoms plus weakness, nose bleeds, loss of appetite, shortness of breath, dizziness, and lethargy for the highest concentration level.

TOLUENE

Toluene is an aromatic hydrocarbon that is flammable, practically insoluble in water, and fully miscible with many organic liquids. Toluene is produced primarily from petroleum sources. It is used to produce benzene and phenol. Also, toluene is used as a solvent and an intermediate in production of explosives and specialty organic chemicals. Toluene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

Almost all toluene discharged to the environment by industry is in the form of atmospheric emissions. Photo-oxidation is the primary atmospheric degradation process for toluene, and benzaldehyde is reported to be the principal organic by-product. Direct photolytic cleavage of toluene is energetically improbable in the atmosphere, and oxidation and hydrolysis are probably not important as aquatic fates.

Toluene is known to be degraded by microorganisms and can be detoxified and excreted by mammals. However, the available data do not allow estimation of the relative importance of biodegradation/biotransformation processes.

Acute and chronic inhalation exposures to 200 ppm or greater concentrations of toluene vapor cause eye irritation, headaches, nausea, and other Central Nervous System (CNS) effects in humans. In humans, acute exposures to very high concentrations can cause narcosis, but exposures to quantities sufficient to produce unconsciousness fail to produce organ damage.

Acute toluene exposure can cause subjective CNS symptoms (e.g., nausea, headache, and fatigue) as well as eye irritation, at levels equal to or exceeding 200 ppm. In a study of three subjects who were exposed for eight hours to various toluene levels, one subject reported a mild headache at levels of 50 or 100 ppm in the air. At 200 ppm the majority reported fatigue, muscular weakness, repeated headache, nausea, impaired coordination, eye irritation, and after-effects (including fatigue, general confusion, and moderate insomnia) (Von Oettigan et al., 1942). As the toluene concentration was increased, the severity of these effects increased. At 800 ppm, volunteers reported severe fatigue, pronounced nausea, mental confusion, uncoordination, and severe after-effects. In a similar experiment, two subjects exposed for eight hours reported slight exhilaration at 200 ppm, lassitude and nausea at 400 to 600 ppm, and headache, nausea, and severe lassitude at 800 ppm (Carpenter et al, 1944). In studies of 10 people, the majority of the subjects reported eye and throat irritation after a 3 to 5 minute exposure to 300 ppm toluene. The subjects considered 200 ppm to be acceptable for an 8-hour exposure (Nelson et al., 1943). Others reported that a single 7-hour exposure to 200 ppm caused CNS effects such as decreased coordination, prolonged reaction time, decrease in pulse, and decrease in systolic blood pressure (Ogata et al., 1970).

Chronic exposure to toluene was also reported to cause CNS disturbances. In 100 workers exposed to toluene for one to three weeks, and who sought medical attention, 30 percent were exposed to 200 to 500 ppm and complained of headache, nausea, anorexia, lassitude, impairment of coordination, and loss of memory (Wilson, 1942). The workers exposed to 500 to 1,500 ppm complained of

nausea, headache, dizziness, anorexia, extreme weakness, and pronounced impairment of coordination and reaction time. It was unclear whether toluene levels below 200 ppm caused adverse effects.

Other CNS alterations have been observed in workers. Parmeggiani and Sassi (1954) reported that six of 11 workers exposed to 200 to 800 ppm toluene for many years exhibited signs of nervous hyperexcitability. In another setting, one worker exposed for many years to 210 to 300 ppm showed symptoms of stupor, nervousness, and insomnia. However, in 17 other workers exposed to 80 to 160 ppm, no CNS effects were noted (Capellini and Alessio, 1971). Chronic occupational exposure to 300 to 430 ppm toluene was also reported to cause behavioral changes.

The most noted effect of toluene in animals is CNS depression following high-level exposure. Vapor levels at or below 1,000 ppm appear to have little effect on gross parameters, although more sensitive indicators (e.g., electroencephalogram [EEG] changes) were noted in rats. Several studies indicate that toluene exerts no adverse effects on the blood-forming organs in rats and dogs. However, leukocytosis, impaired leukopoiesis, and chromosomal damage in the bone marrow were reported by several other researchers for rats and mice. Most inhalation and ingestion studies produced no evidence of liver damage, but effects suggestive of liver damage were noted at higher inhalation exposures (i.e., 2,000 ppm) in rats and various animals dosed intraperitoneally. Several studies reported renal injury to rats, dogs, and guinea pigs after subchronic inhalation of toluene in excess of 600 ppm. Lung irritation effects were observed in some studies with dogs, guinea pigs, and

rats. The acute oral LD50 for rats ranges from 6 to 7.5 g/kg. Inhalation LD50 values range from 500 to 700 ppm for mice and 4,000 ppm for rats (USEPA, 1983a).

There is no conclusive evidence that toluene is carcinogenic or mutagenic in animals or humans (USEPA, 1980a). The National Toxicology Program (NTP) is currently conducting an inhalation carcinogenicity bioassay with rats and mice. Researchers have reported that toluene is embryotoxic but not teratogenic in laboratory animals. There are no accounts of teratogenic effects in humans after exposure to toluene.

ACGIH recommends a TLV of 100 ppm (375 mg/m^3) toluene. This value appears to be appropriate for the prevention of headache and nausea, as well as other CNS effects. A short-term exposure limit of 150 ppm (560 mg/m^3) has been recommended for exposures of less than 15-minute duration in an 8-hour day.

ETHYL BENZENE

Ethyl benzene is a volatile aromatic compound with a high log K_{ow}, indicating that it adsorbs onto organic particles in the soil, slowing its transport to groundwater and surface water. Small amounts of ethyl benzene can leach into groundwater from soil (especially sandy soil) and may biodegrade in subsurface soils. The half-life of ethyl benzene in air is 35 hours. The primary loss mechanisms from the soil surface is expected to be evaporation. Ethyl benzene is a chemical which is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

To date, ethyl benzene has not been evaluated by USEPA for human carcinogenicity potential. The target organs for health impacts from acute exposures are the eyes, upper respiratory system, skin, and CNS. No data on teratogenicity or mutagenicity of ethyl benzene were located by USEPA (1980b).

Human toxicity of ethyl benzene is characterized by its irritancy to the skin, and less markedly, to the mucous membranes (ACGIH, 1986). The TLV for ethyl benzene of 100 ppm was set to protect against its irritant effects. At this concentration, no systemic effects of ethyl benzene are expected to be produced (ACGIH, 1986).

Bardodej and Bardodejava (1970) reported no toxic effects in volunteers after inhalation exposure to 100 ppm ethyl benzene for 8 hours. Their exposure to an increased concentration of ethyl benzene resulted in fatigue, headache, and mild eye and respiratory irritation.

STYRENE

Styrene is a volatile aromatic compound produced primarily from the dehydrogenation of ethyl benzene. Styrene is used to produce polystyrene, which is a thermoplastic with excellent electrical properties and thermal stability.

The target organs for toxic effects are the CNS, the respiratory system, and the eyes and skin. There is some epidemiologic evidence of greater sensitivity of the human fetus than the adult to the systemic toxic effects of styrene. These studies are described in the following paragraphs.

The frequency of spontaneous abortions among Finnish chemical workers was analyzed by Hemminki et al (1980). Information on spontaneous abortions (15,482 cases), induced abortions (71,235 cases), and births (193,897 cases) for 1973 through 1976 was obtained from the Hospital Discharge Registry of the Finnish National Board of Health. The information was linked by social security number to the membership of the Finnish Union of Chemical Workers (approximately 900 female members). The rates of spontaneous abortion were 8.5 percent (N = 52) and 15.0 percent (N = 6) among the female union members and a subgroup in the styrene industry, respectively. These rates were significantly higher ($p < 0.01$) than the rate among all Finnish women (5.5 percent, N = 15, 482).

The information on the work histories of 43 Finnish mothers of children born with CNS defects from June 1, 1976, to March 1, 1977, were obtained through

personal interviews (Holmberg, 1977). Two mothers had been employed in the reinforced plastics industry with regular exposure to styrene, polyester resin, organic peroxides, and acetone. The defects in their two children were anencephaly and congenital hydrocephaly. The overall rates of anencephaly and congenital hydrocephaly were reported to be 0.2 and 0.3 respectively, per 1,000 live births in Finland. Based on these estimates, there appeared to be more than a 300-fold increased rate of these malformations in the reinforced plastics industry during the 9-month study period, compared to the general population (2/12 versus 0.5/1,000).

Retrospective cohort mortality and case-control studies were conducted on workers exposed to styrene in the styrene-polystyrene manufacturing industry and in the styrene-butadiene synthetic rubber industry (McMichael et al., 1976; Smith and Ellis, 1977; Meinhardt et al., 1978). Inadequate data are available at present to indicate that styrene is a human carcinogen. However, an elevated incidence of tumors of the hematopoietic and lymphatic tissues have been observed. Available studies are limited because of relatively small cohort sizes or multiple chemical exposures of workers (including exposure to benzene).

Styrene is classified by USEPA as a possible human carcinogen (Group C), meaning there are no human data and limited evidence of carcinogenicity from animal studies.

XYLENE(s)

Xylenes are volatile aromatic compounds used as a solvent for prints, ink, and adhesives. There are three isomeric forms of xylene: meta-xylene, ortho-xylene, and para-xylene. Xylenes are components of detergents and other household and industrial products. Xylene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

Xylenes readily volatilize from surface water and surface soil. Volatilization and subsequent photo-oxidation by reaction with hydroxyl radicals in the atmosphere are probably important transport and degradation processes for xylenes in the upper layer of soil and in aquatic environments. Xylenes bind to sediment in water and to organics in soils and undergo microbial degradation. Biodegradation is probably the most degradation fate process in both soils and the aquatic environment. Xylenes have been shown to persist for up to six months in soil. Because of their low water solubility and rapid biodegradation, xylenes are unlikely to leach into groundwater in high concentrations.

Short-term exposure can cause eye, nose, and throat irritation at 200 ppm. There is some evidence that chronic exposures to less than 50 ppm can cause headaches and other CNS effects. Xylene has not been shown to be carcinogenic when administered orally to rats or mice. Xylene was found to be mutagenic in a battery of short-term assays. Xylene is not teratogenic but has caused fetotoxicity in rats and mice.

Occupational exposure to xylene has been reported to cause headache, fatigue, lassitude, irritability, and GI disturbances (e.g., nausea, anorexia, and flatulence). Other researchers have also reported neurological disturbances and injury to the heart, kidney, and CNS among xylene workers.

Short-term exposures to xylene vapors have not been demonstrated to cause noticeable subjective effects at levels less than 200 ppm. When 10 volunteers were exposed for 3 to 5 minutes to xylene at 200 ppm, the majority reported eye, nose, and throat irritation (Nelson et al., 1943). At 100 ppm, the majority reported no symptoms and indicated that an 8-hour daily exposure at this level would be satisfactory. In another study, one of six people exposed for 15 minutes to 233 ppm experienced eye irritation, and four of six reported eye irritation at 460 ppm (Carpenter et al., 1975). Activities reported to cause eye and upper respiratory tract irritation from uncharacterized xylene levels include furniture polishing and demolition of epoxy resin concrete. Unconsciousness and death have been reported to result from xylene exposure in excess of 10,000 ppm (Morley et al., 1970). The workers who died had evidence of pulmonary edema and brain hemorrhage. The survivors suffered from amnesia, renal impairment, and hepatic dysfunction.

Long-term exposure to xylene may result in subjective symptoms at levels lower than 200 ppm. One-third of 45 xylene production workers exposed daily to 10 to 45 ppm reported headaches, irritability, insomnia, rapid heartbeat, and indigestion (Sukhanova et al., 1969). Intermittent exposure over 2 months to 270 to 350 ppm xylene caused acute vomiting, giddiness, and loss of appetite in one worker (Glass, 1961).

ACGIH believes the irritant effects of xylene are minimal at 100 ppm with no significant degree of narcosis or chronic injury from exposures at that level; consequently, they recommended a TLV of 100 ppm (435 mg/m^3). A short-term exposure limit of 150 ppm has been recommended by ACGIH for exposures of less than 15 minutes in an 8-hour work day.

NAPHTHALENE

Naphthalene is a white solid, also called naphthalin, naphthene, moth flake, tar camphor, or white tar, which exhibits the characteristic mothball odor. Chemically, it is composed of two fused benzene rings (Sandmeyer, 1981). Naphthalene occurs naturally in the roots of Radix and Herba ononids (Hesse et al. 1977). It is formed in cigarette smoke by pyrolysis (Johnstone, 1963) and is a photodecomposition produce of carbaryl, a naphthylcarbamate insecticide (Addison et al., 1975). Naphthalene also occurs in crude oil, cracked petroleum products, coke oven emissions, and high temperature carbonization of bituminous coal (American Petroleum Institute, 1959). Naphthalene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).In both solid and liquid form, naphthalene is flammable. The vapor or dust can make an explosive mixture with air. Molten naphthalene, in contact with water, may result in violent foaming or the formation of explosive mixtures (Manufacturing Chemists Association, 1956).

Ingestion of naphthalene, in the form of mothballs, has resulted in no adverse effects in a number of the cases described. The ingested material was excreted in the feces in unchanged form. The co-ingestion of fats facilitates the absorption and other systemic events (Moeschlin, 1965). In severe cases, ingestion caused gastroenteric distress, tremors and convulsions. Within 2 to 7 days, moderate to severe anemia may develop, hemoglobin damage occurs, and the serum takes on a yellowish brown color. In some cases, this leads to disruption of renal function and even death due to respiratory failure (Deichman and Gerade, 1969).

Naphthalene is acutely irritating to the eye. With skin contact, it is a primary irritant. Since naphthalene may volatilize and sublime at room temperature, inhalation is a primary exposure route. The signs and symptoms of toxicity due to inhalation of naphthalene vapors resemble those observed from oral or dermal exposure. Naphthalene vapors may cause eye and respiratory irritation, headache, nausea, and perfuse perspiration.

Chronic effects of oral administration of a naphthalene-isopropanol mixture resembled ethanol intoxication but subsided after a few days (Gadsden, 1958). The effects on the eye were more severe. Corneal ulceration and cataracts have been observed (Adams, 1930) as well as general opacities which were observed after 5 years of exposure. Repeated inhalation of naphthalene vapors may produce malaise, headache, and vomiting.

Daily oral administration of naphthalene to rabbits at 1 g/kg produced effects in the eye that were slightly visible after only three doses and definitely exhibited after 20 days. A dose of 1.5 g/kg day produced white spots in the rabbit eye periphery but were distributed over the whole retina of young animals (Shimotori, 1972). Naphthalene is rapidly metabolized in adults to alpha- and beta-naphthol and alpha- and beta-naphthoquinone. The most active metabolite is probably naphthalene-1,2-oxide (Juchau and Namkung, 1974).

Usually organic compounds that readily form epoxides are suspected mutagens or carcinogens. Although naphthalene has low DNA and RNA binding capacities (Brooks and Lawley, 1964) and previous studies have failed to show evidence of carcinogenic activity by naphthalene (Horning et al., 1976; Searle, 1976;

Skjaeggestad, 1964), NTP has recently tested naphthalene for carcinogenic activity in mice. The results of the study have not yet been published.

EPA (1982) determined that the dose at which acute effects have been observed in humans is three to five orders of magnitude higher than the exposure levels to specific subpopulations associated with mothball use and cigarette smoking. EPA, therefore, concluded that there appears to be little acute risk to humans from environmental exposure to naphthalene; however, severe adverse effects are possible from accidental ingestion of substantial quantities of naphthalene.

CYANIDE

Cyanide is a compound that may exist as a gas (e.g., hydrogen cyanide [HCN]), a salt (e.g., potassium cyanide [KCN] or sodium cyanide [NaCN]) a metal cyanide (ferro/ferri-cyanide), or as free cyanide. At coal gasification sites, cyanide is expected to be present mostly as ferro/ferri-cyanide, and to a lesser extent, as free or amenable cyanide. Most cyanides, with the exception of several metallocyanides, are relatively soluble in water. However, their environmental fate in water varies considerably by compound. The alkali metal cyanides (e.g., KCN and NaCN) readily dissociate upon release to the water and may form HCN or bond with metals present in the water. Ferro- and ferricyanides are relatively stable metallocyanides and may undergo photodissociation to the cyanide ion (CN-) and form HCN. The insoluble cyanides (i.e., copper and silver cyanide) are not expected to dissociate. They may become adsorbed to sediment, bioaccumulate in aquatic organisms, or biodegrade (ATSDR, 1988).

In both water and soils, volatilization is expected to be an important fate process. At a pH of less than 9.2, most of the free cyanide in water and soil is expected to exist as HCN (ATSDR, 1988). HCN has a vapor pressure of 264.3 mm mercury (mmHg) (0°C); however, volatilization is expected to vary with soil and water characteristics. A number of microorganisms biodegrade cyanide at low concentrations. HCN is expected to be highly mobile in soils and may leach into the groundwater when present in concentrations that may exceed the biodegradation capacity of the microorganisms.

Most atmospheric cyanide is HCN. It is expected to be resistant to photodecomposition and has a half-life of approximately 334 days (ATSDR, 1988). At coal gasification sites that have been inactive for decades, HCN would not be a major concern. Both cyanide gases and salts are used in industrial processes. HCN is manufactured at 14 sites in the U.S. and is used as an intermediate in the production of nylon and other compounds. Minor uses of HCN include insecticides and rodenticides for fumigating enclosed spaces (e.g., grain storage areas). Cyanide salts are used mainly in the electroplating and metal-finishing industries. Minor applications of the salts include the manufacture of dyes and pigments, as well as use as insecticides and rodenticides.

Cyanides also occur naturally in several foods and plants and are produced by certain bacteria, fungi, and algae. Cyanocobalamin, a form of vitamin B12, is a dietary requirement. However, most of the cyanide found in the environment is from industrial processes.

The exposure routes of concern for cyanide at this site are ingestion of cyanide-contaminated soils and inhalation of fugitive dust where cyanide has been adsorbed to the particles. There are no studies in the available literature that evaluate toxicity following these specific exposures. All the inhalation studies are of the effects of exposure to HCN; oral studies are generally on the effects of HCN, NaCN, or KCN exposure.

Epidemiological studies have also been undertaken in tropical climates where the cyanide-containing vegetable, cassava, is a dietary staple. Neurologic,

cardiovascular/respiratory, and/or thyroid effects were found following these exposures. However, care should be exercised when assuming the same effects will result from the defined routes of exposure at this site and from exposure to other cyanide compounds.

The fatal effects of exposure to high doses of cyanide over short periods of time are well known. Inhalation of 100 ppm HCN for 0.5 to 1 hour has been fatal to humans. The LD50 in humans for ingestion exposure has been reported to be 1.5 mg/kg/day of CN-. A lower fatal dose in humans has been reported at 0.6 mg/kg/day CN- (ATSDR, 1988).

Brief exposure to lower levels of cyanide has resulted in rapid, deep breathing, shortness of breath, convulsions, and loss of consciousness. Because cyanide is not sequestered in the body, these effects are reversible over time. However, longer-term exposure to these low levels has resulted in CNS, thyroid gland, and cardiovascular effects.

Cyanide is readily absorbed following inhalation and oral exposure. Human studies have reported 58 to 77 percent of inhaled HCN is retained in the lungs (Landahl & Hermann, 1950). Human and animal studies indicate cyanide is rapidly distributed by the blood following both inhalation and oral exposure.

The major metabolic pathway of cyanide is conversion to thiocyanate by either rhodanese or 3-mercaptopyruvate. There are also three minor metabolic pathways: conversion to 2-aminothiazoline-4-barboylic acid; incorporation into a 1-carbon metabolic pool; or combination with hydroxycobalamin to form

cyanocobalamin (B12) (ATSDR, 1988). Cyanide metabolites are primarily excreted in the urine. Small amounts are excreted in the expired air.

Inhalation Toxicity

Numerous occupational exposures to cyanide have been reported; however, no levels of exposure are available. Exposure to HCN resulted in palpitations, shortness of breath, pain over the heart, vertigo, and involuntary eye movements (Carmelo, 1955), cyanosis, headache, altered EEG, and left-sided blindness (Sandberg, 1967). A photographic laboratory worker was exposed to potassium cyanide when a bag of the compound burst in his face. He developed abdominal pain, pallor, and collapse, but recovered after treatment (Thomas and Brooks, 1970).

While many of the available animal studies involved inhalation of fatal doses of cyanide, several studies are available that demonstrate effects from exposure to lower doses.

When monkeys were exposed to 87 to 196 ppm HCN, severe disruptive changes in respiration and unconsciousness were noted (Purser et al., 1984). Tremors, convulsions, loss of equilibrium, dyspnea, nausea, exaggerated intestinal peristalsis, and diarrhea were noted in dogs exposed to 45 ppm HCN for varying durations (Valade, 1952).

All available human and animal studies involved exposure to HCN and not particulate matter. Acute exposure to inhaled HCN at high concentrations resulted in hyperventilation, unconsciousness, and death. The cardiovascular

effects are believed to be secondary to the CNS effects (ATSDR, 1988). A worker exposed to HCN by both inhalation and dermal routes developed left-sided blindness (Sandberg, 1967). HCN fumigators also exposed by inhalation and dermal contact developed palpitations, shortness of breath, pain over the heart, vertigo, and involuntary eye movements (Carmelo, 1955).

When rats were exposed to inhalation of HCN at low concentrations, cardiac enzyme changes resulted (O'Flaherty and Thomas, 1982). The previously cited Purser study of monkeys exposed to 87 to 196 ppm HCN from pyrolyzed polyacrylonitrile also found cardiovascular effects, including rapid induction of a semiconscious state and severe disruptive changes in respiration.

Several occupational studies of workers exposed to HCN produced thyroid abnormalities. In a case-control study of electroplating workers exposed to 6.4 to 10.4 ppm HCN for 5 to 15 years, 56 percent of the exposed group had enlarged thyroid glands and significantly elevated hemoglobin levels and lymphocyte counts. It should be noted that these workers were also exposed to volatiles, exposure levels varied, and unmatched controls were used (El Ghawabi et al., 1975).

Workers in a silver-reclaiming factory exposed an average of 10.5 months to a TWA of 16.6 mg/m^3 HCN developed headache, dizziness, and mild thyroid abnormalities (Blanc et al., 1985).

No studies of developmental effects in humans resulting form inhalation of cyanide are available.

The only available animal study is of hamsters exposed to acetonitrile, which has cyanide as a metabolic by-product. The hamsters were dosed with zero, 1,800, 3,800, 5,000, and 8,000 ppm for 60 minutes. Dose-related increases in maternal mortality, fetal resorptions, and malformations were found (Willhite, 1981).

Oral Toxicity

The risk assessment at this site quantitatively evaluates effects from ingestion of soil particles to which cyanide is adsorbed. There are a number of studies of CN- administered in the diet or by gavage; however, no studies in which soil was the vehicle are available.

Male rats were fed 30 mg/kg/day cyanide for 11.5 months and developed vacuolization and myelin degeneration of the spinal cord (Philbrick et al., 1979). No CNS effects were reported by Howard and Hanzell (1955) for rats fed up to 10.8 mg/kg/day of CN- in HCN-fumigated feed for two years.

Dogs fed 0.27 and 0.53 mg/kg/day cyanide in capsules for 16 weeks developed degenerative changes in the CNS ganglion cells, reduced ribonucleic acid (RNA) content, and inflammation (Hertting et al., 1960).

No studies describing cardiovascular or respiratory effects in humans or animals following long-term, low-dose oral exposure were found in the available literature. However, it is important to note that respiratory failure and death have resulted following continuous exposure to single, high doses of cyanide.

Qualitative surveys of African communities where people are exposed to cyanide from consumption of cassava have found a strong correlation between cassava consumption and endemic goiter and cretinism. Dietary deficiencies may have compounded this association (ATSDR, 1988).

In a 14-day study, male rats were fed the equivalent of 40 mg/kg/day CN- as potassium cyanide added to the diet. The diets varied by the amount of protein. Increased thyroid weights and increased plasma thyroid stimulating hormone levels were noted only in the low-protein diet group. These effects were not observed when protein levels were increased or when iodine was added to the drinking water of rats fed the low-protein diet (Kreutler et al., 1978).

Rats were fed the equivalent of 30 mg/kg/day CN- for 11.5 months. At the end of four months, the rats exhibited decreased plasma thyroxine and thyroxine secretion rates. At the end of the 11.5 months, these same effects were found, plus increased relative thyroid weight (Philbrick et al., 1979).

Epidemiologic studies were conducted in Zaire where cassava is a staple food. Congenital hypothyroidism was found in 15 percent of the newborns. This incidence is approximately 500 times that of industrialized countries. In addition to cassava consumption, iodine deficiencies may have contributed to this condition (ATSDR, 1988).

Numerous studies of orally exposed pregnant animals have found maternal toxicities and developmental abnormalities in the offspring. Pregnant

hamsters exposed to cyanide as D,L-amygdalin (a component of laetrile) exhibited maternal toxicity at 250 mg/kg and greater. Fetuses were examined at 15-days gestation, and dose-related abnormalities were observed in this group (Willhite, 1982).

Female rats were fed a basal casava diet containing 12 mg/kg HCN and a basal diet with 1.25 gm KCN per kg diet prior to mating, during gestation, and through lactation. The weanlings were subsequently fed these same diets. Those weanlings exposed to higher levels of cyanide in utero and during the post-weaning period had significantly decreased protein-efficiency ratios. Both the dams and weanlings fed the potassium cyanide-enhanced diet had significantly increased serum thiocyanate levels (Tewe and Maner, 1981).

Pregnant pigs were fed cassava diets with added cyanide. In the group with the highest exposure (520.7 mg/kg CN-), serum thiocyanate levels were increased in dams and fetuses. Reduced thyroid activity was found in the dams. Both the high and low groups (276 mg/kg CN-) had proliferation of glomerular cells in the kidneys.

Other Effects. No data on reproductive toxicity from cyanide exposure by any route are available in the literature. Cyanide has tested negative for mutagenic effects. There are no data available indicating that cyanide has any carcinogenic effects.

High Risk Populations. High-risk populations include those persons with a metabolic disturbance in the conversion of cyanide to thiocyanate and those

with dietary deficiencies (e.g., iodine, protein, vitamin B12, or riboflavin), as well as those nutritionally deprived.

TRIMETHYLBENZENE

Trimethylbenzenes are alkylated benzenes. This group of compounds, which include xylenes, toluene, and ethylbenzene, is a by-product of petroleum distillation and found in coke oven effluents. Trimethylbenzenes are primarily used in industry as solvents, paint thinners, and motor fuel components. One of the three trimethylbenzene isomers has been identified as an insect attractant (Clayton and Clayton, 1981). Trimethylbenzene is associated with manufactured gas process residuals (Atlantic Environmental Services, 1988).

Trimethylbenzene, as with most alkylated benzenes, seems to be relatively nontoxic except during acute exposures at very high concentrations (Klaasen et al., 1986). This is probably because alkylated benzenes are metabolized to compounds of lower toxicity, and there is no evidence that these metabolic pathways can be saturated, leading to the formation of toxic reactive intermediates. Trimethylbenzene is absorbed through the lungs and the GI tract; dermal absorption does not lead to systemic toxicity. The primary toxicologic effects seen at acute exposure to high concentration are CNS depressive effects such as nervousness, anxiety, fatigue, nausea, and irritation of the eyes, nose and throat. Skin irritation and chemical pneumonitis can occur at the site of contact (e.g., where deposition in lungs occurs). Workers exposed to trimethylbenzene in a solvent at concentrations of 10-60 ppm for many years have shown hypochromic anemia and some deviation from normal coagulation (ACGIH, 1986).

Little experimental work has been carried out on trimethylbenzene. Most studies are acute or subacute in duration, and the results were mostly CNS depressive effects with some incidence of thrombocytosis, thrombosenis, and inhibition of phagocytical activity in leukocytes.

There are no drinking water or OSHA standards for trimethylbenzene; however, the ACGIH recommends a threshold limit value of 25 ppm (125 mg/m^3) in air.

APPENDIX G-1/2

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Appendix G-3

Risk Templates

SEDC-NP
16-Jan-90

TABLE G-3-1
Direct Contact with and/or Ingestion of Sediment
Most Probable Case - Children
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	12.84	2.5	0.050	0.01	0.50	45	1	1.95E-08	1.94E-08	4.00E-01	9.74E-08
ethylbenzene	0.0174	2.5	0.050	0.05	0.10	45	1	5.30E-12	1.32E-10	1.00E-01	1.37E-09
cyanide (total)	0.4330	2.5	0.050	1.00	0.50	45	1	6.59E-10	6.55E-08	2.00E-02	3.31E-06
									SUMMARY HAZARD INDEX		3.41E-06

Note: TK - Toxicokinetic Factor

TABLE G-3-2
Direct Contact with and/or Ingestion of Sediment
DC-MP Most Probable Case - Children
25-Jul-90 Carcinogenic effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose (mg/kg/day)} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
Benzene	0.0330	2.5	0.050	0.05	0.10	45	1	5.0	7.18E-13	1.78E-11	2.90E-02	5.38E-13
Carc. PAHs - USEPA	3.7600	2.5	0.050	0.01	0.50	45	1	5.0	4.09E-10	4.06E-10	1.15E+01	9.37E-09
Carc. PAHs - ICF	3.7600	2.5	0.050	0.01	0.50	45	1	5.0	4.09E-10	4.06E-10	3.20E+00	2.61E-09

SUMMARY CARCINOGENIC RISK	
USEPA	9.37E-09
ICF	2.61E-09

Note: TK - Toxicokinetic Factor

SEDC-BW

16-Jan-90

TABLE G-3-3
Direct Contact with and/or Ingestion of Sediment
Realistic Worst Case - Children
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	42.67	9.1	0.1	0.10	1.00	45	2	5.20E-07	4.75E-06	4.00E-01	1.32E-05
ethylbenzene	0.087	9.1	0.1	0.25	0.50	45	2	5.30E-10	2.42E-08	1.00E-01	2.47E-07
cyanide (total)	1.30	9.1	0.1	2.50	1.00	45	2	1.58E-08	3.62E-06	2.00E-02	1.82E-04
									SUMMARY HAZARD INDEX		1.95E-04

Note: TK - Toxicokinetic Factor

TABLE G-3-4
Direct Contact with and/or Ingestion of Sediment
DC-RW
Realistic Worst Case - Children
25-Jul-90
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose}_{(mg/kg/day)} = \text{Soil Concentration}_{(ug/g)} \times \left[(\text{Amount Contacted}_{(g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested}_{(g/event)} \times \text{Ingestion TK Factor})\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Increamental Risk} = \text{Body Dose}_{mg/kg/day} \times \text{CAG Potency Factor}_{(mg/kg/day)^{-1}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
Benzene	0.0950	9.1	0.1	0.25	0.50	45	2	10.0	8.26E-11	3.78E-09	2.90E-02	1.12E-10
Carc. PAHs - USEPA	10.2000	9.1	0.1	0.10	1.00	45	2	10.0	1.77E-08	1.62E-07	1.15E+01	2.07E-06
Carc. PAHs - ICF	10.2000	9.1	0.1	0.10	1.00	45	2	10.0	1.77E-08	1.62E-07	3.20E+00	5.76E-07

SUMMARY CARCINOGENIC RISK	
USEPA	2.07E-06
ICF	5.76E-07

Note: TK - Toxicokinetic Factor

TABLE G-3-5

SEDNE-HP
16-Jan-90

Direct Contact with and/or Ingestion of Sediment
Most Probable Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	12.84	1.2	0.050	0.01	0.50	70	5	6.28E-08	2.89E-08	4.00E-01	2.29E-07
ethylbenzene	0.0174	1.2	0.050	0.05	0.10	70	5	1.70E-11	1.96E-10	1.00E-01	2.13E-09
cyanide (total)	0.43	1.2	0.050	1.00	0.50	70	5	2.12E-09	9.74E-08	2.00E-02	4.98E-06
									SUMMARY HAZARD INDEX		5.21E-06

Note: TK - Toxicokinetic Factor

TABLE G-3-6

WK-MP
Direct Contact with and/or Ingestion of Sediment
25-Jul-90
Most Probable Case - Workers
Carcinogenic Effects
Mechanicville Site

his table calculates estimated body doses and incremental carcinogenic risks.

he equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
Benzene	0.0330	1.2	0.050	0.05	0.10	70	5	3.0	1.38E-12	1.59E-11	2.90E-02	5.02E-13
Carc. PAHs - USEPA	3.7600	1.2	0.050	0.01	0.50	70	5	3.0	7.88E-10	3.63E-10	1.15E+01	1.32E-08
Carc. PAHs - ICF	3.7600	1.2	0.050	0.01	0.50	70	5	3.0	7.88E-10	3.63E-10	3.20E+00	3.68E-09

SUMMARY CARCINOGENIC RISK	
USEPA	1.32E-08
ICF	3.68E-09

Note: TK - Toxicokinetic Factor

SEDWK-RW

16-Jan-90

TABLE G-3-7

Direct Contact with and/or Ingestion of Sediment
Realistic Worst Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	42.67	4.2	0.1	0.10	1.00	70	10	1.67E-06	7.09E-06	4.00E-01	2.19E-05
ethylbenzene	0.087	4.2	0.1	0.25	0.50	70	10	1.70E-09	3.61E-08	1.00E-01	3.78E-07
cyanide (total)	1.30	4.2	0.1	2.50	1.00	70	10	5.09E-08	5.40E-06	2.00E-02	2.73E-04
									SUMMARY HAZARD INDEX		2.95E-04

Note: TK - Toxicokinetic Factor

TABLE G-3-8
Direct Contact with and/or Ingestion of Sediment
DWK-RW
Realistic Worst Case - Workers
25-Jul-90
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose (mg/kg/day)} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
Benzene	0.0950	4.2	0.1	0.25	0.50	70	10	10.0	2.66E-10	5.64E-09	2.90E-02	1.71E-10
Carc. PAHs - USEPA	10.2000	4.2	0.1	0.10	1.00	70	10	10.0	5.70E-08	2.42E-07	1.15E+01	3.44E-06
Carc. PAHs - ICF	10.2000	4.2	0.1	0.10	1.00	70	10	10.0	5.70E-08	2.42E-07	3.20E+00	9.57E-07

SUMMARY CARCINOGENIC RISK	
USEPA	3.44E-06
ICF	9.57E-07

Note: TK - Toxicokinetic Factor

SOILWKHP
16-Jan-90

TABLE G-3-9
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[\left(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}\right) + \left(\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor}\right)\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
toluene	151.00	1.2	0.050	0.025	0.05	70	1	1.48E-08	1.70E-07	3.00E-01	6.16E-07
xylene	306.00	1.2	0.050	0.05	0.10	70	1	5.99E-08	6.89E-07	2.00E+00	3.74E-07
ethyl benzene	82.10	1.2	0.050	0.05	0.10	70	1	1.61E-08	1.85E-07	1.00E-01	2.01E-06
cyanide (amenable)	0.525	1.2	0.050	1.00	0.50	70	1	5.14E-10	2.36E-08	2.00E-02	1.21E-06
noncarcinogenic PAHs	2785.00	1.2	0.050	0.01	0.50	70	1	2.73E-06	1.25E-06	4.00E-01	9.95E-06
styrene	150.00	1.2	0.050	0.05	0.10	70	1	2.94E-08	3.38E-07	2.00E-01	1.83E-06
trimethylbenzene	26.70	1.2	0.050	0.05	0.10	70	1	5.23E-09	6.01E-08	2.00E+00	3.27E-08
									SUMMARY HAZARD INDEX		1.60E-05

Note: TK - Toxicokinetic Factor

TABLE G-3-10
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Workers
Carcinogenic Effects
Mechanicville Site

TLWKMP
25-Jul-90

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	104.00	1.2	0.050	0.05	0.10	70	1	2.0	5.81E-10	6.69E-09	2.90E-02	2.11E-10
Carc. PAHs - USEPA	271.00	1.2	0.050	0.01	0.50	70	1	2.0	7.58E-09	3.49E-09	1.15E+01	1.27E-07
Carc. PAHs - ICF	271.00	1.2	0.050	0.01	0.50	70	1	2.0	7.58E-09	3.49E-09	3.20E+00	3.54E-08

SUMMARY CARCINOGENIC RISK	
USEPA	1.27E-07
ICF	3.56E-08

Note: TK - Toxicokinetic Factor

SOILWKRW
16-Jan-90

TABLE G-3-11
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Workers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
toluene	840.00	4.2	0.1	0.125	0.25	70	2	1.64E-06	3.49E-05	3.00E-01	1.22E-04
xylene	1400.00	4.2	0.1	0.25	0.50	70	2	5.48E-06	1.16E-04	2.00E+00	6.09E-05
ethyl benzene	440.00	4.2	0.1	0.25	0.50	70	2	1.72E-06	3.66E-05	1.00E-01	3.83E-04
cyanide (amenable)	3.20	4.2	0.1	2.50	1.00	70	2	2.50E-08	2.66E-06	2.00E-02	1.34E-04
noncarcinogenic PAHs	10851.00	4.2	0.1	0.10	1.00	70	2	8.49E-05	3.61E-04	4.00E-01	1.11E-03
styrene	780.00	4.2	0.1	0.250	0.50	70	2	3.05E-06	6.48E-05	2.00E-01	3.39E-04
trimethylbenzene	170.00	4.2	0.1	0.25	0.50	70	2	6.65E-07	1.41E-05	2.00E+00	7.39E-06
									SUMMARY HAZARD INDEX		2.16E-03

Note: TK - Toxicokinetic Factor

TABLE G-3-12

Direct Contact with and/or Ingestion of Soil
OILWKRW
Realistic Worst Case - Workers
25-Jul-90
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1 \text{ mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}}$$

$$\text{Incremental Risk} = \text{Body Dose (mg/kg/day)} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
benzene	640.0000	4.2	0.1	0.25	0.50	70	2	4.0	1.43E-07	3.04E-06	2.90E-02	9.23E-08
carc. PAHs - USEPA	1305.0000	4.2	0.1	0.10	1.00	70	2	4.0	5.84E-07	2.48E-06	1.15E+01	3.52E-05
carc. PAHs - ICF	1305.0000	4.2	0.1	0.10	1.00	70	2	4.0	5.84E-07	2.48E-06	3.20E+00	9.80E-06

SUMMARY CARCINOGENIC RISK	
USEPA	3.53E-05
ICF	9.89E-06

Note: TK - Toxicokinetic Factor

INHALATION RISK SCENARIOS

DISK: INHALATION
FILE: INH-MECH.WK1

DATE: 25-Jul-90

SITE: Mechanicville SUMMARY TABLE: TABLE G-3-13

Variables	Child
Body Weight (kilograms)	21
Duration of Total Exposure Period (years)	6

Noncarcinogenic Compound(s)	Toxicokinetic Factor (unitless)	Standard or Guideline (mg/kg/day)
Cyanide	7.50	2.00E-02
Ethylbenzene	1.00	1.00E-01
Noncarcinogenic PAHs	0.75	4.00E-01
Styrene	1.00	2.00E-01
Toluene	1.00	1.00E+00
Trimethylbenzene	1.00	4.00E-01
Total Xylenes	1.00	4.00E-01

Carcinogenic Compound(s)	Toxicokinetic Factor (unitless)	CAG Potency Factor (mg/kg/day)^-1
Benzene	1.00	2.90E-02
Bis(2-ethylhexyl)phthalate	0.75	1.40E-02
Methylene Cloride	1.00	1.40E-02
Carcinogenic PAHs - USEPA	1.00	6.10E+00
Carcinogenic PAHs - ICF	1.00	4.53E-01

Zone 1 School, 750 ft Noncarcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	MOST PROBABLE CASE Duration of Exposure (hrs/event)	MOST PROBABLE CASE Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	REALISTIC WORST CASE Duration of Exposure (hrs/event)	REALISTIC WORST CASE Number of Exposure Events (events/yr)
Cyanide	3.58E-09	8	20	2.45E-07	8	25
Ethylbenzene	5.52E-05	8	20	2.16E-03	8	25
Noncarcinogenic PAHs	1.43E-05	8	20	9.80E-04	8	25
Styrene	1.02E-04	8	20	3.93E-03	8	25
Toluene	1.02E-04	8	20	3.97E-03	8	25
Trimethylbenzene	1.81E-05	8	20	6.99E-04	8	25
Total Xylenes	2.07E-04	8	20	8.04E-03	8	25

Zone 2 Home, 100 ft (playing) Noncarcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	MOST PROBABLE CASE Duration of Exposure (hrs/event)	MOST PROBABLE CASE Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	REALISTIC WORST CASE Duration of Exposure (hrs/event)	REALISTIC WORST CASE Number of Exposure Events (events/yr)
Cyanide	2.09E-08	6	20	9.42E-07	6	25
Ethylbenzene	2.41E-04	6	20	1.01E-02	6	25
Noncarcinogenic PAHs	8.35E-05	6	20	3.77E-03	6	25
Styrene	4.42E-04	6	20	1.84E-02	6	25
Toluene	4.44E-04	6	20	1.86E-02	6	25
Trimethylbenzene	7.86E-05	6	20	3.28E-03	6	25
Total Xylenes	9.01E-04	6	20	3.77E-02	6	25

Zone 3 Home, 100 ft (sleeping) Noncarcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	MOST PROBABLE CASE Duration of Exposure (hrs/event)	MOST PROBABLE CASE Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	REALISTIC WORST CASE Duration of Exposure (hrs/event)	REALISTIC WORST CASE Number of Exposure Events (events/yr)
Cyanide	2.09E-08	10	20	9.42E-07	10	25
Ethylbenzene	2.41E-04	10	20	1.01E-02	10	25
Noncarcinogenic PAHs	8.35E-05	10	20	3.77E-03	10	25
Styrene	4.42E-04	10	20	1.84E-02	10	25
Toluene	4.44E-04	10	20	1.86E-02	10	25
Trimethylbenzene	7.86E-05	10	20	3.28E-03	10	25
Total Xylenes	9.01E-04	10	20	3.77E-02	10	25

TABLE G-3-13 (continued)

Zone 1 School, 750 ft Carcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	MOST PROBABLE CASE Duration of Exposure (hrs/event)	MOST PROBABLE CASE Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	REALISTIC WORST CASE Duration of Exposure (hrs/event)	REALISTIC WORST CASE Number of Exposure Events (events/yr)
Benzene	7.03E-05	8	20	2.73E-03	8	25
Bis(2-ethylhexyl)phthalate	0.00E+00	8	20	0.00E+00	8	25
Methylene Cloride	0.00E+00	8	20	1.31E-05	8	25
Carcinogenic PAHs - USEPA	1.41E-06	8	20	9.65E-05	8	25
Carcinogenic PAHs - ICF	1.41E-06	8	20	9.65E-05	8	25

Zone 2 Home, 100 ft (playing) Carcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	MOST PROBABLE CASE Duration of Exposure (hrs/event)	MOST PROBABLE CASE Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	REALISTIC WORST CASE Duration of Exposure (hrs/event)	REALISTIC WORST CASE Number of Exposure Events (events/yr)
Benzene	3.06E-04	6	20	1.28E-02	6	25
Bis(2-ethylhexyl)phthalate	0.00E+00	6	20	0.00E+00	6	25
Methylene Cloride	1.48E-06	6	20	6.15E-05	6	25
Carcinogenic PAHs - USEPA	8.20E-06	6	20	3.70E-04	6	25
Carcinogenic PAHs - ICF	8.20E-06	6	20	3.70E-04	6	25

Zone 3 Home, 100 ft (sleeping) Carcinogenic Compound(s)	MOST PROBABLE CASE Concentration (mg/m^3)	MOST PROBABLE CASE Duration of Exposure (hrs/event)	MOST PROBABLE CASE Number of Exposure Events (events/yr)	REALISTIC WORST CASE Concentration (mg/m^3)	REALISTIC WORST CASE Duration of Exposure (hrs/event)	REALISTIC WORST CASE Number of Exposure Events (events/yr)
Benzene	3.06E-04	10	20	1.28E-02	10	25
Bis(2-ethylhexyl)phthalate	0.00E+00	10	20	0.00E+00	10	25
Methylene Cloride	1.48E-06	10	20	6.15E-05	10	25
Carcinogenic PAHs - USEPA	8.20E-06	10	20	3.70E-04	10	25
Carcinogenic PAHs - ICF	8.20E-06	10	20	3.70E-04	10	25

Terminology
Inhalation
Most Probable Case
Realistic Worst Case
Young Child
Adult
Carcinogen
Noncarcinogen

Inhalation Rate (m^3/hr)
Child

	Zone 1	Zone 2	Zone 3
Most Probable	0.8	2.0	0.4
Realistic Worst	0.8	2.0	0.4

TABLE G-3-13 (continued)

Mechanicville
Inhalation Most Probable Case
Young Child Noncarcinogen

Noncarcinogenic Compound(s)	Body Weight (kilograms)	Zone 1 Concentration (mg/m^3)	Zone 1 Duration of Exposure (hrs/event)	Zone 1 Number of Exposure Events (events/yr)	Zone 1 Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)
Cyanide	21	3.58E-09	8	20	0.8	5.98E-11
Ethylbenzene	21	5.52E-05	8	20	0.8	9.22E-07
Noncarcinogenic PAHs	21	1.43E-05	8	20	0.8	2.39E-07
Styrene	21	1.02E-04	8	20	0.8	1.70E-06
Toluene	21	1.02E-04	8	20	0.8	1.70E-06
Trimethylbenzene	21	1.81E-05	8	20	0.8	3.02E-07
Total Xylenes	21	2.07E-04	8	20	0.8	3.46E-06

Noncarcinogenic Compound(s)	Zone 2 Concentration (mg/m^3)	Zone 2 Duration of Exposure (hrs/event)	Zone 2 Number of Exposure Events (events/yr)	Zone 2 Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
Cyanide	2.09E-08	6	20	2.0	6.54E-10
Ethylbenzene	2.41E-04	6	20	2.0	7.55E-06
Noncarcinogenic PAHs	8.35E-05	6	20	2.0	2.61E-06
Styrene	4.42E-04	6	20	2.0	1.38E-05
Toluene	4.44E-04	6	20	2.0	1.39E-05
Trimethylbenzene	7.86E-05	6	20	2.0	2.46E-06
Total Xylenes	9.01E-04	6	20	2.0	2.82E-05

Noncarcinogenic Compound(s)	Zone 3 Concentration (mg/m^3)	Zone 3 Duration of Exposure (hrs/event)	Zone 3 Number of Exposure Events (events/yr)	Zone 3 Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)
Cyanide	2.09E-08	10	20	0.4	2.18E-10
Ethylbenzene	2.41E-04	10	20	0.4	2.52E-06
Noncarcinogenic PAHs	8.35E-05	10	20	0.4	8.71E-07
Styrene	4.42E-04	10	20	0.4	4.61E-06
Toluene	4.44E-04	10	20	0.4	4.63E-06
Trimethylbenzene	7.86E-05	10	20	0.4	8.20E-07
Total Xylenes	9.01E-04	10	20	0.4	9.40E-06

Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	Standard or Guideline (mg/kg/day)	Hazard Ratio
9.32E-10	7.5	2.00E-02	3.50E-07
1.10E-05	1.0	1.00E-01	1.10E-04
3.72E-06	0.8	4.00E-01	6.98E-06
2.02E-05	1.0	2.00E-01	1.01E-04
2.02E-05	1.0	1.00E+00	2.02E-05
3.58E-06	1.0	4.00E-01	8.96E-06
4.11E-05	1.0	4.00E-01	1.03E-04

SUMMARY HAZARD INDEX	3.50E-04

TABLE G-3-13 (continued)

Mechanicville
Inhalation Realistic Worst Case
Young Child Noncarcinogen

Noncarcinogenic Compound(s)	Body Weight (kilograms)	Zone 1 Concentration (mg/m^3)	Zone 1 Duration of Exposure (hrs/event)	Zone 1 Number of Exposure Events (events/yr)	Zone 1 Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)	Zone 2 Concentration (mg/m^3)	Zone 2 Duration of Exposure (hrs/event)	Zone 2 Number of Exposure Events (events/yr)	Zone 2 Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
Cyanide	21	2.45E-07	8	25	0.8	5.11E-09	9.42E-07	6	25	2.0	3.69E-08
Ethylbenzene	21	2.16E-03	8	25	0.8	4.51E-05	1.01E-02	6	25	2.0	3.95E-04
Noncarcinogenic PAHs	21	9.80E-04	8	25	0.8	2.04E-05	3.77E-03	6	25	2.0	1.47E-04
Styrene	21	3.93E-03	8	25	0.8	8.20E-05	1.84E-02	6	25	2.0	7.20E-04
Toluene	21	3.97E-03	8	25	0.8	8.29E-05	1.86E-02	6	25	2.0	7.28E-04
Trimethylbenzene	21	6.99E-04	8	25	0.8	1.46E-05	3.28E-03	6	25	2.0	1.28E-04
Total Xylenes	21	8.04E-03	8	25	0.8	1.68E-04	3.77E-02	6	25	2.0	1.48E-03

Noncarcinogenic Compound(s)	Zone 3 Concentration (mg/m^3)	Zone 3 Duration of Exposure (hrs/event)	Zone 3 Number of Exposure Events (events/yr)	Zone 3 Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)	Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	Standard or Guideline (mg/kg/day)	Hazard Ratio
Cyanide	9.42E-07	10	25	0.4	1.23E-08	5.43E-08	7.5	2.00E-02	2.04E-05
Ethylbenzene	1.01E-02	10	25	0.4	1.32E-04	5.72E-04	1.0	1.00E-01	5.72E-03
Noncarcinogenic PAHs	3.77E-03	10	25	0.4	4.91E-05	2.17E-04	0.8	4.00E-01	4.07E-04
Styrene	1.84E-02	10	25	0.4	2.40E-04	1.04E-03	1.0	2.00E-01	5.21E-03
Toluene	1.86E-02	10	25	0.4	2.43E-04	1.05E-03	1.0	1.00E+00	1.05E-03
Trimethylbenzene	3.28E-03	10	25	0.4	4.28E-05	1.86E-04	1.0	4.00E-01	4.64E-04
Total Xylenes	3.77E-02	10	25	0.4	4.92E-04	2.14E-03	1.0	4.00E-01	5.34E-03

SUMMARY HAZARD INDEX	1.82E-02

TABLE G-3-13 (continued)

Mechanicville
Inhalation Most Probable Case
Young Child Carcinogen

Carcinogenic Compound(s)	Zone 1 Body Weight (kilograms)	Zone 1 Concentration (mg/m^3)	Zone 1 Duration of Exposure (hrs/event)	Zone 1 Number of Exposure Events (events/yr)	Zone 1 Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)
Benzene	21	7.03E-05	8.0	20	0.8	1.01E-07
Bis(2-ethylhexyl)phthalate	21	0.00E+00	8.0	20	0.8	0.00E+00
Methylene Cloride	21	0.00E+00	8.0	20	0.8	0.00E+00
Carcinogenic PAHs - USEPA	21	1.41E-06	8.0	20	0.8	2.02E-09
Carcinogenic PAHs - ICF	21	1.41E-06	8.0	20	0.8	2.02E-09

Zone 2 Concentration (mg/m^3)	Zone 2 Duration of Exposure (hrs/event)	Zone 2 Number of Exposure Events (events/yr)	Zone 2 Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
3.06E-04	6	20	2.0	8.21E-07
0.00E+00	6	20	2.0	0.00E+00
1.48E-06	6	20	2.0	3.97E-09
8.20E-06	6	20	2.0	2.20E-08
8.20E-06	6	20	2.0	2.20E-08

Carcinogenic Compound(s)	Zone 3 Concentration (mg/m^3)	Zone 3 Duration of Exposure (hrs/event)	Zone 3 Number of Exposure Events (events/yr)	Zone 3 Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)
Benzene	3.06E-04	10.0	20	0.4	2.74E-07
Bis(2-ethylhexyl)phthalate	0.00E+00	10.0	20	0.4	0.00E+00
Methylene Cloride	1.48E-06	10.0	20	0.4	1.32E-09
Carcinogenic PAHs - USEPA	8.20E-06	10.0	20	0.4	7.34E-09
Carcinogenic PAHs - ICF	8.20E-06	10.0	20	0.4	7.34E-09

Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	CAG Potency Factor (mg/kg/day)^-1	Incremental Cancer Risk
1.20E-06	1.0	2.90E-02	3.47E-08
0.00E+00	0.8	1.40E-02	0.00E+00
5.30E-09	1.0	1.40E-02	7.41E-11
3.14E-08	1.0	6.10E+00	1.91E-07
3.14E-08	1.0	4.53E-01	1.42E-08

SUMMARY INCREMENTAL CANCER RISK	USEPA	2.26E-07
	ICF	4.90E-08

TABLE G-3-13 (continued)

Mechanicville
Inhalation Realistic Worst Case
Young Child Carcinogen

	Zone 1					
Carcinogenic Compound(s)	Body Weight (kilograms)	Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	Inhalation Rate (m^3/hr)	Zone 1 Exposure (mg/kg/day)
Benzene	21	2.73E-03	8	25	0.8	4.88E-06
Bis(2-ethylhexyl)phthalate	21	0.00E+00	8	25	0.8	0.00E+00
Methylene Cloride	21	1.31E-05	8	25	0.8	2.34E-08
Carcinogenic PAHs - USEPA	21	9.65E-05	8	25	0.8	1.73E-07
Carcinogenic PAHs - ICF	21	9.65E-05	8	25	0.8	1.73E-07

	Zone 2				
Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Nueber of Exposure Events (events/yr)	Inhalation Rate (m^3/hr)	Zone 2 Exposure (mg/kg/day)
1.28E-02	6.0	25	2.0	4.29E-05
0.00E+00	6.0	25	2.0	0.00E+00
6.15E-05	6.0	25	2.0	2.06E-07
3.70E-04	6.0	25	2.0	1.24E-06
3.70E-04	6.0	25	2.0	1.24E-06

	Zone 3				
Carcinogenic Compound(s)	Concentration (mg/m^3)	Duration of Exposure (hrs/event)	Number of Exposure Events (events/yr)	Inhalation Rate (m^3/hr)	Zone 3 Exposure (mg/kg/day)
Benzene	1.28E-02	10.0	25	0.4	1.43E-05
Bis(2-ethylhexyl)phthalate	0.00E+00	10.0	25	0.4	0.00E+00
Methylene Cloride	6.15E-05	10.0	25	0.4	6.88E-08
Carcinogenic PAHs - USEPA	3.70E-04	10.0	25	0.4	4.14E-07
Carcinogenic PAHs - ICF	3.70E-04	10.0	25	0.4	4.14E-07

Summary Exposure (mg/kg/day)	Toxicokinetic Factor (unitless)	CAG Potency Factor (mg/kg/day)^-1	Incremental Cancer Risk
6.21E-05	1.0	2.90E-02	1.80E-06
0.00E+00	0.8	1.40E-02	0.00E+00
2.99E-07	1.0	1.40E-02	4.18E-09
1.83E-06	1.0	6.10E+00	1.11E-05
1.83E-06	1.0	4.53E-01	8.28E-07

SUMMARY INCREMENTAL CANCER RISK	USEPA	1.30E-05
	ICF	2.63E-06

TABLE G-3-13 (continued)

RISK CALCULATION SUMMARY
Mechanicville Site
Inhalation
Noncarcinogen

Compounds	Most Probable Case Child	Percent Total Risk	Realistic Worst Case Child	Percent Total Risk
Cyanide	3.50E-07	0.1%	2.04E-05	0.1%
Ethylbenzene	1.10E-04	31.4%	5.72E-03	31.4%
Noncarcinogenic PAHs	6.98E-06	2.0%	4.07E-04	2.2%
Styrene	1.01E-04	28.8%	5.21E-03	28.6%
Toluene	2.02E-05	5.8%	1.05E-03	5.8%
Trimethylbenzene	8.96E-06	2.6%	4.64E-04	2.5%
Total Xylenes	1.03E-04	29.4%	5.34E-03	29.3%
SUMMARY HAZARD INDEX	3.50E-04		1.82E-02	

Inhalation
Carcinogen

Compounds	Most Probable Case Child	Percent Risk-USEPA	Percent Risk-ICF	Realistic Worst Case Child	Percent Risk-USEPA	Percent Risk-ICF
Benzene	3.47E-08	15.3%	70.8%	1.80E-06	13.9%	68.4%
Bis(2-ethylhexyl)phthalate	0.00E+00	0.0%	0.0%	0.00E+00	0.0%	0.0%
Methylene Cloride	7.41E-11	0.0%	0.2%	4.18E-09	0.0%	0.2%
Carcinogenic PAHs - USEPA	1.91E-07	84.6%		1.11E-05	86.1%	
Carcinogenic PAHs - ICF	1.42E-08		29.0%	8.28E-07		31.4%
SUMMARY INCREMENTAL CANCER RISK						
USEPA	2.26E-07			1.30E-05		
ICF	4.90E-08			2.63E-06		

SSLC-HP
16-Jan-90

TABLE G-3-14
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Teenagers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices.

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	24.00	9.1	0.1	0.05	0.10	45	5	7.31E-08	3.34E-06	4.00E-01	8.53E-06
Cyanide (amenable)	0.69	9.1	0.1	1.00	0.50	45	5	1.05E-08	1.92E-06	2.00E-02	9.66E-05
									SUMMARY HAZARD INDEX		1.05E-04

noncar PAHs
car PAHs

Note: TK - Toxicokinetic Factor

LC-MP
25-Jul-90

TABLE G-3-15
Direct Contact with and/or Ingestion of Soil
Most Probable Case - Teenagers
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \text{No. Events} \times \text{No. of years exposed} \times \frac{1\text{mg}}{1000\text{ ug}} \times \frac{1\text{ yr}}{365\text{ days}} \times \frac{1}{1000\text{ ug}}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
Carc. PAHs - USEPA	20.00	9.1	0.1	0.05	0.1	45	5	5.0	4.35E-09	1.99E-07	1.15E+01	2.34E-06
Carc. PAHs - ICF	20.00	9.1	0.1	0.05	0.1	45	5	5.0	4.35E-09	1.99E-07	3.20E+00	6.50E-07

SUMMARY CARCINOGENIC RISK	
USEPA	2.34E-06
ICF	6.50E-07

Note: TK - Toxicokinetic Factor

SSLC-RW

16-Jan-90

TABLE G-3-16
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Teenagers
Noncarcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and hazard indices.

The equations to calculate body dose level and hazard indices are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times \left[(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})\right] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{year}} \times \frac{1\ \text{mg}}{1000\ \text{ug}} \times \frac{1\ \text{yr}}{365\ \text{days}}$$

$$\text{Hazard Index} = \frac{\text{Body Dose (mg/kg/day)}}{\text{Standard or Guideline (mg/kg/day)}}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	Standard/ Guideline (mg/kg/day)	Hazard Index
noncarcinogenic PAHs	37.41	9.1	0.1	0.05	0.10	45	10	2.28E-07	1.04E-05	4.00E-01	2.66E-05
Cyanide (amenable)	1.80	9.1	0.1	2.50	1.00	45	10	1.10E-07	2.51E-05	2.00E-02	1.26E-03
									SUMMARY HAZARD INDEX		1.28E-03

Note: TK - Toxicokinetic Factor

GSLC-RW

25-Jul-90

TABLE G-3-17
Direct Contact with and/or Ingestion of Soil
Realistic Worst Case - Teenagers
Carcinogenic Effects
Mechanicville Site

This table calculates estimated body doses and incremental carcinogenic risks.

The equations to calculate body dose level and incremental carcinogenic risks are:

$$\text{Body Dose (mg/kg/day)} = \text{Soil Concentration (ug/g)} \times [(\text{Amount Contacted (g/event)} \times \text{Dermal TK Factor}) + (\text{Amount Ingested (g/event)} \times \text{Ingestion TK Factor})] \times \frac{1}{\text{Body Weight (kg)}} \times \frac{\text{No. Events}}{\text{years}} \times \frac{\text{No. of years exposed}}{70 \text{ years}} \times \frac{1\text{mg}}{1000 \text{ ug}} \times \frac{1 \text{ yr}}{365 \text{ days}} \quad 1000 \text{ ug}$$

$$\text{Incremental Risk} = \text{Body Dose mg/kg/day} \times \text{CAG Potency Factor (mg/kg/day)}^{-1}$$

Compound	Concentration (ug/g)	Amount of Soil Contacted (g/event)	Amount of Soil Ingested (g/event)	Dermal TK Factor	Ingestion TK Factor	Body Weight (kg)	No. of Events per year	No. of Years Exposed	Ingestion Body Dose (mg/kg/day)	Direct Contact Body Dose (mg/kg/day)	CAG Potency Factor (mg/kg/day)^-1	Incremental Risk
Carc. PAHs - USEPA	38.20	9.1	0.1	0.05	0.1	45.0	10	10.0	3.32E-08	1.52E-06	1.15E+01	1.79E-05
Carc. PAHs - ICF	38.20	9.1	0.1	0.05	0.1	45.0	10	10.0	3.32E-08	1.52E-06	3.20E+00	4.97E-06

SUMMARY CARCINOGENIC RISK	
USEPA	1.79E-05
ICF	4.97E-06

Note: TK - Toxicokinetic Factor

Appendix G-4

Air Modeling Method and Results

D.1 AIR QUALITY MODELING OF FUGITIVE AIR EMISSIONS

Emissions of contaminants are predicted for future hypothetical construction activities at the Mechanicville site. Both particle and volatile emissions are estimated.

D.1.1 Fugitive Dust Emissions

The fugitive dust emission equations used for this analysis are based on empirical studies of surface mines and storage piles for various materials (Cowherd, 1985). These equations can be used to estimate the emissions of contaminants based on the measured chemical concentrations in the surface soil at the Mechanicville site.

The emissions predicted from these equations are for inhalable particles (PM_{10}) that have an aerodynamic diameter smaller than or equal to 10um. Inhalable particles can be retained by the body upon inhalation and contribute to inhalation exposure.

Contaminant emission rates were estimated from PM_{10} emission factors, the mass fraction of contaminant in the Mechanicville site soil, and the hypothetical exposed surface area of the contaminated soil. The contaminant emission rate (Q_{10}; g/sec) of particles 10 um and smaller was determined by the following equation:

$$Q_{10}\ (g/sec) = [\ f \times E_{10} \times A_c\ ] \times 10^{-6} \qquad (D\text{-}1)$$

where:

Q_{10} = contaminant PM_{10} emission rate (g/sec)

f = mass fraction of contaminant in PM_{10} emissions (mg contaminant/kg PM_{10})

E_{10} = PM_{10} emission rate (g PM_{10}/m^2-sec)

A_c = contaminated surface area (m^2)

10^{-6} = conversion factor for (mg contaminant/kg PM_{10}) to (g contaminant/g PM_{10})

The first step in estimating the emission rate (Q_{10}) from the contaminated surface area is to evaluate the sources of the particle emissions. For the Mechanicville site, the main source of particle emissions is wind erosion.

For estimating emissions from wind erosion for surface areas not covered by vegetation, two emission factor equations have been recommended by Cowherd et al. (1985). Selection of an equation depends on whether the contaminated site's surface material is classified as having a "limited reservoir" or an "unlimited reservoir" of erodible surface particles. Nonhomogeneous exposed surfaces that are crusted and include nonerodible elements are characterized as having a "limited reservoir" of erodible particles and require high threshold wind speeds for wind erosion. Exposed surfaces with "unlimited" erosion potential are those that do not form a crust and consist of finely divided particles (e.g., sandy agricultural soil). For the "unlimited reservoir" category, a lower threshold wind speed is necessary to entrain the contaminated soil. Based on field studies, a threshold friction velocity of 75 cm/sec is considered as the dividing line between the two classes of wind erosion.

Based on a relationship derived by Gillette (1980), the threshold friction velocity for wind erosion can be estimated from the mode of the grain-size distribution for soil samples from the site. Based on representative soil samples from the Mechanicville site, a threshold friction velocity less than 75.0 cm/sec was determined using the Gillette curve as presented in Cowherd et al. (1985). Therefore, the "unlimited reservoir" emission equation was used for the Mechanicville site.

For the utility repair scenario described in Section 5.0, Jordan calculated a conservative estimate of the PM_{10} emission rate (E_{10}) for the contaminated surface with "unlimited" erosion potential; an emission factor derived by Gillette (1981) based on field measurements of highly erodible soil was used. Cowherd (1985) presents a simplified form of this equation to represent the worst-case (short-term) emission rates. This equation is:

$$E_{10}\ (g/m^2\text{-sec}) = (1.0 \times 10^{-5})\ (1 - V)[U_{6\text{-hour}}]^3 \qquad \text{(D-2)}$$

where: V = fraction of contaminated surface with vegetative cover (equal to 0.0 for bare soil)

[$U_{6\text{-hour}}$] = expected maximum 6-hour mean wind speed (m/sec)

Based on local climatological data presented in Cowherd et al. (1985), the fastest mile [U^+] and mean wind speed [U] recorded for Albany, New York, are 21.4 m/sec and 4.0 m/sec, respectively. Because the Mechanicville site is located approximately 15 miles north of Albany, the Albany meteorological data were assumed to be representative of the Mechanicville site. As proposed by the World

Meteorological Organization to account for different averaging periods, the expected maximum 6-hour mean wind speed during the year can be estimated by the following equation:

$$[U_{6\text{-hour}}]\ (\text{m/sec}) = [U^{+}]\text{-}2.0 \qquad \text{(D-3)}$$

For the Mechanicville site, with all of the uncovered contaminated soil assumed to be bare (V = 0.0), worst-case hourly emission rates (E_{10}) due to soil erosion were calculated for the following two wind speed conditions:

Maximum Hourly Wind Speed: 19.4 m/sec

Most Probable Hourly Wind Speed: 4.0 m/sec

The particulate emission rates (E_{10}), per unit surface area, for the two wind speed cases were calculated to be:

Maximum 6-hour Wind Speed: $E_{10} = 7.30 \times 10^{-2}$ g/m^2-sec

Most Probable Wind Speed: $E_{10} = 6.40 \times 10^{-4}$ g/m^2-sec

A summary of the assumptions and input parameters used to estimate the fugitive dust emission rates due to unlimited soil erosion are given in Table D-1.

TABLE G-4-1

ASSUMPTIONS AND INPUT PARAMETERS
USED IN FUGITIVE DUST EMISSION RATE CALCULATIONS
MECHANICVILLE SITE

Wind Erosion Emissions

Erosion Potential:	Unlimited
Volume of Contaminated Soil Removed:	
Utility Repair Excavation: (Realistic Worst Case)	4,800 cubic feet
Utility Repair Excavation Case: (Most Probable Case)	1,200 cubic feet
Fraction of Contaminated Surface (V) with Vegetative Cover	0.00
Roughness Height (Zo):	5.0 cm

Wind Speed Range	Wind Speed [m/s]	E_{10c} [g/m^2 -s]
High Wind Speed:	19.4	8.00×10^{-5}
Mean Wind Speed:	4.0	9.73×10^{-7}

The surface area of contaminated soil was assumed to equal that of the soil pile. The volume of contaminated soil brought to the surface and piled at the site was estimated for the following two scenarios:

Utility Repair Excavation - Realistic Worst Case: 4,800 cubic feet

Utility Repair Excavation - Most Probable Case: 1,200 cubic feet

The exposed surface areas of the soil piles were estimated based on the assumption that the storage piles were shaped similar to a solid cone.

The actual contaminant emission rates (Q_{10}), in grams per second, were obtained by Equation D-1 for the two wind speed cases.

D.1.2 Volatilization Rates from Soils

The volatilization of contaminants through the soil is a complex process involving the mass transfer of volatiles from the soil particles into the air pores in the soil, mass transfer through the soil pore spaces, and mass transfer from the soil surface into the ambient air. Before estimating the volatilization rates of organic chemicals from the contaminated soil, several empirical models were evaluated. For each model, values for several input parameters were not directly available for Mechanicville and would have had to be estimated. The volatilization rates calculated by the different models for specific contaminants ranged over several orders of magnitude. Because of the

uncertainty of the applicability of these models for the Mechanicville site, it was decided that a more simplified but conservative approach would be used.

Based on the mean contaminant soil concentration measured at the Mechanicville site, the mass of the contaminant (grams) in the soil for the two soil volume cases previously discussed was determined. The contaminant emission rates due to volatilization from the surface soils were calculated for the following two cases:

Most Probable: 10 percent of VOC mass emitted over 20-day period

Realistic Worst: 100 percent of VOC mass emitted over 30-day period

For the two cases, the emission rates due to volatilization from the exposed soil are assumed to remain constant. For the contaminants measured in the Mechanicville soil, Table D-2 provides the mean soil concentration (mg/kg) and the 20-day and 30-day average emission rates (g/sec).

D.2 AIR QUALITY DISPERSION MODELS

Once contaminant emission rates for the different scenarios have been estimated, air quality modeling is used to estimate ambient air concentrations at selected distances from the Mechanicville site. Jordan modeled the emissions from the exposed soil surface area as area sources. Jordan assumed that no plume rise will occur, and that the contaminant emissions are mixed uniformly over a height equal to the height of the soil pile.

TABLE G-4-2

SOIL CONCENTRATIONS AND EMISSION RATES
FOR VOLATILIZATION FROM SURFACE SOILS
MECHANICVILLE SITE

ASSUMPTIONS:

MOST PROBABLE: 10% OF VOC MASS EMITTED OVER 20 DAYS
WORST CASE: 100% OF VOC MASS EMITTED OVER 30 DAYS

SOIL DENSITY: 1440 KG/M^3
SOIL VOLUME: MOST PROBABLE: 1200 CU. FT. WORST CASE: 4800 CU. FT.

		MOST PROBABLE		WORST CASE	
CONTAMINANT COMPOUND	MEAN SOIL CONC. (MG/KG)	MASS OF CONTAMINANT IN SOIL[a] (G)	20 DAY AVG. E[b] (G/S)	MASS OF CONTAMINANT IN SOIL (G)	30 DAY AVG. E (G/S)
Benzene	104	5.09E+03	2.94E-04	2.03E+04	7.85E-03
Toluene	151	7.38E+03	4.27E-04	2.95E+04	1.14E-02
Ethylbenzene	82.1	4.01E+03	2.32E-04	1.61E+04	6.20E-03
Styrene	150	7.34E+03	4.25E-04	2.93E+04	1.13E-02
Total Xylenes	306	1.50E+04	8.66E-04	5.99E+04	2.31E-02
Trimethylbenzene	26.7	1.31E+03	7.56E-05	5.22E+03	2.01E-03
Methylene Chloride	0.5	2.45E+01	1.42E-06	9.78E+01	3.77E-05

[a] Mass of contaminant in soil (g) = mean soil concentration $\left(\frac{\text{mg contaminant}}{\text{kg soil}}\right)$ x soil density $\left(\frac{\text{kg soil}}{m^3}\right)$ x soil volume (m^3)

[b] Average E(g/s) = $\frac{\text{mass of contaminant in soil (g)}}{20 \text{ days}} \times \frac{1 \text{ day}}{24 \text{ hour}} \times \frac{1 \text{ hour}}{60 \text{ min.}} \times \frac{1 \text{ min}}{60 \text{ sec.}}$

Jordan evaluated two air dispersion modeling approaches to determine which modeling approach was appropriate for the Mechanicville site. The first modeling approach involves a simple box model to estimate ambient concentrations due to emissions from an area source. The box model is based on conservation of mass equations, requires steady-state conditions, and is widely used in exposure studies where the receptors are on-site or very close to the exposed surface area. The box itself encloses the area of interest, bounded by the ground, with a height estimated by an assumed mixing layer. Mixing within the box is assumed to be complete. The width of the box is set equal to the width of the exposed soil area. The box is oriented so that its length lies in the direction of the wind. The box model is limited in its application to area sources with a surface width much larger than the distance to the receptor of interest.

For the Mechanicville site, predicted concentrations are of interest at receptors located on-site or within 750 feet of the exposed contaminated area. The size of the exposed contaminated soil piles for the Mechanicville site are relatively small, with the largest pile estimated to have a diameter of only 31 feet. Because the distance to the receptors of interest is greater than the width of the soil pile, the box model is not appropriate for the Mechanicville site. Therefore, another modeling approach was considered for determining the ambient contaminant concentrations due to fugitive emissions.

The second modeling approach follows the basic modeling procedures described in D. B. Turner's Workbook of Atmospheric Dispersion Estimates (Turner, 1970). These procedures are based on the basic Gaussian plume equation. For a ground-level source with no effective plume rise, the Gaussian equation reduces to a

simplified form that has been widely used in screening assessments. For the Mechanicville site, the emissions from the soil piles are assumed to be spread over the area of the pile. Following Turner's recommendations, Jordan modeled the area source emissions from the soil pile as if they originated from a virtual point source. The virtual point source approach creates a point source located at an appropriate distance upwind such that the horizontal dispersion at the soil pile is equal to the soil pile width. The horizontal dispersion downwind of the facility can then be simulated as if all the soil pile emissions were being emitted from the virtual point source. The distance used in the calculation of ambient concentrations is the total distance from the virtual point to the receptor.

The calculation of the ambient concentrations due to emissions from the soil piles is simplified by using the virtual source approximation. Further simplification is possible by assuming that the emissions due to soil erosion and volatilization are initially spread over the height of the soil pile. Having calculated the contaminant emission rate of particles 10 um and smaller (Q_{10c}), the ambient contaminant concentration can be estimated by the following equation:

$$C10 = Q_{10c} / [\ pi * sigma_y * (sigma_z + H_p) * U\ ] \quad (D\text{-}6)$$

where:

C10 = Contaminant air concentration (g/m^3)

Q_{10c} = Contaminated emission rate (g/sec)

$sigma_y$ = Horizontal dispersion coefficient (m) at distance X + Xv

$sigma_z$ = Vertical dispersion coefficient (m) at distance X

H_p = Height of soil pile (m)

U = Average wind speed (m/sec)

X_v = Virtual source distance (m)

X = Distance from edge of soil pile to receptor (m)

For the Mechanicville site evaluation, downwind receptors were placed 10, 100, and 750 feet from the edge of the soil pile. The initial virtual horizontal dispersion coefficient is estimated by dividing the width of the soil surface pile by 4.3. From extrapolation of the horizontal dispersion coefficient curve in Turner's workbook for D atmospheric stability class, the virtual source distance (X_v) was determined for two different soil volume cases:

Case Description	Exposed Soil Volume
Utility Repair Excavation - Realistic Worst	4,800 cubic feet
Utility Repair Excavation - Most Probable	1,200 cubic feet

Different wind speeds were used with Equation D-6 to represent realistic worst and most probable conditions at the Mechanicville site. To represent the most probable conditions, a wind speed of 4.0 m/sec with a D atmospheric stability class was assumed. To represent the worst case conditions, two wind speed values were assumed. To simulate realistic worst conditions from emissions due to the volatilization of contaminants in the soil pile, a wind speed of 2.0 m/sec was selected. Because fugitive emissions due to unlimited soil erosion increase with wind speed, a wind speed of 19.4 m/sec was selected to represent worst case particulate emissions.

Based on the assumptions used in this analysis, the ambient air quality concentrations calculated using Equation D-6 predict hourly values of contaminant concentrations. To relate these predictions to longer averaging time periods, conservative scaling factors recommended by USEPA (1977) were used to estimate longer duration exposure concentrations. The 1-hour average box model predictions were multiplied by 0.40 to obtain 24-hour average off-site concentrations, and by 0.70 to obtain 8-hour average on-site concentrations.

Table D-3 presents the ambient air concentrations due to fugitive dust emissions from soil erosion for the realistic worst case utility repair scenario. Table D-4 presents the contaminant ambient air concentrations for the analogous most probable case.

Based on the emission rates for volatilization from surface soil given in Table D-2, Table D-5 provides the chemical-specific average concentrations for the two contaminated soil volume cases (i.e., two utility repair scenarios). The ambient 1-hour average concentrations were calculated based on an assumed D atmospheric stability class and wind speed values of 2.0 and 4.0 m/sec. From the predicted 1-hour average concentrations, 8-hour and 24-hour average concentrations were calculated using the scaling factors given previously.

4945D-3

TABLE G-4-3

AMBIENT AIR CONCENTRATIONS
FOR NONVOLATILE CONTAMINANTS:
REALISTIC WORST CASE
UTILITY REPAIR SCENERIO
MECHANICVILLE

ASSUMPTIONS:

	Wind Speed (m/sec)	Soil Surface Area (sq. meters)
For Unlimited Wind Erosion:	19.4	135.9

(Stability Class = D for all cases)

COMPOUND	DOWNWIND DISTANCE (feet)	REALISTIC WORST CASE AMBIENT AIR CONCENTRATIONS (ug/cu.m) WIND EROSION 1-hour	8-hour	24-hour
Acenaphthene	10	1.18E+00	8.26E-01	4.72E-01
	100	4.41E-01	3.09E-01	1.76E-01
	750	1.15E-01	8.04E-02	4.59E-02
Acenaphthylene	10	3.35E+00	2.34E+00	1.34E+00
	100	1.25E+00	8.75E-01	5.00E-01
	750	3.26E-01	2.28E-01	1.30E-01
Anthracene	10	1.67E+00	1.17E+00	6.69E-01
	100	6.25E-01	4.38E-01	2.50E-01
	750	1.63E-01	1.14E-01	6.51E-02
Carcinogenic PAHs	10	2.48E+00	1.73E+00	9.91E-01
	100	9.26E-01	6.48E-01	3.70E-01
	750	2.41E-01	1.69E-01	9.65E-02
Fluoranthene	10	2.61E+00	1.82E+00	1.04E+00
	100	9.74E-01	6.82E-01	3.90E-01
	750	2.54E-01	1.78E-01	1.01E-01
Fluorene	10	4.70E+00	3.29E+00	1.88E+00
	100	1.76E+00	1.23E+00	7.02E-01
	750	4.57E-01	3.20E-01	1.83E-01
Naphthalene	10	4.99E+00	3.49E+00	2.00E+00
	100	1.87E+00	1.31E+00	7.46E-01
	750	4.86E-01	3.40E-01	1.94E-01
Phenanthrene	10	2.94E+00	2.05E+00	1.17E+00
	100	1.10E+00	7.68E-01	4.39E-01
	750	2.86E-01	2.00E-01	1.14E-01
Pyrene	10	3.65E+00	2.55E+00	1.46E+00
	100	1.36E+00	9.54E-01	5.45E-01
	750	3.55E-01	2.49E-01	1.42E-01
2-Methylnaphthalene	10	1.19E-01	8.32E-02	4.75E-02
	100	4.44E-02	3.11E-02	1.78E-02
	750	1.16E-02	8.10E-03	4.63E-03
Total Cyanide	10	6.30E-03	4.41E-03	2.52E-03
	100	2.35E-03	1.65E-03	9.42E-04
	750	6.13E-04	4.29E-04	2.45E-04

4945d-4

TABLE G-4-4

AMBIENT AIR CONCENTRATIONS FOR NONVOLATILE CONTAMINANTS: MOST PROBABLE CASE UTILITY REPAIR SCENERIO MECHANICVILLE

ASSUMPTIONS:

	Wind Speed (m/sec)	Soil Surface Area (sq. meters)
For Unlimited Wind Erosion:	4.0	34

(Stability Class = D for all cases)

COMPOUND	DOWNWIND DISTANCE (feet)	MOST PROBABLE CASE AMBIENT AIR CONCENTRATIONS (ug/cu.m) WIND EROSION 1-hour	8-hour	24-hour
Acenaphthene	10	3.72E-02	2.60E-02	1.49E-02
	100	9.76E-03	6.83E-03	3.91E-03
	750	1.68E-03	1.17E-03	6.71E-04
Acenaphthylene	10	1.05E-01	7.38E-02	4.22E-02
	100	2.77E-02	1.94E-02	1.11E-02
	750	4.76E-03	3.33E-03	1.90E-03
Anthracene	10	5.27E-02	3.69E-02	2.11E-02
	100	1.38E-02	9.69E-03	5.54E-03
	750	2.38E-03	1.67E-03	9.52E-04
Carcinogenic PAHs	10	7.80E-02	5.46E-02	3.12E-02
	100	2.05E-02	1.44E-02	8.20E-03
	750	3.52E-03	2.47E-03	1.41E-03
Fluoranthene	10	8.21E-02	5.75E-02	3.28E-02
	100	2.16E-02	1.51E-02	8.63E-03
	750	3.71E-03	2.59E-03	1.48E-03
Fluorene	10	1.48E-01	1.04E-01	5.92E-02
	100	3.89E-02	2.72E-02	1.56E-02
	750	6.68E-03	4.68E-03	2.67E-03
Naphthalene	10	1.57E-01	1.10E-01	6.29E-02
	100	4.13E-02	2.89E-02	1.65E-02
	750	7.10E-03	4.97E-03	2.84E-03
Phenanthrene	10	9.24E-02	6.47E-02	3.70E-02
	100	2.43E-02	1.70E-02	9.72E-03
	750	4.17E-03	2.92E-03	1.67E-03
Pyrene	10	1.15E-01	8.04E-02	4.60E-02
	100	3.02E-02	2.11E-02	1.21E-02
	750	5.19E-03	3.63E-03	2.07E-03
2-Methylnaphthalene	10	3.74E-03	2.62E-03	1.50E-03
	100	9.84E-04	6.89E-04	3.94E-04
	750	1.69E-04	1.18E-04	6.76E-05
Total Cyanide	10	1.98E-04	1.39E-04	7.94E-05
	100	5.21E-05	3.65E-05	2.09E-05
	750	8.96E-06	6.27E-06	3.58E-06

4945d-5

TABLE G-4-5

AMBIENT AIR CONCENTRATIONS
FOR VOLATILE CONTAMINANTS:
UTILITY REPAIR SCENERIO
MECHANICVILLE

ASSUMPTIONS:

	Soil Pile Volume (cu. ft.)	Wind Speed (m/sec)
Most Probable Case:	1200	4.0
Realistic Worst Case:	4800	2.0

(Stability Class = D for all cases)

COMPOUND	DOWNWIND DISTANCE (feet)	AMBIENT AIR CONCENTRATIONS (ug/cu.m.)					
		MOST PROBABLE			REALISTIC WORST CASE		
		1-hour	8-hour	24-hour	1-hour	8-hour	24-hour
Benzene	10	2.84E+00	1.99E+00	1.13E+00	8.56E+01	5.99E+01	3.42E+01
	100	7.64E-01	5.35E-01	3.06E-01	3.20E+01	2.24E+01	1.28E+01
	750	1.76E-01	1.23E-01	7.03E-02	6.83E+00	4.78E+00	2.73E+00
Toluene	10	4.12E+00	2.88E+00	1.65E+00	1.24E+02	8.70E+01	4.97E+01
	100	1.11E+00	7.77E-01	4.44E-01	4.65E+01	3.25E+01	1.86E+01
	750	2.55E-01	1.79E-01	1.02E-01	9.92E+00	6.94E+00	3.97E+00
Ethylbenzene	10	2.24E+00	1.57E+00	8.96E-01	6.76E+01	4.73E+01	2.70E+01
	100	6.03E-01	4.22E-01	2.41E-01	2.53E+01	1.77E+01	1.01E+01
	750	1.39E-01	9.70E-02	5.54E-02	5.39E+00	3.78E+00	2.16E+00
Styrene	10	4.10E+00	2.87E+00	1.64E+00	1.23E+02	8.62E+01	4.93E+01
	100	1.11E+00	7.74E-01	4.42E-01	4.60E+01	3.22E+01	1.84E+01
	750	2.54E-01	1.78E-01	1.02E-01	9.83E+00	6.88E+00	3.93E+00
Total Xylenes	10	8.36E+00	5.85E+00	3.34E+00	2.52E+02	1.76E+02	1.01E+02
	100	2.25E+00	1.58E+00	9.01E-01	9.41E+01	6.59E+01	3.77E+01
	750	5.17E-01	3.62E-01	2.07E-01	2.01E+01	1.41E+01	8.04E+00
Trimethylbenzene	10	7.30E-01	5.11E-01	2.92E-01	2.19E+01	1.53E+01	8.76E+00
	100	1.97E-01	1.38E-01	7.86E-02	8.19E+00	5.73E+00	3.28E+00
	750	4.52E-02	3.16E-02	1.81E-02	1.75E+00	1.22E+00	6.99E-01

APPENDIX G-4
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MECHANICVILLE SITE-SPECIFIC HEALTH AND SAFETY PLAN

INVESTIGATION OF FORMER COAL GASIFICATION SITES

MECHANICVILLE SITE
MECHANICVILLE, NEW YORK

HEALTH AND SAFETY PLAN

Prepared for:

New York State Electric and Gas Corporation
4500 Vestal Parkway East
Binghamton, New York 13903-1082

Prepared by:

ABB Environmental Services, Inc.
Portland, Maine

FEBRUARY 1992

SITE INVESTIGATION TEAM
SITE SAFETY PLAN

A. GENERAL INFORMATION

SITE: Mechanicville

LOCATION: Mechanicville, New York

PLAN PREPARED BY: T. Plante DATE: 2/20/92

APPROVED BY: Meg MacJesock DATE: 2/25/92

OBJECTIVE(S): To maintain health and safety while collecting environmental characterization samples (soil/water) from a former coal gasification plant site. This plan covers activities to be performed under Task 5: Phase IIA Supplemental Remedial Investigations.

PROPOSED DATE OF INVESTIGATION: May 1992 through November 1992

BACKGROUND REVIEW: Complete: X Preliminary: ____

OVERALL HAZARD: Serious: ___ Moderate: X Low: X Unknown: ___

1.1 SCOPE AND PURPOSE

This Health and Safety Plan (HASP) was prepared in conformance with the ABB Environmental Services, Inc. (ABB-ES) Health and Safety Program, and is intended to meet the requirements found in 29 CFR 1910.120. As such, the HASP addresses all activities associated with field operations at the NYSEG, Mechanicville site. Compliance with this HASP is required of all ABB-ES personnel, contractor personnel, or third parties entering the site.

- measurement of water levels in wells, piezometers, and surface water; and
- collection of groundwater and seep water samples for analyses.

B. SITE/WASTE CHARACTERISTICS

WASTE TYPES(S): Liquid X Solid X Sludge ___ Gas ___

CHARACTERISTICS(S): Corrosive ___ Ignitable ? Radioactive ___

Volatile X Toxic X Reactive ? Unknown X Other (Name) ___

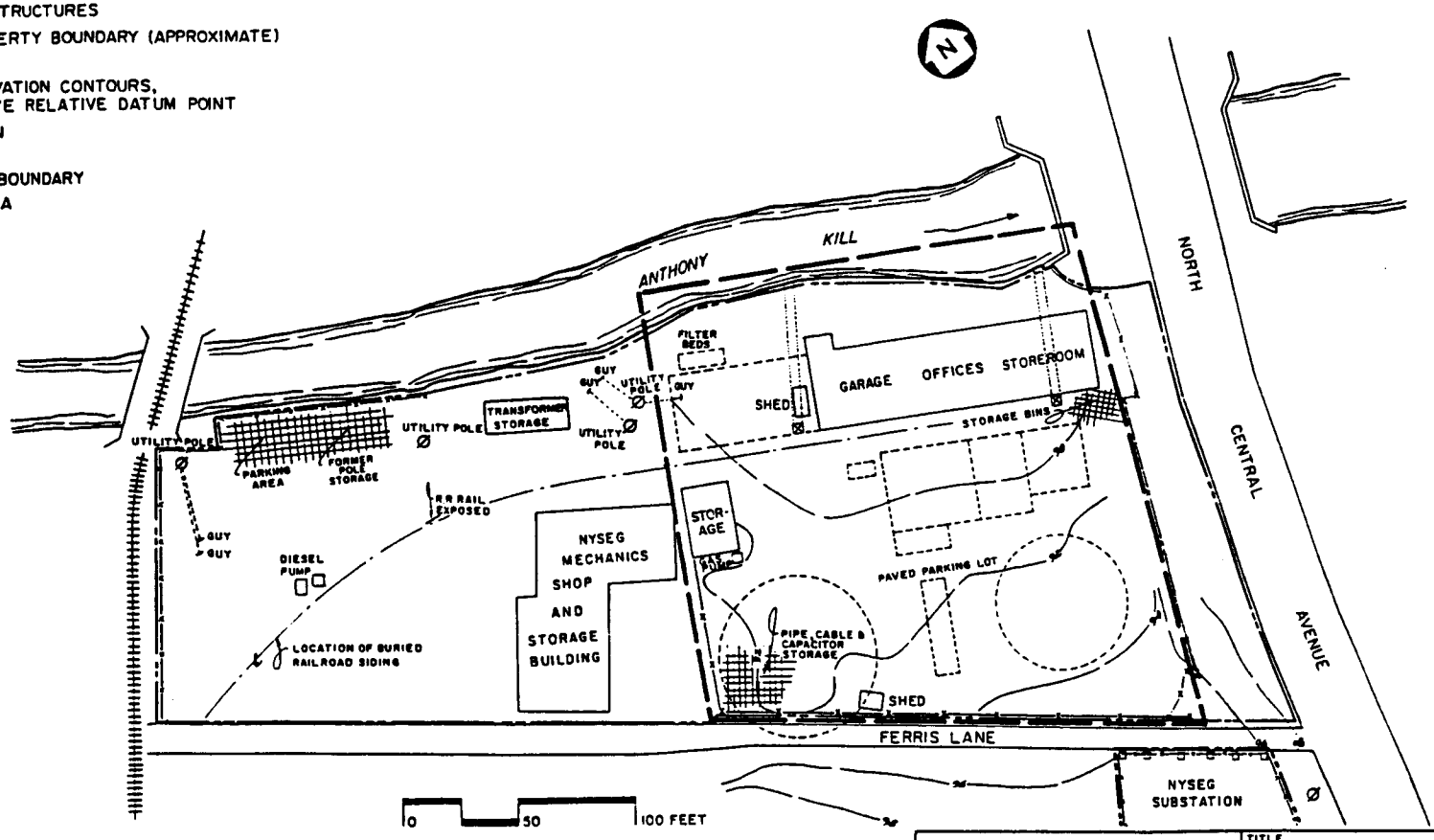
FACILITY DESCRIPTION:

The former Mechanicville manufactured gas plant (MGP) site is located in Mechanicville, New York along the Anthony Kill (a small tributary of the Hudson River). The site is a quarter-mile upstream of the Hudson River, on the western side of North Central Avenue. The site is bounded by the Anthony Kill on the north, North Central Avenue on the east, Ferris Lane on the south, and a lot presently owned by NYSEG on the west. A gas manufacturing plant was operated at the site by New York State Electric and Gas Corporation (NYSEG) and its predecessor companies from 1901 until 1955. Most of the structures utilized in the coal gas manufacturing operation were cleaned out and demolished at the time of closure in 1955. Two of the original gas plant structures are still standing on the site. These are: (1) a large building formerly used as a boiler house and a substation; and (2) a small building formerly used as an office. Between 1955 and 1990, NYSEG operated natural gas and electric service center. The site is currently unoccupied and is surrounded by a 6-foot high chain link fence on three sides and the Anthony Kill to the north. The site is being investigated because it was formerly used for coal gas manufacturing.

The present layout of the facility is shown in Figure 1. A more detailed facility description and site history is contained in Section 1.0 of the Phase II Remedial Investigation Report.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
MECHANICVILLE SITE PLAN - 1987
MECHANICVILLE, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-04

FIGURE 1

TABLE 1

CONTAMINANTS OF CONCERN
MECHANICVILLE SITE

CARCINOGENS	MEDIUM IN WHICH DETECTED
Carcinogenic PAHs[1]	Soil, Sediment
Benzene	Soil, Sediment, Indoor Air
NONCARCINOGENS	
Toluene	Soil, Indoor Air
Xylene	Soil
Ethyl Benzene	Soil, Sediment
Styrene	Soil
Noncarcinogenic PAHs[2]	Soil, Sediment
Cyanide	Soil, Sediment
Trimethylbenzene	Soil

Notes:

1 Include benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

2 Include acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, and 2-methylnaphthalene (sediment only).

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TOXICOLOGICAL PROPERTIES OF COMPOUNDS IDENTIFIED IN VARIOUS MEDIA MECHANICVILLE SITE

COMPOUND CLASS	MEDIA IDENTIFIED IN	SPECIFIC COMPOUNDS	TOXICOLOGICAL PROPERTIES[1]
Volatile Organic Compounds	Groundwater	Toluene, benzene, xylenes, ethylbenzene, trimethylbenzene, styrene	These aromatic compounds are absorbed readily through the respiratory and gastrointestinal (GI) tracts and can also be absorbed through the skin. Benzene has the potential to cause cancer. Depending on the dose received, the other compounds can exert toxic effects on the liver and kidneys; they can also act as central nervous system (CNS) depressants and respiratory irritants.
	Subsurface Soil	All of the above plus n-propylbenzene	
	Sediment	Toluene, benzene	
	Air	Toluene, benzene	
Semivolatile Compounds			
• PAHs	Groundwater	Acenaphthene, acenaphthylene, anthracene, benzofluoranthenes, benzo(g,h,i)perylene, benzo(a)anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene	PAHs are a diverse group of compounds of varying toxicity. They are highly lipid-soluble and are absorbed through the GI and respiratory tracts, and to a lesser degree, through the skin. Many PAHs have been shown to be potentially carcinogenic. Other PAHs are thought to be noncarcinogenic; these include fluorene, anthracene, pyrene, naphthalene, phenanthrene, and fluoranthene. The acute toxicity and chronic toxicity of low level exposures are not well understood.
	Subsurface soil Sediment	All of the above plus dibenzo(a,h)anthracene	
• Phenolic compounds	Groundwater Subsurface soil Surface water	Total recoverable phenolics	Depending on the dose, these compounds can produce liver and kidney toxicity and CNS effects. They can act as respiratory and skin irritants.
Inorganic Compounds	Groundwater	Iron, zinc, cyanide, sulfate	Iron and zinc are essential nutrients. However, they can produce objectionable effects such as staining, bad taste, and GI irritation at high levels. Bioavailable cyanide can exert toxic effects on the liver, kidneys, CNS, and cardiovascular system at high levels. Sulfate is a natural constituents of groundwater which affects taste in high concentration (500 mg/ℓ).
	Subsurface soil	Iron, zinc, cyanide	
	Surface water	Iron, cyanide, sulfate	
	Sediment	Iron, zinc, sulfate	

1 In assessing the risks to public health and the environment posed by these chemicals, not only toxicological properties but also potential receptors and probable exposure conditions must be considered.

CHEMICAL TOXICITY OF COAL TAR CONSTITUENTS

CHEMICAL	APPROXIMATE ODOR THRESHOLD (PPM)	TLV (PPM)	PHYSICAL CHARACTERISTICS	DERMAL TOXICITY	REMARKS
Benzene	0.16	10	Aromatic odor	Local + + Systemic + + +	Poisoning occurs most commonly through inhalation; also penetrates through skin. Carcinogen.
Toluene	1	100 (skin)	Aromatic odor	Local + Systemic +	Penetrates through skin.
Xylenes	0.1-1	100	Aromatic odor		Moderate toxicity via inhalation and oral routes. Low dermal toxicity.
Naphthalene	0.01	10	Mothball odor	Local + + Systemic + +	Poisoning may occur through ingestion of large doses, inhalation, or skin absorption.
Phenolics	1	5 (skin)	Sweet, tarry odor		High toxicity via oral, dermal, and inhalation routes. Absorption from spilling phenolic solutions on the skin may be very rapid, and death results from collapse within 30 minutes to several hours.
Cresol	0.01	5	Sweet, tarry odor		Moderately toxic via inhalation and oral routes. Acts similarly to phenols, but less severe. Produces severe chemical burns and dermatitis.
Phenanthrene/Anthracene					
Ethylbenzene	0.1	100	Aromatic odor	Local + + Systemic + +	A skin irritant, and an allergen. Known carcinogen.
Pyridine	0.1	5 (skin)	Penetrating, sickening odor	Local + + Systemic +	Skin irritant.
Ammonia	1	25	Pungent, suffocating odor	Local + + +	A mild irritant to the skin. Mildly toxic via oral and inhalation routes.
Chrysene					Skin and eye irritant. Highly toxic via inhalation and oral routes.
Benzo(a)pyrene					Carcinogenic agent.
Cyanide compounds		5 (skin)	Faint almond odor		Suspected carcinogen. Toxic by inhalation.
Sulfide compounds Hydrogen sulfide		10	Rotten-egg odor		Cyanide compounds of sodium and potassium can affect the body if inhaled or in contact with eyes and skin or ingested. Sufficient cyanide may be absorbed through the skin to cause fatal poisoning. Cause softening and irritation of the skin. Hydrogen sulfide is extremely toxic.

nued

TABLE 3

CHEMICAL TOXICITY OF COAL TAR CONSTITUENTS

CHEMICAL	APPROXIMATE ODOR THRESHOLD (PPM)	TLV (PPM)	PHYSICAL CHARACTERISTICS	DERMAL TOXICITY	REMARKS
Coal Tar Pitch Volatiles		0.2 mg/m^3	Penetrating, sickening odor		
Arsenic and compounds		0.2 mg/m^3		Local +++ Systemic +++	
Polychlorinated biphenyl: PCB Arochlor 1242 $C_{12}H_7CL_3$ (approx.)	1	2	Colorless to dark brown liquid with mild hydrocarbon odor	Local ++ Systemic	Poisoning occurred most commonly through investigation or penetration of skin.
Archlor 1254 $C_6H_2C1_3C_6H_3C1_2$	0.5	1		Local ++	Symptoms: irritates eyes (discharge), skin acne-form, dermatitis, jaundice, dark urine. Target organ: liver, eyes, skin. First Aid: Swallow: Ipecac, vomit. Skin: soap wash (immed) Incompatibles: strong oxidizers.

Notes:

TLV - Threshold Limit Value
\+ - Slight Hazard
++ - Moderate Hazard
+++ - Extreme Hazard

D. SITE SAFETY WORK PLAN

PERIMETER ESTABLISHMENT:

Map/Sketch Attached? Yes Site Secured? Partially
(6' perimeter fence)
Perimeter Identified? Yes Zone(s) of Contamination Identified? Some

PERSONNEL PROTECTION:

Level of Protection: A ___ B ___ C X D X - Modified

Anything above background in the breathing zone on the PID, monitor for benzene using the 0.5/a Draeger tube. If benzene levels exceed 1.0 ppm (note: using 1.0 instead of 0.5 ppm because tube also reads toluene and xylene), upgrade to Level C. If benzene levels are below 1.0 ppm, continue working at modified Level D until PID levels reach 25 ppm then upgrade to Level C. If PID levels near 50 ppm, monitor with benzene 5/b tube. If benzene levels exceed 50 ppm, upgrade to Level B. Otherwise, continue working at Level C until PID readings read over 100 ppm.

Level B required if:

- PID ≥ 1000, or
- Benzene ≥ 50 ppm

Level C required if:

- PID between 25 and 1000 ppm, and/or
- Benzene between 1 and 50 ppm

Modified Level D ok if:

- PID < 25 ppm, and
- Benzene < 1 ppm

SURVEILLANCE EQUIPMENT AND MATERIALS:

To the extent feasible, the presence of airborne contaminants will be evaluated through the use of direct-reading instrumentation. Information gathered will be used to ensure the adequacy of the levels of protection being employed at the site, and may be used as the basis for upgrading or downgrading levels of protection, at the discretion of the site HSO.

- ISD Dual Detector. This meter monitors for combustible gases and oxygen. It can be used to determine (1) if an area contains concentrations of combustible gases with readings in percentage of the lower explosive limit; and (2) the percentage of oxygen. This equipment will be calibrated in accordance with the manufacturer's instructions.

- HNU IS101 and Photovac TIP Photoionization Detector (PID). Like the OVA, the PID operates on the basis of ionization of the contaminant, which results in a meter deflection proportional to the concentration of the contaminant. In the PID, ionization is caused by a UV light source. The strength of the UV (measured in electron volts [eV]) determines which contaminants can be ionized. The HNU can use three different strength UV sources, including 9.6, 10.2, and 11.7 eV. Only the 10.2- and 11.7-eV probes are currently available for field use. The TIP operates using a UV light source of 10.6 eV. Calibration and maintenance will be performed in accordance with the manufacturer's instructions.

- Detector Tubes (MSA and Draeger). A colorimetric detector tube is a direct-reading instrument that consists of a glass tube impregnated with an indicating chemical, which is connected to a piston cylinder or bellows-type pump. A known volume of air is drawn through the glass tube. The contaminant in the air reacts with the indicator chemical, producing a stain the length of which is proportional to the contaminant's concentration. Care must be taken when using the detector tubes because reliability of the results depends on proper calibration, the degree of stability of the reacting chemical, and the ambient temperature. Interfering gases or vapors can also positively or negatively affect measured results. Calibration and maintenance will be performed in accordance with the manufacturer's instructions.

DECONTAMINATION PROCEDURES:

Equipment to be decontaminated during the project may include (1) drill rig, (2) tools, (3) monitoring equipment, (4) sample containers, and (5) truck or trailer. Drilling equipment will be steam-cleaned prior to arrival at the Mechanicville site, followed by on-site steam-cleaning with approved water upon site arrival and between boring/well sites. Prior to use on-site, all casings, augers, recirculation and water tanks, etc., will be devoid both inside and out of any asphaltic, bituminous, or other encrusting or coating materials, grease, grout, soil, etc.

To the extent practical, all steam cleaning shall be performed in an area that is on-site. All decontamination will be done by personnel in protective gear appropriate for the level of decontamination, as determined by the Health and Safety Officer. Decontamination areas will be lined with plastic. If heavy coal tar is present, equipment will be decontaminated in a lined, bermed pit, and decontamination fluids will be collected and drummed. All other decontamination fluids will be disposed of via percolation on-site.

The split-spoon sampler utilized during the subsurface soil sampling procedures will be decontaminated using a TSP/water rinse followed by a distilled water rinse. Loose material will be removed using a brush, prior to the split-spoon washing procedure.

Heavy coal tar material that cannot be removed from sampling equipment will be cleaned with kerosene, then a TSP/water rinse, followed by a distilled water rinse. Large drilling equipment (i.e., augers) will be cleaned with kerosene, then steam-cleaned.

Spoils from the borehole operation, to the extent possible, shall be placed back in the borehole directly above the bentonite grout seal. If a larger than expected quantity of concentrated wastes is encountered, NYSEG will be notified and the wastes will be separated and drummed for later disposal.

SITE ENTRY PROCEDURES:

The site itself will normally be divided into three zones: the majority of the work area will be considered the Exclusion Zone, with limited areas serving as the Support

Zone, and an area for decontamination called the Contamination Reduction Zone (CRZ).

Exclusion Zone

The Exclusion Zone isolates the area of contaminant generation and restricts (to the extent possible) the spread of contamination from active areas of the site to support areas and off-site locations. The Exclusion Zone is demarcated by the Hot Line (i.e., a tape line or physical barrier). Personnel entering the Exclusion Zone must (1) enter through the CRZ; (2) wear the prescribed level of protection (see Section 4.3.1); and (3) be otherwise authorized to enter the Exclusion Zone (see Section 1.3, 1.4, and 9.1). Any personnel, equipment, or materials exiting the Exclusion Zone will be considered contaminated. Personnel will be subject to decontamination; equipment and materials will either be subject to decontamination or containerized in uncontaminated devices.

Within the Exclusion Zone, specific locations or restricted areas (clearly marked or identified) will be established as necessary for particular locations or around specific site operations. In the case of well drilling or excavation operations, a restricted area will be established that includes a minimum 30-foot radius from the drill rig or excavation operation. Other restricted areas may include drum areas, active site areas, sources of combustible gases or air contaminants, or other dangerous areas as they are identified. Specific access for emergency services to areas of specific site operations will be established.

Contamination Reduction Zone

Moving out from the Exclusion Zone, starting at the Hot Line and continuing to the Contamination Control Line, is the CRZ. The CRZ is a transition zone between contaminated and uncontaminated areas of the site. When "hot" or contaminated personnel, equipment, or materials cross the Hot Line, they are assumed to be as "hot" or contaminated as they are going to be from site operations. Being subjected to the decontamination process, they become less contaminated; when they reach the Contamination Control Line, they are clean and can exit this zone without spreading contamination.

Within the CRZ is the Contamination Reduction Corridor (CRC), where materials necessary for full personnel and portable equipment decontamination are kept. A

separate facility will be established for heavy equipment decontamination. In addition, certain safety equipment (e.g., emergency eye wash, fire extinguisher, stretcher, and first aid kit) are staged in this zone.

Support Zone

The Support Zone is the outermost zone of the site, separated from the CRZ by the Contamination Control Line; it is considered a clean area. Movement of personnel and materials from this zone into the CRZ is generally unrestricted, except as required through access points controlled for administrative purposes. However, only uncontaminated/decontaminated personnel or materials may enter this zone from the CRZ.

The Support Zone contains the necessary support facilities (including personal hygiene facilities) for site operations. It also serves as the communications center and source of emergency assistance for operations in the Exclusion Zone and CRZ. A log of all persons entering the site will be maintained by the HSO, the field operations leader, or the site designee.

COMMUNICATIONS:

When radio communication is not used, the following air horn signals will be employed:

HELP	three short blasts	(. . .)
EVACUATION	three long blasts	(_ _ _)
ALL CLEAR	alternating long and short blasts	(_ . _ .)

ENGINEERING CONTROLS, WORK PRACTICES, AND PERSONAL PROTECTIVE EQUIPMENT

ENGINEERING CONTROLS:

No special engineering controls can be used at the Mechanicville site.

WORK PRACTICES:

Workers are expected to adhere to established safe work practices for their respective specialties (e.g., drilling, sampling collection, laboratory analysis, or construction). The need to exercise caution in the performance of specific work tasks is made more acute due to (1) weather conditions; (2) restricted mobility and reduced peripheral vision caused by the protective gear itself; (3) the need to maintain the integrity of the protective gear; and (4) the increased difficulty in communicating caused by respirators. Work at the site will be conducted according to established protocols and guidelines for the safety and health of all involved. Among the most important of these principles for working at a hazardous waste site are the following:

- In any unknown situation, always assume the worst conditions and plan responses accordingly.

- Use the buddy system. Under no conditions will any person be permitted to enter the Exclusion Zone alone. Establish and maintain communication. In addition to radio communications, it is advisable to develop a set of hand signals, because conditions may greatly impair verbal communications.

- Because no personal protective equipment is 100-percent effective, all personnel must minimize contact with excavated or contaminated materials. Plan work areas, decontamination areas, and procedures accordingly. Do not place equipment on drums or the ground. Do not sit on drums or other materials. Do not sit or kneel on the ground in the Exclusion Zone or CRZ. Avoid standing in or walking through puddles or stained soil.

- Smoking, eating, or drinking in the work area and before decontamination will not be allowed. Oral ingestion of contaminants is the second most likely means of introducing toxic substances into the body (inhalation is the first).

- Avoid heat and other work stresses related to wearing protective gear. Work breaks should be planned to prevent stress-related accidents or fatigue.

- To the extent feasible, handling of contaminated materials should be done remotely, particularly when drummed or other containerized hazardous waste materials are found on-site. Every effort should be made to identify the contents of containers found on-site before they are subject to material-handling applications.

- Personnel must be observant of not only one's own immediate surroundings, but also those of others. Everyone will be working under constraints; therefore, a team effort is needed to notice and warn of impending dangerous situations. Extra precautions are necessary when working near heavy equipment and while utilizing personal protective gear because vision, hearing, and communication can be restricted.

- Contact lenses are not allowed to be worn on-site; if corrosive or lachrymose substances enter the eyes, proper flushing is impeded.

- All facial hair that interferes with the face piece fit, must be removed prior to donning a respirator at all sites requiring Level C or B protection.

- Rigorous contingency planning and dissemination of plans to all personnel minimizes the impact of rapidly changing safety protocols in response to changing site conditions.

- Personnel must be aware that chemical contaminants may mimic or enhance symptoms of other illnesses or intoxication. Avoid excess use of alcohol or working while ill during field investigation assignments.

- The site leader, HSO, and sampling personnel will maintain project records in a bound notebook (e.g., daily activities, meetings, incidents, and data). Notebooks will remain on-site for the duration of the project so that replacement personnel may add information, thereby maintaining continuity. These notebooks and daily records will become part of the permanent project file.

Team Member	Responsibility
Dan Ostrye	Project Manager
Tom Plante+*	Site Manager
Bob Burger	Sampling Supervisor
Rick Allen	Geophysical Supervisor
Nathan Hagelin+*	Site Hydrogeologist
Nathan Hagelin+*	Site Health and Safety Officer

* First Aid Certified + CPR Certified

WORK LIMITATION: (Time of day, etc.)

Work will be conducted only during daylight hours. Sampling work undertaken during the winter will continue until winter conditions make efforts unproductive or inefficient, or the provisions of the cold weather operations plan are invoked.

TRAINING

Training is defined under the ABB Environmental Health and Safety Program, and all personnel entering potentially contaminated areas of this site must meet the requirements of 29 CFR 1910.120. Personnel without the required training will not be permitted in any area with potential for exposure to toxic substances or harmful physical agents (i.e., downrange).

MEDICAL SURVEILLANCE

All personnel entering potentially contaminated areas of this site will be medically qualified for site assignment through a medical surveillance program outlined in the ABB Environmental Health and Safety Program. Personnel who have not received

medical clearance will not be permitted in any area with potential for exposure to toxic substances or harmful physical agents (i.e., downrange).

E. EMERGENCY INFORMATION

LOCAL RESOURCES

Ambulance	John A. Ahearn Rescue Squad	(518) 664-8354
Hospital Emergency Room	Leonard Hospital, Troy, New York	235-0310
Poison Control Center	Albany Medical Center	445-3125
Police	City of Mechanicville	664-7383
Fire Department	City of Mechanicville	664-7383
Airport	Albany County	(800) 343-8828
Explosives Unit	N/A	
EPA Contact		

SITE RESOURCES

Water Supply Yes, in NYSEG office building

Telephone Yes, NYSEG Office (518) 664-7371 ext. 30 or 34

Radio No

Other

EMERGENCY CONTACTS

1.	Environmental Medicine Resources	(404) 455-0818
2.	National Poison Control Center	(808) 492-2414
3.	National Response Center (USEPA)	(800) 424-8802
4.	Chemical Manufacturers Association Chemical Regional Center	(800) 262-8200
5.	Site HSO: Nathan Hagelin	(207) 775-5401 X2725
6.	Site Manager: Tom Plante	(207) 775-5401 X2720
7.	Regional HSS: Meg MacLeod	(207) 775-5401 X2112
8.	HSM: Cindy Sundquist	(207) 775-5401 X2111
9.	Project Manager: Dan Ostrye	(207) 775-5401 X2703
10.	Tom O'Meara (NYSEG - Binghamton)	(607) 762-4036

EMERGENCY/CONTINGENCY PLAN

This section identifies the emergency contingency planning undertaken for operations at this site. Other sections provide further information to be used under emergency conditions.

PERSONNEL ROLES, LINES OF AUTHORITY, AND COMMUNICATION:

The site HSO is the primary authority for directing site operations under emergency conditions. All communications both on- and off-site will be directed through the HSO.

EVACUATION:

Withdrawal Upwind

The work party will continually note general wind directions while on-site. (A windsock may be set up near the work site for visual determinations.) When conditions warrant moving away from the work site, the crew will relocate upwind a distance of approximately 100 feet or farther, as indicated by site monitoring instruments. Donning an SCBA and a safety harness and line, the HSO and a member of the crew (the buddy system must be used) may return to the work site to determine if the condition noted was transient or persistent. If persistent, an alarm should be raised to notify on-site personnel of the situation and the need to leave the site or don an SCBA. An attempt to decrease emissions should be made only if greater respiratory protection is donned. The HSS and client will be notified of conditions. When site access is restricted, thus hindering escape, the crew may be instructed to evacuate the site rather than move upwind, especially if withdrawal upwind moves the crew away from escape routes.

Site Evacuation

When conditions warrant site evacuation, the work party will proceed upwind of the work site and notify the security force, HSO, and field office of site conditions. If the decontamination area is upwind and greater than 500 feet from the work site, the

crew will pass quickly through decontamination to remove contaminated outer suits. If the hazard is toxic gas, respirators will be retained. The crew will proceed to the field office to assess the situation. If instrumentation indicates an acceptable condition, respirators may be removed. As more information is received from the field crew, it will be relayed to the appropriate agencies. The advisability and type of further response action will be coordinated and carried out by the HSO.

Evacuation of Surrounding Area

When the HSO determines that conditions warrant evacuation of downwind residences and commercial operations, local agencies will be notified and assistance requested. Designated on-site personnel will initiate evacuation of the immediate off-site area without delay.

EMERGENCY MEDICAL TREATMENT/FIRST AID:

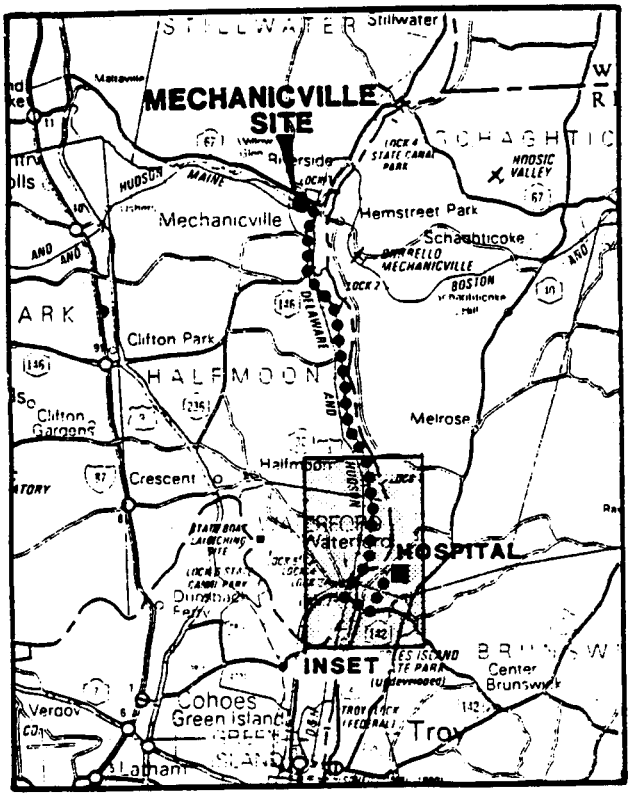
First aid will be rendered to any person injured on-site, as appropriate. The injured person will then be transported to medical personnel for further examination and/or treatment. The preferred transport method is a professional emergency transportation service; however, when this is not readily available or would result in excessive delay, other transport is authorized. Under no circumstances will injured persons transport themselves to a medical facility for emergency treatment.

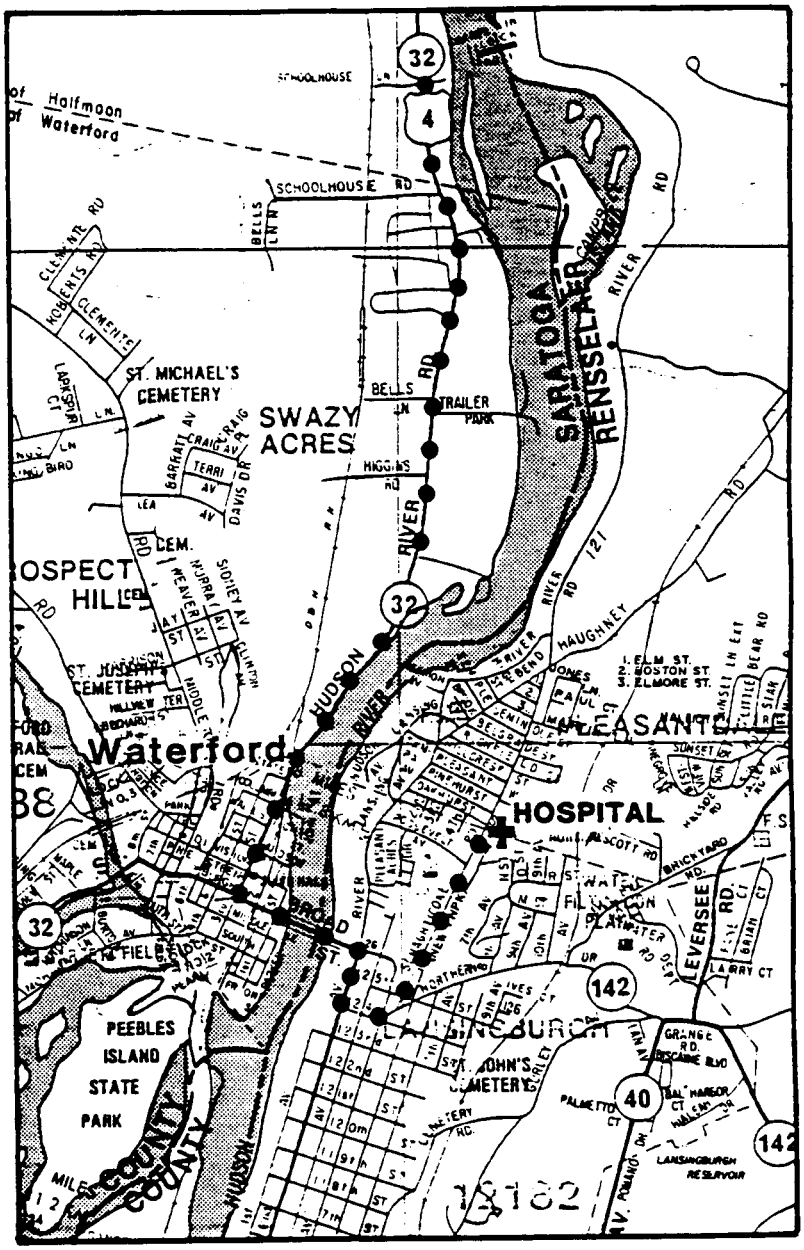
When an injury occurs in a downrange position, provisions for decontamination of the victim will be made. However, life-threatening conditions may preclude normal decontamination procedures. In such cases, arrangements will be made with the medical facility and transporter to provide for the situation.

F. EMERGENCY ROUTES

(Give road or other directions; attach map)

HOSPITAL: Exit site - Proceed south on North Central Avenue (Route 4). Follow Route 4 to Waterford, New York. Turn left onto the Waterford Bridge at 2nd Avenue (Broad St.). Bear right upon crossing the Hudson River and continue on 2nd Avenue. At the first light turn left onto 124th St. which runs into New Turnpike Road. Proceed east approximately one mile on New Turnpike Road and Leonard Hospital is on the right. (See Figure 2).





N

E.C. JORDAN CO. CONSULTING ENGINEERS	MECHANICVILLE TRANSPORT ROUTE TO HOSPITAL
NEW YORK STATE ELECTRIC AND GAS BINGHAMTON, NEW YORK	INVESTIGATION OF COAL GASIFICATION
JOB NO. 4945-01	FIGURE 2

FIELD TEAM REVIEW

I have read and reviewed the health and safety information in the HASP. I understand the information and will comply with the requirements of the HASP.

NAME: _____

DATE: _____

SITE/PROJECT: _____

MEDICAL DATA SHEET

This Medical Data Sheet will be completed by all on-site personnel and kept in the Support Zone during site operations. It is not a substitute for the Medical Surveillance Program requirements consistent with the ABB Environmental Corporate Health and Safety Program for Hazardous Waste Sites. This data sheet will accompany any personnel when medical assistance or transport to hospital facilities is required. If more space is required, use the back of this sheet.

PROJECT: _____

NAME: _____

ADDRESS: _____

HOME TELEPHONE: AREA CODE ( ) _____

AGE: _____ HEIGHT: _____ WEIGHT: _____

IN CASE OF EMERGENCY, CONTACT: _____

ADDRESS: _____

TELEPHONE: AREA CODE ( ) _____

DO YOU WEAR CONTACT LENSES? YES ( ) NO ( )

ALLERGIES: _____

LIST MEDICATION(S) TAKEN REGULARLY: _____

PARTICULAR SENSITIVITIES: _____

PREVIOUS/CURRENT MEDICAL CONDITIONS OR EXPOSURES TO HAZARDOUS CHEMICALS: _____

NAME OF PERSONAL PHYSICIAN: _____

TELEPHONE: AREA CODE ( ) _____

MATERIALS LISTS

TABLE A-1
PERSONNEL SAFETY EQUIPMENT CHECK LIST

QUANTITY REQUIRED	PROTECTIVE AND SAFETY EQUIPMENT	MODEL OR MATERIAL
	SCBA	MSA 401
	Spare Cylinders	
1pp	Escape Mask	ELSA
1pp	Full Face	
2ppd	Cartridge	
1pp	Hardhat w/Face Shield	
1pp	*Safety Glasses	
	Ear Protection	
2ppd	*Gloves, inner	surgical
2pp	*Gloves, outer	nitrile
	Chem Resist Coveralls	
2ppd	Disposable Coveralls	Coated Tyvek
	Splash Aprons	Vinyl
1pp	*Boots: Safety Boots	
2ppd	Boot Covers	
	Fully Encapsulated Suits	
	Dosimeters	TLD
1	First Aid Equipment *Utility first aid kit Industrial first aid kit	
	Stretcher	
	Oxygen	
2	*Eye Wash Station	Portable
	Emergency Shower	
2	*Fire Extinguisher	CO_2
	Safety Harness	
	Safety Harness	
	Emergency Tools	
	Other duct tape (rolls)	

* - Mandatory
pp - per person
ppd - per person per day

TABLE A-2

DECONTAMINATION EQUIPMENT/MATERIALS

QUANTITY	TYPE	REMARKS
4	wash tubs	
1	high pressure water sprayer hot	
1	steam sprayer	
4	scrub brushes	
2 bags/day	containers contaminated disposables	
1 box	detergent	
5 gal/day	methanol/acetone/ isopropanol	
5 gal	kerosene	
10. gal/day	deionized water	
1 box/day	disposable wipes	
	plastic wrap	
	Ziploc bags	

CHRIS DATA SHEETS/MSDSs

NER CODE A-111

MONSANTO PRODUCT NAME

TRISODIUM PHOSPHATE CRYSTALLINE

MONSANTO COMPANY
800 N. LINDBERGH BLVD.
ST. LOUIS, MO 63167

Emergency Phone No.
(Call Collect)
314-694-1000

PRODUCT IDENTIFICATION

Synonyms:	TSP/C; Trisodium orthophosphate; Sodium phosphate, tribasic; Phosphoric acid, trisodium salt; Trisodium phosphate dodecahydrate
Chemical Formula:	$Na_3PO_4 \cdot 12H_2O \cdot 1/4\ NaOH$ (approximately)
CAS No.:	10101-89-0*
DOT Proper Shipping Name:	Sodium Phosphate, Tribasic (see NOTE below)
DOT Hazard Class/ I.D. No.:	ORM-E/NA9148
DOT Label(s):	Not Applicable
Hazardous Substance(s)/ RQ(s):	Yes/5,000 lbs.
U.S. Surface Freight Classification:	Trisodium Phosphate

Note: Bagged material is not regulated.

*Since hydrated materials could not be reported on the ~~TSCA Initial~~ Inventory List, Trisodium Phosphate Crystalline was reported as anhydrous with the CAS No. 7601-54-9.

WARNING STATEMENTS

DANGER!
CAUSES EYE BURNS
CAUSES SKIN IRRITATION

PRECAUTIONARY MEASURES

Do not get in eyes, on skin, on clothing.
Avoid breathing dust.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.

EMERGENCY AND FIRST AID PROCEDURES

FIRST AID: IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Call a physician.

IF ON SKIN, immediately flush with plenty of water. Remove contaminated clothing. Wash clothing before reuse.

OCCUPATIONAL CONTROL PROCEDURES

Eye Protection: Wear chemical safety goggles to prevent eye contact. Have eye baths immediatey available where eye contact can occur.

Skin Protection: Wear appropriate impervious gloves and protective clothing to prevent skin contact. Launder contaminated clothing and clean protective equipment before reuse.

Respiratory Protection: Use NIOSH approved equipment suitable for nuisance dust when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application.

Ventilation: Provide ventilation to minimize exposure. Local exhaust ventilation preferred.

Airborne Exposure Limits: Product: Trisodium phosphate dodecahydrate

Although no specific exposure limit has been established for this material, OSHA and ACGIH have established limits for nuisance dusts:

OSHA PEL/TWA: Total 15 mg/m^3; Respirable 5 mg/m^3
ACGIH TLV/TWA: Total 10 mg/m^3; Respirable 5 mg/m^3

Keep exposure below these limits.

FIRE PROTECTION INFORMATION

This material is not combustible.

REACTIVITY DATA

Materials to Avoid: Trisodium Phosphate Crystalline could be corrosive to aluminum surfaces because of high pH. Sealed containers should be kept free of water because of its corrosivity when wet.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Does not occur..

PHYSIOLOGICAL EFFECTS SUMMARY

Oral LD_{50} (Rat): 6,500 mg/kg, Practically Nontoxic
Dermal LD_{50} (Rabbit): 7,940 mg/kg, Practically Nontoxic
Eye Irritation (Rabbit): (FHSA) Corrosive
Skin Irritation (Rabbit): (FHSA) 3.3 on a scale of 8.0, Moderately Irritating

PHYSICAL DATA

Appearance and Odor: White, crystalline, free-flowing granules or powder; odorless

pH (1% solution @ 25°C): 12.0

Bulk Density (lbs./cu. ft.): Powder 61-65
Granular 58-64

Solubility (g/100 g H_2O) (Anhydrous Salt Basis):
11.6 @ 25°C
17.5 @ 40°C
35.3 @ 60°C
61.3 @ 80°C
84.5 @ 100°C

Note: These physical data are typical values based on material tested but may vary from sample to sam

SPILL, LEAK & DISPOSAL INFORMATION

Waste Disposal: Dispose of in a landfill in accordance with all local, state and federal regulations.

Spill or Leakage Procedures: Sodium phosphate, tribasic, as currently defined, is *a hazardous substance* in the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund) and in the current federal regulations 40 CFR, Part 116 (Section 311, Clean Water Act) with a reportable quantity of 5,000 pounds when released to the environment. Since federal, state and local laws may vary, consult your attorney or appropriate regulatory officials for information relating to spill reporting.

Sweep, scoop or vacuum up all spilled material, contaminated soil and other contaminated material and place in containers. If possible, complete cleanup on a dry basis. After all practical dry cleanup has been done, residual contamination can be flushed with plenty of water.

ADDITIONAL COMMENTS

Environmental Toxicity Information:

96-hr LC_{50} (Bluegill) : 440 mg/l, Practically Nontoxic
96-hr LC_{50} (Trout) : 260 mg/l, Practically Nontoxic

DATE: 8/1/83 **REVISED:** x **SUPERSEDES:** 5/78
MSDS NO.: 010101890

FOR ADDITIONAL NON-EMERGENCY INFORMATION, CONTACT:

Product Acceptability Coordinator
Detergent Materials
Monsanto Industrial Chemicals Co.
314-694-2096
(A Unit of Monsanto Company)

MATERIAL SAFETY DATA — THISODIUM PHOSPHATE CRYSTALLINE

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Monsanto Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Monsanto Company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

OILS, FUEL: NO. 1

OON

Common Synonyms	Watery liquid	Colorless	Kerosene odor
Kerosene Kerosine Range oil JP-1	Floats on water.		

Stop discharge if possible
Call fire department
Avoid contact with liquid
Isolate and remove discharged material
Notify local health and pollution control agencies

Fire

Combustible
Extinguish with dry chemical, foam or carbon dioxide
Water may be ineffective on fire
Cool exposed containers with water

Exposure

CALL FOR MEDICAL AID.
LIQUID
Irritating to skin and eyes.
Harmful if swallowed.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
DO NOT INDUCE VOMITING.

Water Pollution

Dangerous to aquatic life in high concentrations.
Fouling to shorelines.
May be dangerous if it enters water intakes.
Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)
Mechanical containment
Should be removed
Chemical and physical treatment

2. LABEL

2.1 Category: None
2.2 Class: Not pertinent

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Miscellaneous Hydrocarbon Mixtures
3.2 Formula: Not applicable
3.3 IMO/UN Designation: 3.3/1223
3.4 DOT ID No.: 1223
3.5 CAS Registry No.: Data not available

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid
4.2 Color: Colorless to light brown
4.3 Odor: Characteristic

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Protective gloves; goggles or face shield.
5.2 Symptoms Following Exposure: INGESTION causes irritation of gastrointestinal tract; pulmonary tract irritation secondary to exhalation of vapors. ASPIRATION causes severe lung irritation with coughing, gagging, dyspnea, substernal distress, and rapidly developing pulmonary edema, signs of bronchopneumonia and pneumonitis appear later; minimal central nervous system depression.
5.3 Treatment of Exposure: INGESTION: do NOT lavage or induce vomiting; call physician. ASPIRATION: enforce bed rest; administer oxygen; call physician. EYES: wash with plenty of water. SKIN: wipe off and wash with soap and water.
5.4 Threshold Limit Value: Data not available
5.5 Short Term Inhalation Limits: Data not available
5.6 Toxicity by Ingestion: Grade 1; LD_{50} = 5-15 g/kg
5.7 Late Toxicity: Data not available
5.8 Vapor (Gas) Irritant Characteristics: Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.
5.9 Liquid or Solid Irritant Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.
5.10 Odor Threshold: 1 ppm
5.11 IDLH Value: Data not available

6. FIRE HAZARDS

6.1 Flash Point: 100°F C.C.
6.2 Flammable Limits in Air: 0.7%-5%
6.3 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide
6.4 Fire Extinguishing Agents Not to be Used: Water may be ineffective
6.5 Special Hazards of Combustion Products: Not pertinent
6.6 Behavior in Fire: Not pertinent
6.7 Ignition Temperature: 444°F
6.8 Electrical Hazard: Not pertinent
6.9 Burning Rate: 4 mm/min.
6.10 Adiabatic Flame Temperature: Data not available
6.11 Stoichiometric Air to Fuel Ratio: Data not available
6.12 Flame Temperature: Data not available

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: Not pertinent
7.6 Inhibitor of Polymerization: Not pertinent
7.7 Molar Ratio (Reactant to Product): Data not available
7.8 Reactivity Group: 33

8. WATER POLLUTION

8.1 Aquatic Toxicity: 2990 ppm/24 hr/bluegill/TL_m/fresh water
8.2 Waterfowl Toxicity: Data not available
8.3 Biological Oxygen Demand (BOD): 53%, 5 days
8.4 Food Chain Concentration Potential: None

9. SHIPPING INFORMATION

9.1 Grades of Purity: Light hydrocarbon distillate: 100%
9.2 Storage Temperature: Ambient
9.3 Inert Atmosphere: No requirement
9.4 Venting: Open (flame arrester)

10 HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)
A-T-U

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations: Combustible liquid
11.2 NAS Hazard Rating for Bulk Water Transportation:

Category	Rating
Fire	2
Health	
Vapor irritant	1
Liquid or Solid irritant	1
Poisons	1
Water Pollution	
Human Toxicity	1
Aquatic Toxicity	1
Aesthetic Effect	3
Reactivity	
Other Chemicals	0
Water	0
Self Reaction	0

11.3 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue)	0
Flammability (Red)	2
Reactivity (Yellow)	0

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 15°C and 1 atm: Liquid
12.2 Molecular Weight: Not pertinent
12.3 Boiling Point at 1 atm: 350-560°F = 183—293°C = 456—566°K
12.4 Freezing Point: —45 to —55°F = —43 to —48°C = 230 to 225°K
12.5 Critical Temperature: Not pertinent
12.6 Critical Pressure: Not pertinent
12.7 Specific Gravity: (liquid) 0.81-0.85 at 15°C
12.8 Liquid Surface Tension: 23-32 dynes/cm = 0.023—0.032 N/m at 20°C
12.9 Liquid-Water Interfacial Tension: 47—49 dynes/cm = 0.047-0.049 N/m at 20°C
12.10 Vapor (Gas) Specific Gravity: Not pertinent
12.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
12.12 Latent Heat of Vaporization: 110 Btu/lb = 60 cal/g = 2.5 X 10^4 J/kg
12.13 Heat of Combustion: —18,540 Btu/lb = —10,300 cal/g = —431.24 X 10^4 J/kg
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: Not pertinent
12.25 Heat of Fusion: Data not available
12.26 Limiting Value: Data not available
12.27 Reid Vapor Pressure: Data not available

NOTES

BENZENE

BNZ

Common Synonyms	Watery liquid Colorless Gasoline-like odor
Benzol Benzole	Floats on water. Flammable. Irritating vapor is produced. Freezing point is 42°F.

Avoid contact with liquid and vapor. Keep people away.
Wear goggles and self-contained breathing apparatus.
Shut off ignition sources and call fire department.
Stop discharge if possible.
Stay upwind and use water spray to knock down vapor.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire	FLAMMABLE Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Wear goggles and self-contained breathing apparatus. Extinguish with dry chemical, foam, or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.
Exposure	CALL FOR MEDICAL AID **VAPOR** Irritating to eyes, nose and throat. If inhaled, will cause headache, difficult breathing, or loss of consciousness. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. **LIQUID** Irritating to skin and eyes. Harmful if swallowed. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
Water Pollution	HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)

Issue warning-high flammability.
Restrict access.

2. LABEL

2.1 Category: Flammable liquid
2.2 Class: 3

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Aromatic Hydrocarbon
3.2 Formula: C_6H_6
3.3 IMO/UN Designation: 3.2/1114
3.4 DOT ID No.: 1114
3.5 CAS Registry No.: 71-43-2

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid
4.2 Color: Colorless
4.3 Odor: Aromatic; rather pleasant aromatic odor, characteristic odor

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Hydrocarbon vapor canister, supplied air or a hose mask; hydrocarbon-insoluble rubber or plastic gloves, chemical goggles or face splash shield; hydrocarbon-insoluble apron such as neoprene.
5.2 Symptoms Following Exposure: Dizziness, excitation, pallor, followed by flushing, weakness, headache, breathlessness, chest constriction. Coma and possible death.
5.3 Treatment of Exposure: SKIN: flush with water followed by soap and water; remove contaminated clothing and wash skin. EYES: flush with plenty of water until irritation subsides. INHALATION: remove from exposure immediately. Call a physician. IF breathing is irregular or stopped, start resuscitation, administer oxygen.
5.4 Threshold Limit Value: 10-ppm 1 ppm
5.5 Short Term Inhalation Limits: 75 ppm for 30 min
5.6 Toxicity by Ingestion: Grade 3; LD_{50} = 50 to 500 mg/kg
5.7 Late Toxicity: Leukemia
5.8 Vapor (Gas) Irritant Characteristics: If present in high concentrations, vapors may cause irritation of eyes or respiratory system. The effect is temporary.
5.9 Liquid or Solid Irritant Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.
5.10 Odor Threshold: 4.68 ppm
5.11 IDLH Value: 2,000 ppm

6. FIRE HAZARDS

6.1 Flash Point: 12°F C.C.
6.2 Flammable Limits in Air: 1.3%-7.9%
6.3 Fire Extinguishing Agents: Dry chemical, foam, or carbon dioxide
6.4 Fire Extinguishing Agents Not to be Used: Water may be ineffective
6.5 Special Hazards of Combustion Products: Not pertinent
6.6 Behavior in Fire: Vapor is heavier than air and may travel considerable distance to a source of ignition and flash back
6.7 Ignition Temperature: 1097°F
6.8 Electrical Hazard: Class I, Group D
6.9 Burning Rate: 6.0 mm/min
6.10 Adiabatic Flame Temperature: Data not available
6.11 Stoichiometric Air to Fuel Ratio: Data not available
6.12 Flame Temperature: Data not available

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: Not pertinent
7.6 Inhibitor of Polymerization: Not pertinent
7.7 Molar Ratio (Reactant to Product): Data not available
7.8 Reactivity Group: 32

8. WATER POLLUTION

8.1 Aquatic Toxicity: 5 ppm/6 hr/minnow/lethal/distilled water
20 ppm/24 hr/sunfish/TL_m/tap water
8.2 Waterfowl Toxicity: Data not available
8.3 Biological Oxygen Demand (BOD): 1.2 lb/lb, 10 days
8.4 Food Chain Concentration Potential: None

9. SHIPPING INFORMATION

9.1 Grades of Purity:
Industrial pure .....99+ %
Thiophene-free .....99+ %
Nitration .....99+ %
Industrial 90% .....85+ %
Reagent .....99+ %
9.2 Storage Temperature: Open
9.3 Inert Atmosphere: No requirement
9.4 Venting: Pressure-vacuum

10 HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)

A-T-U-V-W

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations: Flammable liquid
11.2 NAS Hazard Rating for Bulk Water Transportation:

Category	Rating
Fire	3
Health	
Vapor Irritant	1
Liquid or Solid Irritant	1
Poisons	3
Water Pollution	
Human Toxicity	3
Aquatic Toxicity	1
Aesthetic Effect	3
Reactivity	
Other Chemicals	2
Water	1
Self Reaction	0

11.3 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue)	2
Flammability (Red)	3
Reactivity (Yellow)	0

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 15°C and 1 atm: Liquid
12.2 Molecular Weight: 78.11
12.3 Boiling Point at 1 atm: 176°F = 80.1°C = 353.3°K
12.4 Freezing Point: 42.0°F = 5.5°C = 278.7°K
12.5 Critical Temperature: 552.0°F = 288.9°C = 562.1°K
12.6 Critical Pressure: 710 psa = 48.3 atm = 4.89 MN/m²
12.7 Specific Gravity: 0.879 at 20°C (liquid)
12.8 Liquid Surface Tension: 28.9 dynes/cm = 0.0289 N/m at 20°C
12.9 Liquid Water Interfacial Tension: 35.0 dynes/cm = 0.035 N/m at 20°C
12.10 Vapor (Gas) Specific Gravity: 2.7
12.11 Ratio of Specific Heats of Vapor (Gas): 1.061
12.12 Latent Heat of Vaporization: 169 Btu/lb = 94.1 cal/g = 3.94 X 10⁵ J/kg
12.13 Heat of Combustion: −17,460 Btu/lb = −9698 cal/g = −406.0 X 10³ J/kg
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: Not pertinent
12.25 Heat of Fusion: 30.45 cal/g
12.26 Limiting Value: Data not available
12.27 Reid Vapor Pressure: 3.22 psa

NOTES

ETHYLBENZENE

ETB

Common Synonyms	Liquid	Colorless	Sweet gasoline-like odor
Phenylethane EB	Floats on water. Flammable, irritating vapor is produced		

Avoid contact with liquid and vapor. Keep people away.
Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves).
Shut off ignition sources and call fire department.
Stop discharge if possible.
Stay upwind and use water spray to "knock down" vapor.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire

FLAMMABLE.
Flashback along vapor trail may occur.
Vapor may explode if ignited in an enclosed area.
Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves).
Extinguish with dry chemical, foam, or carbon dioxide.
Water may be ineffective on fire.
Cool exposed containers with water.

Exposure

CALL FOR MEDICAL AID.

VAPOR
Irritating to eyes, nose and throat.
If inhaled, will cause dizziness or difficult breathing.
Move to fresh air.
If breathing has stopped, give artificial respiration.
If breathing is difficult, give oxygen.

LIQUID
Will burn skin and eyes.
Harmful if swallowed.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
DO NOT INDUCE VOMITING.

Water Pollution

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.
Fouling to shoreline.
May be dangerous if it enters water intakes.

Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)

Mechanical containment.
Should be removed.
Chemical and physical treatment.

2. LABEL

2.1 Category: Flammable liquid
2.2 Class: 3

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Aromatic hydrocarbon
3.2 Formula: $C_6H_5CH_2CH_3$
3.3 IMO/UN Designation: 3.3/1175
3.4 DOT ID No.: 1175
3.5 CAS Registry No.: 100-41-4

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid
4.2 Color: Colorless
4.3 Odor: Aromatic

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Self-contained breathing apparatus; safety goggles.
5.2 Symptoms Following Exposure: Inhalation may cause irritation of nose, dizziness, depression. Moderate irritation of eye with corneal injury possible. Irritates skin and may cause blisters.
5.3 Treatment of Exposure: INHALATION: if ill effects occur, remove victim to fresh air, keep him warm and quiet, and get medical help promptly; if breathing stops, give artificial respiration. INGESTION: induce vomiting only upon physician's approval; material in lung may cause chemical pneumonitis. SKIN AND EYES: promptly flush with plenty of water (15 min. for eyes) and get medical attention; remove and wash contaminated clothing before reuse.
5.4 Threshold Limit Value: 100 ppm
5.5 Short Term Inhalation Limits: 200 ppm for 30 min.
5.6 Toxicity by Ingestion: Grade 2; LD_{50} = 0.5 to 5 g/kg (rat)
5.7 Late Toxicity: Data not available
5.8 Vapor (Gas) Irritant Characteristics: Vapors cause moderate irritation such that personnel will find high concentrations unpleasant. The effect is temporary.
5.9 Liquid or Solid Irritant Characteristics: Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.
5.10 Odor Threshold: 140 ppm
5.11 IDLH Value: 2,000 ppm

6. FIRE HAZARDS

6.1 Flash Point: 60°F O.C., 59°F C.C.
6.2 Flammable Limits in Air: 1.0%-6.7%
6.3 Fire Extinguishing Agents: Foam (most effective); water fog, carbon dioxide or dry chemical
6.4 Fire Extinguishing Agents Not to be Used: Not pertinent
6.5 Special Hazards of Combustion Products: Irritating vapors are generated when heated.
6.6 Behavior in Fire: Vapor is heavier than air and may travel considerable distance to the source of ignition and flash back.
6.7 Ignition Temperature: 860°F
6.8 Electrical Hazard: Not pertinent
6.9 Burning Rate: 5.8 mm/min
6.10 Adiabatic Flame Temperature: Data Not Available

(Continued)

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: Not pertinent
7.6 Inhibitor of Polymerization: Not pertinent
7.7 Molar Ratio (Reactant to Product): Data Not Available
7.8 Reactivity Group: 32

8. WATER POLLUTION

8.1 Aquatic Toxicity: 29 ppm/96 hr/bluegill/TL_m/fresh water
8.2 Waterfowl Toxicity: Data not available
8.3 Biological Oxygen Demand (BOD): 2.8% (theor.), 5 days
8.4 Food Chain Concentration Potential: None

9. SHIPPING INFORMATION

9.1 Grades of Purity: Research grade: 99.86%; pure grade: 99.5%; technical grade: 98.0%
9.2 Storage Temperature: Ambient
9.3 Inert Atmosphere: No requirement
9.4 Venting: Open (flame arrester) or pressure-vacuum

10. HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)

A-T-U

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations: Flammable liquid
11.2 NAS Hazard Rating for Bulk Water Transportation:

Category	Rating
Fire	3
Health	
Vapor Irritant	2
Liquid or Solid Irritant	2
Poisons	2
Water Pollution	
Human Toxicity	1
Aquatic Toxicity	3
Aesthetic Effect	2
Reactivity	
Other Chemicals	1
Water	0
Self Reaction	0

11.3 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue)	2
Flammability (Red)	3
Reactivity (Yellow)	0

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 15°C and 1 atm: Liquid
12.2 Molecular Weight: 106.17
12.3 Boiling Point at 1 atm: 277.2°F = 136.2°C = 409.4°K
12.4 Freezing Point: −139°F = −95°C = 178°K
12.5 Critical Temperature: 651.0°F = 343.9°C = 617.1°K
12.6 Critical Pressure: 523 psa = 35.6 atm = 3.61 MN/m²
12.7 Specific Gravity: 0.867 at 20°C (liquid)
12.8 Liquid Surface Tension: 29.2 dynes/cm = 0.0292 N/m at 20°C
12.9 Liquid Water Interfacial Tension: 35.48 dynes/cm = 0.03548 N/m at 20°C
12.10 Vapor (Gas) Specific Gravity: Not pertinent
12.11 Ratio of Specific Heats of Vapor (Gas): 1.071
12.12 Latent Heat of Vaporization: 144 Btu/lb = 80.1 cal/g = 3.35 X 10^5 J/kg
12.13 Heat of Combustion: −17,780 Btu/lb = −9877 cal/g = −413.5 X 10^5 J/kg
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: Not pertinent
12.25 Heat of Fusion: Data Not Available
12.26 Limiting Value: Data Not Available
12.27 Reid Vapor Pressure: 0.4 psa

6. FIRE HAZARDS (Continued)

6.11 Stoichiometric Air to Fuel Ratio: Data Not Available
6.12 Flame Temperature: Data Not Available

STYRENE

STY

Common Synonyms	Watery liquid	Colorless to light yellow	Sweet pleasant odor
Styrol Vinylbenzene Phenylethylene Styrolene	Floats on water. Flammable, irritating vapor is produced.		

Avoid contact with liquid and vapor. Keep people away.
Wear chemical protective suit with self-contained breathing apparatus.
Stop discharge if possible.
Call fire department.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire

FLAMMABLE.
CONTAINERS MAY EXPLODE IN FIRE.
Flashback along vapor trail may occur.
Vapor may explode if ignited in an enclosed area.
Wear chemical protective suit with self-contained breathing apparatus.
Combat fires from safe distance or protected location.
Extinguish with dry chemical, foam, or carbon dioxide.
Water may be ineffective on fire.
Cool exposed containers with water.

Exposure

CALL FOR MEDICAL AID.

VAPOR
Irritating to eyes, nose and throat.
If inhaled, will cause dizziness or loss of consciousness.
Move to fresh air.
If breathing has stopped, give artificial respiration.
If breathing is difficult, give oxygen.

LIQUID
Will burn skin and eyes.
Harmful if swallowed.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
DO NOT INDUCE VOMITING.

Water Pollution

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.
Fouling to shoreline.
May be dangerous if it enters water intakes.

Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)

Issue warning-air contaminant
Mechanical containment
Should be removed
Chemical and physical treatment

2. LABEL

2.1 Category: Flammable liquid
2.2 Class: 3

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Olefin
3.2 Formula: $C_6H_5CH=CH_2$
3.3 IMO/UN Designation: 3.3/2055
3.4 DOT ID No.: 2055
3.5 CAS Registry No.: 100-42-5

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid
4.2 Color: Colorless
4.3 Odor: Sweet at low concentrations; characteristic pungent; sharp; disagreeable

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Air-supplied mask or approved canister; rubber or plastic gloves; boots; goggles or face shield.
5.2 Symptoms Following Exposure: Moderate irritation of eyes and skin. High vapor concentrations cause dizziness, drunkenness, and anesthesia.
5.3 Treatment of Exposure: INHALATION: remove to fresh air; keep warm and quiet; use artificial respiration if needed. INGESTION: do NOT induce vomiting; call physician; no known antidote. SKIN OR EYE CONTACT: flush with plenty of water; for eyes get medical attention.
5.4 Threshold Limit Value: 50 ppm
5.5 Short Term Inhalation Limits: 100 ppm for 30 min.
5.6 Toxicity by Ingestion: Grade 2; LD_{50} = 0.5 to 5 g/kg
5.7 Late Toxicity: Data not available
5.8 Vapor (Gas) Irritant Characteristics: Vapors cause moderate irritation such that personnel will find high concentrations unpleasant. The effect is temporary.
5.9 Liquid or Solid Irritant Characteristics: Causes smarting of the skin and first-degree burns on short exposure; may cause secondary burns on long exposure.
5.10 Odor Threshold: 0.148 ppm
5.11 IDLH Value: 5,000 ppm

6. FIRE HAZARDS

6.1 Flash Point: 83°F O.C., 88°F C.C.
6.2 Flammable Limits in Air: 1.1%-6.1%
6.3 Fire Extinguishing Agents: Water fog, foam, carbon dioxide, or dry chemical
6.4 Fire Extinguishing Agents Not to be Used: Water may be ineffective
6.5 Special Hazards of Combustion Products: Not pertinent
6.6 Behavior in Fire: Vapor is heavier than air and may travel considerable distance to a source of ignition and flash back. At elevated temperatures such as in fire conditions, polymerization may take place which may lead to container explosion.
6.7 Ignition Temperature: 914°F
6.8 Electrical Hazard: Class I, Group D
6.9 Burning Rate: 5.2 mm/min
6.10 Adiabatic Flame Temperature: Data not available

(Continued)

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: May occur if heated above 150°F. Can cause rupture of container. Metal salts, peroxides, and strong acids may also cause polymerization.
7.6 Inhibitor of Polymerization: Tertiary-butylcatechol, 10-15 ppm
7.7 Molar Ratio (Reactant to Product): Data not available
7.8 Reactivity Group: 30

8. WATER POLLUTION

8.1 Aquatic Toxicity:
22 ppm/96 hr/bluegill/TL_m/fresh water
8.2 Waterfowl Toxicity: Data not available
8.3 Biological Oxygen Demand (BOD):
18% (theor.), 412 days
8.4 Food Chain Concentration Potential: None

9. SHIPPING INFORMATION

9.1 Grades of Purity: 99.5+%
9.2 Storage Temperature: Ambient
9.3 Inert Atmosphere: No requirement
9.4 Venting: Open (flame arrester)

10. HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)

A-T-U-Z

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations:
Flammable liquid
11.2 NAS Hazard Rating for Bulk Water Transportation:

Category	Rating
Fire	3
Health	
Vapor Irritant	2
Liquid or Solid Irritant	2
Poisons	2
Water Pollution	
Human Toxicity	1
Aquatic Toxicity	3
Aesthetic Effect	2
Reactivity	
Other Chemicals	2
Water	0
Self Reaction	3

11.3 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue)	2
Flammability (Red)	3
Reactivity (Yellow)	2

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 15°C and 1 atm: Liquid
12.2 Molecular Weight: 104.15
12.3 Boiling Point at 1 atm:
293.4°F = 145.2°C = 418.4°K
12.4 Freezing Point:
−23.1°F = −30.6°C = 242.6°K
12.5 Critical Temperature:
703°F = 373°C = 646°K
12.6 Critical Pressure:
580 psa = 39.46 atm = 4.00 MN/m²
12.7 Specific Gravity:
0.906 at 20°C (liquid)
12.8 Liquid Surface Tension:
32.14 dynes/cm = 0.03214 N/m at 19°C
12.9 Liquid Water Interfacial Tension:
35.48 dynes/cm = 0.03548 N/m at 19°C
12.10 Vapor (Gas) Specific Gravity:
Not pertinent
12.11 Ratio of Specific Heats of Vapor (Gas):
1.074
12.12 Latent Heat of Vaporization:
156 Btu/lb = 86.8 cal/g = 3.63 X 10⁵ J/kg
12.13 Heat of Combustion: Not pertinent
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: −277 Btu/lb = −154 cal/g = −6.45 X 10⁵ J/kg
12.25 Heat of Fusion: Data not available
12.26 Limiting Value: Data not available
12.27 Reid Vapor Pressure: 0.27 psa

6. FIRE HAZARDS (Continued)

6.11 Stoichiometric Air to Fuel Ratio: Data not available
6.12 Flame Temperature: Data not available

TOLUENE

TOL

Common Synonyms	Watery liquid	Colorless	Pleasant odor
Toluol Methylbenzene Methylbenzol	Floats on water. Flammable, irritating vapor is produced.		

Stop discharge if possible. Keep people away.
Shut off ignition sources and call fire department.
Stay upwind and use water spray to "knock down" vapor.
Avoid contact with liquid and vapor.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire

FLAMMABLE.
Flashback along vapor trail may occur.
Vapor may explode if ignited in an enclosed area.
Wear goggles and self-contained breathing apparatus.
Extinguish with dry chemical, foam, or carbon dioxide.
Water may be ineffective on fire.
Cool exposed containers with water.

Exposure

CALL FOR MEDICAL AID.

VAPOR
Irritating to eyes, nose and throat.
If inhaled, will cause nausea, vomiting, headache, dizziness, difficult breathing, or loss of consciousness.
Move to fresh air.
If breathing has stopped, give artificial respiration.
If breathing difficult, give oxygen.

LIQUID
Irritating to skin and eyes.
If swallowed, will cause nausea, vomiting or loss of consciousness.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
DO NOT INDUCE VOMITING.

Water Pollution

Dangerous to aquatic life in high concentrations.
Fouling to shoreline.
May be dangerous if it enters water intakes.

Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)

Issue warning-high flammability
Evacuate area

2. LABEL

2.1 Category: Flammable liquid
2.2 Class: 3

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Aromatic Hydrocarbon
3.2 Formula: $C_6H_5CH_3$
3.3 IMO/UN Designation: 3.2/1294
3.4 DOT ID No.: 1294
3.5 CAS Registry No.: 108-88-3

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid
4.2 Color: Colorless
4.3 Odor: Pungent, aromatic, benzene-like; distinct, pleasant

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Air-supplied mask; goggles or face shield; plastic gloves.
5.2 Symptoms Following Exposure: Vapors irritate eyes and upper respiratory tract; cause dizziness, headache, anesthesia, respiratory arrest. Liquid irritates eyes and causes drying of skin. If aspirated, causes coughing, gagging, distress, and rapidly developing pulmonary edema. If ingested causes vomiting, griping, diarrhea, depressed respiration.
5.3 Treatment of Exposure: INHALATION: remove to fresh air, give artificial respiration and oxygen if needed; call a doctor. INGESTION: do NOT induce vomiting; call a doctor. EYES: flush with water for at least 15 min. SKIN: wipe off, wash with soap and water.
5.4 Threshold Limit Value: 100 ppm
5.5 Short Term Inhalation Limits: 600 ppm for 30 min.
5.6 Toxicity by Ingestion: Grade 2; LD_{50} = 0.5 to 5 g/kg
5.7 Late Toxicity: Kidney and liver damage may follow ingestion.
5.8 Vapor (Gas) Irritant Characteristics: Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.
5.9 Liquid or Solid Irritant Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.
5.10 Odor Threshold: 0.17 ppm
5.11 IDLH Value: 2,000 ppm

6. FIRE HAZARDS

6.1 Flash Point: 40°F C.C., 55°F O.C.
6.2 Flammable Limits in Air: 1.27%-7%
6.3 Fire Extinguishing Agents: Carbon dioxide or dry chemical for small fires, ordinary foam for large fires
6.4 Fire Extinguishing Agents Not to be Used: Water may be ineffective
6.5 Special Hazards of Combustion Products: Not pertinent
6.6 Behavior in Fire: Vapor is heavier than air and may travel a considerable distance to a source of ignition and flash back.
6.7 Ignition Temperature: 997°F
6.8 Electrical Hazard: Class I, Group D
6.9 Burning Rate: 5.7 mm/min
6.10 Adiabatic Flame Temperature: Data not available

(Continued)

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: Not pertinent
7.6 Inhibitor of Polymerization: Not pertinent
7.7 Molar Ratio (Reactant to Product): Data not available
7.8 Reactivity Group: 32

8. WATER POLLUTION

8.1 Aquatic Toxicity: 1180 mg/l/96 hr/sunfish/TL_m/fresh water
8.2 Waterfowl Toxicity: Data not available
8.3 Biological Oxygen Demand (BOD): 0%, 5 days; 38% (theor), 8 days
8.4 Food Chain Concentration Potential: None

9. SHIPPING INFORMATION

9.1 Grades of Purity: Research, reagent, nitration-all 99.8 + %; industrial: contains 94 + %, with 5% xylene and small amounts of benzene and nonaromatic hydrocarbons; 80/120: less pure than industrial.
9.2 Storage Temperature: Ambient
9.3 Inert Atmosphere: No requirement
9.4 Venting: Open (flame arrester) or pressure-vacuum

10 HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)

A-T-U

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations: Flammable liquid
11.2 NAS Hazard Rating for Bulk Water Transportation:

Category	Rating
Fire	3
Health	
Vapor Irritant	1
Liquid or Solid Irritant	1
Poisons	2
Water Pollution	
Human Toxicity	1
Aquatic Toxicity	3
Aesthetic Effect	2
Reactivity	
Other Chemicals	1
Water	0
Self Reaction	0

11.3 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue)	2
Flammability (Red)	3
Reactivity (Yellow)	0

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 15°C and 1 atm: Liquid
12.2 Molecular Weight: 92.14
12.3 Boiling Point at 1 atm: 231.1°F = 110.6°C = 383.8°K
12.4 Freezing Point: −139°F = −95.0°C = 178.2°K
12.5 Critical Temperature: 605.4°F = 318.6°C = 591.8°K
12.6 Critical Pressure: 596.1 psa = 40.55 atm = 4.108 MN/m²
12.7 Specific Gravity: 0.867 at 20°C (liquid)
12.8 Liquid Surface Tension: 29.0 dynes/cm = 0.0290 N/m at 20°C
12.9 Liquid Water Interfacial Tension: 36.1 dynes/cm = 0.0361 N/m at 25°C
12.10 Vapor (Gas) Specific Gravity: Not pertinent
12.11 Ratio of Specific Heats of Vapor (Gas): 1.089
12.12 Latent Heat of Vaporization: 155 Btu/lb = 86.1 cal/g = 3.61 X 10⁵ J/kg
12.13 Heat of Combustion: −17,430 Btu/lb = −9686 cal/g = −405.5 X 10⁵ J/kg
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: Not pertinent
12.25 Heat of Fusion: 17.17 cal/g
12.26 Limiting Value: Data not available
12.27 Reid Vapor Pressure: 1.1 psa

6. FIRE HAZARDS (Continued)

6.11 Stoichiometric Air to Fuel Ratio: Data not available
6.12 Flame Temperature: Data not available

POLYCHLORINATED BIPHENYL

PCB

Common Synonyms	Oily liquid to solid powder	Light yellow liquid, or white powder	Weak odor
PCB Chlorinated biphenyl Aroclor Halogenated waxes Polychloropolyphenyls	Sinks in water.		

Stop discharge if possible. Keep people away.
Avoid contact with liquid and solid.
Call fire department.
Isolate and remove discharged material.
Notify local health and pollution control agencies.

Fire

Combustible.
Extinguish with water, foam, dry chemical, or carbon dioxide.

Exposure

CALL FOR MEDICAL AID.

LIQUID OR SOLID
Irritating to skin and eyes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.

Water Pollution

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.
May be dangerous if it enters water intakes.

Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. RESPONSE TO DISCHARGE

(See Response Methods Handbook)

Issue warning-water contaminant
Should be removed
Chemical and physical treatment

2. LABEL

2.1 Category: None
2.2 Class: Not pertinent

3. CHEMICAL DESIGNATIONS

3.1 CG Compatibility Class: Not listed
3.2 Formula: $(C_{12}H_{10-n}Cl_n$
3.3 IMO/UN Designation: Not listed
3.4 DOT ID No.: 2315
3.5 CAS Registry No.: 1336-36-3

4. OBSERVABLE CHARACTERISTICS

4.1 Physical State (as shipped): Liquid or solid
4.2 Color: Pale yellow (liquid); colorless (solid)
4.3 Odor: Practically odorless

5. HEALTH HAZARDS

5.1 Personal Protective Equipment: Gloves and protective garments.
5.2 Symptoms Following Exposure: Acne from skin contact.
5.3 Treatment of Exposure: SKIN: wash with soap and water.
5.4 Threshold Limit Value: 0.5 to 1.0 mg/m³
5.5 Short Term Inhalation Limits: Data not available
5.6 Toxicity by Ingestion: Grade 2; oral rat LD_{50} = 3980 mg/kg
5.7 Late Toxicity: Causes chromosomal abnormalities in rats, birth defects in birds
5.8 Vapor (Gas) Irritant Characteristics: Vapors cause severe irritation of eyes and throat and cause eye and lung injury. They cannot be tolerated even at low concentrations.
5.9 Liquid or Solid Irritant Characteristics: Contact with skin may cause irritation.
5.10 Odor Threshold: Data not available
5.11 IDLH Value: 5 to 10 mg/m³

6. FIRE HAZARDS

6.1 Flash Point: >286°F
6.2 Flammable Limits in Air: Data not available
6.3 Fire Extinguishing Agents: Water, foam, dry chemical, or carbon dioxide
6.4 Fire Extinguishing Agents Not to be Used: Not pertinent
6.5 Special Hazards of Combustion Products: Irritating gases are generated in fires.
6.6 Behavior in Fire: Not pertinent
6.7 Ignition Temperature: Data not available
6.8 Electrical Hazard: Not pertinent
6.9 Burning Rate: Data not available
6.10 Adiabatic Flame Temperature: Data not available
6.11 Stoichiometric Air to Fuel Ratio: Data not available
6.12 Flame Temperature: Data not available

7. CHEMICAL REACTIVITY

7.1 Reactivity With Water: No reaction
7.2 Reactivity with Common Materials: No reaction
7.3 Stability During Transport: Stable
7.4 Neutralizing Agents for Acids and Caustics: Not pertinent
7.5 Polymerization: Not pertinent
7.6 Inhibitor of Polymerization: Not pertinent
7.7 Molar Ratio (Reactant to Product): Data not available
7.8 Reactivity Group: Data not available

8. WATER POLLUTION

8.1 Aquatic Toxicity:
0.278 ppm/96 hr/bluegill/TL_m/fresh water
0.005 ppm/336-1080 hr/pinfish/TL_m/salt water
8.2 Waterfowl Toxicity: LD_{50} 2000 ppm (mallard duck)
8.3 Biological Oxygen Demand (BOD): Very low
8.4 Food Chain Concentration Potential: High

9. SHIPPING INFORMATION

9.1 Grades of Purity: 11 grades (some liquid, some solids) which differ primarily in their chlorine content (20%-68% by weight)
9.2 Storage Temperature: Ambient
9.3 Inert Atmosphere: No requirement
9.4 Venting: Open

10. HAZARD ASSESSMENT CODE

(See Hazard Assessment Handbook)

II

11. HAZARD CLASSIFICATIONS

11.1 Code of Federal Regulations: ORM-E
11.2 NAS Hazard Rating for Bulk Water Transportation: Not listed
11.3 NFPA Hazard Classification: Not listed

12. PHYSICAL AND CHEMICAL PROPERTIES

12.1 Physical State at 15°C and 1 atm: Solid
12.2 Molecular Weight: Not pertinent
12.3 Boiling Point at 1 atm: Very high
12.4 Freezing Point: Not pertinent
12.5 Critical Temperature: Not pertinent
12.6 Critical Pressure: Not pertinent
12.7 Specific Gravity: 1.3—1.8 at 20°C (liquid)
12.8 Liquid Surface Tension: Not pertinent
12.9 Liquid Water Interfacial Tension: Not pertinent
12.10 Vapor (Gas) Specific Gravity: Not pertinent
12.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
12.12 Latent Heat of Vaporization: Not pertinent
12.13 Heat of Combustion: Not pertinent
12.14 Heat of Decomposition: Not pertinent
12.15 Heat of Solution: Not pertinent
12.16 Heat of Polymerization: Not pertinent
12.25 Heat of Fusion: Data not available
12.26 Limiting Value: Data not available
12.27 Reid Vapor Pressure: Data not available

NOTES

COAL TAR PITCH VOLATILES

CAS: 8007-45-2

TLV-TWA. 0.2 mg/m³, as Benzene Soluble Fraction
Appendix A1a — Recognized Human Carcinogen

The pitch of coal tar is the black or dark brown amorphous residue that remains after the redistillation process. The volatiles contain a large quantity of lower molecular weight polycyclic hydrocarbons.[1,2] As these hydrocarbons (naphthalene, fluorene, anthracene, acridine, phenanthrene) sublime into the air and there is an increase of benzo(a)pyrene (BaP or 3,4-benzpyrene) and other higher weight polycyclic hydrocarbons in the tar and in the fumes. Polycyclic hydrocarbons, known to be carcinogenic, are of this large molecular type.

Coal tar is used as a base for coatings and paints, for roofing and paving, and as a binder for carbon electrodes.

Doll[4] found that deaths from cancer of the lungs and pleura of retired gas-workers is approximately two times the expected rate.

Coal tar pitch polluted air is characterized by large amounts of phenanthrene, anthracene, pyrene, and carbazole. Coal tar pitch contains approximately 10% polycyclic hydrocarbons, and three different samples analyzed by Sawicki *et al*[1] gave a concentration of 1.4% BaP alone.

Samples collected in urban and nonurban sites[1,2] contained a range of 2.4-410 μg BaP/g of particulate (38-2600 μg BaP/g of benzene fraction or 0.11-61 μg/1000 m³ of air) in the former locations and 0.15-51 μg BaP/g of particulate (9.3-730 μg BaP/g of benzene soluble fraction or 0.01-1.9 μg BaP/1000 m³ of air) in the latter[3] during a three-month period, January through March.

Falk *et al*[5,6] pointed out that the amount of BaP in the air was greater than one would expect on the basis of comparative quantitative emissions of other hydrocarbons. The composition of the hydrocarbons varies with time and distance, suggesting differences in stability of the compounds. The authors conclude that chrysene, 1,12-benzperylene, coronene, and BaP are stable, and phenanthrene, an "unidentified hydrocarbon" and anthranthrene are most readily destroyed, usually within 48 hours. Intermediate stability is demonstrated by pyrene (58% recovery in 48 hours) and fluoranthrene (80% recovery in 48 hours).

Stability of polycyclic hydrocarbons was also studied by Commins and Lawther.[11] They point out that the temperature applied to sinter the filter used to collect the sample altered the apparent stability for BaP. They concluded that the filter should never be subjected to temperatures above 100°C; no loss of BaP was found after heating 100 μg BaP on a sintered disc in a sealed tube at 100°C for seven hours.

In further experiments, Kotin *et al*[8] painted the interscapular area of C57 black mice three times weekly with benzene extracts of natural smog. First tumors appeared 465 days following the initial application.

Fairhall[12] stated that fumes of dust from native asphalt do not present a substantial health hazard in comparison with coal tar fume or dust, citing the work of Hueper[13] and Davies.[14] Hueper[15] also pointed out that, as a rule, a minimal time of exposure of one to five years is required to develop occupational cancer. Similarly, occupational cancers often develop many years after exposure to carcinogens has ceased. Simmers[16] concluded that the degree of change noted in the lungs of rats breathing air contaminated with aromatic polycyclic hydrocarbons is dose-dependent.

In its criteria document for coal tar products, NIOSH cites papers dealing primarily with coke oven and aluminum potroom workers.[17] A study of aluminum industry potroom workers[18] showed an increase in lung cancer mortality. A paper on this industry in the Soviet Union associates such an increase with concentrations of tarry substances between 27 and 2130 mg/m³, while the BaP levels were between 0.6 and 56 μg/m³.[19] High respiratory mortality among coke oven workers in Great Britain was reported.[20] Kidney as well as lung cancer was relatively prevalent among American coke-oven workers exposed 5 years or more.[21]

Animal studies indicating that lung and kidney tumors were caused by exposure to coal tar aerosols were also cited.

The occupational exposure standard recommended by NIOSH was 0.1 mg/m³ for the cyclohexane extractable fraction.[17] A 1977 summary, however, gives 0.2 mg/m³ as the NIOSH recommendation for coal tar pitch volatiles.[22]

In the absence of more definitive information on the identity of the components of coal tar pitch aerosols responsible for carcinogenic effects, a TLV based on the benzene (or other suitable solvent) soluble fraction appears to be the most practical compromise. If the concentration of aerosols from coal tar, on this basis, is maintained below 0.2 mg/m³, any increase in the incidence of lung and other tumors, due to occupational exposure, should be minimal.

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OSHA POSTER

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Requirements of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

Inspection

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discrimination.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected, whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory penalties against employers of up to $1,000 for each serious violation and for optional penalties of up to $1,000 for each nonserious violation. Penalties of up to $1,000 per day may be proposed for failure to correct violations within the proposed time period. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to $10,000 for each such violation.

Criminal penalties are also provided for in the Act. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of not more than $10,000, or by imprisonment for not more than six months, or by both. Conviction of an employer after a first conviction doubles these maximum penalties.

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

Such voluntary action should initially focus on the identification and elimination of hazards that could cause death, injury, or illness to employees and supervisors. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free consultative assistance, without citation or penalty, is available to employers, on request, through OSHA supported programs in most State departments of labor or health.

[illegible] OFFICE

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More Information

Additional information and copies of the Act, specific OSHA safety and health standards, and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following cities:

Atlanta, Georgia
Boston, Massachusetts
Chicago, Illinois
Dallas, Texas
Denver, Colorado
Kansas City, Missouri
New York, New York
Philadelphia, Pennsylvania
San Francisco, California

Telephone numbers for these offices, and additional area office locations, are listed in the telephone directory under the United States Department of Labor in the United States Government listing.

Washington, D.C.
1985
OSHA 2203

William E. Brock, Secretary of Labor

U.S. Department of Labor

COLD WEATHER OPERATIONS

COLD WEATHER OPERATIONS

I. INTRODUCTION

Cold weather often causes problems for personnel working outside. There are several types of cold weather injuries which can occur, even at temperatures above freezing. As temperatures drop below freezing, the potential for these injuries increases dramatically, as does the potential for equipment failure. Because of the considerable danger to personnel, outdoor work should be suspended if the ambient temperature drops below O° F (-18° C) or if the windchill factor drops below -29° F (-34° C). This level represents a guideline which should be used as an action level unless the HSO determines and documents otherwise.

Snow and ice add additional risks to personnel and operations. Reduced visibility, increased potential for falling injuries, reduced on-site mobility, and the increase in time required to access the site (or off-site support services) are some of the problems posed by snow and ice.

In view of the above, it is critical that the Site Safety Officer establish site specific safety and operating protocols, and that all on-site personnel be made aware of the risks from the recognition of, and the treatment of cold weather injuries.

II. COLD WEATHER INJURIES

There are two basic categories of cold weather injuries; local and systemic.

A. Local Cold Injuries

Local cold injuries are those injuries which affect specific areas of the body (e.g., fingers, ear, toes) and include the more commonly recognized cold weather injuries described below.

1. Chilblains is a condition that can result from prolonged exposure of bare skin to temperatures in the low sixties (°F) or below. This condition generally occurs in the extremities, and is a chronic injury of the skin and peripheral

capillary circulation. Covering and protecting the skin from prolonged exposure to the cold is the best method of preventing and treating chilblains.

2. Frostbite is the freezing of some part of the body as a result of exposure to very low temperatures. Frostbite can affect hands, feet, ears, and exposed parts of the face. It occurs when ice crystals form in the fluid in cells of the skin and tissue. As long as blood circulation remains good, frostbite will not occur. Frostbite is a constant hazard in sub- zero weather, especially where there are strong winds.

There are three stages of frostbite. Classification depends upon the amount of tissue damage. Severity can range from incipient frostbite (frostnip), which affects the skin, to superficial frostbite, which involves the skin and the tissues immediately beneath it, to deep frostbite, a much more serious injury with damage that may affect deeper tissue and even bone.

a. Symptoms

Symptoms for each of the three stages of frostbite include:

Frostnip
Skin first turns red, later becomes pale or waxy white.
May be tingling, stinging, or aching or uncomfortable sensation of coldness, followed by numbness, or it may be unnoticed by person.

Superficial Frostbite
Skin is white or gray-white and waxy in appearance.
Skin is firm to touch, does not move easily.
Tissue beneath the skin is soft and resilient.
Lack of sensation in the area.

Deep Frostbite
Tissues are pale, cold, solid.
Usually affects hands and feet.
Blisters and swelling may occur.

b. Emergency Treatment of Frostbite

Frostnip is easily reversed in the field by the application of body heat. Apply body heat before the affected area becomes numb. Thaw frozen spots immediately. Do not rub affected areas.

If frostnip affects your fingers and hands, place them against the skin of your chest or in your armpits. To warm your face, hold a mitten or scarf over the lower part of your face and breathe into it.

Superficial Frostbite usually responds to the application of body heat. If it does not or if it resembles the early stages of deep frostbite, treat the condition as though it were.

Deep Frostbite
If possible remove person to a heated shelter to avoid further frostbite.

Remove all constricting items (boots, gloves, socks) from area of injury if it can be done without danger of further frostbite.

RAPID REWARMING WILL MINIMIZE TISSUE LOSS.

Warm extremities in a carefully-controlled warm water bath (104°F to 106°F) until tips of the fingers or toes turn pink and feeling is restored.

If a water bath is not available, use ALTERNATE METHODS;

Apply wet packs (100°F to 112°F) to the person's body.

Gently wrap frostbitten area in blankets or other warm material.

DO NOT attempt to thaw by exercising the affected parts or heating them in front of an open fire, heat lamps, radiator or a stove. The person may have lost sensation in the parts and may receive a heat injury as a result.

DO NOT use snow to thaw frostbite.

DO NOT rub, massage or use pressure on the affected areas.

Watch to see if CPR is necessary.

Continue Care:

Keep frostbitten parts elevated if possible.

Give victim warm drinks such as tea, coffee, or soup.

DO NOT GIVE ALCOHOLIC BEVERAGES.

Have victim exercise fingers or toes as soon as they are warmed.

Do NOT allow a person with frostbitten feet to walk. It may cause additional damage.

c. Medical Treatment of Frostbite

Frostnip usually does not require medical care.

Superficial Frostbite. Blisters may require medical care.

Deep Frostbite. EARLY MEDICAL TREATMENT IS URGENT! Get the victim to medical care at once.

d. Prevention of Frostbite

It is far easier to prevent or to stop frostbite in earlier stages than to thaw and take care of badly frozen flesh:

Wear enough clothing to protect yourself against cold and wind.

Wear warm gloves and boots.

Pull a scarf or jacket flap over the lower part of your face or a hood tightly around your face.

Exercise face, fingers and toes from time to time to keep them warm and to detect any areas that may have become numb.

Crew members should watch each other closely for signs of frostbite, especially on the face.

3. Immersion foot (formerly called trench foot) is a cold injury resulting from prolonged exposure to temperatures near freezing, especially when standing or walking in wet or swampy ground.

a. Symptoms

In the early stages the feet and toes are pale, feet are cold, numb, stiff. Walking is difficult. If preventive action is not taken, feet will swell and ache. In extreme cases, irreversible damage to the tissues of the foot or leg may result.

b. Emergency Treatment of Immersion Foot

Feet should be handled very gently. Do not rub or massage.

If necessary, clean feet carefully with soap and water, then dry and elevate them and expose them to warm but not hot air.

c. Prevention of Immersion Foot

Because early stages of immersion foot are not painful, you must be constantly alert to prevent this condition.

Check feet often when working in wet cold.

Keep your feet dry by wearing waterproof foot gear and by avoiding standing in wet areas.

Since perspiration trapped inside waterproof boots or heavy footgear can contribute to immersion foot symptoms, change your socks frequently.

Dry your feet as soon as possible if they get wet. Warm them with your hands. Use foot powder and put on dry socks.

If you cannot change wet boots and socks, exercise your feet frequently by wriggling your toes and moving your ankles. Never wear tight boots.

B. Systemic Cold Injuries

Systemic injuries are those that affect the entire body system. Severe general body cooling is known as systemic hypothermia, and can occur at temperatures well above freezing. Hypothermia is the progressive lowering of body temperature accompanied by rapid, progressive mental and physical collapse. Subnormal temperature within the central body can be fatal. A large percentage of wilderness deaths are the result of hypothermia.

Hypothermia is caused by exposure to cold and it is aggravated by moisture, cold winds, fatigue, hunger, and inadequate clothing or shelter. Excessive perspiration from strenuous exercise followed by too rapid cooling can lead to hypothermia.

Hypothermia usually occurs between the temperatures of 30-50°F, temperatures which most people believe are not dangerous. Crew members should be alert for symptoms of hypothermia, especially when temperatures are dropping rapidly or when they must work in rain, snow or ice.

Hypothermia may occur on land or following submersion in even moderately cold water, 65°F or below. Death in cold water may seem to be from drowning but it is usually the result of hypothermia.

On land, hypothermia may take up to a full day or more of exposure to develop. If the cold conditions are extremely severe, however, death may occur within a few hours of the first symptoms.

In water, skin and nearby tissues chill very fast. Within even 10 to 15 minutes, the temperature of the heart and brain may drop. When core (internal body) temperature reaches 90°F, unconsciousness may occur. In water, when the body temperature

drops to 80°F, heart failure is the usual cause of death. A person may drown as a result of losing the use of arms and legs or by becoming unconscious.

a. Symptoms

In the early stages of hypothermia, the body begins to lose heat faster than it can produce it and makes efforts to stay warm by shivering. When the body can no longer generate heat fast enough to overcome heat loss and the energy reserves of the body are becoming exhausted, a second stage begins; the body temperature begins to drop. This affects the ability of the brain to make judgments and also results in loss of muscular control.

As the body temperature drops, hypothermia symptoms become increasingly severe:

SYMPTOMS OF HYPOTHERMIA	APPROX. CORE TEMPS.
Person is conscious, alert. May have shivering that becomes uncontrollable as core temperature nears 95°F. Respirations increase at first.	Above 95°F
Person is conscious but disoriented, apathetic. Shivering present but diminishes as temperature drops. Below 92°F respiratory rate gradually diminishes, pupils begin to dilate.	95-90°F
Person is semi-conscious. Shivering replaced by muscular rigidity. Pupils fully dilated at about 86°F.	90-86°F
Unconscious, diminished respirations.	Below 86°F
Barely detectable or nondetectable respirations.	Below 80°F

b. Emergency Treatment of Hypothermia

In very mild cases of hypothermia, dry clothing and shelter may be all that is needed.

Move victim to shelter and warmth as rapidly as possible.

Gently remove all wet clothing (so victim does not expend energy warming and drying wet clothing) and replace it with dry.

Give the person something warm to drink. Do not give alcoholic beverages.

ALL OTHER CASES SHOULD BE CONSIDERED MEDICAL EMERGENCIES.

PROVIDE EXTERNAL HEAT ANY WAY POSSIBLE!

A WARM BATH with the water kept between 105°F and 110°F is the most effective way of warming a victim of hypothermia. (NEVER put an UNCONSCIOUS VICTIM in a bathtub.)

If it is not possible to give the person a warm bath, use an ALTERNATIVE METHOD:

Wrap warm moist towels (or other fabric) around the victim's head, neck, sides, groin. As the packs cool, rewarm them by adding warm water (about 105°F). (Check the temperature of the water with your elbow or the inside of your arm. Water should be warm but not hot).

Or, if you are at an remote outdoor location and cannot use any of the other methods:

Make a "human sandwich" by placing the unclothed victim in a sleeping bag (or between blankets) with two other undressed persons to provide body-to-body heat transfer. THIS WILL SAVE LIVES. Additional sleeping bags or blankets can be placed over and under the sleeping bag.

Do NOT wrap a hypothermia victim in a blanket without an auxiliary source of heat unless it is to protect against any further heat loss before treatment can begin.

Do NOT leave the person in a sleeping bag without extra heat in order to go for help unless there is no other alternative.

Continue treatment:

Give warm liquids and nourishing food if the person is conscious.

Check the person for symptoms of frostbite and if necessary, give treatment for frostbite.

Handle the patient gently and do not allow him to walk. Exertion can circulate cold stagnant blood from extremities to the central body and cause "after-drop", in which the patient's core temperature may drop below the level which will sustain life. (Alcohol also contributes to after-drop.)

c. Medical Care for Hypothermia

HYPOTHERMIA IS A SEVERE EMERGENCY. GET MEDICAL TREATMENT AS SOON AS POSSIBLE. Even persons with mild hypothermia should see a doctor.

d. Prevention of Hypothermia

Never go into the field in cold weather without wearing adequate clothing and taking a complete change of warm clothes and one or two pairs of extra socks (in plastic bags).

Wear or carry a windproof, water-resistant outer jacket. In rain or snow, wear adequate rain gear.

Stay dry. If your clothing becomes wet from perspiration, rain, snow or immersion in water, change it as soon as possible.

If you start to shiver in a prolonged or violent way, seek shelter at once. Shivering produces heat but uses up energy. Shivering violently may be an early sign of hypothermia.

Avoid accidental immersion in water. Practice boat safety and learn cold water survival techniques if your field work involves activities where you could fall into the water.

If you do fall into water (and are not very close to shore), remain quiet with your head out of water or climb onto the boat or any other object that will support you and keep you up out of the water.

C. Safety/First Aid Equipment

In view of the causes, results, and appropriate treatment of cold weather injuries discussed above, the following items should be included as safety equipment during cold weather operations.

Extra clothing for all personnel
Blankets/sleeping bag
High energy food, and drinking water supply
Toboggan
Tow ropes

In extreme cold conditions, the following safety items should also be included:

Electric blanket
Portable emergency generator (with fuel, oil, and cords)
Space heater and fuel

III. GENERAL WINTER OPERATIONS

Cold weather conditions can severely affect winter operations. The Site Manager and Site Safety Officer must plan work schedules and project tasks accordingly.

A. Preliminary Assessment

If you will be working outdoors in cold weather, assess the local weather conditions through the news media (radio, television, newspapers) in order to know the amount of preparation you will need to make. Carefully consider such questions as:

What are the typical wind and weather conditions for the period in which you will be sampling?

Are the areas in which you will work sheltered or open to the wind?

Is there a place nearby for periodic warming breaks? Can you obtain or heat warm food and beverages there? Is there a source of drinking water?

Are there ways to minimize the length of time that crew members will have to work outdoors in the cold?

If you use a vehicle for a warming area or will use a heater in a closed room, how can you insure there is adequate ventilation to prevent carbon monoxide poisoning?

B. Scheduling

Try to schedule work in the least severe weather.

Plan to rotate crew members to keep cold exposures short.

Allow sufficient time for frequent warming breaks.

Remember that workers in heavy clothing may need more time to complete tasks and may become fatigued more easily.

Be aware that you may have to discontinue operations if winds increase or the temperature drops.

Remember that winter days are short. Scheduling should allow time for taking care of equipment and supplies before nightfall when it is more difficult to gauge terrain and when temperatures are likely to drop.

C. Site Access

Snow and ice could make travel on site access roads impossible, or treacherous at best. Personnel should not be allowed to work on-site if conditions severely hamper the arrival or departure of emergency vehicles. An otherwise minor injury could

result in a major medical emergency if the route to off-site medical facilities is blocked by snow, ice, etc.

If conditions warrant, the following provisions should be made:

1. Snow removal/plowing services for site access roads should be secured.

2. A dependable four wheel drive vehicle should be immediately available on-site to transport injured to off-site medical facilities.

3. Sleeping bags, blankets, food supply, and water should be kept on-site in the event a sudden storm requires personnel to remain on-site overnight.

The HSO must decide when weather conditions make site access unsafe, and must stop work until conditions improve.

D. Equipment and Supplies

You should obtain equipment and supplies that will help prevent cold stress and that will help in the treatment of cold stress disorders.

Take a reliable ambient temperature thermometer, a wind gauge and a wind chill chart.

If the site is very windy, try to provide means of shielding workers from the wind.

If you are working at a distance from stores, carry extra food and water since hunger and dehydration contribute to cold stress. Try to take a means of providing hot food and beverages if one is not available nearby.

Provide emergency communication equipment for use between ground crews and those working in the cold, at heights, or in remote locations.

Very close attention must be paid to the effects of cold weather on field equipment. Many types of batteries can be severely affected by cold resulting in disabled radios, air monitoring equipment, sampling pumps, and vehicles. A supply of fresh batteries, sufficient number of charging units, and a set of automotive jumper cables should be maintained on-site.

The electronics in many field instruments such as PI meters, LEL meters and oxygen meters can also be adversely affected by the cold. Manufacturers literature must be consulted for operating ranges.

If at all possible, monitoring well sampling tasks should not be scheduled during cold weather. These tasks generally require the use of (relatively delicate) pumps; long, uninsulated stretches of tubing; and significant quantities of decontamination solutions. Unless considerable effort is expended to prevent pumps, hoses, decontamination solutions, and sample containers from freezing, attempting to sample monitoring wells in cold weather may be counter-productive. Portable shelters should be considered if cold weather sampling is necessary.

IV. CONCLUSIONS

Safe cold weather operations require considerable planning on the part of the Site Manager and Site Safety Officer.

Weather conditions and forecasts must be watched closely, and on-site activities and procedures modified accordingly.

On-site personnel must be made aware of the hazards of cold weather, and the symptoms and treatment of cold weather injuries.

A sufficient number of warm-up breaks must be provided to on-site personnel.

Enclosed, heated decontamination facilities may be required.

Additional time must be allotted in the morning to check out and warm-up field equipment. Additional time must also be allotted for the end of the day to drain hoses and pumps, pack and secure equipment, and plan the next day's activities based upon up-to-date weather forecasts.

MECHANICVILLE SITE-SPECIFIC QUALITY ASSURANCE PROJECT PLAN

INVESTIGATION OF THE FORMER COAL GASIFICATION SITE

AT

MECHANICVILLE, NEW YORK

QUALITY ASSURANCE PROJECT PLAN ADDENDUM

Prepared for:

New York State Electric and Gas Corporation
4500 Vestal Parkway East
Binghamton, New York 13903-1082

Prepared by:

ABB Environmental Services, Inc.
(Formerly E.C. Jordan Co.)
P.O. Box 7050, DTS
Portland, Maine 04112

Revised
May 1992

INVESTIGATION OF FORMER COAL GASIFICATION SITES
QAPP ADDENDUM

Client: NYSEG
Project No.: 4945-06
Task No.: 5

Prepared by: T. Plante 2/92
Reviewed & Approved by: D. Ostrye 2/92
Revised: 5/92

SITE DESCRIPTION

Site: Mechanicville Site ID: ME

Street: Corner of North Central Avenue and Ferris Lane.

City: Mechanicville County: Saratoga State: New York

Site Owners: New York State Electric and Gas Corp. (NYSEG)

Phone No: (518) 664-7371

Address: Park Plaza, Mechanicville, New York 12118

Purpose of Study: To expand our understanding of the nature and distribution of environmental contamination resulting from past use of the site for coal gasification and electrical equipment storage. Also, to gather hydrogeologic data to further define site hydrogeology and chemical migration pathways. This is the fifth phase of a phased investigation.

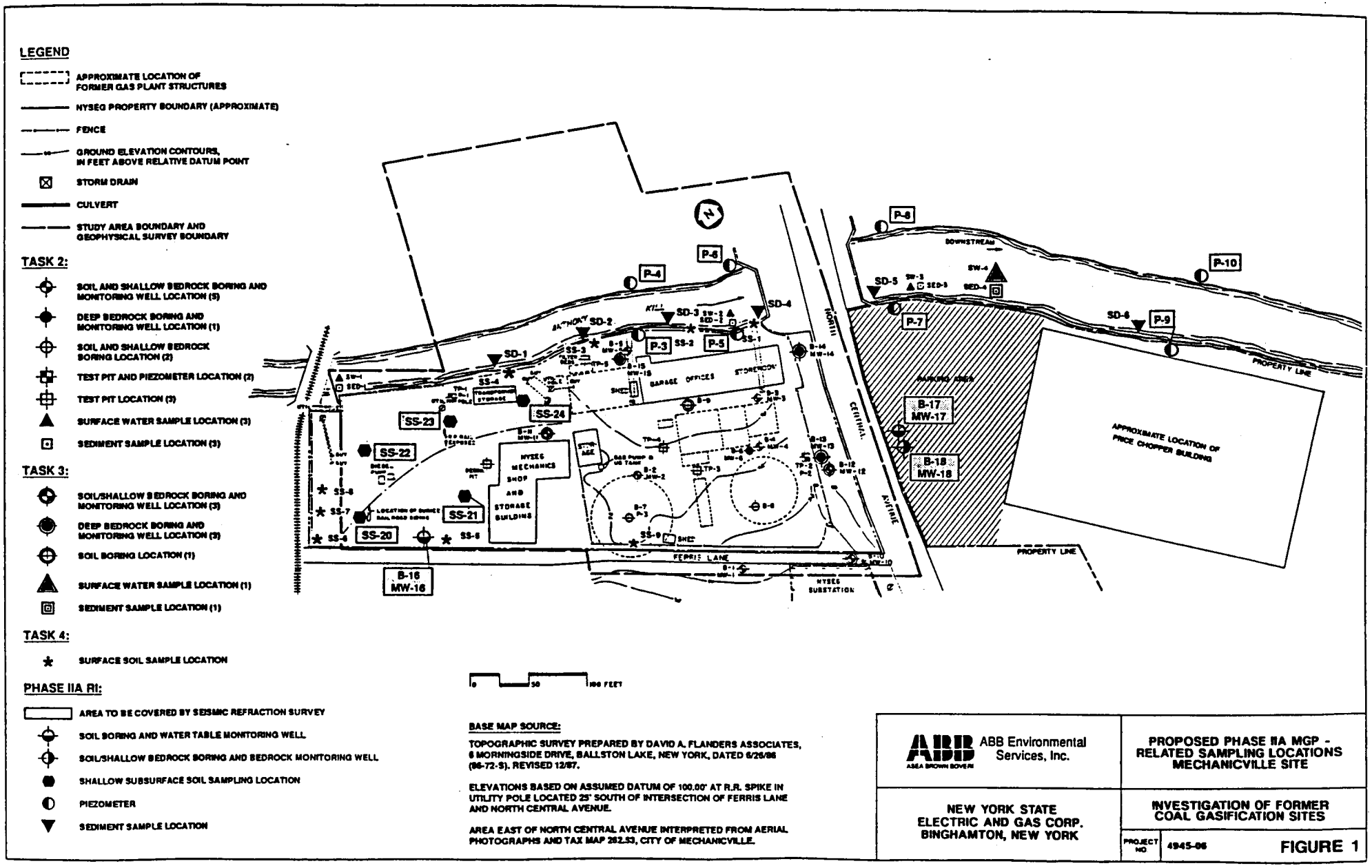
SUMMARY OF INVESTIGATION

The objective of this Phase IIA Supplemental Remedial Investigation is to gain a greater understanding of the site which will address comments and recommendations offered by the New York State Department of Environmental Conservation (NYSDEC). The work plan specifically focuses on assessing site soils for PCB contamination, further investigation west of the site to assess soil and groundwater quality, and installation of soil borings, monitoring wells, piezometers and seepage

meters downgradient of the site to assess off-site migration of site-related contaminants. The investigation includes the following activities:

- geophysical survey of the area directly east of the site to delineate the bedrock surface and locate the bedrock trough;
- installation of one upgradient shallow monitoring well;
- installation of one shallow and one bedrock monitoring well pair downgradient of the site;
- possible installation of one to two additional monitoring wells downgradient if visible evidence of contamination is found in the first pair;
- collection of subsurface boring soil samples inside and outside the boundary of the site;
- possible installation of additional soil borings if initial downgradient borings show visible evidence of soil contamination;
- shallow subsurface soil sampling within the site boundary;
- installation of piezometers along the Anthony Kill adjacent to and downgradient of the site;
- sediment sampling and UV/IR screening of samples;
- installation of seepage meters along the banks of the Anthony Kill adjacent to and downstream of the site;
- measurement of water levels in wells, piezometers, and surface water; and
- collection of groundwater and seep water samples for analyses.

The Phase IIA Supplemental Remedial Investigation is summarized below and sampling locations are shown in Figures 1 and 2. Detailed sampling procedures and



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/25/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

AREA EAST OF NORTH CENTRAL AVENUE INTERPRETED FROM AERIAL PHOTOGRAPHS AND TAX MAP 262.53, CITY OF MECHANICVILLE.

ABB Environmental Services, Inc.

NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

PROPOSED PHASE IIA MGP - RELATED SAMPLING LOCATIONS MECHANICVILLE SITE

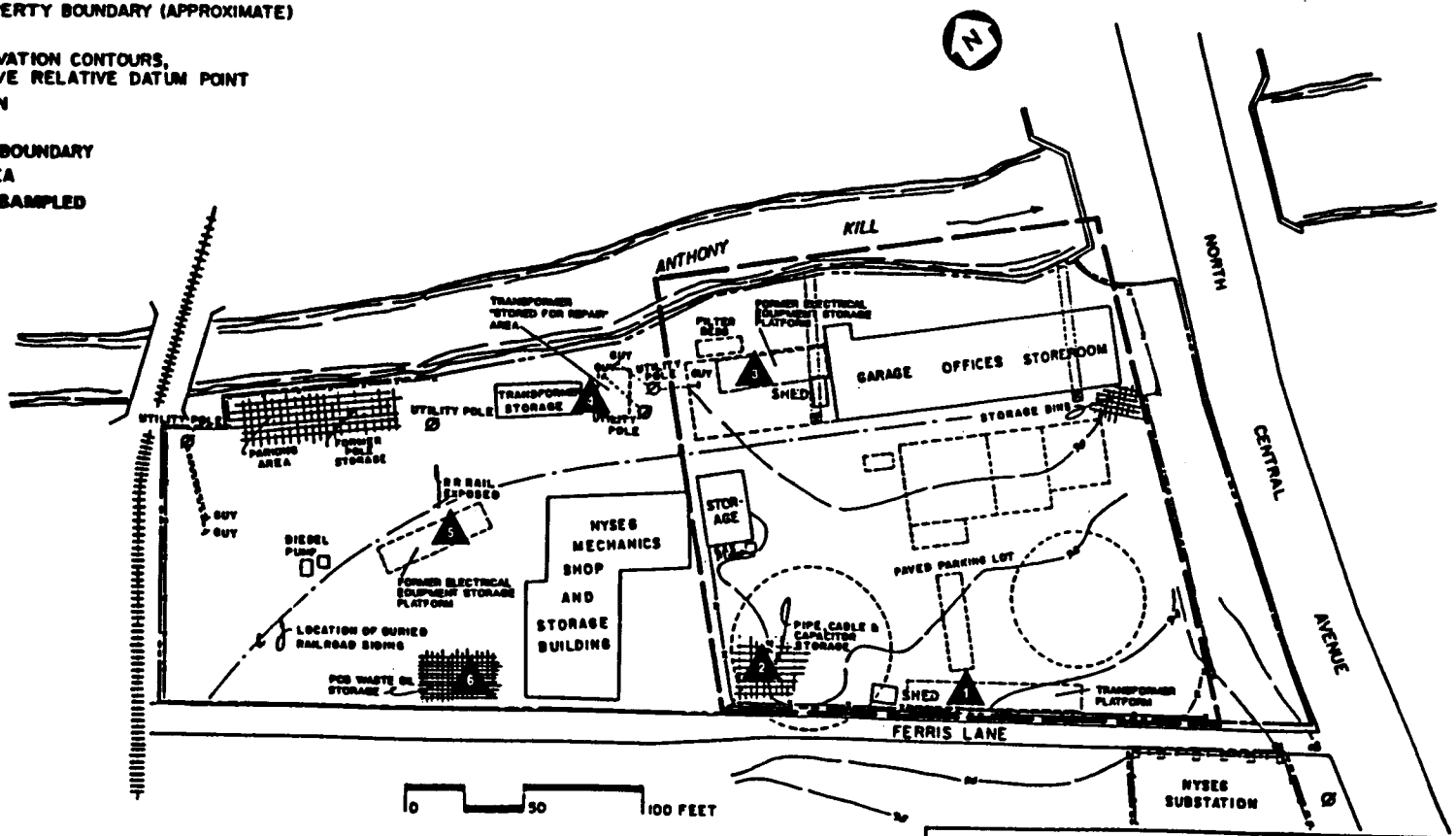
INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO 4945-06

FIGURE 1

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET ABOVE RELATIVE DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA
- AREA TO BE SAMPLED FOR PCBs



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

ABB Environmental Services, Inc.

TITLE: PROPOSED PHASE II PCB SAMPLING AREAS MECHANICVILLE SITE

CLIENT: NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 6945-86

FIGURE 2

quality assurance objectives are for the activities to be undertaken during this field investigation are contained in the NYSEG contract QAPP (Jordan, 1986). A summary of these activities and any changes or additions are noted below.

weight impact (sledge hammer) or small buried charges of explosives. If explosives are used, shotholes are usually prepared with a driven rod (not excavated) so as to insure good ground coupling. Th explosives are tightly tamped and the depths and amount of explosives used are noted.

Seismograms are obtained using a portable signal enhancement seismograph which records the wave arrivals from the energy source along the seismic spread, acquiring separate data for each geophone position. Timing lines are provided across the entire recording allowing direct reading of wave arrivals to an accuracy of one millisecond. The signal enhancement capability refers to the ability of the instrument to record the seismic waves from several impacts (or explosions), add them electronically,a nd retain this data in its internal digital memory for later processing and interpretation. The enhanced signal improves data quality and greatly facilitates interpretation.

Generally, several recordings are obtained along each seismic spread; seismograms are generated with the energy source at each end, and others may be obtained by energy generation in the middle, and at other positions along an individual seismic spread as necessary.

Continuous profiling is accomplished by having an end shotpoint of one seismic spread coincident with an end or intermediate position shot point of the succeeding spread. The length of each spread is determined by the required depth of penetration. Seismic spreads of varying lengths can be used in a study; the deeper the required penetration, the longer the spread must be.

Interpretation

The data are interpreted by first accurately measuring the individual transit times at each geophone position, then constructing a graph of these times versus their distance from the energy source. The geophysicist then determines by inspection of the time-distance graphs the number of subsurface seismic layers present. Straight line segments of best fit are drawn onto the graph, each layer being represented by a line of different slope. The inverse of the slope of each line is the (apparent) velocity value for each layer. The distance from the origin (or energy source) of the "crossover point" between two layers is proportional to the thickness of the overlying layer.

The identification of various materials can be made with a knowledge of seismic velocity values based on other engineering studies, and on correlations with various test borings taken near seismic lines. The results of seismic refractions will be used to place the downgradient borings/monitoring wells in the bedrock trough and/or the interpreted groundwater migration pathway (if different then any bedrock trough identified) and will be included in the Phase IIA Supplemental RI Report.

2.0 SUBSURFACE EXPLORATIONS

The Phase IIA Supplemental RI drilling program will consist of a minimum of three borings with an additional five optional borings depending on if visible evidence of contamination is found in the initial downgradient borings. Boring B-16 will be drilled to approximately 10 feet bgs (to bedrock), B-17 and B-18 will be advanced to bedrock (approximately 30 feet bgs). Boring B-18 will be advanced an additional 15 feet into bedrock. Monitoring wells will be installed in these borings and two of the optional borings downgradient of the site (if borings are completed). Split-spoon samples will be screened for coal tar residues by visual observation and odor, and for volatile compounds by use of a portable HNU or Photovac TIP photoionization detector. All borings not completed as monitoring wells will be grouted to the surface.

All borings completed to the bedrock surface (except B-18) will be drilled by using 4.25-inch inner diameter (ID) hollow-stem augers with continuous 3-inch outer diameter (OD) split-spoon sampling. B-18 will not be sampled since it is adjacent to B-17. Boring B-18 will be advanced 15 feet into bedrock by NX-coring. Core samples will be taken continuously. For boring B-18, the double-cased drilling technique will be used since it is anticipated that a confining silty-sand layer potentially overlain by coal tar will be encountered 1 to 2 feet above the bedrock surface as observed in borings B-12 and B-13 completed during Task 3. Potable water will be used for drilling and will be analyzed for volatile organic analytes (VOAs), semivolatile organic analytes (SVOAs), inorganics and total cyanide. Drilling methods are described in the NYSEG contract QAPP (Jordan, 1986c).

A minimum of one soil sample will be collected from each boring, preferably from the screened interval, and submitted to the NYSEG laboratory for analyses. These soil samples will be analyzed for VOAs, SVOAs, reactive cyanide and reactive sulfide, and inorganics. Analyses are summarized in Table 1, and documentation and

TABLE 1
NYSEG MECHANICVILLE SITE

PHASE IIA REMEDIAL INVESTIGATION
SAMPLE ANALYSIS PLAN

TYPE OF INVESTIGATION	MEDIUM	TOTAL EXPECTED NO. OF SAMPLES	VOAs NYSDEC ASP 91-1	VOAs NYSDEC ASP 91-4	SVOAs NYSDEC ASP 91-2	INORGANICS (SEE NOTES 2 AND 3) FILTERED	INORGANICS (SEE NOTES 2 AND 3) TOTAL	REACTIVE CYANIDE USEPA METHOD 9010	REACTIVE SULFIDE USEPA METHOD 9030	PCBs (9) USEPA METHOD 8080	TURBIDITY	MATRIX SPIKE	MATRIX SPIKE DUPLICATE	LEVEL OF DATA QUALITY(5)
Borings (1)	Soil	2 samples 1 duplicate 3 total (1)	3		3		3	3	3			1	1	IV
Shallow Subsurface Soil Sampling	Soil	5 samples 1 duplicate 6 total						6	6			1	1	IV
		24 samples 3 duplicates 27 total								27		2	2	III
Sediment	Soil	6 samples 1 duplicates 7 total	7		7		7	7	7			1	1	IV
Monitoring Wells:	Water													
(6, 8)		15 samples 2 duplicate 17 total	14	3	17	17	17				17	1	1	IV
Seep Meters or Surface Water (7)	Water	5 samples 1 duplicate 6 total		6	6	6	6				6	1	1	IV

Notes:

1. A minimum of one sample from each boring sampled will be submitted for laboratory analysis from the contaminated area or the well screen depth or both if different.
2. Analytes include Fe, Zn, Al, Cd, Sb, Co, Cu, Mn, Ni, Pb, Cr, and total amenable, and ferro-ferric cyanide. ASP Superfund CLP analytical methods will be used.
3. Filtered/unfiltered applicable to groundwater samples for metals.
4. ASP denotes NYSDEC Analytical Services Protocol, December 1991 revision.
5. All data validation performed according to USEPA protocol. 10% of samples will be subject to full validation, 90% to blank validation.
6. Samples from MW-22 and MW-23 behind Price Chopper will only be collected if these wells are deemed necessary and installed. Therefore, they are not included in this table.
7. Five seep meter/surface water samples will be collected. Surface water samples will be taken inplace of seepage meter samples where seepage meters prove ineffective.
8. All existing monitoring wells are to utilize NYSDEC ASP 91-1 for VOAs. All proposed wells (i.e., MW-16, MW-17, MW-18, MW-22 and MW-23) are to utilize NYSDEC ASP 91-4.
9. All PCB analyses will be performed using USEPA Method 8080 by NYSEG laboratories or NYSDOH ELAP-CLP certified laboratories.

data quality levels are also indicated in Table 1. All samples will be submitted to, and analyzed by a laboratory certified by NYSDOH for ELAP-CLP category. Information from split-spoon samples will be logged according to procedures outlined in the NYSEG contract QAPP (Jordan, 1986).

Maintaining proper records is an important aspect of soil sample taking. At the time samples are obtained, the following must be recorded by the sampler:

- sample site location (e.g., grid coordinates baseline station and offset, or the location plotted on a map or aerial photograph)
- sample type and depth
- soil description
- date and time of sampling
- project and sample designations
- sampler identification
- analyses requested

For laboratory samples, the sampler must initiate chain-of-custody (COC) procedures and describe the sample site in adequate detail to allow the analytical results to be properly interpreted and, if necessary, to allow collection of additional samples form the same sample location. Jordan uses standardized record forms to expedite this process and ensure uniformity of records. The sampling protocols and recordkeeping requirements for the types of samples described in the following pages vary according to the sampling techniques. Additional requirements may also be established on a site-specific basis.

The entire soil sampling process is designed and conducted in a manner that provides properly documented samples suitable for the intended analyses.

3.0 SHALLOW SUBSURFACE EXPLORATION

A total of six (five plus one duplicate) shallow subsurface soil samples will be collected west of the site (SS-20 through SS-24) as shown in Figure 1. The rationale for these samples is to evaluate whether chemicals from reported disposal of spent oxide wastes and wood chips are present on this area of the NYSEG property and to assess their impact. Samples will be collected with a stainless steel trowel or spoon or a spade from 0 to 12 inches below the pavement (or bgs if unpaved) and composited. Samples will be submitted to NYSEG for laboratory analysis of reactive cyanide and reactive sulfide.

A total of 27 shallow subsurface samples (SS-25 through SS-48 plus three duplicates) will be collected from the six electrical equipment storage areas shown on Figure 2. Each storage area will be subdivided into four equal-sized areas. Four samples will be collected from each sub-area from the 3- to 12-inch depth interval and composited, resulting in four composite samples for PCB analysis from each storage area. The sample grid spacing is illustrated in Table 2. Additional samples will be collected at locations other than the six storage areas if visible evidence of oil stains is encountered. Samples will be collected with a stainless steel trowel or spoon or a spade. Samples will be submitted to the NYSEG laboratory for PCB analysis (NYSDEC ASP 91-3).

Information from shallow subsurface soil samples will be logged according to procedures outlined in the NYSEG contract QAPP (Jordan, 1986). Soil sample recordkeeping described in the previous section also applies here. Figure 3 is an example surface soil sampling record.

4.0 MONITORING WELL/PIEZOMETER INSTALLATION

This program will further characterize the distribution of the groundwater chemical plume downgradient of the site (MW-17, MW-18, and possibly MW-21 and MW-22) and to provide additional upgradient groundwater quality information (MW-16). The monitoring wells will be constructed of 2-inch OD stainless steel construction. The final location of the downgradient wells will be based on a review of current on-site groundwater level measurements, the seismic refraction survey, and property access. These wells will also serve to better define the groundwater flow direction downgradient of the site. The monitoring well pair, MW-17/MW-18, will also be

TABLE 2

SAMPLE GRID SPACING

PCB SAMPLES

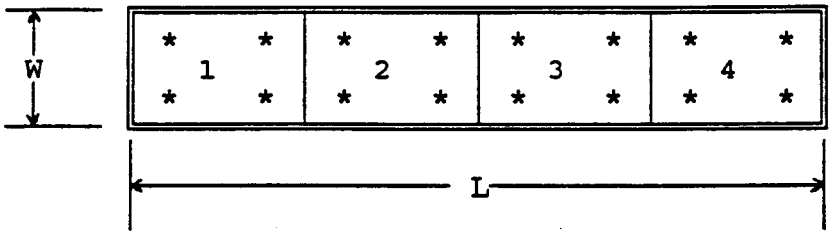
Spacing(x) = x / [2 * N(x)]

1st Loc(x) = Space(x) / 2

Were:

x	=	L or W
N(x)	=	# of composite samples in the L or W direction.
Spacing(x)	=	spacing (distance between collection points) in the L or W direction.
1st Loc(x)	=	location of the corner collection points along L or W relative to edge of the suspect area.

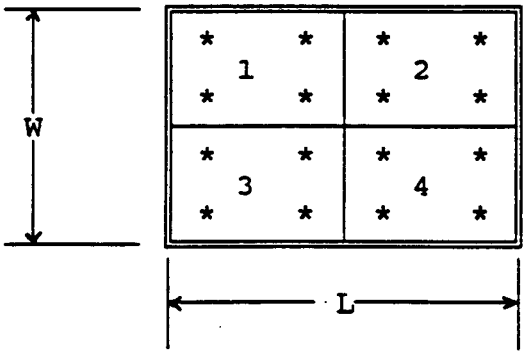
Example # 1



N(W)=1 N(l)=4

Space(W)= W/2
1st Loc(W)= W/4
Space(L)= L/8
1st Loc(L)= L/16

Example # 2



N(W) = N(L) = 2

Space(W)= W/4
1st Loc(W)= W/8

Space(L)= L/4
1st Loc(L)= L/8

LEGEND:

*	=	sample collection point
1	=	composite sample #
W	=	width
L	=	length
═══	=	perimeter of suspect area
———	=	boundary of composite sample coverage

useful in determining the presence of vertical gradients between the bedrock and the overburden. Proposed locations of the wells are shown in Figure 1. Permission from private property owners will be necessary to install all off-site wells and piezometers as they are currently located.

In addition to the monitoring well installations, eight 1-inch PVC piezometers (P-3 through P-10) will be installed with a hand auger or hand driven into the ground to a depth of no greater than five feet along both banks of the Anthony Kill as shown in Figure 1. Well point piezometers will serve as groundwater level measurement points to be incorporated into the shallow groundwater flow contour maps for the Mechanicville site and, in conjunction with measured surface water elevations, used to indicate discharging or recharging conditions. This will enable better evaluation of shallow groundwater flow directions, gradients, and velocities from the site to these areas. These piezometers, in conjunction with water level data from the overburden/bedrock monitoring well pair MW-15/MW-5, will also indicate determine the presence of vertical gradients along the Anthony Kill, adjacent to the site.

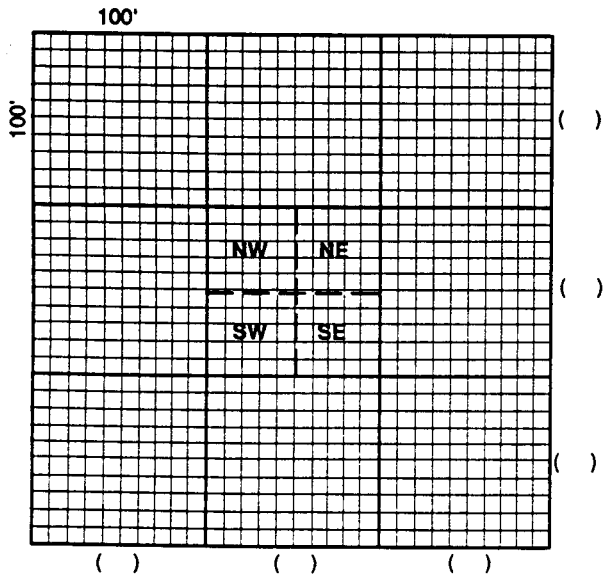
In general, monitoring wells and piezometers will be installed according to NYSEG procedures for monitoring wells and piezometers at former coal gasification plant sites (NYSEG, 1989). All substitutions, alterations and/or deviations from these procedures will require NYSDEC approval in advance. Based on previous site information, it is anticipated that well screens will be stainless steel, 10-slot (0.010 inch screen), with silica sand filter pack. The sand will be No. 0 Morie sand, with the uppermost six inches of the sand pack being No. 00 Morie sand, a finer material. A monitoring well installation report, including individual well construction details, will be prepared. In the shallow wells, the well screen and sand pack will be positioned to monitor the upper 10 feet of groundwater. The deep well will monitor the zone approximately 20 to 30 feet below the ground surface. Monitoring well installation details for the shallow and deep wells are shown in Figures 3 and 4, respectively. The borehole above (and below as necessary, including any sediment trap) the screened zone is sealed with dry bentonite pellets to preclude preferential vertical groundwater flow along the well annulus. The space between the bentonite seal and the surface seal will be filled with cement/bentonite grout (94 lbs cement per 3 to 5 lbs bentonite) regardless of whether or not contamination is encountered in the fill soil. Any deviations from the installation details specified in this QAPP must be approved by both NYSEG and NYSDEC.

SURFACE SOIL SAMPLING RECORD

Site _____

Grid Element; _____ Date; _____ Time: _____ St., _____ End. _____

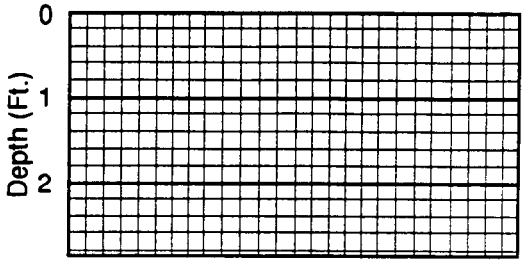
Sketch Map of Grid Element



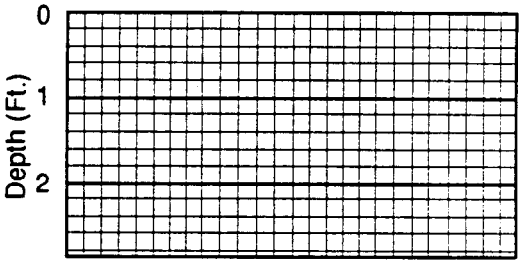
Sample Component Loss

-Description- -Monitoring- -PPM-

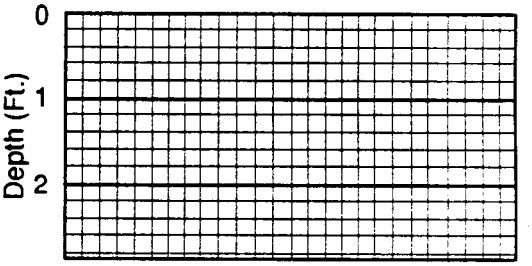
NE Surface PPM, Spoils PPM



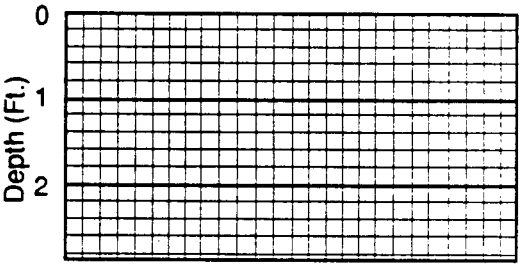
NW Surface PPM, Spoils PPM



NW Surface PPM, Spoils PPM



SE Surface PPM, Spoils PPM



Samples Obtained

Composite Samples

Depth (Ft)	Quadrants	Init. Ser No.	Hd. Sp. PPM
S	NE NW SE SW		
1'	NE NW SE SW		
1.5'	NE NW SE SW		
2'	NE NW SE SW		

Grab Samples

	NE NW SE SW		
	NE NW SE SW		
	NE NW SE SW		
	NE NW SE SW		

Notes: _____ Photographers Roll: _____

_____ Exposures: _____

_____

_____

_____ Reference: Field Book, Page _____

Attachments, No. _____

_____
Signed

FIGURE 3
SURFACE SOIL SAMPLING RECORD
PROGRAM QUALITY ASSURANCE PROJECT PLAN

The preferred well development technique will be the surge (or surge-block) technique. During this development technique, in-situ well water is forced out, and pulled into, the well screen. This technique will draw silt-sized material entrained within the sand filter pack during well installation into the well. The accumulated silt within the well can then be periodically removed by bailing or pumping the well. The advantage of this development technique is that it will generate less water than continuous pumping development or air-lift development and it effectively removes fine-grained sediments surrounding the well screen. If this technique is not effective, the pumping or air-lift methods will be used as alternates. The development water generated will be pumped into closed-top 55-gallon drums and transported to the site. The development water will be allowed to infiltrate into an on-site groundwater recharge pit. The area as a recharge pit will be covered with clean soil when it is no longer needed in accordance with NYSDEC TAGM "Disposal of Contaminated Groundwater Generated During Remedial Investigations".

As part of this task, rising-head permeability tests will be conducted on all new wells to determine the horizontal hydraulic conductivities of the geologic strata being monitored. Rising-head tests will be performed by temporarily depressing the water level in the wells, using compressed air or a slug, and recording time and water level recovery using an in-situ Hermit data logger and pressure transducer or water level indicator.

5.0 WATER LEVEL MEASUREMENTS

Water level measurements will be taken at all monitoring wells and piezometers associated with the site with an electronic water level meter using the top of the riser pipe as the reference datum. Elevations of top of risers will be surveyed subsequent to installation. Surface water elevations will be established in reference to adjacent piezometers. Water level measurement procedures are outlined in the NYSEG contract QAPP (Jordan, 1986). Duplicate keys for all wells will be provided to NYSDEC at the completion of the field investigation.

6.0 GROUNDWATER SAMPLING AND ANALYSIS

The well installation program will be followed by one round of groundwater sampling of all wells. Dedicated stainless steel bailers will be installed in all existing site monitoring wells, and monitoring wells will be sampled according to the procedures

outlined in the NYSEG contract QAPP (Jordan, 1986), with the exception of the volume of water to be purged to reach turbidity goals.

Prior to obtaining a groundwater sample from a well, at least four to ten bore volumes of water must be pumped or bailed from a well of high yielding formation. Conversely, if the yield is low, the well may be purged of all its water, then sampling commenced as soon as the well recovers. The bore is the hole in which the stainless steel pipe stands, and volume is calculated from $(pi)(d^2)(h)/4$, where pi = 3.14,d = diameter of borehole, and h = height of water column from the bottom of the well to the surface of water in the well. Four to ten volumes are required to minimize turbidity and to obtain a representative sample; the turbidity goal is 50 NTUs or less. This holds for high yielding wells. For wells that can be totally evacuated by the four to ten (or less) bore volumes one total evacuation of the well will be sufficient.

Wells should be pumped or bailed dry. If this cannot be accomplished, the water level in the well should be monitored while pumping or bailing until the level has "stabilized". When this occurs, most if not all of the water being removed is coming from the aquifer. Temperature, specific conductance, and pH of the water should be monitored; when these factors "stabilize", it is probable that little or no water is coming from casing storage.

Purge water from monitoring will be drummed and transported to the site. Here it will be passed through granular activated carbon canisters and discharged in an on-site groundwater recharge pit.

In developing and extracting samples wells, the Division will require that dedicated tubes, hoses (rubber or tygon is unacceptable), and bailers, including line and other sampling equipment, must be provided for each well. Groundwater elevation equipment and other non-dedicated equipment will be decontaminated. Decontamination procedures are described in Section 9.0.

Groundwater sample analyses and data quality objectives are summarized in Table 1; all samples from monitoring rounds will be submitted to NYSEG laboratories, and may be subcontracted to the following New York State certified laboratories: Galson Laboratories in Syracuse, New York; Friend Laboratories in Waverly, Pennsylvania; and UPSTATE in Syracuse, New York. Any laboratory used to NYSEG must be certified by NYSDOH for ELAP-CLP category.

Groundwater samples will be analyzed in the field for turbidity temperature, pH, and conductivity and sent to a laboratory for analysis of volatile organics (NYSDEC ASP 91-1), semivolatile organics (NYSDEC ASP 91-2), inorganics, and turbidity. Table 1 details the sample analysis parameters. Groundwater sample collected-data will be recorded on a data record such as Figure 4.

7.0 SEDIMENT SAMPLING/SCREENING

The sediment sampling and screening will be conducted on samples collected from the southern bank of the Anthony Kill, adjacent to and downstream of the site. Sample locations will be determined in the field through visual observation of the stream bank conditions (i.e., stained sediments, flowing seeps, stressed vegetation) and evaluation of the hydrogeology of the site incorporating the additional wells and piezometers. A minimum of seven sediment samples (SD-1 through SD-6 plus one duplicate) will be collected for laboratory analysis of volatile organics (NYSDEC ASP 91-1), semivolatile organics (NYSDEC ASP 91-2), inorganics, total organic carbon, reactive cyanide (USEPA Method 9010) and reactive sulfide (USEPA Method 9030). Approximate locations are shown in Figure 1. Sediment sampling and field screening will be used to locate seepage meter investigation areas by identifying areas of the stream bank containing site-related chemicals. The sediment sampling rationale is contained in Table 8-2.

Sediment samples will be collected using stainless steel spoons or trowels, teflon or glass coring tubes in shallow surface water, and gravity cores in deeper waters as outlined in the NYSEG contract QAPP (Jordan, 1986). Samples will be collected at two to three depth intervals at each location (where sediment depth is sufficient) to profile potential discharge zones. If no sediment deposits are available, sampling will be collected from the submersed interface of the bedrock and the streambank overburden. Sediment sample data will be recorded on data sheets such as Figure 5.

All sediment samples will be examined in the field for visual signs of contamination and screened using a PID meter. Sediment samples collected will also be screened for the presence of PAH and TPH using the UV fluorescence and IR spectroscopy screening methods.

The UV fluorescence screening procedure involves the extraction of a soil sample in an organic solvent and comparison of the fluorescence of the extract to the

GROUNDWATER FIELD SAMPLE DATA RECORD

Project: _____ Site: _____
Project Number: _____ Date: _____
Sample Location ID: _____ Signature of Sampler: _____
Time: Start: _____ End: _____

Water Level/Well Data

Well Depth _____ Ft. ___Measured ___Historical

___Top of Well ___Top of Protective Casing ___ _____

Well Riser Stick-up _____ Ft. (from ground)

Protective _____ Ft. Casing/Well Difference

Protective _____ Ft. Casing

Depth to Water _____ Ft.

Well Material: ___PVC ___SS _____

Well Locked?: ___Yes ___No

Well Dia. ___2 inch ___4 inch ___6 inch ___ _____

Water Level Equip. Used: ___Elect. Cond. Probe ___Float Activated ___Press. Transducer ___ _____

Height of Water Column _____ Ft. X ___.16 Gal/Ft. (2 in.) ___.65 Gal/Ft. (4 in.) ___1.5 Gal/Ft. (6 in.) ___ __ Gal/Ft. (__in.) = [_____Gal/Vol _____Total Gal Purged]

Well Integrity:	Yes	No
Prot. Casing Secure	___	___
Concrete Collar Intact	___	___
Other _____	___	___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
___	___	Peristaltic Pump	_____
___	___	Bailer	_____
___	___	PVC/Silicon Tubing	_____
___	___	Teflon/Silicon Tubing	_____
___	___	Airlift	_____
___	___	Hand Pump	_____
___	___	In-line Filter	_____
___	___	Press/Vac Filter	_____
___	___	Submersible Pump	_____
___	___		_____
___	___		_____

Decontamination Fluids Used:

(✓ All That Apply at Location)
___Methanol (100%)
___25% Methanol/75% ASTM Type II water
___Deionized Water
___Liquinox Solution
___Hexane
___HNO_3/D.I. Water Solution
___Potable Water
___None
___ _____
___ _____

Field Analysis Data

Ambient Air VOC _____ ppm Well Mouth _____ ppm Field Data Collected ___In-line ___In Container

Sample Observations: __Turbid __Clear __Cloudy __Colored __Odor

Purge Data	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.
Temperature, Deg. C					
pH, units					
Specific Conductivity (umhos/cm. @ 25 Deg. C.)					
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm					
Turbidity (NTU's)					

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____
_____	___	_____	_____	___	_____/_____/_____/_____

Notes: _____

FIGURE 4
GROUNDWATER SAMPLE DATA RECORD
PROGRAM QUALITY ASSURANCE PROJECT PLAN

9202081D (a)

SURFACE WATER AND SEDIMENT FIELD SAMPLE DATA RECORD

Project: _____ Site: _____
Project Number: _____ Date: _____
Sample Location ID: _____
Time: Start: _____ End: _____ Signature of Sampler: _____

SURFACE WATER INFORMATION

TYPE OF SURFACE WATER:
[ ] STREAM [ ] RIVER
[ ] POND/LAKE [ ] SEEP

DECONTAMINATION FLUIDS USED:
✓ ALL USED
[ ] ETHYL ALCOHOL
[ ] 25% METHANOL/ 75% ASTM TYPE II WATER
[ ] DEIONIZED WATER
[ ] LIQUINOX SOLUTION
[ ] HEXANE
[ ] HNO_3 SOLUTION
[ ] POTABLE WATER
[ ] NONE

WATER DEPTH AND SAMPLE LOCATION _____ (ft)

DEPTH OF SAMPLE
FROM TOP OF WATER _____ (ft)

EQUIPMENT USED FOR COLLECTION:
[ ] NONE, GRAB INTO BOTTLE
[ ] BOMB SAMPLER
[ ] PUMP _____

VELOCITY MEASUREMENTS OBTAINED? [ ] YES, SEE FLOW MEASUREMENT DATA RECORD _____

TEMPERATURE _____ Deg. C. SPEC. COND. _____ µmhos/cm pH _____ Units DISS. O_2 _____ ppm

FIELD GC DATA: [ ] FIELD DUPLICATE COLLECTED
DUPLICATE ID _____

SAMPLE LOCATION SKETCH:
[ ] YES
[ ] NO

METHOD USED:
[ ] WINKLER
[ ] PROBE

SEDIMENT INFORMATION

DEPTH OF SEDIMENT SAMPLE _____ (ft)

EQUIPMENT USED FOR COLLECTION:
[ ] GRAVITY CORER
[ ] S.S. SPLIT SPOON
[ ] DREDGE
[ ] HAND SPOON
[ ] ALUMINUM PANS
[ ] SS BUCKET
[ ] _____

DECONTAMINATION FLUIDS USED:
✓ ALL USED
[ ] ETHYL ALCOHOL
[ ] 25% METHANOL/ 75% ASTM TYPE II WATER
[ ] DEIONIZED WATER
[ ] LIQUINOX SOLUTION
[ ] HEXANE
[ ] HNO_3 SOLUTION
[ ] POTABLE WATER
[ ] NONE

TYPE OF SAMPLE COLLECTED:
[ ] DISCRETE
[ ] COMPOSITE

SEDIMENT TYPE:
[ ] CLAY
[ ] SAND
[ ] ORGANIC
[ ] GRAVEL

SAMPLE OBSERVATIONS:
[ ] ODOR _____
[ ] COLOR _____
[ ] _____

FIELD GC DATA: [ ] FIELD DUPLICATE COLLECTED
DUPLICATE ID _____

SAMPLES COLLECTED

✓ IF REQUIRED AT THIS LOCATION	MATRIX: SURFACE WATER	MATRIX: SEDIMENT	✓ IF PRESERVED WITH ACID-BASE	VOLUME REQUIRED	✓ IF SAMPLE COLLECTED	SAMPLE BOTTLE IDS
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____
[ ]	[ ]	[ ]	[ ]	_____	[ ]	_____/_____/_____/_____

NOTES/SKETCH

FIGURE 5
SURFACE WATER/SEDIMENT SAMPLE DATA RECORD
PROGRAM QUALITY ASSURANCE PROJECT PLAN

fluorescence of a known standard which can be either a specific PAH or a mixture of PAH. Since many other extractable organics, including naturally occurring compounds, also fluoresce; this screening can produce false positive results. However, the absence of fluorescent matter in a sample generally confirms the absence of medium to high levels of manufactured gas plant contaminants. The degree to which false positives are encountered is related to subsequent site uses, presence of natural lignite in soils, and vegetation.

The IR screening procedure is an adaptation of the laboratory procedure for measuring TPH. The adaptations are primarily related to sample volumes and extraction protocols which result in reduced analytical times. The results of TPH screening are more variable than laboratory results but provide useful data, especially where elevated levels (i.e., greater than 250 parts per million) are encountered.

These screening results will be used to select which sediment samples will be submitted for laboratory analysis.

8.0 SEEPAGE METER INSTALLATION/SAMPLING

The purpose of the seepage meter investigation is to empirically measure seepage rates of site-derived groundwater into the Anthony Kill and determine the chemical quality of seep water both adjacent to and downgradient of the site. Discharge rates determined through the seepage meters will be compared against Darcy's Law calculated estimates.

Seepage meters will be installed at approximately three locations adjacent to and two locations downstream of the site. The exact location and number of seepage meters actually installed will be determined by visual observation of the stream bank for stained sediments or flowing seeps and field screening of sediment samples for TPHs and PAHs.

Design specifications and interpretative methods for the data collected from the seepage meters are contained in Appendix A of this QAPP. A brief description of seepage meter construction follows.

Seepage meters are constructed of 55-gallon, steel drums, cut in half along the horizontal plane. A 3/8-inch ID section of threaded pipe is fitted through the end

of the drum with rubber washers and two nuts on either side of the drum end. The nuts are tightened to create a water-tight seal around the pipe, and each drum is checked for leaks.

A rubber hose is then fitted to the pipe, the other end of which is connected to a plastic bladder bag obtained from a medical supplier. The bag is equipped with a one-way valve on the drum end of the bag, and a flip valve for emptying tat the other end of the bag. The drum and bag are then fully submersed in water and pressed firmly into the stream bottom. Because the drums have neutral buoyancy, they must be anchored. To ensure no disturbance or movement, a wooden stake is driven adjacent to each drum, and a 3-inch-thick cinder block is slipped over the stake, to rest on top of and secure the drum. The bag is then submersed under water with a sinker. This completes the seepage meter installation; each stake is marked to identify the meter.

Flow into the meter through the stream bed is measured by closing the flip valve on the bag and allowing the bag to fill for several hours or days. The volume of seepage water collected in the bag over a measured time interval provides a groundwater seepage rate into the Anthony Kill for the area covered by the seepage meter. Seepage water will also collected and submitted for laboratory chemical analyses for volatile organics (NYSDEC ASP 91-4), semivolatile organics (NYSDEC ASP 91-2), and inorganics (see Table 1).

9.0 DECONTAMINATION PROCEDURES

Equipment to be decontaminated during the project may include (1) drill rig and drilling equipment; (2) truck or trailer; (3) tools; (4) monitoring equipment; and (5) sample containers. The drill rig and drilling equipment will be steam cleaned prior to arrival at the Mechanicville site, followed by on-site steam cleaning with water upon arrival, between boring/well sites, and after all work is complete at the site. The truck and trailer and assorted tools (i.e., pipe wrenches for breaking drill rods) will also be steam cleaned prior to leaving the site. Prior to use on-site, all casings, augers, recirculation and water tanks, etc., will be devoid, both inside and out, of any asphaltic, bituminous, or other encrusting or coating materials, grease, grout, soil, etc.

To the extent practical, all steam cleaning shall be performed in an area that is on-site. All decontamination will be performed by personnel in protective gear appropriate for the level of contamination, as determined by the Health and Safety Officer. All decontamination fluids will be disposed of via on-site percolation.

The split-spoon sampler(s) used during the subsurface soil sampling procedures will be decontaminated between samples and after final use, using a Liquinox/water rinse followed by a distilled water rinse. Loose material will be removed using a brush, prior to the split-spoon washing procedure.

Heavy coal tar material that cannot be removed from sampling equipment (i.e., hand/power augers for shallow subsurface samplers, may be cleaned with hexane, then a Liquinox/water rinse, followed by a distilled water rinse. Large equipment coated with heavy coal tar material (i.e., drilling augers) will be steam-cleaned.

Soil cuttings from the soil borings and monitoring well installation will be placed into 55-gallon drums, labeled, covered, and stored within the site property boundaries pending subsequent testing for hazardous waste characteristics and disposal by NYSEG in accordance with NYSEG TAGM "Disposal of Drill Cuttings". Wash water generated by the double-cased drilling method will be transported to the site, and after settling of solids, the supernate will be allowed to infiltrate into an on-site groundwater recharge pit. The area as a recharge pit will be covered with clean soil when it is no longer needed in accordance with NYSEC TAGM "Disposal of Contaminated Groundwater Generated During Remedial Investigations".

10.0 DATA QUALITY OBJECTIVES (DQOS)

DQOs are based on the premise that different data uses require different quality data. Data quality refers to a degree of certainty with respect to precision, accuracy, reproducibility, completeness, and comparability. DQOs are qualitative and quantitative statements specifying the quality of data required to support RI/FS activities, such as including site screening, site characterization, and risk assessment, and to support engineering alterative evaluation and selection decisions.

Two levels of data quality, USEPA Level III and Level IV (USEPA, 1988; USEPA, 1989), are needed for the soil and groundwater samples submitted for analyses. These data quality objective levels are in accordance with the NYSDEC ASP. The

specific DQO levels for each individual sample are shown in Table 1. All samples undergoing ASP analyses will have Level IV data quality; all other samples will have Level III data quality. Level III allows the use of non-contract laboratory program (CLP) methods, but requires that the analytical methods be accepted by USEPA; the data is typically used for risk assessment, site characterization, alternative evaluation, and engineering design. This level of data quality is considered sufficient for the majority of the soil and water samples collected from this site; these samples are being used primarily to further characterize and define the limits of coal gasification process-related contaminants, to select and implement a remedial action.

Level IV requires CLP methods and CLP data packages; the data is used for risk assessment, alternative evaluation and engineering design for sites that are near heavily populated areas, or are likely to undergo litigation. Samples analyzed and documented to this level of data quality are being used primarily to confirm the presence of contaminants in sensitive areas (i.e., upgradient and downgradient, off-site monitoring wells) with a high degree of precision and accuracy. For Level IV validation, 10% of the samples will undergo full validation and 90% will undergo blank validation only.

The analytical laboratory (i.e., NYSEG or NYSEG subcontractor) must analyze matrix spikes (MS) and matrix spike duplicates (MSD) sufficient for determining analytical precision and accuracy for specified methods and requested levels of data quality. Frequency of MS and MSD analyses will be five percent for each matrix. Field, sampler, and trip blanks and field duplicates will be collected as described in the NYSEG contract QAPP (Jordan, 1986).

ABB Environmental will provide third-party validation and review of analytical results, in accordance with NYSDEC and USEPA protocol. The validation of analytical measurements consists of a systematic process of reviewing data to provide assurance that the data are adequate for their intended use.

Performance verification will be done for all data. During performance verification, the Chain-of-Custody and Analytical Request Forms (ARFs) are reviewed for completeness and accuracy. Method blank corrections will also be made to the data based on field, sampler, trip, and laboratory blank results.

In addition to the activities associated with Level III data validation, Level IV data validation requires more thorough quality control (QC) review of analytical methods

and laboratory Quality Assurance/Quality Control (QA/QC) documentation. Full validation Level IV will be performed for 10% sample and includes reviewing measurement system calibration and calibration verification, quality control activities, field sample data records and chain-of-custody, and intermediate calculations, as well as certifying the process.

INVESTIGATION OF FORMER COAL GASIFICATION SITES
QAPP ADDENDUM (continued)

Site Mechanicville Site I.D. ME

MANPOWER

Field Personnel

Team Leaders: Pending

Team Member(s): Pending

PROJECT COORDINATION

ABB Environmental Site Manger: Thomas R. Plante Phone No: (207) 775-5401

ABB Environmental Project Manger: Daniel P. Ostrye Phone No: (207) 775-5401

NYSEG Project Manager: Thomas O'Meara Phone No: (607) 762-4036

ABB Environmental Project QA Officer: Steven Turner Phone No: (207) 775-5401

ABB Environmental Data Validator Maryanne Kosciewicz Phone No: (207) 775-5401

PROJECT SCHEDULE (see Figure 8-3 in Phase II RI Report)

	Event	Start	Duration
1.	Exploratory Borings/Monitoring Well Installations	Pending	
2.	Elevation Survey	Pending	
3.	Permeability Survey	Pending	
4.	Sampling Groundwater	Pending	
5.	Surface/Subsurface Soil Sampling	Pending	

INVESTIGATION OF FORMER COAL GASIFICATION SITES
QAPP ADDENDUM (continued)

Site Mechanicville

Site I.D. ME

SAMPLING REQUIREMENTS

Analytical Samples		QA Samples	10
Water Samples:		Duplicate samples: (Groundwater, Surface Water, Soil, Sediment, Air)	9
Groundwater:	17		
Surface Water:	0		
Seeps:	6		
Soil Samples:	45	Trip Blank: water (VOA)	1
Sediment Samples:	7	Air Blank: sorbent	0
Air Samples:	0	Filtration Blank (1/15 samples)	3
Other (Specify)	—	Sampler Blank Monitoring Well-Groundwater (VOA, SVOA, inorganics)	1
		Matrix Spike (5% per matrix)	7
		Matrix Spike Duplicate (5% per matrix)	7

See Table 1 for Sample Analysis Plan.

SAMPLE IDENTIFICATION

The standard method for sample identification used by ABB-ES for NYSEG former coal gasification plant sites includes the following codes:

Type of Sample	Code
Monitoring Well	MW
Groundwater Seep	GS
Surface Water	SW
Borehole	B
Test Pit	TP
Sediment	SD
Air	A
Duplicate	DUP
Trip Blank	TB
Filtration Blank	FB
Sampler Blank	SB
Tar Well	TW

The digits following the sample type code denote the number of the sample round (if more than one set of samples will be collected) and the number assigned to the sample point. For example, the groundwater sample collected from monitoring well Number 1 on the first sampling round would be MW-101 and the sample collected from that well on the second round would be MW-201. When more than one sample will be collected at the same point, as with boreholes, sample numbers are also assigned. The first sample from Boring 1 would be B-1(S1), the second sample B-1(S2), and so on. Sampling round numbers are not needed for boring samples because they are collected only once.

For this project, ABB will also use a sample identification code developed by NYSEG for direct use with NYSEG's computerized data recording system. Each sample will be assigned a thirteen-digit alpha-numeric code comprised of the following elements:

Element	Number of Digits
Site	2
Source of sample	1
Relative location (x)	1
Location of sample	2

Year of well installation (applies to groundwater samples only)	2
Sample point	2
Slash	1
Sample number	1
Round number	1
	13

The specific codes to be used in this investigation for each element are presented in the attached table. This table contains only a small portion of the coding system developed by NYSEG.

NYSEG SAMPLE IDENTIFICATION CODES

SITE	
Cortland/Homer	CH
Ithaca First Street	IF
Ithaca Court Street	IC
Ithaca Cayuga Inlet	II
Mechanicville	ME
Mechanicville/Coons Crossing	MC
Owego	OW

SOURCE OF SAMPLE	
Soil	E
Groundwater	G
Surface water	S
Air	A
Solid waste	W
Sediment	T

RELATIVE LOCATION	
Downgradient	D
In fill or in source	I
Upgradient	U
Not Applicable	X

LOCATION OF SAMPLE	
Air sampler	AS
Boring	B-
Monitoring well	MW
Tar well (pit, sump)	TW
Stream	SS
Test pit	TP
Shallow soil	SH
Deep soil	D-
Seep	EE

YEAR OF WELL INSTALLATION	
1985 well	85
1986 well	86
1990 well	90
Samples other than groundwater samples	XX

SAMPLE POINT		
First point	01	
Second point	02	
nth point	n	
Duplicate	DU	
Trip blank	TB	
Filtration blank	FB	
Sampler blank	SB	

SEPARATOR	
Slash	/

SAMPLER NUMBER	
First sample of round at sample point	1
Second sample of round at sample point	2
nth sample of round at at sample point	n

ROUND NUMBER	
First round of sampling	1
Second round of sampling	2
nth round of sampling	n

INVESTIGATION OF FORMER COAL GASIFICATION SITES
MECHANICVILLE

EXAMPLE SAMPLE IDENTIFICATION NUMBERS

ABB-ES	NYSEG
Monitoring Wells - Round 1	
MW-101	MEGUMW8601/14
MW-102	MEGDMW8602/14
MW-103	MEGDMW8603/14
MW-104	MEGDMW8604/14
MW-105	MEGDMW8605/14
MW-106	MEGDMW8606/14
MW-107	MEGDMW9007/11
MW-108	MEGDMW9008/11
MW-19A	MEGDMW909A/11
MW-19B	MEGDMW909B/11
Monitoring Wells - Round 2	
MW-201	MEGUMW8601/15
MW-202	MEGDMW8602/15
MW-203	MEGDMW8603/15
MW-204	MEGDMW8604/15
MW-205	MEGDMW8605/15
MW-206	MEGDMW8606/15
MW-207	MEGDMW9007/12
MW-208	MEGDMW9008/12
MW-29A	MEGDMW909A/12
MW-29B	MEGDMW909B/12
Borings	
B-7	MEEDB-XX07/11
B-8	MEEDB-XX08/11
B-9A	MEEDB-XX9A/11
B-9B	MEEDB-XX9B/11

INVESTIGATION OF FORMER COAL GASIFICATION SITES
MECHANICVILLE

EXAMPLE SAMPLE IDENTIFICATION NUMBERS
continued

ABB-ES		NYSEG
QA Samples - Round 1		
DUP-107	(soil)	MEEXB-XXDU/11
DUP-103	(groundwater)	MEGXM290DU/11
DUP-108	(soil)	MEEXSHXXDU/11
TB-101	(water)	MEGXMW90TB/11
FB-101	(water)	MEGXMW90FB/11
SB-101	(water)	MEGXMW90SB/11
Surface/Shallow Subsurface Soil		
SS-21	(soil)	MEEISHXX21/11
SS-22	(soil)	MEEISHXX22/11
SS-23	(soil)	MEEISHXX23/11
SS-24	(soil)	MEEISHXX24/11
SS-25	(soil)	MEEISHXX25/11
SS-26	(soil)	MEEISHXX26/11
SS-27	(soil)	MEEISHXX27/11
SS-28	(soil)	MEEISHXX28/11
SS-29	(soil)	MEEISHXX29/11
SS-30	(soil)	MEEISHXX30/11
SS-31	(soil)	MEEISHXX31/11
SS-32	(soil)	MEEISHXX32/11
SS-33	(soil)	MEEISHXX33/11
SS-34	(soil)	MEEISHXX34/11
SS-35	(soil)	MEEISHXX35/11
SS-36	(soil)	MEEISHXX36/11
SS-37	(soil)	MEEISHXX37/11
SS-38	(soil)	MEEISHXX38/11
SS-39	(soil)	MEEISHXX39/11

E.C. Jordan Co., 1986. Quality Assurance Project Plan - *Investigation of Former Coal Gasification Sites in New York States*; Prepared for New York State Electric and Gas Corporation, Binghamton, New York; April 1986.

NYSEG, 1989. *Installation Procedures for Monitoring Wells and Piezometers at Former Coal Gasification Sites*; Prepared for the New York State Electric and Gas Corporation, Binghamton, New York, by their Environmental Matters Group; June 1989.

SEEPAGE STUDY REFERENCES

A Field Exercise on Groundwater Flow Using Seepage Meters and Mini-piezometers*

David R. Lee
Department of Earth Sciences and
Department of Biology
University of Waterloo
Waterloo, Ontario N2L 3G1

John A. Cherry
Department of Earth Sciences
University of Waterloo
Waterloo, Ontario N2L 3G1

Abstract

Basic principles of physical hydrogeology and the nature of the hydrologic interactions between groundwater and surface water can be convincingly demonstrated in the field using two inexpensive and easily-constructed devices known as the miniature piezometer and the seepage meter. These instruments have been successfully used during a hydrogeology field course at the University of Waterloo and have been adopted as a routine teaching aid. Seepage meters and miniature piezometers are inserted in the sediment of shallow areas in lakes, estuaries, or streams. In a matter of a few hours, the devices can be installed, monitored, and removed. Information on the direction and rate of groundwater flow can be obtained. Hydraulic conductivity can be measured using several types of tests. Samples of the groundwater can be collected and, with field measurements of parameters such as specific conductance, dissolved oxygen, pH, and chloride, comparisons between groundwater and surface water quality can be made. Student investigations can include the identification of groundwater inflow or outflow areas in lakes, streams, or estuaries, measurement of the spatial and temporal variations in seepage flux through bottom sediments, and identification of zones of subsurface pollutant migration into surface waters. A day of equipment preparation and a preliminary site visit are prerequisites to the student field activities. Materials for a seepage meter and a miniature piezometer can be acquired for less than 25 dollars.

Key Words: education, hydrogeology, groundwater, limnology, hydrology, water quality, contaminant, seepage, field exercise, lake, stream, estuary.

Introduction

This paper describes the use of two simple inexpensive devices that enable students to measure the flow of groundwater and to demonstrate for themselves some of the basic principles of hydrogeology. A half-day field trip to a shallow body of surface water, preferably with a sandy bottom, makes it possible for students to acquire data that can serve as an impressive indication of the dynamic nature of groundwater flow in a natural setting. The methods are rapid and direct and provide information that cannot otherwise be obtained even if expensive drilling equipment is available. The exercise involves the use of seepage meters to measure groundwater flow rates and the use of manually-installed miniature piezometers to measure hydraulic head (groundwater potential) and hydraulic conductivity. These methods have been used during field experiments in a groundwater hydrology course at the University of Waterloo and as a means of investigating groundwater-flow conditions in lake- and streambeds. The devices are also being used in current research projects, including thesis studies by undergraduate and graduate students.

The basic elements of groundwater flow are related through the Darcy equation,

$$Q = A \frac{dh}{dl} K.$$

Q is the flux of groundwater (volume/unit time), A is the area through which flow occurs, dh/dl is the hydraulic gradient (the change in hydraulic head over a distance along the line of flow (unitless)) and K is the hydraulic conductivity of the material (usually expressed as cm/s). Hydraulic head is a measure of the energy per unit weight of the groundwater. Textbooks on hydrogeology such as Todd (1959), Davis and De Weist (1966) and Domenico (1972) present more detailed discussions of the Darcy equation and its significance in groundwater studies.

Figure 1 shows schematic illustrations of groundwater flow near lakes, in lake bottoms, and in stream bottoms. The flow systems are represented by isopotential lines (contour lines of hydraulic head) and arrows showing the direction of groundwater flow. In lake bottoms and streambeds groundwater flow is upward, downward, or horizontal but is rarely non-existent. The direction and rate of flow is dependant on the physiography, texture and stratigraphy of the subsurface materials. Locally, the flow in streambeds and lake bottoms can vary dramatically, thus providing a variety of observational conditions within a single study area.

The two devices described below provide information on the flow net and on the flux and velocity of water moving along the flow lines at and near the interface. The seepage meter and the minipiezometer also provide a means of sampling the water that is either leaving or entering the groundwater zone beneath the lake or stream. This can often serve to demonstrate the influence

*This work was sponsored in part by a research agreement with Environment Canada

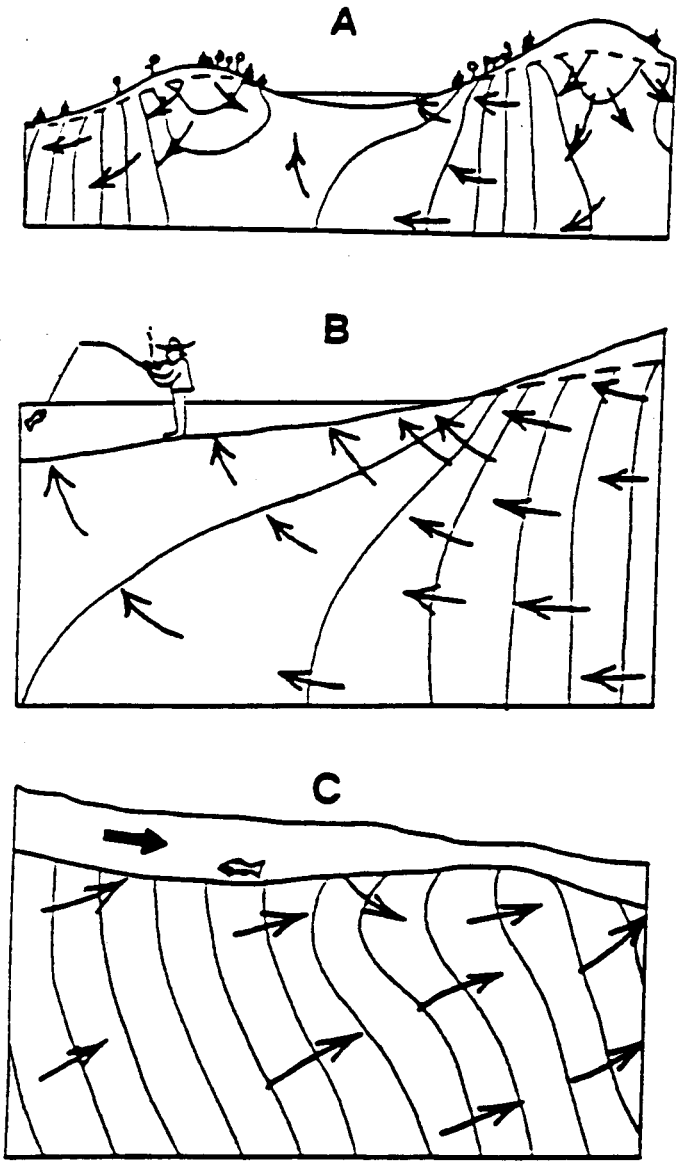


Fig. 1. — Idealized sections showing groundwater flow near bodies of surface water. A, topographic highs are recharge zones and the topographic lows (often occupied by lakes or streams) are discharge zones; B, pattern of groundwater discharge into a lake or estuary; C, longitudinal section of a streambed indicating flow into the sediment where the streambed is concave. (A modified from Winter, 1976; B modified from Lee, 1977; C modified from Vaux, 1968)

of groundwater on surface-water quality. In some cases it is possible to demonstrate that pollutants are fed to lakes or streams by groundwater seepage.

Miniature Piezometers

Piezometers are used to measure the hydraulic head in geologic materials that are saturated under positive pressure. They consist of pipes with slotted tips or well points on the end. Piezometers are normally installed in boreholes drilled by power auger, wash-boring, rotary drill or cable-tool equipment. Piezometers installed at depths between several meters and many tens of meters below ground surface have been used routinely by hydrogeologists and soil engineers for several decades. The miniature piezometer (mini-piezometer) is a similar device but is smaller in size and is installed manually.

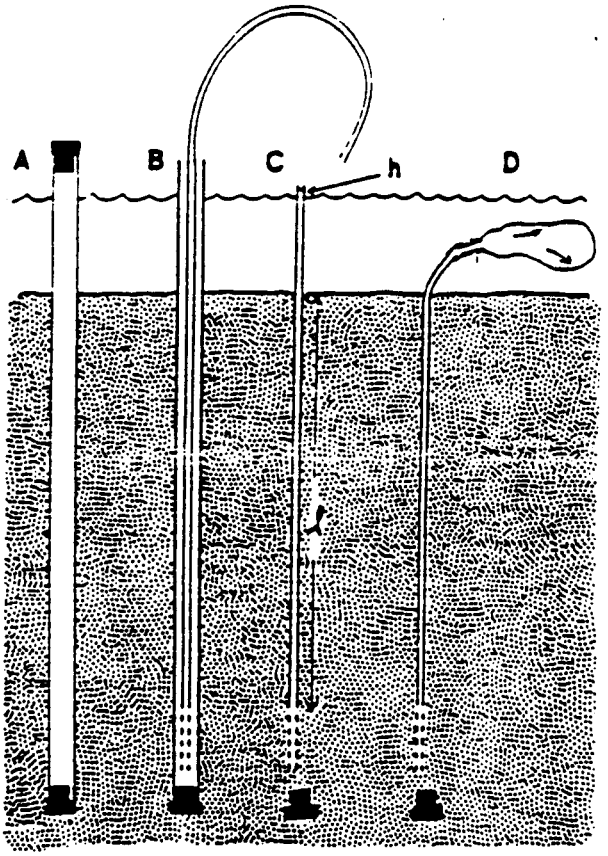


Fig. 2. — General features and method of installation of a mini-piezometer. A, casing driven into the sediment; B, plastic tube with screened tip inserted in the casing; C, plastic tube is a piezometer and indicates differential head (h) with respect to the surface water; D, plastic bag attached to the piezometer collects sediment-porewater. (See text for details)

Figure 2 shows the general features and method of installation of the mini-piezometer. The piezometer consists of a 0.31 cm ID translucent polyethylene tube (approximately $0.12/m) with a perforated tip wrapped with 0.2 mm nylon mesh netting or fiberglass cloth. The netting protects the tip from influx of sediment. The piezometer is installed using a 1.7 cm ID steel pipe that is driven into the bed by hammer or vibrator. The casing pipe is loosely fitted with 1.4 cm (5/8 inch) lag bolts at each end. When the steel pipe is driven to the desired depth the plastic tube is inserted and held in place as the pipe is pulled out. The bottom lag bolt remains in the sediment near the piezometer tip. Raised above the water level, the translucent tube shows the head differential with respect to the surface water.

Small differences in hydraulic head relative to the surface water are measured using a manometer that overcomes the difficulties of observing head differences that are slightly above or below the level of the surface water. The principle of the apparatus is indicated in figure 3A which shows how the difference in head between the piezometer and the surface water may be elevated and measured accurately. The equipment needed to measure this differential head in mini-piezometers is shown in figure 3B. The meter stick is attached to a rod and installed vertically next to the piezometer. The apparatus is prepared for use by blowing water out of the tygon tube using a rubber suction bulb. The bulb is squeezed and released slowly allowing water to rise to a static level. The

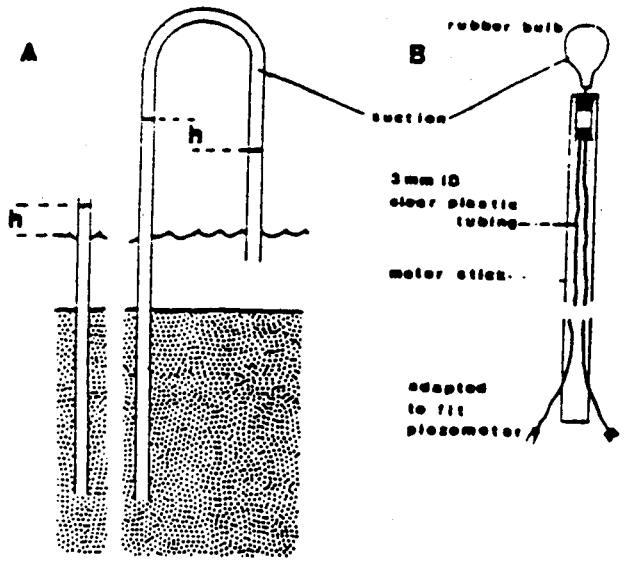


Fig. 3. — The manometer used to measure differential heads in minipiezometers. A, principle of operation; B, the field apparatus.

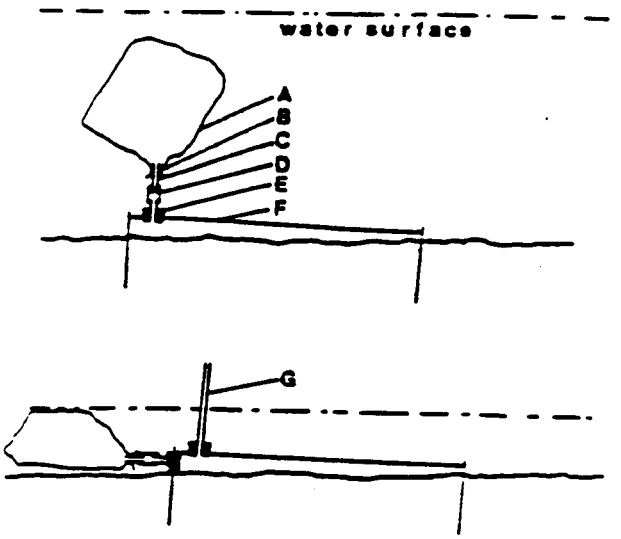


Fig. 4 — Full section view of seepage meter showing proper placement in the sediment. A, 4 liter, 0.017 mm membrane plastic Baggies Alligator bag (open end was heat sealed); B, rubber-band wrap; C, 0.64 cm inside diameter, 5 cm long, polyethylene tube; D, 0.79 cm inside diameter, 4.5 cm long, amber-latex tube; F, 15 cm x 57 cm diameter epoxy-coated cylinder (end-section of a steel drum); G, 0.64 cm inside diameter, polyethylene tube long enough to reach above the surface water.

levels in the two tubes are compared to be sure no bubbles of air are causing different heads in the two tubes. One end of the tube is then attached to the piezometer tube and the other is left in the overlying water. When the water levels in the two tubes reach static levels, the differential head, Δh, is read on the meter stick. The vertical hydraulic gradient is $\Delta h/\Delta 1$, where $\Delta 1$ is the depth of the piezometer screen below the sediment-water interface.

To measure the hydraulic conductivity of the sediment adjacent to the piezometer tip, two types of tests can be conducted, a falling head test and a constant head test. For the falling head test the piezometer tube is extended vertically above the surface-water level and then filled with water to a condition of overflow. The overflow condition is discontinued at a time that is recorded as t initial. The rate at which the water level in the tube declines is then recorded. This can be facilitated by taking stop-watch readings of times at which the water level passes marked intervals on the tube. If the hydraulic conductivity is very high, the rate of water-level fall will be very rapid. Increased accuracy can be obtained if the fall distance is lengthened by extending the tube a couple meters above the surface-water level or by feeding water to the piezometer from a larger diameter reservoir with marked intervals. A constant head test can be performed by placing a known volume of water in a plastic bag attached to the submerged tube. The hydraulic head in the submerged bag is the level of the stream or lake level. The change in volume of water in the bag over a recorded time interval is measured. Example results and calculation procedures are summarized in Table 1. The derivations of the equations used in this analysis were first presented by Hvorslev (1951) and have been summarized by Lambe and Whitman (1969). The constant head and falling head formulas are based on significantly different assumptions. Comparison of hydraulic conductivities determined by these two methods can be an interesting endeavor.

Where the hydraulic gradient is downward, groundwater from the piezometer can be collected using a suction bulb or hand-operated vacuum pump connected to a bottle. Where the gradient is upward samples can be obtained by simply letting water discharge from the piezometer tube. Where the gradient is weak or the material poorly conductive, the screened area of the piezometer tip must be increased and suction must be applied to obtain water samples.

Seepage Meters

Seepage flux between the groundwater and the overlying surface water can be measured directly by covering an area of sediment with an open-bottomed container and then measuring the time and change of water volume in a bag connected to the container (Lee 1977). Two of these devices, known as seepage meters (Fig. 4), can be made by cutting 15-cm-long, end-sections from a 0.208 m^3 (55 gallon) metal drum. Seepage meters can detect flux as low as 0.001 cm^3/m^2 s (about 0.1 mm/day) if the bag is left connected for a day or longer. In water over 20 cm deep, a single tube through the top of the seepage meter serves both as a vent for any gas released from the sediment and as a connection for the measuring bag. In shallow water an additional outlet tube on the side of the seepage meter permits the bag to be submerged as it must be to maintain the same piezometric head in the seepage meter and in the surface water.

In use, the seepage meter is pushed slowly into the sediment and tilted slightly so that the vent will function properly (Fig. 4). Unless the sediment surface is soft or irregular, it is often unnecessary to push the seepage meter more than 8 cm into the sediment to obtain an adequate seal. The stopper with tube is then twisted into cylinder hole. Where flow is upward, it is unnecessary to

Piezometer observations

Piezometer number: P1 Depth of screen below sediment: 1 m

Time	Δh,mm	Gradient Δh/1	Elapsed time, min	Volume change, cm³
1630	35	.035	—	—
1650	33	.033	—	—
1739	36	.036	—	—
1705-1723	—	—	18	+12

Hydraulic conductivity calculation: Assuming a case G screen (Hvorslev 1951),

$$K_h = \frac{q \ln [(mL/D) + (1 + (mL/D)^2]^{-.5}}{2 \pi L H_c}$$

, where

D = diameter, intake, sample (cm)
L = length, inake, sample (cm)
H_c = constant piezometric head (cm)
q = flow of water (cm³/s)
t = time (s)
m = transformation ratio, $(K_h/K_v)^{-.5}$ assumed to equal 1*
ln = 2.3 $\log_{10}$.

Therefore K_h =

$$\frac{(12 \text{ cm}^3/1080 \text{ s}) \text{ LN } [(10 \text{ cm}/.31 \text{ cm}) + (1 + (10 \text{ cm}/.31 \text{ cm})^2)^{-.5}]}{2 \pi (10 \text{ cm})(3.5 \text{ cm})}$$

$= 2.1 \times 10^{-4}$ cm/s

Seepage meter observations

Seepage meter number: SM 1
Depth of water: 0.2m
Sediment type: sand and organic matter

Time	Volume change, cm³	Elapsed time, min	Seepage flux, μm/s	Hydraulic conductivity, cm/s
1630-1648	+126	18	+.450	1.3×10^{-3}
1650-1736	+355	46	+.496	1.5×10^{-3}
1739-1752	+ 94	13	+.485	1.2×10^{-3}

Seepage flux calculation:

$$Q, \mu m/s = \frac{(\text{volume change, cm}^3)\ 0.0643}{(\text{elapsed time, min})}$$

$$= \frac{(126)\ 0.0643}{18} = 0.450\ \mu m/s$$

Hydraulic conductivity calculation:
From the Darcy equation K = v/S, where
v = Darcy velocity
S = hydraulic gradient, Δh/Δ1
K = hydraulic conductivity

Therefore $K = \frac{0.450\ \mu m/s}{0.035} = 1.3 \times 10^{-3}$ cm/s

* The effect of this assumption is small (e.g. If m = 10, $K_h = 2.7 \times 10^{-4}$ cm/s; If m = 1000, $K_h = 3.9 \times 10^{-4}$ cm/s.

before connecting it to the seepage meter.

The Darcy velocity, v, (volume per unit area per unit time) is calculated from the relation 0.0643V ÷ t = v, where V is the volume of water (cm³) entering or leaving the bag, and t is the elapsed time (min). The Darcy velocity is expressed as micrometers per second (1 μm/s = 8.64 cm/day). The factor 0.0643 converts units of time, volume, anc area covered by a seepage meter (0.255 m²) to equivalent units of velocity (μm/s) or seepage flux (cm³/m² s). The average linear interstitial velocity is equal to the Darcy velocity divided by the porosity of the sediment. For most sandy sediments, porosities are in the range of 0.3 to 0.4 (expressed as a fraction).

Student Activities

Students from the University of Waterloc used these techniques to investigate the migration of tritium-contaminatec groundwater to a small lake and stream in an experimental watershed at the Chalk River Nuclear Laboratories in eastern Ontario. To minimize the number of pieces of equipment required, this exercise was combined with stream-flow metering so the students could rotate from one activity to the other. Each student installed a piezometer and a seepage meter and measured piezometric head during seepage-measurement intervals ranging from 10 to 45 minutes. Because of the difficulty of removing deeper casings by hand, most students elected to emplace their piezometer 0.6 to 1 m into the sediment. Each student conducted a constant head test to determine the hydraulic conductivity of material near the piezometer screen, and then removed the seepage meter so that subsequent students could install the equipment themselves.

The study sites met the following selection criteria:
Wave height less than 0.3 m;
Current speed less than 0.2 m/s;
Firm sand with very little gravel and cobble; and
Water depth 0.1 to 0.6 m.

Preliminary measurements were made to be sure the students coulc install the equipment and find seepage rates high enough to complete the exercise in 2 to 3 hours. Because seepage rates are generally highest near the shore, as illustrated in figure 1B, and because shoreline areas were accessible by wading, students worked within 10 m of the shoreline.

Data collected by one student and some sample calculations are shown in Table 1. Piezometric head and seepage rate generally decreased with distance from the lakeshore but seepage rates were quite variable in the streambec. Current effects probably accounted for the variability of replicate seepage measurements in the stream. Streambed heterogeneity probably caused variability between points. No zones of downward seepage were found in either the lake or the stream.

Direct measurements of seepage flux, made by the students, showed that groundwater flowed into the lake along the northern shore. A pore-water constituent (in this case tritiated water) indicated that this seepage water is contaminated by tritium, contained in waste waters pumped into disposal pits locatec about 800 m north of the lakeshore. The use of seepage meters and mini-piezometers thus enabled the students within a very short time to draw conclusions with regard to the occurrence and source of contaminants entering the lake. Analysis of water from mini-piezometers in the nearby streambed

showed no tritium contamination despite the presence of considerable tritium in the stream itself.

The dynamic nature of the groundwater regime was demonstrated in a visibly impressive manner by filling of the measuring bag attached to the seepage meter. All but 2 of 14 piezometers functioned properly as indicated by raising and lowering the piezometer tube and watching the water level fall or rise to a static level and by the constant-head response tests. Failure to obtain responsive piezometers was due to lifting of the piezometer tube while pulling the casing out of the sediment and consequent loss of the nylon-mesh screen.

We anticipate that a similar approach could be used by others to teach general principles of hydrogeology. This exercise could be included as a part of an introductory course in hydrogeology. It could also be used in hydrology, limnology, geomorphology or sedimentology courses. It could serve as a springboard for student projects designed to determine the importance of the groundwater component to the water budget of a lake or pond, to identify contaminant migration from groundwater to surface waters, to study the effects of seepage flux on sediment chemistry, or to study the role of groundwater in fluvial erosion and deposition. Because these topics have only recently begun to receive research attention, this work offers an opportunity and a freshness which is attractive to students.

Planning the Field Exercise

Sandy shores of gravel-quarry ponds, lakes, reservoirs, and estuaries are ideal sites for these exercises, but the importance of making preliminary measurements to identify suitable sites cannot be overemphasized. Seepage rates must be high enough so that volume changes of at least 50 cm^3 can occur in the measuring bag in 1-2 hours. The sediment should not contain rocks which will bend piezometer drive-casings. Strong wave action and currents interfere with accurate measurements of seepage, although piezometers would probably not be affected adversely. Mud bottoms may not have sufficient flow to permit flux measurement in 1-2 hours.

In estuaries, where tidal fluctuations induce seepage flux through sediment, it may be helpful to consult tide tables before planning a field exercise. At low tide, the highest rates of upward seepage and the strongest upward gradients occur (Lee 1977), and it is easier to install seepage meters at this time. Estimates of net seepage flux will require measurement through an entire tidal cycle.

In streams where surface-water velocity is low and especially in sandy areas, these methods can be used successfully. In other stream environments, however, it may be difficult to find suitable demonstration sites. Downward seepage in streams may be induced where permeability or depth of gravel increases in the direction of streamflow or where the longitudinal bed profile is concave (Vaux 1968). These factors, heterogeneity and current, make data from streambeds more difficult to interpret than comparable data from quieter waters.

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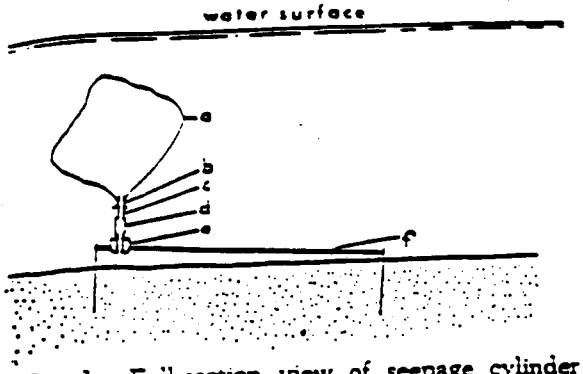


Fig. 1. Full-section view of seepage cylinder showing proper placement in sediment. a—4-liter, 0.017-mm-membrane, plastic Baggies Alligator bag (open end heat-sealed); b—rubber-band wrap; c—0.64-cm-ID, 6 cm long, polyethylene tube; d—0.79-cm-ID, 4.5 cm long, amber-latex tube; e—No. 5½ one-hole rubber stopper with polyethylene tube; f—15- × 57-cm-diameter epoxy-coated cylinder (end-section of a steel drum).

water flow systems around lakes (Born et al. 1974) and estuaries are poorly documented.

The usual approach for obtaining estimates of groundwater-surface water interaction is to install observation wells on land near the shore or in the water basin. The wells are then used to obtain measurements of the distribution of the hydraulic head and estimates of permeability. This is generally unsatisfactory because it is seldom feasible to estimate permeability by less than an order of magnitude and because surface-groundwater interaction is often controlled at or very near the sediment–water interface.

I thank J. K. Neel for guidance in the initial phases of this work. J. K. Neel, Q. L. Gehle, J. A. Cherry, and L. S. Clayton provided comments. Work space and equipment were provided by the staff of the Lake Sallie Fisheries Station, Minnesota Department of Conservation, and by the Department of Geology, Virginia Polytechnic Institute and State University. Part of this work appeared in my M.S. thesis (University of North Dakota).

Groundwater seeping into standing surface waters can be collected by covering an area of lakebed with a bottomless cylinder vented to a deflated plastic bag (Fig. 1). The cylinder is turned slowly (≈1 cm s^{-1}), open-end down, into the sediment until its top is about 2 cm above the sediment surface. The vent hole is elevated slightly so that any gas from the sediment may freely escape. The cylinder is marked and left for several days to allow benthic organisms to escape (although preliminary measurements can be started immediately). Then a stopper with tube is inserted into the cylinder hole.

To collect a sample, a deflated plastic bag is connected to the tube and left for a specified time or until it contains 0.5–3 liters. Where surface water seeps *into* the sediment, the plastic bag is filled with a known amount of water before it is connected to the tube. Macroscopic seepage velocity is determined as

$$v = \frac{1.075\ V}{t},$$

where V is liters of water entering (+ value) or leaving (− value) the bag, t is hours of elapsed time, and v is seepage velocity (+ is upward, − is downward) expressed as micrometers per second. The factor 1.075 converts units of volume, time, and area covered by the cylinder (0.255 m^2) to equivalent units of velocity ($\mu m\ s^{-1}$) or seepage flux ($ml\ m^{-2}\ s^{-1}$). The macroscopic seepage velocity should not be confused with the average interstitial velocity, which is equal to 100 times the seepage velocity divided by the percent porosity of the sediment.

Most problems in measuring seepage are due to improper placement of the cylinder. If the cylinder is not positioned with its hole near the highest point, gas from the sediment accumulates and reduces seepage. Measurements are also reduced if the cylinder lid presses against the lakebed. If the cylinder is pushed too rapidly into the sediment, blowouts can cause erratic results. In areas where sediment accumulates, the vent hole should be extended with a short length of pipe. Plugging from algal growth may necessitate periodic examination and cleaning of the vent tube. About 5 ml of water unavoidably enter the plastic bag during

connection. A lightweight, steel fence-picket notched to hook the lower edge of the cylinder, helps in removal of the cylinder. It is easier to find the cylinders if the tops are painted white. Material for constructing each seepage meter costs $4 to $9 (in 1976) if two cylinders are cut from one 55-gallon (208 liter) drum.

The method will probably find its greatest application where surface waters lie in high to moderately permeable material. Without modifications, it is not designed for use in the turbulent water of the surf zone or in rapidly flowing rivers. In fine, low permeability sediments, groundwater velocity may be too low to measure with this technique, or flow may be restricted to discrete springs or leaks.

The principle of the method described here was first used to measure water losses from irrigation canals (Israelsen and Reeve 1944). Other methods (Bower and Rice 1968; Warnick 1951; Zuber 1970) have also been suggested to measure flow into or away from surface waters, but all involve substantial cost and none is appropriate for sample collection.

Laboratory-scale tests were designed to see if the seepage meter gave an accurate measure of groundwater flow over the velocity range encountered in the field. A rectangular test tank 1.3 m deep and 1.26 × 2.66 m in area held a bed of sand (0.5–0.125-mm-diameter granules, 4% silt and clay) 0.76 m deep. A permeable plate supported the sand 10 cm above the bottom of the tank. Upward or downward seepage through the sandbed was controlled with a variable-head tank connected to the water beneath the permeable plate. An overflow pipe kept 0.40 m of water over the sandbed. The seepage flux through the sand was controlled by the difference in the piezometric head measured by two tubes, one open to the water beneath the permeable plate and one open to the water above the sand. Measurements of seepage flux were made at several hydraulic gradients ranging from −0.071 to 0.097.

Reproducibility of velocity measurements was evaluated at Lake Sallie, Minnesota. Two seepage meters were placed 0.15 m apart. Simultaneous measurements were made during 3 consecutive days and at longer intervals over 2 months. The water surface elevations were recorded for Lake Sallie and nearby Muskrat Lake, 50 m away and 1.6 m higher.

A site near the Duke Marine Lab (Beaufort, North Carolina) was selected for additional tests because there was a recording tide gauge operated by the National Oceanic and Atmospheric Administration. About 30 m southwest of the tide gauge, three seepage meters were placed 0.65 m apart on a line perpendicular to shore in water about 0.4 m deep at mean low tide. The sediment was composed of sand and pieces of shells. Seepage flux was measured during 53–79-min intervals over a complete tidal cycle. When the tide was above mean sea level, measurements were started with 1 liter of water in the bag to permit detection of seepage into the sediment.

For evaluation of the seepage meter as a groundwater collection device, a site was selected in an area of fairly uniform groundwater discharge at Lake Sallie. Wells were installed to intercept water before it reached the lake, and seepage meters were placed in the lake adjacent to these wells to collect entering seepage (Fig. 2). Wells, driven 1.72 to 2.11 m into the water table, were sampled 8 times during 108 days. Only small amounts of water (0.6 liter) and soil (20 to 30 g) were removed at each sampling.

Water samples were either frozen and analyzed several weeks later or stored at 0° to 5°C and analyzed within 48 h. Ammonia, nitrite, and nitrate nitrogen, and soluble orthophosphate were determined according to *Standard methods* (Am. Public Health Assoc. 1965, 1971). Specific conductivity was measured at 20°C with a conductivity bridge. Chloride was determined with a specific-ion electrode. Samples were analyzed for total phosphate by a persulfate procedure (Dominick 1971). Filtration through medium-grade filter

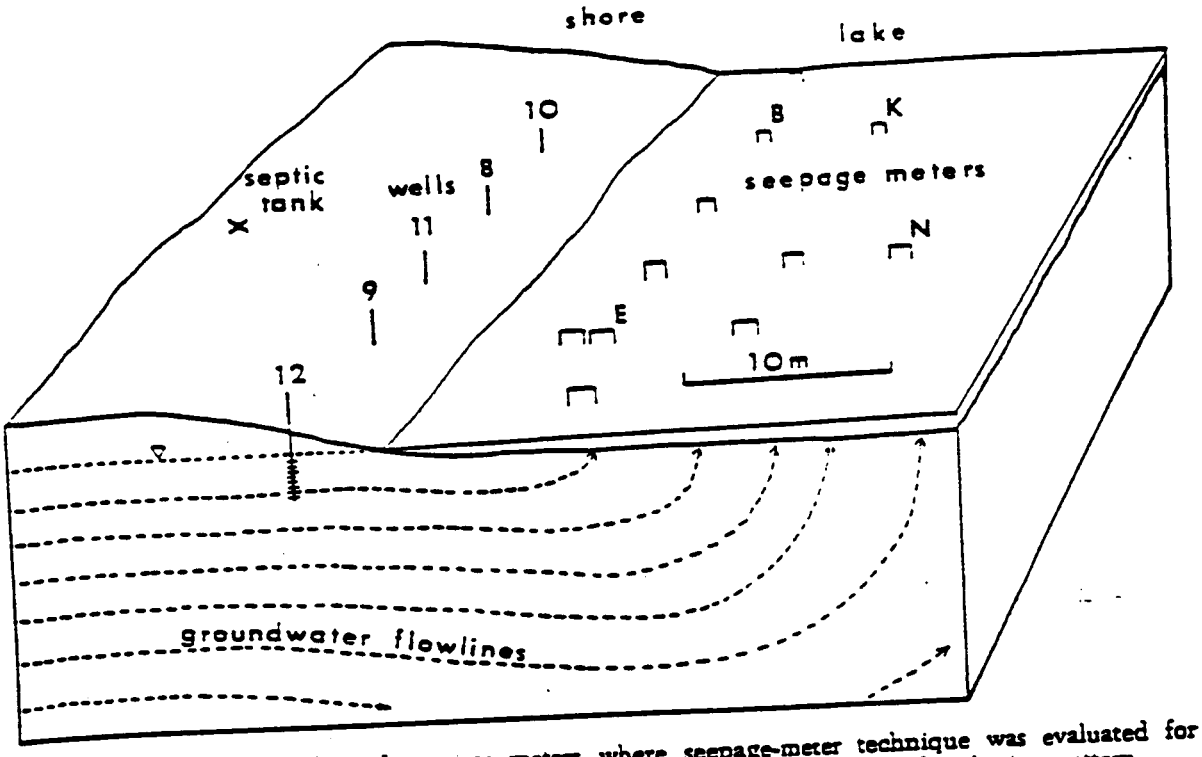


Fig. 2. Position of wells and seepage meters where seepage-meter technique was evaluated for collection of groundwater for chemical analysis. Flow lines show seepage distribution pattern.

paper (Sargent 501 or equivalent) preceded analyses for orthophosphate, nitrite, and nitrate.

Regression coefficients for the relation of velocity and hydraulic gradient in the experimental tank ranged from 0.995 to 0.994. Results for a representative seepage meter are shown in Fig. 3. Slopes for the regression lines for seepage at different locations in the test tank differed slightly (16 to 22 for upward seepage and 9.1 to 20 for downward seepage) probably due to heterogeneity in the test tank. However for any particular location in the tank, the slopes of the regression lines were significantly higher (at $p = 0.05$) for upward than for downward seepage. A 2–3-mm layer of fine clay particles accumulated at the surface of the sediment and these particles may have controlled permeability by impeding downward seepage more than upward seepage.

Results of the experiments on simultaneous measurement of seepage velocity showed that velocity for the two seepage meters always differed by about 0.1 μm s^{-1} and ranged from 0.596–0.854 μm s^{-1} over the 2-month period (Fig. 4). Variation in seepage velocity over time was not significantly correlated with changes in the relative elevation of nearby Muskrat Lake and Lake Sallie (Fig. 4). Changes in atmospheric pressure may have caused variations in velocity by changing the permeability of the sediment (Christiansen 1944; Peck 1960). Small variations in velocity were reproduced with closely placed seepage meters.

Measurements of velocity and water surface elevation during a tidal cycle at Beaufort, North Carolina, are presented in Fig. 5. Seepage velocity, measured with three seepage meters, was significantly correlated with water surface elevation ($R = 0.853$, $n = 32$). Seepage *into* the sediment (groundwater recharge) was detected in only 2 of 32 measurements. The close agreement of the three seepage meters over the tidal cycle showed that the technique gave reproducible results.

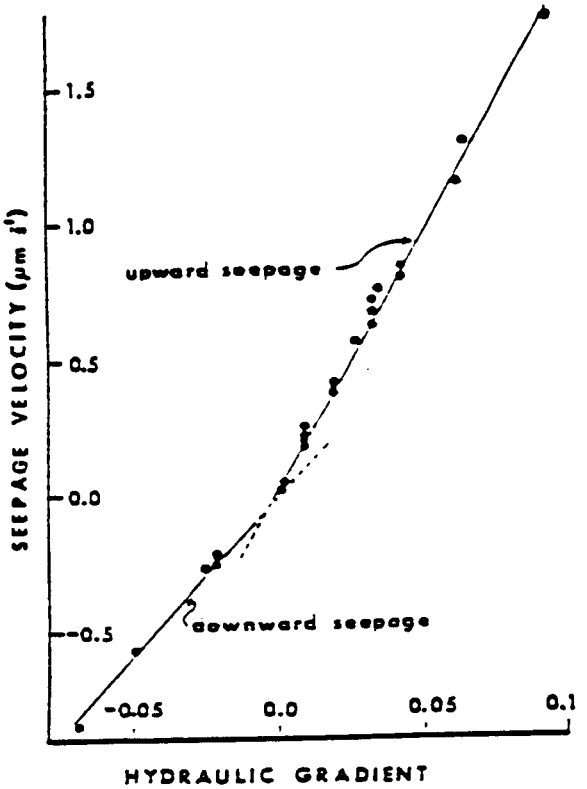


Fig. 3. Relation of hydraulic gradient and velocity measured with seepage meter in experimental tank. For upward seepage: velocity = (19.07 ± 0.32) gradient + (0.0220 ± 0.0012), R = 0.996, n = 29. For downward seepage: velocity = −(11.68 ± 0.94) gradient − (0.0028 ± 0.0110), R = 0.984, n = 7.

Along an 800-m segment of Lake Sallie shoreline, seepage measurements were made 5–160 m from shore. Near the midpoint of this section of shoreline, a site was selected for evaluation of the seepage meter as a groundwater collection device. At this site there was about 10 m of clean sand and gravel below the water table; the sand and gravel was underlain by a thick, relatively impermeable, clay layer (USGS well records, M.S. McBride personal communication).

A flow net (Fig. 6) was drawn assuming isotropic-homogeneous conditions, relatively low permeability of the underlying clay compared to the sand and gravel, and predominantly horizontal flow in the sand and gravel around the lake. The flow net showed that seepage velocity decreased exponentially with distance from shore and

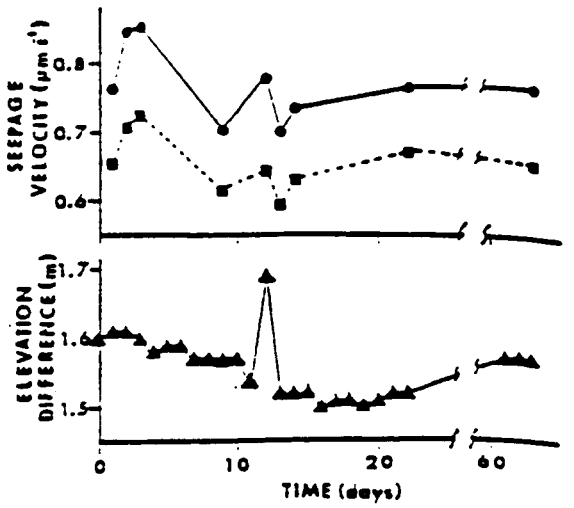


Fig. 4. Seepage velocity measurements from two seepage meters set 0.15 m apart, and relative elevations of lakes Sallie and Muskrat.

that shallow groundwater was discharged nearshore, deeper groundwater farther from shore.

Seepage measurements along the shoreline showed that nearshore discharge was rapid (0.3–0.8 μm s^{-1}) and that velocity did decline approximately exponentially

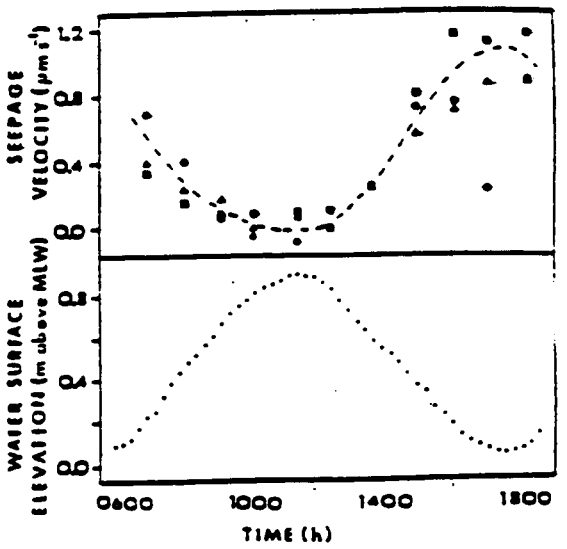


Fig. 5. Seepage velocity and water surface elevation during tidal cycle at Beaufort, North Carolina, 16 May 1975. Symbols (▲, ●, ■) denote different seepage meters. Water surface elevation data was obtained from NOAA tide gauge located at study site.

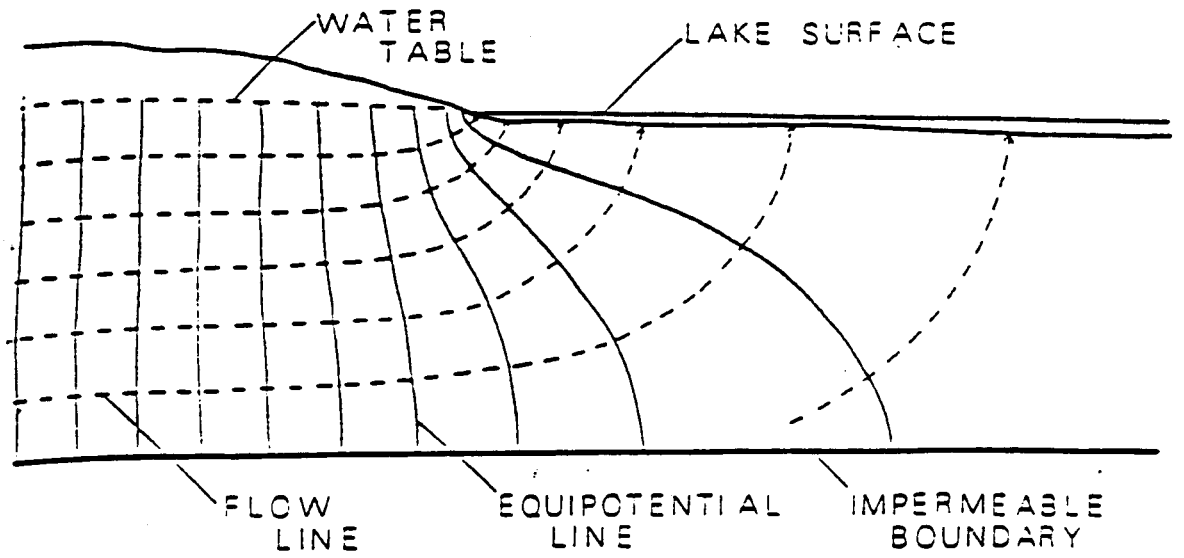


Fig. 6. Theoretical flow net showing distribution of groundwater discharge into Lake Sallie.

with distance from shore (Fig. 7). Substantial seepage influx occurred 60–80 m from shore, whereas the flow net showed high rates of flow to only about 15 m from shore. Seepage distribution would be skewed lakeward in this way if the horizontal to vertical permeability ratio were about 1 : 18 (Cedergren 1968), a common feature of glacial outwash terrain (Weeks 1969). McBride and Pfannkuch (1975) have also discussed the distribution of groundwater flow into lakes.

Seepage influx at the site adjacent to the wells ranged from 0.4–0.8 μm s^{-1}. Water collected from the seepage meters initially contained high and varying concentrations of orthophosphate (0.21–1.15 mg liter^{-1}) which eventually stabilized in the range 0.02–0.30 mg liter^{-1}, the average concentration being 0.15 (Fig. 8). Ammonia concentrations in the water collected from the seepage meters were also high initially, but there was a steady decline over a 2-month period. Ammonia levels dropped below 0.25 mg liter^{-1} after 900 liters of groundwater passed through the seepage meters. An exception, seepage meter E, consistently yielded water containing over

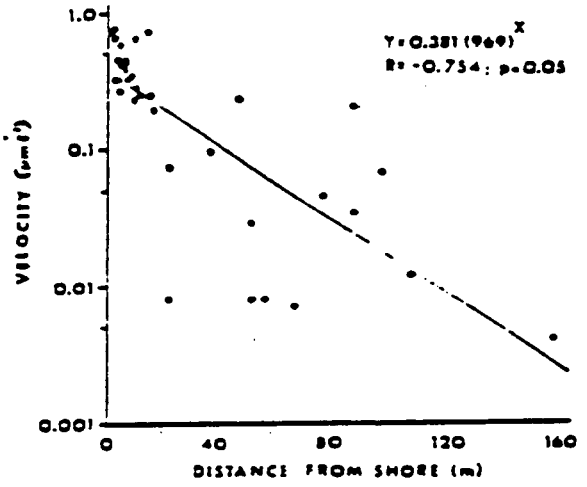


Fig. 7. Relation of seepage velocity and distance from shore along an 800-m shoreline segment at Lake Sallie.

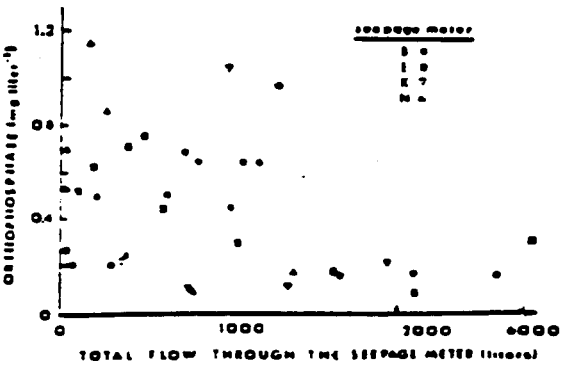


Fig. 8. Phosphate concentration and total groundwater discharged through four seepage meters over 4-month period.

Table 2. Chemical features of well water, lake water, and velocity and chemical features of seepage at a Lake Sallie experimental site, 1971.

Well no.		Ortho-PO_4	Total PO_4	NH_3-N	NO_3-N	Sp. cond. (umhos cm^{-1})	Chloride
8	Summary of	0.30 (±0.17)	4.49 (±1.64)	1.35 (±1.03)	12.4 (±6.4)	614 (±101)	30.1 (±39.2)
9	eight samples	0.45 (±0.25)	2.96 (±1.40)	0.46 (±0.29)	24.3 (±11.1)	782 (±208)	56.6 (±50.3)
10	collected	0.25 (±0.12)	4.05 (±2.65)	0.68 (±0.24)	11.0 (±1.6)	493 (±41)	8.73 (±1.86)
11	semimonthly	0.40 (±0.13)	2.84 (±1.91)	3.42 (±0.64)	31.8 (±5.1)	1160 (±103)	65.0 (±17.6)
12	Aug-Nov	0.15 (±0.10)	2.79 (±1.86)	0.36 (±0.19)	8.78 (±1.8)	423 (±42)	9.56 (±2.3)
Lake	23 Oct	0.20	0.40	0.02	0.026	363	21.1
	27 Nov	0.07	0.14	0.03	0.004	384	26.1
	30 Dec	0.09	0.28	0.16	3.92	-	-

Seepage meter		Liters through meter*	Velocity ($um\ s^{-1}$)						
B	23 Oct	1,510	0.623	0.15	0.54	0.13	10.0	460	-
B	27 Nov	1,930	0.276	0.16	0.20	0.08	12.3	459	4.95
B	30 Dec	2,380	0.543	0.14	0.32	0.00	8.8	-	-
E	27 Nov	1,460	0.764	0.17	0.22	2.09	13.2	490	10.3
E	30 Dec	1,940	0.487	0.08	0.32	3.4	14	-	-
E	26 May	4,050+	1.03	0.30	0.30	2.48	16.0	-	-
K	27 Nov	1,240	0.492	0.11	0.20	0.17	0.003	530	6.37
K	30 Dec	1,780	0.743	0.21	0.32	0.20	0.003	-	-
N	27 Nov	1,270	0.747	0.17	0.28	0.11	0.002	480	5.5
N	30 Dec	1,830	0.650	0.02	0.28	0.16	0.004	-	-

* This column shows the volume of water which flowed through the seepage meter before the sample was collected. The average flow during the preceding months was used to calculate this number.

+ This number, for a sample collected in 1972, was calculated using the autumn flow rate.

2.0 mg $liter^{-1}$ NH_3-N even after 4,000 liters of groundwater and 9 months had passed. However, the phosphate concentration in seepage meter E was not higher than that of the other meters at this site (Table 2). Wells 9 and 11 (Fig. 2), located lakeward of a septic tank, had the highest specific conductivity and the highest concentration of orthophosphate, nitrate nitrogen, and chloride (Table 2). Average orthophosphate concentration of water from the other wells (8, 10, and 12) was in the same range as the orthophosphate concentration of water from the seepage meters.

Some evidence indicated that a high nitrate zone capped the water table. The seepage inflow 7 m from shore (B and E, Fig. 2) contained from 8.8–16 mg $liter^{-1}$ NO_3-N, but in groundwater discharged 12 m and 17 m from shore, nitrate concentrations were <0.005 mg $liter^{-1}$ N. Average nitrate concentrations in the shallow wells near the lakeshore ranged from 8.78–31.8 mg $liter^{-1}$ N (Table 2). Monthly samples from a well 57 m from the edge of the lake contained 1.57–0.34 mg $liter^{-1}$ NO_3-N at the surface of the water table, but when the well was driven 0.5 m deeper, nitrate levels fell to <0.012. It is not uncommon to find high nitrate concentrations in shallow groundwater near the water table (Behnke 1975).

Lake water contained less phosphate, less inorganic nitrogen, lower conductivity, and higher chloride than the seepage water (Table 2). Seepage water contained about the same amount of orthophosphate and about the same conductivity as the well water not affected by the septic tank.

The inexpensive seepage meter was used on moderately permeable sediment of lakes and estuaries to measure seepage velocities ranging from −0.1–2.58 $\mu m\ s^{-1}$. Where seepage is upward, the seepage meter yields a sample of water which can be used for chemical analysis.

For the velocity range encountered in the field, a linear relation was observed between measured seepage velocity and an experimentally controlled hydraulic gradient. Changes in the rate and direction of seepage flux during a tidal cycle were correlated with changes in the water surface elevation of an estuary. Closely placed seepage meters gave reproducible results.

Velocity and chemistry of seepage inflow to Lake Sallie thus concurred with results predicted by the theoretical flow net: shallow groundwater discharged nearshore contained high concentrations of nitrate, whereas deeper groundwater, discharged farther from shore, contained very little nitrate; nearshore seepage was rapid and declined with distance from shore. Where groundwater discharge was relatively rapid (0.4–0.8 $\mu m\ s^{-1}$), water collected with the seepage meter became chemically consistent after about 4 months and was chemically similar to water from wells located along the same flow path.

David Robert Lee

Department of Earth Sciences
University of Waterloo
Waterloo, Ontario N2L 3G1

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CITIZEN PARTICIPATION PLAN

CITIZEN PARTICIPATION PLAN

1.0 Introduction to the Plan

The New York State Electric and Gas Corporation (NYSEG) is committed to a citizen participation program as part of its responsibilities for the clean-up of the Mechanicville Central Avenue former manufactured gas plant (MGP) site. Citizen participation promotes public understanding of the remedial investigation process, and proposed remedial activities that are planned for the site. This plan provides an opportunity for the public to express their concerns and have input into the investigation and remedial actions that are being planned for the site.

2.0 Basic Site Information

Former MGP sites are being investigated by NYSEG because by-products of the gas production process may be present on site. These by-products, predominantly coal tars, have the potential to adversely effect human health and/or the environment.

The Mechanicville Central Avenue former manufactured gas plant produced coal gas, a predecessor to natural gas, from 1901 to 1955. Coal gas was produced by heating coal under low oxygen conditions in brick ovens. The gas was then cooled and cleaned for impurities. Coal tars, coal ash, and gas purifier waste were by-products generated on-site. The majority of coal tar generated on-site was collected and sold to tar refineries. However, previous investigations of the site identified that coal tars are present on the site in the subsurface soils. These coal tars have the potential to migrate and impact groundwater.

The site is currently listed on the New York Registry of Inactive Hazardous Waste Sites. The site is classified by the New York Department of Environmental Conservation (NYSDEC) as Classification 2; a site posing a significant threat to the public health or the environment--action required. NYSEG disagrees with NYSDEC's determination as no health or environmental threat has been identified in previous studies. However, NYSEG does agree that remedial actions are necessary for the site because coal tars and impacted groundwater are migrating into the Anthony Kill adjacent to the site.

3.0 Project Description

In 1986, NYSEG contracted an independent environmental consultant, E.C. Jordan Co. (Jordan) to conduct a multi-phase environmental investigation of the site. NYSEG conducted this investigation on a voluntary basis. The investigation included performing testpits, soil and bedrock borings, monitoring well installation, sampling and chemical analysis of soil, groundwater, Anthony Kill surface water and sediments, and indoor air. All analytical work was performed using generally accepted sampling protocols at New York State certified laboratories. Coal tars were found in several subsurface structures and also found in the subsurface soils. In 1990, Jordan concluded that the coal tar was impacting the quality of the local groundwater and seeping into the Anthony Kill. The impacted groundwater was also discharging into the Anthony Kill.

Jordan's Risk Assessment of the site concluded that the site did not pose a significant risk to public health nor was there a significant environmental risk to the Anthony Kill. These conclusions were based on the surface water and sediment samples taken from the Anthony Kill, and modeling of the discharges to the Anthony Kill. Although no significant risks were identified, NYSEG proposed plans to conduct a feasibility study to eliminate the discharge of coal tars to the Anthony Kill. These plans were proposed to the NYSDEC in the Fall of 1991. NYSDEC Region 5 staff responded to NYSEG's proposal by requesting NYSEG to resubmit the site investigation reports in a format that is consistent with NYSDEC guidelines. NYSDEC also identified several areas where additional study were warranted.

To address NYSDECs concerns, NYSEG contracted ABB Environmental Services, Inc. (ABB-ES) formerly the E.C. Jordan Co., to conduct a Phase IIA supplemental investigation. The Phase IIA Work Plan focuses on assessing surface soils for PCB oil contamination and installing additional soil borings and monitoring wells, and piezometers downgradient of the site. Additional groundwater samples will be collected from the new and existing monitoring wells. Seep samples and additional sediment samples will also be taken from the Anthony Kill. Several locations have been identified where NYSEG had historically stored electrical equipment. These areas will undergo soil sampling for PCB contamination.

Upon analysis of the samples from the Phase IIA investigation sampling points, a Feasibility Study will be performed to identify remedial actions that will address

the discharge of coal tar, and coal tar constituents, into the Anthony Kill. In the event that PCBs are detected in shallow subsurface soil samples, the need for remediation will be evaluated based on state and federal requirements.

NYSEG anticipates conducting the Phase IIA field investigation activities in May of 1992. A Draft Final Report will be available for public review in November 1992. This schedule is dependent on NYSDEC approval of the Phase IIA Work Plan by March 27, 1992.

4.0 Identification of Affected/Interested Public (Contact List)

Public Officials

Patrick Hildreth, Mayor
City of Mechanicville
36 North Main Street
Mechanicville, New York 12118
(518) 664-8331

Commissioner of Health & Safety
Dan Golden
City of Mechanicville
36 North Main Street
Mechanicville, New York 12118
(518) 664-5651

NYS Department of Health, Distribution Office
Brian Fear, P.E.
282 Glen Street
Glen Falls, New York 12801
(518) 793-3893

Mr. Robert Hathaway, Chair
Saratoga County Board of Supervisors
40 McMaster Road
Ballston Spa, New York 12020

Honorable Joseph Bruno
NYS Senate
LOB Room 915
Albany, New York 12247

Honorable Robert D'Andrea
NYS Assembly
LOB Room 320
Albany, NY 12248

John Sheehan
Bureau of Env. Exposure Investigations
NYS Department of Health
2 University Place
Albany, NY 12203

Sue Collamer
Health Liaison
NYS Department of Health
2 University Place
Albany, NY 12203

State Superfund Board Members:

Mr. James Buhrmaster
President J.H. Buhrmaster, Inc.
P.O. Box 2120
Scotia, NY 12302

Mr. Richard D. Morse
Legislative Program and Council Staff
NYS Assembly
Room 520, State Capital
Albany, NY 12248

Mr. Jim Ransom
Akwesasne Mohawk Reservation
Council Building
Hoganburg, NY 13655

Judy Enck
NY Public Interest Research Group
184 Washington Avenue
Albany, NY 12210

Adjacent Land Owners:

Northerly - Izzo's
12 South Central Avenue
Mechanicville, New York 12118
(518) 664-7391

Southerly - Thomas J. Fiacco
139 North Second Street
Mechanicville, New York 12118
(518) 664-5539

Abutters on Easterly Side of Central Avenue

Clark Trading Corp.
501 Duanesburg Road
Schenectady, New York 12306

Frank Cocozzo & Bruce Brown
c/o Getty Petroleum
49 Riverside Drive
Rensselaer, New York 12144

No organizations Working on the Site

Media:

1) Daily Newspapers:

Albany Times-Union
Timothy O. White, Editor
News Plaza, P.O. Box 15000
Albany, New York 12212
(518) 454-5694

The Daily Gazette
50 North Main Street
Mechanicville, New York 12118
(518) 664-2508

The Saratogian
Barbara Lombardo
20 Lake Avenue
Saratoga Springs, NY 12866

2) Radio:

WMVI
Chris Martin, General Manager
38 North Main Street
Mechanicville, New York 12118

3) Television:

TV Channel 10
Don Desker, News Director
341 Northern Boulevard
Albany, New York 12204
(518) 436-0771

WRGB
Gary Whittaker, News Director
1400 Balltown Road
Schenectady, New York 12309
(518) 381-4988

Others:

Anne Rabe
Citizens Environmental Coalition
33 Central Avenue
Albany, NY 12210

George Hodgson
Environmental Management Council
50 West High Street
Balston Spa, New York 12020
Phone: (518) 885-5381

5.0 Identification of Department Contacts

NYSDEC Contacts:

Site Manager

James McClain
Assistant Sanitary Engineer
Department of Environmental Conservation
Route 66
Raybrook, New York 12977
(518) 891-1370

Public Information

Betsy Lowe
Department of Environmental Conservation
Route 86
Raybrook, New York 12977
(518) 891-1370

6.0 Identification of Document Repository

Mechanicville District Public Library
15 South Main Street
Mechanicville, New York 12118
(518) 664-4646

7.0 Description of Specific Citizen Participation Activities

Upon NYSDEC review, notice of development of the Phase IIA Workplan will be made to all contacts listed in Section 4.0 A copy of the final work plan will be kept at the designated repository. The workplan will be presented at a public meeting after final approval by NYSDEC. A minimum two week advance notice of the public meeting will be provided to the contact list. Site RI/FS updates will be submitted to the contact list every six to twelve months until the Phase IIA work is complete. When the Phase IIA work is completed, the final draft report will be submitted to NYSDEC and two copies will be forwarded to the repository identified in Section 6.0.

Although utility work adjacent to the site and sediment exposure was considered in the health assessment, to address NYSDEC concerns over possible exposure to site related chemicals at adjacent facilities, NYSEG will contact all abutters and public utilities which may conduct intrusive work adjacent to the site. For any planned intrusive activities, NYSEG will provide an assessment of the potential exposure risk and provide guidance on developing health and safety procedures.

It is anticipated that a Proposed Remedial Action Plan (PRAP) will be written after the approval of the Phase IIA report. The PRAP identifies the problems and the recommended remedial actions that are necessary for the site. The PRAP also identifies all the options that were evaluated to remediate the site and provides justification for the remedial action that was chosen. NYSEG staff will take the lead to setup a public meeting to present the results of the Phase IIA report and the PRAP with a two week minimum advance notice. A 30-day public review period will follow and NYSEG will address issues and concerns raised during the public review process. The final Remedial Action Plan (RAP) will include response to any issues raised during the review period. The two copies of the final version of the RAP will be sent to the repository.

8.0 Glossary of Key Terms and Major Program Elements

NOTE: The first eight definitions represent major elements of the remedial process. They are presented in the order in which they occur, rather than in alphabetical order, to provide a context to aid in their definition.

Site Placed on Registry of Inactive Hazardous Waste Sites - Each inactive site known or suspected of containing hazardous waste must be included in the Registry. Therefore, all sites which state or county environmental or public health agencies identify as known or suspected to have received hazardous waste should be listed in the Registry as they are identified. When possible, the Department carries out an initial evaluation of the site before listing.

Phase I Site Investigation - Preliminary characterizations of hazardous substances present at a site; estimates pathways by which pollutants might be migrating away from the original site of disposal; identifies population or resources which might be affected by pollutants from a site; observes how the disposal area was used or operated; and gathers information regarding who might be responsible for wastes at a site. Involves a search of records from all agencies known to be involved with a site, interviews with site owners, employees and local residents to gather pertinent information about a site. Information gathered is summarized in a Phase I report.

After a Phase I investigation, DEC may choose to initiate an emergency response; to nominate the site for the National Priorities List; or, where additional information is needed to determine site significance, to conduct further (Phase II) investigation.

Phase II Site Investigation - Ordered by DEC when additional information is still needed after completion of Phase I to properly classify the site. A Phase II investigation is not sufficiently detailed to determine the full extent of the contamination, to evaluate remedial alternatives, or to prepare a conceptual design for construction. Information gathered is summarized in a Phase II report and is used to arrive at a final hazard ranking score and to classify the site.

Remedial Investigation (RI) - A process to determine the nature and extent of contamination by collecting data and analyzing the site. It includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for, and proposed extent of, a remedial program for the site.

Feasibility Study (FS) - A process for developing, evaluating and selecting remedial actions, using data gathered during the remedial investigation to: define the objectives of the remedial program for the site and broadly develop remedial action alternatives; perform an initial screening of these alternatives; and perform a detailed analysis of a limited number of alternative which remain after the initial screening stage.

Remedial Design - Once a remedial action has been selected, technical drawings and specifications for remedial construction at a site are developed as specified in the final RI/FS report. Design documents are used to bid and construct the chosen remedial actions. Remedial design is prepared by consulting engineers with experience in inactive hazardous waste disposal site remedial actions.

Construction - DEC selects contractors and supervises construction work to carry out the designed remedial alternative. Construction may be as straightforward as excavation of contaminated soil with disposal at a permitted hazardous waste facility. On the other hand, it may involve drum sampling and identification, complete encapsulation, leachate collection, storage and treatment, groundwater management, or other technologies. Construction costs may vary from several thousand dollars to many millions of dollars, depending on the size of the site, the soil, groundwater and other conditions and the nature of the wastes.

Monitoring/Maintenance - Denotes post-closure activities to insure continued effectiveness of the remedial actions. Typical monitoring/maintenance activities include quarterly inspection by an engineering technician; measurement of level of water in monitoring wells; or collection of ground water and surface water samples and analysis for factors showing the condition of water, presence of toxic substances, or other indicators of possible pollution from the site. Monitoring/maintenance may be required indefinitely at many sites.

Consent Order - A legal and enforceable negotiated agreement between the Department and responsible parties where responsible parties agree to undertake investigation and cleanup or pay for the costs of investigation and cleanup work at a site. The order includes a description of the remedial actions to be undertaken at the site and a schedule for implemented.

Contract - A legal document signed by a contractor and the Department to carry out specific site remediation projects.

Contractor - A person or firm hired to furnish materials or perform services especially in construction projects.

Delisting - Removal of a site from the state Registry based on study which shows the site does not contain hazardous wastes.

Potentially Responsible Party Lead Site - An inactive hazardous waste site at which those legally liable for the site have accepted responsibility for investigating problems at the site, and for developing and implementing the site's remedial program. PRP's include: those who owned the site during the time wastes were placed, current owners, past and present operators of the site, and those who generated the wastes placed at the site. Remedial programs developed and implemented by PRP's generally result from an enforcement action taken by the State and the costs of the remedial program are generally borne by the PRP.

Ranking System - The United States Environmental Protection Agency uses a hazard ranking system (HRS) to assign numerical scores to each inactive hazardous waste site. The scores express the relative risk or danger from the site.

Responsible Parties - Individuals, companies (e.g., site owners, operators, transporters or generators of hazardous waste) responsible for or contributed to the contamination problems at a hazardous waste site. PRP is a potential responsible party.

Site Classification - The Department assigns sites to classifications established by state law, as follows:

- Classification 1 - A site causing or presenting an imminent danger of causing irreversible or irreparable damage to the pubic health or environment--immediate action required.

- Classification 2 - A site posing a significant threat to the public health or environment--action required.

- Classification 2a - A temporary classification for a site known or suspected to contain hazardous waste. Most likely the site will require a Phase I and Phase II investigation to obtain more information. Based on the results, the site then would be reclassified or removed from the state Registry if found not to contain hazardous wastes.

- Classification 3 - A site which has hazardous waste confirmed, but not a significant threat to the public health or environment--action may be deferred.

- Classification 4 - A site which has been properly closed--requires continued management.

- Classification 5 - A site which has been properly closed, with no evidence of present or potential adverse impact--no further action required.

State-Lead Site - An inactive hazardous waste site at which the Department has responsibility for investigating problems at the site and for developing and implementing the site's remedial program. The Department uses money available from the State Superfund and the Environmental Quality bond Act of 1986 to pay for these activities. The Department has direct control and responsibility for the remedial program.

PHASE IIA SUPPLEMENTAL REMEDIAL INVESTIGATION AND FEASIBILITY STUDY REPORT

FORMER COAL GASIFICATION SITE MECHANICVILLE, NEW YORK

Submitted by:

New York State Electric and Gas Corporation
Corporate Drive - Kirkwood Industrial Park
Binghamton, New York

Prepared by:

ABB Environmental Services, Inc.
110 Free Street
Portland, Maine

DECEMBER 1993

ABB Environmental Services, Inc.

ASEA BROWN BOVERI

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Project No. 4945-20

December 1993



Daniel P. Ostrye
Program Manager

Jeffrey E. Brandow, P.E.
Project Engineer

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1.0 INTRODUCTION

This Phase IIA Supplemental Remedial Investigation (RI) and Feasibility Study (FS) Report was prepared by ABB Environmental Services, Inc. (ABB-ES) for the New York State Electric and Gas Corporation (NYSEG) under Contract No. 85-159. It presents a summary of previous investigations and the findings of the Phase IIA Supplemental RI conducted at the Mechanicville Central Avenue Site (the site), Mechanicville, New York. In addition, this report presents the results of the FS completed to evaluate potential remedial measures that may be warranted to address certain environmental conditions encountered at the site.

1.1 BACKGROUND

In 1986 NYSEG initiated field investigation activities at the former coal gasification site at Mechanicville to assess the potential presence of residual by-products and wastes associated with former gas manufacturing activities at the facility. The investigation activities were conducted as four separate tasks completed during the period between 1986 and 1990. The results of the individual investigation activities were consolidated into a summary document entitled, "Investigation of the Former Coal Gasification Site at Mechanicville, New York; Phase II Remedial Investigation Report and Work Plan for Phase IIA Supplemental Remedial Investigation and Feasibility Study" (Phase II RI Report) which was submitted to the New York State Department of Environmental Conservation (NYSDEC) in June 1992.

In February 1993, NYSEG entered into an Order on Consent - Index #A5-0276-91-10 (the Order) with NYSDEC relative to the Mechanicville Site. The goal of the Order was to develop and implement a Phase IIA Supplemental RI and Feasibility Study (FS) which address health and environmental hazards and potential hazards attributable to the site. Work plans detailing the technical approach and specific supplemental investigation and feasibility study activities required in the Order were included in the Phase II RI Report. The work plan components of this report and modifications required pursuant to comments provided by NYSDEC in correspondence to NYSEG dated July 2, 1992, constitute the Work Plan as incorporated into the Order.

Field work activities associated with the Supplemental Investigation were conducted by ABB Environmental Services, Inc. between May 1993 and July 1993. The FS was conducted subsequent to receipt and evaluation the Phase IIA Supplemental RI data. The scope of the NYSDEC approved "focused" FS was modified to address comments provided by the NYSDEC project manager in a letter to NYSEG dated April 3, 1993. Specifically, the Work Plan was modified to address additional environmental media which were not initially included in the FS work plan.

This Phase IIA Supplemental Remedial Investigation and Feasibility Study Report presents and discusses the data collected from Phase IIA Supplemental field activities as they relate to the current understanding of site conditions developed from previous investigations of the site. The results of the FS are presented and discussed in the context of the requirements of the Order to address any presence of potential threat to the public health or environment posed by the presence of residual by-products and wastes associated with former site operations and any threatened release of such residual materials at or from the site.

1.2 Summary of Phase IIA Supplemental RI Field Work Activities

The following activities were completed during the Phase IIA Supplemental RI field program:

- the collection, field characterization, and laboratory analyses of twenty-four (24) surface soil samples;
- the installation of four (4) seepage meters in the Anthony Kill, the measurement of seepage rates, and collection and laboratory analyses of seepage samples;
- the collection, field characterization, instrumental screening, and laboratory analyses of six (6) sediment samples from the Anthony Kill;
- the completion of three (3) soil borings and the collection and laboratory analysis of two (2) subsurface soil samples;
- the installation of three (3) groundwater monitoring wells and the collection and laboratory analysis of one (1) round of groundwater samples from selected groundwater monitoring wells;
- the performance of in situ hydraulic permeability testing of zones in which new monitoring wells were screened;

- the measurement of water levels in selected overburden and bedrock monitoring wells to evaluate the direction of groundwater flow; and

- the completion of an expanded topographic survey.

1.3 REPORT ORGANIZATION

This RI report contains the following sections:

- Background (Section 2.0)
- Previous Investigations (Section 3.0)
- Summary of Phase IIA Supplemental RI Field Work (Section 4.0)
- Site Topography, Geology, and Hydrogeology (Section 5.0)
- Field and Laboratory Data (Section 6.0)
- Summary of Findings (Section 7.0)
- Conclusions and Recommendations of the Phase IIA Supplemental RI (Section 8.0)
- Feasibility Study Introduction (Section 9.0)
- Identification of Standards, Criteria, and Guidelines (Section 10.0)
- Identification and Screening of Technologies (Section 11.0)
- Development of Remedial Alternatives (Section 12.0)
- Initial Screening of Mechanicville Site Alternatives (Section 13.0)
- Detailed Analysis of Remedial Action Alternatives (Section 14.0)
- Comparative Analysis of Alternatives (Section 15.0)
- Recommendations of Remedial Action (Section 16.0)

The *Background Section* contains information concerning, among other things, site setting, site history, regional geology and regional hydrogeology. The *Previous Investigations Section* summarizes previous investigations conducted at the site. The summary of *Remedial Investigation Field Work Activities Section* contains a description of the Phase IIA Supplemental RI field work activities conducted at the site. The *Site Topography, Geology and Hydrogeology Section* presents ABB-ES' interpretations of geologic and hydrogeologic data collected during RI field work activities. The *Field and Laboratory Data Section* presents field characterization and laboratory analytical data collected during the Phase IIA Supplemental RI field work activities. The *Summary of Findings Section* summarizes the geologic and hydrogeologic data as well as the field characterization and laboratory analytical data relative to environmental conditions at the site. The *Conclusions and Recommendations Section* presents conclusions from the RI and presents recommendations for potential remedial activities at the site to be considered in the FS.

The *Feasibility Introduction* discusses the purpose and scope of this FS. *Identification of Standards, Criteria, and Guidelines* summarizes federal, state, and local SCGs and includes development of remedial objectives that apply to this site. *Identification and Screening of Technologies* focuses on technologies for controlling migration of overburden groundwater and coal tar at the site. *Development of Remedial Alternatives* assembles alternatives with different combinations of technologies based on observations and site features. *Initial Screening of Mechanicville Site Alternatives* uses criteria of implementation, effectiveness, and cost to screen assembled alternatives. *Detailed Analysis of Remedial Action Alternatives* focuses on the three alternatives that emerged from alternatives screening. *Comparative Analysis* of Alternatives compares advantages and disadvantages of each of the three alternatives, relative to one another, with regard

to evaluation criteria. This analysis is the basis for *Recommendations of Remedial Action*.

2.0 BACKGROUND

2.1 SITE SETTING

The site is located in the City of Mechanicville, Saratoga County, New York (see Figure 2-1). The site is bordered on the east by North Central Avenue (formerly Champlain Canal), on the south by Ferris Lane, on the west by a railroad right-of-way, and on the north by the Anthony Kill. Current site conditions are depicted in Figure 2-2.

Saratoga County is in the Valley and Ridge physiographic province of east-central New York (Heath, et al., 1963; Waller, et al., n.d.). The Hudson River forms the northeastern and eastern boundaries of Saratoga County; the Mohawk River, the largest tributary to the Hudson River, forms the southeastern boundary.

The nearest surface water body is the Anthony Kill, a small tributary to the Hudson River at Mechanicville, that borders the northern boundary of the site approximately 1,500 feet upstream from its confluence with the Hudson River.

2.2 HISTORY AND OPERATIONS

2.2.1 Description of Manufactured Gas Plant (MGP) Operations

The water gas process was used at the Mechanicville site to manufacture gas. According to available information, both the blue gas and carbureted water gas manufacturing processes were used during plant operations (USWAG, 1984). Prior to the 1950s, the blue gas process was used, after which the plant converted to the carbureted water gas process. The site plan circa 1910 is shown in Figure 2-3. The site plan circa 1951 is shown in Figure 2-4.

Blue gas was produced by passing steam over incandescent coke and recovering the released gases. Because the steam lowered the temperature of the fuel bed, air blasts were needed periodically to restore the temperature. Using the blue gas process involved alternating cycles of steam injection and air blasts (See Figure 2-3).

The carbureted water gas process was developed to raise the heat content (British thermal units [Btu]) of the gas. In this process, blue gas passes through a carburetor where a spray of oil is injected into the gas streams and subsequently thermally cracked in a superheater (USWAG, 1984). Hydrocarbon gases, such as methane and ethane, were formed in the superheater adding to the Btu content of the gas.

The oil used in the carbureted water gas process was stored in three (3) aboveground tanks underneath a platform supporting the oxide house. A

fourth aboveground tank (10,000 gallons) was located between the two gas holders as shown in Figure 2-4.

At the Mechanicville facility, gas flowed from the gas house to the purifier house to the relief holder, and to the larger distribution holder. All piping was underground (Elvins, 1986; McBride, et al., 1986). This flow path differs from the typical water gas plant where gas was stored in the relief holder prior to being purified. The oxide house apparently stored fresh and/or spent oxide material used to purify the gas.

By-products generated at the Mechanicville gas plant included: ash and condensate from the gas house; wood chips from the purifier house; coal tar; light oils; and tar/oil water emulsions. Information documenting the management of manufactured materials and by-product/wastes generated at the site have not been located. However, it was common practice to dispose of ash and spent oxide material on-site (USWAG, 1984).

According to NYSEG employees, the following methods of disposal were employed:

- The ash and clinkers (noncombusted material) were shoveled out of the generator at night and spread in the area between the relief holder and Ferris Lane.

- The condensate from the water gas purification process was treated in the tar dehydrator (tar separator). The oil was used for fuel and

the water piped through a series of filter beds located behind the coal storage building. These filter beds consisted of wood troughs (approximately ten (10) feet by six (6) feet, and four (4) feet deep) set in the ground and filled with coke. Baffles directed the flow through the coke and discharged the water into the Anthony Kill. The oily coke in the beds was collected periodically and burned in the gas house.

- Wood chips treated with iron oxide were used to remove cyanide and hydrogen sulfide from the gas in the purifier house. When free sulfur accumulated to approximately 50 percent of the mass, much of the iron was tied up in iron sulfide and ferrocyanides, and the spent wood chips were replaced by fresh ones. The plant employed several disposal methods for the spent wood chips: (1) incinerated by the City of Mechanicville from 1951 to 1955; (2) piled along the road until someone came and hauled them away; and (3) spread on the lot just west of the active plant area (NYSEG n.d. and E.C. Jordan Co. 1986).

- Residual coal tar condensed out of the purified gas and mixed with water in the bottom of the relief holder. The mixture was periodically pumped into a truck and hauled off-site.

2.2.2 History and Operation

Founded in 1900, the Halfmoon Light, Heat & Power Co. began gas manufacturing operations in 1901. The layout of the gas plant, circa 1910, is depicted in Figure 2-3. (Sheehan, n.d.). The plant was expanded in 1911 to include a larger water gas holder and distribution gas holder.

In 1924, the Halfmoon Light, Heat & Power Co. was acquired by the Associated Gas and Electric System. Four years later, in 1928, the Associated Gas and Electric System was incorporated into NYSEG (Sheehan, n.d.). The site contained the following facilities/structures as of 1951:

- purifier house
- tar dehydrator
- storage and tool house
- relief gas holder (40,000 cubic feet)
- distribution gas holder (100,000 cubic feet)
- boiler room
- substation
- coal storage area
- filter beds
- transformer platform
- gas regulator building
- radiator shop.

The plant layout in 1951 is depicted in Figure 2-4. Coal gas production continued at the site until 1955 (Elvins, 1986).

From 1955 to 1990, NYSEG operated a natural gas and electric service center until the center was relocated to Halfmoon, New York. During the service center's 1955-1990 occupation, electrical equipment, including new and used transformers, regulators and capacitors, was stored on site. Prior to the late 1970s, the transformers were stored on two wooden platforms. One platform was located on the south border of the site, along Ferris Lane; the other platform was located above the filter beds, east of the former boiler room/substation building. After removal of the platforms, the transformers were relocated to an area by the banks of Anthony Kill. Because of oil staining, the top 8 to 12 inches of soil beneath this transformer storage area were removed by NYSEG in August 1984. Twelve (12) drums of excavated soil were hauled to an approved disposal facility and the excavated area was backfilled with gravel.

Upon routine inspection, minor oil stains were identified at several other locations. A 12- by 24-foot area, located approximately 25 feet west of the former filter beds, was excavated to depth of 2 feet. The excavated soils were then disposed of under the assumption they contained polychlorinated biphenyls (PCBs). Following the excavation, five (5) samples were collected for laboratory analysis. One sample in the center of the excavation area contained 1.0 part per million (ppm) of the PCB Aroclor-1248. The excavation was then lined with plastic and backfilled with clean soil to the original grade.

NYSEG purchased the 0.25-acre lot adjacent to the site on the corner of Ferris Lane and North Central Street in 1924 (Bevis, 1986). The lot remained empty until the 1950s when NYSEG built the existing electrical substation. NYSEG also owns the property west of the site. NYSEG purchased the land between the railroad tracks and the Anthony Kill in 1952, and the land between the railroad tracks and Ferris Lane in 1987.

Recent environmental activities at the site included the removal of one (1) 3,000-gallon gasoline tank. One (1) 3000-gallon diesel tank was decommissioned in place. The tank removal was performed in 1991. Hope Oatman, New York State Department of Environmental Conservation (NYSDEC) Region 5 Division of Environmental Quality, was present to verify that the tanks were properly addressed and did not leak.

In October 1992, the building that formerly housed the boiler room and electric generating equipment was demolished leaving the foundation in place.

The site is currently unoccupied and serves as a garage and supply storage/maintenance shop. The site is bordered by a 6-foot chain-link fence on the east, south, and west perimeters and by the Anthony Kill to the north.

2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

Regional geologic and hydrogeologic descriptions are based on a review of available literature, regional geologic and hydrogeologic maps, and data gathered in Tasks 1, 2, and 3.

2.3.1 Regional Geology

Saratoga County is located within the Hudson River Valley. The geomorphology is predominantly glacial. Soils in this region include gravelly sands, ablation tills (deposited during the Laurentide Ice sheet), stratified silt and clay deposits, and silty shale (weathered bedrock). Overburden soils range from 0 to 50 feet in thickness. The near-surface strata may have been altered by cultural activities such as farming and urban development.

The bedrock topography in Saratoga County is part of a regional preglacial drainage system that was glacially scoured to form U-shaped valleys. The most prominent surficial bedrock feature is a buried tributary known locally as the Colonie channel which traverses the Clifton Park area in a north-south direction, approximately 4 miles southwest of the site. Within the U-shaped channel is a narrow V-shaped inner gorge that in some places has been cut to sea level.

The Mechanicville area is predominantly underlain by interbedded shales and sandstone. Regionally, the principal bedrock formations consist of tightly folded, faulted and jointed Ordovician shales including the Normanskill Shale, Snake Hill Formation, Canajoharie Shale, and the Schenectady Formation. These formations

are primarily composed of blue-black to grey shales that range in total thickness from 100 to 1,000 feet. Older crystalline rocks (e.g. quartzite, gneiss, and schist) outcrop approximately 12 miles northwest of the site. These formations dip to the east and become overlain by sandstones, carbonates, and the shales described above.

The site is underlain by thinly bedded blue-grey Ordovician shales. The upper 10 feet is highly fractured with increased competency with depth. The shale bedrock beneath the site is approximately 100 to 400 feet thick.

2.3.2 Regional Hydrogeology

In the Mechanicville area, the regional groundwater flow is to the east, toward the Hudson River. Fine-grained stratified clay and silt deposits underlie relatively extensive areas in the eastern part of Saratoga County including the City of Mechanicville. The clay and silt is, for all practical purposes, impermeable and will not yield water in usable quantities (less than 10 gallons per minute (gpm)). Sand and gravel deposits are also common in the eastern region of the county. The saturated thickness of these soil deposits range from 0 to 100 feet. (Health, et. al., 1963).

Only one of the 18 high-use aquifers designated for public water supply by the New York State Department of Health is located in Saratoga County. This aquifer, referred to as the Colonie channel aquifer, consists of a series of the sand and gravel deposits primarily located within the village of Clifton Park, 4 miles southwest of the Mechanicville site. The Colonie channel aquifer consists of

discontinuous sand and gravel deposits that are confined in most places by a thick sequence of lacustrine silt and clay. Several public water supply systems tap the Colonie channel aquifer. Production wells in this aquifer have yields in excess of 500 gpm. Overlying the lacustrine silt and clay is a veneer of lake and dune sands that form a surficial aquifer. This aquifer is hydraulically connected to the lower confined aquifer through ice-contact deposits, such as kames or kame deltas, that are exposed at the land surface. These deposits act as recharge areas for the underlying confined aquifer. (Reynolds, R.J. 1983).

The overburden deposits underlying the Mechanicville site are generally less than 30 feet thick and are composed of silts and clays as well as highly weathered silty shale. The permeability of these deposits is low, ranging from $2.2x10^{-5}$ to $1.9x10^{-4}$ centimeters per second (cm/sec) or 0.06 to 0.54 feet per day (ft/day). Due to grain size and low permeability, the overburden deposits at the site are likely to be associated with the impermeable silts and clays described above. The groundwater at the Mechanicville site is not hydraulically connected to the Colonie channel aquifer.

Regionally, groundwater within the bedrock flows along planes influenced by bedding, cleavage, faults and/or joints. As the weight of the overlying bedrock and soils increases with depth, the interstitial spaces between joints and fractures decrease. On average, groundwater flow velocities in bedrock also decrease with depth.

Several natural springs that produce highly mineralized water are present in the dolomite formations in Saratoga Springs, approximately 9 miles north of

Mechanicville. The flow at these springs appears to be controlled by the Saratoga fault, which trends approximately north-south. The fault plane runs approximately 5 miles to the northwest of the Mechanicville site. East of the fault, dolomite is overlain by shale preventing upward seepage of the water. Opposite to dolomite, to the west of the fault, lies crystalline bedrock which acts as an impermeable barrier. Groundwater flowing in the dolomite is forced up to the surface along the fault plane, creating Saratoga Springs.

Bedrock groundwater is extracted primarily from wells installed in the carbonate formations (dolomites and limestones). These formations outcrop in the Glens Falls area and underlie the shales to the south. In 1963, twenty-five (25) wells installed in the carbonate reported yields ranging from 1 to 300 gpm. The average yield was 30 gpm. 110 wells installed in the Ordovician shales produce an average yield of 10 gpm.

Based on boring data collected during Tasks 1 through 4, Ordovician shales underlie the Mechanicville site and outcrop along the norther border of the site, forming the banks of the Anthony Kill. Both the overburden and the bedrock at the site have been documented to produce low yields (approximately 10 gpm), with the nearest primary aquifer 4 miles to the southwest (upgradient). The closest domestic wells are located nearly 1 mile southwest (i.e., upgradient) of the site in the Town of Halfmoon. According to available information, there are no active industrial wells in the Mechanicville area.

3.0 PREVIOUS INVESTIGATIONS

This section presents a summary of the previous investigations performed to complete the RI at the Mechanicville site. Sub-tasks performed during Task 1 (The Preliminary Site Evaluation), Task 2 (The Initial Field Investigation Program), Task 3 (The Expanded Problem Definition Program), and Task 4 (The Risk Assessment) are described in Subsections 3.1 through 3.4. A summary of the results is presented in Section 3.5, followed by conclusions and recommendations pertaining to the site and future investigations.

3.1 TASK 1 PRELIMINARY SITE EVALUATION

The Task 1 Preliminary Site Evaluation was conducted in 1986 to develop an understanding of the site's history, environmental setting, and current conditions. The field work activities included a detailed site reconnaissance, interviews, file searches, and a geophysical survey.

The geophysical survey was conducted within the two parking lots of the NYSEG facility on North Central Avenue. The survey area was approximately one (1) acre in size. The ground-penetrating radar (GPR), terrain conductivity profiling (also referred to as electromagnetic profiling), and seismic refraction surveys were conducted along the traverse lines indicated on Figures 3-1 and 3-2.

3.2 TASK 2 INITIAL FIELD INVESTIGATION PROGRAM

The Task 2 Initial Field Investigation Program was conducted during the period of 1986 to 1987. The purpose of the program was to investigate the presence of manufactured gas plant (MGP)-associated wastes at the Mechanicville site. Field activities included the completion of test pits and soil borings; installation of monitoring wells; sampling of air, soils, groundwater, surface water, and sediments; laboratory analyses; and completion of a preliminary land use investigation.

The primary objectives of Task 2 were problem identification, preliminary risk assessment, and preliminary in-house engineering determinations. The following field activities were performed:

- Excavated five test pits for characterization of the subsurface geology of the site; installed piezometers in two (2) of the test pits to obtain groundwater elevation data; collected six (6) soil samples for laboratory chemical analyses.

- Drilled eight (8) soil borings and collected eight (8) soil samples for laboratory analyses; installed six (6) monitoring wells and one (1) piezometer.

- Performed in situ permeability tests at all wells and obtained five (5) rounds of groundwater elevation data from monitoring wells and piezometers.

- Collected quarterly groundwater samples from six (6) monitoring wells for laboratory analyses.

- Collected quarterly surface water and sediment samples at three (3) locations along the Anthony Kill for laboratory analyses.

- Conducted a topographic survey to identify surficial features and exploration locations.

- Conducted a preliminary land use survey within a half-mile radius of the site.

- Performed a preliminary assessment of the potential health and environmental risks posed by chemical constituents found at the site, and identified remedial alternatives to control the effects and risks.

- Identified additional data requirements and proposed a Task 3 program to obtain the necessary data.

The detailed scope of work and analytical results for Task 2 were described in the Task 2 Report for the Mechanicville site, submitted to NYSEG in April 1986.

3.3 TASK 3 EXPANDED PROBLEM DEFINITION PROGRAM

The Task 3 Expanded Problem Definition Program was conducted during the period of 1987 through 1989. Task 3 was designed to (1) confirm analytical results of the Task 2 investigation, (2) obtain further data on chemical distribution in soil and shallow bedrock at the site, (3) further investigate the potential for chemical migration in groundwater, (4) assess the air quality within the buildings on the site, and (5) identify potential chemical receptors and potential sensitive land users.

Task 3 consisted of the following subtasks:

- Performed a ground penetrating radar (GPR) survey adjacent to the site on the northern side of the Anthony Kill to extend the area of bedrock contouring.

- Excavated four (4) shallow and three (3) deep borings drilled for further site characterization, including the collection and laboratory analyses of soil samples and characterization of bedrock.

- Installed six (6) monitoring wells and collected two (2) rounds of groundwater samples for laboratory analysis and two (2) rounds of water level measurements.

- Performed in situ permeability tests of overburden materials in which monitoring wells were screened. Packer pressure tests were conducted in the deep bedrock wells.

- Updated the topographic survey to include all Task 3 explorations.

- Collected air quality samples at three (3) indoor locations and one background location at the property line fence to assess volatilized contaminants.

- Evaluated and interpreted geologic, hydrogeologic, and chemical data to provide an understanding of site conditions.

- Identified potential receptors of site-derived chemicals.

- Developed a proposed outline for a Task 4 program to assess risks on-site and at the site boundaries.

A detailed discussion of the scope of work and analytical results were presented in the Phase II Remedial Investigation Report submitted to NYSEG in June 1992.

3.4 TASK 4 RISK ASSESSMENT

The scope of the Task 4 Risk Assessment was developed based on information obtained during Tasks 1 through 3. The Risk Assessment was designed to

(1) identify and assess the potential risk associated with exposure to the chemicals present on-site, and (2) evaluate the need for and develop, if necessary, the scope for Conceptual Design (Task 5).

The subtasks completed as part of the Task 4 Risk Assessment included the following:

- Reviewed and summarized the Tasks 2 and 3 field investigation findings on the distribution of chemicals present on-site.

- Selected the contaminants of concern identified on-site that represent potential hazards at the site.

- Identified the possible pathways of exposure and potentially exposed populations at and near the site.

- Identified the potential hazards associated with exposure to the contaminants of concern including acute and chronic toxic effects of the compounds.

- Identified the dose/response data used to quantitatively assess risk (e.g., U.S. Environmental Protection Agency [USEPA] cancer potency factors and reference doses).

- Compared the environmental concentrations of chemicals on-site to existing state and federal health-based criteria and standards.

- Characterized the human health and environmental risks associated with exposure to site-related chemicals.

- Established the Target Clean-up Levels (TCLs) to protect against future potential exposure to contaminants of concern.

- Evaluated the need for a conceptual Remedial Design (Task 5).

The Baseline Risk Assessment is presented in Section 6.0 of the Phase II Remedial Investigation Report submitted to NYSEG in June 1993. A summary of the results and conclusions are presented in Subsections 3.5 and 3.6 of this report.

3.5 SUMMARY

Site Setting, History

The Task 1 report identified potential environmental problems in soils, groundwater, surface water and air. From the site reconnaissance, interviews, and file reviews, it was concluded that:

- Land use in the vicinity of the site is both residential and commercial. Day-care centers, schools, recreational areas, nursing homes, and elderly housing projects are located within a half-mile radius of the Mechanicville site.

- Coal gas was produced at the site for fifty-four (54) years, from 1901 to 1955;

- Coal tar residues accumulated in the base of the relief gas holder;

- Condensate from the water gas process was treated in a tar dehydrator and filter bed system before being discharged into the Anthony Kill;

- Residual ash from the gas generator was reportedly stored on the site before removal by various users;

- Wood chips and oxide wastes from the purifying house were hauled off-site for final disposal. Some spent chips may have been spread on the lot west of the active plant area.

Geology, Hydrogeology

The findings of the field investigations and analytical programs conducted during Task 1, Task 2, Task 3, and Task 4 at the site are summarized as follows:

- The shallow geology consists of 8 to 25 feet of heterogeneous fill deposits including a silty sand and gravel, a clayey silt and fractured shale, and a silty shale, all overlying fractured shale bedrock.

- The water table is approximately 5 to 10 feet below ground surface (bgs). Groundwater movement is principally within the silty shale and underlying bedrock fractures which are prevalent in the upper 10 feet of bedrock.

- Regional groundwater flow is west to east across the site, toward the Hudson River. Locally, groundwater flows to the north-northeast, discharging to the Anthony Kill.

Figure 3-3 shows sampling locations by task.

3.5.1 Nature and Extent of Contamination

Surface Soil

No PCBs were detected in any of the collected surface soil samples. This includes sample SS-5, which was obtained next to the PCB waste-oil drums. Additionally, no volatile organic compounds (VOCs) were detected in samples SS-1 through SS-5. A trace of bromomethane was detected in sample SS-3, but at a concentration below the detection limit for that sample. In addition, this compound was not detected in the duplicate sample, SS-3A. Cyanide was detected in two (2) surface soil samples, SS-1 and SS-3A (no cyanide was detected in the replicate sample SS-3) at 1.8 and 1.9 ppm, respectively. Both samples were collected from the area behind the garage offices and storeroom building, along the upper bank of the Anthony Kill. Several polycyclic aromatic hydrocarbons (PAHs) were detected in samples SS-1 through SS-4, including the duplicate

sample. Concentrations of total PAHs ranged from 9.1 to 71 ppm. No PAHs were detected in sample SS-5. Bis(2-ethylhexyl)phthalate (BEHP) was found in insignificant concentrations in two samples plus the duplicate sample. Although this compound is a common laboratory contaminant, no BEHP was detected in the laboratory blank; therefore, this compound is considered to be present in the surface soil. One other semi-volatile organic compound (SVOC), di-n-butyl phthalate, was detected in several samples. However, this is also a common laboratory contaminant and was found in the laboratory blank at similar concentrations. Therefore, this compound was not considered to be present in surface soils at the site.

Subsurface Soil

Analyses of subsurface soil samples from the field investigation program showed the presence of coal tar and MGP-related compounds (i.e., VOCs, PAHs, and cyanide) near the former relief gas holder, purifier and oxide houses, and filter beds. The highest levels of VOCs and PAHs were detected in samples collected at or near these sites. The highest levels of VOCs (3,800 and 3,410 ppm) were observed in samples collected from B-8 (at depths of 13.5 to 15.5 feet and 15.5 to 17.5 feet), which is located beneath the foundation of the former gas relief holder. The highest levels of PAHs were observed in samples obtained from B-8 (5,440 ppm), TP-5 (8,500 ppm; adjacent to the filter beds), and B-3 (9,310 ppm in the vicinity of the former purifier and oxide houses). Deep soil samples (deeper than 15 feet) contained lower levels of organics than the samples collected from shallow soils.

Iron levels ranged from 18,000 to 35,000 ppm. The lower concentrations were in the deeper fine silty sand. Higher levels were seen in shallow fill samples. Zinc levels generally ranged from 32 to 390 ppm, except for one Task 2 sample (B-5/S-1), which contained 1,600 ppm.

Cyanide was detected in three (3) subsurface soil samples at levels ranging from 1 to 3.2 ppm. These samples were collected in the vicinity of the former purifier and oxide houses. The concentration of cyanide in this area is most likely due to spillage during cleaning of the purifier house (Wilson and Stevens, 1981).

Phenolic compounds were found in four (4) soil boring samples at depths of 4 to 11 feet. Concentrations ranged from 0.74 to 3.6 ppm. These samples were collected in the vicinity of the former filter beds and the former gas and purifier houses. Phenolics are widely distributed in the environment due to both natural (i.e., vegetative decomposition) and man-made processes. Tars and wastewaters at coal gas plants are a source of phenolics; however, the tars produced by water gas plants such as the one at Mechanicville usually contain only negligible amounts of phenolics.

Groundwater

Cyanide was detected in all wells except MW-11. The highest levels of total cyanide (0.58 to 0.8 ppm) were observed at MW-12 during Task 3. During Task 2, a maximum level of 0.42 ppm was reported at MW-3. Well MW-12 is located downgradient from the former relief gas holder while MW-3 is downgradient from the former purifier/oxide structures.

Volatile aromatic compounds, a subset of VOCs, were detected consistently in all wells except MW-1, MW-2, and MW-11. MW-1, MW-10, and MW-11 are located upgradient of the former coal gasification plant. MW-2 is downgradient from the former distribution gas holder, but soils data from B-2 and B-7 suggest little or no contamination in this area. Concentrations in the bedrock wells (MW-6, MW-13, MW-14, and MW-15) were generally greater than those detected in the shallow wells. Other VOCs, including 1,1,1-trichloroethane, 1,1-dichloroethane, and trichloroethylene were detected in several samples. These compounds show no spatial pattern of occurrence (i.e. shallow versus deep, upgradient versus downgradient) and are not typically associated with MGP-associated wastes. They are not believed to be site-derived (E.C. Jordan Co., 1989; GRI, 1987).

PAHs were observed in at least one (1) sample from all wells except MW-1, MW-2, and MW-11. The average concentrations of all the samples collected at each well ranged from nondetectable (at MW-1, MW-2, and MW-11) to 0.75 parts per billion (ppb) at MW-12. The maximum levels of 1500 and 1564 ppb were observed at wells MW-12 and MW-5, respectively. The distribution of PAHs in the groundwater is similar to the distribution in the soil, indicating that contaminated soil is associated with PAHs in the groundwater.

The groundwater sampling data indicate that the detected PAHs are particulate in nature, rather than dissolved species. Some measured concentrations greatly exceed the solubility of PAHs in water. The solubility of PAHs ranges from 0.50 ppb for dibenzo(a,h)anthracene to 620 ppb for indeno(1,2,3-cd)pyrene. Thus, the groundwater concentrations must not be indicative of dissolved PAH concentrations. This conclusion is consistent with the sampling protocol, because

groundwater samples for organics are not filtered prior to analysis for organic contamination.

Dissolved iron was present in at least one (1) sample from every well. Wells MW-1, MW-2, MW-10, and MW-11, considered to provide the most representative background concentrations, contained concentrations ranging from 0.04 to 1.4 ppb. The wells with the highest concentrations of dissolved iron were MW-3, MW-4, MW-5, MW-6, and MW-12. These were the same wells with the highest concentrations of PAHs.

Dissolved zinc was detected at least once in every well. Samples from MW-4 and MW-5 contained unusually high levels (0.52 to 1.09 ppb). Samples from other wells showed fairly uniform concentrations (0.01 to 0.11 ppb). This uniformity suggests that zinc is a natural constituent of site groundwater which has not been elevated by site activities (E.C. Jordan Co., 1989).

Total recoverable phenolics were detected in all wells. The maximum concentration in shallow wells was 17 ppb while the maximum concentration in deep wells was 0.3 ppb.

Surface Water

No volatile aromatics were detected in any surface water samples. PAHs were detected once at the location adjacent to the site at a concentration of 0.105 ppb. Other organics detected during Task 2 included methylene chloride (upstream), acetone (adjacent), and BEHP (all locations). These compounds were found at

concentrations less than 0.1 ppb. They were also found in some sampler and trip blanks. During Task 3, BEHP was found upstream on both sampling occasions at concentrations less than 0.5 ppb; it was not found adjacent or downstream of the site. These three contaminants (methylene chloride, acetone, and BEHP), when present at low concentrations, are common laboratory contaminants. It is unlikely that they are derived from the site (GRI, 1987).

Iron was found at all four locations at levels ranging from 0.2 to 1.8 ppb. The highest concentration was found adjacent to the site. Zinc was detected in at least one (1) sample from three (3) locations; only the downstream sample collected during Task 3 had no detectable zinc. Concentrations ranged from 0.01 to 0.03 ppb. Phenolics were detected in at least one (1) sample from all locations except the upstream and adjacent locations sampled during Task 3. Cyanide was not detected in any of the Task 3 samples. It was detected in at least one (1) sample in each Task 2 location.

Sediment

Three VOCs were detected in the sediments. During Task 2, Round 3 sampling, benzene and toluene were found at a concentration of 0.07 ppm, adjacent to and downstream from the site. During Task 3, ethylbenzene was detected at a level of 0.087 ppm adjacent to the site, along with a trace concentration of benzene. These contaminants are associated with coal tar wastes as well as petroleum products and industrial chemicals.

Analysis of Task 2 and Task 3 sediment samples indicated that PAH concentrations adjacent to the site are elevated compared to upstream and downstream sampling locations. Sampling location SD-2 contained trace levels up to 75.8 ppm of total PAHs during Task 2 sampling, and trace levels to 5.1 ppm during Task 3 sampling.

Concentrations of iron and zinc were fairly consistent in the four (4) locations. Iron concentrations ranged from 7,100 to 33,100 ppm, while zinc concentrations ranged from 25 to 100 ppm. Cyanide compounds were not detected in any Task 2 samples, while in Task 3 a cyanide level of 1.3 ppm was detected adjacent to the site. Phenolics were detected in Task 2 Round 4 samples at all three (3) locations at comparable levels (1.8 to 6.1 ppm). During Task 3, phenolic levels ranged from 0.68 to 2.3 ppm.

Indoor Air

The results of the indoor air program revealed low levels of benzene and toluene at most sampling locations. The only exception was benzene, which was not being detected in the background sample. Ethyl benzene and xylenes were below analytical detection limits for all samples.

The highest indoor levels of toluene and benzene were found in the storeroom. A possible source of benzene in the storeroom may be a forklift used in this area. Although the engine was not running during the sampling period, it is possible that residual gasoline vapors had volatilized into the air. Toluene was detected in the background sample at higher levels than two (2) of the indoor samples. It was

highest in the garage. It is possible that the sample was affected by vehicle use in the area.

Contaminants of Concern

No contaminants of concern were chosen for surface water or groundwater. This is because there was no indication of site-related surface water contamination, based on the Task 2 and 3 surface water sampling results. Also, groundwater is not a current source of drinking water nor does it represent a potential source for the future. Therefore, ABB-ES' evaluation of the risks associated with groundwater consumption is limited to a comparison of the concentrations found to groundwater or drinking water standards.

Chemicals were selected as contaminants of concern in subsurface soil, sediment, and indoor air based upon their concentrations, frequency of detection, and toxicologic properties. All chemicals detected in surface soil samples SS-1 through SS-4 were chosen as contaminants of concern for this medium. All the contaminants of concern are associated with coal gasification activities.

Both carcinogenic and noncarcinogenic PAHs were detected at a high frequency and magnitude. Of the sixteen (16) PAHs detected at the site, seven (7) have been classified as potential human carcinogens and were selected as contaminants of concern: benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. In addition, several PAHs were chosen as contaminants of concern to represent the noncarcinogenic hazards of PAHs: naphthalene, pyrene, acenaphthene,

acenaphthylene, phenanthrene, fluoranthene, fluorene; anthracene, 2-methylnaphthalene, and benzo(g,h,i)perylene.

Although iron and zinc were found in all samples, they were not selected because they are of such low toxicity. In addition, levels in soil were similar to background levels at the site, while levels in sediment were within an average background range. Other compounds such as acetone, BEHP, butylbenzyl phthalate, di-n-octyl phthalate, carbon disulfide, 4-methylphenol, and propyl benzene were not chosen because of their low frequency of detection. In addition, some of these compounds are common laboratory contaminants and therefore may not actually be present on the site.

3.5.2 Fate and Transport

Chemicals related to former MGP activities are present in the soils and in the shallow and deep groundwater near the former gas plant structures; specifically, the purifier and oxide houses, the relief gas holder, and the filter beds. The concentrations of six (6) compounds (i.e., benzo(a)pyrene, benzene, styrene, total cyanide, iron, and phenolics) and total organics in shallow and deep groundwater exceeded the relative New York State Drinking Water Standards. Benzene and toluene were found in all air quality samples collected, but concentrations did not exceed applicable Occupational Safety and Health Administration (OSHA), American Conference of Governmental Industrial Hygienists (ACGIH), and National Institute for Occupational Safety and Health (NIOSH) standards.

The primary routes identified for off-site chemical migration are via groundwater in the shallow and deep bedrock fractures, and the silty shale fill. Chemical migration is influenced by an east-trending shallow bedrock trough located downgradient of the relief gas holder.

Migratory pathways for chemical migration or transport off-site include air (primarily during excavation of site soils), surface water, groundwater, and sediments.

Potential receptors for chemicals found at the site include more sensitive segments of the population, including the elderly, young children, and the infirm. Additionally, people in the vicinity of the site may be exposed to airborne chemicals predominantly during excavation activities.

3.5.3 Risk Assessment

The significant findings of the Risk Assessment were as follows:

- The contaminants of concern identified in the soil and sediment at the site include carcinogenic PAHs and benzene and several noncarcinogens (toluene, ethylbenzene, styrene, PAHs, trimethylbenzene, xylenes, and cyanide).

- For the public health risk assessment, ABB-ES identified probable exposure pathways by which people could come in contact with site-derived chemicals under current and future conditions, assuming no

remedial action at the site. These included the following: direct contact with and incidental ingestion of surface soil, subsurface soil, and Anthony Kill sediment, and inhalation of volatile compounds and soil particulates.

- Potential carcinogenic and noncarcinogenic risks to human health were estimated under these assumed exposure pathways. Estimated incremental lifetime carcinogenic risks were within the target risk range for both the most probable and realistic worst exposure scenarios, for all of the exposure pathways identified. (USEPA guidelines state that the total incremental carcinogenic risk for an individual resulting from exposure at a hazardous waste site is generally within a range of 10^{-4} and 10^{-6} with a risk of 10^{-4} interpreted as an additional 1 in 10,000 chance of an individual developing cancer during a lifetime, as a result of the exposure.)

- The noncarcinogenic Hazard Indices (HIs) were all well below the cutoff of 1.0, indicating that no significant adverse noncarcinogenic effects would be expected.

- Because Mechanicville site groundwater is not currently used or expected to be used in the foreseeable future as a source of drinking water, public health risks associated with the groundwater are negligible. Groundwater beneath the site, however, does contain several contaminants at levels above both USEPA and New York drinking water standards.

- It is unlikely that the site is significantly utilized by wildlife because of the industrial nature of the area and the lack of suitable habitats. Aquatic organisms in the Anthony Kill, immediately adjacent to the site, were determined to be the environmental receptors most likely to be affected by site-related contamination.

- Contaminated groundwater from the site is discharging to the Anthony Kill; however, due to the dilution, volatilization of VOCs, and sorption of PAHs to soils (PAHs are relatively insoluble in water), no detectable concentrations of site related contaminants are present in surface water samples collected from the Anthony Kill.

3.6 CONCLUSIONS

The conclusions from the Tasks 1 through 4 field investigations and analytical programs are summarized as follows:

- The soils and groundwater in the former active plant area contain chemicals related to the coal gasification process.

- Coal gasification wastes in the subsurface environment are a continuing source of chemicals to soil and groundwater, and groundwater is the primary vehicle of transport.

- Downward seepage gradients within the bedrock trough near North Central Avenue may be carrying chemicals down into shallow and deeper bedrock fractures.

- Compounds are migrating northeasterly in the groundwater at the site, towards the Anthony Kill. The Anthony Kill is a groundwater discharge zone; however, dilution effects, volatilization, and sorption to soils result in the absence of detectable concentrations of VOCs or PAHs in surface water.

- Under current site conditions, the potential for public exposure to the contaminants of concern is low, for two reasons: (1) most of the site is paved or covered with buildings and access to the site is limited, restricting the possibility of contact with contaminated soil or volatilized contaminants; and (2) the groundwater at the site is not used as a drinking water source.

- Therefore, ABB-ES concludes that, under the assumed conditions of exposure, no significant adverse health effects would be anticipated.

- The results of the environmental risk assessment indicate that some potential for impacts does exist for aquatic organisms living in the Anthony Kill immediately adjacent to the site. However, these risks appear relatively minor, for several reasons. Few compounds were present at levels in excess of their environmental criteria, the extent of exceedances was minimal, and potential impacts were associated

only with "worst case" conditions, with no impacts expected under typical conditions. Also, the amount of benthic habitat is limited due to the streambed morphology and exposed bedrock, with little sediment accumulation.

- Finally, there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants in the downstream surface water and sediment samples did not exceed protective criteria, even under the most conservative assumptions.

3.6.1 Data Needs and Recommendations for Future Work

Data needs have been identified that must be addressed to meet the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for Remedial Investigations. These data needs are as follows:

- Delineate the nature and extent of site-related contamination east of North Central Avenue. An east-trending bedrock trough was identified in the area of the former relief gas holder and a component of groundwater flow at the site is in an easterly direction.

- Investigate the western portion of the site for groundwater and soil contamination due to the possible disposal of wood chips and oxide wastes in this area. The nature of shallow subsurface anomalies identified during the Task 1 GPR survey will also be assessed.

- Several areas on the eastern and western portions of the site were identified as having been storage areas for PCB-containing transformers and capacitors as well as various electrical equipment. Sampling of these areas for PCB contamination is necessary.

- Investigate the property north of the Anthony Kill across from the site to establish whether a hydraulic connection exists between site groundwater and groundwater north of the Anthony Kill. If a hydraulic connection exists, collection and chemical analyses of groundwater samples may be necessary to evaluate any impacts to groundwater quality caused by the site.

- As has been done in the past, the site Health and Safety Plan (HASP) should be followed during any future exploratory work on the site to prevent or minimize undue exposure.

3.6.2 Recommended Remedial Investigation Objectives

To address the data needs identified in the previous subsection, the Phase IIA Supplemental RI Work Plan was developed. On- and off-site investigation activities are proposed to (1) investigate the potential for PCB contamination on the site, (2) determine the nature and effect of site-derived contamination east of the site, (3) determine if a hydraulic connection exists between the site groundwater and groundwater north of the Anthony Kill, (4) further define the areas and rates of site groundwater discharge to the Anthony Kill, and (5) assess the potential for site-related contamination on the western portion of the site.

4.0 SUMMARY OF PHASE IIA SUPPLEMENTAL RI FIELD PROGRAM

This section presents a summary of the Phase IIA Supplemental RI field work activities. A more detailed description of the Phase IIA Supplemental RI field work activities is provided in the Workplan for Phase IIA Supplemental Remedial Investigation (Section 8.0 of the June 1992 Phase II Supplemental RI Report).

4.1 GEOPHYSICAL INVESTIGATION

A seismic refraction survey was conducted on the Price Chopper property, located directly across North Central Avenue from the site (Figure 4-1). The survey was performed by an experienced ABB-ES geophysicist using a Geometrics ES-2415F Signal Enhancement Seismograph. Individual seismometers (geophones) were separated by 10 feet, and multiple impacts of a 10-pound sledgehammer were used for an energy source. Three (3) impact points were used for each seismic spread. Due to the limited size of the site, the average length of the spreads was 120 feet.

4.2 SOIL INVESTIGATION

The following activities were completed during the soil investigation:

- the investigation of soil conditions east (downgradient) of the site, to assess the potential migration of MGP-related contaminants in this direction;

- the investigation of soil conditions west (upgradient) of the site;

- the investigation of surface soil (0 to 1 foot bgs) conditions in areas formerly used to store transformers, capacitors and other miscellaneous electrical equipment;

- the investigation of surface soil (0 to 1 foot bgs) conditions in the western portion of the site where wood chips and spent oxide wastes may have been periodically disposed.

The locations of all Phase IIA Supplemental RI explorations are shown on Figure 4-2.

4.2.1 Surface Soils (0 to 1 foot bgs)

Surface soil sampling locations are shown on Figure 4-2 and 4-3. Analytical data relating to the surface soil sampling locations are discussed in Subsection 5.2 and summarized in Tables 5-1 and 5-2.

Shallow Subsurface Soil Conditions, in the Western Portion of the Site

Six (6) surface soil samples including one (1) duplicate sample were collected from the western portion of the site for laboratory analyses and analyzed for reactive sulfide and reactive cyanide. All samples were collected from the 0 to 1 foot bgs interval using pre-cleaned stainless steel spoons and bowls. Samples located under asphalt were collected from the 0.25 to 1 foot bgs interval.

Surface Soil Conditions Under Former Transformer Storage Areas

A total of twenty-one (21) surface soil composite samples, including two (2) duplicate samples, were collected and laboratory analyzed for PCBs. The samples were collected from six (6) former transformer storage areas. Four (4) samples were collected from within each of the reported transformer storage areas designated Areas 3, 4, 5, and 6 (see Figure 4-3). Each sample consisted of a composite of four (4) sub-areas. Samples were collected from the 0 to 1 foot bgs interval using pre-cleaned stainless steel spoons and composited in stainless steel bowls. According to photographs, site maps, and interviews with NYSEG employees, transformer storage Area 2 had historically been paved. Based on this information and with the concurrence of the NYSDEC project manager, one (1) sample of accumulated soil was collected from the surface of the asphalt. In transformer storage Area 1, with prior approval of the NYSDEC project manager, two (2) soil samples were collected; one (1) from the accumulated soil from the surface of the asphalt and one (1) shallow subsurface sample (0.15 to 1 feet bgs) collected from beneath the asphalt.

4.2.2 Subsurface Soil (below 2 feet bgs)

Three (3) soil borings (B-16, B-17 and B-18) were drilled during the Phase IIA Supplemental RI field program and completed as groundwater monitoring wells (MW-16, MW-17, and MW-18), respectively. Soil boring/groundwater monitoring well locations are shown on Figure 4-2. Completion of monitoring well borings is discussed in Subsection 4.3.

Two (2) of the borings were completed in the overburden and one (1) (MW-18) was completed in bedrock. Field observations were made on all soil and bedrock samples collected and each soil boring was logged with respect to geologic/soil characterization. Field boring logs and rock core identification logs are presented in Appendix A.

Soil samples (or rock cores) were collected continuously during drilling of all soil borings. Soil samples were collected using a 3-inch outside diameter (OD) split-spoon sampler. All samples were field characterized and instrumentally screened for evidence of VOCs. Rock cores were retrieved using NX core rods and core barrels were then placed in wooden core boxes and stored on site. Three (3) subsurface soil samples, including one (1) duplicate, were submitted for laboratory analyses. Samples were analyzed for VOCs, SVOCs, selected inorganics and total cyanide, reactive cyanide, and reactive sulfide.

4.2.3 Investigation of Former Filter Bed Area

With the concurrence of the NYSDEC project manager, six (6) additional soil borings (borings B-20 through B-25) were completed to investigate subsurface soil conditions in the former filter bed area. The purpose of these borings was to, if possible, locate and sample the residual filter bed material. Field observations were made on all soils samples collected and logged with respect to geologic/soil characterization. Field boring logs are presented in Appendix A.

Soil samples were collected continuously using a 2-inch OD split-spoon sampler. All samples were field characterized and instrumentally screened for evidence of contamination.

4.3 GROUNDWATER INVESTIGATION

4.3.1 Groundwater Monitoring Well Installation

One (1) shallow groundwater monitoring well (MW-16) was installed to characterize groundwater conditions in the overburden soils upgradient of the site. Two (2) collocated groundwater monitoring wells, one (1) screened in the overburden and one (1) screened in the bedrock (MW-17 and MW-18, respectively) were installed downgradient of the site at a location on the Price Chopper property based on the results of the seismic survey.

The overburden groundwater monitoring wells, MW-16 and MW-17, were advanced using 4.25-inch inside diameter (ID) hollow-stem augers. The borings were advanced to competent bedrock which was encountered at depths of 8 and 22.5 feet bgs respectively. The bedrock groundwater monitoring well was advanced to bedrock using the 4-inch ID steel casing and the drive and wash method. The casing was seated approximated 2 feet into the bedrock. The boring was then advanced 15 feet into the bedrock using an NX size core barrel.

All monitoring well screens and risers were constructed of 2-inch ID Schedule 5 stainless steel. The well screens were #10 slot wire-wound and 10 feet in length. Well materials were pre-cleaned by steam-cleaning prior to installation. A sandpack was installed in the annulus between the borehole wall and the screen. The sandpack material, Morie 0 silica sand, was placed at a minimum of 2 feet above the top of the screen. A minimum of 2 feet of bentonite pellets/slurry was placed above the sandpack. Pellets were hydrated with potable water upon installation and allowed adequate time to swell. The remainder of the borehole was backfilled with wet bentonite-cement grout.

Monitoring wells were protected against tampering by installing water-tight, flush-mounted locking curb boxes set in place with a minimum of 2 cubic feet of concrete. After the wells were installed and water levels had equilibrated, water level measurements were recorded.

The elevation of the well risers were surveyed and recorded by David Flanders Associates, Inc. (FLANDERS) (also see Subsection 4.10)

The monitoring well installation diagrams are included in Appendix A. Details of the well installations are listed in Table 4-1.

4.3.2 Piezometers

Seven (7) piezometers (P-3 through P-9) were installed to investigate groundwater flow along the north and south banks of the Anthony Kill. P-10 could not be installed due to the lack of an adequate depth of soil/sediments in the area. Piezometers were constructed of hand slotted 1-inch ID Schedule 40 polyvinyl chloride (PVC), installed in pre-driven holes and cemented in place.

4.3.3 Monitoring Well Development

All three (3) Phase IIA Supplemental RI monitoring wells were developed by pumping using a down hole Whalco submersible pump and periodically stressing the formation with surge and block. A minimum of three (3) well volumes were removed from the well in addition to any volume of water introduced to the formation during drilling activities. At the conclusion of development, purge water clarity varied from clear (MW-17 and MW-18) to slightly turbid (MW-16). Development water was collected in 55-gallon drums, and discharged into the recharge well on-site.

4.3.4 Groundwater Sampling

One (1) round of groundwater sampling, associated with the Phase IIA Supplemental RI field program, was conducted at the site. Monitoring wells were

sampled between 13 and 15 July 1993. Only wells in which no evidence of free-product was observed were sampled.

Prior to sample collection, all wells were checked for both light and dense non-aqueous phase liquids (L and DNAPL [i.e. free product]) utilizing an interface probe. To assure accuracy of the probe, dedicated stainless steel washers were used to sound the bottom of the well instead of the interface probe. If DNAPLs were present, they would be visible on the retrieved washers. LNAPL was observed in one well (MW-3) and DNAPL was observed in five (5) wells (MW-4, MW-5, MW-6, MW-10, and MW-12).

Wells that did not show the presence of free-product were then purged of a minimum of four (4) well volumes. In situ parameters (pH, specific conductivity, and temperature) were recorded periodically during purging. After the field parameters and turbidity stabilized, (typically four [4] to six [6] well volumes) the wells were sampled.

A dedicated Teflon bailer was used to sample each well. After sampling both bailers and pump tubing were containerized with the soil cuttings in U.S. Department of Transportation (DOT) approved 55-gallon drums for off-site disposal.

Samples were submitted to Galson Laboratories (GALSON) of Syracuse, New York. Groundwater samples were collected in appropriate containers supplied by GALSON, preserved in accordance with the Quality Assurance Project Plan (QAPP), and chilled to 4°C prior to priority overnight shipment to GALSON.

Samples were analyzed for VOCs, SVOCs, filtered and unfiltered inorganics, total cyanide (including amenable and iron cyanide), and turbidity.

Water level measurements were taken from all sampled monitoring wells and piezometers. Water levels were measured to the nearest 0.01 foot. Groundwater elevation data are presented in Table 4-2.

4.4 Hydraulic Conductivity and Permeability Testing

In situ hydraulic conductivity tests, commonly referred to as slug tests, were performed on the three (3) Phase IIA Supplemental RI monitoring wells. Data were recorded using a pressure transducer and a Hermitt 2000 data logger. Data were reduced using Aqtesolv software. Permeabilities were calculated using the Bouwer and Rice method. Because the shallow bedrock is highly fractured, it hydraulically resembles a porous media. Data from slug tests performed at MW-18, screened in the shallow bedrock, were treated the same as MW-16 and MW-17, screened in the overburden. Although different methods were used during the Phase IIA Supplemental RI, as compared to previous investigations, calculated values were consistent with previous findings. Hydraulic conductivity data is presented in Appendix B.

4.5 SEDIMENT AND SEEPAGE INVESTIGATION

The primary objective of the seepage and sediment investigation was to evaluate the quality of groundwater discharge (i.e., seepage) to and sediments in the Anthony Kill at locations upstream of, adjacent to, and downstream of the site.

Sediment samples were collected from the bed of the Anthony Kill using a pre-cleaned stainless steel spoon and bowl. Sediments were placed in appropriate jars and labeled in the field with date, time, and location. Sediment samples were screened with a photoionization detector (PID) meter and infrared spectroscopy (IR) and ultraviolet (UV) fluorescence to select specific samples for laboratory analyses. The sediment samples were submitted to GALSON for laboratory analysis for VOCs, SVOCs, metals, total cyanide, and reactive sulfide and cyanide. Locations of the sediment samples are depicted in Figure 4-2.

Four (4) seepage meters were constructed and installed into the bed of the Anthony Kill. The seepage meters consisted of the top (or bottom) third of a 55-gallon steel drum, with 3/8 inch tubing secured with water/air-tight seals. A catheter bag was then attached to the tubing. The locations of the seepage meters are depicted on Figure 4-2.

Seepage samples were collected from seepage meters SP-1, SP-2, and SP-4. Seepage meter SP-3 produced insufficient discharge to collect a sample. Total sample volume and collection time were noted for computation of discharge flow rates. Samples were analyzed for VOCs and for SVOCs, when sufficient volume was available (SP-1 and SP-2).

4.6 LABORATORY ANALYTICAL METHODS

4.6.1 Laboratory Analytical Parameters/Methods

Several analytical methods were employed to analyze the samples collected during the Phase IIA Supplemental RI field program. Six (6) surface samples, including one (1) duplicate, were analyzed for reactive sulfide and reactive cyanide by USEPA Method 9030 and Method 9010 respectively. Twenty-one (21) surface soil samples, including two (2) duplicates, were analyzed for PCBs utilizing NYSDEC Analytical Services Protocol (ASP) 91-3.

Parameter groups selected for laboratory analyses of subsurface soil, groundwater and sediment and seepage samples collected at the site were as follows:

- VOCs using NYSDEC ASP 91-1 and 91-4;
- SVOCs using NYSDEC ASP 91-2;
- Metals (both total and dissolved metals for groundwater samples) using ASP Superfund Contract Laboratory Program (CLP) analytical methods;
- Reactive sulfide using USEPA Test Method 9030 (soil and sediments only);
- Reactive cyanide using USEPA Test Method 9010 (soil and sediments only);
- Turbidity using USEPA Test Method 180.1 (groundwater only); and

- Total and amenable cyanide using USEPA Test Method 9010.

4.6.2 Data Validation

Samples collected during the Phase IIA Supplemental RI field program were subjected to analytical data validation by ABB-ES in accordance with Quality Assurance Data Validation of Analytical Deliverables and the QAPP.

The analytical results for VOCs, SVOCs, inorganics, reactive sulfide and cyanide, and PCBs are generally acceptable and, in most instances, may be used without qualification. A limited number of samples for various analyses were "flagged" with a variety of laboratory analytical qualifiers. Descriptions of data qualifiers along with their flagged symbols are detailed within the validation report in Appendix C-1. Appendix C-2 contains a presentation of the validated data with sample detection limits and data qualifiers flagged for the Phase IIA Supplemental samples.

4.6.3 Data Reduction

The reduced data tables presenting only analytical results reported in concentrations above the laboratory detection limits is presented in Tables 5-1 through 5-8. Results from these tables have undergone sorting and organization for incorporation and presentation in connection with this Phase IIA Supplemental Report.

4.7 Decontamination and Residuals Management

Equipment decontamination during the Phase IIA Supplemental RI field program was conducted in accordance with Subsection 9.0 of the QAPP. All drilling equipment (e.g., drill rig, split-spoon samplers) was decontaminated on-site in a specially constructed decontamination pad. Decontamination fluids were contained either within the decontamination pad or in 55-gallon drums. Soil cuttings and dedicated sampling equipment were containerized in DOT-approved 55-gallon drums. Drums were numbered and labeled specifying content, date, and location. Drums were also tracked in the field log book. Cuttings samples were collected from the drums and analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, SVOCs and inorganics. NYSEG has arranged for the removal and off-site disposal of all drummed residual material.

4.8 Site Topography

A two-phased topographic survey of the site and portions of the adjacent properties was performed by FLANDERS. The first phase was completed on June 26, 1986 and resulted in a topographic base map at a scale of 1 inch equals 50 feet, with 2-foot elevation contours. This map contained exploration locations (Tasks 2, 3 and 4 activities), significant surface features, landmarks of the site, and the portion of the Anthony Kill directly adjacent to the site.

The second phase of the topographic survey was conducted on May 24, 1993. The revised topographic map included the Phase IIA Supplemental exploration locations and significant features and landmarks of the land west of the site, currently occupied by the Price Chopper. The portion of the Anthony Kill adjacent to the Price Chopper was also included in this survey.

During both phases, the topographic map assumed a relative horizontal and vertical datum of 100 feet at the railroad spike in the utility pole located 25 feet south of the intersection of Ferris Lane and North Central Avenue. The location and elevations of monitoring wells, piezometers, soil borings, shallow subsurface soil samples, and seepage meters have been incorporated into the site base map to accurately depict exploration locations (see Figure 4-2 and Figure 4-3). Figure 4-2 depicts exploration locations. Figure 4-3 depicts surficial topography.

5.0 SITE TOPOGRAPHY, GEOLOGY, AND HYDROGEOLOGY

5.1 INTRODUCTION

Data relative to classification of the surface and overburden soils and bedrock at the site were compiled by ABB-ES geologists from an examination of soils and rock cores collected during the Tasks 2, 3, 4, and the Phase IIA Supplemental RI field investigation programs. Examination and classification of the soils were in accordance with the Unified Soil Classification System (USCS). Observations on Phase IIA Supplemental excavations were recorded on soil boring logs and visual rock identification logs and are included in Appendix A.

5.2 SITE TOPOGRAPHY

The original geomorphology of the site has been altered through cultural activities (e.g., construction and high use). During the Phase IIA Supplemental RI, the topographic survey was expanded to include the area east of the site, across North Central Avenue which is principally occupied by a Price Chopper grocery store and parking lot. The surficial topography of the Price Chopper parking lot is relatively flat. Just beyond the northern border of the pavement, the ground surface slopes abruptly downward, approximately 12 to 14 feet to the Anthony Kill. The parking lot drains to the north through a storm culvert that discharges into the Anthony Kill near the North Central Avenue Bridge.

5.3 SITE GEOLOGY

The geologic strata encountered in soil borings indicate that the original ground surface has been reworked and covered with fill. The fill is underlain by a gravelly sand that grades to a silty shale (highly weathered bedrock). The underlying shale bedrock is located 8 to 23 feet bgs.

Three (3) geologic cross-sections have been prepared to visually depict the shallow geology encountered. The location and orientation of the three (3) transects are shown in Figure 5-1. The first cross-section A-A' (Figure 5-2) traverses the eastern border of the site, parallel to North Central Avenue. The second cross-section B-B' (Figure 5-3) traverses the site in a north-south direction, through one of the former gas holders and the filter beds. The third cross-section C-C' (Figure 5-4) traverses the site approximately parallel to the Anthony Kill.

5.3.1 Overburden

The overburden soils consist of fill, gravelly sand and fractured silty shale (weathered bedrock). Small discontinuous lenses of sand and gravel as well as silty clays are also present. The different soil units present at the site are described as follows:

- Fill. The fill consists of brown to black silty sand and gravel with organic matter, ash, brick fragments, glass, and wood chips. Within the fill, heterogeneities include zones of clayey silt and fractured

shales. The fill averages 8 to 28 feet thick, thinning toward the Anthony Kill.

- Gravelly Sand. A brown, dense gravelly sand was encountered at only one (1) soil boring at a depth of 8 feet bgs. The gravelly sand unit is 1.5 to 4 feet thick. This may be interpreted as fill or, if the area has not been disturbed, a glaciofluvial deposit.

- Glacial Till. A thin discontinuous tan to light grey silty clay with fine gravel was encountered at the top of the bedrock surface at soil boring B-4. The till is less than one (1) foot thick and is located along the northern edge of a small bedrock trough.

- Silty Shale. This unit is primarily highly weathered bedrock. It consists of black to gray platy shale fragments in a brown silt matrix that directly overlies the bedrock throughout the site. The native silty shale is approximately 1 to 3 feet thick. At other areas (B-4 and B-8) shale and silt fragments were possibly used as fill material. At these areas, the silty shale has no identifiable structure and is approximately 8 to 9 feet thick.

Two (2) soil borings (B-16, and B-17) were drilled during the Phase IIA Supplemental field investigation program. At boring B-16, soils consisted of fill (silt, gravel sand, glass, and brick) overlying silty shales. The fill/shale contact is at approximately 6 feet bgs. Bedrock was encountered at 8 feet bgs.

Similar soils were encountered at boring B-17. Approximately 12 feet of fill overlies silts and sands which grade to silty shales at approximately 21 feet bgs. Competent bedrock was encountered at 22.5 feet bgs.

5.3.2 Bedrock

The bedrock at the site consists of thinly bedded blue-gray shale with calcite inclusions. The bedrock outcrops at several locations along the southern bank of the Anthony Kill. The exposed bedrock is tightly folded striking east-west, with the fold axes dipping approximately 30 degrees to the south. Because the bedding with the bedrock structure is tight, bedrock groundwater flow will not follow bedding but, rather follows joints and fractures within the formation.

A seismic refraction survey was conducted in the parking lot of the Price Chopper, east of North Central Avenue, to investigate potential presence of an eastward trending bedrock valley in this area. The bedrock surface appears to be relatively flat, with the highest elevation at approximately 21 feet bgs beneath the center of the parking lot. Beneath the eastern border of the parking lot, bedrock dips gently to the east. Based on the seismic refraction data, depth to bedrock was estimated to be 21 to 23 feet bgs. Boring B-17/MW-17 and B-18/MW-18 were drilled to intercept groundwater flow downgradient from the site. In boring B-18, bedrock was encountered at 22.5 feet bgs, confirming seismic refraction data and indicating that the data could be used to map the general contours of the bedrock surface in this area. Results from the seismic refraction slurry are presented in Appendix D.

During the Phase IIA Supplemental field investigation, bedrock was encountered at 8 and 22.5 feet bgs at B-16 and B-17/B-18 respectively. Fifteen (15) feet of rock core was drilled at B-18. The bedrock was composed of blue-grey shales with calcite intrusions along fracture planes (oriented at 60 and 120 degrees from horizontal). The top 5 feet of the bedrock was highly fractured, with competency increasing with depth. These findings are consistent with previous investigations at the site. A bedrock surface contour map interpreted from the seismic surveys and exploration data collected during Tasks 1.2.3, and 4, and the Phase IIA Supplemental RI field investigation program is shown in Figure 5-5.

The topography of the bedrock surface forms a shallow basin centered beneath the eastern portion of the site and sloping to the north towards the Anthony Kill. The basin is asymmetrical in shape with the western and southern perimeters sloping upward more steeply than the eastern perimeter. Beneath the Price Chopper parking lot, the eastern slope of the basin rises to approximately 21 feet bgs and then dips gently to the east (see Figure 5-5).

5.4 SITE HYDROGEOLOGY

The interpretation of hydrogeologic conditions at the site is based on field measurements of groundwater elevations and in situ permeability tests. The water table at the site ranges from 2 to 20 feet bgs, and the saturated thickness in the overburden ranges from 3 to 25 feet. In the portion of the site where gas manufacturing took place, asphalt and buildings cover nearly all of the ground surface, thereby limiting direct infiltration from precipitation. Two storm drains

located in the northern portion of the site collect surface runoff and discharge to the Anthony Kill. As a result, infiltrating precipitation is limited to the western portion of the site that was not acquired by NYSEG until 1952. The limited rainwater infiltration into the site subsurface soils over the years has minimized the potential for contaminant transport within the overburden and bedrock.

Water level measurements were collected from piezometers and all accessible groundwater monitoring wells including the three (3) new groundwater monitoring wells: MW-16 screened in the fill and shallow bedrock; MW-17 screened in the overburden; and MW-18 screened in the shallow bedrock. Table 4-2 presents groundwater elevation data collected during Tasks 2, 3, 4, and the Phase IIA Supplemental field investigation.

Groundwater flow through the overburden is influenced by bedrock and surficial topography and by proximity to the Anthony Kill. Based on information from the piezometers and the new and existing monitoring wells, the estimated direction of overburden groundwater flow is northeasterly, towards the Anthony Kill. With the additional data points at monitoring wells MW-16, MW-17, and MW-18, groundwater flow direction is interpreted to flow in a more northeasterly direction than previously described. Specifically, groundwater at the site flows more toward the Anthony Kill with a smaller component flow to the east. Figures 5-6 and 5-7 depict the potentiometric surface of groundwater in the overburden in March 1988 and July 1993, respectively.

Slug tests conducted in monitoring wells MW-16 and MW-17 indicate that the hydraulic conductivity of the saturated overburden is on the order of 10^{-5} and

10^{-3} cm/sec, respectively. These values are consistent with values calculated during Tasks 1, 2, 3, and 4.

Groundwater elevation measurements collected from groundwater monitoring well pairs screened in the overburden and the bedrock indicate that there is a slight (0.004 ft/ft) downward gradient from the overburden to the fractured bedrock layer at the site. In close proximity of the Anthony Kill, the vertical gradient changes. At MW-5 and MW-15, there is an upward gradient of approximately 0.002 ft/ft.

During the Phase IIA Supplemental field investigation, flow in the Anthony Kill was higher during the May 1993 field investigation than during the July 1993 groundwater and seepage meter sampling event. The tops of the seepage meters, installed into the streambed of the Anthony Kill in May, were nearly exposed at the water surface during the July sampling event. The lower flow conditions observed in July were consistent with seasonal precipitation patterns. Additionally, it was noted by ABB-ES field personnel that the water level in the Anthony Kill fluctuated by as much as 0.5 feet during the July sampling event, and increased in turbidity over a period of several hours. It was also noted that turbidity in the stream increased as the water level was observed to increase. The cause of the rapid fluctuations in stream flow are not known at this time.

Based on the seep measurements, the average flux of groundwater seepage is 0.035 gallons per day per square foot (gal/day/ft^2). Using the seepage meter data from the low flow period and assuming that groundwater discharges from site along the 1,000-foot length of the Anthony Kill and that discharge is limited to

one-half of the stream width (approximately 12 feet), the average flow of groundwater into the Anthony Kill is 0.0057 cubic feet per day per cubic foot ($ft^3/day/ft^2$) or 0.04 gallons per day (gpd) per square foot. This value is lower than the calculated 0.03 $ft^3/day/ft^2$, or 0.224 gpd per square foot. The low seepage rate is likely due to a combination of factors: (1) the low flow conditions of the Anthony Kill; (2) the significant fluctuations in water level during the sampling period; and (3) the statistically few number of data points. Therefore, the seepage rates calculated from these data represent a lower bound of the discharge rate from the site to the Anthony Kill. A summary of seepage sample volumes and rates is presented in Table 5-9.

6.0 PHASE IIA SUPPLEMENTAL FIELD AND LABORATORY DATA

6.1 SUMMARY OF PHASE IIA SUPPLEMENTAL ANALYTICAL DATA - SOIL INVESTIGATION

A total of thirty (30) surface and subsurface soil samples were submitted for laboratory analyses. Analytical results for all detected compounds and analytes are presented in Tables 5-1, 5-2 and 5-3. Summaries of all validated laboratory analytical data including quality control samples are provided as Appendix C to this Report.

6.1.1 Surface Soils

Six (6) surface soil samples, including one (1) duplicate sample were collected from the western portion of the site. The samples were collected from the area where spent oxides were reportedly disposed of and were analyzed for reactive sulfide and reactive cyanide. No reactive sulfide or reactive cyanide was detected in any of these samples. The results of the laboratory analyses are summarized in Table 5-1.

A total of twenty-one (21) surface soil composite samples including two (2) duplicate samples were collected from the six (6) former transformer storage areas and analyzed for PCBs. The results of the laboratory analyses are summarized in Table 5-2. Both Aroclor-1248 and Aroclor-1260 were reported at concentrations all below the method detection limits; as a result the reported

values are estimated. Aroclor-1248 was detected at concentrations ranging from 0.057 to 2.5 ppm in eight (8) composite surface soil samples collected from transformer storage Areas 3, 4, and 4A. Aroclor-1260 was detected at concentrations ranging from 0.047 to 2.6 ppm in eleven (11) surface soil samples collected in Areas 3, 4, 4A, 5, and 6.

6.1.2 Subsurface Soils

Continuous split-spoon soil samples were collected from borings B-16 and B-17. No odors or visual evidence of residual contamination were detected or observed in any soil samples collected from these borings. No PID readings above background levels were detected in any of the soil samples collected from the borings. Soil samples were not collected from boring B-18 because it is collocated with boring B-17.

Three (3) subsurface soil samples, including one (1) duplicate sample, were collected from the Phase IIA Supplemental soil borings and submitted for laboratory analyses. One (1) soil sample was collected from boring B-16 and two (2) soil samples were collected from boring B-17 and submitted for laboratory analyses. The soil samples were collected from overburden soils immediately above the bedrock-overburden contact, at the 6 to 8 feet bgs interval in boring B-16 and the 18 to 20 feet bgs intervals in boring B-17. The results of the laboratory analyses are discussed below.

Volatile Organic Compounds No VOCs were detected in any of the three (3) soil samples submitted for laboratory analyses.

Semivolatile Organic Compounds A limited number of SVOCs were detected in the subsurface soils at concentrations below their respective method detection limits. The reported values have been "flagged" with a "J" qualifier indicating an estimated concentration. The following PAHs were detected in the subsurface soils collected from borings B-16 and B-17: chrysene, fluoranthene, pentachlorophenol, benzo(a)anthracene, benzo(a)pyrene, chrysene, naphthalene, and phenanthrene. In addition, diethylphthalate was detected in the subsurface soil sample collected at B-16. The presence of this compound is not associated with the gas manufacturing process and is likely present as an artifact of sample handling and/or laboratory contamination.

Inorganics The inorganics aluminum, antimony, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel and zinc were detected in subsurface soil samples. The reported results are within the range of results reported for soil samples collected during previous site investigation activities.

Reactive Sulfide and Cyanide No reactive sulfide or reactive cyanide was detected in any of the subsurface soil samples submitted for laboratory analyses.

Hydrocarbon odors and visual evidence of MGP by-products were observed in soil samples collected from soil borings completed in the former filter bed area (B-20 through B-25). Subsurface soils from approximately 2 feet bgs to bedrock (approximately 6-10 feet bgs) contain visible quantities of coal tar. However, no evidence of waste coke from the former filter beds was observed in any of the collected soil samples; therefore, no samples were submitted for laboratory analyses from these borings.

6.2 SUMMARY OF ANALYTICAL DATA - GROUNDWATER INVESTIGATION

Groundwater quality at the site has been characterized by the evaluation of field and laboratory data collected from fifteen (15) groundwater monitoring wells. Twelve (12) of the groundwater monitoring wells were installed during Tasks 1 through 4, and three (3) additional groundwater monitoring wells were installed during the Phase IIA Supplemental RI.

During the Phase IIA Supplemental RI, groundwater samples were only collected from wells in which no visible evidence of free product was observed. Free product was observed in groundwater monitoring wells MW-3, MW-4, MW-5, MW-6, MW-10, and MW-12. Consequently these wells were not sampled. Eleven (11) groundwater samples, including two (2) duplicates, were collected from the remaining nine (9) groundwater monitoring wells. Analytical results for all detected compounds and analytes are presented in Tables 5-4, 5-5, and 5-6 along with the respective Maximum Contaminant Levels (MCLs) established under the New York State Drinking Water Standards (NYSDWS). The following is a summary of the analytical data from groundwater samples relative to the NYSDWS:

Volatile Organic Compounds: With the exception of two (2) monitoring wells (MW-14 and MW-15), no VOCs were detected at concentrations in excess of the respective NYSDWS MCLs. In groundwater samples collected from monitoring wells MW-14 and MW-15, the following VOCs were detected above the respective MCLs:

benzene
ethylbenzene
methylene chloride
total xylenes
toluene
1,1-dichloroethane
1,1,1-trichloroethane

Benzene, ethylbenzene, total xylenes and toluene were detected well above the NYSDWS MCLs in the groundwater sample collected at MW-14. 1,1-dichloroethane and 1,1,1-trichloroethane were detected only slightly above the respective NYSDWS MCLs in the groundwater sample and duplicate sample both collected at MW-15.

Semivolatile Organic Compounds: SVOCs were detected above MCLs in four (4) samples collected from three (3) groundwater monitoring wells (MW-13, MW-14 and MW-15). The specific compounds exceeding the respective MCLs include:

acenaphthene
2-methylnaphthalene
naphthalene
bis(2-ethylhexyl)phthalate

BEHP slightly exceed the MCLs. When present at low concentrations, BEHP is a common laboratory contaminant and is believed to be an artifact of the analytical process. It is unlikely that BEHP is derived from the site.

Inorganics: Inorganics have been analyzed in both filtered and unfiltered groundwater samples. In general, concentrations in the unfiltered groundwater are higher than those in the filtered samples. This is primarily due to the presence of suspended soil particles in the unfiltered water samples.

Only manganese was detected in the filtered groundwater samples in concentrations exceeding the NYSDWS MCLs. In the unfiltered groundwater samples, chromium, manganese, and iron were detected at concentrations exceeding MCLs in groundwater samples. Chromium was detected in excess of MCLs in monitoring wells MW-1 and MW-17. Iron was detected in excess of MCLs in monitoring wells MW-1, MW-11, MW-16, MW-17, and MW-18.

Turbidity: Turbidity measurements were elevated in groundwater samples collected from monitoring wells MW-16 and MW-17 (1,100 and 4,600 Nephelometric Turbidity Units (NTU), respectively). The detection of elevated concentration of inorganics in the unfiltered groundwater sample reflects the high amounts of suspended particulates. These wells were installed in relatively silty soils and may require additional development prior to any future groundwater sampling activity.

6.3 SUMMARY OF ANALYTICAL DATA - SEDIMENT AND SEEPAGE INVESTIGATION

6.3.1 Sediment Investigation

Seven (7) sediment samples including one (1) duplicate sample were collected for field and laboratory analyses from the Anthony Kill. Using UV/IR field analyses, PAHs were detected in four (4) of the seven (7) sediment samples and a decision was made to submit all seven (7) samples for laboratory analyses. A summary of sediment laboratory data is presented in Table 5-7. The analytical data from these samples have been compared to USEPA/National Oceanic and Atmospheric Administration sediment criteria (USEPA/NOAA criteria). These criteria were developed to assess the potential impacts of sediment contamination on the aquatic life. The following is a summary of this data relative to the USEPA/NOAA criteria.

Volatile Organic Compounds: No VOCs were detected in excess of the USEPA/NOAA criteria. Six (6) VOCs were detected at low concentrations in the sediment samples. Two of the VOCs, acetone and methylene chloride were detected in all samples and are believed to artifacts of the analytical process. The remaining four VOCs (benzene, chloromethane, ethylbenzene and total xylenes) were detected at concentrations ranging from 1.0 to 14.0 ppb. There are no NOAA criteria for the VOCs.

Semivolatile Organic Compounds: SVOCs, specifically PAHs, were detected in excess of the USEPA/NOAA criteria in five (5) of the seven (7) sediment

samples collected from the streambed of the Anthony Kill. The SVOCs detected include:

acenaphthene
anthracene
benzo(a)anthracene
benzo(a)pyrene
fluoranthene
2-methylnaphthalene
naphthalene
phenanthrene

An evaluation of the significance of the exceedances is provided in Subsection 7.5.

Inorganic: No inorganics were detected in excess of the USEPA/NOAA criteria.

6.3.2 Seepage Investigation

During the July 1993 sampling survey, seepage samples could be collected from only three (3) of the four (4) seepage meters installed in the streambed of the Anthony Kill. Due to low groundwater and stream flow conditions, groundwater seep samples were collected from seepage meters SP-1, SP-2, and SP-4. No seepage was collected from seepage meter SP-3.

The small volumes of seepage water that could be collected required a reduction in the list of target compounds that could be analyzed. Groundwater seepage

samples from SP-1 and SP-2 were analyzed for VOCs and SVOCs. The groundwater seepage collected at SP-4 was analyzed for VOCs only. Results for all detected compounds and analytes are presented in Table 5-8. The analytical data from these samples have been compared to New York State Surface Water Quality Standards (NYS SWQS). The following is a summary of the analytical results for the groundwater seepage samples:

Volatile Organic Compounds: No VOCs were detected above NYS SWQS in any of the groundwater seepage samples submitted for laboratory analyses.

Semivolatile Organic Compounds: Two (2) SVOCs (4-methylphenol and BEHP) were detected in the groundwater seepage samples from seepage meters (SP-1 and SP-2) at levels slightly in excess of the NYS SWQS. Neither BEHP or 4-methyl phenol were detected in sediment samples collected from the locations where seepage meters SP-1 and SP-2 were installed (i.e., SD-4 and SD-3, respectively). Therefore, it is likely that these compounds were present in the sample collection catheter bags and associated tubing. It is significant to note that the sediment samples collected adjacent to seepage meters SP-1 (SD-4) and SP-2 (SD-3) contained measurable concentration of PAHs which were not detected in the seepage water collected from these areas.

7.0 SUMMARY OF FINDINGS

This section summarized the findings from the Phase IIA Supplemental activities conducted at the site.

7.1 SITE TOPOGRAPHY

A topographic survey was conducted east of the site, across from North Central Avenue, in an area principally occupied by the Price Chopper store and parking lot and the Anthony Kill, which abuts the northern boundary of the Price Chopper facility. Surficial topography of the Price Chopper parking lot is relatively flat, sloping slightly to the north and west. Just beyond the northern edge of the parking lot, the ground surface slopes steeply downward approximately 12 to 14 feet, to the streambed of Anthony Kill. The parking lot drains to the north through a storm culvert that discharges into the Anthony Kill near the North Central Avenue bridge.

7.2 SITE GEOLOGY

The Mechanicville site occupies a 2.25 acre lot that is mostly paved. The north of the site is bordered by the Anthony Kill, which drains into the Hudson River 1,500 feet to the east. Site geology is characterized by the presence of fill overlying native soils. In many areas of the site, discrimination between native

and fill soils is difficult and definitive delineation cannot be made. The native soils include silt sands, sand and gravel, till, and silty shale. The thickness of overburden soil ranges from 3 to 25 feet thick. The glacial tills and silty shale (weathered bedrock) overlie shale bedrock.

The bedrock surface topography forms a shallow basin centered beneath the former MGP facility. The slopes of the basin are steeper in the south and east and more gentle to the west. The basin drains to the north, toward the Anthony Kill. The bedrock surface topography east of the site appears to be relatively flat with a local bedrock high beneath the center of the parking lot. Bedrock beneath the Price Chopper parking lot is located approximately 20 to 23 feet bgs. The bedrock surface topography is depicted in Figure 5-5. The upper 10 feet of bedrock is highly fractured. The number and size of fractures decrease rapidly with depth; thereby significantly reducing the potential downward movement of groundwater.

7.3 SITE HYDROGEOLOGY

Two water-bearing units are present at the site: the overburden and the bedrock. Monitoring wells and piezometers have been installed in both water-bearing zones. Groundwater flow direction in the overburden is northeasterly. At the southern border of the site, groundwater flows eastward. Closer to the Anthony Kill, the bedrock surficial topography influences the flow direction, and the potentiometric surface contours parallel the banks of the Anthony Kill. Groundwater flow direction in the proximity of the Anthony Kill, is toward the

Anthony Kill. The average calculated groundwater discharge flow into the Anthony Kill is 0.03 $ft^3/day/ft^2$.

Groundwater flow direction in the shallow fractured bedrock is similar to the flow direction in the overburden flow system, indicating that the two water-bearing units are hydraulically connected. Groundwater flow in the deeper bedrock does not appear to be influenced by the Anthony Kill, but flows to the east, toward the Hudson River.

Groundwater elevation measurements collected from groundwater monitoring well pairs screened in the overburden and the bedrock indicate that there is a slight (0.004 ft/ft) downward gradient from the overburden to the fractured bedrock layer at the site. In close proximity of the Anthony Kill, the vertical gradient changes. At MW-5 and MW-15, there is an upward gradient of approximately 0.002 ft/ft.

Groundwater and stream elevations measured during the Phase IIA Supplemental field investigation suggest that during the drier months, flow into the Anthony Kill depends on the water elevation in the Anthony Kill. As discussed in Subsection 5.4, the water level in the Anthony Kill may fluctuate by up 0.5 feet over a period of several hours.

Groundwater elevation measurements collected from piezometers installed on the northern bank of the Anthony Kill are inconclusive. Because the stage of the Anthony Kill varies over a period of several hours, shallow groundwater flow

direction along the northern bank is dependent on the stage elevation of the Anthony Kill.

7.3.1 Hydrogeologic Model

A groundwater flow model for the Mechanicville site was constructed for the purpose of aiding in the interpretation of groundwater flow through the overburden, fractured bedrock and competent bedrock beneath the site. The model was calibrated to observed and interpreted site conditions. Discussion pertaining to the model selection, calibration, aquifer parameters and mass balance consideration are presented in Appendix E. Interpretations of the shallow groundwater flow, based on water level measurements, indicate discharge of shallow groundwater flow to the Anthony Kill.

The model was set up in three layers; Layer 1, groundwater flow in the overburden; Layer 2, groundwater flow through the upper 10 feet of the fractured bedrock; and Layer 3, groundwater flow through the interval of 10 feet to 20 feet into bedrock. These depths correspond to approximate depths of explorations (borings and well) installed at the site, and also to potential depths of interest of the anticipated remedial alternatives to be evaluated.

The important features of this model are the hydraulic conductivities, the recharge over the area, available flux from upgradient, the over-all water balance, and interactions with the Anthony Kill.

Based on the groundwater flow into the model at the upgradient flux boundary, the total flow into the Anthony Kill is approximately 3 gallons per minute (gpm). The approximated flow rates in each of the layers are: 31.3 cu ft/d (12.3%) in Layer 1; 158.3 cu ft/d (62%) in Layer 2; and 65.2 cu ft/d (26%) in Layer 3. Additional recharge occurs to Layer 1 over the model, however, in the model formulation all flow to the Anthony Kill occurs through Layer 2, the upper 10 feet of fractured bedrock. (See Figure 7-1.)

7.4 CONTAMINANT DISTRIBUTION

7.4.1 Soils

Surface soil samples were collected to evaluate the potential presence of reactive materials in surface soils in the unpaved western portion of the site and to evaluate the potential presence of PCBs in former transformer storage areas.

No reactive sulfide or cyanide was detected in the surface soils west of the site.

Twenty-one (21) surface soil samples were collected and analyzed for PCBs. Aroclor-1248 was detected in eight (8) samples collected from Transformer Storage Areas 3, 4, and 4A, at concentrations ranging from 0.057 to 2.5 ppm. Aroclor-1260 was detected in eleven (11) surface soil samples at concentrations ranging from 0.047 to 2.6 ppm. Aroclor-1260 was detected in samples collected from Transformer Storage Areas 3, 4A, 5, and 6.

Subsurface soils samples were collected for laboratory analyses from two (2) soil borings completed during the Phase IIA Supplemental RI to assess the potential presence of MGP-related constituents in subsurface soils. The laboratory analyses found that:

- No evidence of MGP residuals was observed in subsurface soil samples collected from the two (2) soil borings (B-16 and B-17) completed during the Phase IIA Supplemental field investigation;

- No VOCs were detected in subsurface soil samples;

- Ten (10) SVOCs were detected in subsurface soils collected from boring B-16 and B-17. All compounds were detected at concentrations below the method detection limit and, therefore, the reported values are estimated;

- Eleven (11) inorganic analytes were detected in subsurface soil samples collected from boring B-16 and B-17. Concentrations of these analytes were well within the range of results of previous subsurface soil analyses;

- No reactive cyanide or reactive sulfide was detected in subsurface soil samples; and

- No evidence of filter bed materials were observed in subsurface soils collected at boring B-20 through B-25.

7.4.2 Groundwater

Groundwater samples were collected from nine (9) of the fifteen (15) groundwater monitoring wells which have been installed at the site. The remaining six (6) monitoring wells were not sampled because the presence of DNAPL and/or LNAPL was detected in each well. The monitoring wells in which L or DNAPLs were detected are all located within the perimeter of that portion of the site on which the former gas manufacturing facility was located. The findings of the Phase IIA Supplemental groundwater sampling survey are summarized below: Six (6) VOCs were detected at concentrations in excess of their NYSDWS MCLs in samples collected from monitoring wells MW-14 and MW-15. No VOCs were detected above the NYSDWS MCLs in the seven remaining monitoring wells from which groundwater samples were collected (i.e., MW-1, MW-2, MW-11, MW-16 and MW-17 and MW-18).

Four (4) SVOCs were detected at concentrations in excess of the respective NYSDWS MCLs. Exceedances were detected in groundwater samples collected from groundwater monitoring wells MW-13, MW-14, and MW-15. No SVOC exceedances were detected in groundwater samples collected from MW-16, MW-17, or MW-18.

Inorganics were analyzed in both filtered and unfiltered samples. In general, concentrations in unfiltered groundwater samples are higher than those in the filtered samples. This is due to sorption to soil particulates present only in the unfiltered samples.

Only manganese was detected in the filtered groundwater samples in concentrations exceeding NYSDWS. In the unfiltered groundwater samples, chromium was detected at monitoring wells MW-1 and MW-17. Iron was detected in excess of MCLs at monitoring wells MW-1, MW-11, MW-16, MW-17, and MW-18.

Turbidity was measured at each of the nine (9) sampled groundwater monitoring wells. Samples from both monitoring well MW-16 and MW-17 contained very high (1,100 and 4,600 NTUs) suspended particulates. The detection of elevated inorganics in the unfiltered groundwater samples is likely the result of the presence of suspended particulates in the samples.

7.4.3 Sediments and Groundwater Seepage

Seven (7) sediment samples including one (1) duplicate were collected from areas upstream, adjacent to and downstream of the site. Laboratory analyses of the samples detected both VOCs and SVOCs in all samples. No VOCs were detected above the respective USEPA/NOAA criteria. SVOCs were detected at concentration in excess of USEPA/NOAA criteria in four (4) sediment samples (SD-2, SD-3, SD-4, and SD-5) collected from the streambed of the Anthony Kill. No SVOCs were detected at concentrations in excess of the USEPA/NOAA criteria from the sediment samples SD-1, collected adjacent to the site and sample SD-6 collected downstream from the site. No inorganics were detected at concentrations in excess of the USEPA/NOAA criteria.

The concentrations of SVOCs detected in sediment samples collected during the Phase IIA Supplemental field investigation are comparable to SVOC concentrations detected in sediment samples collected during previous RI activities at the site.

Three (3) groundwater seepage samples were collected from seepage meters SP-1, SP-2, and SP-4. Seepage meter SP-3 did not produce sufficient volume to collect a sample. The results of the analyses are compared to the NYS SWQ Standards. No VOCs were detected at concentrations in excess of their respective MCLs. Two (2) SVOCs were detected at levels exceeding NYS SWQ Standards. BEHP was detected at both SP-1 and SP-2 at 9J and 4J μg/l, respectively. 4-Methylphenol was detected at SP-2 at 2J μg/L. Both BEHP and 4-methylphenol were also detected in the sediment samples SD-4 and SD-2, collected in the proximity of the seepage meters SP-1 and SP-2, respectively. Phenol was also detected in elevated levels (430 and 160 μg/L) in seepage samples SP-1 and SP-2. Phenol was not detected in sediment samples collected immediately adjacent to the seepage meter installation locations and is, therefore, believed to be artifacts of the sample collection process.

7.5 RISK ASSESSMENT

A Task 4 Risk Assessment was conducted in August of 1990 to investigate potential risks to human health and the environment associated with exposures to chemicals present in air, soil, sediment, and groundwater at the site. Results of the risk assessment indicated that risks from both carcinogenic and

noncarcinogenic chemicals in soil, sediment, and air to the identified receptors (children and site workers) and environmental receptors (aquatic organisms) were within USEPA acceptable ranges.

Subsequent to the Task 4 Risk Assessment, additional analytical data for sediments, surface soil, subsurface soil, and groundwater were collected in May and July of 1993. This subsection provides a review of these additional surface soil, subsurface soil and groundwater sediment and seepage data and an evaluation of the importance with regard to the Task 4 public health risk assessment.

7.5.1 Data Summary

Data summaries that include the arithmetic mean (which was calculated assuming one-half the sample quantitation limit (SQL) for non-detects), maximum and minimum detected concentrations, and frequency of detections for chemicals identified in surface soil, subsurface soil, and groundwater are presented in Tables 7-1, 7-2, and 7-3, respectively. In some cases, calculated mean concentrations exceed maximum detected concentrations. This is the result of the range in detection limits seen in some samples. The maximum detected concentration is the appropriate estimator of concentrations in these cases.

Surface soil was analyzed for PCBs, reactive cyanide, and reactive sulfide. Samples for PCB analysis were collected from sampling locations SS-25, SS-29 through SS-41, and SS-45 through SS-48. The PCBs Aroclor-1248 and Aroclor-1260 were detected in the May 1993 and July 1993 samples, respectively,

at maximum concentrations of 2.5 and 2.4 ppm, respectively (Table 7-1). Samples for reactive cyanide and sulfide were collected from SS-20, SS-22, SS-23, and SS-24. These analytes were not detected in any surface soil samples. Subsurface soil was collected from boring locations B-16 and B-17. Nine (9) SVOCs and ten (10) inorganics were identified in the subsurface soil (Table 7-2). Groundwater was collected from monitoring wells MW-1, MW-2, MW-11, and MW-13 through MW-18. Seven (7) VOCs, fourteen (14) SVOCs, and eleven (11) inorganics were detected in these samples. Table 7-3 presents total concentrations of analytes. Results of inorganic analyses for MW-16 and MW-17 were excluded from this summary because turbidity levels in these wells would render them unusable as a potable source.

7.5.2 Evaluation of Surface Soil Exposure

PCBs were not detected in the surface soil data collected in the 1990 sampling round. Therefore, risk estimates were calculated to assess additional potential risks associated with exposures to the Aroclors detected in the 1993 sampling effort.

7.5.3 Evaluation of Groundwater Exposure

Groundwater analytical data were compared to NYSDWS MCLs (November 1993) and USEPA MCLs (May, 1993) (Table 7-4). Mean and maximum detected concentrations of detected VOCs except 1,1-Dichloroethane exceeded NYSDWS MCLs, and the maximum detected concentrations of three (3) VOCs exceeded USEPA MCLs. The mean and maximum detected concentrations of 2-

methylnaphthalene and naphthalene, and the maximum detected concentrations of acenaphthene, phenol, and BEHP exceeded NYSDWS MCLs. The mean and maximum detected concentrations of aluminum, antimony, iron, lead, and manganese, and the maximum detected concentrations of chromium and nickel exceeded either NYSDWS or USEPA MCLs. Standards for aluminum, iron, and manganese, however are secondary. Secondary MCLs are not health based and are for contaminants which may affect the aesthetic qualities of drinking water (i.e., color, odor and taste).

7.5.4 Sediments and Seepage

The Task 4 Risk Assessment also investigated potential risks to environmental receptors associated with current exposures to surface water and sediment. Results of the environmental risk assessment indicated that some potential risks to aquatic organisms may exist in Anthony Kill directly adjacent to the site. Of the site related contaminants detected in surface water, only 2-methylnaphthalene exceeded Ambient Water Quality Criteria (AWQC). Task 4 also reported that the average carbon-normalized phenanthrene concentration detected at sampling locations adjacent to the site exceeded the lower confidence interval of the Sediment Quality Criteria (SQC).

Subsequent to the 1990 Task 4 Risk Assessment, additional analytical data for sediment were collected in the Anthony Kill in the vicinity of the Mechanicville site in May 1993. These data are presented in Table 5-7. In general, the additional analytical data are consistent with the results of previous sampling events and substantiate the findings reported in the environmental assessment

components of the Task 4 Risk Assessment. Six (6) compounds that had not been previously detected in Anthony Kill sediments were detected in the sediment samples collected in May 1993. These compounds are chloromethane, xylenes (total), carbazole, diethylphthalate, dibenzofuran, pentachlorophenol. In addition, aluminum, chromium, cobalt, copper, lead, manganese, and nickel, were detected in the May 1993 samples, these inorganic compounds had not been previously analyzed for. Toluene and di-n-octylphthalate were not detected in these new sediment results although they had been reported in earlier data.

With respect to the sediment constituents that were quantitatively evaluated in the Task 4 Risk Assessment (i.e., acenaphthene, benzo(a)anthracene, benzo(b)pyrene, fluoranthene, phenanthrene, and pyrene), the supplemental sediment analytical data substantiate previous risk conclusions. Excepting acenaphthene, the maximum detected concentrations of these sediment constituents are less than the average concentrations previously used to evaluate environmental impacts. Acenaphthene was detected at sediment sampling location SD-3 at a concentration of 1.6 ppm (0.840 ppm in the duplicate sample), which is higher than the average of 0.590 ppm used to evaluate environmental risk in the Task 4 Risk Assessment. Nonetheless, the carbon-normalized acenaphthene concentration detected in the two samples from SD-3 does not exceed even the lower confidence interval of the SQC for this compound (57 and 64 ppm C, respectively). Carbon-normalized phenanthrene concentrations reported in the May 1993 analytical data exceed the lower confidence interval of the SQC at both the "upstream" and "downstream" sampling locations, but <u>not</u> adjacent to the site.

The Task 4 Risk Assessment also evaluated the potential exposures associated with the discharge of groundwater form the site, using a simplistic and conservative groundwater flow model. Results of this analysis indicated that the estimated low flow concentrations of all groundwater constituents would discharge into the Anthony Kill at concentrations below AWQC. Subsequent to the 1990 Task 4 Risk Assessment, groundwater seepage samples were collected from three locations in the Anthony Kill and analyzed for VOCs and SVOC at SP-1 and SP-2 and VOCs at SP-4. As presented in Table 5-9, no detectable concentrations of PAHs or VOCs were detected in these seep samples. Phenol was detected at both seep sampling locations SP-1 and SP-2 (reported concentrations were 0.430 and 0.16 ppm, respectively. However, the presence of this compound in these seep samples may be a sampling artifact. However, the detected concentrations are below freshwater chronic AWQC (i.e., 2.56 ppm). The low groundwater flow conditions that existed at the time that these samples were collected suggests that the groundwater flows data may underestimate worst case discharge rates. The analytical data do substantiate the earlier groundwater modeling results that suggested that groundwater discharge into the Anthony Kill would not result in exposures to aquatic environmental receptors (e.g., fish, amphibians, and freshwater invertebrates) likely to result in adverse impacts.

7.5.5 Summary

In summary, analytical data from the 1993 sampling effort does not suggest any significant changes in risks from potential exposure to surface soil or subsurface soil at the site compared to risks identified in the Task 4 report. Risks associated with exposure to surface soils samples collected in 1993 containing PCBs are not

appreciably elevated compared to those quantified in 1990. The total risks using both old and new data are within the USEPA target risk range.

A comparison of subsurface soil data collected in 1993 to that summarized in the 1990 Task 4 report indicates that similar or lower concentrations of analytes are found in 1993 data. Thus, similar or lower levels of risks would be associated with exposure to these soils. A variety of organic and inorganic analytes in groundwater were found to exceed New York State and USEPA MCLs.

Compared to the Task 4 report, analytical data from the 1993 sampling effort do not suggest any significant changes in risks from potential exposure to sediments. The data are consistent with the result of previous sampling events. Analytical results from the groundwater seepage samples indicate that the seepage does not pose an unacceptable risk to aquatic life in the Anthony Kill.

8.0 CONCLUSIONS AND RECOMMENDATIONS OF THE PHASE IIA SUPPLEMENTAL REMEDIAL INVESTIGATION

The following subsections present the conclusions and recommendations of the remedial investigation program at the Mechanicville site based on a review of the findings of the all previous remedial investigation activities and the findings of the Phase IIA Supplemental RI reported herein.

8.1 CONCLUSIONS

8.1.1 Site Topography, Geology and Hydrogeology

1. The site is located in a topographic low area adjacent to the south band of the Anthony Kill. The site and adjoining areas have been substantially altered by cultural activities including significant excavation and subsequent filling of lands bordering North Central Avenue and the site. The gas manufacturing facilities have been demolished and majority of the area on which the facilities were located has been paved or is covered by the slab and/or foundation(s) of the of the former structures. As a result, precipitation does not infiltrate into the subsurface soils, thereby reducing the potential flushing of MGP related residuals into the groundwater system that underlies the Site.

2. The site geology consists of 8 to 23 feet of overburden material overlying bedrock. Overburden soils consist of fill, silty sands (tills) and silty shales. The depositional history of the site cannot be clearly discerned; however, the presence of the silty shale layer provides a relatively permeable layer in the overburden through which it is likely that the majority of groundwater flow in the overburden is occurring. Bedrock is composed of a blue-gray shale which is highly weathered in the upper 5 to 10 feet. The size and frequency of fracturing decrease rapidly with depth thereby reducing the effective permeability of bedrock formation with depth.

3. The topography of the bedrock surface forms a shallow basin centered beneath the eastern portion of the site and sloping downward to the north in the direction of the Anthony Kill. The basin is asymmetrical in shape with the western and southern perimeters sloping upward more steeply than the eastern perimeter. The Phase IIA Supplemental RI confirmed the general shape of the basin and demonstrated that the bedrock surface rises to the east of the site, thereby eliminating concerns relative to potential off-site migration of free-product in this direction.

4. Groundwater flow in the overburden and in the shallow fractured bedrock zones is generally to the north toward the Anthony Kill. Hydraulic modeling of the groundwater system indicates that groundwater flow across the entire site is on the order of 4,000 to 5000 gallons per day (i.e., 3 to 5 gpm). Based on the modeling output, it is estimated that approximately 50 percent of groundwater flow crossing the site discharges directly to the Anthony Kill adjacent to the site. The remainder of the groundwater flow

is believed to flow in an easterly direction ultimately discharging to the Hudson River.

5. The Anthony Kill has been designated as a Class C stream by NYSDEC. The streambed in the vicinity of the site is primarily exposed bedrock with a relatively thin veneer of accumulated sediment along the stream banks and in low velocity zones. Hydrologic maps of the area indicate the low flow (7Q10) for the Anthony Kill is approximately 17 cubic feet per second. As a consequence of the low groundwater discharge rates to the Anthony Kill estimates of dilution factors of groundwater discharge to the Anthony Kill under low flow conditions are in the range of 5,000 to 1 further reducing the potential for aquatic impacts associated with contaminant discharges from the site.

8.1.2 Soils

1. Surface soils (0 to 2 feet bgs) contain low levels of certain constituents including PCBs, PAHs, and inorganics associated with former gas manufacturing and service center activities which have occurred at the site. Based on the results of the risk assessment, the presence of these constituents does not pose an unacceptable risk to human health provided that site use is limited to commercial activities which do not result in disturbance of the unpaved areas of the site and maintain the integrity of the pavement in the remainder of the site.

2. Subsurface soils within limited areas of the former gas manufacturing facility contain free phase coal tar both above and below the water table. Coal tar has also been observed in the underlying bedrock, and was found near the streambed of the Anthony Kill by the North Central Avenue bridge. Given that the majority of the former gas manufacturing facility area is currently covered by asphalt or building foundations and slabs, the principal driving force for inducing further migration of the coal tar (i.e., precipitation) has been eliminated. Transport in the groundwater flow system is also expected to be very slow given the extremely low groundwater velocities and the reduced groundwater recharge rates associated with the extensive amount of paved and otherwise impermeable areas both on-site and upgradient of the site. However, in spite of the above mentioned mitigating factors, the presence of coal tar in the subsurface soils represents a continuing source of contamination to both soils and groundwater beneath the site.

3. Based on the results of the risk assessment, the presence of residual material associated with former gas manufacturing and service center operations do not pose a risk to public health so long as the facility continues to be used for commercial purposes and any excavation work is conducted under an appropriate HASP.

4. The presence of waste coke associated with the former filter beds located near the bank to the Anthony Kill could not be confirmed during the Phase IIA Supplemental field investigation. A sample collected by NYSEG in 1981 was submitted for laboratory analysis and failed for reactive sulfide,

reporting concentrations in excess of the reactivity threshold concentration. No evidence of waste coke was identified during the Phase IIA Supplemental field program. It is concluded that the areal extent of this material is limited and the potential volume which must be assessed for potential remediation is also likely to be small (i.e., less than 30 cubic yards)

8.1.3 Groundwater

1. Groundwater flow is primarily confined to the overburden and shallow bedrock units. The hydraulic permeability of the underlying bedrock formation rapidly decreases with depth and flow in the deep bedrock is primarily along fracture and joint planes. The presence of free phase coal tar has been observed in six (6) of the monitoring wells installed in the overburden and shallow bedrock systems. These wells are all located within the perimeter of the former gas manufacturing facility. The free phase coal tar has not been observed as seepage into the Anthony Kill and has not been observed in perimeter monitoring wells MW-14, MW-17 and MW-18. It is concluded that the migration of coal tar from the site is extremely slow under current site conditions.

2. The low permeability of both the overburden soils and the underlying bedrock formation indicate that groundwater will not sustain a viable water supply. This conclusion is supported by the fact that the nearest water supply well is located approximately 5,000 feet southwest of the site. Alternate water supplies represent better alternatives to installation of a

well in this heavily developed area. Further, other potential sources of groundwater contamination, including gas stations, petroleum fuel storage facilities, rail yard and manufacturing facilities, are also present in close proximity to the site and could represent additional threats to any planned water supply installation near the site.

3. Based on results of the risk assessment, the presence of site related contaminants in groundwater does not pose an unacceptable threat to public health. This is primarily due to the fact that there is no current use of groundwater as a water supply. Given the low yield potential of the overburden and bedrock formations and the probable existence of other sources of contamination to groundwater, it is improbable that any new water supplies will be developed near the site.

8.1.4 Surface Water and Sediments

1. The chemical analyses of sediment samples collected at six (6) locations adjacent to and downgradient from the site detected the same constituents at similar concentrations as were reported in earlier phases of the RI. Based on this additional data, it is concluded the presence of these constituents in the sediments of the Anthony Kill does not pose an unacceptable risk to aquatic life in the Anthony Kill.

2. The seepage meter investigation measured groundwater discharge rates were at the low end of the range estimated in the groundwater modeling effort. In addition, the concentrations of contaminants detected in seepage

water samples were significantly below the assumed concentrations. The assumed concentrations were used to assess the potential aquatic impacts associated with the discharge of contaminated groundwater from the site to the Anthony Kill. Because the actual concentrations were lower, the risk assessment approach applied to the assessment of potential surface water impacts is very conservative. Given that this conservative assessment did not identify any adverse impacts to surface water, it is concluded that no further investigation of potential surface water impacts is warranted at this time.

8.2 RECOMMENDATIONS

Recommendations will be developed by ABB-ES and NYSEG and included in this subsection.

1. In that environmental conditions have been adequately characterized at the Mechanicville site, NYSEG recommends that no further investigation activities be conducted. However, NYSEG recognizes that specific additional investigation and/or monitoring activities may be warranted to support the development of remedial actions or to monitor the effectiveness of any remedial actions which are selected for implementation based on the results of the FS.

2. In that the evaluation of public health impacts associated with the former gas manufacturing operation have been based on commercial (i.e., non-

residential) use of the property, NYSEG recommends that site use remain limited to commercial activities. This limitation will continue until such time as a reassessment of site conditions concludes that the public health risks associated with less restrictive uses are within the generally accepted range of risk values (currently 10^{-4} to 10^{-6}) in place at the time that the reassessment is performed.

3. In that the RI program has not identified any current and ongoing threats to public health or the environment, NYSEG recommends that the feasibility study focus on: 1) control of site related residuals to maintain current conditions; and 2) the identification of practicable remedial measures which could mitigate potential future impacts associated with the residuals identified at the site.

9.0 FEASIBILITY STUDY INTRODUCTION

ABB-ES prepared this FS for the Mechanicville former MGP site located in the City of Mechanicville, Saratoga County, New York. The primary objective of this FS is to develop and evaluate appropriate remedial alternatives such that an appropriate remedial response can be selected. This FS was conducted in accordance with guidelines in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 90-4030: "Selection of Remedial Actions at Inactive Hazardous Waste Sites" (NYSDEC, 1990); the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (USEPA, 1993c and USEPA, 1990); and the "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (USEPA, 1988, Interim Final).

This FS is based on results of the four-phase RI conducted for the Mechanicville site during 1986 through 1990, and the Phase IIA Supplemental Remedial Investigation conducted in May 1993. The RI consisted of a Preliminary Site Evaluation (Task 1), an Initial Field Investigation Program (Task 2), an Expanded Problem Definition Program (Task 3), a Risk Assessment (Task 4), and the Phase IIA Supplemental RI (Task 5). The results and conclusions of Tasks 1 through 4 were presented in the Phase II Remedial Investigation Report and Work Plan for the Phase IIA Supplemental Remedial Investigation and Feasibility Study (ABB-ES, 1992), which are summarized in Section 3.0 of this report. The results and conclusions from work conducted under the Phase IIA Supplemental RI are presented in Sections 4.0 through 8.0 of this report.

9.1 PURPOSE

The primary objective of this FS is to develop and evaluate appropriate remedial alternatives such that an appropriate remedial response can be selected. The FS process used for the Mechanicville site is consistent with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990) and involves identifying and evaluating suitable technologies for monitoring, containing, treating, and/or removing site wastes (Figure 9-1). Those technologies considered feasible were assembled into remedial alternatives that were evaluated in detail using the evaluation criteria specified in the NYSDEC TAGM 90-4030. The goal of the remedial response selection process is to select remedies that are protective of human health and the environment and maintain protection over time.

9.2 SCOPE OF FEASIBILITY STUDY

The RI identified and investigated various media potentially impacted by coal gasification activities at the Mechanicville site. These media included:

- surface soil
- subsurface soil
- subsurface coal tar
- overburden groundwater
- bedrock groundwater
- surface water of the Anthony Kill

- sediment of the Anthony Kill
- air

The risk assessment (see Subsections 3.4, 3.5, and 7.5) for the site was conducted to identify and assess the potential risks associated with exposure to chemicals detected on-site in these various media. For the public health risk assessment, the potential carcinogenic and noncarcinogenic risks from site-related exposures under baseline conditions (i.e., current conditions and future conditions, assuming no construction or remedial action) were estimated for sediments, soils, and exposure to VOCs and particulate dust from excavation activities during utility repair work. Because surface water data collected from the Anthony Kill do not indicate that site-related contaminants are present at detectable levels, exposure to public health by this pathway was not assessed. The environmental assessment evaluated present and future impacts to environmental receptors for potentially affected media including surface water, sediment, soil, and groundwater.

The FS provides the basis for selecting and implementing remedial actions at the Mechanicville site. This begins with the development of site-specific response objectives, qualitative goals established on the basis of the nature and extent of contamination, the resources currently or potentially threatened, and the potential for human and/or environmental exposures. Existing site-specific data collected during the RI and the risk assessment form the basis for selecting the media for which response objectives should be developed. The rationale for selection of media to be addressed in this FS follows.

Soil. The human health risk evaluation concluded that direct contact with on-site soil (surface and subsurface) by area residents (specifically, older children that may trespass), or utility workers, would not be expected to pose a significant health risk under the assumed exposure conditions (i.e., current conditions and future conditions, assuming no construction or remedial action). Both carcinogenic and noncarcinogenic risks were within target risk levels. Based on the results of the baseline risk assessment, and because no change in site use is planned in the foreseeable future, development of remedial response objectives for surface and subsurface soil is not warranted.

However, because the risk assessment for surface soils was based on current site use, administrative actions (i.e., deed restrictions, easements, zoning) will be a component of each alternative developed in this FS to restrict future noncommercial use of the site. In addition, laboratory analysis of one soil sample, collected by NYSEG in November 1981 from the filter beds, detected the presence of reactive sulfides at a concentration of 1,300 ppm. This concentration exceeds the threshold concentration for the hazardous waste reactivity test. In an attempt to further delineate soils associated with the former filter beds, additional soil borings were completed in this area during the 1993 Phase IIA Supplemental RI (see Subsection 6.1.2). Although no evidence of waste coke was observed in samples collected during the investigation, excavation and treatment and/or disposal of potentially reactive soils will also be a component of each remedial alternative.

Because coal tar constituents that could potentially impact groundwater quality have been detected in subsurface soils at the Mechanicville site, New York State's TAGM 92-4046, "Determination of Soil Cleanup Objectives and Cleanup Levels"

(NYSDEC, 1992), was evaluated. This TAGM provides guidance for establishing target cleanup objectives for contaminants in soil that will be protective of groundwater quality. Recommended soil cleanup objectives cited in the TAGM for VOCs, SVOCs, and PCBs were compared to concentrations detected in subsurface and surface soils at the Mechanicville site. Site-specific cleanup levels were not calculated for organic compounds using actual soil organic carbon content because sufficient background information was not available. In accordance with the TAGM, background levels for the inorganic contaminants of concern, iron (27,000 ppm) and zinc (260 ppm), were used as soil cleanup objectives.

Based on cleanup levels established in this TAGM, VOCs (e.g., benzene, toluene, ethylbenzene) and SVOCs (e.g., PAHs) detected in soil may have a potential impact on site groundwater. However, most samples where organic contaminants were detected at levels in excess of the cleanup levels established by the TAGM are associated with areas where (1) non-aqueous phase liquids (NAPLs) are present in monitoring wells or (2) boring or test pit logs indicate the presence of coal tar. Remedial options for coal tar and soils associated with coal tar are discussed as a separate media in this subsection.

PCB concentrations in surface soils were reported at concentrations below the method detection limit; as a result, the reported values are estimated. The estimated PCB concentrations were either below or slightly above the goal of 1 ppm for surface soils. Because of the low concentrations detected and because all concentrations are estimated, minimal risk is anticipated based on PCBs detected in soil at the site. Therefore, no further action relative to PCBs is proposed for surface soils.

Iron and zinc concentrations in the majority of soil samples were close to background levels with one exception: zinc was detected in the sample from B-5, located near the former filter beds, at a concentration of 1,600 ppm. Several other constituents associated with coal tar (e.g., PAHs) were also detected in this sample. In addition, coal tar has been encountered in the groundwater monitoring well (i.e., MW-5) installed in the boring from which the sample was collected. Soil in this area will therefore be addressed in conjunction with coal tar.

Coal Tar. Based on observations during the investigation program, coal tar is present in both the vadose and saturated zones beneath the Mechanicville site. The presence of free-phase coal tar has been observed in six (6) of the monitoring wells installed in the overburden and shallow bedrock systems, all located within the perimeter of the former gas manufacturing facility. The free-phase coal tar has not been observed as seepage into the Anthony Kill and has not been observed in perimeter monitoring wells (i.e., MW-14, MW-17, and MW-18).

DNAPLs such as coal tar are difficult to treat even in highly permeable soils. Because coal tar has migrated into the saturated zone and into fractured bedrock, efficient coal tar recovery is even more difficult, if not impossible. Although many DNAPL recovery technologies are being tested, there have been no field demonstrations to date (USEPA, 1992b and 1993a). Traditional pump-and-treat methods typically recover only a small fraction of trapped DNAPLs and in situ methods (e.g., bioremediation, soil flushing, vacuum extraction, bioventing), capable of potentially treating contaminants associated with coal tar (e.g., VOCs, PAHs, cyanide, iron) are not demonstrated and would be ineffective for treatment of free-phase coal tar.

Attempts to excavate and treat/dispose of vadose zone soils contaminated with coal tar would also likely prove ineffective because coal tar is dispersed throughout the site at various depths, including the fractured bedrock below the site. Because most of the site is covered with asphalt and buildings, excavation would require demolition, removal, and disposal of a large quantity of construction/demolition debris. In addition, much of the coal tar beneath the site is located below the water table, which ranges from 2 to 20 feet bgs. As a result, excavation would likely require either lowering the water table or dewatering excavated saturated soils. Emissions of toxic and volatile contaminants during large-scale excavation of the entire site may also be a health and safety concern to construction workers and downgradient receptors. All these factors would result in a very costly, potentially ineffective remedial action. In addition, because coal tar has migrated into bedrock, excavation of overburden soil would only be effective at removing a portion of the coal tar associated with the site.

Finally, investigations indicate that migration of coal tar from the site is extremely slow under current site conditions and that existing conditions effectively limit migration of coal tar to the Anthony Kill. Free phase coal tar has not been observed as seepage into the Anthony Kill and has not been observed in perimeter monitoring wells MW-14, MW-17, and MW-18. The majority of the area on which the former gas manufacturing facilities were located is ether paved or is covered by the slab and/or foundation(s) of the former structures. As a result, infiltration by precipitation to subsurface soils is minimized, thereby reducing potential flushing of site-related residuals into the groundwater system beneath the site. In addition, the risk assessment concluded that because groundwater discharge rates to the Anthony

Kill are very low, the potential for aquatic impacts associated with contaminant discharges from the site is minimal.

Based on this evaluation, control of coal tar migration rather than remedial activities that involve removal and/or treatment of coal tar is proposed at this time. Migration of coal tar to the Anthony Kill could potentially be controlled via management of the migration of overburden groundwater, which will be evaluated as part of this FS. Although migration of coal tar from the site appears to be extremely slow under current site conditions, control of coal tar migration contributes to the long-term management of contaminant migration by minimizing further contamination of surface water and limiting the spread of the potentially mobile coal tar source. Effective control of coal tar may also facilitate use of new and emerging technologies that may be available in the future.

Exposure to subsurface contamination would likely occur only during excavation activities in the future (i.e., servicing of underground sewer, water, or other utility lines). Other human health exposure scenarios are unlikely because access to the site is restricted and most of the ground surface above areas where coal tar has been observed is covered by asphalt or buildings/foundations. Because of the industrialized nature of the area, and the lack of suitable habitats, it is unlikely that the site is significantly used by wildlife. As a result, risk to human health and the environment would be minimal. Remedial alternatives developed to address overburden groundwater will, however, consist of placing deed restrictions on the property to restrict noncommercial use of the site in the future. Further, in accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), because wastes would remain

on-site, five-year site reviews will be a component of each remedial alternative developed for the site. Remedial options for coal tar will be reevaluated at this time.

Groundwater. As described in Section 5.0, groundwater flow beneath the Mechanicville site is primarily confined to the overburden and shallow bedrock units. Groundwater flow in these units is generally north toward the Anthony Kill. The hydraulic permeability of the underlying bedrock formation rapidly decreases with depth and flow in the deep bedrock, primarily along fracture and joint planes.

Hydraulic modeling of the groundwater system indicates that groundwater flow across the entire site is on the order of 4,000 to 5,000 gallons per day (i.e., 3 to 5 gpm). Based on the modeling output, it is estimated that approximately 50 percent of groundwater flow crossing the site discharges directly to the Anthony Kill adjacent to the site. The remainder of the groundwater flow is believed to flow in an easterly direction ultimately discharging to the Hudson River.

The low permeability of both the overburden soils and the underlying bedrock formation indicate that groundwater will not sustain a viable water supply. This conclusion is supported by the fact that there are no known current users of the groundwater near or downgradient of the Mechanicville site. The nearest water supply well is located approximately 5,000 feet southwest of the site, and no active industrial wells were identified in the Mechanicville area. In addition, the City of Mechanicville obtains its drinking water from a surface water reservoir approximately three miles northeast of the site, at an elevation approximately 160 feet higher than the site. Alternate water supplies represent better alternatives to installation of a well in this heavily developed area. Further, other potential sources of groundwater

contamination, including gas stations, petroleum fuel storage facilities, rail yards, and manufacturing facilities, are also present near the site and could represent additional threats to any planned water supply installation near the site.

As a result, because there appear to be no potential exposures, groundwater is not considered a potential current or future exposure pathway and was therefore not evaluated as part of the human health risk assessment.

Although no environmental receptors are exposed directly to groundwater at the site, approximately 50 percent of groundwater flow crossing the site discharges to the Anthony Kill, and stream quality could be affected. Therefore, an assessment of the potential impact of groundwater constituents discharging to the Anthony Kill was conducted. Based on this evaluation, estimated low stream flow concentrations of site-derived contaminants are below surface water quality criteria for all chemicals of concern, resulting in minimal risk to environmental receptors.

Groundwater is currently not a source of drinking water, nor does it represent a future potential source. In addition, the ecological risk assessment concluded that the potential impact of groundwater constituents discharging to the Anthony Kill is minimal. However, free-phase coal tar and concentrations of site-related constituents at concentrations in excess of their respective MCLs and NYSDEC criteria (i.e., MCLs and Class GA groundwater criteria) were encountered in both overburden and bedrock groundwater associated with the Mechanicville site. As a result, groundwater containing contaminants in excess of these criteria which discharge to the Anthony Kill could potentially impact ecological receptors. Therefore, this FS includes development of remedial response objectives for protection of ecological

receptors by addressing the release of site-related contaminants in overburden groundwater to the Anthony Kill.

The FS will not address bedrock groundwater for several reasons. First, as described above, groundwater is currently not a source of drinking water. The formation beneath the site does not represent a potential source in the future primarily because it will not yield water in usable quantities. In addition, there are ample surface water supplies available for use by the City of Mechanicville.

Second, based on observations during the RI, the upper portion of bedrock beneath the Mechanicville site contains fractures spaced between 2 inches to 1 foot apart. Although deeper bedrock contained fewer fractures, some fractures contained coal tar or had a distinct coal tar odor. In addition, coal tar has been observed as DNAPL in a number of monitoring wells screened in the bedrock. To remove the coal tar from the bedrock aquifer, it would be necessary to establish the number, density, size, and direction of the fractures, which represent the principal hydraulic route in this formation. This would be difficult to accomplish because of the extreme heterogeneity of a typical fractured system and lack of efficient and economical aquifer characterization techniques (USEPA, 1992a).

In general, DNAPLs are difficult to extract even in highly permeable soils and the technology for their removal is still evolving and not demonstrated (USEPA, 1992b, 1993a, and 1993b). Extraction is difficult primarily because of the tendency for DNAPLs to flow through the interconnected fractures and settle in dead-end segments of the fracture system. When traditional pump and treat systems are installed to clean up aquifers in fractured bedrock formations, improvements in water

quality are very slow because little or no water flushes through dead-end fractures or through the porous rock matrix, both of which are likely to contain the majority of the DNAPL mass (Mackay and Cherry, 1989). Because of the potential impact that DNAPL contamination in bedrock may have on achievement of remediation goals is so significant, USEPA is currently developing specific recommendations for management of sites where DNAPL is present (USEPA, 1993b).

Guidance has been developed by USEPA to clarify how the agency will assess whether restoration of groundwater at a particular site is technically impracticable and what, if any, alternative actions must be taken to ensure protection of human health and the environment (USEPA, 1993b) in the event that restoration is not practicable. This guidance specifies a number of factors that can inhibit groundwater restoration including site use, chemical properties of the contaminants of concern, contaminant distribution, geology, and hydrogeologic factors. Using the approach developed by USEPA, the relative difficulty of groundwater restoration at the Mechanicville site was assessed. The results, presented in Figure 9-2, show that Mechanicville site characteristics severely restrict the restoration potential of the bedrock aquifer beneath the site.

Therefore, because of the difficulty, ineffectiveness, and lack of demonstrated technologies available for extracting DNAPL, particularly from bedrock, remediation of bedrock groundwater beneath the Mechanicville site will not be evaluated as part of this FS. However, in accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), five-year site reviews will be a component of each remedial alternative developed for

the site because wastes will remain on-site. Remedial options for bedrock groundwater will be reevaluated as part of this review process.

Anthony Kill Surface Water and Sediment. The risk assessment concluded that direct contact with Anthony Kill sediments by area residents (specifically, older children which are most likely to trespass) or construction workers would not be expected to pose a significant health risk under the assumed exposure conditions. Both carcinogenic and noncarcinogenic risks were within target risk levels. Because surface water data collected from the Anthony Kill do not indicate that site-related contaminants are present at detectable levels, exposure to public health by this pathway was not assessed.

An evaluation of the environmental risks posed by contaminants detected in surface water and sediment suggests that a minimal potential for negative impacts does exist for organisms in the Anthony Kill. These risks appear to be relatively minor for several reasons. Few compounds were determined to exceed their media-specific protective criteria, and the extent of these exceedances were minimal. Moreover, negative impacts were associated only with "worst case" conditions (e.g., stream low-flow conditions and use of maximum analyte levels for criteria comparisons), with no adverse impacts expected under more typical assumptions. Finally, there is no indication that contaminants are impacting downstream receptors. Levels of contaminants detected in the downstream surface water and sediment samples never exceeded relevant protective criteria, even under the most conservative assumptions.

Because the baseline risk assessment indicated that no unacceptable risk currently exists from exposure to Anthony Kill surface water and sediment, development of remedial response objectives for these media is not warranted.

Air. Both carcinogenic and noncarcinogenic risk estimates were calculated for exposure of nearby residents to fugitive emissions of VOCs and particulate-borne SVOCs with dust originating from a hypothetical soil pile excavated and stockpiled on-site during utility repair work. It was concluded that inhalation of contaminants, volatilized or aerosolized by potential future site activities involving soil excavation, does not pose a significant health risk to the general population. As a result, development of remedial response objectives for this media is also not warranted in this FS. However, in the event that activities involving intrusive/exploratory work are required on the site, an appropriate HASP should be developed and followed to prevent or minimize undue exposure.

Summary. The scope of this FS includes the development of remedial response objectives to control migration of coal tar and groundwater contaminants in overburden to the Anthony Kill. Remedial technologies and alternatives capable of achieving these response objectives will be evaluated.

In addition, because the risk assessment for surface soils was based on commercial site use, administrative actions (i.e., deed restrictions, easements, zoning) will be a component of each alternative developed in this FS to restrict future noncommercial use of the site. In accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Alternatives at Inactive Hazardous Waste Sites, five-year site reviews will also be conducted to evaluate the effectiveness of remedial actions implemented

at the site and to evaluate the need for additional remedial actions. Finally, excavation and treatment and/or disposal of soils from the filter beds area that failed the reactivity test in 1981 will be a component of each of the remedial action alternatives.

9.3 FEASIBILITY STUDY ORGANIZATION

This FS evaluates management of migration and source control technologies designed to minimize migration of groundwater and coal tar from the site. This RI/FS report consists of eight sections that comprise the FS portion of the report. In addition to this introductory Section 9.0, Section 10.0 identifies the standards, criteria, and guidelines (SCGs) governing the extent of site remediation and establishes the remedial action objectives that will be used to develop detailed remedial alternatives to mitigate existing or future threats to human health and the environment. Site-specific considerations and assumptions made in defining these objectives are discussed.

Section 11.0 identifies and screens remedial technologies for controlling migration of overburden groundwater and coal tar at the Mechanicville site. In Section 12.0, remedial alternatives are assembled with different combinations of technologies based on observed contamination and site features. Section 13.0 screens the assembled alternatives using the criteria of implementation, effectiveness, and cost. Section 14.0 analyzes in detail the three alternatives that emerged from the alternatives screening. The seven evaluation criteria discussed in the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste

Sites (NYSDEC, 1990) serve as a basis for conducting the detailed analysis of the three remedial alternatives.

Section 15.0 is a comparative analysis of the remedial alternatives discussed in Section 14.0. The purpose of Section 15.0 is to compare the advantages and disadvantages of each of the three remedial alternatives, relative to one another, with regard to the evaluation criteria. This comparison serves as the basis for selecting an appropriate remedial action in Section 16.0. In accordance with the NYSDEC TAGM 90-4030 (NYSDEC, 1990), a scoring of each alternative was conducted to aid in the comparative analysis of alternatives. The detailed breakdown of how each of the alternatives was scored is presented in Appendix F.

Previous Feasibility Study Work. As part of the Phase II Remedial Investigation Report and Work Plan for the Phase IIA Supplemental Remedial Investigation and Feasibility Study (ABB-ES, 1992), a Phase IIA Supplemental Focused Feasibility Study Work Plan was developed. The Work Plan identified response objectives and the proposed technical approach for a focused FS, which included identification of potential remedial technologies and alternatives to reduce the release of site-related contaminants to the Anthony Kill.

Six alternatives that have the potential to mitigate contaminant migration to the Anthony Kill, plus a no action alternative, were identified. The seven alternatives included:

1. No Action
2. Downgradient Subsurface Drains

3. Downgradient Barrier Wall
4. Downgradient Extraction Wells
5. Downgradient Barrier Wall with Extraction Wells
6. Upgradient Subsurface Drains
7. Upgradient Subsurface Drains with Downgradient Barrier Wall

The applicability of each of these alternatives to site conditions was reevaluated for this FS based on additional data collected during the Phase IIA Supplemental RI and groundwater modeling conducted to evaluate potential alternatives (see Appendix E). Based on this analysis, the technical approach described in the Work Plan was not changed, with two exceptions.

First, the No Action Alternative was changed to a Minimal Action Alternative that includes environmental monitoring, administrative controls (e.g., deed restrictions), five-year site reviews, and asphalt cover maintenance. This alternative represents the minimal effort that would be made to provide protection and will provide a baseline with which to compare other remedial alternatives in this FS. Second, Alternative 5 was not developed into a stand-alone, separate alternative. Based on modeling conducted to evaluate the alternatives, perimeter containment wells at the barrier wall will likely not be required to prevent mounding of groundwater at the wall because of low groundwater flow in the overburden unit beneath the site (Appendix E). As a result, rather than conducting a detailed analysis for this alternative, the addition of perimeter containment wells is evaluated as a potential action to be evaluated in the future in the event that Alternative 3: Downgradient Barrier Wall is selected as the preferred remedial alternative. In addition, because this FS has been developed in accordance with the NYSDEC TAGM 90-4030 for

Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), the FS is no longer considered a "focused" FS and will not be referred to as such.

10.0 IDENTIFICATION OF STANDARDS, CRITERIA, AND GUIDELINES

10.1 IDENTIFICATION OF STANDARDS, CRITERIA, AND GUIDELINES (SCGS)

The SCGs identified in this section are used to (1) evaluate the appropriate extent of site cleanup, (2) define and formulate remedial action alternatives, and (3) govern implementation and operation of the selected action. SCGs include both state and federal laws, regulations, guidance, and criteria that directly apply to site-specific conditions, features, or remedial actions.

Because of their site-specific nature, identification of SCGs requires evaluation of the body of federal, state, and local environmental and health regulations with respect to chemicals of concern, site characteristics, and proposed remedial alternatives. Requirements that pertain to a remedial response can be categorized into three distinct areas:

- **Chemical-specific** requirements generally involve health- or risk-based numerical values or methodologies that establish site-specific acceptable concentrations and/or amounts. The values are used to develop action levels, cleanup concentrations, and/or discharge limits.

- **Location-specific** requirements involve restrictions established for specific substances or activities because of the location or characteristics of a site.

- **Action-specific** requirements are generally technology- or activity-based limitations that direct how remedial actions are conducted.

10.1.1 Chemical-specific SCGs

Chemical-specific SCGs are numerical values or procedures that, when applied to a specific site, establish numerical limits for individual chemicals or group of chemicals. These SCGs are generally health- or risk-based standards limiting the concentration of a chemical found in or discharged to the environment. They govern the extent of site remediation by providing either actual cleanup levels, or the basis for calculating such levels. Table 10-1 summarizes chemical-specific SCGs, listed by the media to which they apply.

10.1.2 Location-specific SCGs

Location-specific SCGs represent restrictions placed on the concentration of hazardous substances or the conduct of activities because of the location or characteristics of a site. These SCGs set restrictions relative to special locations such as wetlands, floodplains, sensitive ecosystems, as well as historic or archeological sites, and provide a basis for assessing existing site conditions. No location-specific SCGs have been identified for this site.

10.1.3 Action-specific SCGs

Action-specific SCGs provide a basis for screening remedial technologies, developing remedial alternatives, and assessing the feasibility and effectiveness of each remedial

alternative retained for detailed evaluation. Action-specific SCGs, unlike location- and chemical-specific SCGs, are usually technology- or activity-based limitations that direct how remedial actions are conducted. The applicability of this set of requirements is directly related to the components of the remedial alternatives developed for the site. Potential action-specific SCGs are presented in Table 10-2.

10.2 DEVELOPMENT OF REMEDIAL OBJECTIVES

This subsection describes the basis for developing and comparing remedial technologies or alternatives. In Subsection 10.2.1, remedial response objectives developed based on an evaluation of information gathered during the field investigations and assessment activities are identified. The preliminary remediation goals for the Mechanicville site are established in Subsection 10.2.2. An understanding of site environmental contamination and remedial actions that will be considered to meet the response objectives is presented in Subsection 10.2.3. Subsection 10.2.4 describes the general response actions that will be used to identify technologies. The information presented in this section forms the basis for developing and comparing remedial alternatives.

10.2.1 Identification of Remedial Response Objectives

Response objectives are site-specific, qualitative, initial cleanup objectives established on the basis of the nature and extent of contamination, the resources currently or potentially threatened, and the potential for human and environmental exposure.

These response objectives are used to develop remedial action objectives and appropriate remedial alternatives.

Using the results of the RI and risk assessment, media potentially impacted by site-related contaminants were evaluated in Section 9.0 to assess the media for which remedial response objectives should be developed. Based on this assessment, as well as SCGs identified in Subsection 10.1, the goal of the FS is to evaluate what, if any, additional remedial actions should be implemented to mitigate potential impacts to ecological receptors in the Anthony Kill. Therefore, the response objectives for the Mechanicville site include managing of the release of site-related contaminants to the Anthony Kill in terms of the following migration pathways:

- the movement of coal tar into the Anthony Kill; coal tar was observed in subsurface explorations above a confining silt layer 1 to 4 feet above the bedrock surface; and

- the discharge of site-contaminated groundwater to the Anthony Kill.

10.2.2 Identification of Preliminary Remediation Goals

The purpose of evaluating cleanup goals is to establish the extent of cleanup required for a site. Cleanup levels will generally be set at health-based levels that reflect current and potential use and exposure. However, the Mechanicville site is not located over a water supply and the nearest known water supply wells are approximately 1 mile southwest (upgradient) of the site in the Town of Halfmoon. Therefore, because Mechanicville groundwater is not currently used as a public

potable water supply, drinking water standards (i.e., federal and New York State MCLs) are not currently applicable.

In addition to state MCLs, NYSDEC has promulgated standards for the protection of groundwater quality (6 NYCRR Parts 700 - 705). All fresh groundwaters in the State of New York are classified as Class GA groundwaters. The best usage of Class GA groundwater is as a potable water source; the standards and guidance values are therefore set at concentrations to protect human health and drinking water sources and are referred to as health (water source) values. However, as previously discussed (see Subsection 9.2), because groundwaters in the vicinity of the Mechanicville site are not a current source of drinking water, nor a likely potential future source, application of these standards is not appropriate. Further, other potential sources of groundwater contamination, including gas stations, petroleum fuel storage facilities, rail yards, and manufacturing facilities are also nearby the site and represent additional threats to any planned water supply installation near the site. Finally, it is highly unlikely that Class GA groundwater standards could be achieved within a reasonable time frame or cost given potential off-site sources contributing to groundwater contamination and the presence of DNAPLs in the fractured bedrock unit beneath the site (see Subsection 9.2).

Cleanup levels for groundwater that may be extracted from beneath the site will depend on the selected discharge location (e.g., publicly owned treatment works [POTW] or Anthony Kill). Once a discharge location has been selected, discharge criteria will be negotiated with the appropriate agency (e.g., POTW or NYSDEC).

10.2.3 Remedial Action Objectives

Remedial action objectives are site-specific, quantitative goals defining the extent of cleanup required to achieve response objectives. They include preliminary target cleanup levels, the area of attainment, and the restoration time frame, as appropriate. Remedial action objectives are developed during the FS process and are used as the framework for developing detailed remedial alternatives. The objectives are formulated to achieve the overall goal of protecting human health and the environment and are established with consideration given to the site location and present and future use.

Because existing site conditions effectively control migration of coal tar to the Anthony Kill (see Subsection 9.2), the remedial action objectives for the Mechanicville site are:

- Control migration of coal tar to the Anthony Kill to maintain levels that do not pose a risk to ecological receptors.

- Control migration of contaminants in groundwater to the Anthony Kill to maintain levels that do not pose a risk to ecological receptors.

10.2.4 General Response Actions

General response actions describe general categories of remedial technologies that may be employed to address remedial action objectives, and lay the groundwork for identifying specific technologies in Section 11.0. For controlling migration of coal tar

and overburden groundwater, these general response actions may include one or a combination of the following:

- no action
- institutional controls
- groundwater monitoring
- containment
- extraction
- treatment
- disposal

For the Mechanicville site, the primary general response action will be to control migration of coal tar and contaminants in groundwater to the Anthony Kill. The no action alternative is considered a baseline against which other alternatives can be compared. For the purposes of this FS, the no action alternative involves minimal, limited sampling and administrative controls. Therefore, the baseline alternative will be referred to as "minimal action" for the remainder of this FS.

11.0 IDENTIFICATION AND SCREENING OF APPLICABLE TECHNOLOGIES

This section identifies and screens technologies for controlling migration of overburden groundwater and coal tar at the Mechanicville site. This process was completed in accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), the NCP (USEPA, 1993c and USEPA, 1990), and USEPA RI/FS guidance (USEPA, 1988). The result is a list of potential remedial technologies that will be developed into remedial alternatives. Technologies were identified to attain the remedial action objectives established in Subsection 10.2.3, and to fit into the categories of general response actions described in Subsection 10.2.4. The demonstrated performance of each technology was considered, and the applicability of a technology was established by considering site and waste characteristics.

Site characteristics that were considered include:

- site geology, hydrogeology, and terrain
- availability of space and resources necessary to implement the technology
- presence of special features at the site (e.g., floodplains)

Waste characteristics that were considered include:

- contaminated media
- types and concentrations of waste constituents
- physical and chemical properties of the waste (e.g., volatility, solubility, density, viscosity, and mobility)
- location of contaminants (e.g., fractured bedrock)

The technology screening process reduces the number of potentially applicable technologies by evaluating each technology as to its **effectiveness** in providing protection to human health and the environment and to the reduction in toxicity, mobility, or volume of the waste; **implementability**, as a measure of both the technical and administrative feasibility of constructing, operating, and maintaining a remedial technology; and **cost**, as compared to other technologies providing similar performance.

Table 11-1 identifies general response actions and potential remedial technologies for controlling migration of overburden groundwater and coal tar at the Mechanicville site. Technology screening is presented in Table 11-2. Technologies judged not effective nor implementable were eliminated from further consideration. A summary of the technologies retained for remedial alternatives development for overburden groundwater are presented in Figure 11-1.

12.0 DEVELOPMENT OF REMEDIAL ALTERNATIVES

Based on remedial action objectives, location- and chemical-specific SCGs, and screening of applicable technologies, six remedial alternatives were developed for control of overburden groundwater and coal tar at the Mechanicville site. A range of control alternatives was developed to include minimal action, containment, and containment combined with extraction/treatment alternatives. The alternatives developed for control of overburden groundwater and coal tar at the Mechanicville site and the major technical components of each are presented in Table 12-1.

13.0 INITIAL SCREENING OF THE MECHANICVILLE SITE ALTERNATIVES

In this section, the six alternatives developed for the Mechanicville site are screened for effectiveness, implementability, and cost. Criteria considered for each factor during the initial screening of alternatives are presented in Table 13-1. Tables 13-2 through 13-7 present the initial screening of each alternative. Table 13-8 summarizes the status of each alternative based on the initial screening.

14.0 DETAILED ANALYSIS OF REMEDIAL ACTION ALTERNATIVES

This section presents the detailed analysis of remedial action alternatives for the Mechanicville site. Subsection 14.1 discusses the general approach to the detailed analysis; and Subsections 14.2 through 14.4 present the detailed analyses for Alternatives 1, 2, and 3, respectively, which were retained for further evaluation as discussed in Section 13.0.

14.1 GENERAL APPROACH TO THE DETAILED ANALYSIS

The detailed analysis is intended to provide decision-makers with sufficient information to select the appropriate remedial alternative for management of overburden groundwater and coal tar residuals at the Mechanicville site that best meets the following NYSDEC requirements:

- is protective of public health and the environment
- attains SCGs (or provides grounds for invoking a waiver)
- provides preference for treatment that reduces toxicity, mobility, or volume as a principal element (or provides an explanation in the decision document as to why it does not)
- is cost-effective

The detailed analysis has been conducted in accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), the NCP (USEPA, 1993a and USEPA, 1990), and USEPA RI/FS guidance (USEPA, 1988), and includes the following:

- detailed description of each remedial alternative emphasizing the application of various technologies as components of the alternative; and

- detailed analysis of each alternative against the evaluation criteria described in TAGM 90-4030 (NYSDEC, 1990).

The detailed description of the technologies or processes used for each alternative includes, where appropriate, preliminary site layouts and a discussion of the limitations, assumptions, and uncertainties for each component. These descriptions are intended to provide a conceptual design of each alternative and are used for cost purposes only. Costs presented in this analysis are based on existing data and knowledge of the site and will be reevaluated at the time of remedial action implementation. The three remedial alternatives are subsequently evaluated according to the seven criteria listed in Table 14-1.

The following three remedial alternatives are being considered for implementation at the Mechanicville site:

- Alternative 1: Minimal Action
- Alternative 2: Downgradient Barrier Wall

- Alternative 3: Upgradient Subsurface Drain with Downgradient Barrier Wall

14.2 DETAILED ANALYSIS OF ALTERNATIVE 1: MINIMAL ACTION

14.2.1 Description

The Minimal Action Alternative was developed as a baseline with which to compare other remedial alternatives and represents the minimal effort that would be taken to provide protection. Components of the alternative include the following:

1. Environmental Monitoring
2. Institutional Controls
3. Five-year Site Reviews
4. Asphalt Cover Maintenance
5. Bedrock Mapping

Environmental Monitoring. The objective of the environmental monitoring program would be to monitor site conditions at the Mechanicville site and evaluate whether the risk to human health and the environment changes over time. Based on current site conditions, no significant human health or ecological risk currently exists at the Mechanicville site.

Monitoring would involve routine periodic sampling and analysis of surface water, sediment, and groundwater. The long-term monitoring plan developed and described

below is conceptual. The final, detailed monitoring plan would be developed and submitted for regulatory agency review and comment before implementation.

It is assumed that environmental samples would be collected annually over a period of 30 years, with the frequency reduced over time if no adverse changes in site conditions were observed. Therefore, the estimated costs are believed to be conservative. Based on field investigations conducted to date, all samples would be analyzed for Target Compound List VOCs and SVOCs.

It is assumed that up to four (4) surface water and four (4) sediment samples would be collected along the southern bank of the Anthony Kill annually. Analytical results would be used to detect and evaluate potential migration of coal tar into the stream and its potential impact on ecological receptors.

Groundwater samples would be collected from two (2) existing groundwater monitoring wells (MW-16 and MW-17), one (1) new downgradient monitoring well in overburden, and one (1) new seepage meter installed in the Anthony Kill (Figure 14-1). The upgradient monitoring well, MW-16, would be monitored to provide information on the background concentrations of contaminants in overburden groundwater. The new downgradient well screened at the overburden/bedrock interface and the new seepage meter installed in the Anthony Kill would be monitored to detect and evaluate potential contaminant migration into the Anthony Kill. Monitoring well (i.e., MW-17) would be monitored to evaluate overburden groundwater conditions in the downgradient area east of the site. Water level data would be collected from all existing wells on the site in which free phase coal tar is not encountered to evaluate hydraulic conditions and flow.

Institutional Controls. Institutional controls in the form of deed and land-use restrictions would be implemented to restrict future noncommercial use of the site, thereby limiting the potential for exposure to site contaminants. The controls would also prohibit groundwater use within the site. These controls would be drafted, implemented, and enforced in cooperation with the state and local governments.

Five-year Site Reviews. In accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), a remedial action that results in contaminants remaining on site should be reviewed at least once every five years. Data collected during the environmental monitoring program would provide useful information for this review. The review would assess potential impacts of contaminants to the Anthony Kill and downgradient overburden groundwater, and evaluate risks to human health and the environment. In addition, the review would assess technologies that have emerged and been demonstrated over the previous five years for the extraction and treatment of coal tar present in the overburden and bedrock beneath the site. It was assumed that no site investigation activities would be required as part of this review.

Asphalt Cover Maintenance. The majority of the area on which the former gas manufacturing facilities were located is either paved or is covered by the slab and/or foundation(s) of the former structures. As a result, infiltration by precipitation to subsurface soils is minimized, thereby reducing potential flushing of site-related residuals into the groundwater system beneath the site. In addition, the asphalt cover reduces potential direct contact with site soils. To maintain these benefits, periodic maintenance and/or repair of the asphalt cover is included as part of this alternative. It was assumed that the existing asphalt cover at the site would be inspected annually

to assess its integrity and ability to continue to reduce infiltration to the site. The cap would be visually inspected and repaired (e.g., resurfaced, patched, etc.), as necessary.

Bedrock Mapping. Because bedrock fractures are the primary contaminant pathway for discharge to the Anthony Kill, bedrock mapping would be conducted to identify significant fracture trends in the site vicinity and the general orientation of bedrock fractures in the Anthony Kill. This information would be used to evaluate potential groundwater discharge points and migration pathways in bedrock, and to assess the need to implement additional remedial actions at the site. It was assumed that mapping would include a photolineament survey of the area, a field survey of the streambed of the Anthony Kill, and that no intrusive activities would be required.

14.2.2 Compliance with SCGs

Because Alternative 1 would not involve any remedial actions, contaminated overburden groundwater and coal tar could migrate toward the Anthony Kill and potentially have an adverse impact on ecological receptors. However, investigations indicate that migration of coal tar from the site is extremely slow under current site conditions. Free phase coal tar has not been observed as seepage into the Anthony Kill and has not been observed in perimeter monitoring wells MW-14, MW-17, and MW-18. The risk assessment concluded that because groundwater discharge rates to the Anthony Kill are very low, the potential for aquatic impacts associated with contaminant discharges from the site is minimal. Therefore, because existing site conditions are effective in limiting the migration of coal tar, the Minimal Action

Alternative would maintain the current level of protection and would meet response objectives.

No location-specific SCGs were identified for this site.

The only intrusive actions associated with Alternative 1 would be monitoring well and seepage meter installation and sampling of surface water, sediments, and groundwater. These activities would be conducted according to regulations outlined by OSHA.

14.2.3 Overall Protection of Human Health and the Environment

Groundwater beneath the site is currently not a source of drinking water, nor does it represent a potential future source, and is therefore not a risk to human health because no exposure pathway exists. The risk assessment also concluded that groundwater presents minimal risk to environmental receptors. However, contaminant concentrations in excess of MCLs and NYSDEC criteria have been detected in groundwater, and coal tar present in the subsurface acts as a continuing source to groundwater contamination. Because groundwater and coal tar associated with the site would not be contained or controlled, contaminants in excess of groundwater criteria could migrate to the Anthony Kill, resulting in potential risk to the environment. Monitoring would be necessary to evaluate if this is occurring and, if so, whether it results in unacceptable risk to the environment after reaching the Anthony Kill.

14.2.4 Short-term Impacts and Effectiveness

Individuals accessing the site for sampling activities would be required to be trained in health and safety procedures for work at hazardous waste sites. The existing site-specific HASP would be updated, approved, and followed, and applicable OSHA regulations would be followed.

Because no remedial activities would be implemented under this alternative, no adverse effects on the local community and the environment are anticipated.

14.2.5 Long-term Effectiveness and Permanence

Because no treatment or containment technologies would be implemented, the Minimal Action Alternative would not be a permanent remedy. Containment and control of coal tar and contaminated groundwater would be limited to reductions achieved by the existing asphalt paving and existing site conditions, which, based on existing data, are effective in controlling migration of coal tar. Although no actions would be taken to control potential future ecological risks due to migration of coal tar and contaminants in site groundwater to the Anthony Kill, the risk assessment concluded groundwater discharge currently presents minimal risk to aquatic receptors. Therefore, although the remedial action goal of permanence would not be met, existing conditions are providing protection to human health and the environment.

14.2.6 Reduction of Toxicity, Mobility, and Volume

The existing asphalt cover minimizes precipitation infiltration to subsurface soils, thereby reducing potential flushing and mobility of site-related residuals into the groundwater system beneath the site. Additional treatment (e.g., destruction, separation/treatment, or solidification/chemical fixation technologies) or containment processes would not be employed to address site contamination. Therefore, no reduction over existing site conditions in toxicity, mobility, or volume of contaminants would be achieved.

14.2.7 Implementability

Environmental monitoring, institutional controls, five-year site reviews, asphalt cover maintenance, and bedrock mapping would be the only activities associated with this alternative. Equipment, materials, and services for all activities are readily available. Some coordination among NYSEG, state, and local officials would be required to conduct these activities and to implement institutional controls. Detailed plans for environmental monitoring and bedrock mapping would require development and implementation. These plans would be subject to regulatory review and approval. Institutional controls and five-year reviews would likely be easy to implement. The Minimal Action Alternative would not interfere with possible future remedial actions at the site and will facilitate use of more technically and cost effective technologies for coal tar remediation.

14.2.8 Cost

A cost estimate was prepared for Alternative 1 to help select a remedial alternative. The estimate contains the following principal elements:

- capital cost
- operation and maintenance cost

Capital cost consists of direct and indirect costs. Typically, these costs include those expenditures initially incurred to develop, construct, and implement the remedial alternative. For Alternative 1, direct costs include expenditures for the equipment, labor, and materials necessary to establish institutional controls and conduct bedrock mapping. A 25 percent contingency was included in direct cost items to account for unforeseen project complexities.

Indirect costs include expenditures for contractors' overhead and profit. Additional administrative, engineering, and legal services include engineering expenses, legal fees, health and safety costs, and contingency allowances.

Engineering design and services (i.e., documentation and resident engineering) was estimated at 5 percent of the direct costs. Costs for health and safety activities conducted at Level D were estimated at 2 percent of direct costs. Legal, administrative, and permitting costs were estimated at 2 percent of direct costs.

Operation and maintenance costs refer to expenditures associated with long-term environmental monitoring and maintenance of the environmental systems (i.e., groundwater monitoring wells) and asphalt cover and five-year site reviews.

The estimated total present worth (i.e., 5 percent for 30 years) of Alternative 1 is $685,000. Total estimated engineering, and administrative costs for institutional controls and bedrock mapping are $55,000. The present worth of operation and maintenance costs are estimated at $630,000. Table 14-2 summarizes the costs estimated for Alternative 1.

To generate these costs, the following assumptions were made with respect to Alternative 1:

- the Mechanicville site would be reviewed every five years for a period of 30 years; and

- environmental monitoring (i.e., groundwater, surface water, and sediment) and asphalt cover maintenance would be conducted annually for 30 years.

14.3 DETAILED ANALYSIS OF ALTERNATIVE 2: DOWNGRADIENT BARRIER WALL

14.3.1 Description

Alternative 2 consists of the following major components:

1. Environmental Monitoring
2. Institutional Controls
3. Five-year Site Reviews
4. Asphalt Cover Maintenance
5. Bedrock Mapping
6. Site Preparation
7. Removal and Treatment/Disposal of Filter Bed Soil
8. Installation of Downgradient Barrier Wall

Components 2, 3, 4, and 5 would be performed as described for Alternative 1 (see Subsection 14.2.1). The remaining four major components are described in the following paragraphs.

Environmental Monitoring. The environmental monitoring program would be similar to that described for Alternative 1 (see Subsection 14.2.1). The principal difference would be the objectives of the program which, for Alternative 2, would be to evaluate the effectiveness of the downgradient barrier wall installed at the site and to continue to assess groundwater beneath the site.

Site Preparation. Site preparation would include activities required to prepare the site for mobilization and construction of the barrier wall. Because the gas manufacturing facilities have been demolished and the majority of the area on which the facilities were located has been paved or is covered by the slab of the former structures, minimal clearing of vegetation would be required. It will, however, be necessary to clear some vegetation on the southern bank of the Anthony Kill to allow construction equipment access for installation of the barrier wall. It is assumed that construction of access roads and/or upgrading existing roads to handle heavy equipment would not be required. In addition, because geophysical investigations have been conducted as part of the site investigation (see Sections 3.0 and 4.0), it was assumed that additional surveys to locate underground structures and to delineate bedrock surface would not be required for installation of the downgradient barrier wall. Additional site preparation activities that would be required before work could commence include locating and removing above-ground and subsurface utilities and/or obstructions, establishing a stockpile/storage area for equipment and materials, mobilizing a field office, and establishing a decontamination and trash disposal area.

Removal and Treatment/Disposal of Filter Bed Soil. In November 1981, NYSEG collected soil samples from the filter beds area and the relief gas holder foundation. Laboratory analysis of one (1) sample from the filter beds detected the presence of reactive sulfides at a concentration of 1,300 ppm. This concentration exceeds the threshold concentration for the hazardous reactivity test. In an attempt to further delineate soils associated with the former filter beds, additional soil borings were completed in this area (see Subsection 6.1.2).

Although no evidence of waste coke from the former filter beds was observed in any of the split-spoon soil samples collected in 1993, it was assumed that a test pit survey would be conducted in this area to attempt to locate residual waste coke from the former filter beds. Based on visual observations, soils that contain waste coke would be collected and disposed of appropriately. It was assumed that waste coke might be observed in an estimated 30 cubic yards of soil. This volume estimate was developed assuming an average depth of 8 feet and half the area encompassed by the six (6) borings completed in the former filter bed area (see Subsection 6.1.2). These soils would be excavated, sampled, and disposed of at an appropriate disposal facility. It was assumed that the soils would fail the hazardous test for reactivity, and would therefore require treatment/disposal in an approved, licensed hazardous waste landfill.

Installation of Downgradient Barrier Wall. A low permeable barrier wall is a vertical barrier placed in the subsurface to minimize fluid flow. Barrier walls have been used for many years in civil engineering projects, where they are used for reducing groundwater inflow into excavations or beneath dams. Use of barriers for environmental control purposes is more recent. Goals typically are to prevent contaminated groundwater from crossing site boundaries or discharging into surface waters. At the Mechanicville site, the purpose of the downgradient barrier wall would be to control migration of overburden coal tar to the Anthony Kill.

As described in Section 13.0, a number of techniques are used for constructing barrier walls including slurry walls, grout curtains, and sheet pile walls. Based on current site conditions, a sheet pile wall was selected for analysis in this FS. Sheet pile systems offer a number advantages over other barriers, including:

- The sheet pile system can be installed with minimal excavation, minimizing potential health and safety concerns and disposal of contaminated soils.

- The sheet pile system can achieve low permeabilities if the joints are sealed to prevent potential leakage.

- Minimal construction equipment and ancillary facilities are required, making it more suitable for use at sites where access is limited compared to alternative barrier technologies.

If alternative barrier wall technologies are evaluated during the design and found to be more effective, a different technology may be used at this site.

Sheet piling structures consist of individual sheet piles that are fitted together and driven into the ground. Adjacent sheets are connected by interlocking joints that are designed for mechanical strength rather than to prevent water passage. Because the goal of the downgradient barrier wall at the Mechanicville site is to prevent migration of coal tar to the Anthony Kill, sealing of these joints would likely be necessary to prevent leakage. Various methods are available for sealing joints between sheet piles including placing a sealant into each joint before the sheets are coupled and driven into the ground, grouting the soil adjacent to each joint after the sheets have been driven, or installing sheets designed to allow injection of sealant into joints after being driven into the ground (Starr, et al., 1992). For cost estimating purposes in this FS, the last method was selected.

A patented steel sheet piling whose interlocking joints between individual sheets are constructed with a cavity that can be filled with sealant after driving the sheet piles into the subsurface has been developed. The cavity can be cleaned before and after driving to ensure it is clean and free of soil and/or other foreign material (e.g., rust, grease, etc.). The type of material used to seal the joints is dependent on contaminants present and site conditions. Materials that have been field tested and demonstrated include bentonite grouts, an organic polymer that absorbs water and swells, and epoxy resins. Based on current site conditions at the Mechanicville site, it was assumed that a cement/bentonite grout would be an effective sealant. However, compatibility testing may be needed during design to evaluate effectiveness of the selected grouting material.

For the Mechanicville site, construction of the sheet pile system would begin with excavation and removal of portions of the two existing storm water outfalls that the barrier wall will cross (Figure 14-2). It was assumed that excavated soils generated during removal of the outfalls would be collected and disposed of off-site. The excavated area would subsequently be backfilled with clean fill to provide access for the driving operation.

The contractor would subsequently begin driving the sheet piles using standard techniques for sheet pile wall construction. A 200-foot wall with 30-foot wings on either side would be installed between the south bank of the Anthony Kill and an existing concrete pad (see Figure 14-2). It was assumed that the sheet pile sections would be driven through the overburden soils beneath the site and keyed one to two feet into weathered bedrock. The depth of the sheets would vary between approximately 10 and 28 feet bgs, depending on the depth to bedrock. After driving,

all foreign matter would be removed from the joints by high pressure water blasting. A grouting tube would subsequently be lowered to the bottom of the joint, sealant injected, and the tube withdrawn as the cavity is filled with sealant.

Once the sheet piles are in place, the contractor would excavate down to the storm drain locations, cut holes into the sheet pile wall, and reinstall the two storm drains. The pipe penetrations within the wall would be sealed with bentonite and the area backfilled with clean fill material.

All wash water generated while cleaning the joints and any groundwater encountered during installation of the sheet pile wall would be collected, sampled, and analyzed to determine disposal requirements. It was assumed that this water would be transported to an off-site treatment/disposal facility.

The primary function of this alternative would be to control coal tar migration in the overburden to the Anthony Kill, thus providing protection to aquatic receptors. However, based on groundwater modeling conducted to evaluate remedial alternatives (see Appendix E), the downgradient barrier would not be effective for controlling overburden groundwater flow. The downgradient barrier would only direct groundwater flow in the overburden more easterly in the vicinity of the barrier, and eventually into the Anthony Kill. Flow could also potentially be diverted under the downgradient barrier wall. Groundwater discharging into the Anthony Kill along the length of the barrier is estimated to decrease only about three percent, while no change in overall flow is estimated (see Appendix E).

Groundwater modeling was also conducted to evaluate the potential benefits of perimeter containment wells at the ends of the barrier to relieve mounding and control lateral flow around the barrier (see Appendix E). The model first evaluated the impact on groundwater flow if two (2) perimeter wells were installed in the overburden. Results indicated that the simulated wells could not be pumped at more than a total of 0.05 gpm before creating excessive drawdown. As a result, containment wells were simulated to extend through the overburden and approximately 5 feet into bedrock. The model predicted greater total flow (up to 0.13 gpm before the overburden became dry), but still did not provide significantly greater control of groundwater (only a decrease of 5 percent of total flow and a reduction of approximately 10 percent in flow to the stream along the location of the barrier). In addition, because pumping these wells would lower the water table, migration of overburden coal tar into the bedrock could increase.

Based on the modeling of the remedial system, it was assumed that perimeter containment wells would not be required because the model predicts that groundwater mounding against the downgradient barrier would be minimal (i.e., approximately 0.5 feet, see Appendix E). However, environmental monitoring and visual inspections would be conducted to evaluate the need for future controls such as hydraulic controls.

If conditions indicate the need for perimeter containment wells, it is anticipated that two (2) wells installed on the eastern and western ends of the sheet pile system would be required (Figure 14-3). These wells would be installed five feet into bedrock with 10-foot screens across overburden and shallow bedrock to maintain flow without drying out the overburden. Although modeling estimated that the two

(2) wells would be capable of pumping a total of approximately 0.1 to 0.2 gpm, it was assumed that up to 1 gpm total flow could effectively be removed. Extracted groundwater would be pumped to an on-site treatment unit where it would undergo treatment to remove NAPLs that may be present and potentially treatment to remove inorganic and/or organic contaminants. Treated water would subsequently be discharged to one of the following locations:

- Anthony Kill; or
- local POTW.

The discharge location and degree of treatment required would be negotiated with the POTW and/or NYSDEC prior to installation of the perimeter containment wells. Estimated costs to install, operate, and maintain such a system are discussed in Subsection 14.3.8.

14.3.2 Compliance with SCGs

Location-specific SCGs have not been identified for the Mechanicville site. The components of Alternative 2 would be designed and executed to comply with applicable chemical-specific and action-specific SCGs identified in Tables 10-1 and 10-2, respectively. OSHA requirements for training, safety equipment, and recordkeeping would be met during construction activities at the site.

Alternative 2 would only partially achieve response objectives because contaminated overburden groundwater would continue to migrate to the Anthony Kill. However, the risk assessment concluded that because groundwater discharge rates to the

Anthony Kill are very low, the potential for aquatic impacts associated with contaminant discharges from the site is minimal. Migration of overburden coal tar to the Anthony Kill would be controlled.

14.3.3 Overall Protection of Human Health and the Environment

Alternative 2 would provide some additional protection to ecological receptors by controlling migration of coal tar in the overburden to the Anthony Kill. Because groundwater would only be diverted around and potentially under the downgradient barrier, this alternative would not effectively control migration of overburden groundwater in the long-term. However, groundwater in the area is currently not a source of drinking water, nor does it represent a future potential source, and is therefore not a risk to human health.

Because of the industrialized nature of this area, and the lack of suitable habitats, no significant impacts to area wildlife would be anticipated from implementation of this alternative.

The most significant human health risks would be associated with the use of heavy machinery. To minimize these risks, a HASP would be developed and implemented and OSHA regulations would be followed. Because limited excavation would be required, exposure to contaminated soil during installation of the barrier would be minimal.

14.3.4 Short-term Impacts and Effectiveness

None of the components of Alternative 2 would have significant short-term impacts on the local community and environment. Although land use in the immediate vicinity of the site is both residential and commercial, all activities would be conducted on the site. Local truck traffic along North Central Avenue and noise levels in the vicinity of the site may increase slightly during implementation of this alternative.

The only excavation required as part of this alternative would be excavation associated with temporary removal and replacement of two outfalls and removal of soils from the filter bed area. Because minimal excavation activities would be required, generation of fugitive dust or air emissions is anticipated to be minimal. The site would, however, be monitored and dust suppression measures, such as water sprays, would be used, as necessary. In addition, air zones would be monitored for specific contaminants, and appropriate measures such as use of personal protective equipment would be implemented if health and safety action criteria are exceeded. Workers may also be exposed to contaminants through direct skin contact. Appropriate dermal personal protective equipment would be worn. Workers would be exposed to hazards associated with heavy equipment and the excavation. OSHA guidelines would be followed to minimize the potential for construction-related accidents and a HASP would be developed and followed to address worker health and safety during the remedial action.

Mobilization and site preparation activities would take approximately one week. Installation of the downgradient barrier wall would require four to six weeks. Site

restoration and demobilization would take approximately one week. The total time required to implement this alternative would be approximately eight weeks.

14.3.5 Long-term Effectiveness and Permanence

Alternative 2 is a control technology that would not be considered a permanent remedy because no treatment technologies would be implemented. However, as described in Subsection 9.2, DNAPLs such as coal tar are difficult to extract even from highly permeable soils. Because coal tar has migrated into the saturated zone and into fractured bedrock, efficient recovery is even more difficult, if not impossible. Control of coal tar via a downgradient barrier wall would contribute to the long-term management of the contaminant migration by minimizing further contamination of surface water and limiting the spread of the potentially mobile coal tar source. Because Alternative 2 is not a permanent remedy and because wastes would remain on site, potential future remedial options for the site would be assessed as part of the five-year site review.

The performance life of sheet pile barrier walls can vary from 30 to more than 100 years. The design life of the wall depends on the soil and groundwater conditions at the site and the materials used to construct the barrier. Prior to implementation, site conditions would be thoroughly evaluated to determine the most appropriate construction materials. Because the sheet piles would be driven through overburden soils and keyed one to two feet into weathered bedrock, increased fracturing in bedrock may result. Flow of coal tar could potentially increase due to the increased fracturing and result in further spread of contaminants. To mitigate this effect, grout could be injected into the fractures at the bottom of the sheet pile

wall to prevent leakage through the fractures. However, grouting fractures may not stop all leakage. Environmental monitoring and visual inspections would aid in evaluating the need for such controls.

The existing asphalt cover on the site mitigates exposure to surface and subsurface soil through direct contact, incidental ingestion, and fugitive dust inhalation. Annual maintenance of the cover would therefore be conducted to maintain the integrity of the cover.

If soils associated with the former filter bed are encountered that contain waste coke, these soils would be removed from the site and disposed of off-site. Treatment/disposal of waste in a hazardous waste landfill is a commonly used method of remediation. Material containing waste coke would be sampled and analyzed before transporting off-site to determine if treatment before land disposal is required.

14.3.6 Reduction of Toxicity, Mobility, and Volume

Alternative 2 would decrease the mobility of contaminants by controlling the migration of overburden coal tar into the Anthony Kill. However, mobility of contaminants in groundwater would not be controlled because the barrier would only divert groundwater to a discharge location downstream. Installation of perimeter containment wells may aid in controlling the migration of groundwater to the Anthony Kill. However, groundwater modeling predicted minimal additional control of groundwater (i.e., a decrease of 5 percent of total flow and a reduction of approximately 10 percent in flow to the stream along the location of the barrier).

No reduction in toxicity or volume would be achieved because removal or treatment processes would not be employed with the exception of the soils from the former filter bed containing waste coke. It is assumed that approximately 30 cubic yards of soil containing waste coke would be excavated and disposed of off-site. Hazardous waste landfills are designed to reduce the mobility of contaminants through use of synthetic and clay liners and caps. Landfilling of these soils would not reduce the volume or toxicity of the waste.

14.3.7 Implementability

Activities associated with this alternative include: environmental monitoring, institutional controls, five-year site reviews, bedrock mapping, asphalt cover maintenance, site preparation, disposal of excavated soils from the filter beds, and installation of the downgradient barrier wall. Equipment, materials, and services for all activities are readily available. Some coordination among NYSEG, state, county, and local officials, and adjoining property owners would be required to conduct these activities. Detailed plans for environmental monitoring would require development and implementation. These plans would be subject to regulatory review and approval. Institutional controls and five-year reviews would likely be easy to implement. Installation of the downgradient barrier wall would not impact implementation of possible future remedial activities at the site.

Construction of sheet pile barrier walls utilizes standard construction techniques and equipment and materials that would be readily available. Actual construction may, however, be difficult because of the potential presence of underground structures and

debris and proximity of the downgradient barrier wall to the Anthony Kill. Once constructed, no operation and minimal maintenance would be required.

14.3.8 Cost

A cost estimate was prepared for Alternative 2 to help select a remedial alternative. The estimate contains the following principal elements:

- capital cost
- operating and maintenance cost

Capital cost consists of direct and indirect costs. Typically, these costs include those expenditures initially incurred to develop, construct, and implement the remedial alternative. Direct costs include expenditures for the equipment, labor, and materials necessary to establish institutional controls and access restrictions, prepare the site, excavate and dispose of filter bed soils, and construct the barrier wall. Direct capital costs include construction, labor, and equipment; land and site development; and materials. A 25 percent contingency was included in direct cost items to account for unforeseen project complexities (e.g., adverse weather conditions, inadequate site characterization, and increased construction standby times).

Indirect costs include expenditures for contractors' overhead and profit. Additional administrative, engineering, and legal services that are not actually part of the alternative, but are required to complete implementation of the alternative, include engineering expenses, legal fees, health and safety costs, and contingency allowances.

Engineering design and services during construction (i.e., QA testing, construction oversight, documentation, and resident engineering) for Alternative 2 were estimated at 10 percent each of the direct cost. Costs for health and safety activities conducted at Level D protection were estimated at 5 percent of the direct cost. Legal, administrative, and permitting costs were estimated at 5 percent of the direct cost.

Operating and maintenance costs refer to expenditures associated with the five-year site review, environmental monitoring, and asphalt cover maintenance.

The estimated direct, indirect, operation and maintenance, and total present worth costs for Alternative 2 are presented in Table 14-3. The total present worth cost for Alternative 2 is estimated at $1,184,000. Total estimated construction, engineering, and administrative costs are $554,000. The present worth of operation and maintenance costs is $630,000.

To generate these costs, the following assumptions were made with respect to Alternative 2:

- the Mechanicville site would be reviewed every five years for a period of 30 years;

- environmental monitoring and asphalt cover maintenance would be conducted annually;

- a 200-foot sealable joint sheet pile wall with 30-foot wing walls on the eastern and western sides of the wall would be installed;

- all joints would be sealed with a cement/bentonite grout;
- installation of perimeter containment wells to reduce groundwater mounding upgradient of the wall would not be required; and
- 30 cubic yards of soils from the filter beds area would be excavated and disposed of as hazardous waste.

If installation of two perimeter wells is required, the cost to implement Alternative 2 would increase substantially, primarily because of increased operation and maintenance costs that would be associated with treatment and disposal of contaminated groundwater (Table 14-4). Capital costs, which would include installation of two (2) perimeter containment wells, collection piping, treatment building construction, and the actual treatment system is estimated to range between approximately $321,000 and $440,000. Present worth operation and maintenance costs, which include power requirements, treatment residuals disposal, and system monitoring, are estimated to range from $335,000 to $781,000. Capital and operation and maintenance costs would vary depending on the final discharge location and degree of treatment required. Based on this analysis, the present worth cost associated with groundwater interception and treatment could range from $656,000 to $1,221,000 (see Table 14-4). Therefore, the total present worth cost for Alternative 2 with containment wells and treatment could range from $1,917,000 to $2,482,000.

The low range of this estimate assumes minimum treatment, which would include pretreatment with an oil/water separator and, because of the potential treatment

capabilities of a POTW, discharge to the local POTW. If additional treatment for inorganic and/or organic contaminants is required, costs increase. The high range of the estimate includes pretreatment in an oil/water separator, treatment to remove inorganic constituents using chemical precipitation, and treatment to remove organic compounds using carbon adsorption. Because of costs associated with discharge to the local POTW (i.e., the POTW would charge a per gallon fee for use of the facility), this estimate also assumes the treated water would subsequently be discharged to the POTW. Discharge to the Anthony Kill would be a slightly less. The discharge location would dictate the amount of treatment required.

14.4 DETAILED ANALYSIS OF ALTERNATIVE 3: DOWNGRADIENT BARRIER WALL WITH UPGRADIENT SUBSURFACE DRAIN

14.4.1 Description

Alternative 3 consists of the following major components:

1. Environmental Monitoring
2. Institutional Controls
3. Five-year Site Reviews
4. Asphalt Cover Maintenance
5 Bedrock Mapping
6. Site Preparation
7. Removal and Treatment/Disposal of Filter Bed Soil
8. Installation of Downgradient Barrier Wall

9. Installation of Upgradient Subsurface Drain

Components 2, 3, and 4 would be performed as described for Alternative 1 (see Subsection 14.2.1). Components 5, 7, and 8 would be completed as described for Alternative 2 (see Subsection 14.3.1). The remaining major components are described in the following paragraphs.

Environmental Monitoring. The environmental monitoring program would be similar to that described for Alternative 1 (see Subsection 14.2.1). The principal difference would be the objectives of the program, which would be to evaluate the effectiveness of the downgradient barrier wall and the upgradient subsurface drain installed at the site.

Site Preparation. Site preparation would include activities required to prepare the site for mobilization and construction of the barrier wall and subsurface drain. Minimal clearing of vegetation would be required for installation of the barrier wall, but none would be required for the subsurface drain. It is assumed that construction of access roads and/or upgrading existing roads would not be required. Additional site preparation activities that would be required before work could commence include locating and removing above-ground and subsurface utilities (i.e., gas mains which are connected to the gas regulator house) and/or obstructions, establishing a stockpile/storage area for equipment, excavated soil, and materials; mobilizing a field office; and establishing a decontamination and trash disposal area.

Installation of Upgradient Subsurface Drain. The upgradient subsurface drain would consist of a buried conduit which collects and conveys groundwater discharge by

gravity flow. Subsurface drains are a traditional civil engineering technique for lowering the water table and diverting groundwater flow. More recently, drains have been used as environmental controls to contain or remove a groundwater plume, or to prevent contact of groundwater with waste material. For the purposes of this FS, the 170-foot long upgradient drain would be installed in the overburden (invert slightly above top of rock) to divert flow and subsequently reduce groundwater flow across the site. The subsurface drain, in conjunction with the downgradient barrier wall, would therefore reduce total flow to the Anthony Kill. The major components of a typical drain system include the following:

- drain pipe to collect and convey flow to a wet well
- filter to prevent fine particles from migrating into and clogging the system
- backfill to restore the surface to grade
- impermeable downgradient barrier (e.g., geomembrane) to reduce flow from the north side of the subsurface drain
- manhole to allow access to the drain for flushing and maintaining the system
- wetwell for collecting groundwater for discharge
- submersible pump to discharge groundwater

Traditional construction techniques would be used to install the drain. A backhoe and/or other excavation equipment would be used to open cut the trench estimated to be 170 feet long, 4 feet wide, and 15 to 18 feet deep (see Figure 14-4). The invert of the drain would be installed on the shallow bedrock layer which is 15 to 18 feet bgs in the proposed location (Figure 14-5). During construction, the excavation would require sheeting or shoring to prevent the side walls from collapsing and provide worker safety. Site conditions would determine whether shoring would be achieved hydraulically, mechanically, or by using a trench box or sheet piling. For cost estimating purposes, use of a trench box was assumed.

The bedrock surface would be contoured by removing bedrock so that the slope would allow gravity flow from the ends of the drain to a low point in the middle. Once the proper slope is attained, the pipe bedding would be laid atop the shallow bedrock. The bedding would be made of granular material coarse enough to allow flow to the pipe but fine enough to prevent infiltration of soils from the side walls. A 4-inch perforated HDPE pipe would be laid atop the bedding, and the trench would be backfilled to the high groundwater mark, approximately 8 feet bgs, with filter sand. The remainder of the trench would be backfilled with clean excavated material. To determine if material is suitable for backfill, all excavated soil would be screened visually and with portable detection equipment before using as backfill.

It was assumed that a wetwell and a pump would be installed to collect and discharge the diverted groundwater to the Anthony Kill (see Figure 14-4). Diverted groundwater could also potentially be discharged to the local POTW if discharge to the Anthony Kill is not feasible. Construction of the discharge system would consist of excavating a trench 3 to 4 feet deep by 1.5 feet wide between the drain and the

Anthony Kill. Gravel bedding would be laid above the high groundwater level so as not to create a preferential path to the Anthony Kill for groundwater. The non-perforated discharge pipe would be laid atop the bedding, and the trench would be backfilled. If the pipe is laid above the frost line to accommodate the high groundwater level, a layer of insulation would be installed at 1 to 2 feet bgs to protect the discharge pipe from freezing. It is assumed that the proposed location of the discharge pipe would be in an area not impacted by coal tar. Therefore, on-site soils would be used to backfill the trench. However, the excavated soil would be screened visually and with portable detection equipment. If soils impacted by coal tar are observed, the soil would be temporarily stockpiled and sampled, and samples would be analyzed by an off-site laboratory. The soil would be disposed of at an appropriate off-site facility based on analytical results. The trench would be backfilled with clean fill. After backfilling the pipe trenches, the disturbed areas would be restored to original conditions.

Groundwater flow with Alternative 3 in place was modeled, and results are presented in Appendix E. At best, the upgradient drain is predicted to be able to intercept approximately 700 gallons of groundwater per day. The drain may also increase the flux rate from upgradient locations slightly by reducing head and creating a preferential pathway for groundwater flowing toward the drain. The net result would only be a decrease of about 16 percent in the total groundwater discharge across the site to the Anthony Kill.

Discharge to the stream along the downgradient barrier wall frontage would be reduced by about 21 percent. This is, however, a fairly minimal reduction in total groundwater flow because the majority of flow across the site is not associated with

overburden but with shallow bedrock (see Subsection 7.3.1). Groundwater flow in the vicinity of the barrier wall would be diverted easterly around the wall while some would be forced under the wall into the Anthony Kill, similar to predicted conditions for Alternative 2.

14.4.2 Compliance with SCGs

Location-specific SCGs have not been identified for the Mechanicville site. Alternative 3 would be designed and executed to meet relevant federal and state action-specific and chemical-specific SCGs summarized in Tables 10-1 and 10-2, respectively. OSHA requirements for training, safety equipment, and record keeping would be met during construction activities at the site. Because this alternative proposes diverting upgradient groundwater to the Anthony Kill, a State Pollution Discharge Elimination System (SPDES) permit would be obtained. The discharge system would be monitored to verify compliance with the permit. Soils excavated during trenching activities would be analyzed and taken to an appropriate off-site disposal/treatment facility.

Alternative 3 would only partially achieve response objectives because contaminated overburden groundwater would continue to migrate to the Anthony Kill. However, the risk assessment concluded that because groundwater discharge rates to the Anthony Kill are very low, the potential for aquatic impacts associated with contaminant discharges from the site is minimal. Migration of coal tar in the overburden to the Anthony Kill would be controlled.

Because this alternative involves discharging upgradient groundwater to the Anthony Kill, groundwater quality in the vicinity of the proposed drain location, as represented by groundwater at monitoring well MW-1, was compared to AWQC. Groundwater quality data summarized in Tables 5-6 and 5-7 indicate that no organic compounds were detected in the well. However, manganese was detected in the filtered inorganic analysis at a concentration of 123 ppb which is greater than its AWQC (50 ppb). Chromium, iron, manganese, and nickel were detected in the unfiltered inorganic analysis at concentrations greater than AWQC. However, because the inorganic analytes in groundwater are naturally occurring and thus discharging to the Anthony Kill, this alternative assumes that no treatment would be required. Groundwater would initially be monitored on a monthly basis to evaluate its quality. Subsequent sampling and analysis frequency will be determined as conditions merit.

14.4.3 Overall Protection of Human Health and the Environment

This alternative would provide some additional protection to ecological receptors by controlling migration of overburden coal tar to the Anthony Kill. However, based on modeling results, this alternative would not significantly reduce the discharge of site-impacted groundwater to the Anthony Kill. Therefore, risk to the environment, which is minimal under current conditions, would not change appreciably. Currently there is minimal risk to human health at the Mechanicville Site.

As described in Subsection 14.3.3, because of the industrialized nature of this area, and the lack of suitable habitats, no significant impacts to area wildlife would be anticipated from implementation of this alternative.

The most significant human health risks would be associated with the use of heavy machinery. To minimize these risks, a HASP would be developed and implemented and OSHA regulations would be followed. Because limited excavation would be required, exposure to contaminated soil during installation of the barrier would be minimal.

14.4.4 Short-term Impacts and Effectiveness

None of the components of this alternative would have significant short-term impacts to the local community and environment. Although land use in the immediate vicinity of the site is residential and commercial, all activities would be conducted at the site. Local truck traffic along North Central Avenue and noise levels in the vicinity of the site may increase slightly during implementation of this alternative.

The short-term impacts and effectiveness of excavation activities associated with construction of the downgradient barrier wall and removal of soils from the filter beds are presented in Subsection 14.3.4 for Alternative 2 and would be similar for Alternative 3.

It is assumed that trenching activities associated with the upgradient subsurface drain would take place in soils not impacted by coal tar. However, if coal tar is encountered during implementation of this alternative, appropriate personnel protective equipment would be worn to minimize exposure through incidental ingestion, inhalation, and direct skin contact. OSHA guidelines would be followed to minimize construction-related accidents. A HASP would be developed and followed to address worker health and safety during remedial action.

Mobilization and site preparation activities would take approximately one week. Installation of the downgradient barrier wall and upgradient subsurface drain would require four to six weeks. Site restoration and demobilization would take approximately one week. The total time required to implement this alternative would be approximately eight weeks.

14.4.5 Long-term Effectiveness and Permanence

Alternative 3 is a control technology that would not be considered a permanent remedy because no treatment technologies would be implemented. However, as described in Subsection 9.2, DNAPLs such as coal tar are difficult to extract even from highly permeable soils. Because coal tar has migrated into the saturated zone and into fractured bedrock, efficient recovery is even more difficult, if not impossible. Control of coal tar via a downgradient barrier wall and an upgradient subsurface drain would contribute to the long-term management of the contaminant migration by minimizing further contamination of surface water and limiting the spread of the potentially mobile coal tar source. Because Alternative 3 is not a permanent remedy and because wastes would remain on site, potential remedial options for the site would be assessed as part of the five-year site review.

According to the risk assessment, the only potential impact to the environment is migration of coal tar and groundwater to the Anthony Kill. The effect of the asphalt cover and upgradient subsurface drain would be a slight reduction of groundwater flow through the site. The system would experience a slight lowering of the water table which, according to modeling results, would have only minimal effect on

groundwater migration because most of the groundwater flow through the site is in the shallow bedrock layer (see Subsection 7.3.1).

The long-term effectiveness and permanence associated with the asphalt cover and removal of soils associated with the former filter bed are presented in Subsection 14.3.5 for Alternative 2 and would be similar for Alternative 3.

14.4.6 Reduction of Toxicity, Mobility, and Volume

Alternative 3 would reduce the mobility of contamination by further reducing the migration of coal tar to the Anthony Kill from overburden soils. According to the modeling results, the upgradient subsurface drain with the downgradient barrier wall would provide some control of overburden groundwater flow. By controlling overburden groundwater migration to the Anthony Kill, coal tar migration would be further controlled.

This alternative would not reduce the toxicity and volume of media impacted by coal tar because neither removal or treatment processes would be employed with the exception of soils from the former filter bed containing waste coke. As in Alternative 2 (see Subsection 14.3.6), soil containing coke would be excavated and disposed of off-site, which would provide some reduction in volume of waste at the site.

14.4.7 Implementability

As described in Subsection 14.3.7, site preparation would be readily implemented at the site. Common construction equipment and methods would be required for this alternative. Services are relatively reliable and several contractors would be available to participate in a competitive bidding process.

Excavation for the subsurface drain would primarily require a backhoe, concrete cutting equipment to dig through the former distribution holder foundation, and a trench box. A jack-hammer attachment to the backhoe would be used to remove enough bedrock to provide a sufficient slope for groundwater to drain to the wetwell. When construction is completed, minimal operations and maintenance would be required for the asphalt cover and discharge system.

14.4.8 Cost

A cost estimate was prepared for Alternative 3 to help select a remedial alternative. The estimate is based on the same principal elements discussed in Alternative 2.

The estimated direct, indirect, operation and maintenance, and total present worth costs for Alternative 3 are presented in Table 14-5. The total present worth cost for Alternative 3 is estimated at $1,690,000. Total estimated construction, engineering, and administrative costs are $818,000. The present worth of operation and maintenance costs is $894,000.

To generate these costs, the following assumptions were made with respect to Alternative 3:

- the Mechanicville site would be reviewed every five years for a period of 30 years;
- environmental monitoring and asphalt cover maintenance would be conducted annually;
- a 200-foot sealable joint sheet pile wall with a 30-foot wing wall on the eastern and western sides of the wall would be installed;
- all joints would be sealed with a cement/bentonite grout;
- a 170-foot upgradient subsurface drain would be installed 10 to 12 feet bgs;
- approximately 50 percent of excavated soil would require off-site disposal;
- diverted groundwater discharged to the Anthony Kill would be monitored in accordance with SPDES requirements;
- diverted groundwater would not require pretreatment for discharge to Anthony Kill; and

- approximately 30 cubic yards of soil from the former filter beds area would be excavated and disposed of as hazardous waste.

15.0 COMPARATIVE ANALYSIS OF ALTERNATIVES

The comparative analysis presented in this section compares the three remedial action alternatives relative to the evaluation criteria used during the detailed analysis of alternatives. The purpose of the comparative analysis is to identify the advantages and disadvantages of the alternatives relative to one another and to aid in the eventual selection of a remedial alternative for overburden groundwater at the Mechanicville site. Subsection 15.1 presents the approach of the comparative analysis and Subsection 15.2 presents the comparison of the alternatives.

15.1 APPROACH TO THE COMPARATIVE ANALYSIS

Specific factors are considered when comparing alternatives for selection of a preferred site remedy. To the extent practicable, the selected alternative should:

- be protective of human health and the environment
- comply with SCGs (or provide grounds for invoking a waiver)
- use permanent solutions and alternative treatment technologies to the maximum extent practicable

- satisfy the preference for treatment that reduces toxicity, mobility, or volume as a principal element; if this preference is not satisfied, the decision document must explain why

- be cost-effective

In accordance with the NYSDEC TAGM 90-4030 for the Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990), the comparative analysis is conducted to evaluate the relative performance of each alternative in relation to each of the seven evaluation criteria. NYSDEC has categorized the evaluation criteria into two groups: threshold and balancing. A discussion of each criteria group is provided below.

15.1.1 Threshold Criteria

Because the selected remedy must be protective of human health and the environment and comply with SCGs, NYSDEC has designated (1) overall protection of human health and the environment, and (2) compliance with SCGs, as the two threshold criteria. An alternative must meet both criteria to be eligible for selection as the site remedy.

15.1.2 Primary Balancing Criteria

The five primary balancing criteria are long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. This balancing provides a preliminary assessment of the

maximum extent to which permanent solutions and treatment can be used practicably in a cost-effective manner.

The alternative that is protective of human health and the environment, is SCG-compliant, and affords the best combination of attributes is identified as the preferred alternative. The balancing emphasizes long-term effectiveness and reduction of toxicity, mobility, or volume through treatment.

15.2 COMPARATIVE ANALYSIS OF ALTERNATIVES

Table 15-1 presents the comparative analysis for the three Mechanicville site remedial alternatives. The comparative analysis highlights the results of the detailed analysis. In accordance with the NYSDEC TAGM 90-4030 (NYDEC, 1990), a scoring of each alternative was conducted to aid in the comparative analysis of alternatives. The TAGM assigns each of the seven criteria a relative weight which results in a maximum score of 100 points (e.g., compliance with SCGs is assigned a relative weight of 10, etc.). Based on the performance of an alternative, as well as how well it meets the objectives of the evaluation criterion, points are assigned. A low total score is an indication that an alternative may not sufficiently achieve the goals and objectives of remedial actions at the Mechanicville site. The total score for each alternative is presented in Table 15-1. A detailed breakdown of how each alternative was scored is presented in Appendix F.

15.2.1 Comparison of Threshold Criteria

The alternatives were first compared relative to the two threshold criteria, overall protection of human health and the environment and compliance with SCGs.

Alternative 1, Minimal Action, was developed as a baseline with which to compare other alternatives. Because Alternative 1 would not involve any remedial actions, contaminated groundwater and coal tar would continue to migrate toward the Anthony Kill at the current rate, a condition which does not currently result in significant adverse impacts on ecological receptors. Investigations indicate that migration of coal tar from the site is extremely slow under current site conditions. The risk assessment concluded that because groundwater discharge rates to the Anthony Kill are very low, the potential for aquatic impacts associated with contaminant discharges from the site is minimal.

Alternative 1 would be designed to comply with all applicable action-specific and chemical-specific SCGs (no location-specific SCGs were identified for the site).

Alternatives 2 and 3 would only partially achieve response objectives. Migration of overburden coal tar to the Anthony Kill would be controlled via the downgradient barrier wall installed as part of both alternatives. However, this is of limited benefit because site investigations indicate that coal tar migration occurs at a very slow rate. Alternative 2 would provide minimal control of contaminated overburden groundwater. Alternative 3 would provide slightly greater control (i.e., total groundwater discharge to the Anthony Kill would be reduced by approximately 16

percent). The effect on the surface water and sediment quality of the Anthony Kill from implementing either of these two alternatives is expected to be minimal.

Both Alternative 2 and 3 would be designed to comply with all applicable action-specific SCGs.

15.2.2 Comparison of Balancing Criteria

As discussed, the primary balancing criteria emphasize long-term effectiveness and permanence, and reduction in toxicity, mobility, or volume through treatment. Although minimal risk is present under existing site conditions, Alternative 1 would not reduce future potential risks to ecological receptors because migration of overburden groundwater and coal tar would not be further controlled and would continue to migrate to the Anthony Kill at current migration rates. Potential options that would provide a permanent solution to the remediation of the site would be evaluated as part of the five-year review process.

Although neither Alternative 2 nor 3 would comply with NYSDEC's preference for treatment, both would increase the control of coal tar migration. Control of coal tar via a downgradient barrier wall would contribute to the long-term management of contaminant migration by reducing further contamination of surface water and limiting the spread of the potentially mobile coal tar source. Alternative 3 would provide slightly greater control of overburden groundwater compared to Alternative 2. Potential options that would provide a permanent solution to the remediation of the site would be evaluated as part of the five-year review process.

None of the components of Alternatives 1, 2, and 3 would result in significant short-term environmental impacts because of the urban/commercialized nature of the area, and lack of suitable habitat for potential ecological receptors. Impacts to worker health and safety would be slightly greater for Alternative 3 compared to Alternative 2 because of the excavation and trenching required to install the upgradient subsurface drain. OSHA guidelines and an approved HASP would be followed to address worker health and safety.

The implementation of Alternatives 2 and 3 would be similar; however, Alternative 3 would require interception and discharge of upgradient groundwater to the Anthony Kill in accordance with a SPDES permit. Water quality would be monitored to determine that it meets applicable criteria. Additionally, Alternative 3 would be the most costly of the alternatives. The increased cost is primarily associated with installation of the subsurface drain and operation and maintenance requirements associated with discharge of upgradient groundwater to the Anthony Kill.

16.0 RECOMMENDATION OF REMEDIAL ACTION

The evaluations and discussions presented in Sections 9.0 through 15.0 provide a basis for selecting a remedial action for the Mechanicville site. The recommended remedial action at the Mechanicville site is the Minimal Action Alternative described in Subsection 14.2. This alternative consists of long-term environmental monitoring, institutional controls, five-year site reviews, asphalt cover maintenance, and bedrock mapping.

Based on the comparative analysis of alternatives, the expected performance of all three alternatives would be essentially the same. Because coal tar has migrated into the saturated zone and into fractured bedrock, efficient recovery would be difficult, if not impossible. Although installation of a downgradient barrier wall may reduce migration of coal tar to the Anthony Kill, investigations indicate that migration of coal tar from the site is extremely slow under current site conditions. Free phase coal tar has not been observed as seepage into the Anthony Kill and has not been observed in perimeter monitoring wells MW-14, MW-17, and MW-18. Based on groundwater modeling conducted to evaluate remedial alternatives, neither Alternative 2 nor Alternative 3 would have a significant impact on total flow of overburden groundwater into the Anthony Kill. Alternative 3 would be slightly more effective, with reductions in total flow to the stream estimated at approximately 16 percent (compared to no reduction for Alternatives 1 and 2). The resulting benefits are, however, expected to be minimal. Finally, the risk assessment concluded that because groundwater discharge rates to the Anthony Kill are very low, the potential for aquatic impacts associated with contaminant discharges from the site

is minimal. Therefore, the Minimal Action Alternative is maintaining protection by using existing site conditions to effectively limit migration of coal tar to the Anthony Kill.

Site-related contaminants have been detected in groundwater beneath the site at concentrations in excess of federal and state drinking criteria (e.g., MCLs) and New York State Class GA criteria. However, as previously presented (see Subsections 9.2 and 10.2.2), because groundwaters in the vicinity of the Mechanicville site are not a current source of drinking water, nor are they a likely potential future source, application of these standards is not appropriate. Further, other potential sources of groundwater contamination, including gas stations, petroleum fuel storage facilities, and manufacturing facilities, are also in close proximity to the site and could represent additional threats to any planned water supply installation near the site. Finally, it is highly unlikely that Class GA groundwater standards could be achieved within a reasonable time frame or cost given potential off-site sources contributing to groundwater contamination and the presence of DNAPLs in the fractured bedrock unit beneath the site (see Subsection 9.2).

Therefore, because the effectiveness of control alternatives is questionable and investigations conducted to date indicate that impacts to human health and the environment from site-related contamination are minimal, the Minimal Action Alternative is recommended. As part of this alternative, the following components would be implemented:

- environmental monitoring to monitor site conditions and periodically evaluate risks to human health and the environment;

- institutional controls to restrict future noncommercial use of the site and to restrict groundwater use within and around the site;

- five-year site reviews to assess (1) potential impacts of site-related contaminants to human health and the environment and (2) technologies that have emerged and been demonstrated for the extraction and treatment of coal tar present in the overburden and fractured bedrock beneath the site;

- asphalt cover maintenance to assess the cover integrity and ability to continue to reduce infiltration to the site; and

- bedrock mapping to facilitate potential future remedial actions by evaluating potential migration routes in bedrock to the Anthony Kill.

Each of these components is described in detail in Subsection 14.2. A brief description of implementation of the Minimal Action Alternative follows.

Before commencing environmental monitoring activities, a site-specific monitoring and maintenance plan would be developed. This plan would detail long-term maintenance of the site and include details with regard to environmental monitoring, asphalt cover maintenance, and five-year site reviews. General components of long-term monitoring and maintenance that would be addressed include:

- objectives of the plan;
- sampling frequency and locations;

- sampling equipment and procedures;
- analytical methods;
- quality assurance and quality control requirements;
- asphalt cover inspection and maintenance requirements; and
- five-year site review requirements.

A work plan for conducting bedrock mapping would also be developed to provide the approach and methodology proposed to complete the task. All plans would be subject to regulatory review and approval before implementation. Finally institutional controls in the form of deed and land-use restrictions would be implemented. These restrictions would require coordination between NYSEG, state, county, and local officials and would require enforcement to be effective.

ABB-ES	ABB Environmental Services, Inc.
ACGIH	American Conference of Governmental Industrial Hygienists
ASP	Analytical Services Protocol
AWQC	ambient water quality criteria
BEHP	bis (2-ethylhexyl) phthalate
bgs	below ground surface
Btu	British thermal units
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	Contract Laboratory Program
cm/sec	centimeters per second
DNAPL	dense non-aqueous phase liquid
DOT	Department of Transportation
Flanders	David Flanders Associates, Inc.
FS	Feasibility Study
ft/day	feet per day
GALSON	Galson Laboratories
gpm	gallons per minute
GPR	ground-penetrating radar
gpd	gallons per day
HASP	Health and Safety Plan
HI	Hazard Index
ID	inside diameter
IR	infrared spectroscopy
LNAPL	light non-aqueous phase liquid
MCL	Maximum Contaminant Level
mg/L	milligrams per liter (ppm)
mg/kg	milligrams per kilogram (ppm)
MGP	Manufactured Gas Plant
NAPL	non-aqueous phase liquid

NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NOAA	National Oceanic and Atmospheric Administration
NTU	Nephelometric Turbidity Units
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDWS	New York State Drinking Water Standards
NYSEG	New York State Electric and Gas Corporation
NYS SWQS	New York State Surface Water Quality Standards
OD	outside diameter
PAH	Polycyclic aromatic hydrocarbons
PCB	Poly-chlorinated biphenol
PID	photoionization detector
ppb	parts per billion
ppm	parts per million
PVC	polyvinyl chloride
POTW	publicly owned treatment works
QAPP	Quality Assurance Project Plan
RI	Remedial Investigation
SCGs	standards, criteria, and guidelines
SPDES	State Pollution Discharge Elimination System
SQC	sediment quality criteria
SQL	sample quantitation limit
SVOC	semi-volatile organic compound
TAGM	Technical and Administrative Guidance Memorandum
TCL	Target Clean-up Level
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
UV	ultraviolet fluorescence
VOC	volatile organic compound
μg/L	micrograms per liter (ppb)

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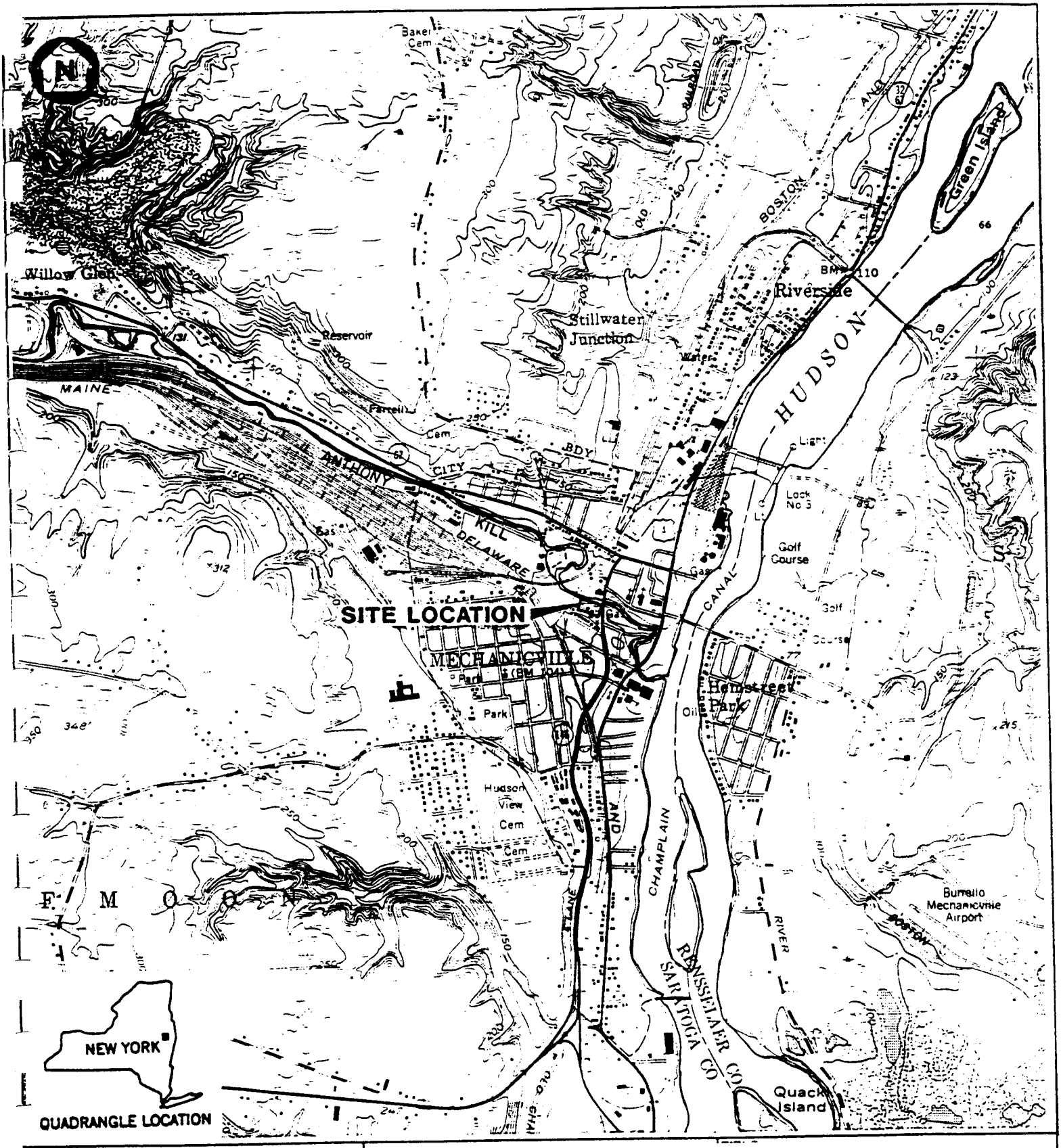
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BASE MAP SOURCE:
USGS QUADRANGLE
MECHANICVILLE (1980)

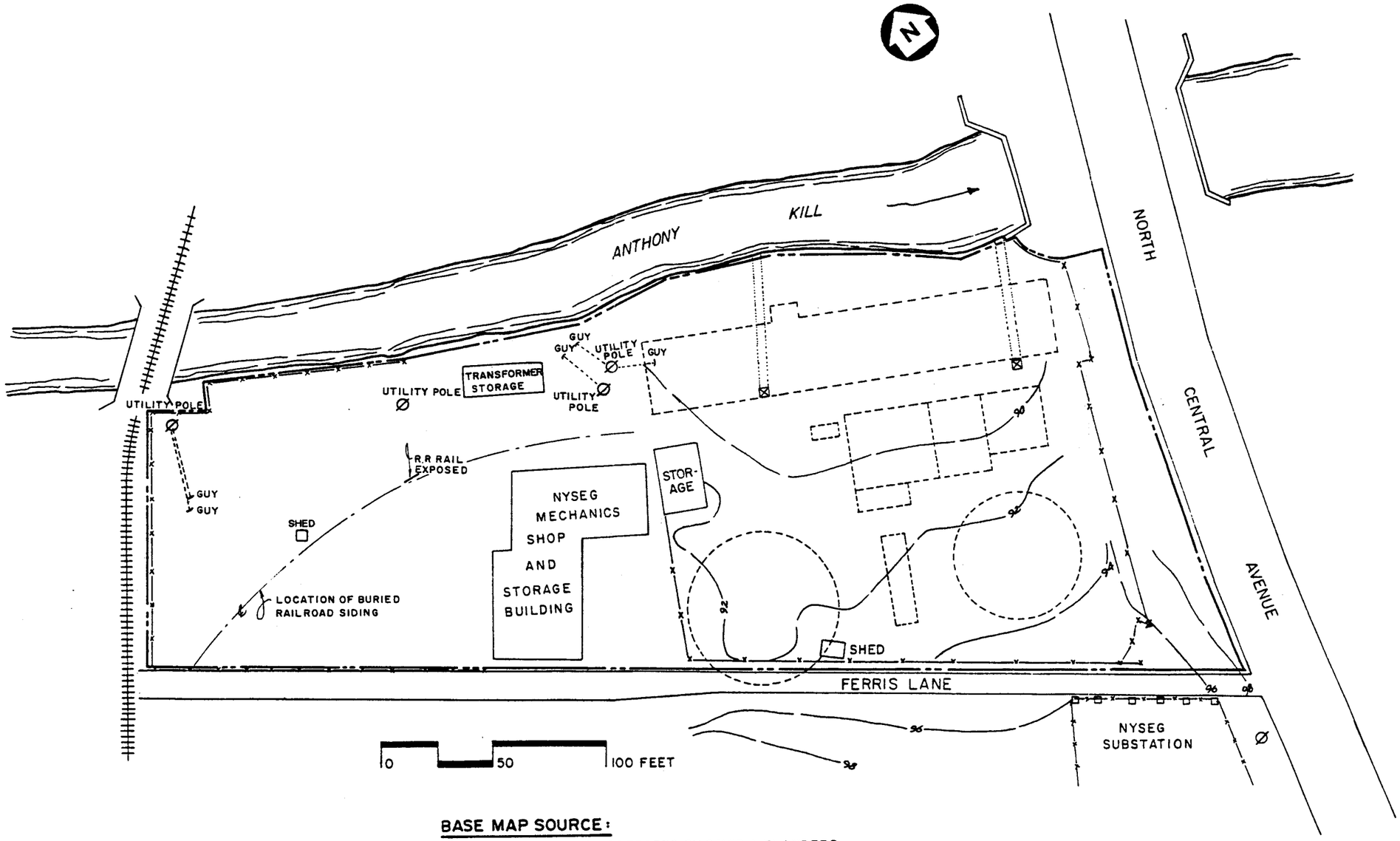
SCALE IN FEET

0 2000 4000

945-09

FIGURE 2-1
SITE LOCATION MAP
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.



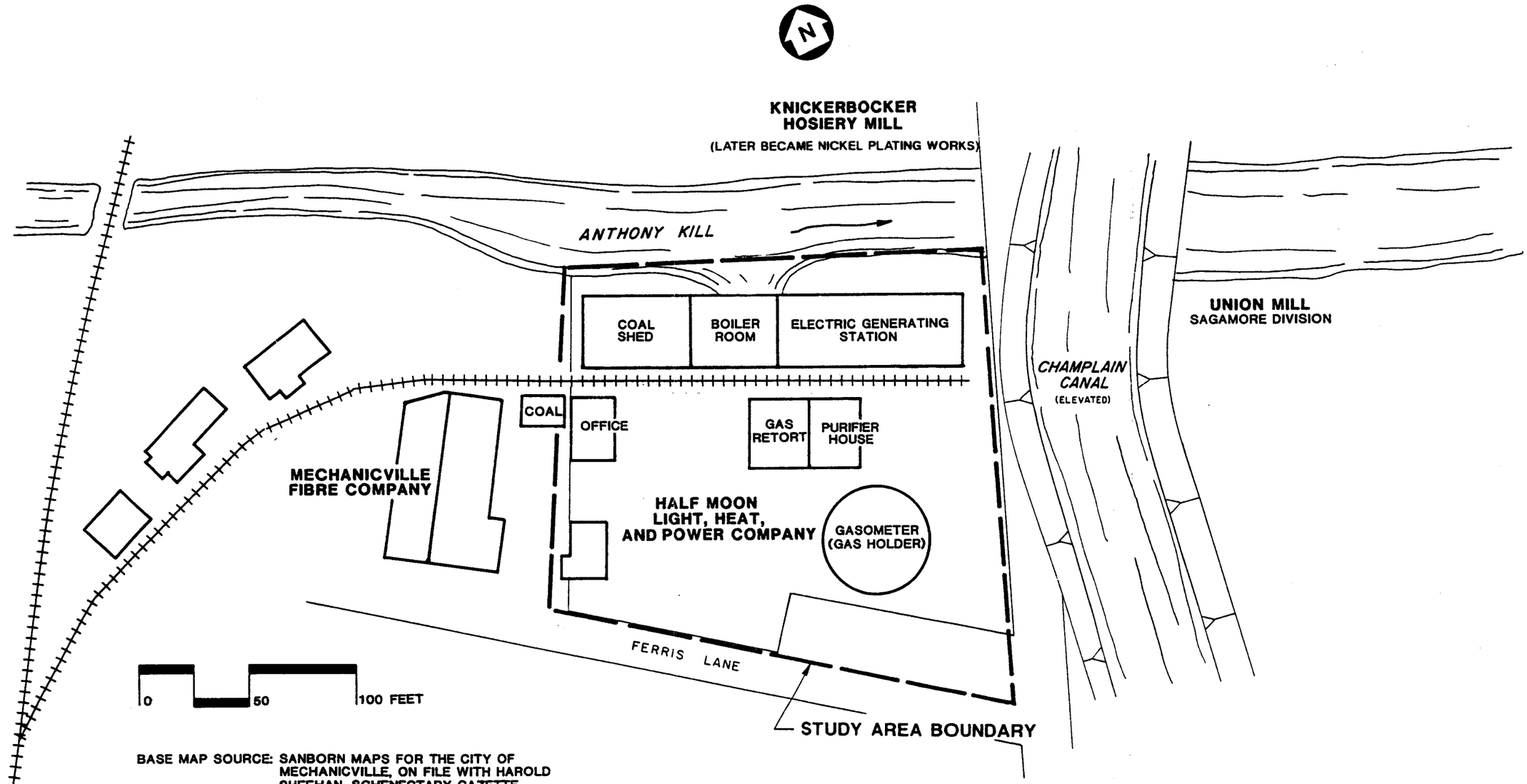
BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

FIGURE 2-2
PRESENT SITE CONDITIONS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

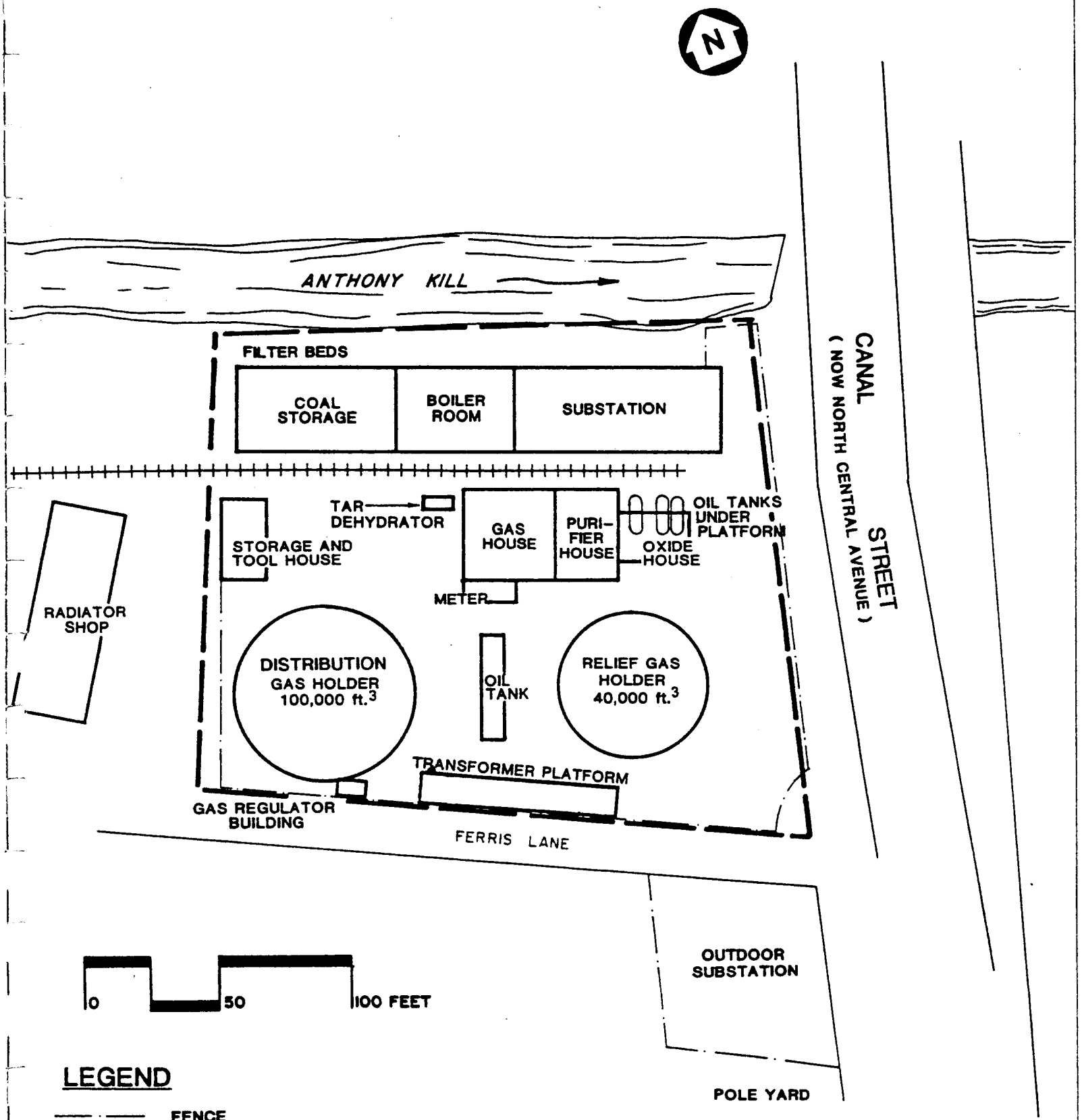
4945-09



BASE MAP SOURCE: SANBORN MAPS FOR THE CITY OF MECHANICVILLE, ON FILE WITH HAROLD SHEEHAN, SCHENECTADY GAZETTE, 50 NORTH ST., MECHANICVILLE, NY.

FIGURE 2-3
MECHANICVILLE SITE PLAN CIRCA 1910
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

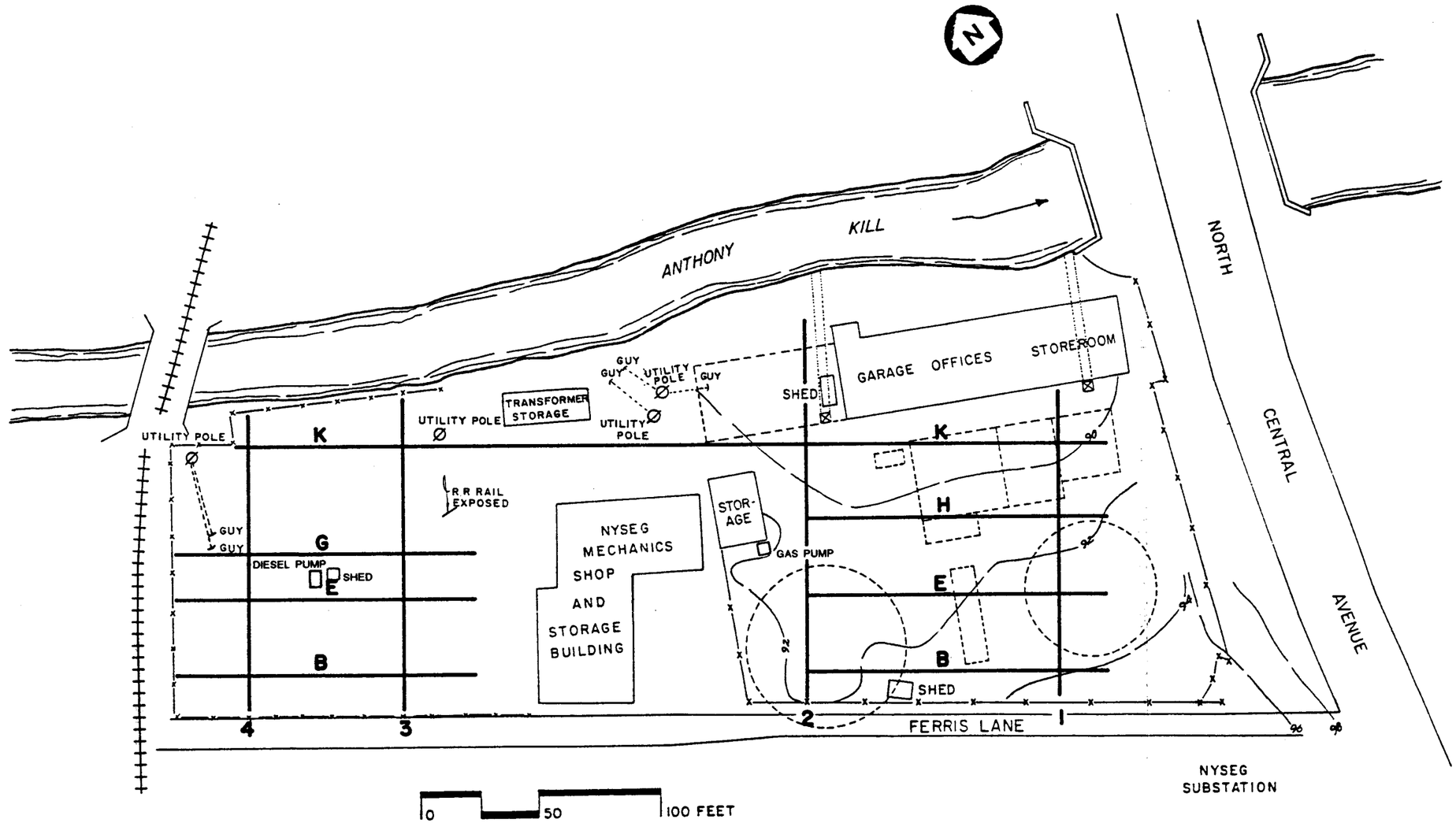


BASE MAP PREPARED BY BROWN, CROSBY, & CO., INC., ENGINEERING DEPARTMENT, 96 WALL ST., NEW YORK, APRIL 1951.

FIGURE 2-4
MECHANICVILLE SITE PLAN CIRCA 1951
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09



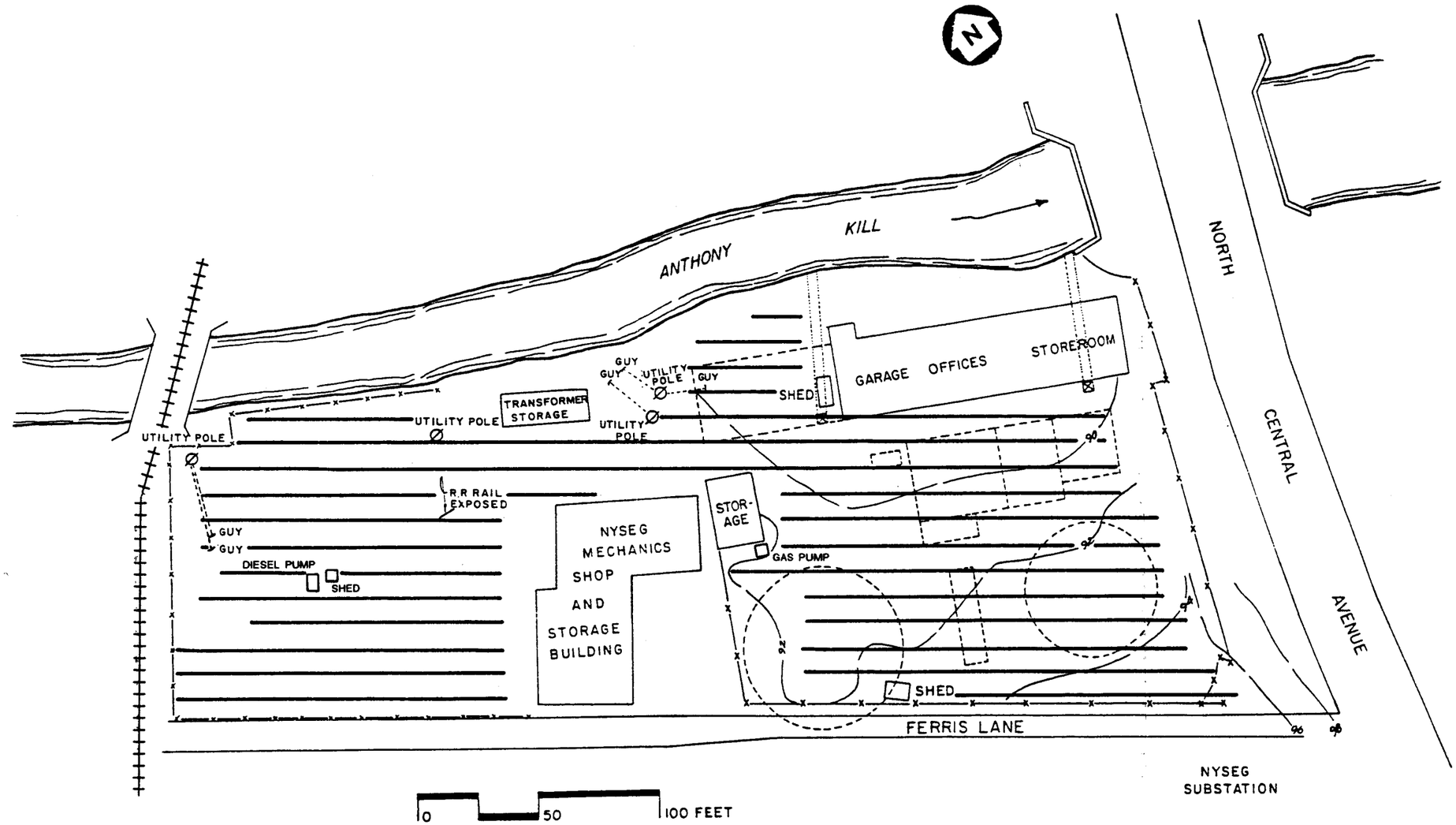
BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

FIGURE 3-1
TASK 2 SEISMIC SURVEY COVERAGE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

FIGURE 3-2
TASK 2 GROUND PENETRATING RADAR COVERAGE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- **GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT**
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY

TASK 2:

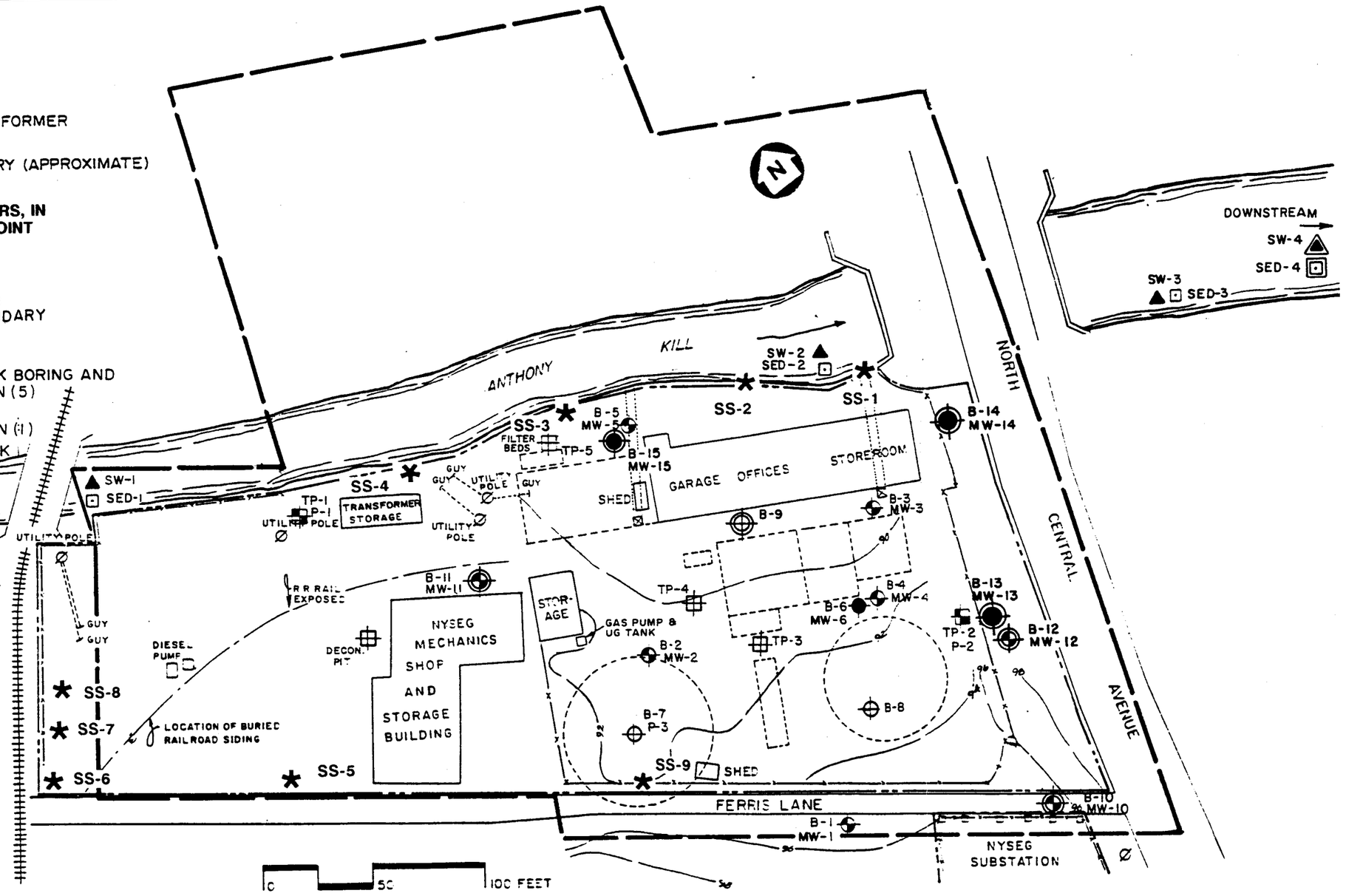
- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TASK 4:

- SURFACE SOIL SAMPLE LOCATION



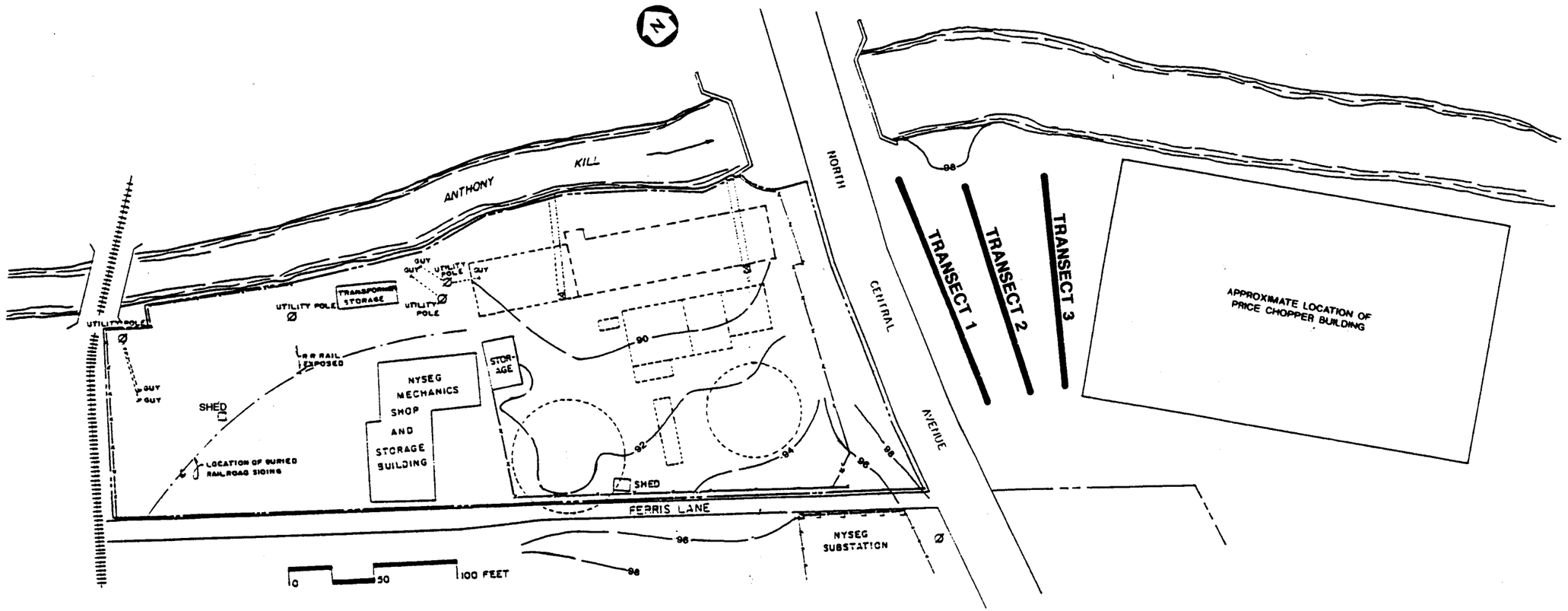
BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

FIGURE 3-3
TASK 2,3 AND 4 EXPLORATION LOCATIONS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.



BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S), REVISED 5/93.

NOTE: GROUND ELEVATION IN FEET RELATIVE TO DATUM POINT.

FIGURE 4-1
PHASE IIA SUPPLEMENTAL RI SEISMIC SURVEY COVERAGE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

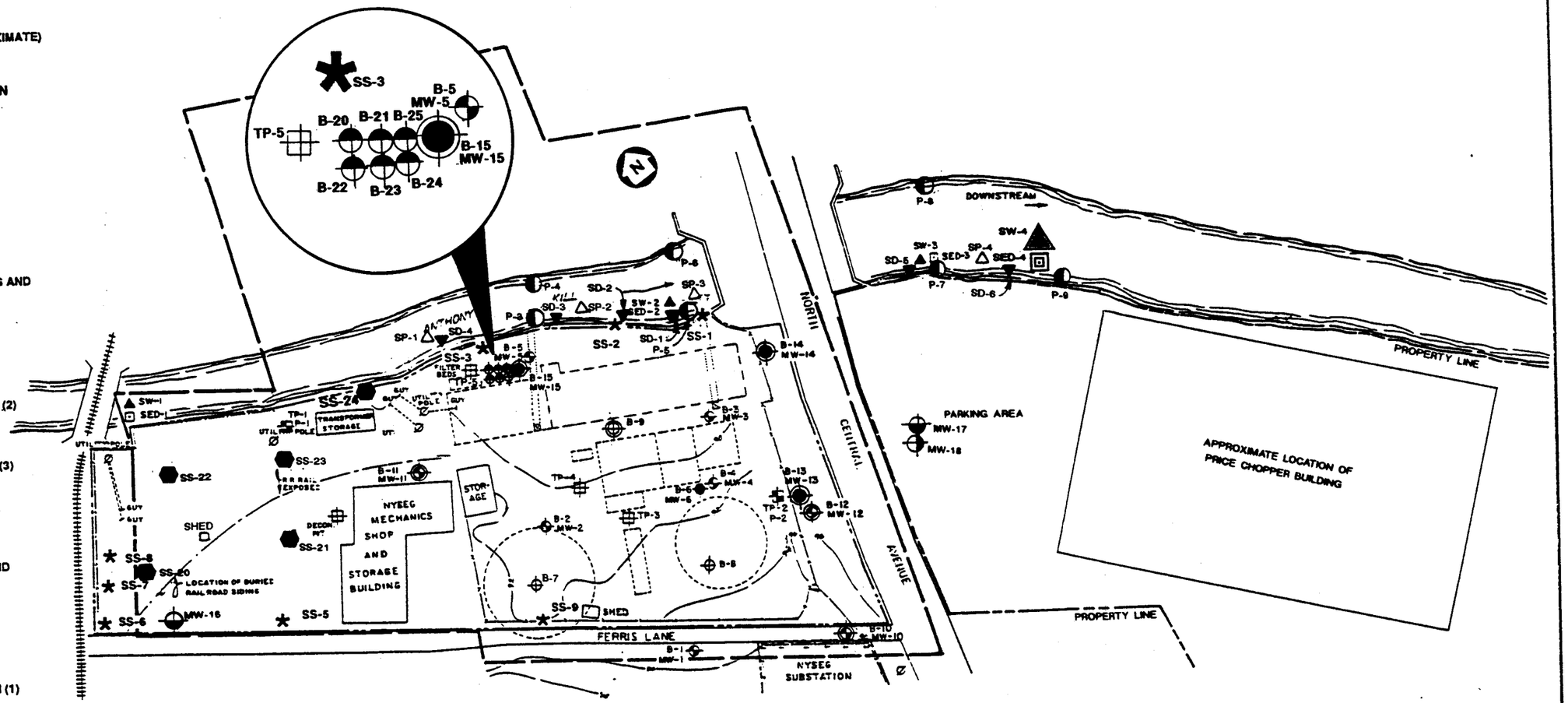
- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TASK 4:

- SURFACE SOIL SAMPLE LOCATION

PHASE IIA SUPPLEMENTAL RI:

- SHALLOW SOIL BORING
- SOIL BORING AND WATER TABLE MONITORING WELL
- SOIL/SHALLOW BEDROCK BORING AND BEDROCK MONITORING WELL
- SHALLOW SUBSURFACE SOIL SAMPLING LOCATION
- PIEZOMETER
- SEDIMENT SAMPLE LOCATION
- SEEPAGE METER LOCATION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87 AND 5/93

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

AREA EAST OF NORTH CENTRAL AVENUE INTERPRETED FROM AERIAL PHOTOGRAPHS AND TAX MAP 262.53, CITY OF MECHANICVILLE.

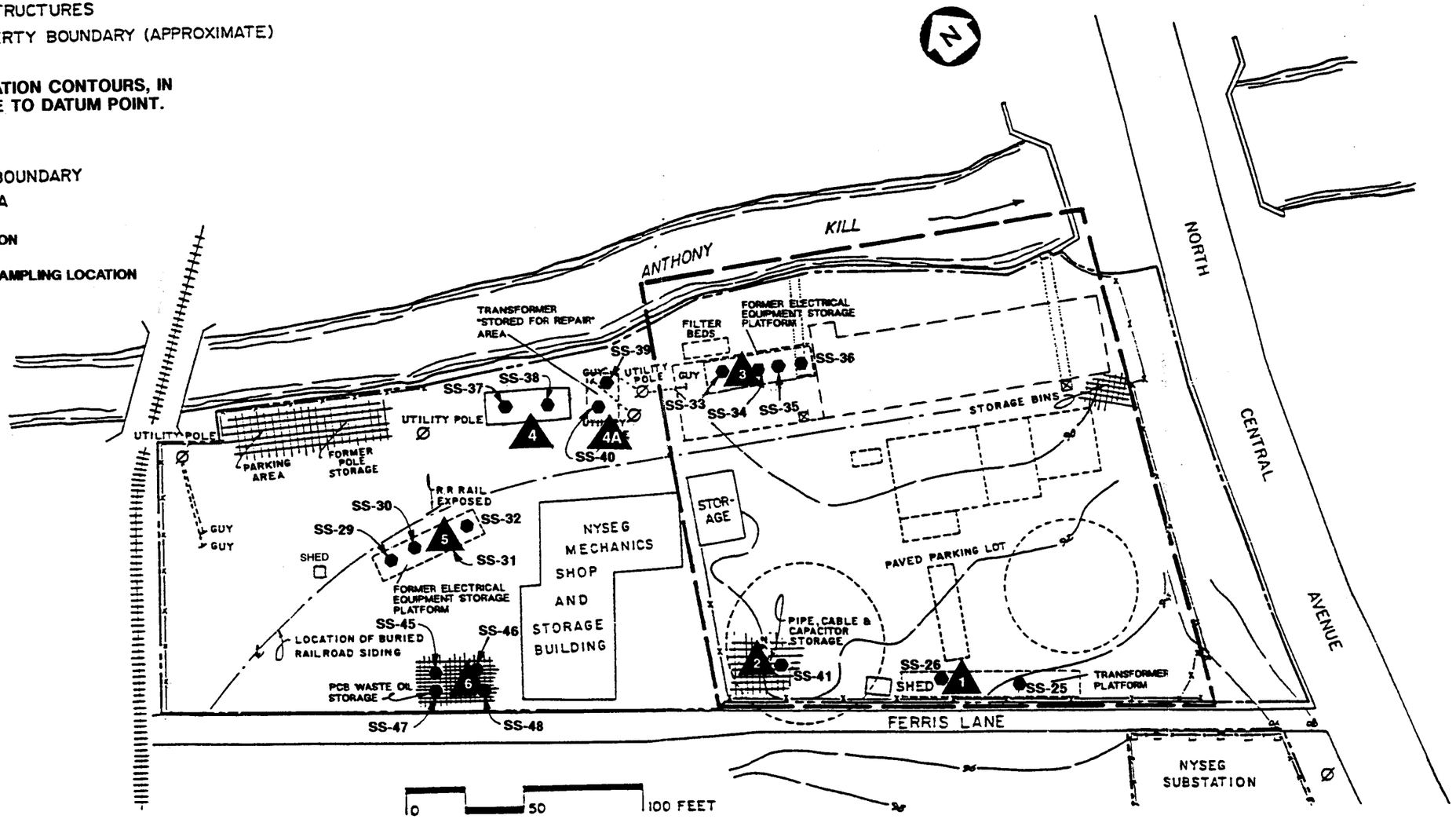
FIGURE 4-2
SAMPLING LOCATIONS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- 90 — **GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT.**
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY
- STORAGE AREA
- 1 — **AREA DESIGNATION**
- SS-45 — **SURFACE SOIL SAMPLING LOCATION**



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

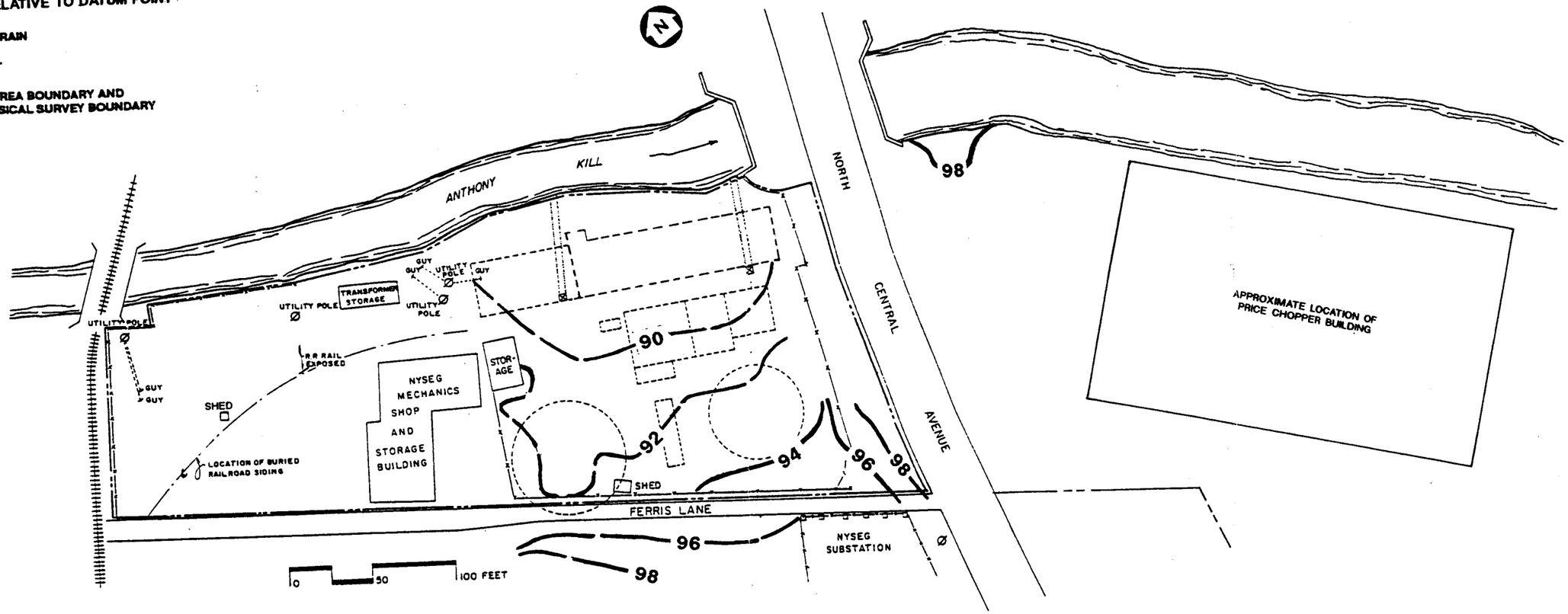
ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF FERRIS LANE AND NORTH CENTRAL AVENUE.

FIGURE 4-3
PCB SAMPLING LOCATIONS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY



BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S).

NOTE: GROUND ELEVATION IN FEET RELATIVE TO DATUM POINT.

FIGURE 4-4
SURFACE TOPOGRAPHIC CONTOUR MAP
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

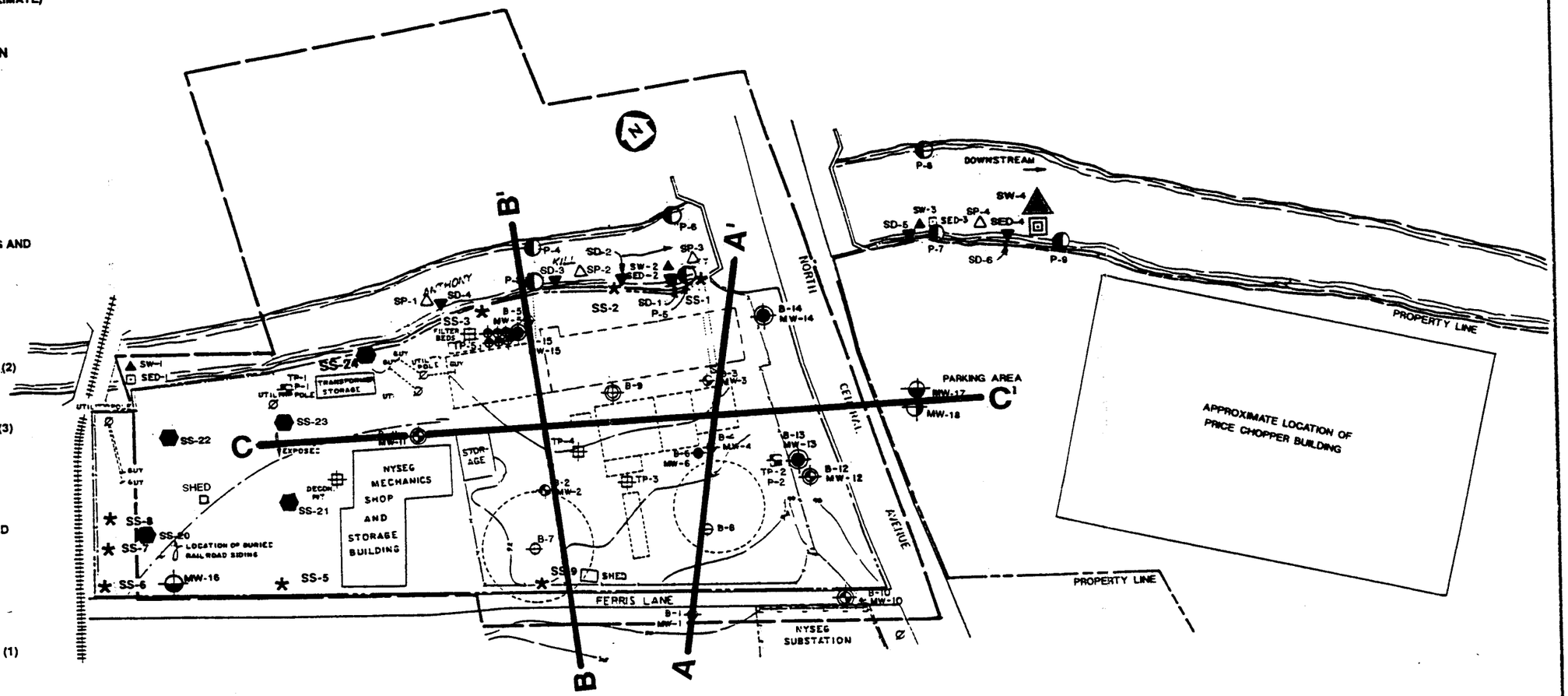
- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TASK 4:

- SURFACE SOIL SAMPLE LOCATION

PHASE IIA SUPPLEMENTAL RI:

- SHALLOW SOIL BORING
- SOIL BORING AND WATER TABLE MONITORING WELL
- SOIL/SHALLOW BEDROCK BORING AND BEDROCK MONITORING WELL
- SHALLOW SUBSURFACE SOIL SAMPLING LOCATION
- PIEZOMETER
- SEDIMENT SAMPLE LOCATION
- SEEPAGE METER LOCATION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 5 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87 AND 5/93

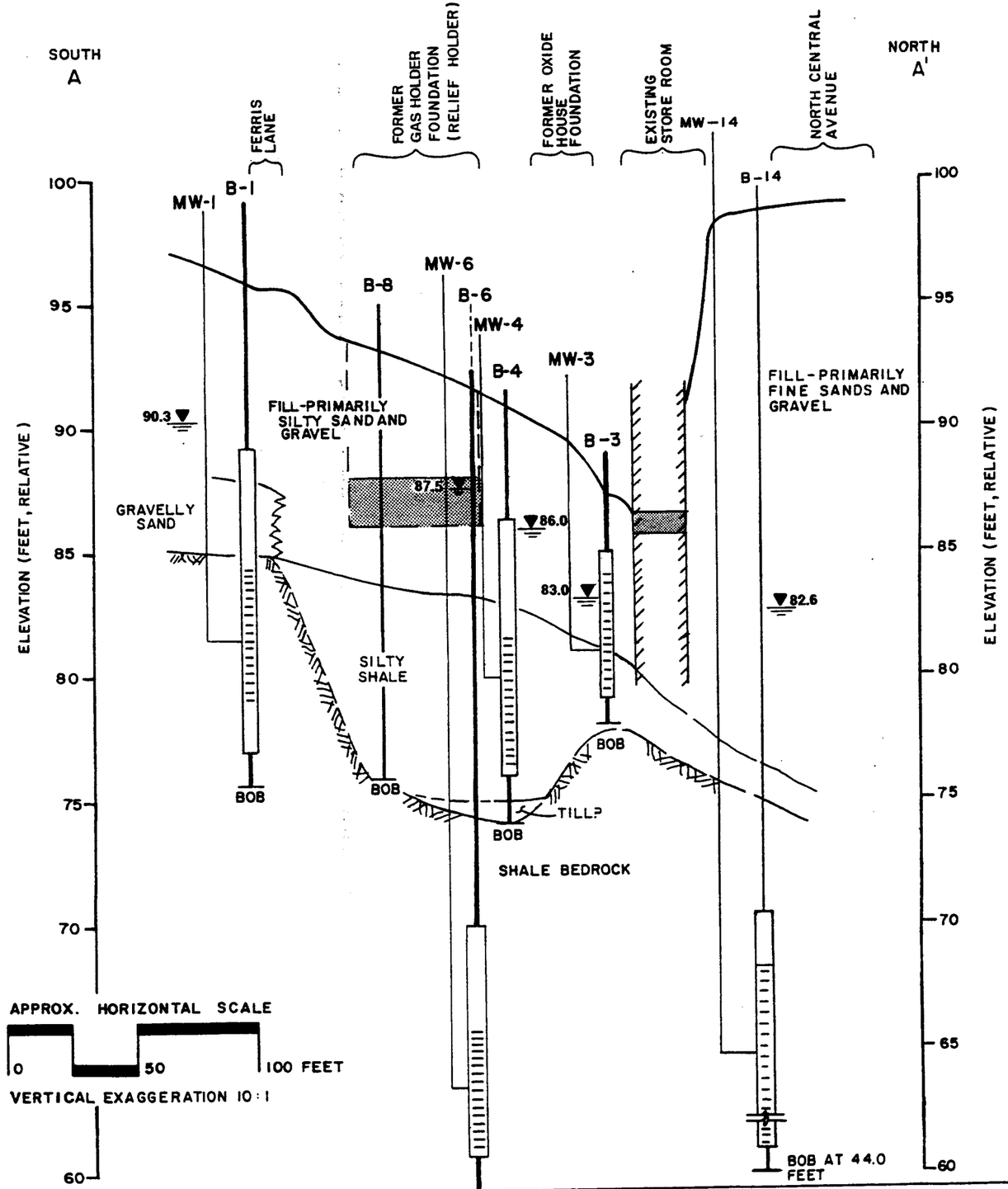
ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

AREA EAST OF NORTH CENTRAL AVENUE INTERPRETED FROM AERIAL PHOTOGRAPHS AND TAX MAP 262.53, CITY OF MECHANICVILLE.

FIGURE 5-1
GEOLOGIC CROSS-SECTION ORIENTATION PLAN
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

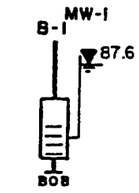
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON JULY 14, 1993

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▭)

BOTTOM OF BORING

79.3 OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

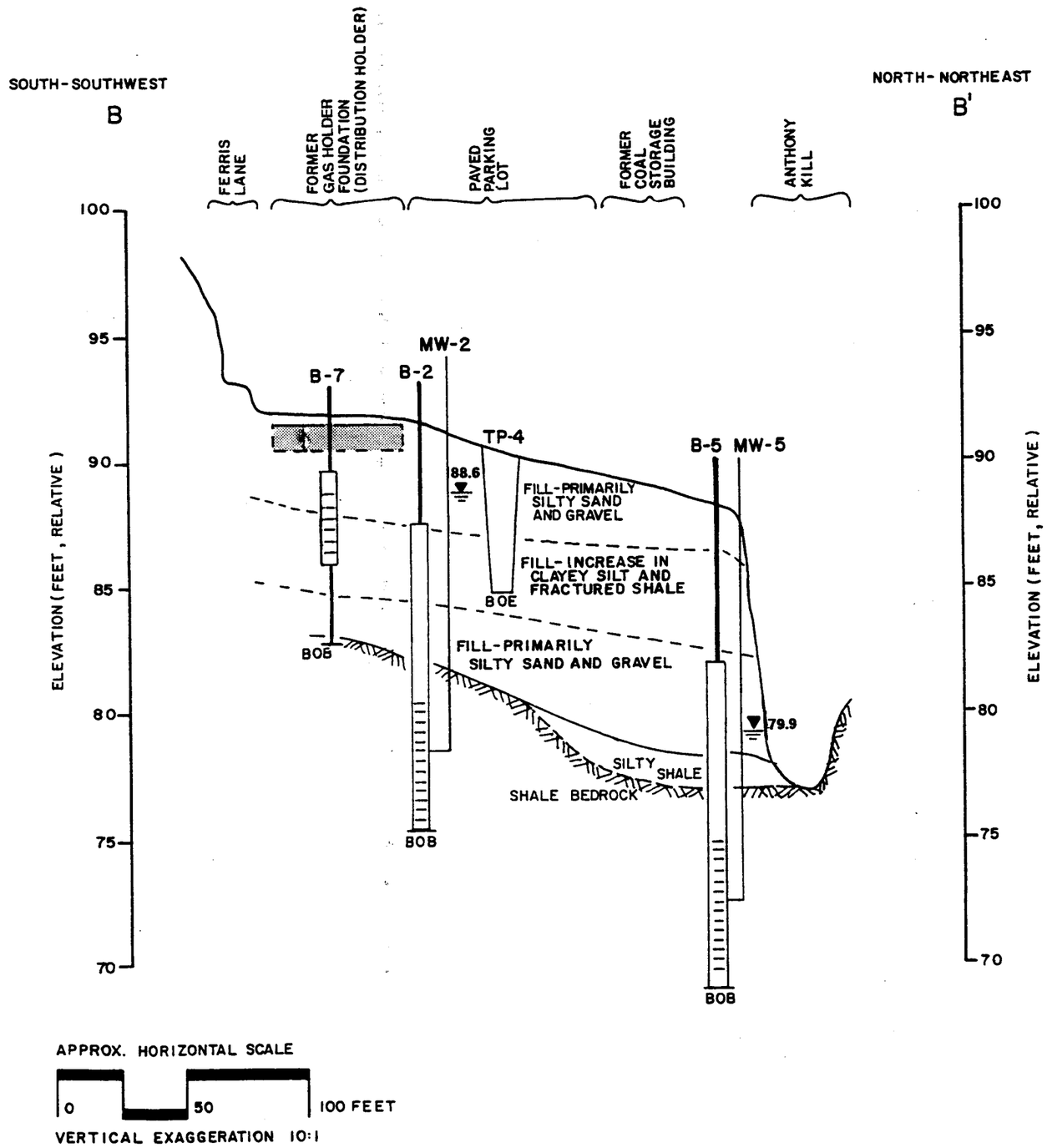
NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

FIGURE 5-2
GEOLOGIC CROSS-SECTION A-A'
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09



GEOLOGIC DESCRIPTIONS

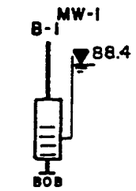
FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

SHALE BEDROCK: LAMINATED. BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND

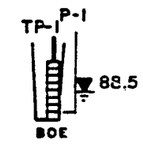


BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON JULY 14, 1993

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

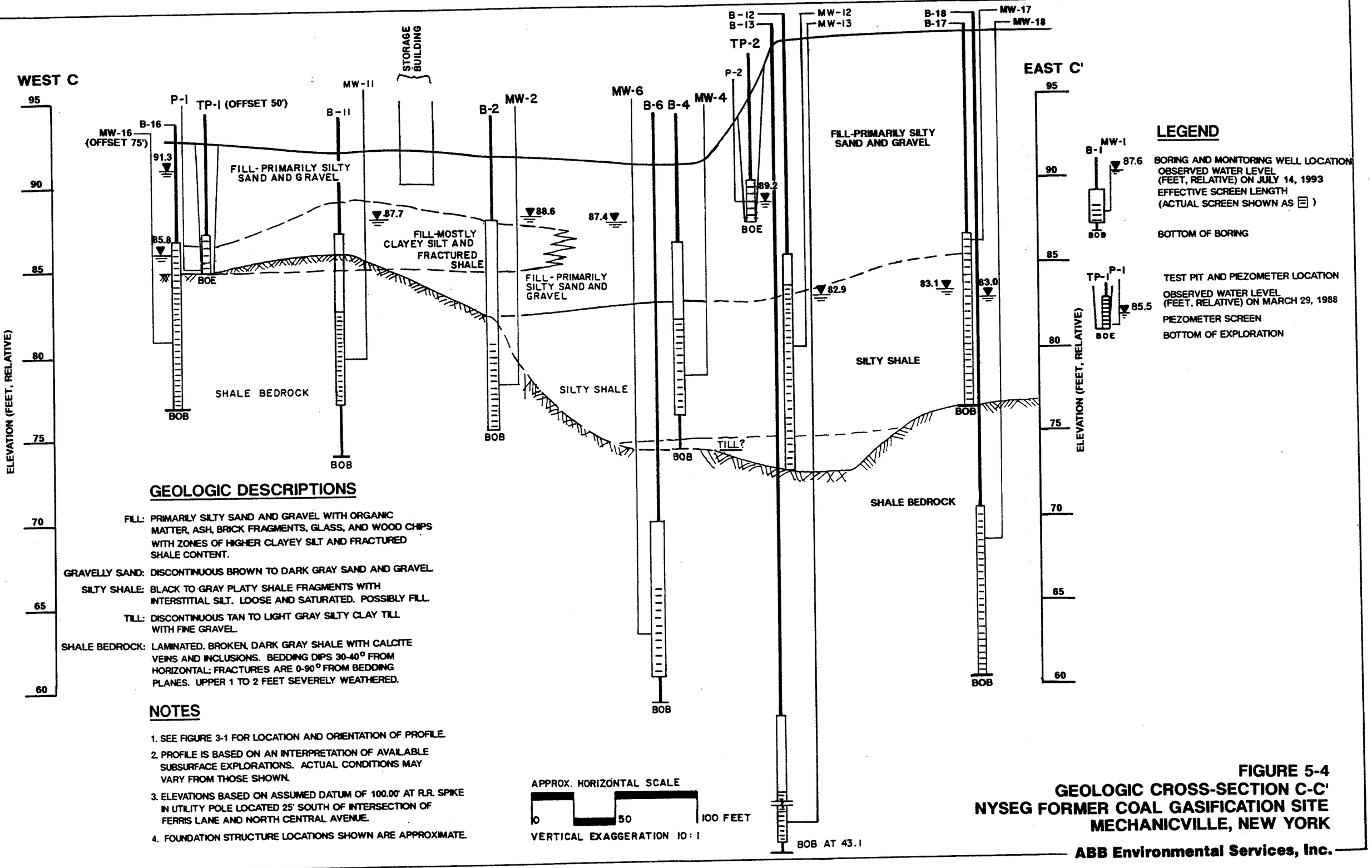
FIGURE 5-3
GEOLOGIC CROSS-SECTION B-B'
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09

WEST C

EAST C'



LEGEND

BORING AND MONITORING WELL LOCATION
OBSERVED WATER LEVEL (FEET, RELATIVE) ON JULY 14, 1993
EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ▤)

GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

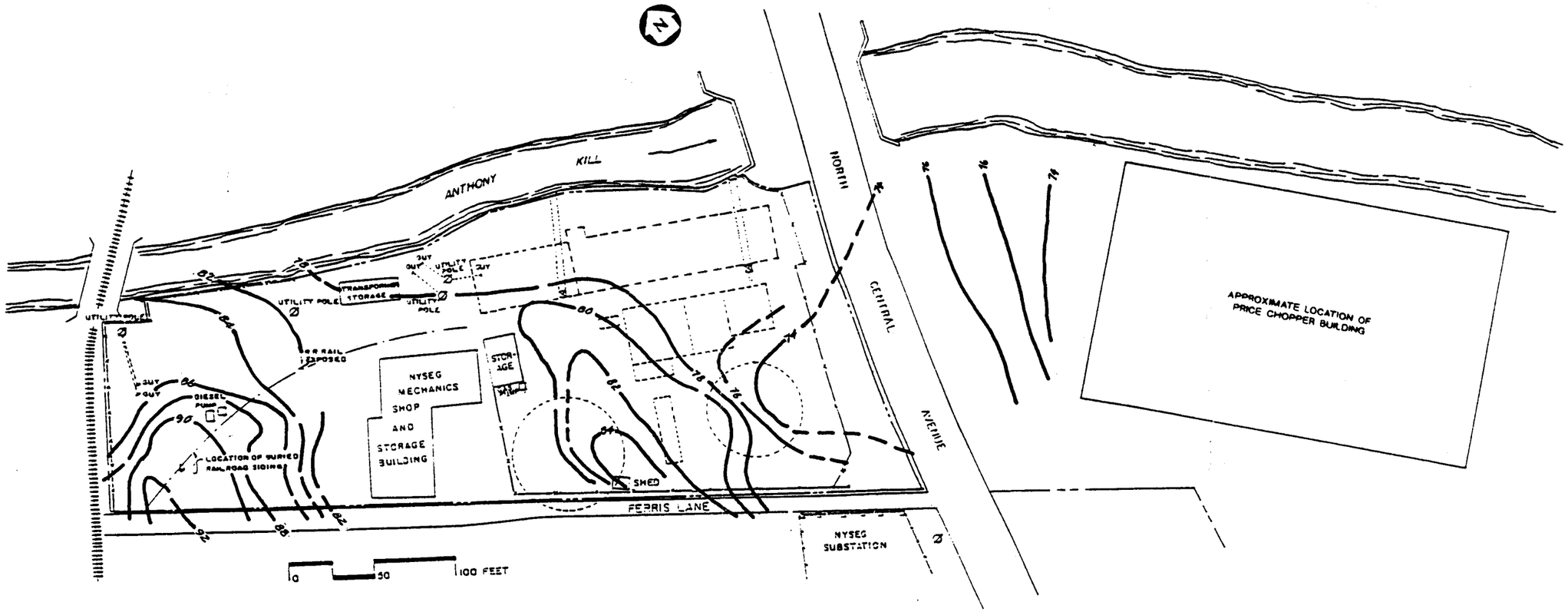
NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

FIGURE 5-4
GEOLOGIC CROSS-SECTION C-C'
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09



BASE MAP SOURCE:
TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 5 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK DATED 6/26/86 (86-72-S1).

LEGEND

90 — GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT.

82 — BEDROCK SURFACE CONTOURS BASED ON SEISMIC REFRACTION AND GPR SURVEY DATA (FT ABOVE RELATIVE DATUM)

X 76.9 — ELEVATION OF BEDROCK SURFACE DETERMINED FROM BORINGS (FT ABOVE RELATIVE DATUM)

FIGURE 5-5
BEDROCK TOPOGRAPHIC CONTOUR MAP
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09

LEGEND

- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT.
- STORM DRAIN
- CULVERT
- STUDY AREA BOUNDARY AND GEOPHYSICAL SURVEY BOUNDARY

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)

TASK 4:

- SURFACE SOIL SAMPLE LOCATION

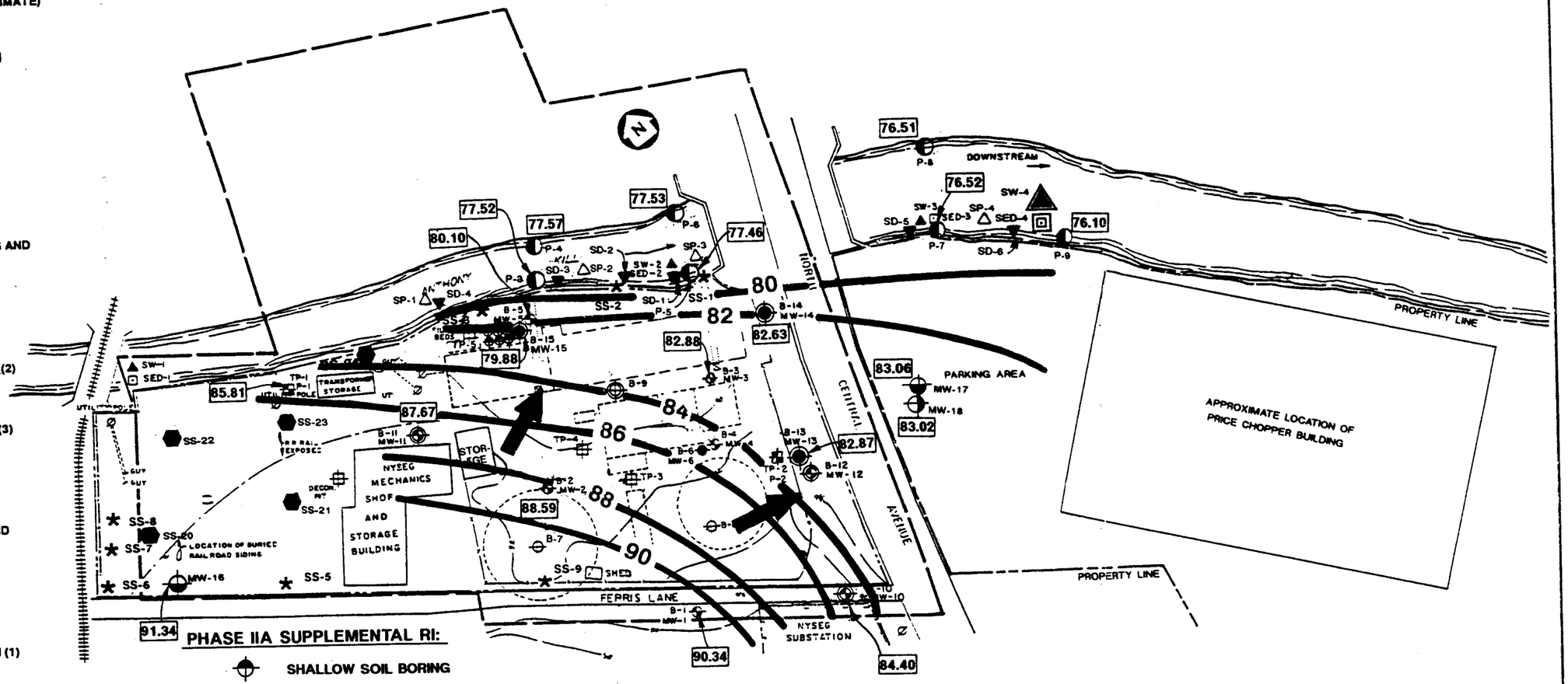
BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87 AND 5/93

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

AREA EAST OF NORTH CENTRAL AVENUE INTERPRETED FROM AERIAL PHOTOGRAPHS AND TAX MAP 262.53, CITY OF MECHANICVILLE.

0 50 100 FEET



PHASE IIA SUPPLEMENTAL RI:

- SHALLOW SOIL BORING
- SOIL BORING AND WATER TABLE MONITORING WELL
- SOIL/SHALLOW BEDROCK BORING AND BEDROCK MONITORING WELL
- SHALLOW SUBSURFACE SOIL SAMPLING LOCATION
- PIEZOMETER
- SEDIMENT SAMPLE LOCATION
- SEEPAGE METER LOCATION
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- 90 — INTERPRETED GROUNDWATER SURFACE CONTOUR
- 91.34 — WATER LEVEL (FT. RELATIVE) OBSERVED ON JULY 14,1993

FIGURE 5-7
POTENTIOMETRIC SURFACE CONTOUR PLAN
JULY 1993
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

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LEGEND

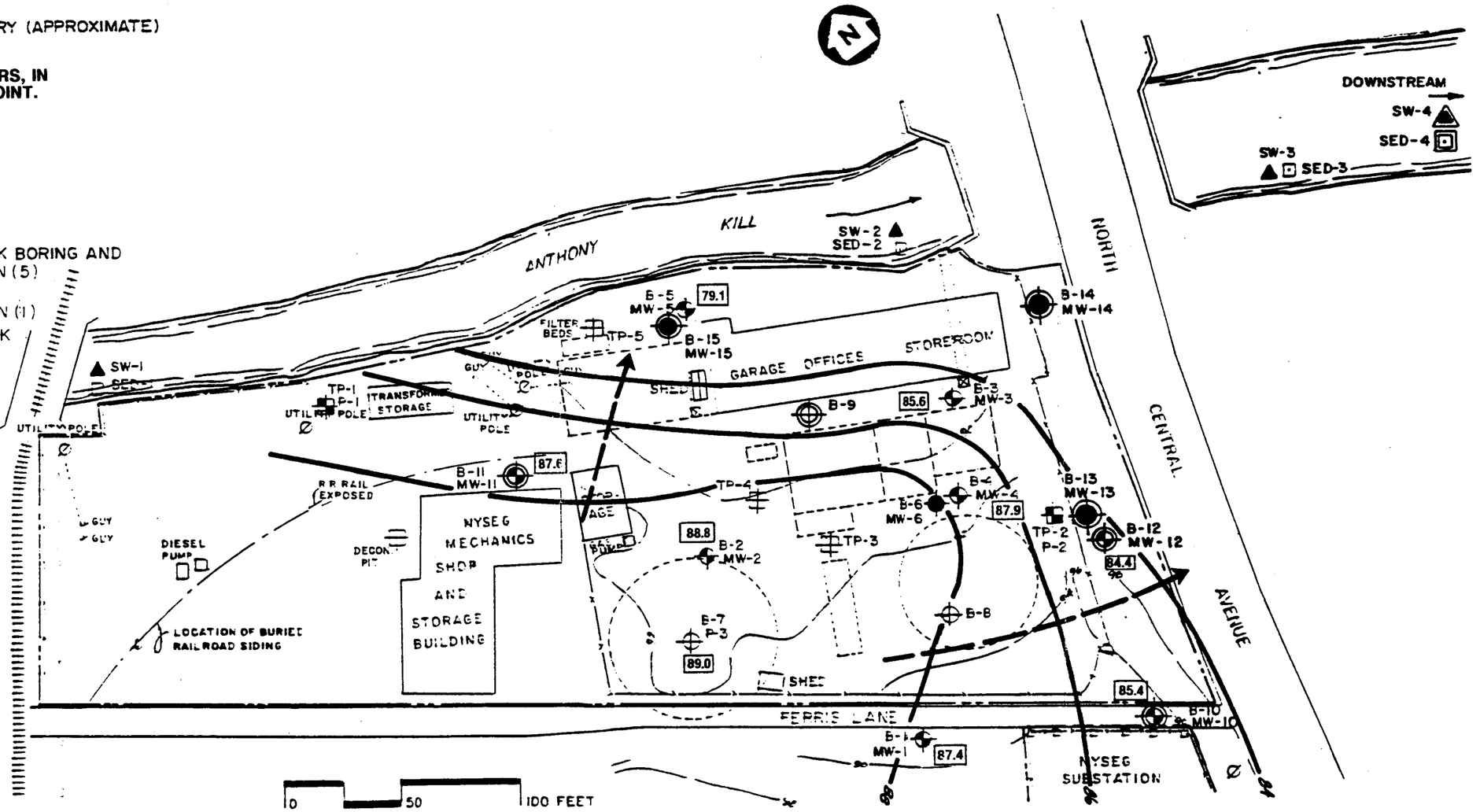
- APPROXIMATE LOCATION OF FORMER GAS PLANT STRUCTURES
- NYSEG PROPERTY BOUNDARY (APPROXIMATE)
- FENCE
- GROUND ELEVATION CONTOURS, IN FEET RELATIVE TO DATUM POINT.
- STORM DRAIN

TASK 2:

- SOIL AND SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (5)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (1)
- SOIL AND SHALLOW BEDROCK BORING LOCATION (2)
- TEST PIT AND PIEZOMETER LOCATION (2)
- TEST PIT LOCATION (3)
- SURFACE WATER SAMPLE LOCATION (3)
- SEDIMENT SAMPLE LOCATION (3)

TASK 3:

- SOIL/SHALLOW BEDROCK BORING AND MONITORING WELL LOCATION (3)
- DEEP BEDROCK BORING AND MONITORING WELL LOCATION (3)
- SOIL BORING LOCATION (1)
- SURFACE WATER SAMPLE LOCATION (1)
- SEDIMENT SAMPLE LOCATION (1)
- 89.0 WATER LEVEL (FT. RELATIVE) OBSERVED ON MARCH 29, 1988
- 84 INTERPRETED GROUNDWATER SURFACE CONTOUR
- INTERPRETED GROUNDWATER FLOW DIRECTION



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

FIGURE 5-6
POTENTIOMETRIC CONTOUR PLAN
MARCH 1988
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

4945-09

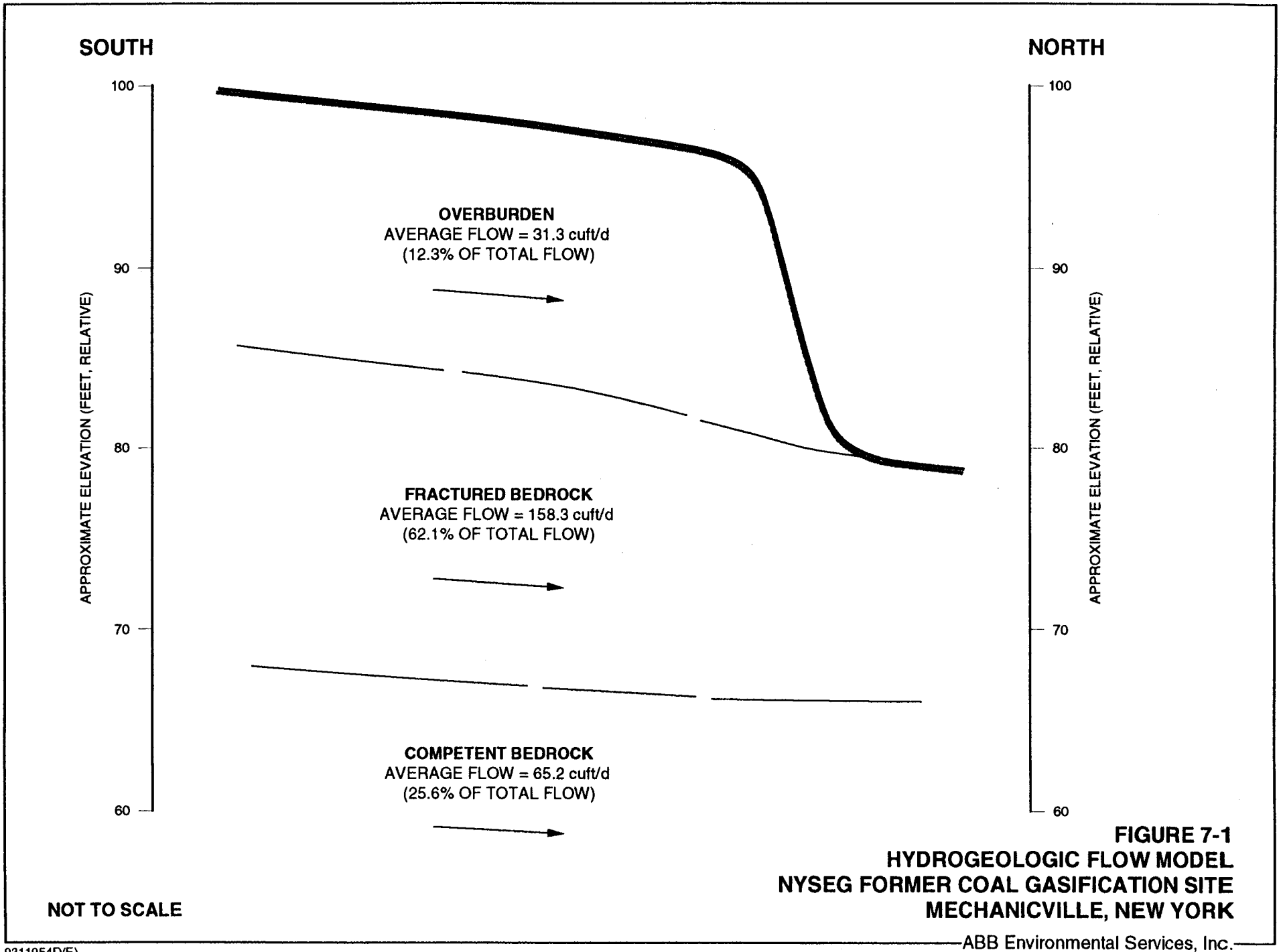
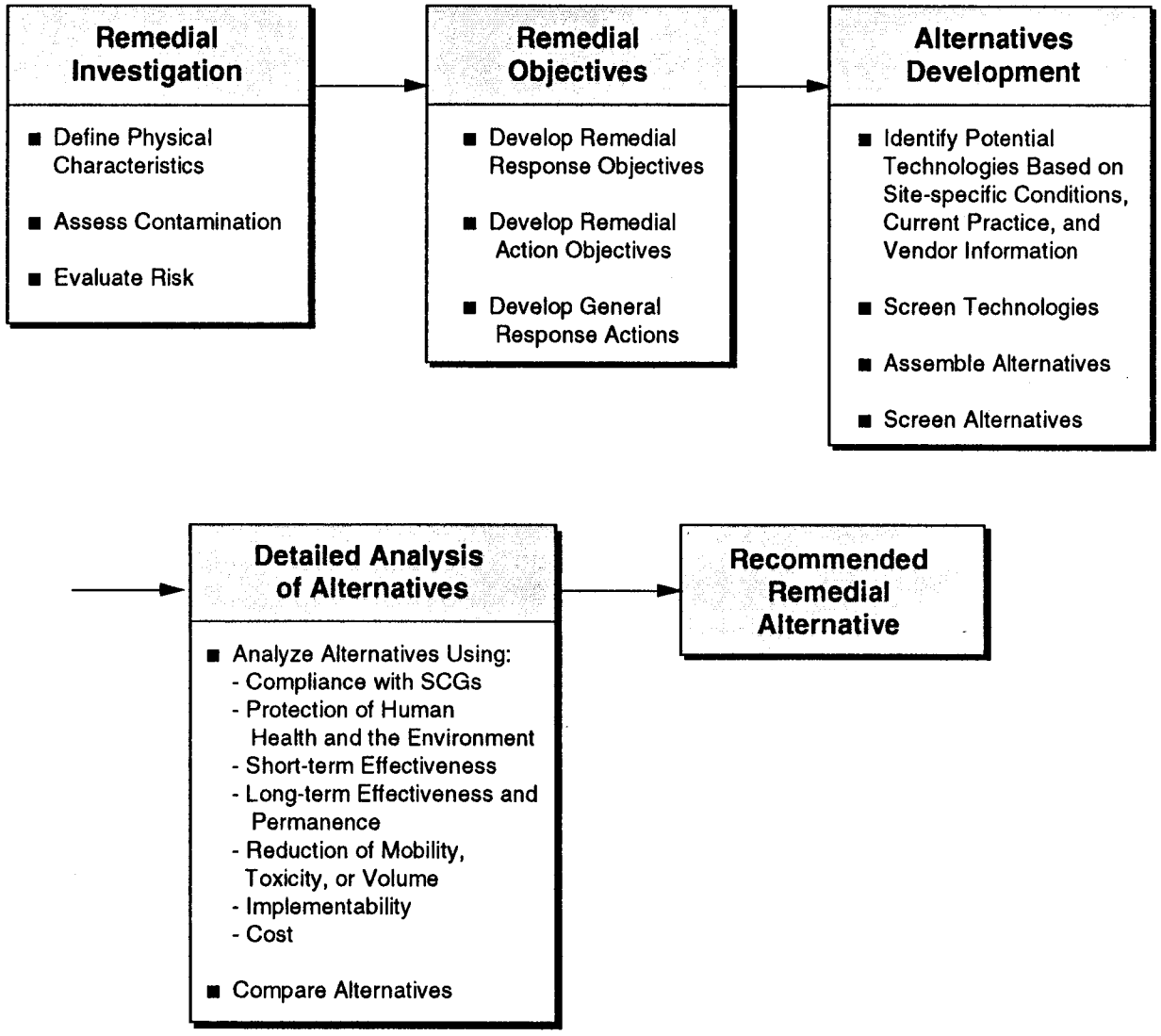


FIGURE 7-1
HYDROGEOLOGIC FLOW MODEL
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

NOT TO SCALE

ABB Environmental Services, Inc.

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Note: SCGs = Standards, Criteria, and Guidelines

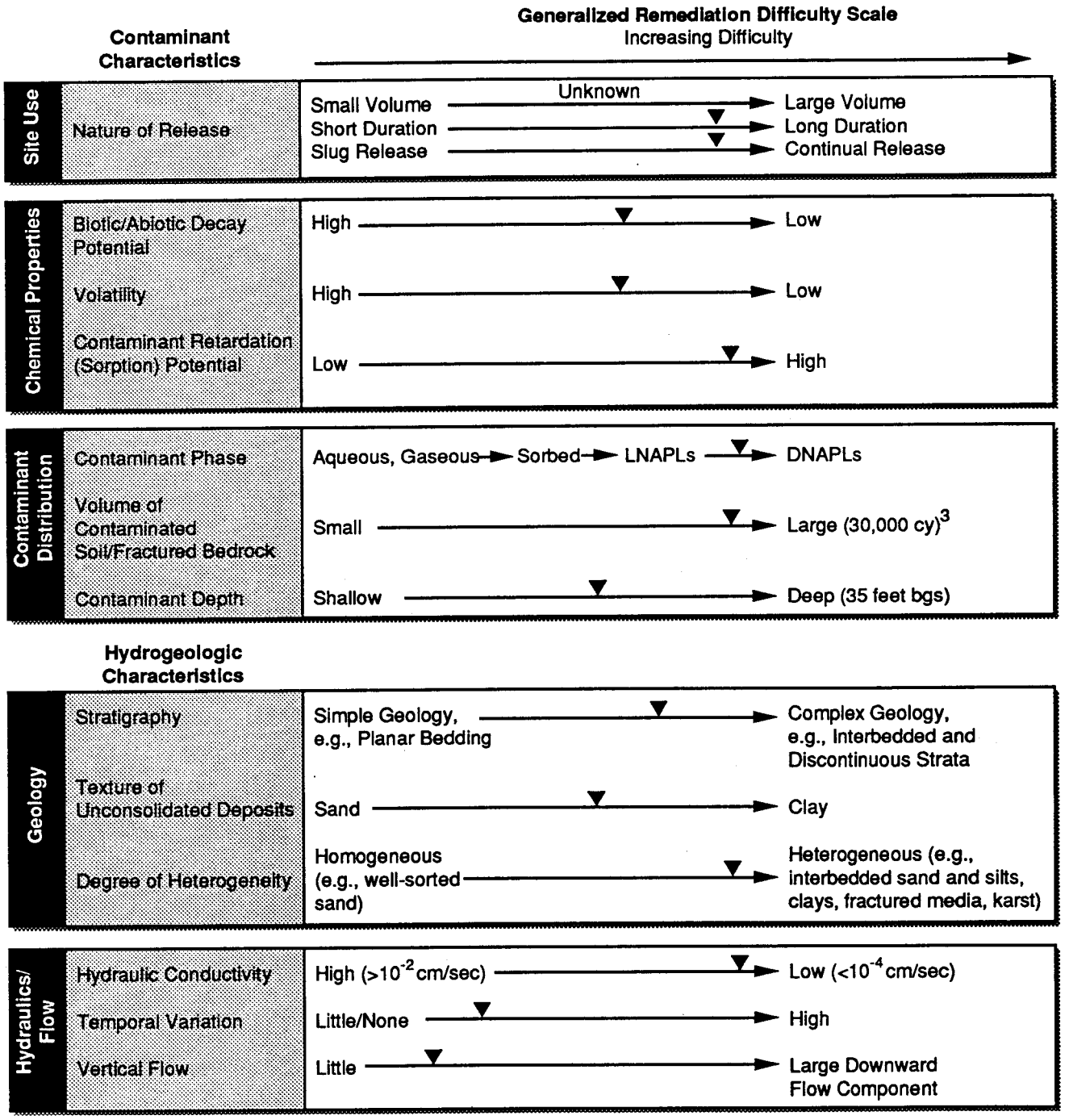
FIGURE 9-1
FEASIBILITY STUDY PROCESS FLOW CHART
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

9311054D(A)

Examples of Factors Affecting Groundwater Restoration[1]

Certain size characteristics may limit the effectiveness of subsurface remediation. The examples listed below are highly generalized. The particular factor or combination of factors that may critically limit restoration potential will be site specific.



NOTES:

▼ Indicates Interpreted Mechanicville Site Characteristics

[1] **Source:** Adapted from Figure 1; USEPA, "Guidance for Evaluating the Technical Impracticability of Ground-water Restoration"; EPA/540-R-93-080; SEPTEMBER 1993.

[2] Volume estimate assumes all overburden soils and the first 10 feet of bedrock in the area of the former gas manufacturing facility are contaminated.

cy = cubic yard

bgs = below ground surface

FIGURE 9-2
USEPA REMEDIATION DIFFICULTY SCALE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK
ABB Environmental Services, Inc.

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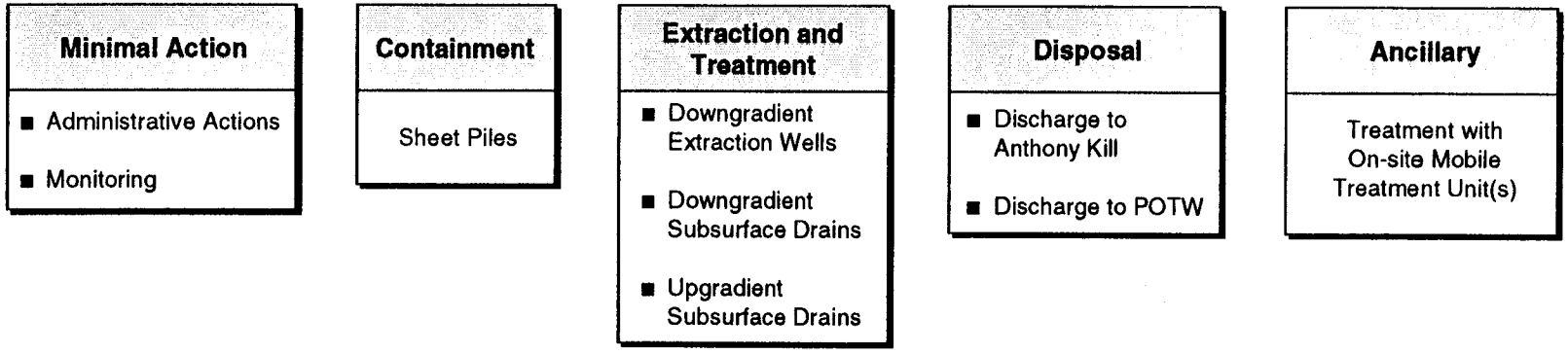
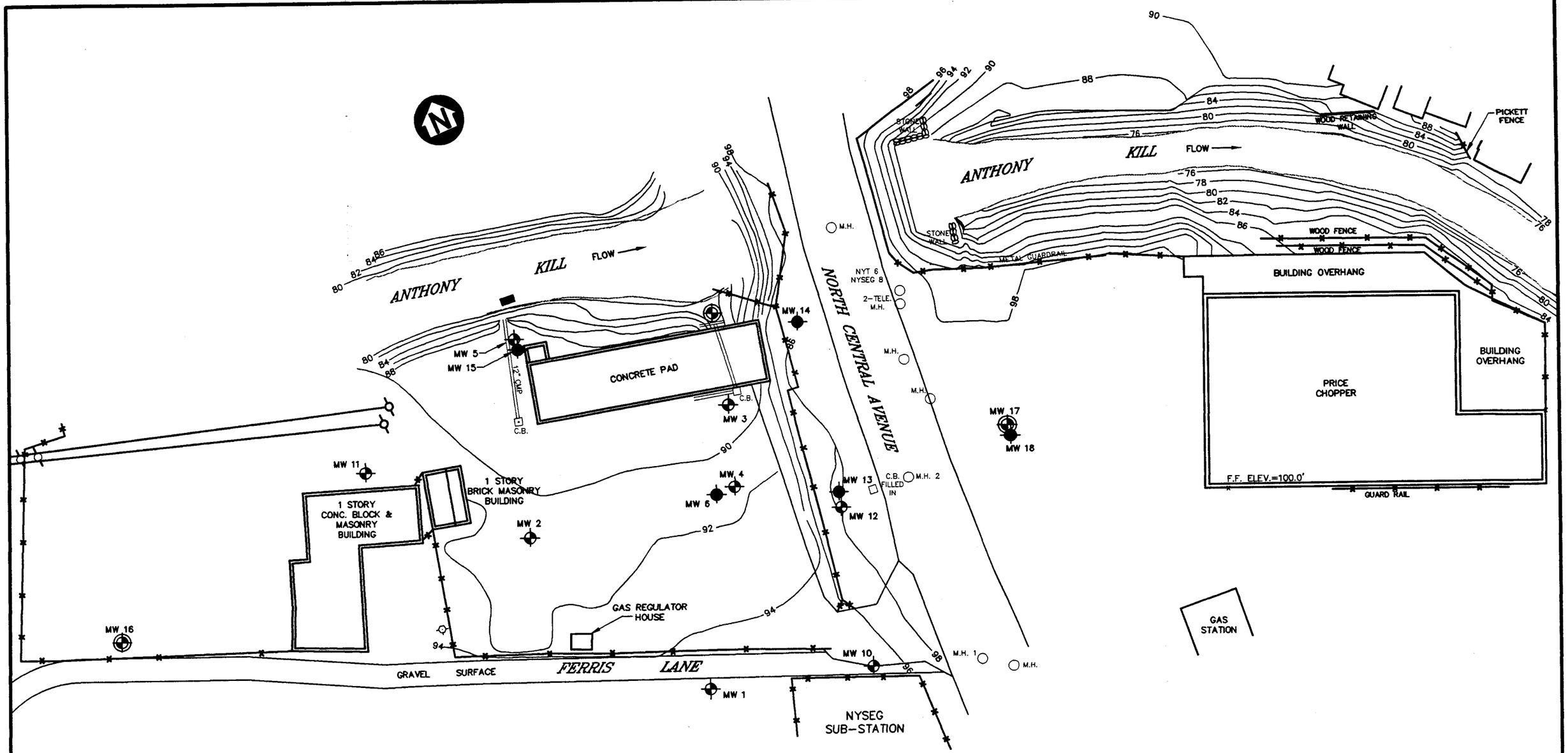


FIGURE 11-1
SUMMARY OF GROUNDWATER TECHNOLOGIES
RETAINED FOR REMEDIAL ALTERNATIVES DEVELOPMENT
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK



SOURCE:

TAKEN FROM TOPOGRAPHIC SURVEY DRAWING
BY DAVID A. FLANDERS, ASSOCIATES
PROFESSIONAL LAND SURVEYORS – SITE CONSULTANTS
1769 ROUTE 9 CLIFTON, NEW YORK
DATED JULY 20, 1993.

0 25 50 100 FEET

SCALE: 1" =50'

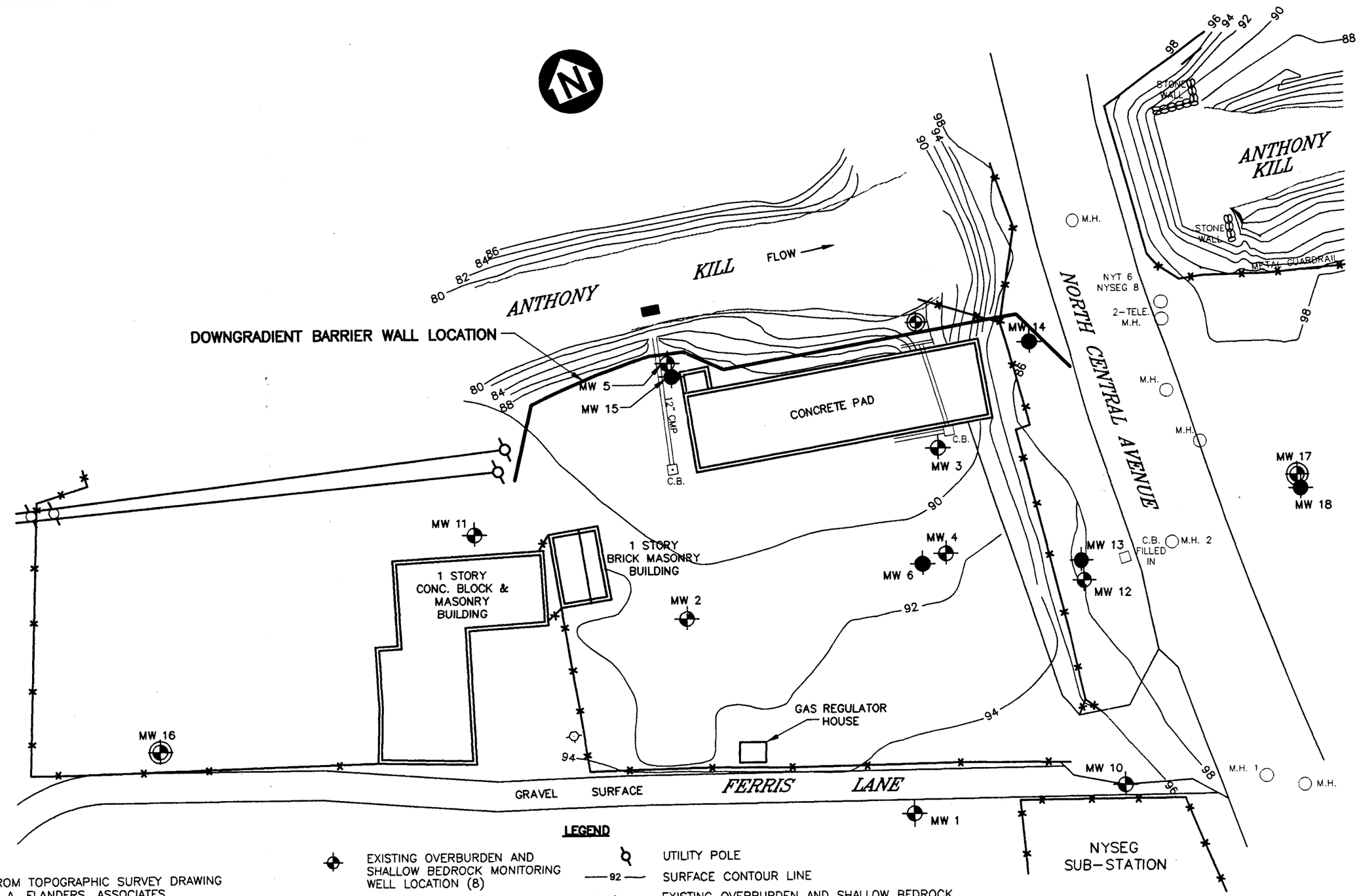
LEGEND

- EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION (8)
- EXISTING DEEP BEDROCK MONITORING WELL LOCATION (4)
- M.H. 2 ○ MANHOLE
- C.B. □ CATCH BASIN
- HYDRANT
- CHAIN LINK FENCE
- UTILITY POLE
- —92— SURFACE CONTOUR LINE
- MW 16 EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION WHICH IS PART OF PROPOSED GROUNDWATER MONITORING PROGRAM (2)
- NEW OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION FOR PROPOSED GROUNDWATER MONITORING PROGRAM (1)
- NEW SEEPAGE METER (1)

FIGURE 14-1
PROPOSED GROUNDWATER MONITORING PROGRAM
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

J:\4945-09\FIG14-1



SOURCE:

TAKEN FROM TOPOGRAPHIC SURVEY DRAWING
BY DAVID A. FLANDERS, ASSOCIATES
PROFESSIONAL LAND SURVEYORS – SITE CONSULTANTS
1769 ROUTE 9 CLIFTON, NEW YORK
DATED JULY 20, 1993.

0 20 40 80 FEET

SCALE: 1"=40'

LEGEND

- EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION (8)
- EXISTING DEEP BEDROCK MONITORING WELL LOCATION (4)
- M.H. 2 ○ MANHOLE
- C.B. □ CATCH BASIN
- HYDRANT
- CHAIN LINK FENCE
- UTILITY POLE
- —92— SURFACE CONTOUR LINE
- MW 16 EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION WHICH IS PART OF PROPOSED GROUNDWATER MONITORING PROGRAM (2)
- NEW OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION FOR PROPOSED GROUNDWATER MONITORING PROGRAM (2)
- DOWNGRADIENT BARRIER WALL LOCATION
- NEW SEEPAGE METER (1)

FIGURE 14-2
ALTERNATIVE 2: DOWNGRADIENT BARRIER WALL WITHOUT PERIMETER GROUNDWATER CONTAINMENT WELLS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

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PERIMETER GROUNDWATER CONTAINMENT WELL LOCATIONS

DOWNGRADIENT BARRIER WALL LOCATION

ANTHONY KILL

FLOW

STONE WALL

METAL GUARDRAIL

NORTH CENTRAL AVENUE

NYT 6
NYSEG 8

2-TELE. M.H.

M.H.

C.B.

MW 5
MW 15
MW 14
MW 3
MW 17
MW 18
MW 11
MW 4
MW 6
MW 13
MW 12
MW 2
MW 16
MW 10
MW 1

12" CMP

CONCRETE PAD

PROPOSED PERIMETER GROUNDWATER TREATMENT FACILITY

1 STORY BRICK MASONRY BUILDING

1 STORY CONC. BLOCK & MASONRY BUILDING

C.B. FILLED IN

GAS REGULATOR HOUSE

GRAVEL SURFACE

FERRIS LANE

NYSEG SUB-STATION

80 82 84 86 88 90 92 94 96 98

SOURCE:

TAKEN FROM TOPOGRAPHIC SURVEY DRAWING BY DAVID A. FLANDERS, ASSOCIATES PROFESSIONAL LAND SURVEYORS – SITE CONSULTANTS 1769 ROUTE 9 CLIFTON, NEW YORK DATED JULY 20, 1993.

0 20 40 80 FEET

SCALE: 1"=40'

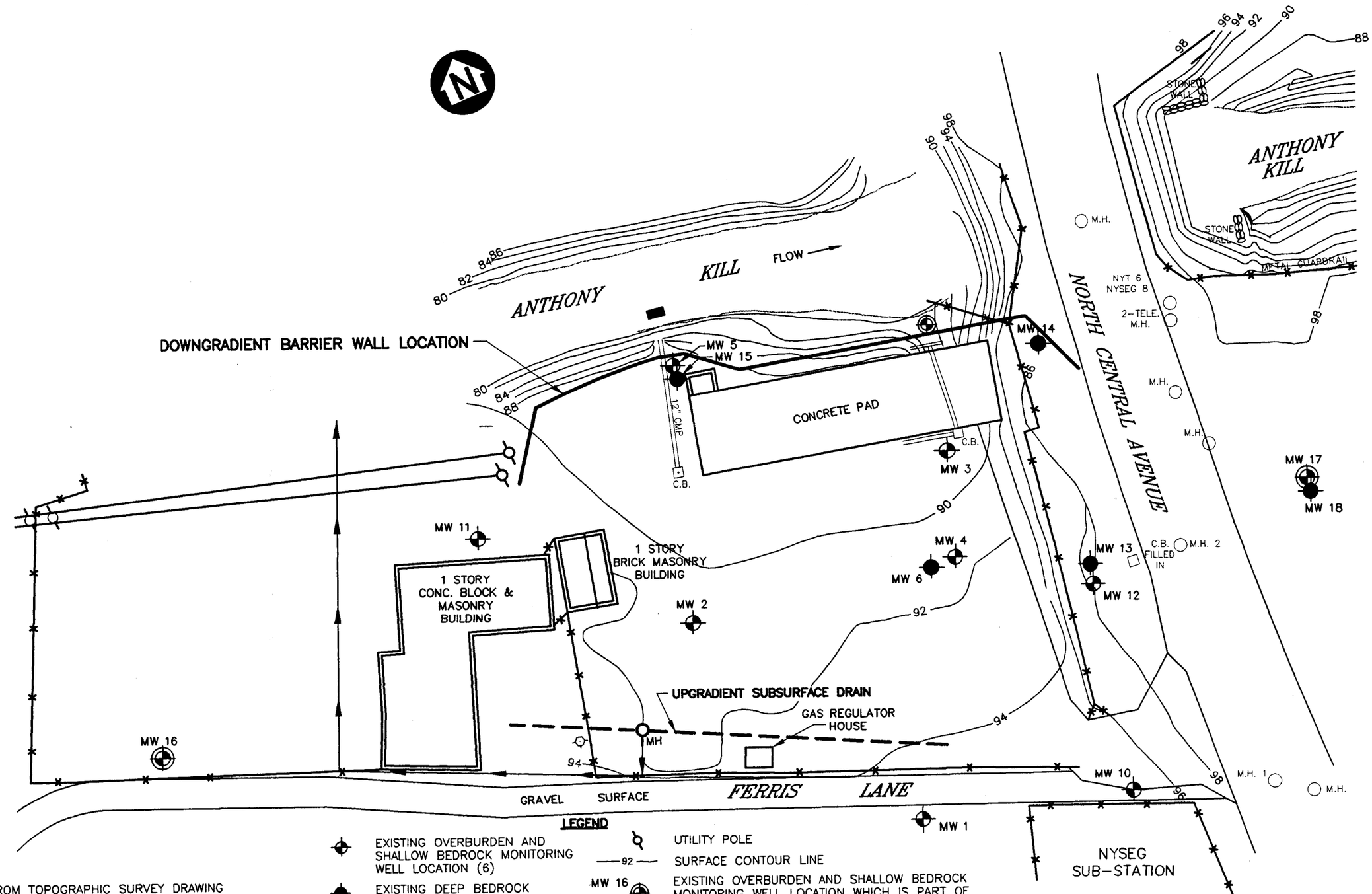
LEGEND

- EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION (8)
- EXISTING DEEP BEDROCK MONITORING WELL LOCATION (4)
- M.H. 2 ○ MANHOLE
- C.B. □ CATCH BASIN
- HYDRANT
- CHAIN LINK FENCE
- PERIMETER GROUNDWATER CONTAINMENT WELL LOCATION
- UTILITY POLE
- 92 SURFACE CONTOUR LINE
- MW 16 EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION WHICH IS PART OF PROPOSED GROUNDWATER MONITORING PROGRAM (2)
- NEW OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION FOR PROPOSED GROUNDWATER MONITORING PROGRAM (2)
- NEW SEEPAGE METER (1)
- DOWNGRADIENT BARRIER WALL LOCATION
- PERIMETER GROUNDWATER CONTAINMENT WELL DISCHARGE PIPING

J:\4945-09\FIG14-3

FIGURE 14-3
ALTERNATIVE 2: DOWNGRADIENT BARRIER WALL WITH PERIMETER GROUNDWATER CONTAINMENT WELLS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.



LEGEND

- EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION (6)
- EXISTING DEEP BEDROCK MONITORING WELL LOCATION (4)
- M.H. 2 — MANHOLE
- C.B. — CATCH BASIN
- HYDRANT
- CHAIN LINK FENCE
- MH — MANHOLE/WETWELL LOCATION FOR DIVERTED GROUNDWATER COLLECTION
- UTILITY POLE
- 92 — SURFACE CONTOUR LINE
- MW 16 — EXISTING OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION WHICH IS PART OF PROPOSED GROUNDWATER MONITORING PROGRAM (2)
- NEW OVERBURDEN AND SHALLOW BEDROCK MONITORING WELL LOCATION FOR PROPOSED GROUNDWATER MONITORING PROGRAM (1)
- NEW SEEPAGE METER (1)
- DOWNGRADIENT BARRIER WALL LOCATION
- UPGRADIENT SUBSURFACE DRAIN
- DIVERTED GROUNDWATER DICHARGE PIPING

SOURCE:

TAKEN FROM TOPOGRAPHIC SURVEY DRAWING
BY DAVID A. FLANDERS, ASSOCIATES
PROFESSIONAL LAND SURVEYORS – SITE CONSULTANTS
1769 ROUTE 9 CLIFTON, NEW YORK
DATED JULY 20, 1993.

0 20 40 80 FEET

SCALE: 1" =40'

J:\4945-09\FIG14-X

FIGURE 14-4
ALTERNATIVE 3: DOWNGRADIENT BARRIER WALL WITH UPGRADIENT SUBSURFACE DRAIN
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

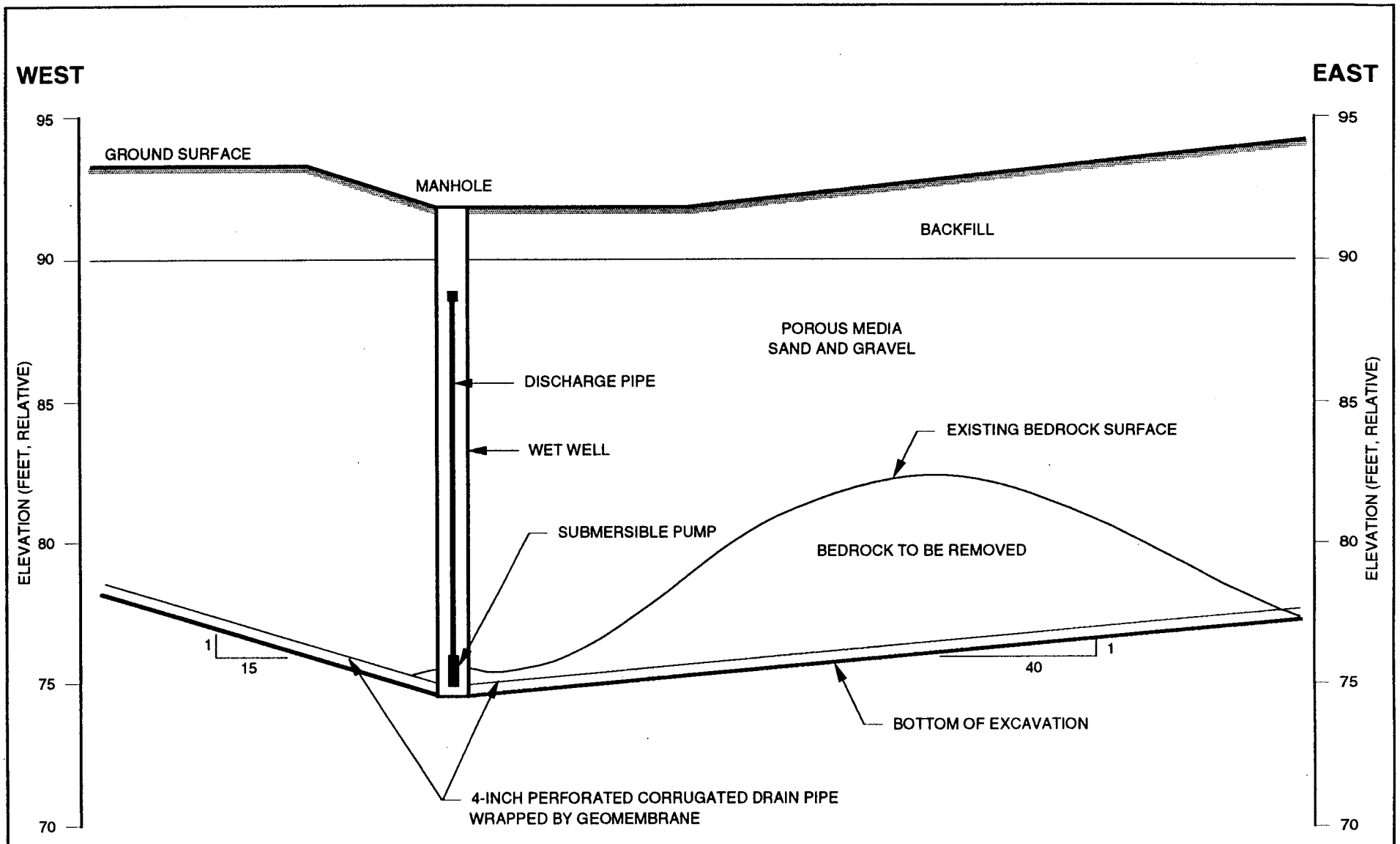


FIGURE 14-5
SUBSURFACE DRAIN CROSS-SECTION
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

9311054D(D)

TABLE 4-1

SUMMARY OF MONITORING WELL CONSTRUCTION DATA
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

Well Boring Location	Date Installed	Geologic Zone Screened	Total Boring Depth (feet bgs)	Location of Screened Interval (feet relative)	Screen Length (feet)	Ground Elevation (feet relative)	Riser Pipe Elevation (feet relative)
MW-1	08/01/86	Overburden/Shallow Bedrock	20.0	76.0 - 70.78	5.25	95.9	98.56
MW-2	08/01/86	Overburden/Shallow Bedrock	16.0	80.4 - 77.3	3.15	91.6	91.31
MW-3	08/06/86	Overburden	9.0	84.4 - 79.5	5.0	87.4	87.31
MW-4	07/30/86	Overburden	16.5	81.7 - 76.7	5.0	91.0	90.61
MW-5	08/05/86	Overburden/Shallow Bedrock	19.5	74.9 - 69.9	5.0	88.4	87.89
MW-6	07/29/86	Bedrock	31.5	65.7 - 60.7	5.0	91.0	90.65
MW-10	11/12/87	Overburden	19.5	88.0 - 77.2	10.8	96.7	96.49
MW-11	11/13/87	Overburden/Shallow Bedrock	18.0	82.6 - 77.1	5.5	92.1	91.44
MW-12	11/18/87	Overburden	25.5	83.8 - 72.8	11.0	98.3	98.46
MW-13	11/18/87	Bedrock	55.5	53.9 - 43.1	10.8	98.6	98.48
MW-14	11/19/87	Bedrock	55.0	68.7 - 57.7	11.0	98.7	98.93
MW-15	11/17/87	Bedrock	39.0	75.5 - 64.5	11.0	88.56	88.17
MW-16	05/17/93	Overburden/Shallow Bedrock	16.0	89.3 - 79.3	10.0	NS	95.28
MW-17	05/18/93	Overburden	22.5	85.7 - 75.7	10.0	NS	98.18
MW-18	05/19/93	Bedrock	38.0	70.1 - 60.1	10.0	NS	98.12

Notes:

1) BGS - below ground surface
2) Elevation relative to 100-foot datum
3) NS - not surveyed

TABLE 4-2

SUMMARY OF GROUNDWATER ELEVATION DATA
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

		GROUNDWATER ELEVATIONS							
	ELEVATION	AUGUST 1986		SEPTEMBER 1986		DECEMBER 1986		MARCH 1987	
MONITORING WELL DESIGNATION	RISER PIPE (RELATIVE DATUM)[1]	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)
MW-1	98.56	11.3	87.3	11.3	87.3	11.0	87.6	10.16	88.4
MW-2	91.31	3.2	88.1	2.4	88.9	2.3	89.0	2.31	89.0
MW-3	87.31	NA	NA	2.7	84.6	2.2	85.1	1.61	85.7
MW-4	90.61	3.8	86.8	3.5	87.1	2.5	88.1	2.51	88.1
MW-5	87.89	9.5	78.4	9.7	78.2	9.0	78.9	NA	NA
MW-6	90.65	3.9	86.8	3.8	86.9	3.8	86.9	2.95	87.7
MW-10	96.49	NA	NA	NA	NA	NA	NA	NA	NA
MW-11	91.44	NA	NA	NA	NA	NA	NA	NA	NA
MW-12	98.46	NA	NA	NA	NA	NA	NA	NA	NA
MW-13	98.48	NA	NA	NA	NA	NA	NA	NA	NA
MW-14	98.93	NA	NA	NA	NA	NA	NA	NA	NA
MW-15	88.17	NA	NA	NA	NA	NA	NA	NA	NA
MW-16	95.28	NA	NA	NA	NA	NA	NA	NA	NA
MW-17	98.18	NA	NA	NA	NA	NA	NA	NA	NA
MW-18	98.12	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on Page 4 of this table.

TABLE 4-2

SUMMARY OF GROUNDWATER ELEVATION DATA
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

		GROUNDWATER ELEVATIONS							
	ELEVATION	AUGUST 1986		SEPTEMBER 1986		DECEMBER 1986		MARCH 1987	
MONITORING WELL DESIGNATION	RISER PIPE (RELATIVE DATUM)[1]	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)
P-1	95.02	9.3	85.7	9.5	85.5	8.3	86.7	8.6	86.4
P-2	98.83	11.7	87.1	11.9	86.9	11.2	87.6	9.1	89.7
P-3	80.38	NA	NA	NA	NA	NA	NA	NA	NA
P-4	80.61	NA	NA	NA	NA	NA	NA	NA	NA
P-5	80.66	NA	NA	NA	NA	NA	NA	NA	NA
P-6	80.47	NA	NA	NA	NA	NA	NA	NA	NA
(P-7)	91.76	3.2	86.6	2.1	89.7	-	-	2.5	89.3
P-7	79.54	NA	NA	NA	NA	NA	NA	NA	NA
P-8	79.55	NA	NA	NA	NA	NA	NA	NA	NA
P-9	79.21	NA	NA	NA	NA	NA	NA	NA	NA

Notes are presented on Page 4 of this table.

TABLE 4-2

SUMMARY OF GROUNDWATER ELEVATION DATA
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
MECHANICVILLE, NEW YORK

		GROUNDWATER ELEVATIONS					
	ELEVATION	JUNE 1987		DECEMBER 1987		JULY 1993	
MONITORING WELL DESIGNATION	RISER PIPE (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)
MW-1	98.56	11.16	87.4	11.06	87.5	8.22	90.34
MW-2	91.31	2.91	88.4	2.51	88.8	2.72	88.59
MW-3	87.31	3.71	83.6	2.21	85.1	4.43	82.88
MW-4	90.61	3.01	87.6	-	-	4.60	86.01
MW-5	87.89	7.99	79.9	-	-	8.01	79.88
MW-6	90.65	3.45	87.2	2.95	87.7	3.24	87.41
MW-10	96.49	NA	NA	10.59	85.9	12.09	84.40
MW-11	91.44	NA	NA	3.94	87.5	3.77	87.67
MW-12	98.46	NA	NA	13.76	84.7	-	-
MW-13	98.48	NA	NA	15.88	82.6	15.61	82.87
MW-14	98.93	NA	NA	16.43	82.5	16.30	82.63
MW-15	88.17	NA	NA	5.67	80.3	8.07	80.10
MW-16	95.28	NA	NA	NA	NA	3.94	91.34
MW-17	98.18	NA	NA	NA	NA	15.12	83.06
MW-18	98.12	NA	NA	NA	NA	15.10	83.02

Notes are presented on Page 4 of this table.

TABLE 4-2

SUMMARY OF GROUNDWATER ELEVATION DATA
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
MECHANICVILLE, NEW YORK

		GROUNDWATER ELEVATIONS					
	ELEVATION	JUNE 1987		DECEMBER 1987		JULY 1993	
MONITORING WELL DESIGNATION	RISER PIPE (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)	DEPTH TO GROUNDWATER (FEET BGS)	GROUNDWATER ELEVATION (RELATIVE DATUM)
P-1	95.02	9.5	85.5	-	-	9.21	85.81
P-2	98.83	11.9	86.9	-	-	9.66	89.17
P-3	80.38	NA	NA	NA	NA	2.86	77.52
P-4	80.61	NA	NA	NA	NA	3.04	77.57
P-5	80.66	NA	NA	NA	NA	3.20	77.46
P-6	80.47	NA	NA	NA	NA	2.94	77.53
(P-7)	91.76	3.3	88.5	NA	NA	NA	NA
P-7	79.54	NA	NA	NA	NA	3.02	76.52
P-8	79.55	NA	NA	NA	NA	3.04	76.51
P-9	79.21	NA	NA	NA	NA	3.11	76.10

NOTES:

1) Elevation relative to 100-foot datum.
2) BGS - below ground surface.
3) NA - Not applicable, well not existant on date of measurement.
4) - = Not measured.
5) (P-7) - Original piezometer #7 destroyed in 1987 and a piezometer installed in 1993 in a different location.

TABLE 5-1
SUMMARY OF LABORATORY ANALYTICAL DATA
SURFACE SOIL INVESTIGATION OF
CONDITIONS WEST OF THE SITE
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

SAMPLE IDENTIFICATION	REACTIVE SULFIDE (ppm)	REACTIVE CYANIDE (ppm)
SS-21	ND	ND
SS-22	ND	ND
SS-23	ND	ND
SS-23 DUP	ND	ND
SS-24	ND	ND
SS-25	ND	ND

NOTES:

1) ppm – parts per million
2) ND indicates that the analyte was not detected.
3) SS – surface soil sample

TABLE 5-2
SUMMARY OF LABORATORY ANALYTICAL DATA
SURFACE SOIL INVESTIGATION OF THE
FORMER TRANSFORMER STORAGE AREAS
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TRANSFORMER STORAGE AREA	SAMPLE IDENTIFICATION	ANALYTICAL RESULTS (ppm)	
		Aroclor-1248	Aroclor-1260
Area 1	SS-25	ND	ND
Area 1	SS-25 SURF.	ND	ND
Area 5	SS-29	ND	0.050 J
Area 5	SS-30	ND	ND
Area 5	SS-31	ND	0.047 J
Area 5	SS-32	ND	ND
Area 3	SS-33	1.800 J	ND
Area 3	SS-34	2.500 J	ND
Area 3	SS-35	0.300 J	0.360 J
Area 3	SS-36	0.057 J	0.180 J
Area 4A	SS-37	0.320 J	2.600 DJ
Area 4A	SS-37 DUP	ND	2.200 J
Area 4A	SS-38	0.700 J	ND
Area 4	SS-39	0.077 J	ND
Area 4	SS-40	0.290 J	ND
Area 2	SS-41	ND	ND
Area 6	SS-45	ND	0.058 J
Area 6	SS-45 DUP	ND	0.075 J
Area 6	SS-46	ND	0.069 J
Area 6	SS-47	ND	0.240 J
Area 6	SS-48	ND	0.130 J

NOTES:

1) ppm - parts per million
2) SS - surface soil sample
3) ND indicates that the analyte was not detected
4) SURF. - sample collected from soil accumulated on surface of pavement
5) J - indicates an estimated value
6) D - indicates that the sample was diluted to facilitate analysis
7) DUP - indicates duplicate sample

TABLE 5-3
SUMMARY OF LABORATORY ANALYTICAL DATA
SUBSURFACE SOIL INVESTIGATION
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CONSTITUENT	B-16 (6-8 FT) 17-MAY-93 SOIL MEEUB-XX16/11	B-17 (18-20 FT) 18-MAY-93 SOIL MEEDB-XX17/11	B-17 (18-20 FT)DUP 18-MAY-93 SOIL MEEDB-XXDU/11
VOLATILE ORGANIC COMPOUNDS (ppm)	ND	ND	ND
SEMIVOLATILE ORGANIC COMPOUNDS (ppm)			
Benzo(a)Anthracene	ND	0.066 J	ND
Benzo(a)Pyrene	ND	0.048 J	ND
Chrysene	0.060 J	0.069 J	ND
Diethylphthalate	0.330 J	ND	ND
Fluoranthene	0.089 J	0.160 J	0.062 J
Naphthalene	ND	0.056 J	ND
Pentachlorophenol	0.330 J	ND	ND
Phenanthrene	ND	0.200 J	0.077 J
Pyrene	0.082 J	0.130 J	0.049 J
bis(2-Ethylhexyl)phthalate			
INORGANICS (ppm)			
Aluminum	12,200	6,970	6,820
Antimony	ND	0.6 J	ND
Cadmium	0.7	ND	ND
Chromium	21.6	12.5	11.1
Cobalt	16.0	7.0	6.6
Copper	50.4	9.7	7.9
Cyanide - Total			
Amenable	ND	ND	ND
Iron - Cyanide	ND	ND	ND
Iron	29,700	15,000	14,600
Lead	36.4	10.5	36.1
Manganese	511.0	203.0	141.0
Nickel	37.8	11.0	11.3
Zinc	138.0	30.4	28.2

NOTES:

1) FT - Feet
2) DUP - indicates duplicate sample
3) ppm - parts per million
4) ND indicates that the analyte was not detected
5) J - indicates an estimated value
6) ppm - parts per million
7) Samples were analyzed for total cyanide. If detected, then amenable and iron-cyanide were quantified

TABLE 5-4
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER INVESTIGATION - ORGANIC ANALYSES
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CONSTITUENT	NYS DRINKING WATER STANDARDS	MWND1 15NDJULYND93 GROUNDWATER MEGDMW8601/11	MWND1 DUP 15NDJULYND93 GROUNDWATER MEGDMW86DU/12	MWND2 14NDJULYND93 GROUNDWATER MEGDMW8602/11	MWND11 14NDJULYND93 GROUNDWATER MEGDMW8711/11	MWND13 14NDJULYND93 GROUNDWATER MEGDMW8713/11	MWND14 15NDJULYND93 GROUNDWATER MEGDMW8714/11
VOLATILE ORGANIC COMPOUNDS (ppb)							
Benzene	5	ND	ND	ND	ND	ND	4,300
Ethylbenzene	5	ND	ND	ND	ND	ND	1,900
Methylene Chloride	5	5	3 J	ND	ND	4 J	84 J
Total Xylenes	5	ND	ND	ND	ND	ND	850
Toluene	5	ND	ND	ND	ND	ND	120
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANIC COMPOUNDS (ppb)							
Acenaphthylene	50	1 J	1 J	ND	ND	22	13
Acenapthene	50	ND	ND	ND	ND	58	100
Anthracene	50	ND	ND	ND	ND	2 J	4 J
Carbazole	50	ND	ND	ND	ND	5 J	5 J
Dibenzofuran	50	ND	ND	ND	ND	2 J	4 J
Fluoranthene	50	ND	ND	ND	ND	2 J	2 J
Fluorene	50	ND	ND	ND	ND	17	28
2-Methylnaphthalene	50	ND	ND	ND	ND	200	190
Naphthalene	50	2 J	2 J	ND	ND	2,600 D	2,800 D
Phenanthrene	50	ND	ND	ND	ND	20	32
Phenol	50	ND	ND	ND	ND	51	44
Pyrene	50	ND	ND	ND	ND	2 J	2 J
bis(2-Ethylhexyl)phthalate	50	41	44	ND	ND	44	ND
4-Methylphenol	50	ND	ND	ND	ND	4 J	ND

NOTES:

1) NYS - New York State
2) ppb - parts per billion
3) ND indicates that analyte was not detected
4) J - indicates an estimated value
5) D - indicates that the sample was diluted for analysis

TABLE 5-4
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER INVESTIGATION – ORGANIC ANALYSES
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK
(continued)

CONSTITUENT	NYS DRINKING WATER STANDARDS	MWND15 14NDJULYND93 GROUNDWATER MEGDMW8715/11	MWND15 DUP 14NDJULYND93 GROUNDWATER MEGDMW87DU/11	MWND16 14NDJULYND93 GROUNDWATER MEGUMW9316/11	MWND17 13NDJULYND93 GROUNDWATER MEGDMW9317/11	MWND18 13NDJULYND93 GROUNDWATER MEGDMW9318/11
VOLATILE ORGANIC COMPOUNDS (ppb)						
Benzene	5	27	24	ND	ND	ND
Ethylbenzene	5	47	41	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND
Total Xylenes	5	29	25	ND	ND	ND
Toluene	5	7	6	ND	ND	ND
1,1-Dichloroethane	5	3 J	3 J	ND	ND	ND
1,1,1-Trichloroethane	5	6	6	ND	0 J	ND
SEMIVOLATILE ORGANIC COMPOUNDS (ppb)						
Acenaphthylene	50	10 J	10	ND	ND	ND
Acenapthene	50	110	110	ND	ND	ND
Anthracene	50	2 J	2 J	ND	ND	ND
Carbazole	50	ND	ND	ND	ND	ND
Dibenzofuran	50	3 J	3 J	ND	ND	ND
Fluoranthene	50	2 J	1 J	ND	ND	ND
Fluorene	50	24	25	ND	ND	ND
2-Methylnaphthalene	50	46	48	ND	ND	ND
Naphthalene	50	480 D	480 D	ND	ND	ND
Phenanthrene	50	34	31	ND	ND	ND
Phenol	50	ND	ND	ND	ND	ND
Pyrene	50	2 J	2 J	ND	ND	ND
bis(2-Ethylhexyl)phthalate	50	45	100	22	ND	ND
4-Methylphenol	50	ND	ND	ND	ND	ND

NOTES:

1) NYS – New York State
2) ppb – parts per billion
3) ND indicates that analyte was not detected
4) J – indicates an estimated value
5) D – indicates that the sample was diluted for analysis

TABLE 5-5
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER INVESTIGATION - FILTERED INORGANIC ANALYSES
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CONSTITUENT	NYS DRINKING WATER STANDARDS	MW-1 15-JULY-93 GROUNDWATER MEGDMW8601/11	MW-1 DUP 15-JULY-93 GROUNDWATER MEGDMW86DU/12	MW-2 14-JULY-93 GROUNDWATER MEGDMW8602/11	MW-11 14-JULY-93 GROUNDWATER MEGDMW8711/11	MW-13 14-JULY-93 GROUNDWATER MEGDMW8713/11	MW-14 15-JULY-93 GROUNDWATER MEGDMW8714/11
INORGANICS (ppb)							
Aluminum	-	52 J	ND	54 J	ND	ND	75 J
Antimony	-	ND	ND	ND	ND	ND	ND
Chromium	100	4 J	4 J	ND	ND	ND	ND
Cobalt	-	ND	ND	ND	ND	ND	ND
Copper	1,000	ND	7 J	ND	ND	ND	ND
Cyanide - Total	-	ND	ND	ND	ND	ND	ND
Amenable	-	ND	ND	ND	ND	ND	ND
Iron-Cyanide	-	ND	ND	ND	ND	ND	198
Iron	300	92 J	46 J	ND	56 J	52 J	79 J
Lead	50	ND	ND	ND	ND	ND	ND
Manganese	300	123	128	1,080	2,170	518	787
Nickel	5,000	41	33 J	ND	64	ND	ND
Zinc	5,000	ND	5 J	2 J	3	12 J	2 J

NOTES:

1) NYS - New York State
2) DUP - indicated a duplicate sample
3) ppb - parts per billion
4) ND indicates that analyte was not detected
5) J - indicates an estimated value
6) Sample was analyzed for total cyanide. If detected, amenable and iron-cyanide were quantified

TABLE 5-5
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER INVESTIGATION - FILTERED INORGANIC ANALYSES
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK
(continued)

CONSTITUENT	NYS DRINKING WATER STANDARDS	MW-15 14-JULY-93 GROUNDWATER MEGDMW8715/11	MW-15 DUP 14-JULY-93 GROUNDWATER MEGDMW87DU/11	MW-16 14-JULY-93 GROUNDWATER MEGUMW9316/11	MW-17 13-JULY-93 GROUNDWATER MEGDMW9317/11	MW-18 13-JULY-93 GROUNDWATER MEGDMW9318/11
INORGANICS (ppb)						
Aluminum	-	ND	ND	55 J	86 J	97 J
Antimony	-	ND	ND	ND	ND	ND
Chromium	100	ND	ND	ND	ND	ND
Cobalt	-	ND	ND	ND	ND	ND
Copper	1,000	ND	ND	ND	20 J	7 J
Cyanide - Total	-	ND	ND	ND	ND	ND
Amenable	-	ND	ND	ND	ND	ND
Iron-Cyanide	-	ND	ND	ND	ND	23
Iron	300	8 J	ND	58	43 J	29 J
Lead	50	ND	ND	ND	ND	ND
Manganese	300	403	403	910	2,320	709
Nickel	5,000	ND	ND	ND	ND	ND
Zinc	5,000	ND	9 J	ND	ND	6 J

NOTES:

1) NYS - New York State
2) DUP - indicated a duplicate sample
3) ppb - parts per billion
4) ND indicates that analyte was not detected
5) J - indicates an estimated value
6) Sample was analyzed for total cyanide. If detected, amenable and iron-cyanide were quantified

TABLE 5-6
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER INVESTIGATION - UNFILTERED INORGANIC ANALYSES
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CONSTITUENT	NYS DRINKING WATER STANDARDS	MW-1 15-JULY-93 GROUNDWATER MEGDMW8601/11	MW-1 DUP 15-JULY-93 GROUNDWATER MEGDMW86DU/12	MW-2 14-JULY-93 GROUNDWATER MEGDMW8602/11	MW-11 14-JULY-93 GROUNDWATER MEGDMW8711/11	MW-13 14-JULY-93 GROUNDWATER MEGDMW8713/11	MW-14 15-JULY-93 GROUNDWATER MEGDMW8714/11
INORGANICS (ppb)							
Aluminum	-	112.0 J	113.0 J	76.0 J	348.0	62.0 J	86.0 J
Antimony	-	ND	10.1 J	14.5 J	ND	ND	16.7 J
Chromium - Total	100	157.0	824.0	ND	5.0 J	4.0 J	ND
Cobalt	-	ND	7.0 J	ND	ND	ND	ND
Copper	1,000	7.0 J	23.0	ND	ND	ND	ND
Cyanide - Total	-	ND	ND	ND	ND	ND	79.3
Amenable Cyanide	-	ND	ND	ND	ND	ND	ND
Iron Cyanide	-	ND	ND	ND	ND	ND	198.0
Iron	300	3,270.0	4,360.0	191.0	332.0	87.0 J	142.0
Lead	50	1.6 J	1.2	7.2	18.0	2.1 J	1.0 J
Manganese	300	629.0	1,630.0	1,200.0	2,040.0	469.0	727.0
Nickel	5,000	125.0	150.0	ND	63.0	ND	ND
Zinc	5,000	26.0	25.0	31.0	42.0	20.0	12.0 J
TURBIDITY (NTU)	-	1.1	1.3	0.7	5.8	33.0	33.0

NOTES:

1) NYS - New York State
2) DUP - indicates a duplicate sample
3) ppb - parts per billion
4) ND indicates that analyte was not detected
5) J - indicates an estimated value
6) Sample was analyzed for total cyanide. If detected, amenable and iron-cyanide were quanitified
7) NTU - nephelometric turbidity units

TABLE 5-6
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER INVESTIGATION – UNFILTERED INORGANIC ANALYSES
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK
(continued)

CONSTITUENT	NYS DRINKING WATER STANDARDS	MW-15 14-JULY-93 GROUNDWATER MEGDMW8715/11	MW-15 DUP 14-JULY-93 GROUNDWATER MEGDMW87DU/11	MW-16 14-JULY-93 GROUNDWATER MEGUMW9316/11	MW-17 13-JULY-93 GROUNDWATER MEGDMW9317/11	MW-18 13-JULY-93 GROUNDWATER MEGDMW9318/11
INORGANICS (ppb)						
Aluminum	–	78.0 J	141.0 J	20,100.0	182,000.0	1,020.0
Antimony	–	17.0 J	ND	ND	ND	ND
Chromium – Total	100	4.0 J	ND	33.0	272.0	5.0 J
Cobalt	–	ND	ND	13.0 J	117.0	ND
Copper	1,000	ND	ND	30.0	349.0	ND
Cyanide – Total	–	ND	ND	ND	65.9	19.1
Amenable Cyanide	–	ND	ND	ND	ND	ND
Iron Cyanide	–	ND	ND	ND	ND	22.5
Iron	300	103.0	199.0	18,800.0	306,000.0	1,280.0
Lead	50	ND	1.2 J	22.2	142.0	3.8
Manganese	300	369.0	383.0	1,100.0	5,750.0	688.0
Nickel	5,000	ND	ND	19.0 J	284.0	ND
Zinc	5,000	16.0 J	21.0	93.0	879.0	46.0
TURBIDITY (NTU)	–	4.3	4.6	1,100.0	4,600.0	6.2

NOTES:

1) NYS – New York State
2) DUP – indicates a duplicate sample
3) ppb – parts per billion
4) ND indicates that analyte was not detected
5) J – indicates an estimated value
6) Sample was analyzed for total cyanide. If detected, amenable and iron-cyanide were quanitified
7) NTU – nephelometric turbidity units

TABLE 5-7

SUMMARY OF LABORATORY ANALYTICAL DATA
SEDIMENT INVESTIGATION
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CONSTITUENT	NOAA STANDARDS ER-L CONCENTRATION	SD-1 (0-1 FT) 21-MAY-93 SEDIMENT METDEEXX01/11	SD-2 (0-1 FT) 21-MAY-93 SEDIMENT METDEEXX02/11	SD-3 (0-1 FT) 21-MAY-93 SEDIMENT METDEEXX03/11	SD-3 (0-1 FT)DUP 21-MAY-93 SEDIMENT METDEEXXDU/11	SD-4 (0-1 FT) 21-MAY-93 SEDIMENT METDEEXX04/11	SD-5 (0-1 FT) 21-MAY-93 SEDIMENT METDEEXX05/11	SD-6 (0-1 FT) 21-MAY-93 SEDIMENT METDEEXX06/11
VOLATILE ORGANIC COMPOUNDS (ppm)								
Acetone	-	0.012	0.012 J	0.005 J	0.012	0.008 J	0.004 J	0.004 J
Benzene	-	ND	0.001 J	0.002 J	0.004 J	0.014	ND	ND
Chloromethane	-	ND	ND	ND	ND	ND	0.004 J	ND
Ethylbenzene	-	ND	ND	ND	0.003 J	0.003 J	ND	ND
Methylene Chloride	-	0.005 J	0.006	0.006	0.006	0.006 J	0.004 J	0.004 J
Total Xylenes	-	ND	ND	ND	0.010	ND	ND	ND
SEMIVOLATILE ORGANIC COMPOUNDS (ppm)								
Acenaphthylene	-	0.086 J	0.066 J	0.074 J	ND	0.086 J	ND	ND
Acenapthene	0.150	ND	0.860	1.600	0.840	0.660	0.071 J	0.040 J
Anthracene	0.085	ND	0.079 J	0.095 J	0.091 J	3.300	0.130 J	ND
Benzo(a)Anthracene	0.230	0.058 J	0.081 J	0.100 J	0.072 J	0.200 J	0.510	ND
Benzo(a)Pyrene	0.400	0.170 J	0.082 J	0.120 J	0.061 J	0.180 J	0.490	ND
Benzo(b)Fluoranthene	-	0.110 J	0.088 J	0.120 J	ND	0.160 J	ND	ND
Benzo(g,h,i)perylene	-	0.110 J	ND	0.100 J	ND	0.099 J	0.150 J	ND
Benzo(k)Fluoranthene	-	ND	ND	ND	ND	ND	0.460	ND
Carbazole	-	ND	ND	ND	ND	ND	0.120 J	ND
Chrysene	0.400	0.090 J	0.095 J	0.110 J	0.077 J	0.240 J	0.670	ND
Dibenz(a,h)Anthracene	0.060	ND	ND	ND	ND	ND	0.120 J	ND
Dibenzofuran	-	ND	ND	0.080 J	ND	ND	ND	ND
Fluoranthene	0.600	0.120 J	0.150 J	0.190 J	0.180 J	0.400 J	1.300	0.080 J
Fluorene	-	ND	0.210 J	0.420	0.230 J	0.290 J	0.074 J	ND
Indeno(1,2,3-c,d)Pyrene	-	0.120 J	0.081 J	0.072 J	0.041 J	0.140 J	0.330 J	ND
2-Methylnaphthalene	0.065	ND	ND	1.000	0.590	0.057 J	ND	ND
Naphthalene	0.340	ND	ND	3.600	2.000	ND	ND	ND
Pentachlorophenol	-	0.110 J	ND	ND	ND	ND	ND	ND
Phenanthrene	0.225	0.064 J	0.380 J	0.460	0.390 J	0.790	0.820	ND
Pyrene	0.350	0.140 J	0.210 J	0.240 J	0.180 J	0.510 J	1.100	ND
bis(2-Ethylhexyl)phthalate	-	0.240 J	ND	0.140 J	ND	0.300 J	0.420	0.280 J
INORGANICS (ppm)								
Aluminum	-	5640	5020	7540	6390	6550	5000	6390
Antimony	-	ND	ND	ND	ND	ND	ND	ND
Cadmium	-	ND	ND	ND	ND	ND	ND	ND
Chromium	80	9	8	12	11	11	11	12
Cobalt	-	5	4 J	8	6	6	7	6
Copper	70	20	18	20	16	16	27	18
Cyanide - Total								
Amenable	-	ND	ND	ND	ND	ND	ND	ND
Iron - Cyanide	-	ND	ND	ND	ND	ND	ND	ND
Iron	-	14300	13900	23100	16600	16400	16300	16900
Lead	35	14	16	15	15	13	36	12
Manganese	-	337	236	368	309	278	412	270
Nickel	30	12	10	16	14	13	13	13
Zinc	120	64	75	89	55	66	96 J	56

NOTES PRESENTED ON PAGE 2 OF THIS TABLE.

NOTES:

1) NOAA criteria based on "The Potential for Biological Effects of Sediment Sorbed Contaminants Tested in the National Status and Trends Program". National Oceanic and Atmospheric Administration (NOAA) Criteria Technical Memorandum NOS–OMA 52, 1990.

2) ER–L – Effects Range – Low

3) FT – feet

4) ppm – parts per million

5) ND indicates that analyye was not detected

6) J – indicates an estimated value

7) Samples were analyzed for total cyanide. If detected, then amenable and iron–cyanide were quantified.

TABLE 5-8
SUMMARY OF LABORATORY ANALYTICAL DATA
GROUNDWATER SEEPAGE INVESTIGATION
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CONSTITUENT	NYS WATER QUALITY STANDARDS	SP-1 14-JULY-93 SEEPAGE MESDEEXX01/11	SP-2 13-JULY-93 SEEPAGE MESDEEXX02/11	SP-4 15-JULY-93 SEEPAGE MESDEEXX04/11
VOLATILE ORGANIC COMPOUNDS (ppb)				
Benzene	-	ND	ND	ND
Ethylbenzene	-	ND	ND	ND
Methylene Chloride	-	1	ND	ND
Total Xylenes	-	ND	ND	ND
Toluene	-	ND	ND	ND
1,1-Dichloroethane	-	ND	ND	ND
1,1,1-Trichloroethane	-	ND	ND	ND
SEMIVOLATILE ORGANIC COMPOUNDS (ppb)				
Acenapthylene	-	ND	ND	NA
Acenapthene	-	ND	ND	NA
Anthracene	-	ND	ND	NA
Carbazole	-	ND	ND	NA
Dibenzofuran	-	ND	ND	NA
Fluoranthene	-	ND	ND	NA
Fluorene	-	ND	ND	NA
2-Methylnaphthalene	-	ND	ND	NA
Naphthalene	-	ND	ND	NA
Phenanthrene	-	ND	ND	NA
Phenol	1.5	430	160	NA
Pyrene	-	ND	ND	NA
bis(2-Ethylhexyl)phthalate	0.6	9 J	4 J	NA
4-Methylphenol	-	ND	2 J	NA

NOTES:

1) NYS - New York State
2) ppb - parts per billion
3) ND indicates that the analyte was not detected
4) NA indicates that sample was not analyzed
5) J - indicates an estimated value

TABLE 5-9

SUMMARY OF SEEPAGE METER FIELD DATA
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

LOCATION	METER ENGAGED		SAMPLE COLLECTED		TIME (HOURS)	VOLUME (ML)	FLUX ($L/D*M^2$)	FLUX ($GAL/DAY*FT^2$)	LABORATORY ANALYSIS
	DATE	TIME	DATE	TIME					
SP-1	7/12/93	10:00	7/14/93	19:00	57	500	0.819	0.0198	VOA, SVOA
SP-2	7/12/93	09:45	7/13/93	07:45	22	835	3.544	0.0856	VOA, SVOA
SP-3[3]	7/12/93	10:15	NA	NA	NA	NA	NA	NA	NA
SP-4	7/12/93	09:35	7/15/93	07:35	70	60	0.08	0.0019	VOA

NOTES:

1) Average seep: 1.454333 liters per day per square meter ($L/d*m^2$) or 0.0351 gallons per day per square foot ($gal/day*ft^2$)
2) ML - milliliter
3) SP-3 did not produce sufficient volume to collect a groundwater seed sample.
4) NA - not applicable
5) VOA - volatile organic analysis
6) SVOA - semi-volatile organic analysis

TABLE 7-1
SUMMARY STATISTICS OF SURFACE SOIL SAMPLING LOCATIONS
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ANALYTE	ARITHMETIC MEAN (ppm)	MAXIMUM DETECTED (ppm)	MINIMUM DETECTED (ppm)	FREQUENCY OF DETECTION
POLYCHLORINATED BIPHENYLS				
Aroclor-1248	0.349	2.500 J	0.057 J	8/18
Aroclor-1260	0.268	2.400 J	0.047 J	10/18

NOTES:

1) Data is from samples SS-25, SS-29 through SS-41, and SS-45 through SS-48, May 1993 and July 1993
2) J = Estimated Value
3) ppm = parts per million

TABLE 7-2
SUMMARY STATISTICS OF SUBSURFACE SOIL SAMPLING LOCATIONS
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ANALYTE	ARITHMETIC MEAN	MAXIMUM DETECTED	MINIMUM DETECTED	FREQUENCY OF DETECTION
SEMIVOLATILE ORGANIC COMPOUNDS (ppm)				
Benzo(a)anthracene	0.155	0.066 J	0.066 J	1/2
Benzo(a)pyrene	0.151	0.048 J	0.048 J	1/2
Chrysene	0.096	0.069 J	0.060 J	2/2
Diethylphthalate	0.231	0.330 J	0.330 J	1/2
Fluoranthene	0.100	0.111 J*	0.089 J	2/2
Naphthalene	0.153	0.056 J	0.056 J	1/2
Pentachlorophenol	0.259	0.330 J	0.330 J	1/2
Phenanthrene	0.159	0.139 J	0.139 J	1/2
Pyrene	0.086	0.090 J*	0.082 J	2/2
INORGANICS (ppm)				
Aluminum	9,547	12,200	6,895 *	2/2
Antimony	0.3	0.55 J	0.55 J	1/2
Cadmium	0.48	0.73 J	0.73 J	1/2
Chromium	16.7	21.6	5.6 *	2/2
Cobalt	11.4	16	6.8 *	2/2
Copper	29.6	50.4	8.8 *	2/2
Iron	22,250	29,700	14,800 *	2/2
Lead	29.9	36.4	23.3 *	2/2
Manganese	392	611	172 *	2/2
Nickel	24.5	37.8	11.2 *	2/2
Zinc	83.7	138	29.3 *	2/2

NOTES:

1) Data is from samples B-16 and B-17 (and B-17D).
2) J = Estimated Value
3) * = Value is a result of average of duplicate samples.
4) ppm = parts per million

TABLE 7–3
SUMMARY STATISTICS OF GROUNDWATER SAMPLING LOCATIONS
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ANALYTE	ARITHMETIC MEAN	MAXIMUM DETECTED	MINIMUM DETECTED	FREQUENCY OF DETECTION
VOLATILE ORGANIC COMPOUNDS (ppb)				
Benzene	482.1	4,300	25.5 *	2/9
Ethylbenzene	217.5	1,900	44 *	2/9
Methylene chloride	11.4	84 J	4 J	3/9
Xylenes	98.9	850	27	2/9
Toluene	15.6	120	6.5 *	2/9
1,1–Dichloroethane	8.5	3 J*	3 J*	1/9
1,1,1–Trichloroethane	8.8	6 J	0.4 J	2/9
SEMIVOLATILE ORGANIC COMPOUNDS (ppb)				
Acenaphthylene	8.0	22	1 J*	4/9
Acenapthene	33.2	110 *	58	3/9
Anthracene	4.3	4 J	2 J*	3/9
Carbazole	5.2	5 J	5 J	2/9
Dibenzofuran	4.4	2 J	4 J	3/9
Fluoranthene	4.1	2 J	1.5 J*	3/9
Fluorene	11.2	28	17	3/9
2–Methylnapthalene	52.0	200	47 *	3/9
Naphthalene	656.4	2,800 D	2 J	4/9
Phenanthrene	12.8	32.5 *	20	3/9
Phenol	14.6	51	44	2/9
Pyrene	4.1	2 J	2 J	3/9
bis(2–ethylhexyl)phthalate	21.8	72.5 *	22	4/9
4–Methylphenol	5.1	4 J	4 J	1/9
INORGANICS (ppb)				
Aluminum	259	1,020	62.0 J	7/7
Antimony	7.8	16.7 J	6.3 J*	4/7
Chromium	73.4	490.5 *	3 J*	5/7
Cobalt	2.8	7 J	7 J	1/7
Copper	3.9	15 *	15	1/7
Cyanide	21.2	79.3	19.1	2/7
Iron	857	3,815 *	87	7/7
Lead	5.0	18	1 J	7/7
Manganese	950	2,040	376 *	7/7
Nickel	31.5	137.5 *	63	2/7
Zinc	27.9	46	12 J	7/7

NOTES:
1) Data is from samples MW–1, MW–2, MW–11, and MW–13 through MW–18 for SVOCs, and
2) MW–1, MW–2, MW–11, MW–13, MW–14, MW–15, and MW–18 for inorganics.
3) J = Estimated Value
4) D = Dilution
5) * = Value is a result of average of duplicate samples.
6) ppb = parts per billion

TABLE 7-4
CRITERIA FOR CHEMICALS FOUND IN GROUNDWATER
FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ANALYTE	MEAN DETECTED CONCENTRATION	MAXIMUM DETECTED CONCENTRATION	NEW YORK STATE DRINKING WATER MCL [a]	MEAN/MAX EXCEEDS MCL (Y/N)	USEPA DRINKING WATER MCL [b]	MEAN/MAX EXCEEDS MCL (Y/N)
VOLATILE ORGANIC COMPOUNDS (ppb)						
Benzene	482.1	4,300	5	Y/Y	5	Y/Y
Ethylbenzene	218	1,900	5	Y/Y	700	N/Y
Methylene chloride	11.4	84 J	5	Y/Y	5	Y/Y
Xylenes	98.9	850	5	Y/Y	10,000	N/N
Toluene	15.6	120	5	Y/Y	1,000	N/N
1,1-Dichloroethane	8.5	3 J	5	N [e]	5	N [e]
1,1,1-Trichloroethane	8.8	6 J	5	Y/Y	200	N/N
SEMIVOLATILE ORGANIC COMPOUNDS (ppb)						
Acenaphthylene	8.0	22	50	N/N	NA	NA
Acenapthene	33.2	110	50	N/Y	NA	NA
Anthracene	4.3	4 J	50	N/N	NA	NA
Carbazole	5.2	5 J	50	N/N	NA	NA
Dibenzofuran	4.4	2 J	50	N/N	NA	NA
Fluoranthene	4.1	2 J	50	N/N	NA	NA
Fluorene	11.2	28	50	N/N	NA	NA
2-Methylnapthalene	52.0	200	50	Y/Y	NA	NA
Naphthalene	656.4	2,800 D	50	Y/Y	NA	NA
Phenanthrene	12.8	33	50	N/N	NA	NA
Phenol	14.6	51	50	N/Y	NA	NA
Pyrene	4.1	2 J	50	N/N	NA	NA
bis(2-ethylhexyl)phthalate	21.8	73	50	N/Y	6	Y/Y
4-Methylphenol	5.1	4 J	50	N/N	NA	NA
INORGANICS (ppb)						
Aluminum	259	1,020	NA	NA	200 [c]	Y/Y
Antimony	7.8	17 J	NA	NA	6	Y/Y
Chromium	73.4	491	100	N/Y	100	N/Y
Cobalt	2.8	7 J	NA	NA	NA	NA
Copper	3.9	15	1,000 [c]	N/N	1,000 [c]	N/N
Cyanide	21.2	79	NA	NA	200	N/N
Iron	857	3,815	300 [c]	Y/Y	300 [c]	Y/Y
Lead	5.0	18	50	N/N	15 [d]	N/Y
Manganese	950	2,040	300 [c]	Y/Y	50 [c]	Y/Y
Nickel	31.5	138	NA	NA	100	N/Y
Zinc	27.9	46	5,000 [c]	N/N	5,000 [c]	N/N

NOTES:
J - Estimated Value
D - Dilution
[a] New York State Drinking Water MCL (November 18, 1992).
[b] USEPA Drinking Water MCL (May 1993).
[c] Value is a secondary maximum contaminant level.
[d] Value is USEPA treatment technique action level.
[e] Average concentration exceeds maximum concentration, therefore mean concentration was not compared to MCL.
ppb - parts per billion

TABLE 10-1

CHEMICAL-SPECIFIC STANDARDS, CRITERIA, AND GUIDANCE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL RESPONSE PROCESS
GROUNDWATER AND SURFACE WATER			
Federal Standards	Safe Drinking Water Act (SDWA) - Maximum Contaminant Levels (MCLs) (40 CFR 141.11 - 141.16)	MCLs have been promulgated for common organic and inorganic contaminants. These levels regulate the concentration of contaminants in public drinking water supplies, but may also be considered relevant and appropriate for groundwater aquifers used for drinking water.	Groundwater is not used as a drinking water source in the vicinity of the site; therefore, MCLs are not applicable to the remediation of the Mechanicville Site.
	SDWA - Maximum Contaminant Level Goals (MCLGs) (40 CFR 141.50 - 141.51)	MCLGs are health-based criteria at which no known or anticipated adverse health effects are expected. MCLGs are available for a number of organic and inorganic contaminants.	Groundwater is not used as a drinking water source in the vicinity of the site; therefore MCLGs are not applicable to the remediation of the site.
	Federal Clean Water Act (CWA) Ambient Water Quality Criteria (AWQC)	Federal AWQC are health-based criteria developed for carcinogenic and noncarcinogenic compounds and parameters in surface water bodies. AWQC for the protection of human health provide criteria for exposure from drinking water and consuming aquatic organisms, and from consuming fish alone.	These criteria are the most commonly used numeric standards for determining discharge limits for treated groundwater to a surface water source. These criteria would be applicable to those alternatives proposing direct discharge to the Anthony Kill.
Federal Guidance and Criteria To Be Considered	USEPA Risk Reference Doses (RfDs) and Risk Reference Concentrations (RfCs)	RfDs/RfCs are estimates of a daily exposure level for the human population without an appreciable risk of deleterious effects during a lifetime.	USEPA RfDs/RfCs are used to characterize risks due to noncarcinogens in various media.
	USEPA Carcinogen Assessment Group Cancer Slope Factors (CSFs)	Carcinogenic effects present the most up-to-date information on cancer risk potency available from USEPA's Integrated Risk Information System (IRIS).	USEPA CSFs are used to compute the individual incremental cancer risk resulting from exposure to certain compounds.
	USEPA Health Advisories (HAs)	HAs are issued as non-regulatory guidance. HA values represent the concentration of contaminants in drinking water at which adverse health effects would not be expected to occur. HAs are established for one-day and ten-day exposure durations.	USEPA HAs are used to evaluate noncarcinogenic effects for oral exposures of shorter duration.
State Standards	New York Department of Health Drinking Water Supplies (10 NYCRR Subpart 5-1)	Under this Subpart, MCLs have been promulgated for organic and inorganic contaminants. These standards have been promulgated for the protection of present or future drinking water supplies.	Groundwater is not used as a drinking water source in the vicinity of the site; therefore, MCLs are not directly applicable to the remediation of the Mechanicville Site.

TABLE 10-1

CHEMICAL-SPECIFIC STANDARDS, CRITERIA, AND GUIDANCE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

MEDIA	REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL RESPONSE PROCESS
	New York Water Quality Regulations for Surface Waters and Groundwaters (6 NYCRR Parts 700 - 705)	New York State has classified groundwater based on best usage. All fresh groundwaters in the State of New York are classified as Class GA where the best usage is as a source of potable water supply. This rule also establishes numeric limits for individual chemical compounds detected in surface water sources, also based on the best usage of the surface water body.	Groundwater is not used as a drinking water source in the vicinity of the site; therefore, class GA standards are not applicable to the remediation of the site. Standards for the protection of surface water would be applicable to establishing any limits for direct discharge of treated groundwater to the Anthony Kill.
SOIL			
State Criteria and Guidance to be Considered	Division of Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels (HWR-92-4046)	This TAGM provides the basis and procedures for establishing soil cleanup levels at inactive hazardous waste sites, when restoration to pre-disposal conditions is not feasible. The TAGM provides four alternative bases for establishing soil cleanup objectives that are protective of human health, protective of groundwater/drinking water quality based on standards, background values for contaminants, and detection limits. Recommendation of the appropriate cleanup objective is based on the criterion that produces the most stringent cleanup level.	This TAGM will be evaluated with respect to remediation of surface and subsurface contamination.

NOTES:

AWQC = Ambient Water Quality Criteria
CFR = Code of Federal Regulations
CSF = cancer slope factor
CWA = Clean Water Act
HAs = health advisories
IRIS = Integrated Risk Information System
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
NYCRR = New York Codes, Rules, and Regulations
RfC = reference concentration
RfD = reference dose
SDWA = Safe Drinking Water Act
TAGM = Technical and Administrative Guidance Memorandum
USEPA = U.S. Environmental Protection Agency

TABLE 10-2

POTENTIAL ACTION-SPECIFIC STANDARDS, CRITERIA, AND GUIDANCE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL RESPONSE PROCESS
Federal Standards		
Occupational Safety and Health Administration (OSHA) - General Industry Standards (29 CFR Part 1910)	These regulations specify the 8-hour time-weighted average concentration for various organic compounds. Training requirements for workers at hazardous waste operations are specified in 29 CFR 1910.120.	Proper respiratory equipment would be worn if it is impossible to maintain the work atmosphere below the threshold concentration. Workers performing activities would be required to have completed specific training requirements.
OSHA - Safety and Health Standards (29 CFR Part 1926)	This regulation specifies the type of safety equipment and procedures to be followed during site remediation.	All appropriate safety equipment would be on-site. In addition, safety procedures would be followed during on-site activities.
OSHA - Recordkeeping, Reporting, and Related Regulations (29 CFR 1904)	This regulation outlines the recordkeeping and reporting requirements for an employer under OSHA.	These requirements apply to all site contractors and subcontractors, and must be followed during all site work.
Clean Water Act (CWA) - National Pollution Discharge Elimination System (NPDES) (40 CFR Parts 122, 125)	This requirement implements the NPDES program that specifies the applicable effluent standards, monitoring requirements, and standards and special conditions for direct discharge to surface water bodies.	CWA NPDES requirements, including discharge limitations, monitoring requirements, and best management practices would apply to alternatives proposing direct discharge of treated groundwater to the Anthony Kill. Discharges would require NPDES compliance and a NPDES permit.
CWA - Pretreatment Standards for Publicly Owned Treatment Works (POTW) Discharge (40 CFR Part 403)	This regulation specifies pretreatment standards for discharges to a POTW. If treated groundwater is discharged to a POTW, the POTW must have mechanics available to meet the requirements of the National Pretreatment Program. Introduction of pollutants which cause pass through or interference are prohibited. Discharges must also comply with any local POTW regulations.	If treated groundwater is discharged to a POTW, the treated water must meet all discharge limitations imposed by the POTW.
U.S. Department of Transportation Rules for Transportation of Hazardous Materials (49 CFR Parts 107, 171.1 - 172.558)	This regulation outlines the procedures for packaging, labeling, manifesting, and transporting of hazardous materials.	If excavated soils or residuals from groundwater treatment fail characteristic hazardous waste analyses, they will be excavated and transported off-site. Those soils will packaged, manifested, and transported to a licensed off-site disposal facility in compliance with these regulations.
State Standards		
New York State Regulations on State Pollutant Discharge Elimination System (SPDES) (6 NYCRR Parts 750 - 758)	Compliance with the New York SPDES is required for discharge of treatment process water. Under these regulations the New York Department of Environmental Conservation may impose treatment standards for discharge, monitoring, reporting, and recordkeeping requirements.	Compliance with these regulations may be attained through compliance with the NPDES program under the CWA for alternatives proposing to discharge treated groundwater to the Anthony Kill. Consideration of additional actions to meet New York SPDES requirements may be necessary.
New York State Identification and Listing of Hazardous Waste Regulations (6 NYCRR Part 371)[1]	These regulations identify the procedures for identifying those solid wastes that are subject to regulation as hazardous under 6 NYCRR Parts 370 - 373.	These regulations will be used in evaluating whether certain on-site soils exhibit the characteristic of a reactive hazardous material. If excavated soils fail characteristic testing they will be handled in accordance with New York State Hazardous Waste Regulations.

TABLE 10-2

POTENTIAL ACTION-SPECIFIC STANDARDS, CRITERIA, AND GUIDANCE
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

REQUIREMENT	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL RESPONSE PROCESS
New York State Water Pollution Control Regulations (6 NYCRR Part 608)	Part 608 sets forth requirements for the protection of streams, ponds, and lakes. Work conducted within 50 feet of the mean high water line of a protected water body requires obtaining prior approval and a permit from NYSDEC.	A permit will be required for those alternatives proposing major invasive or excavation work within 50 feet of the Anthony Kill.

NOTES:

CFR = Code of Federal Regulations
CWA = Clean Water Act
NPDES = National Pollution Discharge Elimination System
NYCRR = New York Codes Rules and Regulations
NYSDEC = New York State Department of Environmental Conservation
OSHA = Occupational Safety and Health Administration
POTW = publicly owned treatment works
SPDES = State Pollution Discharge Elimination System

[1]In the event that hazardous wastes are encountered at the site, additional federal and state action-specific standards, criteria, and guidelines (SCGs) for handling the wastes will be applicable. Removal and treatment/disposal of all hazardous wastes will be in accordance with all applicable requirements and regulations.

TABLE 11-1

GENERAL RESPONSE ACTIONS AND POTENTIAL REMEDIAL TECHNOLOGIES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

General Response Action	Process/ Technology	Description
Minimal Action	Deed Restrictions Zoning Town Ordinance Environmental Monitoring	Restrict withdrawal and use of groundwater containing site chemicals, restrict noncommercial use of the site, and conduct environmental monitoring to assess groundwater and surface water quality.
Containment	Grout Curtain	Inject a fluid material into the overburden soil to reduce water and coal tar movement. Once in place within the formation voids, the fluids solidify or gel, thus greatly reducing the permeability.
	Slurry Wall	Excavate a trench through or under a slurry of bentonite clay and water. The trench is backfilled with an engineered mixture of materials having the desired permeability properties to form a barrier to coal tar movement.
	Sheet Pile	Interlocking steel sheet piles are driven into the ground with a drop or vibratory hammer. With time, fine soil particles are washed into the seams and water cutoff is effected. For applications in very coarse soils, it is possible to grout the pile seams. No excavation is required.
Groundwater Extraction and Treatment	Vertical Extraction Wells	Intercept and extract groundwater and coal tar for treatment and/or discharge using a series of drilled pumping wells.
	Downgradient Subsurface Drains	Intercept and collect contaminated groundwater and coal tar using a one-sided subsurface drain.
	Upgradient Subsurface Drains	Intercept upgradient groundwater and divert it into the Anthony Kill to minimize flow across the site.
In Situ Treatment	Bioremediation	Inject nutrients and/or an oxygen source into the aquifer to encourage development of a microbial population that degrades compounds of concern.
Disposal	Off-site Discharge	Discharge groundwater (meeting negotiated discharge limits) into the Anthony Kill or to the local POTW.
Ancillary	Treatment	Treat extracted groundwater using mobile process units. Treatment could involve oil/water separation, metals precipitation, and/or carbon adsorption for treatment of organics (e.g., VOCs, PAHs, etc.)

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Minimal Action: Administrative Actions to prevent exposure (e.g., deed restrictions, easements, zoning, town ordinance) and monitoring.	Groundwater currently is not used as a drinking water source. Site contaminants currently pose minimal risks to human health and the environment. Restricts withdrawal and use of contaminated groundwater and noncommercial use of the site. Reduces the potential for ingestion and exposure to site chemicals. Provides current information on distribution of chemicals in groundwater, surface water, and/or treatment effectiveness. Minimal capital and operating costs.	Does not reduce mobility, toxicity, or volume of site chemicals. Coal tar will continue to be a source of groundwater and surface water contamination. May not provide a permanent solution. Requires long-term enforcement (maintenance). Requires periodic operational and administrative activity.	Retained	USEPA RI/FS guidance suggests retaining for feasibility study analysis and baseline comparison.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Grout Curtain	Reduces mobility of contaminants in groundwater and coal tar. No operation and minimal maintenance required.	Technology is seldom used for containing groundwater flow in unconsolidated materials. Achieving low permeabilities in unconsolidated material is often difficult. Contaminants present in groundwater may interfere with grout setting reactions and/or reduce grout durability. Extensive treatability testing would be required to evaluate waste grout interaction and compatibility. Gaps in grout curtain due to non-penetration of grout may allow contaminants to migrate off-site. Unproven long-term effectiveness. More costly to install than alternative barrier technologies (e.g., slurry wall).	Eliminated	Significant potential for not meeting response objectives. More economical and effective barriers available.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Slurry Wall	Reduces mobility of contaminants in groundwater and coal tar. Experienced vendors are available to install the slurry wall. No operations and minimal maintenance required.	Requires a large work area to install. Treatability testing would be required to evaluate contaminant/backfill compatibility. Slurry wall may not effectively contain chemicals in groundwater. Compounds present may have adverse effects on the slurry wall and reduce its effectiveness. Unproven long-term effectiveness. Contaminated soils requiring treatment/disposal would be generated during excavation of trench.	Eliminated	Would be difficult to install due to limited space available along the stream bank. Potential for not meeting response objectives.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Sheet Pile Wall	Reduces mobility of contaminants in groundwater and coal tar. No operation and minimal maintenance required. Performance life of sheet pile can vary from 30 to more than 100 years, depending on soil and groundwater conditions and materials used to construct the barrier. Experienced vendors are available to install the sheet piles. Least costly barrier to install. Does not require large work area to install. No excavation required.	May be necessary to grout the piling seams to prevent leakage through interlocking joints. Cannot penetrate competent bedrock. Driving of sheet piles may cause increased fracturing in bedrock and accelerate flow into rock, thereby decreasing barrier effectiveness in overburden.	Retained	Would meet response objectives. Easiest of barriers to implement and lowest cost.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Downgradient Extraction Wells	Would reduce and eventually eliminate off-site groundwater contamination and contaminant migration into the Anthony Kill. Easy to implement - No trenching required. Proven technology. May be less costly to install compared to subsurface drains.	Does not isolate wastes from groundwater, therefore would not prevent leaching of wastes by groundwater. Extracted water would require treatment and/or discharge. Requires long-term pumping, energy supply, and long-term monitoring, operation, and maintenance costs, if chemicals continue to be released from source. May not effectively capture coal tar in saturated zone. Operation and maintenance costs are high.	Retained	System would intercept contaminated groundwater migrating from the site.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Downgradient Subsurface Drains	Would reduce and eventually eliminate contaminant migration into the Anthony Kill. Would require fewer pumps relative to extraction via downgradient wells. Proven technology. Lower operation and maintenance costs compared to extraction wells.	Does not isolate wastes from groundwater, therefore would not prevent leaching of wastes by groundwater. Extracted water would require treatment and/or discharge. Requires long-term pumping energy supply, and long-term monitoring, operation, and maintenance costs, if chemicals continue to be released from source. Trench excavation required for installation. Shoring may be required during installation for worker health and safety. Contaminated soils requiring treatment/disposal would be generated during excavation of trench. May be more costly to install compared to extraction wells.	Retained	System would intercept contamination migrating into the Anthony Kill.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
In Situ Bioremediation	Reduces toxicity, mobility, and volume of contaminants in soil and/or groundwater. Does not expose public or environmental receptors to site chemicals in groundwater.	Site-specific information must be collected to determine site-limiting characteristics for biodegradation. May be difficult to support microbial population in free-phase coal tar present in the saturated zone. Need to inject foreign materials (e.g., nutrients) into the groundwater to enhance biodegradation. Treatability studies would be required to determine system requirements (e.g., flow rates, nutrients) and effectiveness. Uncertain cost, effectiveness, and implementability regarding ability to enhance microbial growth by introducing nutrients.	Eliminated	Coal tar present in the saturated zone would make it difficult to maintain the environment necessary to support a microbial population. Technology may be considered in the future to augment other technologies as site conditions become more favorable.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Upgradient Subsurface Drains	Would reduce, after time, mobility, toxicity, and volume of contaminants in groundwater on-site and off-site by minimizing groundwater movement through the contaminated zone. Quality of intercepted groundwater may not require treatment prior to discharge or use, or may require only short-term treatment. Because the site is paved, downgradient recharge would be minimal, as would groundwater discharge from the site. Proven technology. Passive system not requiring long-term energy or operation costs. No contaminated water would be extracted from the ground.	Coal tar would remain as a source of contamination to groundwater. Although infiltration is minimized, potential existing for coal tar to flow toward Anthony Kill by gravity. Extracted groundwater may require long-term monitoring and treatment. Requires long-term monitoring, operation, and maintenance costs. Further site exploration and testing would be required to determine if the technology is technically feasible and to design the system. Trench excavation required for installation. Shoring may be required during installation for worker health and safety.	Retained	Mobility of contaminants would be reduced by minimizing groundwater movement through the contaminated zone.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Off-Site Discharge	Two options exist: discharge to the Anthony Kill or discharge to the local POTW. Anthony Kill is nearby and easily accessible. Discharge to POTW may have less stringent treatment requirements than discharge to the Anthony Kill because of treatment capabilities of the POTW.	Requires a discharge pipeline from vicinity of site to the river and/or POTW. Long-term availability of POTW is determined by others (no control). May pose additional administrative and liability issues for POTW and site administrators. Long-term feasibility may be questionable if POTW effluent quality restrictions are modified. Dependent on compliance status of POTW. Dependent on negotiations with POTW and state agency representatives to determine if POTW is willing and able to accept wastestream.	Retained	Would be used in combination with other technologies.

TABLE 11-2

TECHNOLOGY SCREENING
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

TECHNOLOGY/ PROCESS	ADVANTAGES	DISADVANTAGES	SCREENING STATUS	COMMENTS
Ancillary Groundwater Treatment with On-site Mobile Treatment Unit(s).	Would reduce toxicity and mobility of contaminants in groundwater. Several types of mobile treatment units are available for use.	Appropriate disposal of treatment residuals (e.g., free-phase product, sludges, carbon) would be required.	Retained	Would be used in combination with other technologies.

TABLE 12-1

COMPONENTS OF THE REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ALTERNATIVE	KEY COMPONENTS
Minimal Action	• Environmental monitoring • Institutional controls (deed restrictions, zoning) • Five-year site reviews • Maintenance of asphalt cap • Mapping of bedrock along southern bank of Anthony Kill
Downgradient Subsurface Drain	• Environmental monitoring • Institutional controls (deed restrictions, zoning) • Five-year site reviews • Maintenance of asphalt cap • Mapping of bedrock along southern bank of Anthony Kill • Site preparation • Removal and disposal of filter bed soil • Trench excavation • Installation of subsurface drain and extraction system • Pretreatment of groundwater prior to discharge • Discharge to POTW or Anthony Kill • Disposal of excavated soil containing coal tar, if necessary

TABLE 12-1

COMPONENTS OF THE REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ALTERNATIVE	KEY COMPONENTS
Downgradient Barrier Wall	• Environmental monitoring • Institutional controls (deed restrictions, zoning) • Five-year site reviews • Maintenance of asphalt cap • Mapping of bedrock along southern bank of Anthony Kill • Site preparation • Removal and disposal of filter bed soil • Installation of sheet pile barrier wall • Disposal of excavated soil containing coal tar, if necessary
Downgradient Extraction Wells	• Environmental monitoring • Institutional controls (deed restrictions, zoning) • Five-year site reviews • Maintenance of asphalt cap • Mapping of bedrock along southern bank of Anthony Kill • Site preparation • Removal and disposal of filter bed soil • Installation of extraction wells • Pretreatment of groundwater prior to discharge • Discharge to POTW or Anthony Kill

TABLE 12-1

COMPONENTS OF THE REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ALTERNATIVE	KEY COMPONENTS
Upgradient Subsurface Drain	• Environmental monitoring • Institutional controls (deed restrictions, zoning) • Five-year site reviews • Maintenance of asphalt cap • Mapping of bedrock along southern bank of Anthony Kill • Site preparation • Removal and disposal of filter bed soil • Trench excavation • Installation of drain • Disposal of excavated soil containing coal tar, if necessary
Upgradient Drain with Downgradient Barrier	• Environmental monitoring • Institutional controls (deed restrictions, zoning) • Five-year site reviews • Maintenance of asphalt cap • Mapping of bedrock along southern bank of Anthony Kill • Site preparation • Removal and disposal of filter bed soil • Trench excavation • Installation of upgradient drain • Installation of downgradient sheet pile barrier wall • Disposal of excavated soil containing coal tar, if necessary

TABLE 13-1

CRITERIA FOR INITIAL SCREENING OF ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

EFFECTIVENESS	IMPLEMENTABILITY	COST
• Compliance with SCGs	• Technical Feasibility	• Equipment/Construction
• Reduction in Toxicity, Mobility, or Volume of Contaminants	• Demonstrated Performance	• Operation and Maintenance
• Protection of Human Health and the Environment	• Availability of Equipment, Space, and Services	
• Adverse Short- and Long-term Effects Caused by Implementation	• Administrative Feasibility	

NOTE:

SCGs = standards, criteria, and guidelines

TABLE 13-2

SCREENING OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

MINIMAL ACTION

Synopsis: This alternative would include implementation of deed restrictions to restrict non-commercial use of and access to the site. Groundwater and surface water quality would be monitored and the asphalt cap would be maintained.

EFFECTIVENESS	IMPLEMENTABILITY	COST
Advantages	**Advantages**	**Advantages**
• Site contaminants currently pose minimal risks to human health and the environment.	• Most easily implemented because no remedial actions are required.	• Minimal capital and O&M costs are required.
• Low potential for contaminant exposure during implementation.	• Services and materials are readily available.	
• Site would be monitored for contaminant migration.		
• Institutional controls would restrict future use of the site.		
Disadvantages	**Disadvantages**	**Disadvantages**
• Coal tar would continue to be a source of groundwater contamination.	• May require future remedial actions.	• Because this alternative does not involve remedial actions, and because the potential for future remedial action exists, this alternative may ultimately be more costly.
• Would not achieve remedial response objectives.	• Long-term monitoring and maintenance would be required.	
• Would not reduce toxicity, mobility, or volume of contaminants.		

Conclusion: The Minimal Action Alternative is retained for comparison with the remaining alternatives.

TABLE 13-3

SCREENING OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DOWNGRADIENT SUBSURFACE DRAIN

Synopsis: This alternative would include installation of a one-sided subsurface drain to intercept and collect contaminated groundwater and coal tar, preventing migration to the Anthony Kill. Collected groundwater would be pretreated and discharged to the local POTW or Anthony Kill. Coal tar would be disposed of off-site at an appropriate disposal facility. Deed restrictions would be imposed to restrict noncommercial use and access to the site. Groundwater and surface water quality would be monitored and the asphalt cap would be maintained.

EFFECTIVENESS	IMPLEMENTABILITY	COST
Advantages	**Advantages**	**Advantages**
• Would reduce migration of coal tar and contaminated groundwater to the Anthony Kill.	• Would require standard construction techniques.	• Capital costs are readily defined.
• Would reduce mobility and volume of contaminants.	• Would require fewer pumps and less energy than downgradient extraction wells.	• O&M less costly than wells.
Disadvantages	**Disadvantages**	**Disadvantages**
• Coal tar may clog the drain.	• Long-term monitoring and maintenance would be required.	• Long-term O&M may be more costly than other alternatives.
• Drain may cause a change in direction of groundwater flow and/or draw surface water from the Anthony Kill into the drain because of a head differential.	• Construction may be difficult because of underground structures and proximity to the bank of the Anthony Kill.	• Excavated contaminated soil would require treatment and/or disposal.
• Drain may not effectively intercept coal tar.	• Off-gas controls may be required during excavation of contaminated soil.	
	• Excavated contaminated soil would require treatment and/or disposal.	
	• Contaminated groundwater would require pretreatment before discharge.	

Conclusion: Because this alternative may be difficult to implement and maintain, and may not effectively control migration of coal tar, the Downgradient Subsurface Drain Alternative is not retained for detailed analysis.

TABLE 13-4

SCREENING OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DOWNGRADIENT BARRIER WALL

Synopsis: This alternative would include installation of sheet piles to prevent groundwater and coal tar from migrating off-site to the Anthony Kill. Deed restrictions would be imposed to prevent noncommercial use of and restrict access to the site. Groundwater and surface water quality would be monitored and the asphalt cap would be maintained.

EFFECTIVENESS	IMPLEMENTABILITY	COST
Advantages	**Advantages**	**Advantages**
• Would reduce migration of coal tar to the Anthony Kill.	• Would require standard construction techniques.	• Engineering and capital costs may be less expensive than with a subsurface drain.
	• No groundwater treatment, therefore, minimal O&M required.	
	• No excavation required.	• Minimal O&M costs.
	• Does not require large work area to install.	• Minimal costs for disposing of excavated contaminated soil.
Disadvantages	**Disadvantages**	**Disadvantages**
• May cause mounding of contaminated groundwater upgradient of the barrier.	• Long-term monitoring would be required.	• Higher capital and O&M costs would be incurred if installation of perimeter containment wells is required.
• Mounding may increase migration of coal tar downward into the bedrock and alter groundwater flow patterns.	• Driving sheet piles may further fracture bedrock, increasing potential for coal tar migration.	
• Would not reduce toxicity or volume of contaminants.	• Construction may be difficult due to underground structures and proximity to the Anthony Kill.	
• Would not reduce migration of contaminated groundwater to Anthony Kill.	• May be necessary to grout piling seams to prevent leakage through interlocking joints.	
	• May be necessary to install perimeter containment wells near barrier to prevent mounding of contaminated groundwater upgradient of the barrier.	

Conclusion: Because this alternative would effectively control the migration of coal tar to the Anthony Kill, it is retained for detailed analysis.

TABLE 13-5

SCREENING OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DOWNGRADIENT EXTRACTION WELLS

Synopsis: This alternative would include installation of extraction wells to intercept and collect contaminated groundwater and coal tar discharging to the Anthony Kill. Extracted groundwater would be discharged to the local POTW or the Anthony Kill after pretreatment. Deed restrictions would be imposed to restrict noncommercial use of and access to the site. Groundwater and surface water quality would be monitored and the asphalt cap would be maintained.

EFFECTIVENESS	IMPLEMENTABILITY	COST
Advantages	**Advantages**	**Advantages**
• Would reduce migration of contaminated groundwater and coal tar to the Anthony Kill.	• Easier to install wells than to construct subsurface drain or barrier. Would require standard drilling techniques.	• Engineering and capital costs may be less expensive than downgradient drain.
• Would reduce mobility and volume of contaminants.	• No excavation of contaminated soil, hence, less health and safety and waste disposal concerns.	• Minimal costs for disposing of contaminated soil cuttings.
Disadvantages	**Disadvantages**	**Disadvantages**
• May not be capable of intercepting coal tar potentially migrating to the Anthony Kill.	• Long-term monitoring and maintenance would be required.	• Higher O&M costs than other alternatives.
• An excessive number of wells would be required to capture contaminant plume.	• Underground structures may prevent adequate well spacing and placement.	• Largest volume of groundwater to treat and dispose compared to other alternatives.
• Well point control may not be as effective as downgradient subsurface drains.		
• Coal tar may clog well screens.		

Conclusion: Because this alternative may not effectively capture coal tar potentially discharging to the Anthony Kill, it is not retained for detailed analysis.

TABLE 13-6

SCREENING OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

UPGRADIENT SUBSURFACE DRAIN

Synopsis: This alternative would include installation of a subsurface drain upgradient of the site to divert uncontaminated groundwater around the site followed by discharge to the Anthony Kill. The drain would minimize migration of contaminated groundwater and coal tar to the Anthony Kill by minimizing groundwater flow across the site. Deed restrictions would be imposed to restrict noncommercial use of and access to the site. Groundwater and surface water quality would be monitored and the asphalt cap would be maintained.

EFFECTIVENESS	IMPLEMENTABILITY	COST
Advantages	**Advantages**	**Advantages**
• Would reduce migration of contaminated groundwater and coal tar to the Anthony Kill by minimizing groundwater flow across the site.	• Would require standard construction techniques.	• Lower capital cost required than other alternatives.
	• Less health and safety concerns during excavation because drain would not be installed in contaminated soils.	• No contaminated soil treatment/disposal costs.
Disadvantages	**Disadvantages**	**Disadvantages**
• Would not fully achieve response objectives because coal tar would remain as source to groundwater contamination.	• Long-term monitoring and maintenance would be required.	• Higher capital costs may be incurred if groundwater requires pretreatment.
• Would not reduce toxicity and volume of contamination.	• Pretreatment would be required before discharge to the Anthony Kill if upgradient groundwater does not meet ambient water quality standards.	
• May cause change in groundwater gradient on-site which would result in contaminated groundwater and coal tar flowing toward the drain.		
• Would lower water table on-site which may increase migration of coal tar downward into bedrock aquifer.		
• Although lateral flow is reduced, would be potential for gravity flow of coal tar to Anthony Kill.		

Conclusion: This alternative is not retained for detailed analysis because it would not meet response objectives. This alternative may also require groundwater treatment prior to discharge to the Anthony Kill, and it may increase coal tar migration to the bedrock.

TABLE 13-7

SCREENING OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

UPGRADIENT SUBSURFACE DRAIN WITH DOWNGRADIENT BARRIER

Synopsis: This alternative would combine installation of a subsurface drain upgradient of the site with construction of a downgradient subsurface barrier. The drain would divert groundwater away from the site, and the sheet piles would mitigate migration of contaminated groundwater and coal tar to the Anthony Kill. Deed restrictions would be imposed to restrict noncommercial use of and access to the site. Groundwater and surface water quality would be monitored and the asphalt cap would be maintained.

EFFECTIVENESS	IMPLEMENTABILITY	COST
Advantages	**Advantages**	**Advantages**
• Would reduce migration of coal tar and contaminated groundwater to the Anthony Kill.	• Would require standard construction techniques.	• Construction costs readily estimated.
• Would reduce mobility of contaminants.	• Less health and safety concerns during excavation because drain would not be installed in contaminated soils.	• No contaminated soil treatment/disposal costs.
• Would minimize groundwater flow across the site.		
Disadvantages	**Disadvantages**	**Disadvantages**
• May cause change in groundwater gradient on-site which would result in contaminated groundwater and coal tar flowing toward the drain.	• Long-term monitoring and maintenance would be required.	• Higher capital costs incurred if groundwater requires pre-treatment.
• Would lower water table on-site which may increase migration of coal tar downward into bedrock aquifer.	• Driving sheet piles may further fracture bedrock, increasing potential for coal tar migration.	
• Would not reduce volume of contaminants	• Pretreatment may be required before discharge to the Anthony Kill if upgradient groundwater does not meet ambient water quality standards.	
	• Sheet pile construction may be difficult because of underground structures and proximity to Anthony Kill.	
	• May be necessary to grout piling seams to prevent leakage through interlocking joints.	

Conclusion: This alternative is retained for detailed analysis because it would effectively control migration of coal tar to the Anthony Kill.

TABLE 13-8

SCREENING STATUS OF REMEDIAL ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ALTERNATIVE	STATUS
Minimal Action	Retained
Downgradient Subsurface Drain	Eliminated
Downgradient Barrier Wall	Retained
Downgradient Extraction Wells	Eliminated
Upgradient Subsurface Drain	Eliminated
Upgradient Subsurface Drain with Downgradient Barrier	Retained

TABLE 14-1

CRITERIA FOR DETAILED ANALYSIS OF ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

CRITERIA	DESCRIPTION
Overall protection of human health and the environment	Describes how each alternative, as a whole, protects and maintains human health and the environment.
Compliance with SCGs*	Describes how the alternative complies with SCGs or if a waiver is required and how it is justified.
Long-term effectiveness and permanence	Evaluates the effectiveness of alternatives in protecting human health and the environment after response objectives have been met.
Reduction of mobility, toxicity, or volume through treatment	Evaluates the anticipated performance of the specific treatment technologies.
Short-term effectiveness	Examines the effectiveness of alternatives in protecting human health and the environment during the construction and implementation period until the response objectives are met.
Implementability	Assesses the technical and administrative feasibility of alternatives and the availability of required resources.
Cost	Evaluates the capital and operation and maintenance costs of each alternative.

Notes:

*SCGs = standards, criteria, and guidelines.

TABLE 14-2

COST SUMMARY TABLE FOR ALTERNATIVE 1: MINIMAL ACTION
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DIRECT COST	$49,000
Direct costs include institutional controls, bedrock mapping, and monitoring well/seepage meter installation.	
INDIRECT COST	$6,000
Indirect costs include health and safety, legal, administration, permitting, engineering, and services during construction.	
TOTAL CAPITAL (DIRECT AND INDIRECT) COSTS	$55,000
PRESENT WORTH OF O&M COSTS (@ 5% FOR 30 YEARS)	$630,000
Operating and maintenance costs include environmental monitoring, five-year site reviews, and asphalt cover maintenance.	
TOTAL PRESENT WORTH FOR ALTERNATIVE 1	$685,000

Notes:

Cost estimates are based on available information and professional judgment. Changing market conditions and regulatory requirements may cause actual costs to vary from the estimated costs.

A contingency of 25 percent has been included in each direct, indirect, and O&M cost item.

TABLE 14-3

COST SUMMARY TABLE FOR ALTERNATIVE 2: DOWNGRADIENT BARRIER WALL
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DIRECT COST	$426,000
Direct costs include institutional controls, mobilization/demobilization, site preparation, bedrock mapping, excavation and disposal of filter bed soils, and downgradient barrier wall installation.	
INDIRECT COST	$128,000
Indirect costs include health and safety, legal, administration, permitting, engineering, and services during construction.	
TOTAL CAPITAL (DIRECT AND INDIRECT) COSTS	$554,000
PRESENT WORTH OF O&M COSTS (@ 5% FOR 30 YEARS)	$630,000
Operating and maintenance costs include environmental monitoring, five-year site reviews, and asphalt cover maintenance.	
TOTAL PRESENT WORTH FOR ALTERNATIVE 2	$1,184,000

Notes:

Cost estimates are based on available information and professional judgment. Changing market conditions and regulatory requirements may cause actual costs to vary from the estimated costs.

A contingency of 25 percent has been included in each direct, indirect, and O&M cost item.

TABLE 14-4

COST SUMMARY TABLE FOR PERIMETER GROUNDWATER CONTAINMENT WELLS
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DIRECT COST	$247,000 - $338,000
Direct costs include installation of perimeter containment wells, collection piping, treatment building construction, and the treatment system.	
INDIRECT COST	$74,000 - $120,000
Indirect costs include health and safety, legal, administration, permitting, engineering, and services during construction.	
TOTAL CAPITAL (DIRECT AND INDIRECT) COSTS	$321,000 - $440,000
PRESENT WORTH OF O&M COSTS (@ 5% FOR 30 YEARS)	$335,000 - $781,000
Operating and maintenance costs include power requirements, treatment residuals disposal, and treatment system monitoring.	
TOTAL PRESENT WORTH	$656,000 - $1,221,000

Notes:

Cost estimates are based on available information and professional judgment. Changing market conditions and regulatory requirements may cause actual costs to vary from the estimated costs.

A contingency of 25 percent has been included in each direct, indirect, and O&M cost item.

Cost estimate is for installation and O&M of groundwater containment wells only.

TABLE 14-5

COST SUMMARY TABLE FOR ALTERNATIVE 3: UPGRADIENT SUBSURFACE DRAIN WITH DOWNGRADIENT BARRIER
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

DIRECT COST	$670,000
Direct costs include institutional controls, mobilization/demobilization, bedrock mapping, excavation and disposal of filter bed soils, upgradient subsurface drain installation, and downgradient barrier wall installation.	
INDIRECT COST	$202,000
Indirect costs include health and safety, legal, administration, permitting, engineering, and services during construction.	
TOTAL CAPITAL (DIRECT AND INDIRECT) COSTS	$872,000
PRESENT WORTH OF O&M COSTS (@ 5% FOR 30 YEARS)	$818,000
Operating and maintenance costs include environmental monitoring, five-year site reviews, and asphalt cover maintenance.	
TOTAL PRESENT WORTH FOR ALTERNATIVE 3	$1,690,000

Notes:

Cost estimates are based on available information and professional judgment. Changing market conditions and regulatory requirements may cause actual costs to vary from the estimated costs.

A contingency of 25 percent has been included in each direct, indirect, and O&M cost item.

TABLE 15-1

COMPARATIVE ANALYSIS OF ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ALTERNATIVE	THRESHOLD CRITERIA		BALANCING CRITERIA					
	OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT	COMPLIANCE WITH SCGs	LONG-TERM EFFECTIVENESS AND PERMANENCE	REDUCTION OF TOXICITY, MOBILITY, & VOLUME	SHORT-TERM EFFECTIVENESS	IMPLEMENTABILITY	COST	SCORE[1]
Alternative 1 Minimal Action	Existing site conditions are effective in controlling migration of coal tar. Currently no unacceptable risk to human health and the environment.	No location-specific SCGs apply to this site. Would comply with action-specific and chemical-specific SCGs.	Would maintain risk at current, insignificant level. Would not reduce potential future risk to ecological receptors.	Maintains reduced mobility due to asphalt cover integrity.	Impacts to community and site worker health and safety during implementation would be unlikely. Minimal short-term environmental impacts.	All components of Alternative 1 would be readily implementable.	Least costly of the alternatives. NPW = $0.7 M	69
Alternative 2 Downgradient Barrier Wall	Would reduce migration of overburden coal tar to Anthony Kill; would provide only minimal control of overburden groundwater.	No location-specific SCGs apply to this site. Would comply with action-specific and chemical-specific SCGs.	Alternative 2 may be slightly more effective than Alternative 1 in the long-term for controlling migration of overburden coal tar to the Anthony Kill. Minimal reduction of total overburden groundwater flow would be achieved.	Migration of overburden coal tar would be controlled.	Implementation impacts, air impacts, and nuisance dust would be minimal. Implementation time estimated to be 2 months to construct.	Well-developed, reliable technology. Requires standard construction techniques to implement. Construction may be difficult because of underground structures and proximity to Anthony Kill.	Least costly of the two remedial action alternatives. NPW = $1.2 M	64
Alternative 3 Upgradient Subsurface Drain with Downgradient Barrier Wall	Would reduce migration of overburden coal tar to Anthony Kill; would reduce total flow of overburden groundwater to stream by approximately 16 percent.	No location-specific SCGs apply to this site. Would comply with action-specific and chemical-specific SCGs.	Alternative 3 would provide similar long-term effectiveness to Alternative 2. It would, however, provide slightly greater control of total overburden groundwater flow to the Anthony Kill (i.e., 16 percent reduction).	Migration of overburden coal tar would be controlled. Total flow of overburden groundwater to Anthony Kill would be reduced slightly.	Impacts to worker health and safety would be slightly greater for Alternative 3 compared to Alternative 2 because of excavation and trenching required to install the subsurface drain. Implementation time estimated to be 2 months.	Well-developed, reliable technology. Requires standard construction techniques. Implementation requires obtaining a SPDES permit to discharge diverted, upgradient groundwater.	Most costly of the alternatives. NPW = $1.7 M	61

Notes:
SCGs = standards, criteria, and guidelines
MCL = Maximum Contaminant Level
NPW = net present worth
[1]Alternative score based on criteria in the NYSDEC TAGM 90-4030 for Selection of Remedial Alternatives at Inactive Hazardous Waste Sites (NYSDEC, 1990) (see Appendix F).

APPENDIX A

Monitoring Well/Soil Boring Information

Former Coal Gasification Site
Mechanicville, New York

APPENDIX A-1

Soil Boring Logs

Former Coal Gasification Site
Mechanicville, New York

FIELD BORING LOG

BORING NO.: B-16 (MW-16)

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/17/93	Date Completed: 5/17/93
Method: HSA	Casing Size: 4.25" ID	PID: TE 508 B	Protection Level: mod B D
Ground Elev.: 9528 ft MSL	Soil Drilled: 16'	Total Depth: 16'	Ground Water Depth (BGS): ≈ 8
Logged by: NJG		Checked by: NJG	Date: 6/16/93

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Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	0.0	S-1 0-2'			2.0/2.0	0.0	DARK BROWN SAND & SILT SOME ORGANICS, TRACE BROKEN GLASS, TRACE BRICK, MOD. DENSE, PR GRADED, MOIST	FILL	5-5-3-7		0
2	0.0	S-2 2-4'			1.2/2.0	0.0	DARK BROWN F. SAND AND GRAVEL, PR GRADED, DENSE, MOIST, (GRAVEL CONSIST OF SHALE FRAGMENTS)	FILL	5-6-2-7		2
4	0.0	S-3 4-6'			2.0/2.0	0.0	DARK BROWN TO BLACK SHALE FRAGMENTS IN F. SAND AND SILT MATRIX, PR GRADED, DENSE, MOIST AT 5.2' BGS. WEATHERED ROCK IN TIP OF SPOON	GP	10-15-25-45		4
6	0.0	S-4 4-8'	✓		1.6/1.6	0.0	DARK BROWN TO GREY F. SAND AND WEATHERED SHALE, TR. SILT, DENSE PR. GRADED, DRY	GP	22-55-80-100/0.1		6
8	0.0	S-5 8-10'			0.8/2.0	0.0	GREY WEATHERED SHALE, SOME SILT, PR GRADED, DRY. (WEATHERED BEDROCK)		55-100/0.3		8
10											10
12	0.0	S-6 11.5-13.5			0.0/0.1	0.0	NO RECOVERY		100/0.1		12
14	0.0	S-7 13.5-			0/0	0.0	NO RECOVERY.		100/0.0		14
16							B03 16' BGS				16
18											18

FIELD BORING LOG

BORING NO.: B-17 (MW-17)

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/18/93	Date Completed: 5/18/93
Method: HSA	Casing Size: 4.25" ID	PID: TE 508 B	Protection Level: mod D
Ground Elev.: 98.18 ft MSL	Soil Drilled: 20'	Total Depth: 22.5' BGS	Ground Water Depth (BGS): 19.4'
Logged by: NSG		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	0.0	S-1 0-2'			1.2/2.0	0.0	DARK BROWN F. SAND & SILT, TR F. GRAVEL (TOP 3" IS ASPHALT AND GRAVEL) COBBLE IN TIP OF SPOON, FR GRADED, MOIST.	FILL	5-6-6-27		0
2	0.0	S-2 2'-4'			1.2/2.0	0.0	DARK BROWN F. SAND, SOME SILT, 2" GRAVEL LAYER AT @ 3.5' BGS. BELOW GRAVEL, SOIL CONTAINS SOME TO LITTLE GRAVEL	FILL	20-25-20-12		2
4	0.0	S-3 4-6'			0.6/2.0	0.0	BROWN SILT & F. SAND, LITTLE F GRAVEL, SLIGHT COAL ODOR, PIECE OF COAL (< 0.05') WITH BLACK STAINING VERY DENSE, MOIST	FILL	14-8-6-5		4
6	0.0	S-4 6-8'			0.2/2.0	0.0	BROWN GRAVEL IN SILT & F. SAND MATRIX, TR COAL FRAGMENTS, PR GRADED, MOIST	FILL	5-3-3-3		6
8	0.0	S-5 8-10'			1.3/2.0	0.0	BROWN TO BLACK F. SAND & SILT, SOME TO LITTLE GRAVEL, SLIGHT ODOR (POSSIBLY PEAT) TR GLASS, TR PEAT, TR BRICK, PR GRADED LOOSE, MOIST.	FILL	7-5-4-4		8
10	0.0	S-6 10-12'			0.4/2.0	0.0	BROWN GRAVEL IN F. SAND MATRIX, SOME SILT, PR GRADED, LOOSE, DAMP TO MOIST.	FILL	4-6-7-8		10
12	0.0	S-7 12-14'			1.4/2.0	0.0	TOP 0.2' AS S-6 (FILL) 12.7-14.0' BROWN F. SAND AND SILT, SOME SHALE FRAGMENTS, WELL GRADED, MOIST	FILL GW-SW	15-8-7-7		12
14	0.0	S-8 14-16			0/2.0	0.0	NO RECOVERY, ROCK IN TIP		14 16-21-22		14
16	0.0	S-9 16-18			0.4/2.0	0.0	BROWN ROUNDED GRAVEL IN SILT AND F. SAND MATRIX, LOOSE, PR GRADED, MOIST	GP/SP	6-11-19-12		16
18											18

FIELD BORING LOG

BORING NO.: B-17 (MW-17)

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/18/93	Date Completed: 5/19/93
Method: HSA	Casing Size: 4.25" ID	PID: TE 508 B	Protection Level: mod D
Ground Elev.: 518.18 ft MSL	Soil Drilled: 20'	Total Depth: 22.5' BGS	Ground Water Depth (BGS): 19.4'
Logged by: NSG		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
18											
	0.0	S-10 18-20	V (PID)		2.0 / 2.0	0.0	BROWN TO GREY F. SAND AND SILT FIRM, DENSE, PR GRADED, SATURATED	SP/SP	7-6-6-5		
20											
	0.0	S-11 20-22'			2.0 / 2.0	0.0	GREY TO BROWN F. SAND, LITTLE SILT, SOME FE STAINING, 0.1' LAYER OF SHALE AT 21.7' BGS LOOSE TO FIRM, PR GRADED, SATURATED	SP	7-10-11-14		
22											
	0.0	S-12 22-24'			0.8 / 0.8	0.0	GREY TO BROWN F. SAND, LITTLE SILT, SOME FE STAINING, LOOSE, PR GRADED, SATURATED	SP	63 - 100/0.3		
24							BEDROCK AT 22.5' BGS				
							BOT = 22.5' BGS				
26											

▽ 19.4

FIELD BORING LOG

BORING NO.: B-18/MW-18

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/18/93	Date Completed: 5/18/93
Method: 4¼ ID / CORE	Casing Size: 4" ID	PID: TE 508 B	Protection Level: MOD D.
Ground Elev.: 98.10 ft MSL	Soil Drilled: 23	Total Depth: 38	Ground Water Depth (BGS): 18
Logged by: NSG		Checked by: WJC	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
							CASING ADVANCE TO 23' BGS. SEE BORING LOG FROM B-17/MW-17 FOR SOIL DESCRIPTIONS.				0
							– BEDROCK AT 23' BGS SEE VISUAL IDENTIFICATION ROCK CORES FOR DESCRIPTION				20
							BOR = 38' BGS				40

FIELD BORING LOG

BORING NO.: B-20

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: Drive Split Spoon	Casing Size: 2" ID	PID: TE 508 B	Protection Level: MOD. D
Ground Elev.: 892 ft MSL	Soil Drilled: 12'	Total Depth: 12'	Ground Water Depth (BGS):
Logged by: NSG, DBD		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	0.0	S-1 0'-2'			1.1/2.0	0.0	GRAY F. SAND AND SOME SILT, LITTLE GRAVEL, LITTLE COARSE SAND, WELL GRADED LOOSE, DRY	~~SW~~ FILL	26 20-10-5		0
2	0.0	S-2 2'-4'				4.8	GRAY, ROOTS SAND AND GRAVEL STRONG HYDROCARBON ODOR, LOOSE, SATURATED	FILL	4-5-4-3		2
4	NA	S-3 4'-6'				NA*	NO RECOVERY		4-3-1-1		4
6	NA	S-4 6'-8'				NA	NO RECOVERY, SHEEN ON SPOON		1-1-1-1		6
8	0.0	S-5 8'-10'				6	BLACK COAL TAR AND CS. SAND. INTENSE HYDROCARBON ODOR * DRILLER INDICATED A "TILE" LIKE STRUCTURE AT 2.9' BGS	FILL	7-20-55-31		8
10		S-6 10'-12'					10-10.2 BLACK CS SAND AND COAL TAR INTENSE HYDROCARBON ODOR 10.2-10.9 WEATHERED BEDROCK REFUSAL AT 10.9' BGS	FILL	34-100/0.1		10
12							BOB ~~10~~ = 12' BGS				12
14											14
16							* PID IS NOT ACCURATE DUE TO RAIN AND HUMIDITY				16

FIELD BORING LOG

BORING NO.: B-21

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: DRIVE SPLIT SPOON	Casing Size:	PID: TE 5083	Protection Level: MOD. D
Ground Elev.: ~~887~~ ft MSL	Soil Drilled: 10'	Total Depth: 10	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NJG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	+	S-1 0-2			1.0/2.0	*	DARK BROWN SILT AND F SAND, LITTLE TO SOME CS SAND, POORLY GRADED, MOIST, STRONG HYDROCARBON ODOR	SW	12-6-6-7		0
2		S-2 2-4			1.0/2.0		DARK BROWN TO BLACK SILT AND F SAND, COAL TAR PRESENT, STRONG ODOR, MOIST, POORLY GRADED, LOOSE	SP	2-3-2-3		2
4		S-3 4-6			1.5/2.0		4-5' BLACK F TO MED SAND POORLY GRADE, LOOSE SATURATED, VISIBLE CONTAMINATION, STRONG ODOR 5'-5.5' BLACK CS SAND, VISIBLE CONTAMINATION STRONG ODOR, POORLY GRADED, LOOSE, SATURATED	SP	2-2-1-1		4
6		S-4 6-8			0.5/2.0		BROWN F SAND, SOME SILT LOOSE, PR GRADED STRONG HYDROCARBON ODOR SATURATED	SP	1-1-1-1		6
8		S-5 8-10			0.4/0.4		BLACK F SAND AND SILT, LARGE LOSS, PIECE OF WOOD VISIBLE CONTAMINATION, STRONG HYDROCARBON ODOR SATURATED	SP	100/0.4		8
10							B63 = 10' BGS				10
12							* PID IS NOT LOOKING DUE TO RAIN AND HUMIDITY				12
14											14

FIELD BORING LOG

BORING NO.: B-22

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: Drive Split Spoon	Casing Size: 3" ID	PID: TE 508 B	Protection Level: mod B
Ground Elev.: 871.2 ft MSL	Soil Drilled: 8	Total Depth: 8' BGS	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Reid UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	*	S-1 0-2'			1.5/2.0	*	0-0.7' BROWN F SAND, SOME SILT 0.7-1.1' BLACK F COAL 1.1-1.5 BROWN SHALE FRAGMENTS IN F SAND MATRIX, STRONG ODOR.	FILL	11-11-7-7		0
2		S-2 2-4'			0.5/2.0		GREY CS SAND, AND F SAND W/ PIECES OF WOOD, SLIGHT SHEEN, HYDROCARBON ODOR, WELL-GRADED LOOSE, MOIST.	FILL	4-4-4-4		2
4		S-3 4'-6'			1.5/2.0		BROWN CS SAND AND F SAND GRADING TO F SAND AND SILT AT ≈ 4.3' BGS 5.0'-5.5' WEATHERED SHALE. STRONG HYDROCARBON ODOR.	FILL	1-3 11-20		4
6		S-4 6-8'			1.8/1.9		BROWN-GRAY WEATHERED SHALE. SATURATED, STRONG HYDROCARBON ODOR	FILL/BEDROCK			6
8							B03 - 8' * PID IS NOT WORKING DUE TO HUMIDITY AND RAIN				8
10											10
12											12
14											14

FIELD BORING LOG

BORING NO.: B 23

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: DRIVE SPLIT SPOON	Casing Size: 2" ID	PID: TE 5088 B	Protection Level: MOD D
Ground Elev.: 893 ft MSL	Soil Drilled: 6	Total Depth: 6	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NJG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	*	S-1 0'-2'			06/20	*	DARK BROWN CS SAND, TR F. SAND, TR MED SAND, LOOSE GRAVEL NO HYDROCARBON ODOR, DRY	SW	7-7-5-5		0
2		S-2 2'-4'			0.4/20		DARK BROWN CS SAND, TR F SAND, TR MED SAND, TR GRAVEL, LOOSE GRAVEL, SLIGHT HYDROCARBON ODOR, SLIGHT SHEEN, MOIST.	SW	3-10-5-3		2
4		S-3 4'-6			1.2/2.0		BROWN WEATHERED SHALE	BEDROCK FILL	3-10-12-80		4
6							BOB = 6' BGS				6
8							* PID NOT LOOKING OUT TO HUMIDITY AND RAIN.				8
10											10
12											12
14											14
16											16

FIELD BORING LOG

BORING NO.: B-24

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: D2in split spoon	Casing Size: 2" ID	PID: TE 508 B	Protection Level: mod D
Ground Elev.: 889 ft MSL	Soil Drilled: 6'	Total Depth: 6'	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	1	S-1 0'-2'			0.8/2.0	1	DARK BROWN CS SAND, F. SAND SOME GRAVEL, WELL GRADED, DENSE NO ODOR, DRY	FILL	5-7-60-5		0
2		S-2 2'-4'			0.6/2.0		BLACK SILT, SOME CS SAND, STEEN ON OUTSIDE OF SPOON, DRY, DENSE	FILL	3-2-3-5		2
4		S-3 4'-6'			1.4/2.0		BLACK CS. SAND, VISIBLE CONTAMINATION (COAL TAR), STRONG HYDROCARBON ODOR, WEATHERED SHALE IN BOTTOM OF SAMPLE, DRY	FILL / BED. ROCK	10 12-25-100/0.3		4
6							BOB = 6' PID NOT WORKING DUE TO RAIN AND HUMIDITY				6
8											8
10											10
12											12

FIELD BORING LOG

BORING NO.: B 25

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: DRIVE SPLIT SPOON	Casing Size: 2" ID	PID: TE 580 B	Protection Level: MOD D
Ground Elev.: ft MSL	Soil Drilled: 8'	Total Depth: 8	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NSL	Date: 6/16/93

Page

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0											
	0.0	S-1 0-2'			0.6/2.0	0.0	DARK BROWN CS. SAND, TR. F-MED SAND, M GRAVEL WELL GRADED, DRY	FILL	10-9-5-9		
2	0.0	S-2 2'-4'			0.5/2.0	15	GRAY TO BLACK CS SAND, TR. F-MED SAND, M GRAVEL, VISIBLE PRODUCT, STRONG ODOR, SATURATED	FILL	6 5-2-2		
4	0.0	S-3 4-6			1.0/2.0	0.0	BLACK CS SAND, SOME WOOD CHIPS, VISIBLE PRODUCT, VERY STRONG HYDROCARBON ODOR, SATURATED	FILL	7-9-7-0*		
6	0.0	S-4 6-8'			0.6/0.6	0.0	SIMILAR TO S-3	FILL	7-100/0.1		
8							BOB = 8'				
10							* AT THIS POINT, SPLIT SPOON ADVANCED TO 8' BGS.				

APPENDIX A-2

Visual Rock Core Logs

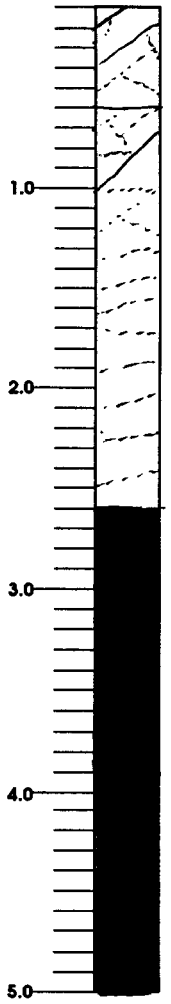
Former Coal Gasification Site
Mechanicville, New York

VISUAL IDENTIFICATION ROCK CORES

B-18/MW-18

Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-1	Core Recovery: 2.6'
	Date 5/19/93	Core Diameter(in): NX = 3"	Required 92 %
Drilling Co.: Empire Soils, Inc.	Boring No.: B-18/MW-18	Depth (ft): 23-27'	Rock Quality: EXCELLENT
Logged by: MJC	Checked by: MJC	Core Length: 4.0'	Sheet 1 of 4

CORE RECOVERY (FT.)



TOTAL 2.6 FT.

65 (%)

0.3 FT CORE RECOVERY

0.7

1.7

TOTAL 2.4 FT.

92 (%)

ROCK DESCRIPTION AND IDENTIFICATION

DARK BLUE-GREY SHALE, VARIES AT APPROXIMATELY 30°

SILT AND ROCK FLOUR PRESENT ON MECHANICAL AND NATURAL FRACTURES.

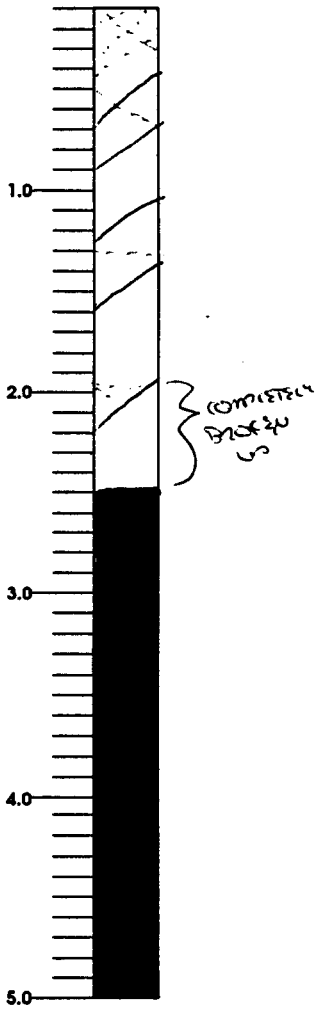
APPROXIMATELY 1.5' LOST TO ROCK FLOUR. MOST MECHANICAL FRACTURES ARE ROUNDED SUGGESTING "ROLLING" IN THE CORE BARREL.

VISUAL IDENTIFICATION ROCK CORES

B-18/MW-18

Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-2	Core Recovery: 2.0
	Date 5/19/93	Core Diameter(in): NX (3")	Required 46 %
Drilling Co.: EMPIRE SOILS, INC.	Boring No.: B-18/MW-18	Depth (ft): 27.5 - 30	Rock Quality: FAIR/POOR
Logged by: NSG	Checked by: NSG	Core Length: 2.5'	Sheet 2 of 4

CORE RECOVERY (FT.)



TOTAL 2.5 FT.

100 (%)

0.3 FT CORE RECOVERY

0.35

0.3

0.5

TOTAL 1.15 FT.

46 (%)

ROCK DESCRIPTION AND IDENTIFICATION

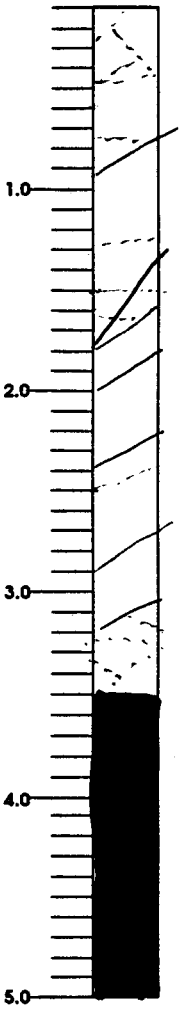
DARK BLUE-GREY SHALE

SOME CALCITE INTRUSIONS

ALL MECHANICAL FRACTURE ARE VERY "WEATHERED" BY THE CORE BARREL

VISUAL IDENTIFICATION ROCK CORES			B-18 / MW-18
Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-3	Core Recovery: 35
	Date 5/19/93	Core Diameter(in): NX (3")	Required 66 %
Drilling Co.: Empire Soils, Inc.	Boring No.: B-18 / MW-18	Depth (ft): 30'-34'	Rock Quality: FAIR
Logged by: NSC	Checked by: NSC	Core Length: 4.0	Sheet 3 of 4

CORE RECOVERY (FT.)



0.3 FT CORE RECOVERY

0.8

0.7

0.4

0.4

ROCK DESCRIPTION AND IDENTIFICATION

DARK BLUE-GREY SHALE, SOME CALCITE INTRUSIONS

DARK GREY TO BLACK VARVES AT 30° AT A 1" INTERVALS

TOTAL 3.5 FT.

88 (%)

TOTAL 2.3 FT.

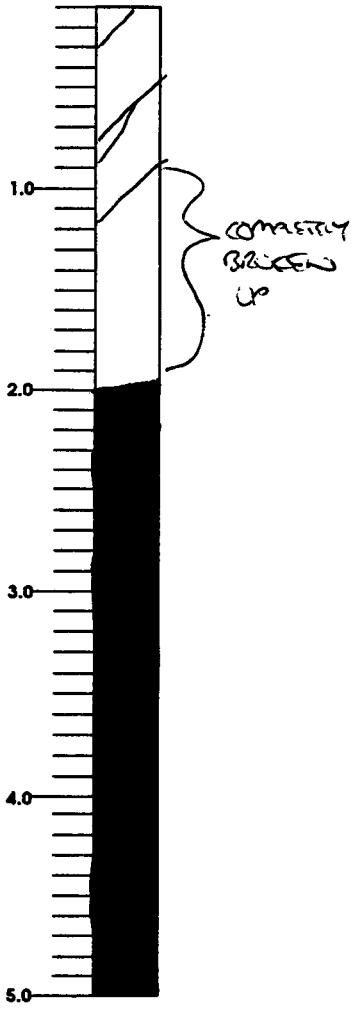
66 (%)

VISUAL IDENTIFICATION ROCK CORES

B-18 / MW-18

Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-4	Core Recovery: 2'
	Date	Core Diameter(in): NX (3")	Required 38 %
Drilling Co.: Empire Soils, Inc.	Boring No.: B-18 / MW-18	Depth (ft): 34-38	Rock Quality: POOR
Logged by: NSG	Checked by: NSG	Core Length: 4'	Sheet 4 of 4

CORE RECOVERY (FT.)



TOTAL 2.0 FT.

50 (%)

0.3 FT CORE RECOVERY

0.45

0.3

TOTAL 0.75 FT.

38 (%)

ROCK DESCRIPTION AND IDENTIFICATION

DARK BLUE-GREY SHALE, SOME CALCITE INTRUSIONS, DARK-GREY VEINS AT APPROX 30°, 1" APART.

APPENDIX A-3

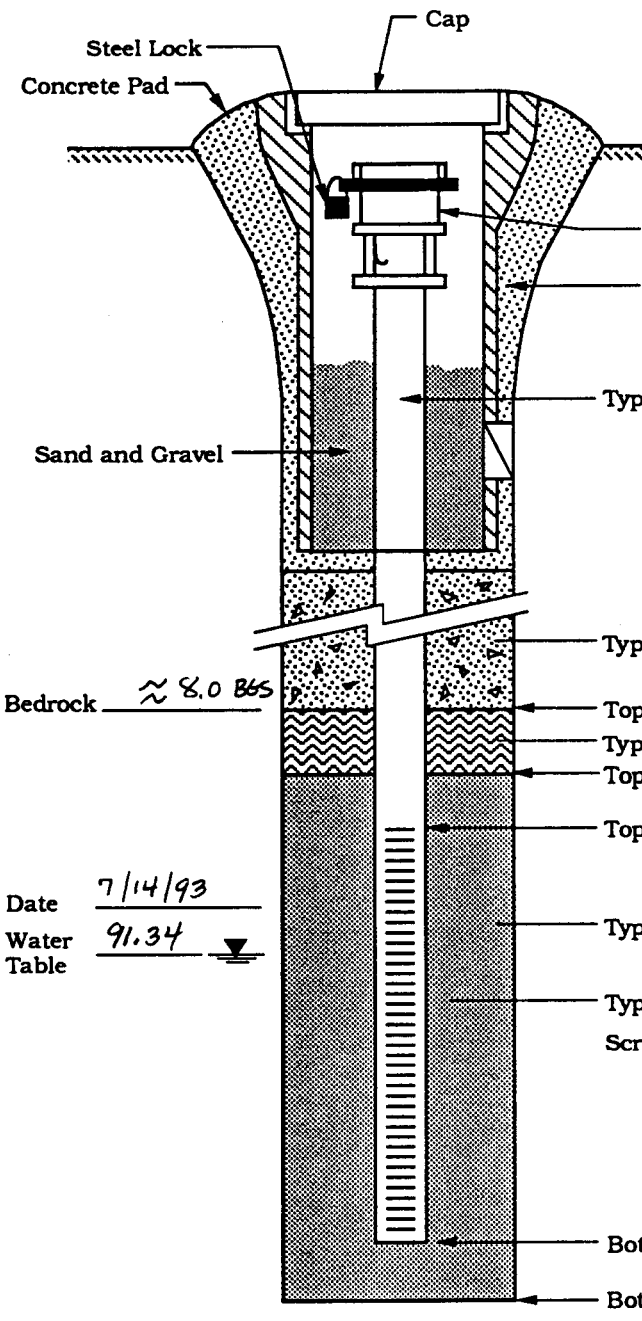
Monitoring Well Diagrams

Former Coal Gasification Site
Mechanicville, New York

FLUSH MOUNT MONITORING WELL INSTALLATION DIAGRAM

WELL I.D.: MW-16 (B-16)

Client: **NYSEG - Mechanicville Site**	Boring Diameter: ≈ 1'	Project No.: 4945-10
	Well Inside Diameter: 2"	Date Installed: 5/17/93
Drilling Co.: **Empire Soils, Inc.**	Well Material: Stainless Steel	Drilling Method: HSA
Field Scientist: NSG	Top of Well Elevation: 95.28	Development Method: Pump & Surge



Elevation (feet, Relative)

Depth (feet, bgs)

Top of Riser: 95.28

Portland Cement Minimum 2 Foot Thick

Type of Riser: 2" ID Stainless Steel

Type of Grout: Bentonite/Cement

Bedrock: ≈ 8.0 BGS

	Depth (feet, bgs)	Elevation (feet, Relative)
Top of Seal	2	93.3
Type of Seal: Bentonite Pellets		
Top of Sand Pack	4	91.3
Top of Screen	6	89.3

Date: 7/14/93

Water Table: 91.34

Type of Sand Pack: Morie O #9947 Silica Sand

Type of Screen: 2" ID Stainless Steel

Screen Slot Size: 0.010

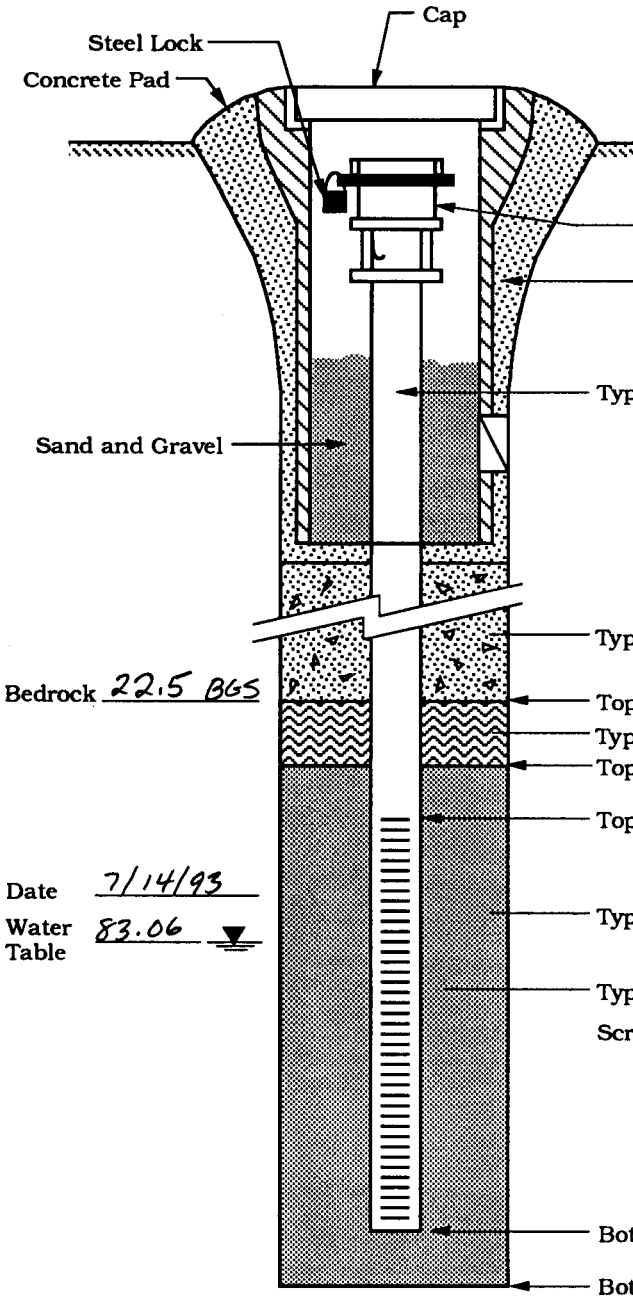
	Depth (feet, bgs)	Elevation (feet, Relative)
Bottom of Screen	16	79.3
Bottom of Borehole	16	79.3

NOT TO SCALE

FLUSH MOUNT MONITORING WELL INSTALLATION DIAGRAM

WELL I.D.: MW-17 (B-17)

Client: **NYSEG - Mechanicville Site**	Boring Diameter: ≈ 1'	Project No.: 4945-10
	Well Inside Diameter: 2"	Date Installed: 5/18/93
Drilling Co.: **Empire Soils, Inc.**	Well Material: Stainless Steel	Drilling Method: HSA
Field Scientist: NSG	Top of Well Elevation: 98.18	Development Method: Pump & Surge



	Depth (feet, bgs)	Elevation (feet, Relative)
Top of Riser		98.18
Type of Riser 2" ID Stainless Steel		
Type of Grout Bentonite/Cement		
Top of Seal	8.5	89.7
Type of Seal Bentonite Pellets		
Top of Sand Pack	10.5	87.7
Top of Screen	12.5	85.7
Type of Sand Pack Morie #0 Silica Sand		
Type of Screen 2" ID Stainless Steel		
Screen Slot Size 0.010		
Bottom of Screen	22.5	75.7
Bottom of Borehole	22.5	75.7

NOT TO SCALE

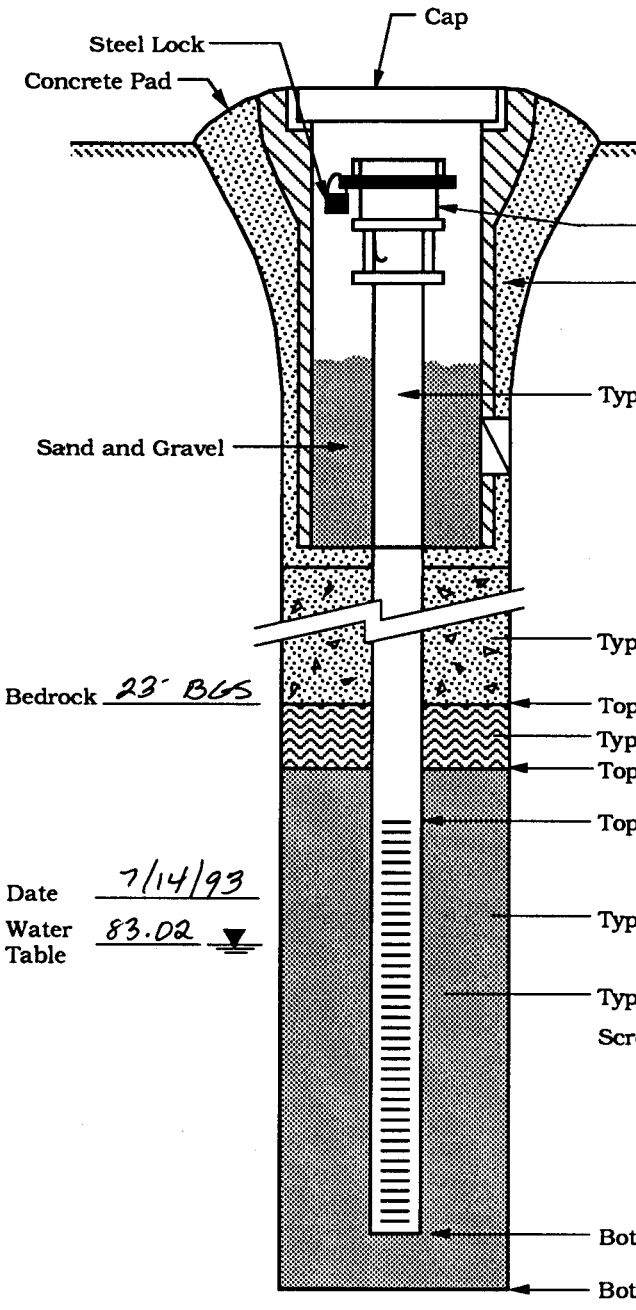
9307053D

ABB Environmental Services, Inc.

FLUSH MOUNT MONITORING WELL INSTALLATION DIAGRAM

WELL I.D.: MW-18 (B-18)

Client: **NYSEG - Mechanicville Site**	Boring Diameter: ≈ 1'	Project No.: 4945-10
	Well Inside Diameter: 2" ID	Date Installed: 5/19/93
Drilling Co.: **Empire Soils, Inc.**	Well Material: Stainless Steel	Drilling Method: HSA
Field Scientist: NSG	Top of Well Elevation: 98.12	Development Method: Pump & Surge



	Depth (feet, bgs)	Elevation (feet, Relative)
Top of Riser		98.12
Portland Cement Minimum 2 Foot Thick		
Type of Riser 2" ID Stainless Steel		
Type of Grout Bentonite/Cement		
Top of Seal	24	74.1
Type of Seal Bentonite Pellets		
Top of Sand Pack	26	72.1
Top of Screen	28	70.1
Type of Sand Pack Morie Φ Silica Sand		
Type of Screen 2" ID Stainless Steel		
Screen Slot Size 0.010'		
Bottom of Screen	38	60.1
Bottom of Borehole	38	60.1

NOT TO SCALE

9307053D

ABB Environmental Services, Inc.

APPENDIX B

Hydraulic Conductivity Report

Former Coal Gasification Site
Mechanicville, New York

Introduction

During the Phase IIA Supplemental RI, the hydraulic conductivity (K) of the overburden and bedrock water bearing zones beneath the Mechanicville site have been estimated through the performance of in situ rising head tests. During in situ tests, the water bearing zones were stressed by lowering the water level in monitoring wells and recording the rate of water level recovery to prestress conditions. The water level recovery data was then input to mathematical formulas to estimate the K of the water bearing zones in which the monitoring wells were screened.

In Situ Tests

In accordance with the Phase IIA Supplemental RI Work Plan, in situ rising head tests were performed at MW-16, MW-17 and MW-18. A weighted PVC slug was use to displace the water.

Prior to in situ testing at each monitoring well, the cap was removed to allow the water level in the well to stabilize (reach its static condition). After the water level stabilized, a pressure transducer was lowered into the well and placed approximately 6 inches above the bottom of the well. The pressure transducer, which reads and transmits the overlying water pressure data, was connected to a Hermit 2000 Data Logger. The Data Logger, which converts the pressure readings to water levels, records and stores the data for future analysis. For in situ tests the data logger initially records water levels approximately every 1/2 second. This rate decreases after two minutes into the test when water levels are recorded every 30 seconds.

After installation of the pressure transducer and data logger, slug tests, utilizing a weighted PVC slug, were performed the Phase IIA Supplemental RI monitoring wells, MW-16, MW-17 and MW-18. The slug was carefully lowered into the well, so not to disturb the transducer. After the water level had returned to static conditions, the slug was rapidly removed from the water, causing a sudden decrease in the water level. Simultaneously, the data logger was activated and the water level recovery was recorded. When the water level in the well recovered to its static condition, the test was complete. Two (2) to three (3) tests were performed on each monitoring well.

In Situ Test Analysis

All slug tests were analyzed by the Bouwer-Rice method (1976) for slug tests in unconfined aquifers. This analysis is incorporated in the Aqtesolv$_{tm}$ computer program, which was used to calculate K estimates. This appendix contains: Table B-1 which presents the test results; the time-displacement graphs; and the equation used in the program's application of the Bouwer-Rice method.

Conclusion

The Bouwer-Rice method yields realistic estimates of K that are consistent with previous work conducted at the Mechanicville site. Hydraulic conductivity test performed during Tasks 2, 3, and 4 report average K values of 3.3 X 10^{-4}, 6.2 X 10^{-4}, and 2.7 X 10^{-4} measured at monitoring wells screened in the overburden, overburden/shallow bedrock, and bedrock respectively. Hydraulic conductivity test performed at MW-17, MW-16 and MW-18, screened in the overburden,

overburden/shallow bedrock, and bedrock estimated K at values of 1 X 10^{-3}, 4 X 10^{-5}, and 1 X 10^{-5} respectively.

REFERENCES

Bouwer, H. and R.C. Rice, 1976. "A slug test for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells."; Water Resources Research; Vol. 12, No. 3; pp. 423-428.

TABLE B-1

SUMMARY OF HYDRAULIC CONDUCTIVITY RESULTS
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

WELL BORING LOCATION	GEOLOGIC ZONE SCREENED	TOTAL BORING DEPTH (FEET BGS)	LOCATION OF SCREENED INTERVAL (FEET RELATIVE)	EFFECTIVE SCREEN LENGTH (FEET)	TEST METHOD	AVERAGE HYDRAULIC CONDUCTIVITY (cm/sec)
MW-1	Overburden/Shallow Bedrock	20.0	76.0 - 70.78	8	Falling Head	9.5 E-4
MW-2	Overburden/Shallow Bedrock	16.0	80.4 - 77.3	8	Falling Head	1.1 E-3
MW-3	Overburden	9.0	84.4 - 79.5	6.5	Falling Head	1.6 E-4
MW-4	Overburden	16.5	81.7 - 76.7	8.5	Falling Head	1.9 E-4
MW-5	Overburden/Shallow Bedrock	19.5	74.9 - 69.9	13	Falling Head	5.4 E-4
MW-6	Bedrock	31.5	65.7 - 60.7	10	Falling Head/Packer	1.5 E-4
MW-10	Overburden	19.5	88.0 - 77.2	13	Rising Head	2.2 E-5
MW-11	Overburden/Shallow Bedrock	18.0	82.6 - 77.1	12	Rising Head	2.0 E-4
MW-12	Overburden	25.5	83.8 - 72.8	13	Rising Head	4.0 E-4
MW-13	Bedrock	55.5	53.9 - 43.1	15	Rising Head/Packer	5.7 E-4
MW-14	Bedrock	55.0	68.7 - 57.7	13	Rising Head/Packer	4.3 E-4
MW-15	Bedrock	39.0	75.5 - 64.5	13	Rising Head/Packer	1.7 E-4
MW-16	Overburden/Shallow Bedrock	16.0	89.3 - 79.3	12	Rising Head	3.9 E-5
MW-17	Overburden	22.5	85.7 - 75.7	12	Rising Head	1.2 E-3
MW-18	Bedrock	38.0	70.1 - 60.1	12	Rising Head	1.1 E-5

Notes:

1) BGS - below ground surface
2) Elevation relative to 100-foot datum
3) cm/sec - centimeters per second

Bouwer-Rice Equation for Hydraulic Conductivity

Basic Equations:

Equation 1

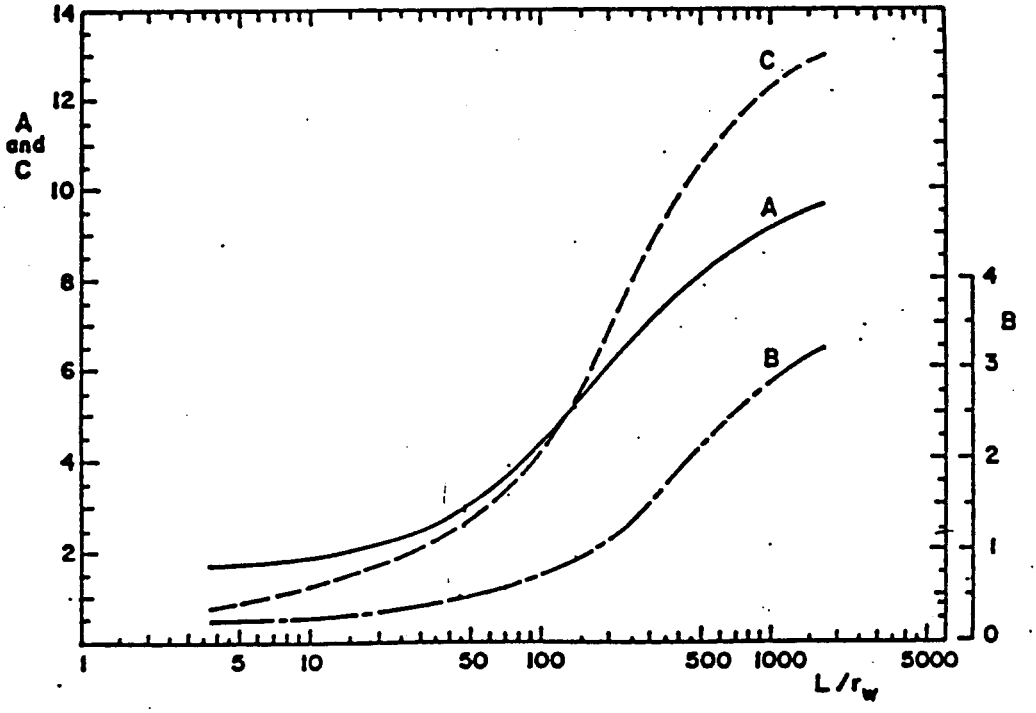
$$\ln \frac{R_e}{R_w} = \left[\frac{1.1}{\ln \frac{H}{r_w}} + \frac{C}{\frac{L}{r_w}}\right]^{-1}$$

Equation 2

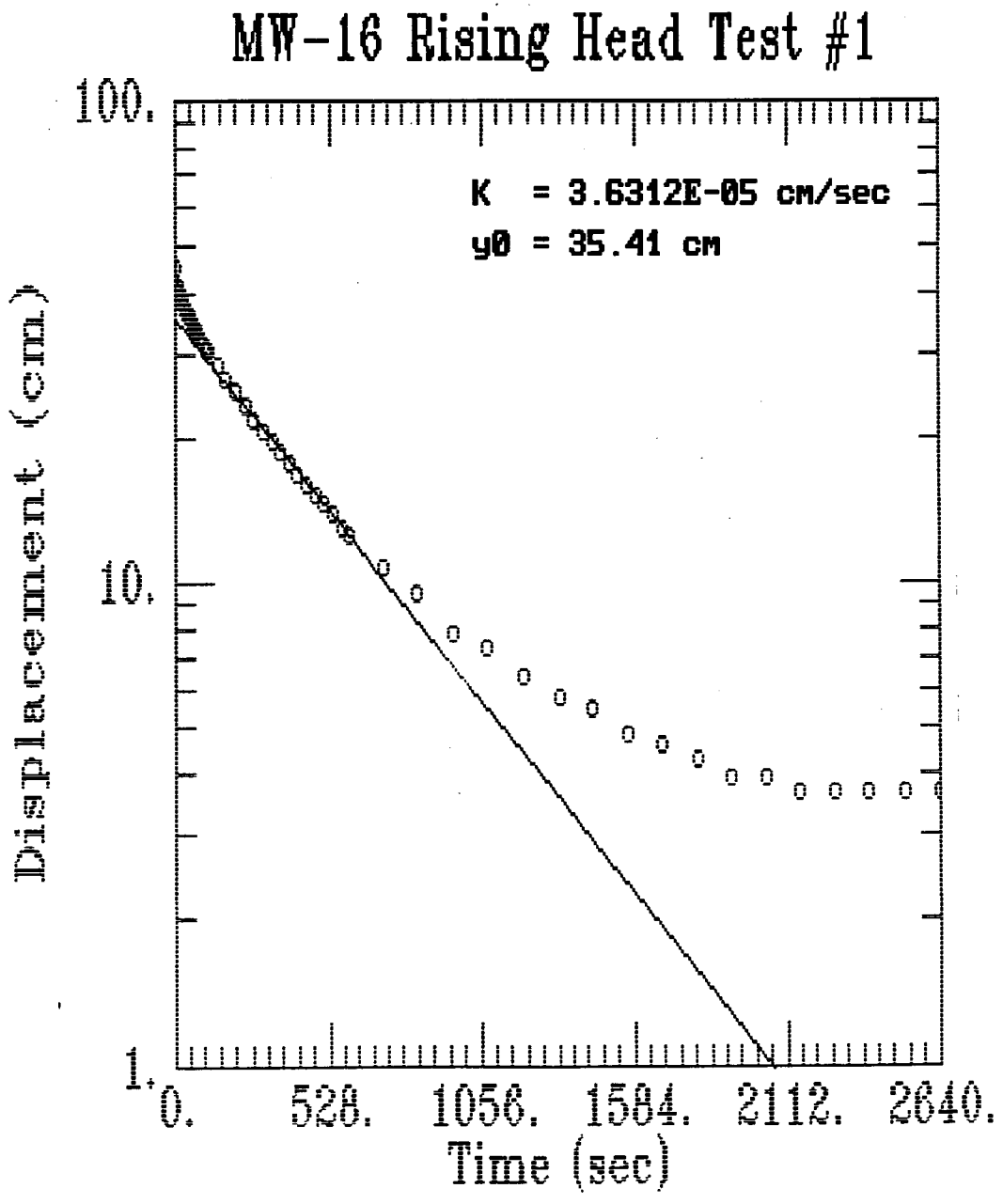
$$K = \left[\frac{r_c^2 \ln \frac{R_e}{R_w}}{2L}\right] \frac{1}{t} \ln \frac{y_o}{y_t}$$

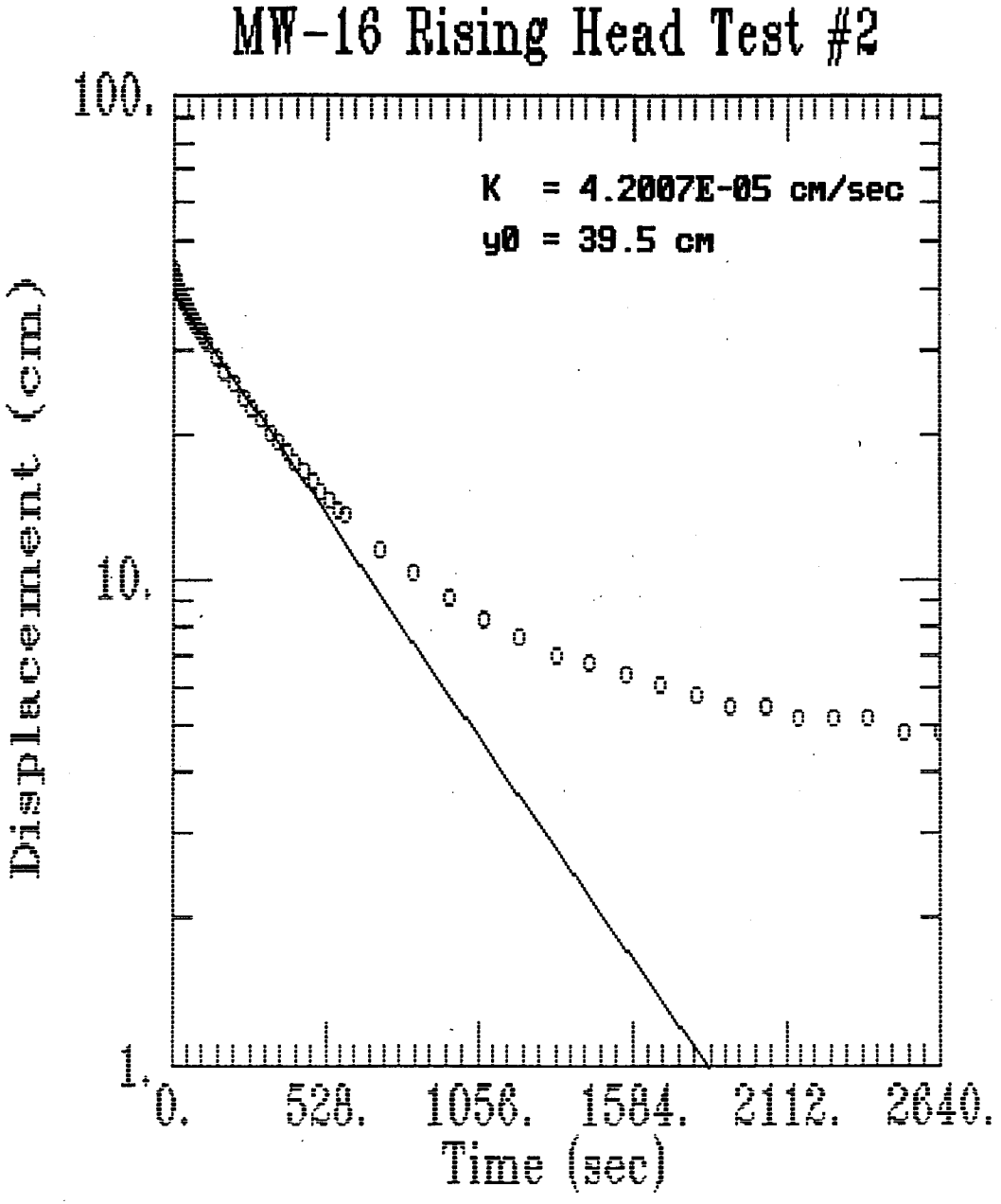
where

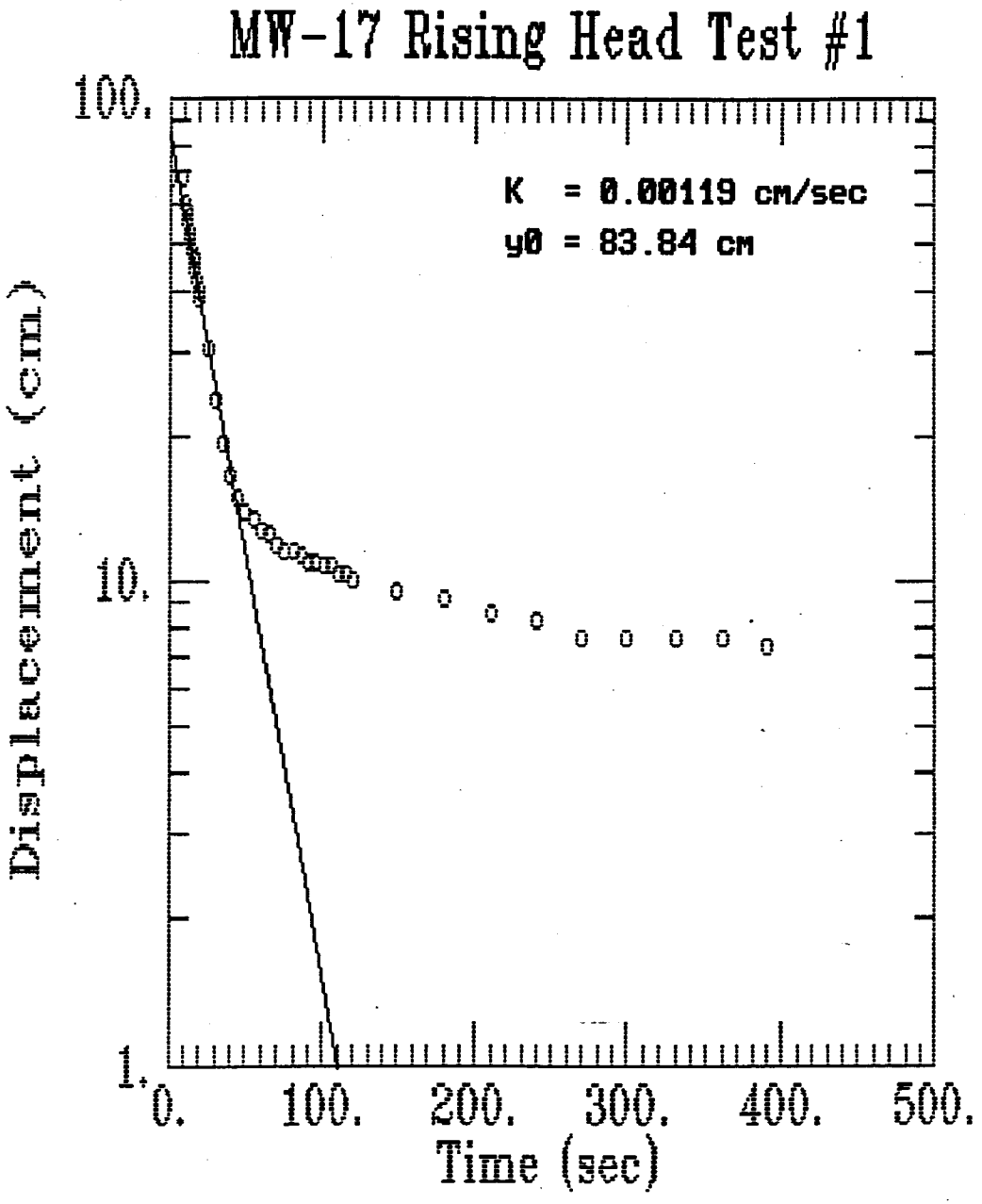
- R_c - radius of the well casing
- R_w - radius of the bore hole
- H - static height of water in the well
- L - effective screen length
- t_o - start time
- t - time in seconds
- Y_o - displacement at time = t_o
- K - hydraulic conductivity
- C - a dimensionless variable derived from the Bouwer-Rice A, B, C, vs. L/r_w graph

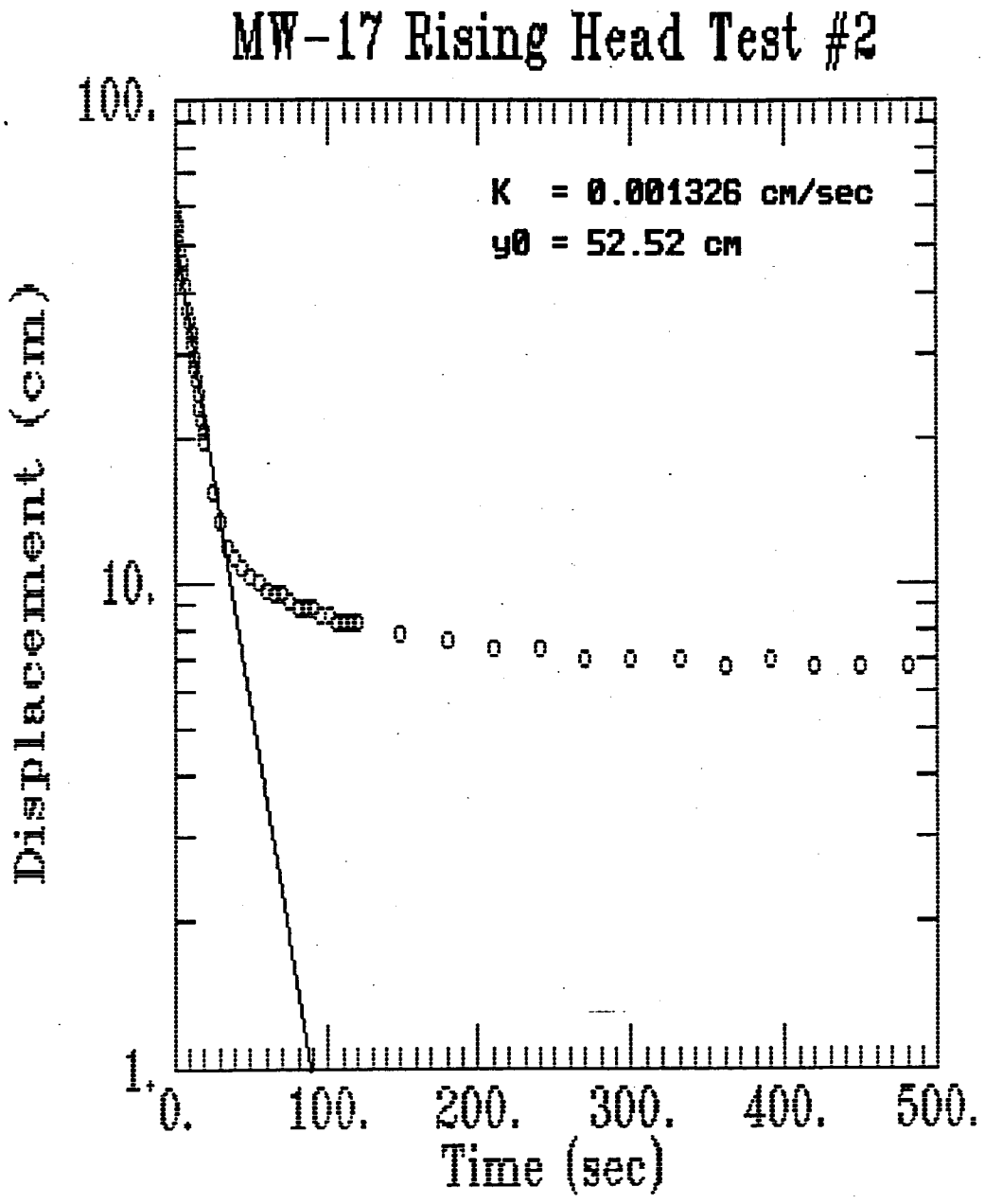


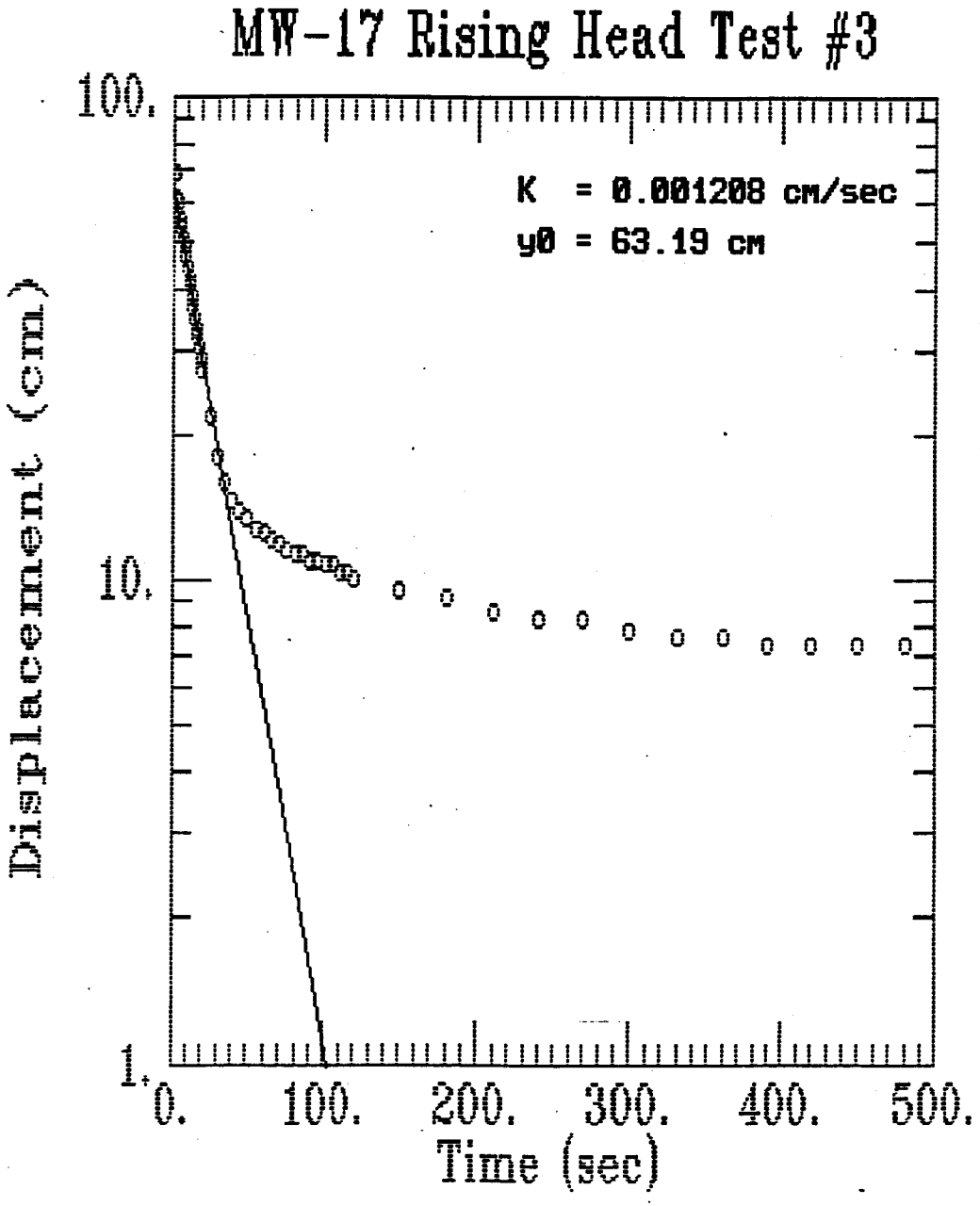
Curves relating coefficients A, B, and C to L/R_w. (From Bouwer and Rice, 1976).

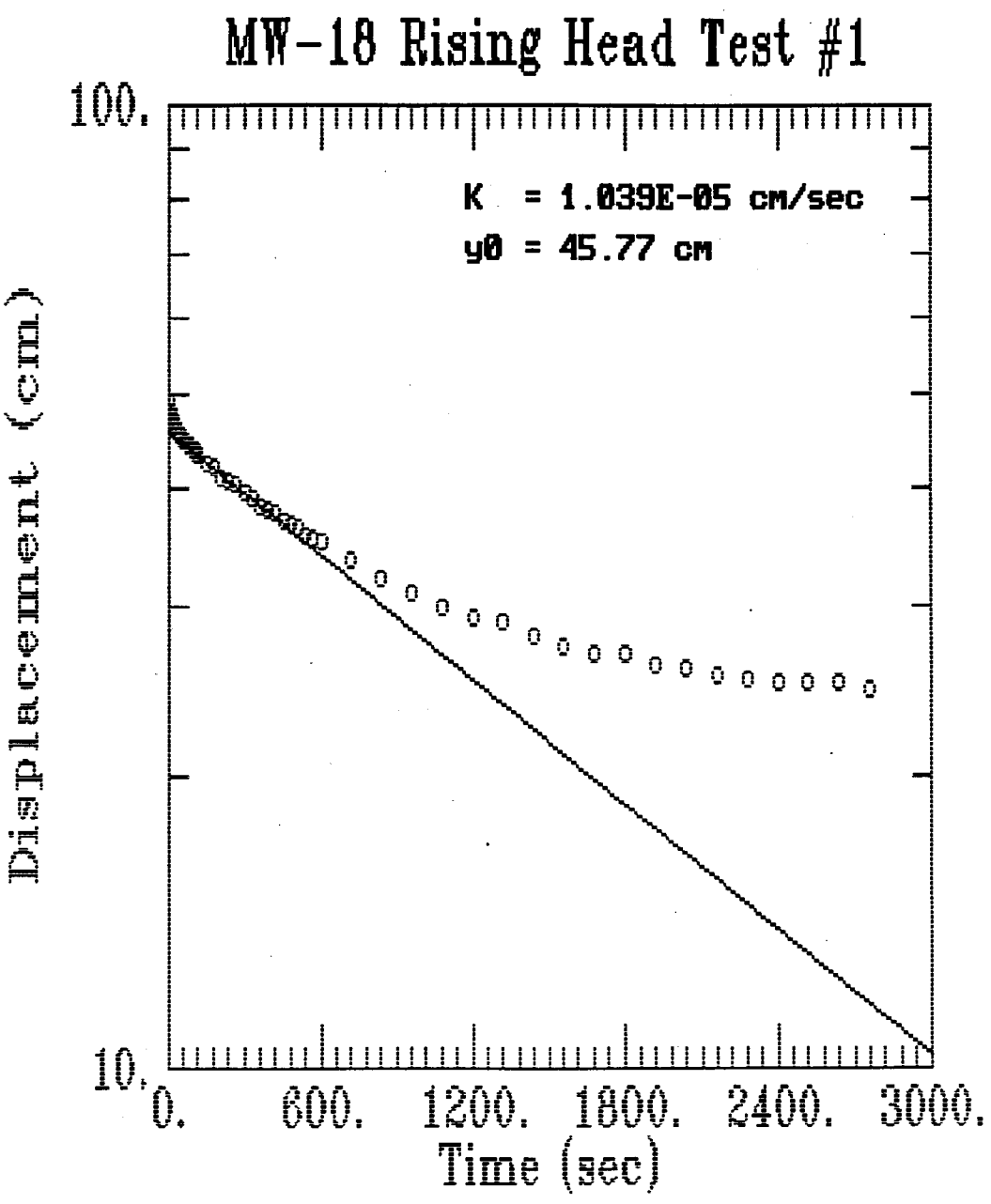

MW-16 Rising Head Test #1
K = 3.6312E-05 cm/sec
y0 = 35.41 cm
Displacement (cm)
100.
10.
1.
0.
528.
1056.
1584.
2112.
2640.
Time (sec)

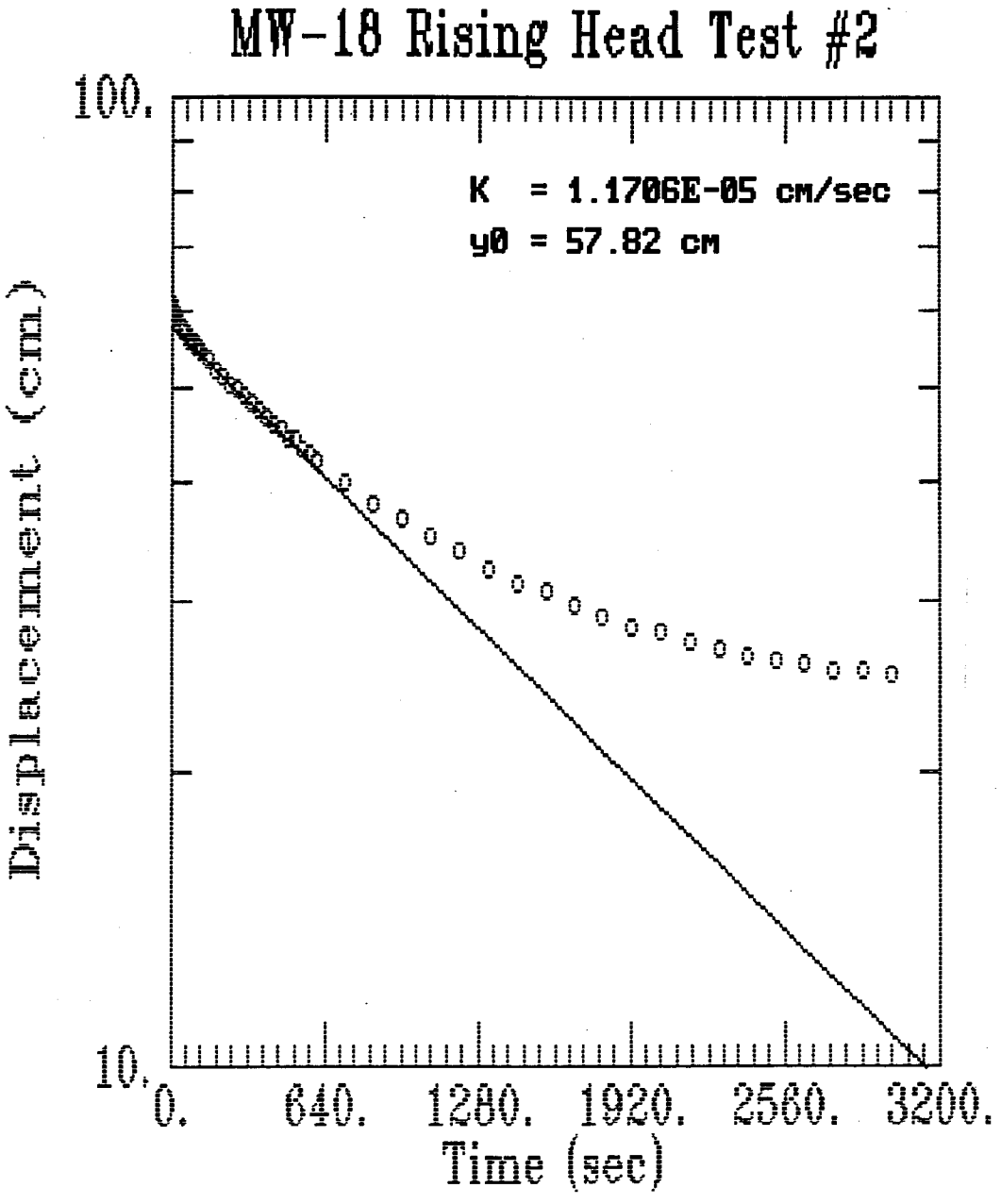

MW-16 Rising Head Test #2
K = 4.2007E-05 cm/sec
y0 = 39.5 cm
100.
10.
1.
Displacement (cm)
0.
528.
1056.
1584.
2112.
2640.
Time (sec)

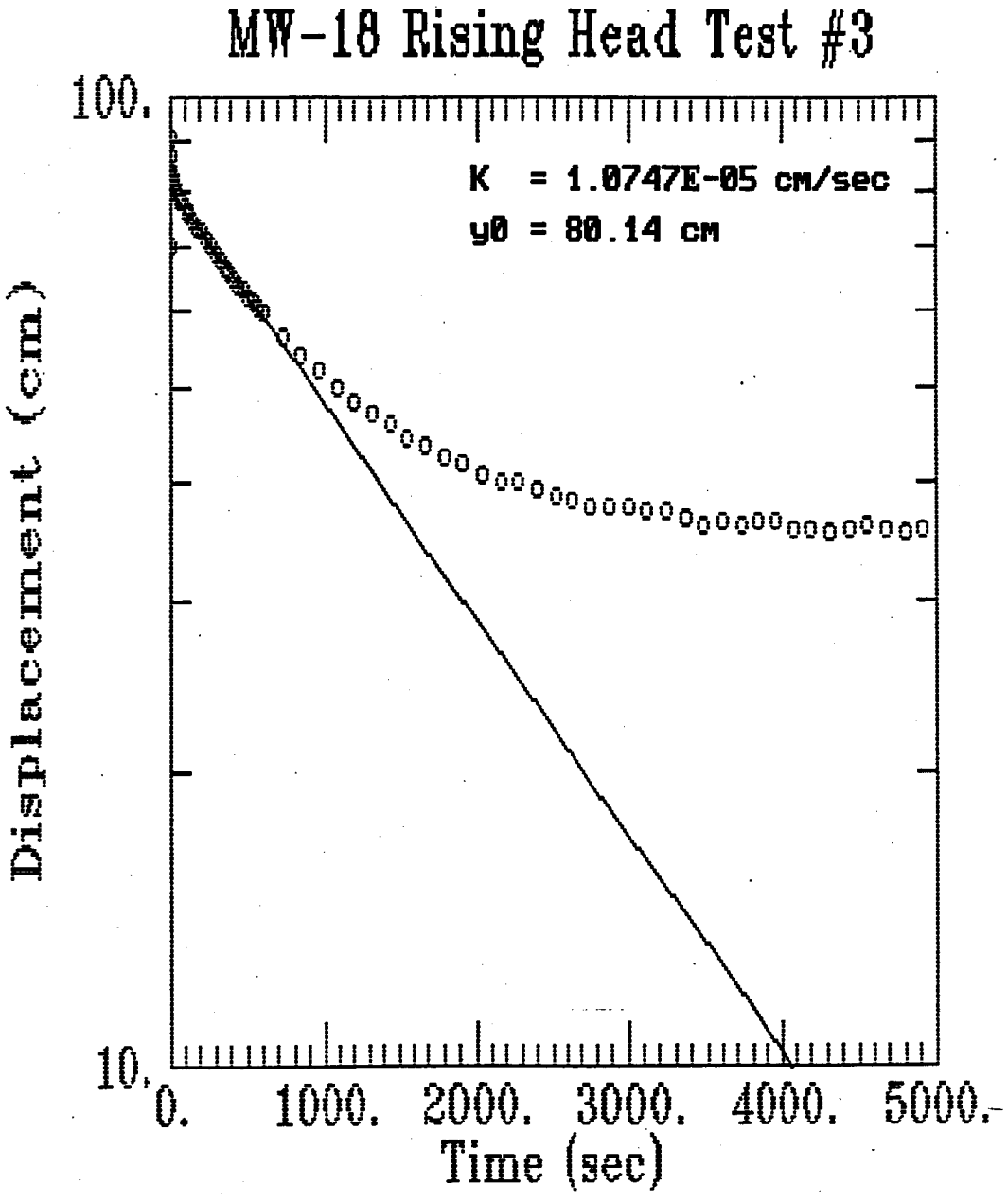

MW-17 Rising Head Test #1
K = 0.00119 cm/sec
y0 = 83.84 cm
Displacement (cm)
100.
10.
1.
0.
100.
200.
300.
400.
500.
Time (sec)


MW-17 Rising Head Test #2
K = 0.001326 cm/sec
y0 = 52.52 cm
Displacement (cm)
100.
10.
1.
0.
100.
200.
300.
400.
500.
Time (sec)


MW-17 Rising Head Test #3
K = 0.001208 cm/sec
y0 = 63.19 cm
Displacement (cm)
100.
10.
1.
0.
100.
200.
300.
400.
500.
Time (sec)


MW-18 Rising Head Test #1
K = 1.039E-05 cm/sec
y0 = 45.77 cm
Displacement (cm)
100.
10.
0.
600.
1200.
1800.
2400.
3000.
Time (sec)


MW-18 Rising Head Test #2
K = 1.1706E-05 cm/sec
y0 = 57.82 cm
Displacement (cm)
100.
10.
0.
640.
1280.
1920.
2560.
3200.
Time (sec)


MW-18 Rising Head Test #3
K = 1.0747E-05 cm/sec
y0 = 80.14 cm
Displacement (cm)
100.
10.
0.
1000.
2000.
3000.
4000.
5000.
Time (sec)

APPENDIX C

Validation Report/ Laboratory Results

Former Coal Gasification Site
Mechanicville, New York

APPENDIX C-1

Validation Report

Former Coal Gasification Site
Mechanicville, New York

Sampling Dates: May 17-22, 1993

Review is complete for the data package generated by Galson Laboratories pertaining to soil samples collected at the Mechanicville site. Review was performed following NYSDEC criteria and USEPA Region II guidelines. All samples analyzed for PCBs were validated at Level III. One sample (METDEEXX05/11) was validated at Level IV for the volatile, semivolatile, and inorganic analyses. The remaining samples were blank evaluated. Samples were analyzed for volatiles, semivolatiles, PCBs, and inorganics using NYSDEC ASP 91-1, 91-2, 91-3, and Superfund-CLP, respectively. Samples were also analyzed for reactive cyanide and reactive sulfide using SW846.

The data table referenced in this memo includes Table 2, Validation/Summary Table, included in Appendix C-2.

The following subsections summarize the qualifications/edits that have been determined by validation.

All Organic Analyses

Compound results below the contract required quantitation limit (CRQL) were flagged with a J by the laboratory and were considered estimated and flagged J.

Compound results greater than the calibration range were diluted and reanalyzed. The diluted results for all compounds beyond calibration range were inserted into the original results and the

remainder of the diluted analysis deleted.

PCB results which exhibited a percent difference greater than 25% between quantitation results on the two columns used for analysis were considered estimated and flagged J.

Inorganic Analyses

Analyte results below the contract required detection limit (CRDL) were considered estimated and flagged with a J.

Volatile Analyses - Qualifications/Edits

1. Acetone was detected in two of the laboratory method blanks at 6 μg/L and 7 μg/L. Equipment blank MEEXB-XXSB/11, which was associated with several of the soil boring samples, also contained 10 μg/L of acetone. As a result acetone should be considered nondetect in all associated soil samples.

2. Initial calibration criteria for linearity were not met for acetone. Positive results were estimated in sample METDEEXX05/11. 2-Butanone did not meet linearity criteria, and the nondetected result in this sample was estimated (UJ).

Volatile Analyses - Comments

Please see items 1 and 2 under **Qualifications/Edits**. All hold times, instrument tunes, internal standards, and surrogate recoveries were within QC limits for the sample validated at Level IV.

All matrix spike and matrix spike duplicate recoveries and RPDs met QC criteria.

Semivolatile Analyses - Qualifications/Edits

3. Naphthalene was detected at 17 μg/kg in the GPC blank associated with the sediment samples. Naphthalene detected at less than 170 μg/kg should be considered nondetect.

4. Source water MEEXB-SR/11 contained di-n-butylphthalate at 3 J μg/L and bis(2-ethylhexyl)phthalate at 18 μg/L. Bis(2-ethylhexyl)phthalate concentrations less than 5994 μg/kg were considered nondetect in the associated samples. Di-n-butylphthalate was not detected in any of the associated samples.

5. Several compounds did not meet percent difference criteria during the continuing calibration for sample METDEEXX05/11. N-nitroso-di-n-propylamine, benzoic acid, 2,4-dinitrophenol, di-n-octylphthalate, and pentachlorophenol were qualified as estimated.

Semivolatile Analyses - Comments

Please see items 3 - 5 under **Qualifications/Edits**. All hold time, instrument tune, internal standard, and surrogate recovery criteria were met for the sample validated at Level IV. Matrix spike and matrix spike duplicate recoveries and RPDs were within recommended limits.

PCB Analyses - Qualifications/Edits

6. Due to shipping delays, the majority of the sample results required qualification since the samples arrived at the laboratory with no ice left in the cooler. The only samples not

affected were MEEISHXX29/11, MEEISHXX30/11, MEEISHXX31/11, and MEEISHXX32/11.

7. Surrogate recoveries were above QC limits for the following samples:

MEEISHXX33/11	MEEISHXX34/11
MEEISHXX35/11	MEEISHXXDU/13
MEEISHXX48/11	

No action was required.

PCB Analyses - Comments

Please see items 6 and 7 under **Qualifications/Edits**. All method blanks and field blanks were compliant. All matrix spike and matrix spike duplicate recoveries and RPDs were within the required limits.

The majority of the samples were contained in a data package that contained only surrogate recovery forms, matrix spike and matrix spike duplicate recovery forms, and method blank summary forms. These data were already estimated due to the shipping problem mentioned in item 6 above. Initial and continuing calibration, calibration sequence, and retention time window criteria were also reviewed for the remaining samples listed in item 6.

Inorganic Analyses - Qualifications/Edits

8. Matrix spike recovery criteria were not met for zinc. Zinc results were estimated in sample METDEEXX05/11.

9. Analytical spike recovery for antimony was less than 85% during the analysis of sample METDEEXX05/11, and antimony results were estimated.

10. Several analytes were detected in source water blank MEEXB-XXSR/11. Results in the associated samples were considered nondetect if they were less than the value given below for the following compounds:

Aluminum	990 mg/kg
Iron	2068 mg/kg
Manganese	116 mg/kg
Zinc	18.5 mg/kg

Inorganic Analyses - Comments

Please see items 8 - 10 under **Qualifications/Edits.** All appropriate QC criteria were reviewed and found acceptable for the sample validated at Level IV unless noted under

Qualifications/Edits.

Reactive Cyanide and Reactive Sulfide Analyses - Qualification/Edits

There were no qualifications or edits to these data.

Reactive Cyanide and Reactive Sulfide Analyses - Comments

All associated blanks were compliant. Reactive cyanide and reactive sulfide were not detected in any of the samples.

Sampling Dates: July 13-15, 1993

Review is complete for the data package generated by Galson Laboratories pertaining to groundwater samples collected at the Mechanicville site. Samples were analyzed for volatiles, low level volatiles, semivolatiles, PCBs, and inorganics using NYSDEC ASP 91-1, 91-4, 91-2, 91-3, and Superfund-CLP, respectively. Samples were also analyzed for reactive cyanide and reactive sulfide using SW846. Two leachate samples, COMP-3 and COMP-4, were analyzed for TCLP volatiles, semivolatiles, and inorganics. Review was performed following NYSDEC criteria and USEPA Region II guidelines. All samples analyzed for PCBs were validated at Level III. One sample (MEGDMW8715/11) was validated at Level IV for the volatile, semivolatile, and inorganic analyses. Sample MEGDMW9317/11 was validated at Level IV for the low level volatile analysis. The remaining samples were blank evaluated.

The data tables referenced in this memo includes Table 2, Validation/Summary Table, included in Appendix C-2.

The following subsections summarize the qualifications/edits that have been determined by validation.

All Organic Analyses

Compound results below the CRQL were flagged with a J by the laboratory and were considered estimated and flagged J.

Compound results greater than the calibration range were diluted and reanalyzed, and the diluted

results flagged with a D by the laboratory. The diluted results for all compounds beyond calibration range were inserted into the original results and the remainder of the diluted analysis deleted.

Inorganic Analyses

Analyte results below the CRDL were considered estimated and flagged with a J.

Volatile Analyses - Qualifications/Edits

1. Trip blanks MEXXXXXXTB/11 and MEXXXXXXTB/12 contained methylene chloride at 0.6 and 5 μg/L, respectively. All associated sample results less than ten times the associated blank concentration were considered non-detect.

2. Initial calibration criteria for linearity were not met for methylene chloride and 1,2-dichloroethene (total). Positive results were estimated in sample MEGDMW8715/11.

3. Methylene chloride did not meet percent difference criteria during continuing calibration. Results for this compound was estimated in sample MEGDMW8715/11.

Volatile Analyses - Comments

Please see items 1 - 3 under **Qualifications/Edits**. All hold time, instrument tune, internal standard, method blank, and surrogate recovery criteria were met for the sample validated at Level IV. All matrix spike and matrix spike duplicate recoveries and RPDs also met QC

criteria.

Low Detection Limit Volatile Analyses - Qualifications/Edits

4. Linearity criteria were not met for vinyl chloride and methylene chloride during the initial calibration. Since these compounds were not detected in any samples, no action was required.

Low Detection Limit Volatile Analyses - Comments

Please see item 4 under **Qualifications/Edits**. All hold time, instrument tune, internal standard, surrogate recovery, and method blank criteria were met.

Semivolatile Analyses - Qualifications/Edits

5. Equipment blank MEXXMWXXFB/11 contained phenol at 6 J μg/L, diethylphthalate at 1 J μg/L, di-n-butylphthalate at 3 J μg/L and bis(2-ethylhexyl)phthalate at 2 μg/L. All associated sample results less than ten times the associated blank concentration were considered non-detect.

6. Internal standard area responses were below QC limits for two internal standards during the analysis of sample MEGDMW8715/11. All compounds quantitated using these internal standards were qualified as estimated for both positive and non-detected results.

7. Bis(2-ethylhexyl)phthalate did not meet field duplicate precision criteria for samples

MEGDMW8715/11 and MEGDMW87DU/11. Results for this compound were qualified as estimated in both samples.

Semivolatile Analyses - Comments

Please see items 5 - 7 under **Qualifications/Edits.** All hold time, instrument tune, method blank, and surrogate recovery criteria were met for the sample validated at Level IV. Matrix spike and matrix spike duplicate recoveries and RPDs were within recommended limits.

PCB Analyses - Qualifications/Edits

No qualification of these data was required.

PCB Analyses - Comments

All method blanks and field blanks were compliant. All matrix spike and matrix spike duplicate recoveries and RPDs were within the required limits. All other appropriate QC were reviewed and found acceptable.

Total and Dissolved Inorganic Analyses - Qualifications/Edits

8. Aluminum percent recovery was greater than QC limits during laboratory control sample analysis. The positive result in the sample reviewed was qualified as estimated.

Total and Dissolved Inorganic Analyses - Comments

Please see item 8 under **Qualifications/Edits.** All appropriate QC criteria were reviewed and found acceptable for the sample validated at Level IV unless noted under **Qualifications/Edits.**

Reactive Cyanide and Reactive Sulfide Analyses - Qualification/Edits

There were no qualifications or edits to these data.

Reactive Cyanide and Reactive Sulfide Analyses - Comments

All associated blanks were compliant. Reactive cyanide and reactive sulfide were not detected in any of the samples.

TCLP Volatiles, Semivolatiles, and Inorganics Analyses - Qualifications/Edits

There were no qualifications or edits to these data.

TCLP Volatiles, Semivolatiles, and Inorganics Analyses - Comments

No contaminants were detected in the associated blanks.

APPENDIX C-2

Laboratory Results with Detection Limits and Data Qualifiers

Former Coal Gasification Site
Mechanicville, New York

DATA QUALIFIERS

Analytical data qualifiers appear on each table as appropriate and are applied by the laboratory or data reviewer. The descriptions of these data qualifiers are as follows:

Data Qualifiers:

J (organic) Laboratory flag which indicates an estimated concentration because results are either below the contract required quantitation level (CRQL) or quality control criteria were not met.

J (inorganic) Laboratory flag which indicates an estimated concentration because results are either below the contract required detection level (CRDL) or quality control criteria were not met.

U Indicates that compound was analyzed but not detected.

UJ Indicates that quantitation level was estimated because QC criteria were not met.

D Indicates that sample concentration was obtained by dilution to bring result within calibration range.

Other Notations:

NR Analysis not requested.

ND Not detected.

Table 2
Validation / Summary Table

SAMPLE LOCATION:		MEEDB-XX17/11	MEEISHXX20/11	MEEISHXX22/11	MEEISHXX23/11	MEEISHXX24/11	MEEISHXXDU/11	MEEUB-XX16/11	MEEXB-XXDU/11
LAB NUMBER:		13178-003	13197-001	13197-002	13197-003	13197-007	13197-006	13156-001	13178-006
DATE SAMPLED:		05/18/93	05/19/93	05/19/93	05/19/93	05/19/93	05/19/93	05/17/93	05/18/93
ANALYTE	RL								
Reactive Cyanide	100	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Reactive Sulfide	100	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Associated Method Blank:		13178	13178	13178	13178	13178	13178	13178	13178
Associated Equipment Blank:		-	-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-	-

Box Number: 4945-100

Table 2
Validation / Summary Table

	LOCATION:	SS-20 (0-1FT)	SS-22 (0-1FT)	SS-23 (0-1 FT)	SS-24 (0-1 FT)	SS-23DUP(0-1FT)
	ISIS ID:	MEEISHXX20/11	MEEISHXX22/11	MEEISHXX23/11	MEEISHXX24/11	MEEISHXXDU/11
	LAB NUMBER:	13197-001	13197-002	13197-003	13197-007	13197-006
	DATE SAMPLED:	05/19/93	05/19/93	05/19/93	05/19/93	05/19/93
ANALYTE	RL					
Reactive Cyanide	100	100 U	100 U	100 U	100 U	100 U
Reactive Sulfide	100	100 U	100 U	100 U	100 U	100 U
Associated Method Blank:		13178	13178	13178	13178	13178
Associated Equipment Blank:		-	-	-	-	-
Associated Field Blank:		-	-	-	-	-

Site: SURFACE SOIL
U = not detected

PROJECT: NYSEG Mechanicville

Pesticides/PCBs Soil Analysis (ug/kg)

08/25/93

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEISHXX25/11	MEEISHXX33/11	MEEISHXX34/11	MEEISHXX35/11	MEEISHXX36/11	MEEISHXX37/11	MEEISHXX38/11	MEEISHXX39/11
	LAB NUMBER:	13256-002	13256-015	13256-016	13256-017	13256-018	13256-003	13256-007	13256-008
	DATE SAMPLED:	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93
	DATE EXTRACTED:	05/27/93	05/27/93	05/27/93	05/27/93	05/27/93	05/27/93	05/27/93	05/27/93
	DATE ANALYZED:	06/13/93	06/16/93	06/16/93	06/15/93	06/14/93	06/15/93	06/15/93	06/14/93
ANALYTE	SOW-3/90 - II CRQL								
alpha-BHC	1.7	NR	NR	NR	NR	NR	NR	NR	NR
beta-BHC	1.7	NR	NR	NR	NR	NR	NR	NR	NR
delta-BHC	1.7	NR	NR	NR	NR	NR	NR	NR	NR
gamma-BHC (Lindane)	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Aldrin	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor Epoxide	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Dieldrin	3.3	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDE	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endrin	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan II	3.3	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDD	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Aldehyde	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan Sulfate	3.3	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDT	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Methoxychlor	17	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Ketone	3.3	NR	NR	NR	NR	NR	NR	NR	NR
alpha-Chlordane	1.7	NR	NR	NR	NR	NR	NR	NR	NR
gamma-Chlordane	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Toxaphene	170	NR	NR	NR	NR	NR	NR	NR	NR
Aroclor-1016	33	37 UJ	710 UJ	720 UJ	220 UJ	36 UJ	37 UJ	370 UJ	35 UJ
Aroclor-1221	67	74 UJ	1400 UJ	1400 UJ	440 UJ	73 UJ	73 UJ	740 UJ	70 UJ
Aroclor-1232	33	37 UJ	710 UJ	720 UJ	220 UJ	36 UJ	37 UJ	370 UJ	35 UJ
Aroclor-1242	33	37 UJ	710 UJ	720 UJ	220 UJ	36 UJ	37 UJ	370 UJ	35 UJ
Aroclor-1248	33	37 UJ	1800 J	2500 J	300 J	57 J	320 J	700 J	77 J
Aroclor-1254	33	37 UJ	710 UJ	720 UJ	220 UJ	36 UJ	37 UJ	370 UJ	35 UJ
Aroclor-1260	33	37 UJ	710 UJ	720 UJ	360 J	180 J	2600 DJ	410 J	35 UJ
Dilution Factor:		1.00	20.0	20.0	5.00	1.00	1.00	10.0	1.00
Percent Solids:		90	94	93	76	91	91	90	95
Sample Volume\Weight (ml\g):		30.1	30.0	30.0	30.0	30.1	30.0	30.0	30.1
Associated Method Blank:		061193P012	061193P012	061193P012	061193P012	061193P012	061193P012	061193P012	061193P012
Associated Equipment Blank:		-	-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-	-

Box Number: 4945-101

PROJECT: NYSEG Mechanicville

Pesticides/PCBs Soil Analysis (ug/kg)

08/25/93

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEISHXX40/11	MEEISHXX41/11	MEEISHXX45/11	MEEISHXX46/11	MEEISHXX47/11	MEEISHXX48/11	MEEISHXXDU/12	MEEISHXXDU/13
	LAB NUMBER:	13256-009	13256-001	13256-010	13256-012	13256-013	13256-014	13256-006	13256-011
	DATE SAMPLED:	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93	05/22/93
	DATE EXTRACTED:	05/27/93	05/27/93	05/28/93	05/27/93	05/27/93	05/27/93	05/27/93	05/27/93
	DATE ANALYZED:	06/15/93	06/13/93	06/14/93	06/14/93	06/15/93	06/15/93	06/16/93	06/14/93
ANALYTE	SOW-3/90 - II CRQL								
alpha-BHC	1.7	NR	NR	NR	NR	NR	NR	NR	NR
beta-BHC	1.7	NR	NR	NR	NR	NR	NR	NR	NR
delta-BHC	1.7	NR	NR	NR	NR	NR	NR	NR	NR
gamma-BHC (Lindane)	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Aldrin	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Heptachlor Epoxide	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan I	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Dieldrin	3.3	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDE	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endrin	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan II	3.3	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDD	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Aldehyde	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Endosulfan Sulfate	3.3	NR	NR	NR	NR	NR	NR	NR	NR
4,4'-DDT	3.3	NR	NR	NR	NR	NR	NR	NR	NR
Methoxychlor	17	NR	NR	NR	NR	NR	NR	NR	NR
Endrin Ketone	3.3	NR	NR	NR	NR	NR	NR	NR	NR
alpha-Chlordane	1.7	NR	NR	NR	NR	NR	NR	NR	NR
gamma-Chlordane	1.7	NR	NR	NR	NR	NR	NR	NR	NR
Toxaphene	170	NR	NR	NR	NR	NR	NR	NR	NR
Aroclor-1016	33	70 UJ	37 UJ	36 UJ	42 UJ	86 UJ	86 UJ	1800 UJ	38 UJ
Aroclor-1221	67	140 UJ	73 UJ	72 UJ	84 UJ	170 UJ	170 UJ	3600 UJ	76 UJ
Aroclor-1232	33	70 UJ	37 UJ	36 UJ	42 UJ	86 UJ	86 UJ	1800 UJ	38 UJ
Aroclor-1242	33	70 UJ	37 UJ	36 UJ	42 UJ	86 UJ	86 UJ	1800 UJ	38 UJ
Aroclor-1248	33	290 J	37 UJ	36 UJ	42 UJ	86 UJ	86 UJ	1800 UJ	38 UJ
Aroclor-1254	33	70 UJ	37 UJ	36 UJ	42 UJ	86 UJ	86 UJ	1800 UJ	38 UJ
Aroclor-1260	33	70 UJ	37 UJ	58 J	69 J	240 J	130 J	2200 J	75 J
Dilution Factor:		2.00	1.00	1.00	1.00	2.00	2.00	50.0	1.00
Percent Solids:		95	91	93	79	77	77	92	87
Sample Volume\Weight (ml\g):		30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.1
Associated Method Blank:		061193P012	061193P012	061193P013	061193P012	061193P012	061193P012	061193P012	061193P012
Associated Equipment Blank:		-	-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-	-

Box Number: 4945-101

PROJECT: NYSEG Mechanicville

Pesticides/PCBs Soil Analysis (ug/kg)

08/25/93

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEISHXX29/11	MEEISHXX30/11	MEEISHXX31/11	MEEISHXX32/11
	LAB NUMBER:	13197-008	13197-009	13197-010	13197-011
	DATE SAMPLED:	05/19/93	05/19/93	05/19/93	05/19/93
	DATE EXTRACTED:	05/24/93	05/24/93	05/24/93	05/24/93
	DATE ANALYZED:	06/11/93	06/11/93	06/11/93	06/11/93
ANALYTE	SOW-3/90 - II CRQL				
alpha-BHC	1.7	NR	NR	NR	NR
beta-BHC	1.7	NR	NR	NR	NR
delta-BHC	1.7	NR	NR	NR	NR
gamma-BHC (Lindane)	1.7	NR	NR	NR	NR
Heptachlor	1.7	NR	NR	NR	NR
Aldrin	1.7	NR	NR	NR	NR
Heptachlor Epoxide	1.7	NR	NR	NR	NR
Endosulfan I	1.7	NR	NR	NR	NR
Dieldrin	3.3	NR	NR	NR	NR
4,4'-DDE	3.3	NR	NR	NR	NR
Endrin	3.3	NR	NR	NR	NR
Endosulfan II	3.3	NR	NR	NR	NR
4,4'-DDD	3.3	NR	NR	NR	NR
Endrin Aldehyde	3.3	NR	NR	NR	NR
Endosulfan Sulfate	3.3	NR	NR	NR	NR
4,4'-DDT	3.3	NR	NR	NR	NR
Methoxychlor	17	NR	NR	NR	NR
Endrin Ketone	3.3	NR	NR	NR	NR
alpha-Chlordane	1.7	NR	NR	NR	NR
gamma-Chlordane	1.7	NR	NR	NR	NR
Toxaphene	170	NR	NR	NR	NR
Aroclor-1016	33	36 U	36 U	36 U	36 U
Aroclor-1221	67	71 U	73 U	72 U	71 U
Aroclor-1232	33	36 U	36 U	36 U	36 U
Aroclor-1242	33	36 U	36 U	36 U	36 U
Aroclor-1248	33	36 U	36 U	36 U	36 U
Aroclor-1254	33	36 U	36 U	36 U	36 U
Aroclor-1260	33	50 J	36 U	47 J	36 U
Dilution Factor:		1.00	1.00	1.00	1.00
Percent Solids:		94	91	93	94
Sample Volume\Weight (ml\g):		30.0	30.0	30.0	30.0
Associated Method Blank:		061093P012	061093P012	061093P012	061093P012
Associated Equipment Blank:		-	-	-	-
Associated Field Blank:		-	-	-	-

Box Number: 4945-100

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEDB-XX17/11	MEEUB-XX16/11	MEEXB-XXDU/11
	LAB NUMBER:	13178-003	13156-001	13178-006
	DATE SAMPLED:	05/18/93	05/17/93	05/18/93
	DATE ANALYZED:	05/21/93	05/21/93	05/21/93
ANALYTE	SOW-3/90 - II CRQL			
Chloromethane	10	12 U	11 U	12 U
Bromomethane	10	12 U	11 U	12 U
Vinyl Chloride	2	12 U	11 U	12 U
Chloroethane	10	12 U	11 U	12 U
Methylene Chloride	5	6 U	5 U	6 U
Acetone	10	32 U	11 U	39 U
Carbon Disulfide	5	6 U	5 U	6 U
1,1-Dichloroethene	5	6 U	5 U	6 U
1,1-Dichloroethane	5	6 U	5 U	6 U
1,2-Dichloroethene (total)	5	6 U	5 U	6 U
Chloroform	5	6 U	5 U	6 U
1,2-Dichloroethane	5	6 U	5 U	6 U
2-Butanone	10	12 U	11 U	12 U
1,1,1-Trichloroethane	5	6 U	5 U	6 U
Carbon Tetrachloride	3	6 U	5 U	6 U
Bromodichloromethane	5	6 U	5 U	6 U
1,2-Dichloropropane	5	6 U	5 U	6 U
cis-1,3-Dichloropropene	2	6 U	5 U	6 U
Trichloroethene	5	6 U	5 U	6 U
Dibromochloromethane	5	6 U	5 U	6 U
1,1,2-Trichloroethane	5	6 U	5 U	6 U
Benzene	5	6 U	5 U	6 U
trans-1,3-Dichloropropene	2	6 U	5 U	6 U
Bromoform	5	6 U	5 U	6 U
4-Methyl-2-Pentanone	10	12 U	11 U	12 U
2-Hexanone	10	12 U	11 U	12 U
Tetrachloroethene	3	6 U	5 U	6 U
1,1,2,2-Tetrachloroethane	5	6 U	5 U	6 U
Toluene	10	6 U	5 U	6 U
Chlorobenzene	10	6 U	5 U	6 U
Ethylbenzene	10	6 U	5 U	6 U
Styrene	10	6 U	5 U	6 U
Total Xylenes	10	6 U	5 U	6 U
Dilution Factor:		1.00	1.00	1.00
Percent Solids:		81	93	82
Sample Volume\Weight (ml\g):		5.00	5.00	5.00
Associated Method Blank:		CH177	CH177	CH177
Associated Equipment Blank:		MEEXB-XXSB/11	MEEXB-XXSB/11	MEEXB-XXSB/11
Associated Field Blank:		-	-	-
Associated Trip Blank:		-	-	-

Box Number: 4945-100

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEDB-XX17/11		MEEUB-XX16/11		MEEXB-XXDU/11	
	LAB NUMBER:	13178-003		13156-001		13178-006	
	DATE SAMPLED:	05/18/93		05/17/93		05/18/93	
	DATE EXTRACTED:	05/20/93		05/20/93		05/20/93	
	DATE ANALYZED:	06/01/93		06/01/93		06/01/93	
ANALYTE	SOW-3/90 - II CRQL						
Phenol	330	360	U	360	U	390	U
bis(2-Chloroethyl)ether	330	360	U	360	U	390	U
2-Chlorophenol	330	360	U	360	U	390	U
1,3-Dichlorobenzene	330	360	U	360	U	390	U
1,4-Dichlorobenzene	330	360	U	360	U	390	U
1,2-Dichlorobenzene	330	360	U	360	U	390	U
2-Methylphenol	330	360	U	360	U	390	U
2,2'-oxybis(1-Chloropropane)	330	360	U	360	U	390	U
4-Methylphenol	330	360	U	360	U	390	U
N-Nitroso-di-n-propylamine	330	360	U	360	U	390	U
Hexachloroethane	330	360	U	360	U	390	U
Nitrobenzene	330	360	U	360	U	390	U
Isophorone	330	360	U	360	U	390	U
2-Nitrophenol	330	360	U	360	U	390	U
2,4-Dimethylphenol	330	360	U	360	U	390	U
bis(2-Chloroethoxy)methane	330	360	U	360	U	390	U
2,4-Dichlorophenol	330	360	U	360	U	390	U
1,2,4-Trichlorobenzene	330	360	U	360	U	390	U
Naphthalene	330	56	J	360	U	390	U
4-Chloroaniline	330	360	U	360	U	390	U
Hexachlorobutadiene	330	360	U	360	U	390	U
4-Chloro-3-Methylphenol	330	360	U	360	U	390	U
2-Methylnaphthalene	330	360	U	360	U	390	U
Hexachlorocyclopentadiene	330	360	U	360	U	390	U
2,4,6-Trichlorophenol	330	360	U	360	U	390	U
2,4,5-Trichlorophenol	800	1800	U	1800	U	2000	U
2-Chloronaphthalene	330	360	U	360	U	390	U
2-Nitroaniline	800	1800	U	1800	U	2000	U
Dimethylphthalate	330	360	U	360	U	390	U
Acenaphthylene	330	360	U	360	U	390	U
2,6-Dinitrotoluene	330	360	U	360	U	390	U

Box Number: 4945-100

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEDB-XX17/11	MEEUB-XX16/11	MEEXB-XXDU/11
	LAB NUMBER:	13178-003	13156-001	13178-006
	DATE SAMPLED:	05/18/93	05/17/93	05/18/93
	DATE EXTRACTED:	05/20/93	05/20/93	05/20/93
	DATE ANALYZED:	06/01/93	06/01/93	06/01/93
ANALYTE	SOW-3/90 - II CRQL			
3-Nitroaniline	800	1800 U	1800 U	2000 U
Acenaphthene	330	360 U	360 U	390 U
2,4-Dinitrophenol	800	1800 U	1800 U	2000 U
4-Nitrophenol	800	1800 U	1800 U	2000 U
Dibenzofuran	330	360 U	360 U	390 U
2,4-Dinitrotoluene	330	360 U	360 U	390 U
Diethylphthalate	330	360 U	330 J	390 U
4-Chlorophenyl-phenylether	330	360 U	360 U	390 U
Fluorene	330	360 U	360 U	390 U
4-Nitroaniline	800	1800 U	1800 U	2000 U
4,6-Dinitro-2-methylphenol	800	1800 U	1800 U	2000 U
N-Nitrosodiphenylamine	330	360 U	360 U	390 U
4-Bromophenyl-phenylether	330	360 U	360 U	390 U
Hexachlorobenzene	330	360 U	360 U	390 U
Pentachlorophenol	800	1800 U	330 J	2000 U
Phenanthrene	330	200 J	360 U	77 J
Anthracene	330	360 U	360 U	390 U
Carbazole	330	360 U	360 U	390 U
Di-n-butylphthalate	330	360 U	360 U	390 U
Fluoranthene	330	160 J	89 J	62 J
Pyrene	330	130 J	82 J	49 J
Butylbenzylphthalate	330	360 U	360 U	390 U
3,3'-Dichlorobenzidine	330	360 U	360 U	390 U
Benzo(a)Anthracene	330	66 J	360 U	390 U
Chrysene	330	69 J	60 J	390 U
bis(2-Ethylhexyl)phthalate	330	1600 U	360 U	1300 U
Di-n-octylphthalate	330	360 U	360 U	390 U
Benzo(b)Fluoranthene	330	360 U	360 U	390 U
Benzo(k)Fluoranthene	330	360 U	360 U	390 U
Benzo(a)Pyrene	330	48 J	360 U	390 U
Indeno(1,2,3-c,d)Pyrene	330	360 U	360 U	390 U
Dibenz(a,h)Anthracene	330	360 U	360 U	390 U
Benzo(g,h,i)perylene	330	360 U	360 U	390 U
Dilution Factor:		1.00	1.00	1.00
Percent Solids:		92	93	85
Sample Volume\Weight (ml\g):		30.0	30.0	30.0
Associated Method Blank:		AI15293	AI15293	AI15293
Associated Equipment Blank:		MEEXB-XXSB/11	MEEXB-XXSB/11	MEEXB-XXSB/11
Associated Field Blank:		-	-	-

Box Number: 4945-100

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEEDB-XX17/11		MEEUB-XX16/11		MEEXB-XXDU/11	
	LAB NUMBER:	13178-003		13156-001		13178-006	
	DATE SAMPLED:	05/18/93		05/17/93		05/18/93	
ANALYTE	SOW-3/90 - II CRDL						
Aluminum	40	6970		12200		6820	
Antimony	12	0.55	J	0.27	U	0.33	U
Arsenic	2	NR		NR		NR	
Barium	40	NR		NR		NR	
Beryllium	1	NR		NR		NR	
Cadmium	1	0.46	U	0.73		0.43	U
Calcium	1000	NR		NR		NR	
Chromium	2	12.5		21.6		11.1	
Cobalt	10	7.0		16.0		6.6	
Copper	5	9.7		50.4		7.9	
Iron	20	15000		29700		14600	
Lead	0.6	10.5		36.4		36.1	
Magnesium	1000	NR		NR		NR	
Manganese	3	203		511		141	
Mercury	0.04	NR		NR		NR	
Nickel	8	11.0		37.8		11.3	
Potassium	1000	NR		NR		NR	
Selenium	1	NR		NR		NR	
Silver	2	NR		NR		NR	
Sodium	1000	NR		NR		NR	
Thallium	2	NR		NR		NR	
Vanadium	10	NR		NR		NR	
Zinc	4	30.4		138		28.2	
Cyanide	2	3.0	U	2.0	U	2.7	U
	Percent Solids:	84		94		85	
	Associated Method Blank:	PBS13156		PBS13156		PBS13156	
	Associated Equipment Blank:	MEEXB-XXSB/11		MEEXB-XXSB/11		MEEXB-XXSB/11	
	Associated Field Blank:	-		-		-	

Box Number: 4945-100

PROJECT: NYSEG Mechanicville

Volatile Organic Aqueous Analysis (ug/L)

10/19/93

Table 2
Validation / Summary Table

ANALYTE	SOW-3/90 - II CRQL	SAMPLE LOCATION: MEGDMW8601/11	MEGDMW8602/11	MEGDMW86DU/12	MEGDMW8711/11	MEGDMW8713/11	MEGDMW8714/11	MEGDMW8715/11	MEGDMW87DU/11
		LAB NUMBER: 13988-003	13970-002	13988-006	13970-003	13988-002	13988-007	13970-004	13970-005
		DATE SAMPLED: 07/15/93	07/14/93	07/15/93	07/14/93	07/15/93	07/15/93	07/14/93	07/14/93
		DATE ANALYZED: 07/21/93	07/20/93	07/21/93	07/20/93	07/21/93	07/21/93	07/21/93	07/21/93
Chloromethane	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
Bromomethane	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
Vinyl Chloride	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
Chloroethane	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
Methylene Chloride	10	5	10 U	3 J	10 U	4 J	84 J	10 U	10 U
Acetone	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
Carbon Disulfide	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
1,1-Dichloroethene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
1,1-Dichloroethane	10	5 U	5 U	5 U	5 U	5 U	120 U	3 J	3 J
1,2-Dichloroethene (total)	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Chloroform	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
1,2-Dichloroethane	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
2-Butanone	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
1,1,1-Trichloroethane	10	5 U	5 U	5 U	5 U	5 U	120 U	6	6
Carbon Tetrachloride	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Bromodichloromethane	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
1,2-Dichloropropane	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
cis-1,3-Dichloropropene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Trichloroethene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Dibromochloromethane	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
1,1,2-Trichloroethane	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Benzene	10	5 U	5 U	5 U	5 U	5 U	4300	27	24
trans-1,3-Dichloropropene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Bromoform	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
4-Methyl-2-Pentanone	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
2-Hexanone	10	10 U	10 U	10 U	10 U	10 U	250 U	10 U	10 U
Tetrachloroethene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
1,1,2,2-Tetrachloroethane	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Toluene	10	5 U	5 U	5 U	5 U	5 U	120	7	6
Chlorobenzene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Ethylbenzene	10	5 U	5 U	5 U	5 U	5 U	1900	47	41
Styrene	10	5 U	5 U	5 U	5 U	5 U	120 U	5 U	5 U
Total Xylenes	10	5 U	5 U	5 U	5 U	5 U	850	29	25
Dilution Factor:		1.00	1.00	1.00	1.00	1.00	25.0	1.00	1.00
Sample Volume\Weight (ml\g):		5.00	5.00	5.00	5.00	5.00	.200	5.00	5.00
Associated Method Blank:		BM985.93	BM985.93	BM985.93	BM985.93	BN004.93	BN004.93	BN004.93	BN004.93
Associated Equipment Blank:		MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11
Associated Field Blank:		-	-	-	-	-	-	-	-
Associated Trip Blank:		MEGXMWXXTB/14	MEXXXXXXTB/12	MEGXMWXXTB/14	MEXXXXXXTB/12	MEGXMWXXTB/14	MEGXMWXXTB/14	MEXXXXXXTB/12	MEXXXXXXTB/12

Box Number: 4945-104

Table 2
Validation / Summary Table

SAMPLE LOCATION: MEGUMW9316/11
LAB NUMBER: 13970-001
DATE SAMPLED: 07/14/93
DATE ANALYZED: 07/20/93

ANALYTE	SOW-3/90 - II CRQL		
Chloromethane	10	10	U
Bromomethane	10	10	U
Vinyl Chloride	10	10	U
Chloroethane	10	10	U
Methylene Chloride	10	10	U
Acetone	10	10	U
Carbon Disulfide	10	5	U
1,1-Dichloroethene	10	5	U
1,1-Dichloroethane	10	5	U
1,2-Dichloroethene (total)	10	5	U
Chloroform	10	5	U
1,2-Dichloroethane	10	5	U
2-Butanone	10	10	U
1,1,1-Trichloroethane	10	5	U
Carbon Tetrachloride	10	5	U
Bromodichloromethane	10	5	U
1,2-Dichloropropane	10	5	U
cis-1,3-Dichloropropene	10	5	U
Trichloroethene	10	5	U
Dibromochloromethane	10	5	U
1,1,2-Trichloroethane	10	5	U
Benzene	10	5	U
trans-1,3-Dichloropropene	10	5	U
Bromoform	10	5	U
4-Methyl-2-Pentanone	10	10	U
2-Hexanone	10	10	U
Tetrachloroethene	10	5	U
1,1,2,2-Tetrachloroethane	10	5	U
Toluene	10	5	U
Chlorobenzene	10	5	U
Ethylbenzene	10	5	U
Styrene	10	5	U
Total Xylenes	10	5	U

Dilution Factor: 1.00
Sample Volume\Weight (ml\g): 5.00

Associated Method Blank: BM985.93
Associated Equipment Blank: MEGXMWXXFB/11
Associated Field Blank: -
Associated Trip Blank: MEXXXXXXTB/12

Box Number: 4945-104

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEGDMW9317/11	MEGDMW9318/11	MESDEEXX01/11	MESDEEXX02/11	MESDEEXX04/11
	LAB NUMBER:	13929-002	13929-003	13970-006	13929-001	13988-001
	DATE SAMPLED:	07/13/93	07/13/93	07/14/93	07/13/93	07/15/93
	DATE ANALYZED:	07/20/93	07/20/93	07/21/93	07/20/93	07/22/93
ANALYTE	SOW-10/92 CRQL					
Chloromethane	1	1 U	1 U	1 U	1 U	1 U
Bromomethane	1	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	1	1 U	1 U	1 U	1 U	1 U
Chloroethane	1	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	2	1 U	1 U	1	1 U	1 U
Acetone	5	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	1	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1	1 U	1 U	1 U	1 U	1 U
Chloroform	1	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1	1 U	1 U	1 U	1 U	1 U
2-Butanone	5	10 U	10 U	10 U	10 U	10 U
Bromochloromethane	1	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1	0.4 J	1 U	1 U	1 U	1 U
Carbon Tetrachloride	1	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	1	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1	1 U	1 U	1 U	1 U	1 U
Trichloroethene	1	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	1	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1	1 U	1 U	1 U	1 U	1 U
Bromoform	1	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-Pentanone	5	10 U	10 U	10 U	10 U	10 U
2-Hexanone	5	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	1	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	1	1 U	1 U	1 U	1 U	1 U
Toluene	1	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	1	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	1	1 U	1 U	1 U	1 U	1 U
Styrene	1	1 U	1 U	1 U	1 U	1 U
Total Xylenes	1	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	1	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	1	1 U	1 U	1 U	1 U	1 U
Dilution Factor:		1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):		25.0	25.0	25.0	25.0	25.0
Associated Method Blank:		CH591.93	CH591.93	CH591.93	CH591.93	CH634.93
Associated Equipment Blank:		-	-	-	-	-
Associated Field Blank:		-	-	-	-	-
Associated Trip Blank:		MEXXXXXXTB/11	MEXXXXXXTB/11	MEXXXXXXTB/13	MEXXXXXXTB/11	MEGXMWXXTB/15

Box Number: 4945-104

PROJECT: NYSEG Mechanicville

Semivolatile Organic Aqueous Analysis (ug/L)

10/20/93

Table 2
Validation / Summary Table

SAMPLE LOCATION:	MEGDMW8601/11	MEGDMW8602/11	MEGDMW86DU/12	MEGDMW8711/11	MEGDMW8713/11	MEGDMW8714/11	MEGDMW8715/11	MEGDMW87DU/11
LAB NUMBER:	13988-003	13970-002	13988-006	13970-003	13988-002	13988-007	13970-004	13970-005
DATE SAMPLED:	07/15/93	07/14/93	07/15/93	07/14/93	07/15/93	07/15/93	07/14/93	07/14/93
DATE EXTRACTED:	07/19/93	07/16/93	07/19/93	07/16/93	07/19/93	07/19/93	07/16/93	07/16/93
DATE ANALYZED:	08/05/93	08/04/93	08/05/93	08/04/93	08/05/93	08/05/93	08/04/93	08/05/93

ANALYTE	SOW-3/90 - II CRQL															
Phenol	10	10	U	10	U	10	U	10	U	51		44		11	U	10	U
bis(2-Chloroethyl)ether	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2-Chlorophenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
1,3-Dichlorobenzene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
1,4-Dichlorobenzene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
1,2-Dichlorobenzene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2-Methylphenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2,2'-oxybis(1-Chloropropane)	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
4-Methylphenol	10	10	U	10	U	10	U	10	U	4	J	10	U	11	U	10	U
N-Nitroso-di-n-propylamine	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
Hexachloroethane	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
Nitrobenzene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
Isophorone	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2-Nitrophenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2,4-Dimethylphenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
bis(2-Chloroethoxy)methane	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2,4-Dichlorophenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
1,2,4-Trichlorobenzene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
Naphthalene	10	2	J	10	U	2	J	10	U	2600	D	2800	D	480	D	480	D
4-Chloroaniline	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
Hexachlorobutadiene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
4-Chloro-3-Methylphenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2-Methylnaphthalene	10	10	U	10	U	10	U	10	U	200		190		46		48	
Hexachlorocyclopentadiene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2,4,6-Trichlorophenol	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2,4,5-Trichlorophenol	25	25	U	26	U	24	U	24	U	28	U	25	U	28	U	26	U
2-Chloronaphthalene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
2-Nitroaniline	25	25	U	26	U	24	U	24	U	28	U	25	U	28	U	26	U
Dimethylphthalate	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U
Acenaphthylene	10	1	J	10	U	1	J	10	U	22		13		10	J	10	
2,6-Dinitrotoluene	10	10	U	10	U	10	U	10	U	11	U	10	U	11	U	10	U

Box Number: 4945-104

PROJECT: NYSEG Mechanicville

Semivolatile Organic Aqueous Analysis (ug/L)

10/20/93

Table 2
Validation / Summary Table

ANALYTE	SOW-3/90 - II CRQL	SAMPLE LOCATION: MEGDMW8601/11	MEGDMW8602/11	MEGDMW86DU/12	MEGDMW8711/11	MEGDMW8713/11	MEGDMW8714/11	MEGDMW8715/11	MEGDMW87DU/11
		LAB NUMBER: 13988-003	13970-002	13988-006	13970-003	13988-002	13988-007	13970-004	13970-005
		DATE SAMPLED: 07/15/93	07/14/93	07/15/93	07/14/93	07/15/93	07/15/93	07/14/93	07/14/93
		DATE EXTRACTED: 07/19/93	07/16/93	07/19/93	07/16/93	07/19/93	07/19/93	07/16/93	07/16/93
		DATE ANALYZED: 08/05/93	08/04/93	08/05/93	08/04/93	08/05/93	08/05/93	08/04/93	08/05/93
3-Nitroaniline	25	25 U	26 U	24 U	24 U	28 U	25 U	28 U	26 U
Acenaphthene	10	10 U	10 U	10 U	10 U	58	100	110	110
2,4-Dinitrophenol	25	25 U	26 U	24 U	24 U	28 U	25 U	28 U	26 U
4-Nitrophenol	25	25 U	26 U	24 U	24 U	28 U	25 U	28 U	26 U
Dibenzofuran	10	10 U	10 U	10 U	10 U	2 J	4 J	3 J	3 J
2,4-Dinitrotoluene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Diethylphthalate	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
4-Chlorophenyl-phenylether	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Fluorene	10	10 U	10 U	10 U	10 U	17	28	24	25
4-Nitroaniline	25	25 U	26 U	24 U	24 U	28 U	25 U	28 U	26 U
4,6-Dinitro-2-methylphenol	25	25 U	26 U	24 U	24 U	28 U	25 U	28 U	26 U
N-Nitrosodiphenylamine	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
4-Bromophenyl-phenylether	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Hexachlorobenzene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Pentachlorophenol	25	25 U	26 U	24 U	24 U	28 U	25 U	28 U	26 U
Phenanthrene	10	10 U	10 U	10 U	10 U	20	32	34	31
Anthracene	10	10 U	10 U	10 U	10 U	2 J	4 J	2 J	2 J
Carbazole	10	10 U	10 U	10 U	10 U	5 J	5 J	11 U	10 U
Di-n-butylphthalate	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Fluoranthene	10	10 U	10 U	10 U	10 U	2 J	2 J	2 J	1 J
Pyrene	10	10 U	10 U	10 U	10 U	2 J	2 J	2 J	2 J
Butylbenzylphthalate	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
3,3'-Dichlorobenzidine	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Benzo(a)Anthracene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Chrysene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
bis(2-Ethylhexyl)phthalate	10	41	10 U	44	19 U	44	10 U	45	100
Di-n-octylphthalate	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Benzo(b)Fluoranthene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Benzo(k)Fluoranthene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Benzo(a)Pyrene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Indeno(1,2,3-c,d)Pyrene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Dibenz(a,h)Anthracene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Benzo(g,h,i)perylene	10	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U
Dilution Factor:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):		1010	950	1040	1040	880	1020	900	980
Associated Method Blank:		DG143.93	DG113.93	DG143.93	DG113.93	DG143.93	DG143.93	DG113.93	DG113.93
Associated Equipment Blank:		MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11
Associated Field Blank:		-	-	-	-	-	-	-	-

Box Number: 4945-104

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEGDMW9317/11	MEGDMW9318/11	MEGUMW9316/11	MESDEEXX01/11	MESDEEXX02/11
	LAB NUMBER:	13929-002	13929-003	13970-001	13970-006	13929-001
	DATE SAMPLED:	07/13/93	07/13/93	07/14/93	07/14/93	07/13/93
	DATE EXTRACTED:	07/16/93	07/16/93	07/16/93	07/16/93	07/16/93
	DATE ANALYZED:	08/04/93	08/04/93	08/04/93	08/06/93	08/06/93
ANALYTE	SOW-3/90 - II CRQL					
Phenol	10	12 U	10 U	10 U	430	160
bis(2-Chloroethyl)ether	10	12 U	10 U	10 U	24 U	13 U
2-Chlorophenol	10	12 U	10 U	10 U	24 U	13 U
1,3-Dichlorobenzene	10	12 U	10 U	10 U	24 U	13 U
1,4-Dichlorobenzene	10	12 U	10 U	10 U	24 U	13 U
1,2-Dichlorobenzene	10	12 U	10 U	10 U	24 U	13 U
2-Methylphenol	10	12 U	10 U	10 U	24 U	13 U
2,2'-oxybis(1-Chloropropane)	10	12 U	10 U	10 U	24 U	13 U
4-Methylphenol	10	12 U	10 U	10 U	24 U	2 J
N-Nitroso-di-n-propylamine	10	12 U	10 U	10 U	24 U	13 U
Hexachloroethane	10	12 U	10 U	10 U	24 U	13 U
Nitrobenzene	10	12 U	10 U	10 U	24 U	13 U
Isophorone	10	12 U	10 U	10 U	24 U	13 U
2-Nitrophenol	10	12 U	10 U	10 U	24 U	13 U
2,4-Dimethylphenol	10	12 U	10 U	10 U	24 U	13 U
bis(2-Chloroethoxy)methane	10	12 U	10 U	10 U	24 U	13 U
2,4-Dichlorophenol	10	12 U	10 U	10 U	24 U	13 U
1,2,4-Trichlorobenzene	10	12 U	10 U	10 U	24 U	13 U
Naphthalene	10	12 U	10 U	10 U	24 U	13 U
4-Chloroaniline	10	12 U	10 U	10 U	24 U	13 U
Hexachlorobutadiene	10	12 U	10 U	10 U	24 U	13 U
4-Chloro-3-Methylphenol	10	12 U	10 U	10 U	24 U	13 U
2-Methylnaphthalene	10	12 U	10 U	10 U	24 U	13 U
Hexachlorocyclopentadiene	10	12 U	10 U	10 U	24 U	13 U
2,4,6-Trichlorophenol	10	12 U	10 U	10 U	24 U	13 U
2,4,5-Trichlorophenol	25	29 U	24 U	26 U	61 U	32 U
2-Chloronaphthalene	10	12 U	10 U	10 U	24 U	13 U
2-Nitroaniline	25	29 U	24 U	26 U	61 U	32 U
Dimethylphthalate	10	12 U	10 U	10 U	24 U	13 U
Acenaphthylene	10	12 U	10 U	10 U	24 U	13 U
2,6-Dinitrotoluene	10	12 U	10 U	10 U	24 U	13 U

Box Number: 4945-104

Table 2
Validation / Summary Table

ANALYTE	SOW-3/90 - II CRQL	SAMPLE LOCATION: MEGDMW9317/11	MEGDMW9318/11	MEGUMW9316/11	MESDEEXX01/11	MESDEEXX02/11
		LAB NUMBER: 13929-002	13929-003	13970-001	13970-006	13929-001
		DATE SAMPLED: 07/13/93	07/13/93	07/14/93	07/14/93	07/13/93
		DATE EXTRACTED: 07/16/93	07/16/93	07/16/93	07/16/93	07/16/93
		DATE ANALYZED: 08/04/93	08/04/93	08/04/93	08/06/93	08/06/93
3-Nitroaniline	25	29 U	24 U	26 U	61 U	32 U
Acenaphthene	10	12 U	10 U	10 U	24 U	13 U
2,4-Dinitrophenol	25	29 U	24 U	26 U	61 U	32 U
4-Nitrophenol	25	29 U	24 U	26 U	61 U	32 U
Dibenzofuran	10	12 U	10 U	10 U	24 U	13 U
2,4-Dinitrotoluene	10	12 U	10 U	10 U	24 U	13 U
Diethylphthalate	10	12 U	10 U	10 U	24 U	13 U
4-Chlorophenyl-phenylether	10	12 U	10 U	10 U	24 U	13 U
Fluorene	10	12 U	10 U	10 U	24 U	13 U
4-Nitroaniline	25	29 U	24 U	26 U	61 U	32 U
4,6-Dinitro-2-methylphenol	25	29 U	24 U	26 U	61 U	32 U
N-Nitrosodiphenylamine	10	12 U	10 U	10 U	24 U	13 U
4-Bromophenyl-phenylether	10	12 U	10 U	10 U	24 U	13 U
Hexachlorobenzene	10	12 U	10 U	10 U	24 U	13 U
Pentachlorophenol	25	29 U	24 U	26 U	61 U	32 U
Phenanthrene	10	12 U	10 U	10 U	24 U	13 U
Anthracene	10	12 U	10 U	10 U	24 U	13 U
Carbazole	10	12 U	10 U	10 U	24 U	13 U
Di-n-butylphthalate	10	12 U	10 U	10 U	24 U	13 U
Fluoranthene	10	12 U	10 U	10 U	24 U	13 U
Pyrene	10	12 U	10 U	10 U	24 U	13 U
Butylbenzylphthalate	10	12 U	10 U	10 U	24 U	13 U
3,3'-Dichlorobenzidine	10	12 U	10 U	10 U	24 U	13 U
Benzo(a)Anthracene	10	12 U	10 U	10 U	24 U	13 U
Chrysene	10	12 U	10 U	10 U	24 U	13 U
bis(2-Ethylhexyl)phthalate	10	12 U	10 U	22	9 J	4 J
Di-n-octylphthalate	10	12 U	10 U	10 U	24 U	13 U
Benzo(b)Fluoranthene	10	12 U	10 U	10 U	24 U	13 U
Benzo(k)Fluoranthene	10	12 U	10 U	10 U	24 U	13 U
Benzo(a)Pyrene	10	12 U	10 U	10 U	24 U	13 U
Indeno(1,2,3-c,d)Pyrene	10	12 U	10 U	10 U	24 U	13 U
Dibenz(a,h)Anthracene	10	12 U	10 U	10 U	24 U	13 U
Benzo(g,h,i)perylene	10	12 U	10 U	10 U	24 U	13 U
Dilution Factor:		1.00	1.00	1.00	1.00	1.00
Sample Volume\Weight (ml\g):		860	1040	960	410	780
Associated Method Blank:		DG113.93	DG113.93	DG113.93	DG113.93	DG113.93
Associated Equipment Blank:		MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	-	-
Associated Field Blank:		-	-	-	-	-

Box Number: 4945-104

PROJECT: NYSEG Mechanicville | Inorganic Aqueous Analysis (ug/L) | 10/19/93

Table 2
Validation / Summary Table

SAMPLE LOCATION:	MEGDMW8601/11		MEGDMW8602/11		MEGDMW86DU/12		MEGDMW8711/11		MEGDMW8713/11		MEGDMW8714/11		MEGDMW8715/11		MEGDMW87DU/11	
LAB NUMBER:	13988-003		13970-002		13988-006		13970-003		13988-002		13988-007		13970-004		13970-005	
DATE SAMPLED:	07/15/93		07/14/93		07/15/93		07/14/93		07/15/93		07/15/93		07/14/93		07/14/93	
ANALYTE	SOW-3/90 - II CRDL															
Aluminum	200	112	J	76.0	J	113	J	348		62.0	J	86.0	J	78.0	J	141	J
Antimony	60	5.0	U	14.5	J	10.1	J	5.0	U	5.0	U	16.7	J	17.0	J	5.0	U
Arsenic	10	NR		NR		NR		NR		NR		NR		NR		NR	
Barium	200	NR		NR		NR		NR		NR		NR		NR		NR	
Beryllium	5	NR		NR		NR		NR		NR		NR		NR		NR	
Cadmium	5	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U
Calcium	5000	NR		NR		NR		NR		NR		NR		NR		NR	
Chromium	10	157		4.0	U	824		5.0	J	4.0	J	4.0	U	4.0	J	4.0	U
Cobalt	50	5.0	U	5.0	U	7.0	J	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Copper	25	7.0	J	4.0	U	23.0	J	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U
Iron	100	3270		191		4360		332		87.0	J	142		103		199	
Lead	3	1.6	J	7.2		1.2	J	18.0		2.1	J	1.0	J	1.0	U	1.2	J
Magnesium	5000	NR		NR		NR		NR		NR		NR		NR		NR	
Manganese	15	629		1200		1630		2040		469		727		369		383	
Mercury	0.2	NR		NR		NR		NR		NR		NR		NR		NR	
Nickel	40	125		8.0	U	150		63.0		8.0	U	8.0	U	8.0	U	8.0	U
Potassium	5000	NR		NR		NR		NR		NR		NR		NR		NR	
Selenium	5	NR		NR		NR		NR		NR		NR		NR		NR	
Silver	10	NR		NR		NR		NR		NR		NR		NR		NR	
Sodium	5000	NR		NR		NR		NR		NR		NR		NR		NR	
Thallium	10	NR		NR		NR		NR		NR		NR		NR		NR	
Vanadium	50	NR		NR		NR		NR		NR		NR		NR		NR	
Zinc	20	26.0		31.0		25.0		42.0		20.0		12.0	J	16.0	J	21.0	
Cyanide	10	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	79.3		10.0	U	NR	
Associated Method Blank:		PBW13929		PBW13929		PBW13929		PBW13929		PBW13929		PBW13929		PBW13929		PBW13929	
Associated Equipment Blank:		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11	
Associated Field Blank:		-		-		-		-		-		-		-		-	

Box Number: 4945-104

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEGDMW9317/11		MEGDMW9318/11		MEGUMW9316/11	
	LAB NUMBER:	13929-002		13929-003		13970-001	
	DATE SAMPLED:	07/13/93		07/13/93		07/14/93	
ANALYTE	SOW-3/90 - II CRDL						
Aluminum	200	182000		1020		20100	
Antimony	60	5.0	U	5.0	U	5.0	U
Arsenic	10	NR		NR		NR	
Barium	200	NR		NR		NR	
Beryllium	5	NR		NR		NR	
Cadmium	5	4.0	U	4.0	U	4.0	U
Calcium	5000	NR		NR		NR	
Chromium	10	272		5.0	J	33.0	
Cobalt	50	117		5.0	U	13.0	J
Copper	25	349		4.0	U	30.0	
Iron	100	306000		1280		18800	
Lead	3	142		3.8		22.2	
Magnesium	5000	NR		NR		NR	
Manganese	15	5750		688		1100	
Mercury	0.2	NR		NR		NR	
Nickel	40	284		8.0	U	19.0	J
Potassium	5000	NR		NR		NR	
Selenium	5	NR		NR		NR	
Silver	10	NR		NR		NR	
Sodium	5000	NR		NR		NR	
Thallium	10	NR		NR		NR	
Vanadium	50	NR		NR		NR	
Zinc	20	879		46.0		93.0	
Cyanide	10	65.9		19.1		10.0	U
Associated Method Blank:		PBW13929		PBW13929		PBW13929	
Associated Equipment Blank:		MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11	
Associated Field Blank:		-		-		-	

Box Number: 4945-104

Table 2
Validation / Summary Table

SAMPLE LOCATION:		MEGDMW8714/11	MEGDMW9317/11	MEGDMW9318/11
LAB NUMBER:		13988-007	13929-002	13929-003
DATE SAMPLED:		07/15/93	07/13/93	07/13/93
ANALYTE	RL			
Amenable Cyanide	10	10 U	10 U	10 U
Iron Cyanide	20	198	20 U	22.5
Associated Method Blank:		-	-	-
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-

Box Number: 4945-103

PROJECT: NYSEG Mechanicville

Dissolved Inorganic Aqueous Analysis (ug/L)

12/21/93

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEGDMW8601/11	MEGDMW8602/11	MEGDMW86DU/12	MEGDMW8711/11	MEGDMW8713/11	MEGDMW8714/11	MEGDMW8715/11	MEGDMW87DU/11
	LAB NUMBER:	D13988-003	D13970-002	D13988-006	D13970-003	D13988-002	D13988-007	D13970-004	D13970-005
	DATE SAMPLED:	07/15/93	07/14/93	07/15/93	07/14/93	07/15/93	07/15/93	07/14/93	07/14/93
ANALYTE	SOW-3/90 - II CRDL								
Aluminum	200	52.0 J	54.0 J	48.0 U	48.0 U	48.0 U	75.0 J	48.0 U	48.0 U
Antimony	60	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Arsenic	10	NR	NR	NR	NR	NR	NR	NR	NR
Barium	200	NR	NR	NR	NR	NR	NR	NR	NR
Beryllium	5	NR	NR	NR	NR	NR	NR	NR	NR
Cadmium	5	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Calcium	5000	NR	NR	NR	NR	NR	NR	NR	NR
Chromium	10	4.0 J	4.0 U	4.0 J	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Cobalt	50	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Copper	25	4.0 U	4.0 U	7.0 J	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Iron	100	92.0 J	8.0 U	46.0 J	56.0 J	52.0 J	79.0 J	8.0 J	8.0 U
Lead	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Magnesium	5000	NR	NR	NR	NR	NR	NR	NR	NR
Manganese	15	123	1080	128	2170	518	787	403	403
Mercury	0.2	NR	NR	NR	NR	NR	NR	NR	NR
Nickel	40	41.0	8.0 U	33.0 J	64.0	8.0 U	8.0 U	8.0 U	8.0 U
Potassium	5000	NR	NR	NR	NR	NR	NR	NR	NR
Selenium	5	NR	NR	NR	NR	NR	NR	NR	NR
Silver	10	NR	NR	NR	NR	NR	NR	NR	NR
Sodium	5000	NR	NR	NR	NR	NR	NR	NR	NR
Thallium	10	NR	NR	NR	NR	NR	NR	NR	NR
Vanadium	50	NR	NR	NR	NR	NR	NR	NR	NR
Zinc	20	2.0 U	2.0 J	5.0 J	3.0 J	12.0 J	2.0 J	2.0 U	9.0 J
Cyanide	10	NR	NR	NR	NR	NR	NR	NR	NR
Associated Method Blank:		PBW13929	PBW13929	PBW13929	PBW13929	PBW13929	PBW13929	PBW13929	PBW13929
Associated Equipment Blank:		MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11
Associated Field Blank:		-	-	-	-	-	-	-	-

Box Number: 4945-104

Table 2
Validation / Summary Table

		SAMPLE LOCATION:	MEGDMW9317/11		MEGDMW9318/11		MEGUMW9316/11	
		LAB NUMBER:	D13929-002		D13929-003		D13970-001	
		DATE SAMPLED:	07/13/93		07/13/93		07/14/93	
ANALYTE	SOW-3/90 - II CRDL							
Aluminum	200		86.0	J	97.0	J	55.0	J
Antimony	60		5.0	U	5.0	U	5.0	U
Arsenic	10		NR		NR		NR	
Barium	200		NR		NR		NR	
Beryllium	5		NR		NR		NR	
Cadmium	5		4.0	U	4.0	U	4.0	U
Calcium	5000		NR		NR		NR	
Chromium	10		4.0	U	4.0	U	4.0	U
Cobalt	50		5.0	U	5.0	U	5.0	U
Copper	25		20.0	J	7.0	J	4.0	U
Iron	100		43.0	J	29.0	J	58.0	J
Lead	3		1.0	U	1.0	U	1.0	U
Magnesium	5000		NR		NR		NR	
Manganese	15		2320		709		910	
Mercury	0.2		NR		NR		NR	
Nickel	40		8.0	U	8.0	U	8.0	U
Potassium	5000		NR		NR		NR	
Selenium	5		NR		NR		NR	
Silver	10		NR		NR		NR	
Sodium	5000		NR		NR		NR	
Thallium	10		NR		NR		NR	
Vanadium	50		NR		NR		NR	
Zinc	20		2.0	U	6.0	J	2.0	U
Cyanide	10		NR		NR		NR	
Associated Method Blank:			PBW13929		PBW13929		PBW13929	
Associated Equipment Blank:			MEGXMWXXFB/11		MEGXMWXXFB/11		MEGXMWXXFB/11	
Associated Field Blank:			-		-		-	

Box Number: 4945-104

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEGDMW8601/11	MEGDMW8602/11	MEGDMW86DU/12	MEGDMW8711/11	MEGDMW8713/11	MEGDMW8714/11	MEGDMW8715/11	MEGDMW87DU/11
	LAB NUMBER:	13988-003	13970-002	13988-006	13970-003	13988-002	13988-007	13970-004	13970-005
	DATE SAMPLED:	07/15/93	07/14/93	07/15/93	07/14/93	07/15/93	07/15/93	07/14/93	07/14/93
ANALYTE	RL								
Turbidity	0.2	1.1	0.70	1.3	5.8	33	33	4.3	4.6
Associated Method Blank:		-	-	-	-	-	-	-	-
Associated Equipment Blank:		MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11
Associated Field Blank:		-	-	-	-	-	-	-	-

Box Number: 4945-104

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	MEGDMW9317/11	MEGDMW9318/11	MEGUMW9316/11
	LAB NUMBER:	13929-002	13929-003	13970-001
	DATE SAMPLED:	07/13/93	07/13/93	07/14/93
ANALYTE	RL			
Turbidity	0.2	4600	6.2	1100
Associated Method Blank:		-	-	-
Associated Equipment Blank:		MEGXMWXXFB/11	MEGXMWXXFB/11	MEGXMWXXFB/11
Associated Field Blank:		-	-	-

Box Number: 4945-104

Table 2
Validation / Summary Table

ANALYTE	SOW-3/90 - II CRQL	SAMPLE LOCATION: METDEEXX01/11	METDEEXX02/11	METDEEXX03/11	METDEEXX04/11	METDEEXX05/11	METDEEXX06/11	METDEEXXDU/11
		LAB NUMBER: 13244-001	13244-002	13244-003	13244-007	13244-008 #	13244-009	13244-006
		DATE SAMPLED: 05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93
		DATE ANALYZED: 05/26/93	05/26/93	05/26/93	05/27/93	05/27/93	05/28/93	05/27/93
Chloromethane	10	12 U	13 U	12 U	17 U	4 J	12 U	12 U
Bromomethane	10	12 U	13 U	12 U	17 U	12 U	12 U	12 U
Vinyl Chloride	2	12 U	13 U	12 U	17 U	12 U	12 U	12 U
Chloroethane	10	12 U	13 U	12 U	17 U	12 U	12 U	12 U
Methylene Chloride	5	5 J	6	6	6 J	4 J	4 J	6
Acetone	10	12	12 J	5 J	8 J	4 J	4 J	12
Carbon Disulfide	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,1-Dichloroethene	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,1-Dichloroethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,2-Dichloroethene (total)	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Chloroform	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,2-Dichloroethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
2-Butanone	10	12 U	13 U	12 U	17 U	12 UJ	12 U	12 U
1,1,1-Trichloroethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Carbon Tetrachloride	3	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Bromodichloromethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,2-Dichloropropane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
cis-1,3-Dichloropropene	2	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Trichloroethene	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Dibromochloromethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,1,2-Trichloroethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Benzene	5	6 U	1 J	2 J	14	6 U	6 U	4 J
trans-1,3-Dichloropropene	2	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Bromoform	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
4-Methyl-2-Pentanone	10	12 U	13 U	12 U	17 U	12 U	12 U	12 U
2-Hexanone	10	12 U	13 U	12 U	17 U	12 U	12 U	12 U
Tetrachloroethene	3	6 U	6 U	6 U	8 U	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane	5	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Toluene	10	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Chlorobenzene	10	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Ethylbenzene	10	6 U	6 U	6 U	3 J	6 U	6 U	3 J
Styrene	10	6 U	6 U	6 U	8 U	6 U	6 U	6 U
Total Xylenes	10	6 U	6 U	6 U	8 U	6 U	6 U	10
Dilution Factor:		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Solids:		81	79	83	61	84	82	85
Sample Volume\Weight (ml\g):		5.00	5.00	5.00	5.00	5.00	5.00	5.00
Associated Method Blank:		QC52693-1	QC52693-1	QC52693-1	QC520793-1	QC520793-1	QC520793-1	QC520793-1
Associated Equipment Blank:		-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-
Associated Trip Blank:		-	-	-	-	-	-	-

Box Number: 4945-102
#: Level IV Validation

PROJECT: NYSEG Mechanicville

Semivolatile Organic Soil Analysis (ug/kg)

08/25/93

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	METDEEXX01/11	METDEEXX02/11	METDEEXX03/11	METDEEXX04/11	METDEEXX05/11	METDEEXX06/11	METDEEXXDU/11
	LAB NUMBER:	13244-001	13244-002	13244-003	13244-007	13244-008 #	13244-009	13244-006
	DATE SAMPLED:	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93
	DATE EXTRACTED:	05/26/93	05/26/93	05/26/93	05/26/93	05/26/93	05/26/93	05/26/93
	DATE ANALYZED:	06/08/93	06/08/93	06/08/93	06/09/93	06/09/93	06/09/93	06/09/93
ANALYTE	SOW-3/90 - II CRQL							
Phenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
bis(2-Chloroethyl)ether	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2-Chlorophenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
1,3-Dichlorobenzene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
1,4-Dichlorobenzene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
1,2-Dichlorobenzene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2-Methylphenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2,2'-oxybis(1-Chloropropane)	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
4-Methylphenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
N-Nitroso-di-n-propylamine	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Hexachloroethane	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Nitrobenzene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Isophorone	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2-Nitrophenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2,4-Dimethylphenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
bis(2-Chloroethoxy)methane	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2,4-Dichlorophenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
1,2,4-Trichlorobenzene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Naphthalene	330	410 U	550 U	3600	550 U	400 U	410 U	2000
4-Chloroaniline	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Hexachlorobutadiene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
4-Chloro-3-Methylphenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2-Methylnaphthalene	330	410 U	430 U	1000	57 J	400 U	410 U	590
Hexachlorocyclopentadiene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2,4,6-Trichlorophenol	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2,4,5-Trichlorophenol	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
2-Chloronaphthalene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
2-Nitroaniline	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
Dimethylphthalate	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Acenaphthylene	330	86 J	66 J	74 J	86 J	400 U	410 U	400 U
2,6-Dinitrotoluene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U

Box Number: 4945-102
#: Level IV Validation

PROJECT: NYSEG Mechanicville

Semivolatile Organic Soil Analysis (ug/kg)

08/25/93

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	METDEEXX01/11	METDEEXX02/11	METDEEXX03/11	METDEEXX04/11	METDEEXX05/11	METDEEXX06/11	METDEEXXDU/11
	LAB NUMBER:	13244-001	13244-002	13244-003	13244-007	13244-008 #	13244-009	13244-006
	DATE SAMPLED:	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93
	DATE EXTRACTED:	05/26/93	05/26/93	05/26/93	05/26/93	05/26/93	05/26/93	05/26/93
	DATE ANALYZED:	06/08/93	06/08/93	06/08/93	06/09/93	06/09/93	06/09/93	06/09/93
ANALYTE	SOW-3/90 - II CRQL							
3-Nitroaniline	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
Acenaphthene	330	410 U	860	1600	660	71 J	40 J	840
2,4-Dinitrophenol	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
4-Nitrophenol	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
Dibenzofuran	330	410 U	430 U	80 J	550 U	400 U	410 U	400 U
2,4-Dinitrotoluene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Diethylphthalate	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
4-Chlorophenyl-phenylether	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Fluorene	330	410 U	210 J	420	290 J	74 J	410 U	230 J
4-Nitroaniline	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
4,6-Dinitro-2-methylphenol	800	2000 U	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
N-Nitrosodiphenylamine	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
4-Bromophenyl-phenylether	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Hexachlorobenzene	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Pentachlorophenol	800	110 J	2100 U	2000 U	2800 U	2000 U	2000 U	2000 U
Phenanthrene	330	64 J	380 J	460	790	820	410 U	390 J
Anthracene	330	410 U	79 J	95 J	3300	130 J	410 U	91 J
Carbazole	330	410 U	430 U	410 U	550 U	120 J	410 U	400 U
Di-n-butylphthalate	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Fluoranthene	330	120 J	150 J	190 J	490 J	1300	80 J	180 J
Pyrene	330	140 J	210 J	240 J	510 J	1100	410 U	180 J
Butylbenzylphthalate	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
3,3'-Dichlorobenzidine	330	410 U	430 U	410 U	550 U	400 U	410 U	400 U
Benzo(a)Anthracene	330	58 J	81 J	100 J	200 J	510	410 U	72 J
Chrysene	330	90 J	95 J	110 J	240 J	670	410 U	77 J
bis(2-Ethylhexyl)phthalate	330	240 J	430 U	140 J	300 J	420	280 J	400 U
Di-n-octylphthalate	330	410 U	430 U	410 U	550 U	400 UJ	410 U	400 U
Benzo(b)Fluoranthene	330	110 J	88 J	120 J	160 J	400 U	410 U	400 U
Benzo(k)Fluoranthene	330	410 U	430 U	410 U	550 U	460	410 U	400 U
Benzo(a)Pyrene	330	170 J	82 J	120 J	180 J	490	410 U	61 J
Indeno(1,2,3-c,d)Pyrene	330	120 J	81 J	72 J	140 J	330 J	410 U	41 J
Dibenz(a,h)Anthracene	330	410 U	430 U	410 U	550 U	120 J	410 U	400 U
Benzo(g,h,i)perylene	330	110 J	430 U	100 J	99 J	150 J	410 U	400 U
Dilution Factor:		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Solids:		81	78	82	60	84	82	84
Sample Volume\Weight (ml\g):		30.0	30.0	30.0	30.1	30.0	30.0	30.0
Associated Method Blank:		AI21193	AI21193	AI21193	AI21193	AI21193	AI21193	AI21193
Associated Equipment Blank:		-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-

Box Number: 4945-102
#: Level IV Validation

PROJECT: NYSEG Mechanicville

Inorganic Soil Analysis (mg/kg)

08/26/93

Table 2
Validation / Summary Table

ANALYTE	SOW-3/90 - II CRDL	LOCATION: SD-1 (0-1FT)	SD-2 (0-1FT)	SD-3 (0-1FT)	SD-4 (0-1FT)	SD-5 (0-1FT)	SD-6 (0-1FT)	SD-3DUP(0-1FT)
		ISIS ID: METDEEXX01/11	METDEEXX02/11	METDEEXX03/11	METDEEXX04/11	METDEEXX05/11	METDEEXX06/11	METDEEXXDU/11
		LAB NUMBER: 13244-001	13244-002	13244-003	13244-007	13244-008 #	13244-009	13244-006
		DATE SAMPLED: 05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93
Aluminum	40	5640	5020	7540	6550	5000	6390	6390
Antimony	12	0.30 U	0.37 U	0.36 U	0.34 U	0.32 U	0.35 U	0.33 U
Arsenic	2	NR	NR	NR	NR	NR	NR	NR
Barium	40	NR	NR	NR	NR	NR	NR	NR
Beryllium	1	NR	NR	NR	NR	NR	NR	NR
Cadmium	1	0.40 U	0.49 U	0.48 U	0.46 U	0.43 U	0.47 U	0.44 U
Calcium	1000	NR	NR	NR	NR	NR	NR	NR
Chromium	2	8.8	7.9	11.5	10.6	10.7	12.0	10.8
Cobalt	10	5.0	4.3 J	7.9	5.8	6.7	5.8	5.8
Copper	5	19.7	17.5	20.0	15.5	26.5	18.1	16.0
Iron	20	14300	13900	23100	16400	16300	16900	16600
Lead	0.6	13.5	155	14.6	12.5	36.2	11.7	14.5
Magnesium	1000	NR	NR	NR	NR	NR	NR	NR
Manganese	3	337	236	368	278	412	270	309
Mercury	0.04	NR	NR	NR	NR	NR	NR	NR
Nickel	8	12.2	9.5	16.0	13.4	12.7	13.2	13.7
Potassium	1000	NR	NR	NR	NR	NR	NR	NR
Selenium	1	NR	NR	NR	NR	NR	NR	NR
Silver	2	NR	NR	NR	NR	NR	NR	NR
Sodium	1000	NR	NR	NR	NR	NR	NR	NR
Thallium	2	NR	NR	NR	NR	NR	NR	NR
Vanadium	10	NR	NR	NR	NR	NR	NR	NR
Zinc	4	64.4	74.9	88.6	65.7	96.3 J	55.7	54.9
Cyanide	2	2.6 U	3.0 U	2.3 U	3.0 U	2.9 U	2.9 U	2.6 U
Percent Solids:		83	80	83	83	84	83	86
Associated Method Blank:		PBS13244	PBS13244	PBS13244	PBS13244	PBS13244	PBS13244	PBS13244
Associated Equipment Blank:		-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-

Site: SEDIMENT SAMPLES
B = less than CRDL U = not detected * = duplicate analysis not met N = spike recovery not met W = post digestion spike not met
J = estimated

Table 2
Validation / Summary Table

	LOCATION:	SD-1 (0-1 FT)	SD-2 (0-1 FT)	SD-3 (0-1 FT)	SD-4 (0-1 FT)	SD-5 (0-1 FT)	SD-6 (0-1 FT)	SD-3DUP (0-1FT)
	ISIS ID:	METDEEXX01/11	METDEEXX02/11	METDEEXX03/11	METDEEXX04/11	METDEEXX05/11	METDEEXX06/11	METDEEXXDU/11
	LAB NUMBER:	13244-001	13244-002	13244-003	13244-007	13244-008	13244-009	13244-006
	DATE SAMPLED:	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93	05/21/93
ANALYTE	RL							
Reactive Cyanide	100	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Reactive Sulfide	100	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Associated Method Blank:		13244	13244	13244	13244	13244	13244	13244
Associated Equipment Blank:		-	-	-	-	-	-	-
Associated Field Blank:		-	-	-	-	-	-	-

Site: SEDIMENT SAMPLES
U = not detected

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	COMP-3	COMP-4
	LAB NUMBER:	13905-003	13905-004
	DATE SAMPLED:	07/12/93	07/12/93
	DATE ANALYZED:	07/23/93	07/23/93
ANALYTE	RL		
Vinyl Chloride	10	10 U	10 U
1,1-Dichloroethene	5	5 U	5 U
1,2-Dichloroethane	5	5 U	5 U
2-Butanone	10	10 U	10 U
Carbon Tetrachloride	5	5 U	5 U
Trichloroethene	5	5 U	5 U
Benzene	5	5 U	5 U
Tetrachloroethene	5	5 U	5 U
Chlorobenzene	5	5 U	5 U
Dilution Factor:		1	1
Sample Volume\Weight (ml\g):		5	5
Associated Method Blank:		BN037.93	BN037.93
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

Box Number: 4945-103

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	COMP-3	COMP-4
	LAB NUMBER:	13905-003	13905-004
	DATE SAMPLED:	07/12/93	07/12/93
	DATE EXTRACTED:	07/19/93	07/19/93
	DATE ANALYZED:	08/02/93	08/02/93
ANALYTE	RL		
Pyridine	98	98 U	100 U
1,4-Dichlorobenzene	10	10 U	10 U
2-Methylphenol	10	10 U	10 U
3 & 4-Methylphenol	10	10 U	10 U
Hexachloroethane	98	98 U	100 U
Nitrobenzene	10	10 U	10 U
Hexachlorobutadiene	10	10 U	10 U
2,4,6-Trichlorophenol	10	10 U	10 U
2,4,5-Trichlorophenol	10	10 U	10 U
2,4-Dinitrotoluene	10	10 U	10 U
Hexachlorobenzene	10	10 U	10 U
Pentachlorophenol	5	5 U	5 U
Dilution Factor:		1	1
Sample Volume\Weight (ml\g):		1015	1000
Associated Method Blank:		AI44193	AI44193
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

Box Number: 4945-103

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	COMP-3	COMP-4
	LAB NUMBER:	13905-003	13905-004
	DATE SAMPLED:	07/12/93	07/12/93
ANALYTE	RL		
Arsenic	100	100 U	100 U
Barium	2	647 J	1120
Cadmium	4	5 J	4 U
Chromium	4	7 J	4 U
Lead	38	38 U	46 J
Mercury	0.1	0.1 U	0.1 U
Selenium	1	20 U	20 U
Silver	7	7 U	7 U
Associated Method Blank:		TCLP13905	TCLP13905
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

Box Number: 4945-103
TCLP Analysis

Table 2
Validation / Summary Table

	SAMPLE LOCATION:	COMP-3	COMP-4
	LAB NUMBER:	13905-003	13905-004
	DATE SAMPLED:	07/12/93	07/12/93
ANALYTE	RL		
Cyanide	1	2.9 U	3.1 U
Associated Method Blank:		TCLP13905	TCLP13905
Associated Equipment Blank:		-	-
Associated Field Blank:		-	-

Box Number: 4945-103
TCLP analysis

Table 2
Validation / Summary Table

SAMPLE LOCATION:		MEEISHXX21/12	COMP-3	COMP-4
LAB NUMBER:		13905-002	13905-003	13905-004
DATE SAMPLED:		07/12/93	07/12/93	07/12/93
ANALYTE	RL			
Reactive Cyanide	100	100 U	100 U	100 U
Reactive Sulfide	100	100 U	100 U	100 U
Associated Method Blank:		MB13905CN	MB13905CN	MB13905CN
Associated Equipment Blank:		-	-	-
Associated Field Blank:		-	-	-

Box Number: 4945-103

APPENDIX D

Seismic Refraction Survey Report

Former Coal Gasification Site
Mechanicville, New York

Introduction

A seismic survey was conducted in the Price Chopper parking lot adjacent to the NYSEG Former Coal Gasification Site in Mechanicville, New York. The survey was conducted to investigate for the presence of a bedrock low hypothesized to exist and to guide the location of a monitoring well pair (MW-17 and MW-18). Seismic methods are often employed to map bedrock surfaces and structural features. Seismic surveying was conducted on 17 May 1993. Find attached to this memorandum seismic data reports for each seismic line.

Instrumentation and General Survey Information

Three 120 foot long seismic lines were shot in the Price Chopper parking lot (located between the Price Chopper and North Central Avenue. Figure 4-1 in the RI illustrates the location of each seismic spread. A Geometrics ES-2515F seismograph was used for seismic data collection. A 12-channel geophone array was used where geophone spacing was 10 feet. A 10 pound sledgehammer was used as an energy source, an offset of 5 feet was used. Analog strip chart recordings were obtained and interpreted in the field. First-break pick analysis and preliminary depth calculations were also made in the field. Seismic data was later processed using various applications software. In order to minimize the adverse effects of cultural noise (primarily vehicular traffic), the survey was conducted between 2:00 a.m. and 4:30 a.m.

Seismic Survey Results

Tables D-1, D-2, and D-3 in the seismic data reports present calculated depths to bedrock beneath each seismic profile line. Figures D-1 through D-3 show these data plotted as depth

to bedrock. Seismic velocities calculated for bedrock ranged between 9,000 and 15,000 feet per second (ft/sec). These values are indicative of weathered and competent shale bedrock. Seismic Line 1 suggests that bedrock lies between 23 and 25 feet below ground surface (bgs). Seismic Line 2 shows that a slight bedrock high may exist paralleling the general structural trend of nearby outcrop. Seismic data indicates that bedrock is found between 20 and 21 feet bgs along Seismic Line 2. Data collected from Seismic Lines 1 and 2 correlate well with the depth of bedrock determined during the subsequent construction of MW-17 and MW-18 (22.5 feet bgs). The bedrock surface appears deeper beneath Seismic Line 3 ranging from 25 to 28 feet bgs.

DATA FILE: c:\temp\msrl1.dat PRINT FILE: c:\temp\msrl1.prn RUN DATE AND TIME: 12-18-1993 at 13:04

TITLE: NYSEG/Mechanicville/Seismic Line 1, 17 May 1993, 0215-0254 hrs

PROGRAM CONTROL DATA — Printer Plot Scales — Datum — Override Values — Special Control Parameters

Sprds	Exit	Layers	Elev V-Over	Horiz ft/col	Time ft/row	Time ms/col	Point 1 Elev	Point 2 X-Loc	Point 2 Elev	Equation X-Loc	Equation Slope	Equation Intcpt	Trace Off BLim	L TLim	Print	SP Dip
1	6	2	0	.0	.0	.0	.0	.0	.0	.0	.0000	.0	.50	10.0	0	0 0

SHOTPOINT AND GEOPHONE INPUT DATA

Spread A, 3 Shotpoints, 12 Geophones, X-Shift = 0.0, X-True = 1

SP	Elev	X-Loc	Y-Loc	Depth	Uphole T	Fudge T	End SP
S	98.5	.0	.0	.0	.0	.0	1
T	98.5	60.0	.0	.0	.0	.0	0
U	98.5	120.0	.0	.0	.0	.0	2

Arrival Times + Fudge T and Layers represented

Geo	Elev	X-Loc	Y-Loc	SP S —T—	SP S —L	SP T —T—	SP T —L	SP U
1	98.5	5.0	.0	1.0	0	29.5	2	36.0 2
2	98.5	15.0	.0	1.8	0	28.5	1	36.3 2
3	98.5	25.0	.0	4.0	0	22.0	1	36.0 2
4	98.5	35.0	.0	25.3	1	16.8	1	35.0 2
5	98.5	45.0	.0	29.5	1	2.5	0	34.0 2
6	98.5	55.0	.0	30.0	2	2.0	1	33.0 2
7	98.5	65.0	.0	30.3	2	2.0	1	32.0 2
8	98.5	75.0	.0	31.5	2	2.5	0	31.0 1
9	98.5	85.0	.0	32.8	2	3.8	0	25.0 1
10	98.5	95.0	.0	33.8	2	19.0	1	5.5 0
11	98.5	105.0	.0	35.0	2	29.3	1	2.3 0
12	98.5	115.0	.0	35.5	2	30.0	2	1.8 1

Layer 1 Velocity V for direct rays and direct distances DD

Spread A	SP	Geo	DD	V	Avg V
S	4	35.0	1386.		
S	5	45.0	1525.		
				1456.	
T	2	45.0	1579.		
T	3	35.0	1591.		
T	4	25.0	1493.		
T	6	5.0	2500.		
T	7	5.0	2500.		
T	10	35.0	1842.		
T	11	45.0	1538.		
				1863.	
U	8	45.0	1452.		
U	9	35.0	1400.		
U	12	5.0	2857.		
				1903.	

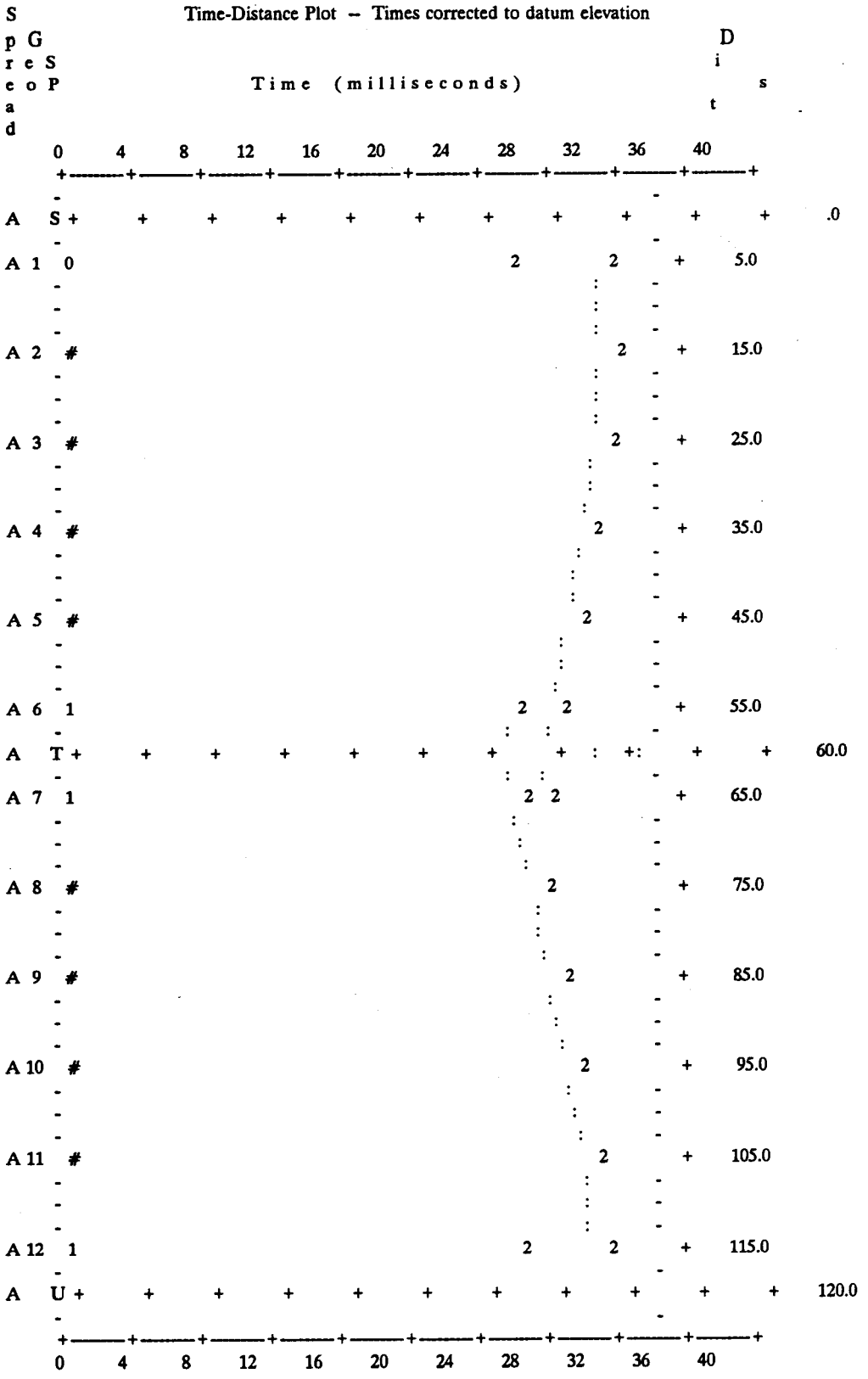
Wtd Avg Velocity computed for Layer 1 = 1805.

Arrival times Td corrected to datum. (Datum Elev = 98.5 + .0000X)

Spread A SP S SP T SP U

Datum Elev 98.5 98.5 98.5

Geo	.	X-Loc	Cor T	.0	.0	.0
—	.	—— ——		–Td–	–Td–	–Td–
1	98.5	5.0	.0	.0	29.5	36.0
2	98.5	15.0	.0	.0	.0	36.3
3	98.5	25.0	.0	.0	.0	36.0
4	98.5	35.0	.0	.0	.0	35.0
5	98.5	45.0	.0	.0	.0	34.0
6	98.5	55.0	.0	30.0	.0	33.0
7	98.5	65.0	.0	30.3	.0	32.0
8	98.5	75.0	.0	31.5	.0	.0
9	98.5	85.0	.0	32.8	.0	.0
10	98.5	95.0	.0	33.8	.0	.0
11	98.5	105.0	.0	35.0	.0	.0
12	98.5	115.0	.0	35.5	30.0	.0


Time-Distance Plot -- Times corrected to datum elevation
Spread
Geophone
Shot Point
Time (milliseconds)
Distance
0 4 8 12 16 20 24 28 32 36 40
A S
A 1
A 2
A 3
A 4
A 5
A 6
A T
A 7
A 8
A 9
A 10
A 11
A 12
A U
.0
5.0
15.0
25.0
35.0
45.0
55.0
60.0
65.0
75.0
85.0
95.0
105.0
115.0
120.0

PRINTER PLOT SCALES

Time: .40 ms/col
Dist: 2.50 ft/row

Layer 2 Velocity V and Intercept time Ti computed by regression:

Spread A V	Ti	Geos	SP	Geos	Ti	V	Avg V	Avg Ti	Pts
000.	.0	0 0	S	6 12	24.1	9912.	9912.	24.1	7.
13659.	28.4	1 7	U	12 12	.0	000.	13659.	28.4	7.

Avg = 11487. for 14. Pts

Layer 2 Velocity V, Avg dTi and Eps computed by Hobson-Overton method:

Spread A					5 Highest Eps									
SPs	Geos	V	AdTi	SE Ep	Eps	Geo	Eps	Geo	Eps	Geo	Eps	Geo	Eps	Geo
S U	6 7	16000.	-2.4	.000	.000	0	.000	0	.000	0	.000	0	.000	0

Avg = 16000. for 2. Pts

Wtd Avg Velocity computed for Layer 2 = 12490.

Arrival times Tc corrected to top of Layer 2, and Elev of top of Layer 2:

Spread A				SP S	SP T	SP U
Elev				75.5	74.2	73.1
Geo	.	X-Loc	Cor T	12.7	13.5	14.1
				–Tc–	–Tc–	–Tc–
1	75.4	5.0	12.8	-24.5	3.3	9.1
2	74.2	15.0	13.5	-24.4	1.6	8.7
3	73.3	25.0	14.0	-22.7	-5.4	7.9
4	73.0	35.0	14.1	-1.6	-10.8	6.8
5	73.6	45.0	13.8	3.0	-24.8	6.1
6	74.1	55.0	13.5	3.8	-25.0	5.4
7	74.3	65.0	13.4	4.1	-24.9	4.5
8	73.7	75.0	13.7	5.1	-24.7	3.2
9	73.3	85.0	14.0	6.1	-23.7	-3.1
10	72.9	95.0	14.2	6.8	-8.7	-22.8
11	72.9	105.0	14.2	8.1	1.6	-26.0
12	73.2	115.0	14.0	8.8	2.5	-26.4

NYSEG/Mechanicville/Seismic Line 1, 17 May 1993, 0215-0254 hrs

Spread A Points of emergence of refracted rays below target geophones:

Geo		SP S	SP T	SP U
		——L	——L	——L
1	X-Loc	.0 0	5.2 2	5.2 2
	Elev	.0	75.5	75.5
2	X-Loc	.0 0	.0 1	15.9 2
	Elev	.0	.0	74.1
3	X-Loc	.0 0	.0 1	28.1 2
	Elev	.0	.0	73.0
4	X-Loc	.0 1	.0 1	39.9 2
	Elev	.0	.0	73.1
5	X-Loc	.0 1	.0 0	51.0 2
	Elev	.0	.0	73.9
6	X-Loc	53.7 2	.0 1	58.9 2
	Elev	74.1	.0	74.3
7	X-Loc	61.8 2	.0 1	67.1 2
	Elev	74.3	.0	74.3
8	X-Loc	69.9 2	.0 0	.0 1
	Elev	74.1	.0	.0
9	X-Loc	79.6 2	.0 0	.0 1
	Elev	73.5	.0	.0
10	X-Loc	90.2 2	.0 1	.0 0
	Elev	72.9	.0	.0
11	X-Loc	101.6 2	.0 1	.0 0
	Elev	72.8	.0	.0
12	X-Loc	112.4 2	112.4 2	.0 1
	Elev	73.1	73.1	.0

Spread A Points of entry of refracted rays below source shotpoints:

L=2	Right	X-Loc	2.6	63.9	.0
		Elev	75.6	74.4	.0
L=2	Left	X-Loc	.0	56.8	115.6
		Elev	.0	74.3	73.2

TABLE D-1

NYSEG/Mechanicville/Seismic Line 1, 17 May 1993, 0215-0254 hrs

Spread A Depth and Elev of layers directly beneath SPs and Geos:

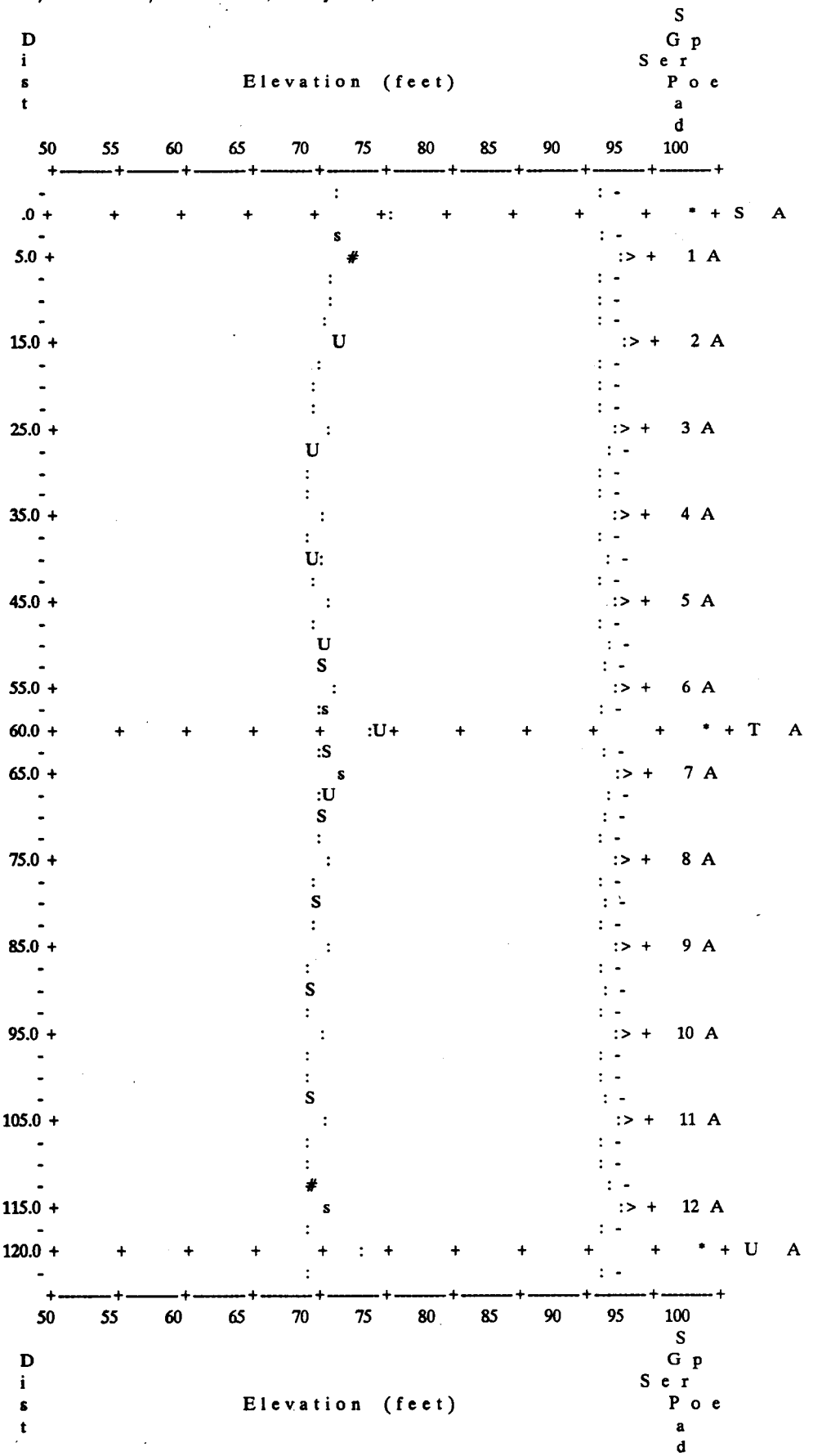
SP	Surface X-Loc	Surface Elev	Layer 2 Depth	Layer 2 Elev
S	.0	98.5	23.0	75.5
T	60.0	98.5	24.3	74.2
U	120.0	98.5	25.4	73.1
Geo				
1	5.0	98.5	23.1	75.4
2	15.0	98.5	24.3	74.2
3	25.0	98.5	25.2	73.3
4	35.0	98.5	25.5	73.0
5	45.0	98.5	24.9	73.6
6	55.0	98.5	24.4	74.1
7	65.0	98.5	24.2	74.3
8	75.0	98.5	24.8	73.7
9	85.0	98.5	25.2	73.3
10	95.0	98.5	25.6	72.9
11	105.0	98.5	25.6	72.9
12	115.0	98.5	25.3	73.2

Velocities used, Spread A

	Layer 1	Layer 2
Vertical	1805.	
Horizontal		12490.

FIGURE D-1

NYSEG/Mechanicville/Seismic Line 1, 17 May 1993, 0215-0254 hrs



PRINTER PLOT SCALES

Elev: .50 ft/col
Dist: 2.50 ft/row

LEGEND

> Geophone Location
* Shotpoint Location
A,B,C Emergent Ray; Source SP A,B,C,...
? Questionable Emergent Ray
s Ray Entrypoint Beneath SP
More Than One Symbol to Plot Here
+ Grid Mark

DATA FILE: c:\temp\msrl2.dat PRINT FILE: c:\temp\msrl2.prn RUN DATE AND TIME: 12-18-1993 at 14:33

TITLE: NYSEG/Mechanicville/Seismic Line 2, 17 May 1993, 0319-0336 hrs

PROGRAM CONTROL DATA — Printer Plot Scales — Datum Point 1 — Datum Point 2 — Override Equation — Values — Special Control Parameters

Sprds	Exit	Layers	Elev V-Over	Horiz ft/col	Time ft/row	Time ms/col	Point 1 Elev	Point 1 X-Loc	Point 2 Elev	Point 2 X-Loc	Override Slope	Override Intcpt	Values BLim	Values TLim	Trace Off	Print	L SP Dip
1	6	2	0	.0	.0	.0	.0	.0	.0	.0	.0000	.0	.50	10.0	0	0	0

SHOTPOINT AND GEOPHONE INPUT DATA

Spread A, 3 Shotpoints, 12 Geophones, X-Shift = 0.0, X-True = 1

SP	Elev	X-Loc	Y-Loc	Depth	Uphole T	Fudge T	End SP
S	98.5	.0	.0	.0	.0	.0	1
T	98.5	60.0	.0	.0	.0	.0	0
U	98.5	120.0	.0	.0	.0	.0	2

Arrival Times + Fudge T and Layers represented

Geo	Elev	X-Loc	Y-Loc	SP S —T—	SP S —L	SP T —T—	SP T —L	SP U
1	98.5	5.0	.0	3.8	1	28.8	2	36.3 2
2	98.5	15.0	.0	6.3	0	28.8	1	36.3 2
3	98.5	25.0	.0	7.5	0	21.5	1	35.5 2
4	98.5	35.0	.0	14.8	0	16.3	1	35.0 2
5	98.5	45.0	.0	28.8	1	3.0	0	31.3 2
6	98.5	55.0	.0	30.0	2	2.0	1	30.3 2
7	98.5	65.0	.0	31.3	2	2.0	1	29.8 2
8	98.5	75.0	.0	32.8	2	5.8	0	29.8 1
9	98.5	85.0	.0	33.8	2	17.0	1	18.0 1
10	98.5	95.0	.0	34.8	2	.0	0	20.5 1
11	98.5	105.0	.0	35.0	2	28.0	1	8.8 1
12	98.5	115.0	.0	37.3	2	30.8	2	.0 0

Layer 1 Velocity V for direct rays and direct distances DD

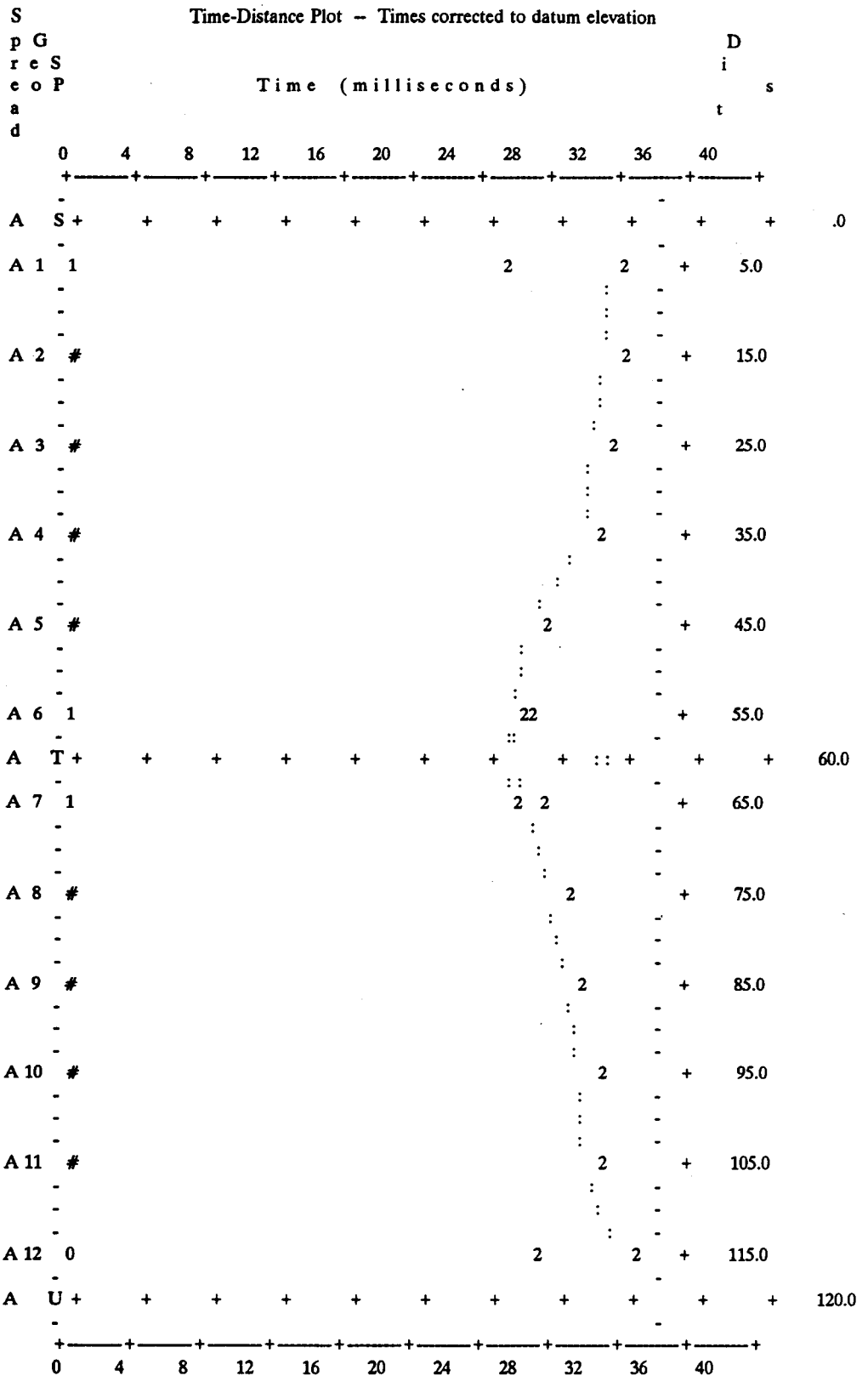
Spread A	SP	Geo	DD	V	Avg V
S	1	5.0	1333.		
S	5	45.0	1565.		
				1449.	
T	2	45.0	1565.		
T	3	35.0	1628.		
T	4	25.0	1538.		
T	6	5.0	2500.		
T	7	5.0	2500.		
T	9	25.0	1471.		
T	11	45.0	1607.		
				1830.	
U	8	45.0	1513.		
U	9	35.0	1944.		
U	10	25.0	1220.		
U	11	15.0	1714.		
				1598.	

Wtd Avg Velocity computed for Layer 1 = 1700.

Arrival times Td corrected to datum. (Datum Elev = 98.5 + .0000X)

Spread A				SP S	SP T	SP U
Datum Elev				98.5	98.5	98.5
Geo	.	X-Loc	Cor T	.0	.0	.0
	.			-Td-	-Td-	-Td-
1	98.5	5.0	.0	.0	28.8	36.3
2	98.5	15.0	.0	.0	.0	36.3
3	98.5	25.0	.0	.0	.0	35.5
4	98.5	35.0	.0	.0	.0	35.0
5	98.5	45.0	.0	.0	.0	31.3
6	98.5	55.0	.0	30.0	.0	30.3
7	98.5	65.0	.0	31.3	.0	29.8
8	98.5	75.0	.0	32.8	.0	.0
9	98.5	85.0	.0	33.8	.0	.0
10	98.5	95.0	.0	34.8	.0	.0
11	98.5	105.0	.0	35.0	.0	.0
12	98.5	115.0	.0	37.3	30.8	.0

NYSEG/Mechanicville/Seismic Line 2, 17 May 1993, 0319-0336 hrs



PRINTER PLOT SCALES

Time: .40 ms/col
Dist: 2.50 ft/row

Layer 2 Velocity V and Intercept time Ti computed by regression:

Spread A V	Ti	Geos	SP	Geos	Ti	V	Avg V	Avg Ti	Pts
000.	.0	0 0	S	6 12	24.0	8960.	8960.	24.0	7.
7832.	22.6	1 7	U	12 12	.0	000.	7832.	22.6	7.

Avg = 8358. for 14. Pts

Layer 2 Velocity V, Avg dTi and Eps computed by Hobson-Overton method:

Spread A SPs	Geos	V	AdTi	SE Ep	5 Highest Eps Eps	Geo	Eps	Geo	Eps	Geo	Eps	Geo	Eps	Geo
S U	6 7	11429.	.6	.000	.000	6	.000	7	.000	0	.000	0	.000	0

Avg = 11429. for 2. Pts

Wtd Avg Velocity computed for Layer 2 = 9041.

Arrival times Tc corrected to top of Layer 2, and Elev of top of Layer 2:

Spread A				SP S	SP T	SP U
Elev				77.4	77.6	78.0
Geo	.	X-Loc	Cor T	12.4	12.3	12.0
				-Tc-	-Tc-	-Tc-
1	77.4	5.0	12.4	-21.1	4.0	11.8
2	76.4	15.0	13.0	-19.2	3.4	11.2
3	75.5	25.0	13.6	-18.5	-4.4	9.9
4	75.9	35.0	13.3	-11.0	-9.4	9.7
5	76.3	45.0	13.0	3.3	-22.3	6.2
6	77.7	55.0	12.2	5.3	-22.6	6.0
7	77.5	65.0	12.4	6.4	-22.7	5.3
8	77.3	75.0	12.5	7.9	-19.0	5.2
9	77.5	85.0	12.4	8.9	-7.7	-6.4
10	77.8	95.0	12.2	10.2	-24.5	-3.7
11	78.0	105.0	12.0	10.5	3.6	-15.3
12	77.9	115.0	12.1	12.7	6.3	-24.1

NYSEG/Mechanicville/Seismic Line 2, 17 May 1993, 0319-0336 hrs

Spread A Points of emergence of refracted rays below target geophones:

Geo		SP S	SP T	SP U
		——L	——L	——L
1	X-Loc	.0 1	6.7 2	6.7 2
	Elev	.0	77.3	77.3
2	X-Loc	.0 0	.0 1	16.5 2
	Elev	.0	.0	76.2
3	X-Loc	.0 0	.0 1	29.0 2
	Elev	.0	.0	75.1
4	X-Loc	.0 0	.0 1	42.6 2
	Elev	.0	.0	76.0
5	X-Loc	.0 1	.0 0	52.4 2
	Elev	.0	.0	77.5
6	X-Loc	54.2 2	.0 1	58.1 2
	Elev	77.7	.0	77.7
7	X-Loc	60.1 2	.0 1	68.5 2
	Elev	77.6	.0	77.3
8	X-Loc	70.4 2	.0 0	.0 1
	Elev	77.3	.0	.0
9	X-Loc	81.4 2	.0 1	.0 1
	Elev	77.3	.0	.0
10	X-Loc	92.1 2	.0 0	.0 1
	Elev	77.7	.0	.0
11	X-Loc	101.6 2	.0 1	.0 1
	Elev	78.0	.0	.0
12	X-Loc	110.5 2	110.5 2	.0 0
	Elev	78.0	78.0	.0

Spread A Points of entry of refracted rays below source shotpoints:

L=2	Right	X-Loc	4.0	63.1	.0
		Elev	77.5	77.5	.0
L=2	Left	X-Loc	.0	55.1	116.4
		Elev	.0	77.8	77.9

TABLE D-2

NYSEG/Mechanicville/Seismic Line 2, 17 May 1993, 0319-0336 hrs

Spread A Depth and Elev of layers directly beneath SPs and Geos:

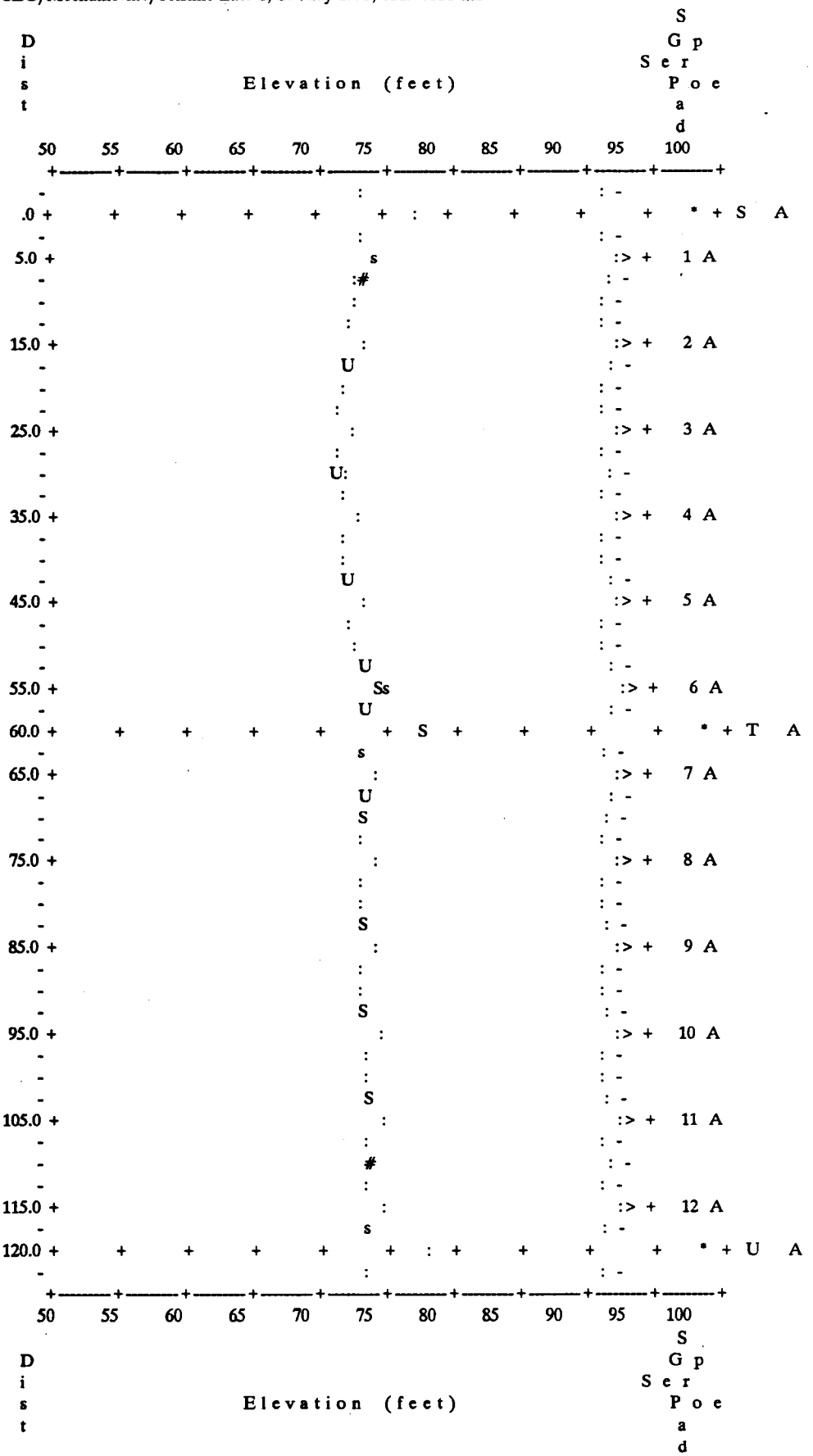
	Surface		Layer 2	
SP	X-Loc	Elev	Depth	Elev
S	.0	98.5	21.1	77.4
T	60.0	98.5	20.9	77.6
U	120.0	98.5	20.5	78.0
Geo				
1	5.0	98.5	21.1	77.4
2	15.0	98.5	22.1	76.4
3	25.0	98.5	23.0	75.5
4	35.0	98.5	22.6	75.9
5	45.0	98.5	22.2	76.3
6	55.0	98.5	20.8	77.7
7	65.0	98.5	21.0	77.5
8	75.0	98.5	21.2	77.3
9	85.0	98.5	21.0	77.5
10	95.0	98.5	20.7	77.8
11	105.0	98.5	20.5	78.0
12	115.0	98.5	20.6	77.9

Velocities used, Spread A

	Layer 1	Layer 2
Vertical	1700.	
Horizontal		9041.

FIGURE D-2

NYSEG/Mechanicville/Seismic Line 2, 17 May 1993, 0319-0336 hrs



PRINTER PLOT SCALES

Elev: .50 ft/col
Dist: 2.50 ft/row

LEGEND

> Geophone Location
* Shotpoint Location
A,B,C Emergent Ray; Source SP A,B,C,...
? Questionable Emergent Ray
s Ray Entrypoint Beneath SP
More Than One Symbol to Plot Here
+ Grid Mark

DATA FILE: c:\temp\msrl3.dat PRINT FILE: c:\temp\msrl3.prn RUN DATE AND TIME: 12-18-1993 at 14:38

TITLE: NYSEG/Mechanicville/Seismic Line 3, 17 May 1993, 0401-0420 hrs

PROGRAM CONTROL DATA — Printer Plot Scales — Datum Point 1 — Datum Point 2 — Override Equation — Values — Special Control Parameters

Sprds	Exit	Layers	Elev V-Over	Horiz ft/col	Time ft/row	ms/col	Point 1 Elev	Point 1 X-Loc	Point 2 Elev	Point 2 X-Loc	Override Slope	Override Intcpt	Values Trace BLim	Values Off TLim	L Print	SP	Dip
1	6	2	0	.0	.0	.0	.0	.0	.0	.0	.0000	.0	.50	10.0	0	0	0

SHOTPOINT AND GEOPHONE INPUT DATA

Spread A, 3 Shotpoints, 12 Geophones, X-Shift = 0.0, X-True = 1

SP	Elev	X-Loc	Y-Loc	Depth	Uphole T	Fudge T	End SP
S	98.5	.0	.0	.0	.0	.0	1
T	98.5	60.0	.0	.0	.0	.0	0
U	98.5	120.0	.0	.0	.0	.0	2

Arrival Times + Fudge T and Layers represented

Geo	Elev	X-Loc	Y-Loc	SP S —T—	L	SP T —T—	L	SP U
1	98.5	5.0	.0	.0	0	31.0	1	37.5 2
2	98.5	15.0	.0	12.5	1	24.5	1	37.0 2
3	98.5	25.0	.0	16.3	1	22.5	1	35.8 2
4	98.5	35.0	.0	24.0	1	3.8	0	34.8 2
5	98.5	45.0	.0	30.0	1	3.0	0	32.5 2
6	98.5	55.0	.0	31.3	2	3.0	1	32.5 2
7	98.5	65.0	.0	31.8	2	2.0	1	32.5 2
8	98.5	75.0	.0	33.3	2	.0	0	27.0 1
9	98.5	85.0	.0	35.8	2	2.0	0	28.5 1
10	98.5	95.0	.0	37.0	2	4.3	0	10.5 1
11	98.5	105.0	.0	36.3	2	22.3	1	7.5 1
12	98.5	115.0	.0	38.8	2	31.0	1	5.0 1

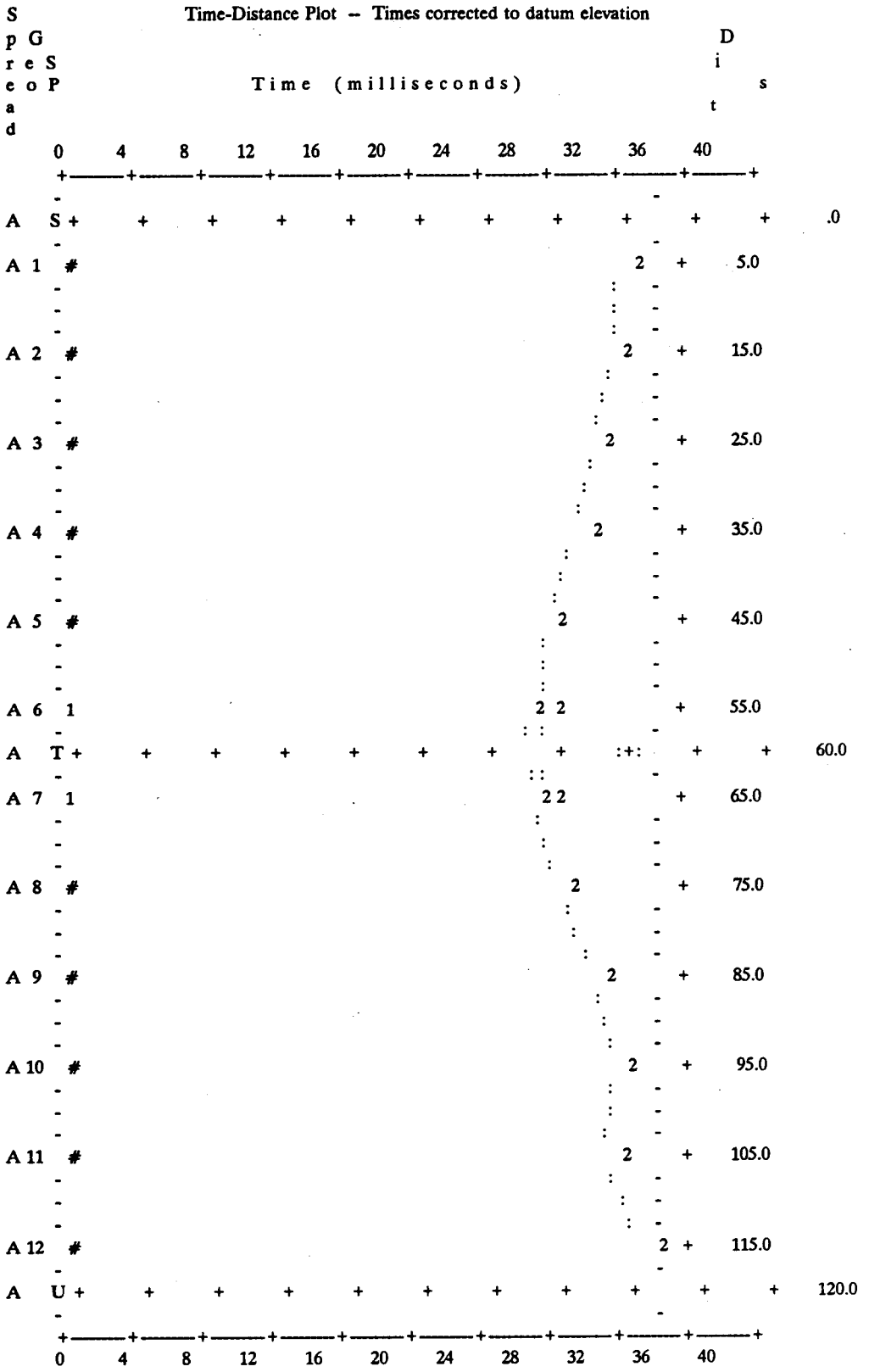
Layer 1 Velocity V for direct rays and direct distances DD

Spread A	SP	Geo	DD	V	Avg V
S	2	15.0	1200.		
S	3	25.0	1538.		
S	4	35.0	1458.		
S	5	45.0	1500.		
				1424.	
T	1	55.0	1774.		
T	2	45.0	1837.		
T	3	35.0	1556.		
T	6	5.0	1667.		
T	7	5.0	2500.		
T	11	45.0	2022.		
T	12	55.0	1774.		
				1876.	
U	8	45.0	1667.		
U	9	35.0	1228.		
U	10	25.0	2381.		
U	11	15.0	2000.		
U	12	5.0	1000.		
				1655.	

Wtd Avg Velocity computed for Layer 1 = 1694.

Arrival times Td corrected to datum. (Datum Elev = 98.5 + .0000X)

Spread A				SP S	SP T	SP U
Datum Elev				98.5	98.5	98.5
Geo	.	X-Loc	Cor T	.0	.0	.0
			-Td-	-Td-	-Td-	
1	98.5	5.0	.0	.0	.0	37.5
2	98.5	15.0	.0	.0	.0	37.0
3	98.5	25.0	.0	.0	.0	35.8
4	98.5	35.0	.0	.0	.0	34.8
5	98.5	45.0	.0	.0	.0	32.5
6	98.5	55.0	.0	31.3	.0	32.5
7	98.5	65.0	.0	31.8	.0	32.5
8	98.5	75.0	.0	33.3	.0	.0
9	98.5	85.0	.0	35.8	.0	.0
10	98.5	95.0	.0	37.0	.0	.0
11	98.5	105.0	.0	36.3	.0	.0
12	98.5	115.0	.0	38.8	.0	.0



PRINTER PLOT SCALES

Time: .40 ms/col
Dist: 2.50 ft/row

Layer 2 Velocity V and Intercept time Ti computed by regression:

Spread A V	Ti	Geos	SP	Geos	Ti	V	Avg V	Avg Ti	Pts
000.	.0	0 0	S	6 12	24.2	7943.	7943.	24.2	7.
10275.	26.4	1 7	U	6 12	.0	000.	10275.	26.4	7.

Avg = 8960. for 14. Pts

Layer 2 Velocity V, Avg dTi and Eps computed by Hobson-Overton method:

Spread A SPs	Geos	V	AdTi	SE Ep	5 Highest Eps Eps	Geo	Eps	Geo	Eps	Geo	Eps	Geo	Eps	Geo
S U	6 7	40000.	-1.0	.000	.000	0	.000	0	.000	0	.000	0	.000	0

Avg = 40000. for 2. Pts

Wtd Avg Velocity computed for Layer 2 = 15858.

Arrival times Tc corrected to top of Layer 2, and Elev of top of Layer 2:

Spread A				SP S	SP T	SP U
Elev				72.9	71.7	70.3
Geo	.	X-Loc	Cor T	15.1	15.8	16.7
				-Tc-	-Tc-	-Tc-
1	72.9	5.0	15.1	-30.2	.0	5.7
2	70.9	15.0	16.3	-18.9	-7.6	4.1
3	71.0	25.0	16.2	-15.1	-9.6	2.9
4	71.1	35.0	16.2	-7.3	-28.3	1.9
5	72.2	45.0	15.5	-.7	-28.4	.3
6	72.1	55.0	15.6	.5	-28.4	.2
7	71.3	65.0	16.1	.6	-29.9	-.2
8	69.4	75.0	17.2	.9	-33.0	-6.8
9	68.7	85.0	17.6	3.0	-31.4	-5.8
10	68.0	95.0	18.0	3.9	-29.6	-24.2
11	69.1	105.0	17.3	3.8	-10.9	-26.5
12	70.4	115.0	16.6	7.0	-1.4	-28.3

NYSEG/Mechanicville/Seismic Line 3, 17 May 1993, 0401-0420 hrs

Spread A Points of emergence of refracted rays below target geophones:

Geo		SP S	SP T	SP U
—		——L	——L	——L
1	X-Loc	.0 0	.0 1	5.7 2
	Elev	.0	.0	73.0
2	X-Loc	.0 1	.0 1	16.3 2
	Elev	.0	.0	70.6
3	X-Loc	.0 1	.0 1	30.5 2
	Elev	.0	.0	70.6
4	X-Loc	.0 1	.0 0	41.8 2
	Elev	.0	.0	72.0
5	X-Loc	.0 1	.0 0	47.3 2
	Elev	.0	.0	72.4
6	X-Loc	51.7 2	.0 1	55.7 2
	Elev	72.3	.0	72.1
7	X-Loc	60.0 2	.0 1	64.4 2
	Elev	71.8	.0	71.3
8	X-Loc	66.3 2	.0 0	.0 1
	Elev	71.1	.0	.0
9	X-Loc	76.5 2	.0 0	.0 1
	Elev	69.1	.0	.0
10	X-Loc	91.9 2	.0 0	.0 1
	Elev	67.6	.0	.0
11	X-Loc	106.0 2	.0 1	.0 1
	Elev	69.2	.0	.0
12	X-Loc	113.7 2	.0 1	.0 1
	Elev	70.3	.0	.0

Spread A Points of entry of refracted rays below source shotpoints:

L=2	Right	X-Loc	2.8	.0	.0
		Elev	73.1	.0	.0
L=2	Left	X-Loc	.0	.0	116.6
		Elev	.0	.0	70.5

TABLE D-3

NYSEG/Mechanicville/Seismic Line 3, 17 May 1993, 0401-0420 hrs

Spread A Depth and Elev of layers directly beneath SPs and Geos:

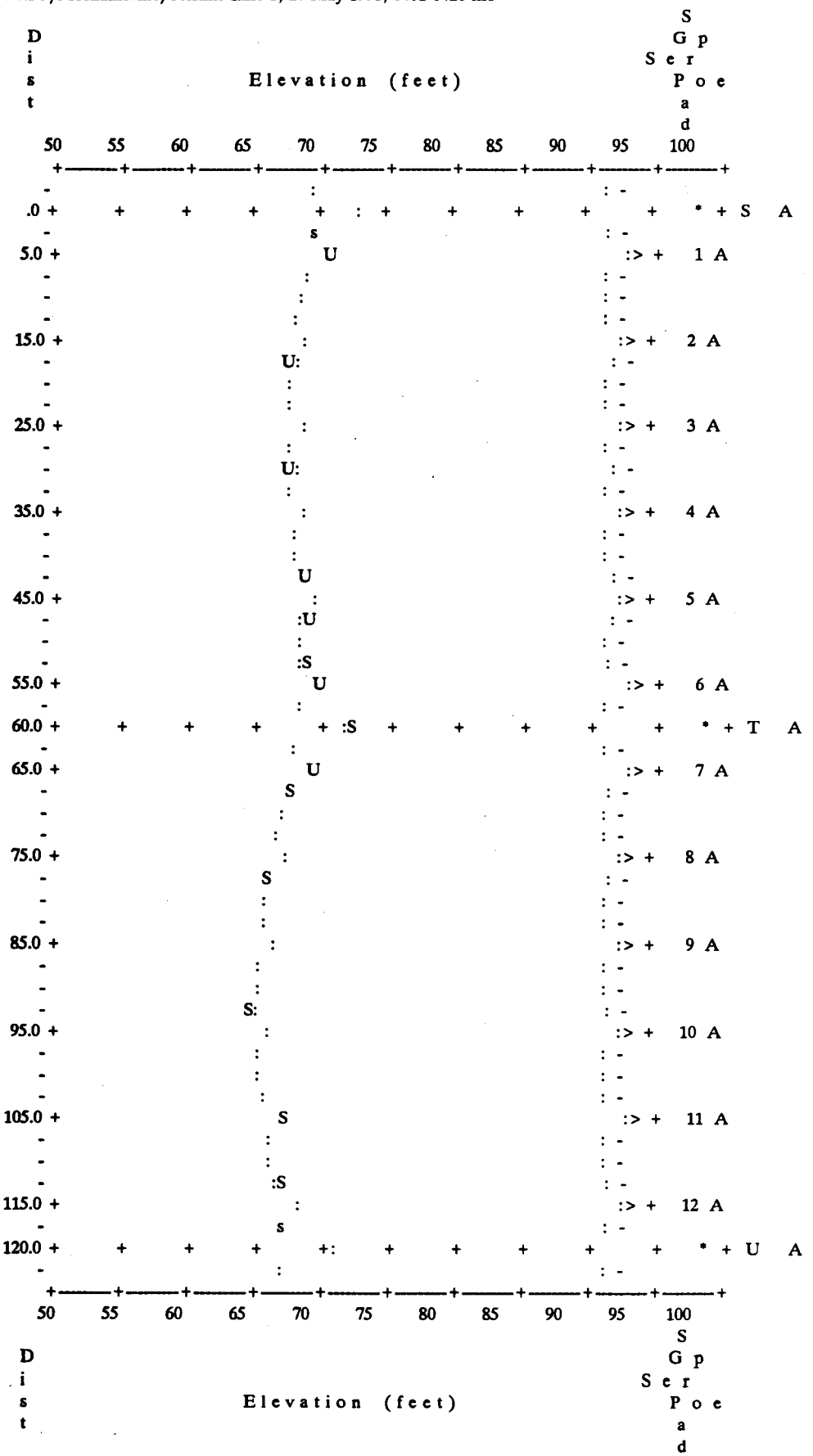
	Surface		Layer 2	
SP	X-Loc	Elev	Depth	Elev
S	.0	98.5	25.6	72.9
T	60.0	98.5	26.8	71.7
U	120.0	98.5	28.2	70.3
Geo				
1	5.0	98.5	25.6	72.9
2	15.0	98.5	27.6	70.9
3	25.0	98.5	27.5	71.0
4	35.0	98.5	27.4	71.1
5	45.0	98.5	26.3	72.2
6	55.0	98.5	26.4	72.1
7	65.0	98.5	27.2	71.3
8	75.0	98.5	29.1	69.4
9	85.0	98.5	29.8	68.7
10	95.0	98.5	30.5	68.0
11	105.0	98.5	29.4	69.1
12	115.0	98.5	28.1	70.4

Velocities used, Spread A

	Layer 1	Layer 2
Vertical	1694.	
Horizontal		15858.

TABLE D-3

NYSEG/Mechanicville/Seismic Line 3, 17 May 1993, 0401-0420 hrs



Dist
Elevation (feet)
Sgp Ser Poead

PRINTER PLOT SCALES

Elev: .50 ft/col
Dist: 2.50 ft/row

LEGEND

> Geophone Location
* Shotpoint Location
A,B,C Emergent Ray; Source SP A,B,C,...
? Questionable Emergent Ray
s Ray Entrypoint Beneath SP
More Than One Symbol to Plot Here
+ Grid Mark

APPENDIX E

Groundwater Modeling

Former Coal Gasification Site
Mechanicville, New York

INTRODUCTION

A groundwater flow model for the Mechanicville site was constructed for the purpose of aiding in the evaluation of remedial alternatives. The model, calibrated to observed and interpreted site conditions, was then used to simulate effects of various alternatives on groundwater flow directions and overall water balances in the model domain.

CONCEPTUAL MODEL

The site is situated along the south bank of the Anthony Kill, and about 1,200 feet west of the Champlain Canal of the Hudson River. Interpretations of the shallow groundwater flow at the site, based on water level measurements, indicate discharge of shallow groundwater flow to the Anthony Kill. Review of the topographic map of the area suggests a groundwater divide for shallow groundwater south of the site and extending eastward toward the Hudson. The conceptual model considers that the shallow flow (i.e., extending 20 feet into the shaley bedrock) constitutes the shallow flow system to be considered in evaluations of remedial alternatives. This depth is somewhat arbitrary, but is reasonable when considering the principal use of the model to compare and evaluate remedial measures for control of the tar in the overburden and shallow groundwater flow. Deeper flow in bedrock would be expected to flow toward the much larger sink, the Hudson River, with flow patterns determined by fracture distributions and orientations in the rock. The 20-foot depth is also about the vertical limit of information currently available for the site. Bedrock is inferred to become more competent with depth, and flux rates are expected to be much lower in the deeper rock. The inferred groundwater flow

direction perpendicular into the Anthony Kill east and west of the site, and the Anthony Kill as the conservatively assumed ultimate receptor for all shallow groundwater flow, results in an inference of recharge and upgradient groundwater flux as the sources of groundwater in the model, and of the Kill as the sole receptor. While the bedrock is not a porous medium, it has been modeled so here due to the relatively high reported hydraulic conductivities for the rock, reports of highly weathered and fractured shallow rock, the similar inferred groundwater flow directions for the overburden and shallow rock, and the lack of suitable fractured rock models. The model deals only with groundwater flow, and cannot predict any potentials for further migration of coal tars at the site.

MODEL SELECTION

The U.S. Geological Survey (USGS) groundwater model code MODFLOW (Harbaugh, 1988) was selected as appropriate for modeling the groundwater flow regime at the site, having the flexibility and capabilities to simulate the various boundary conditions and alternatives desired in the model. ABB-ES uses Geraghty and Miller's packaging of MODFLOW on a 486 DOS-based PC running at 50 Mhz. The output is handled through a postprocessor and printed out as a SURFER plot of contoured head values. A simple site map identifying a few of the key buildings provides a visual frame of reference.

MODEL SETUP AND BOUNDARIES

The model was set up with respect to expected simulation needs and available site data. The model covers an area of 300 feet (north-south) by 740 feet (east-west), and is discretized uniformly as 10-foot square elements, leading to 74 rows and 30 columns in the model. The model grid is shown on Figure E-1.

Vertically, the bottom of the water table aquifer was taken as the top of competent rock. A top-of-rock surface was kriged based on 94 selected points over the model area (from geophysical data and including a few assumed points along the model south boundary where no data were available, see Figure E-2). The kriged surface was transformed in SURFER to provide a matrix of values as input to the model as the bottom of layer one (the overburden). This matrix was further transformed by successively subtracting 10 feet to create bottom of layer two (the weathered rock with higher conductivity), and the bottom of layer three (the rock with lower conductivity). These depths corresponded to approximate depths of explorations (borings and wells) installed at the site, and also to potential depths of interest for the anticipated remedial alternatives to be evaluated.

The east and west boundaries of the model were assumed to be no-flow boundaries since they paralleled interpreted groundwater flow lines. The south boundary was split as a flux boundary (using MODFLOW's general head boundary package) opposite the site, and a no-flow boundary (along an apparent divide) further east of the site. The northern boundary of the model was assumed to be the river, which was represented by MODFLOW's river package. Since there is exposed bedrock along much of the Anthony Kill in the model domain, the overburden was assumed

FIGURE E-1

Mechanicville - Model Grid

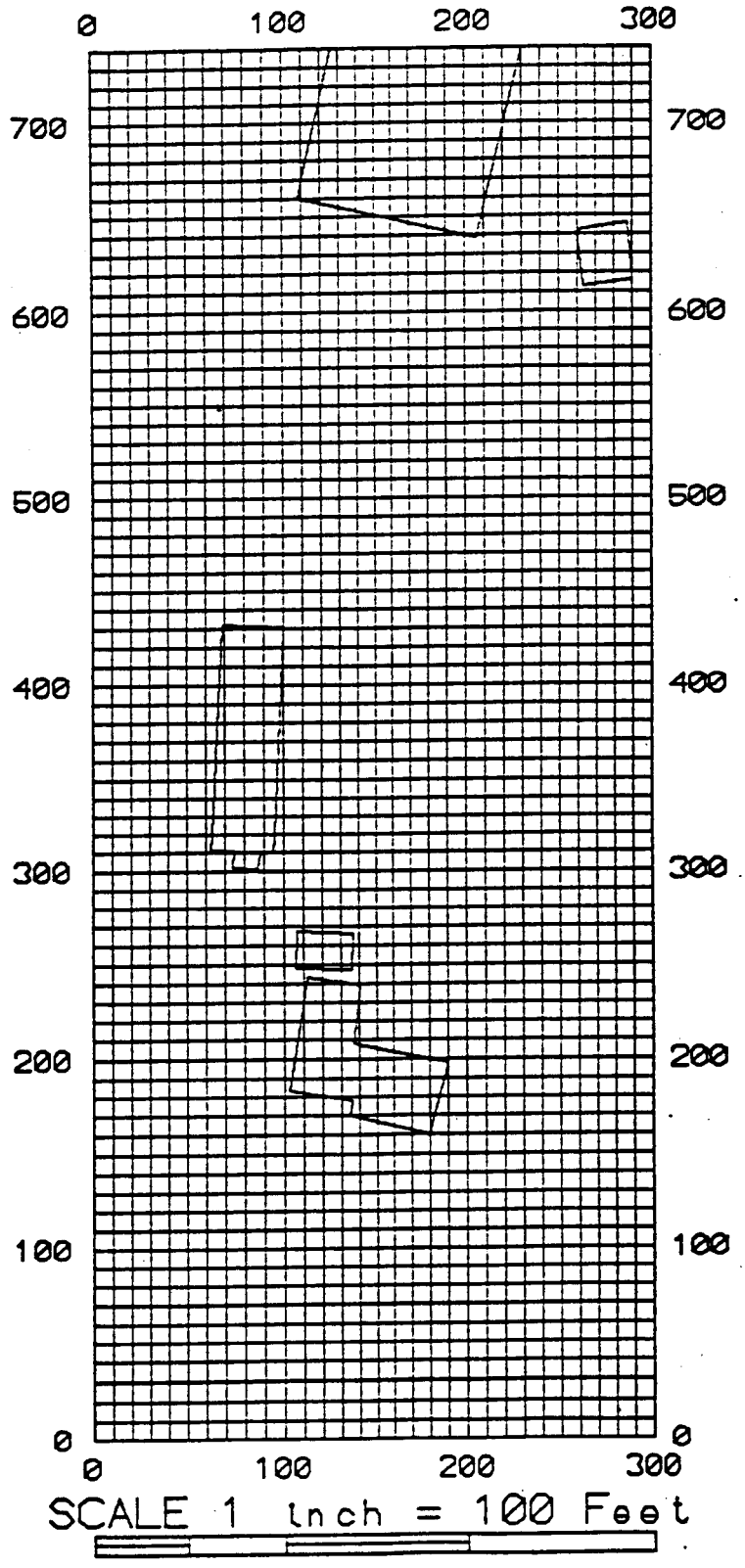
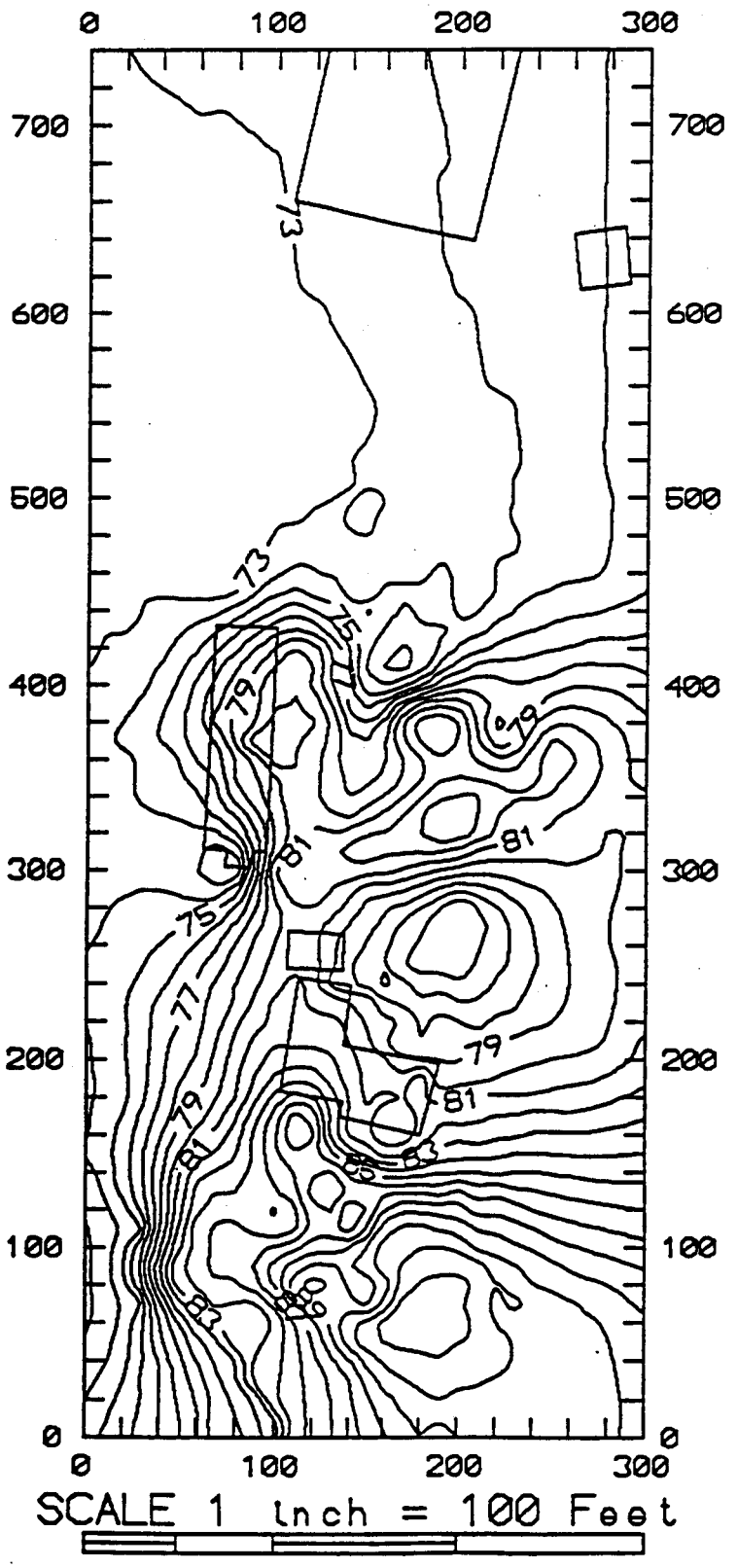


FIGURE E-2

Mechanicville - Top of Rock



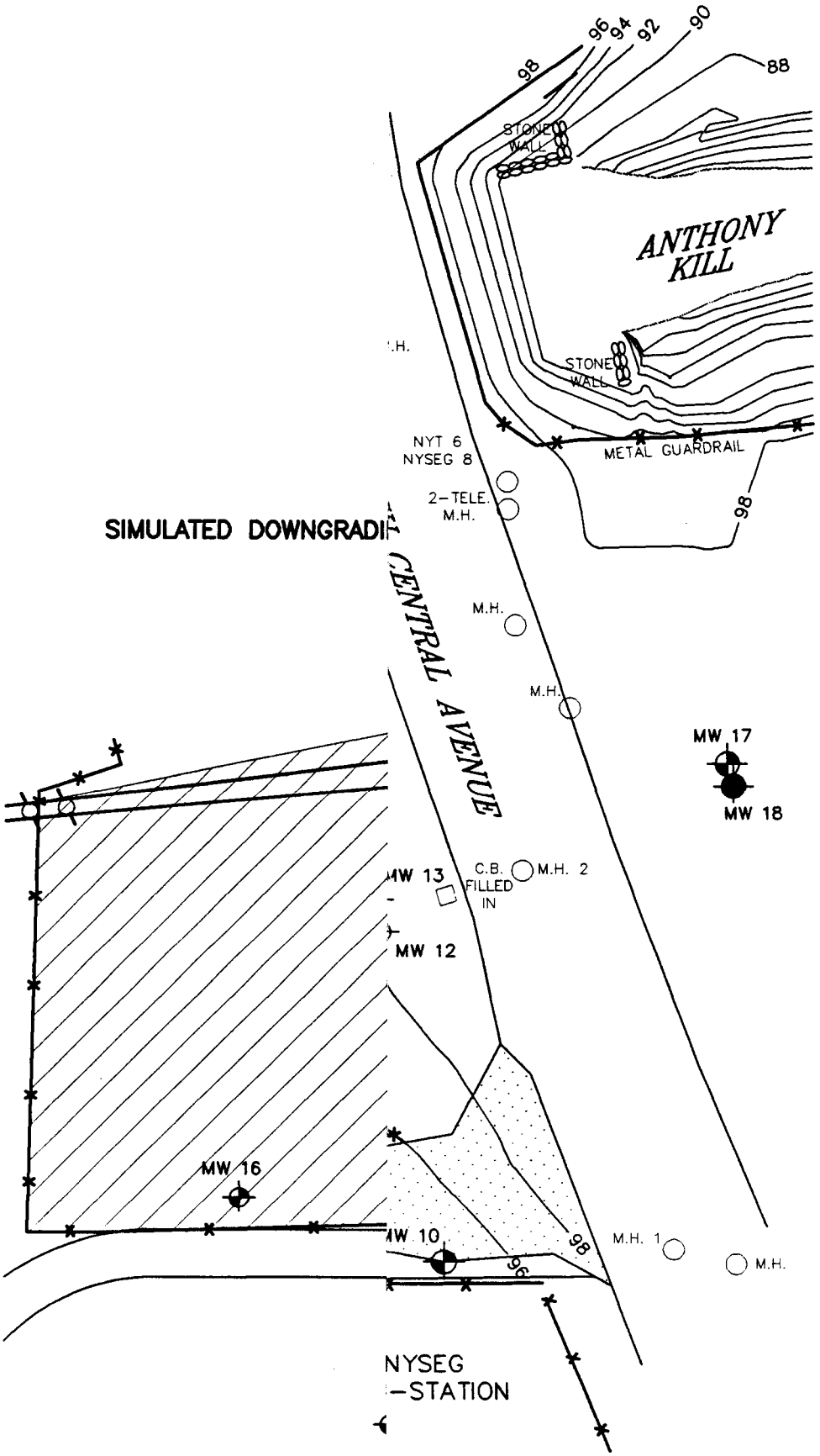


FIGURE E-3
F SIMULATED FEATURES FOR ALTERNATIVES
NYSEG FORMER COAL GASIFICATION SITE
MECHANICVILLE, NEW YORK

ABB Environmental Services, Inc.

J:\4945-09\FIGG-1

to be absent over the river area, and in the model these areas were made inactive in layer one and the river was designated as active only with layer two, the upper rock. The Anthony Kill, then, becomes the sole sink for groundwater in the model under natural conditions. Diffuse recharge was applied over the model area with consideration to the extensive paving over much of the site area. No seeps could be simulated along the river bank due to limitations of the model to represent seepage faces.

The model was conducted in the steady-state mode as long-term effects were to be considered, and available data for water levels were considered representative of average conditions for the site (moderately low seasonal variations reported for water levels).

GROUNDWATER AQUIFER PARAMETERS AND MASS BALANCE CONSIDERATIONS

The objective of the construction and calibration of the model was to provide a mathematical framework for remedial alternative evaluation. This required encompassing the main features of the groundwater flow system, i.e., flow direction, over-all water balance and fluxes, and interactions between model layers and the Anthony Kill. The model input data and computed fluxes, then, should be consistent with observations or estimates based on measurements.

The important features of this model are the hydraulic conductivities, the recharge over the area, available flux from upgradient, the over-all water balance, and interactions with the Anthony Kill. Hydraulic conductivity (K) data for the site

indicated the following ranges of values for each layer: layer one from 0.06 to 0.57 feet per day (ft/d) with geometric mean 0.23 ft/d; layer two from 0.03 to 3.1 ft/d with geometric mean 0.74 ft/d; and layer three from 0.28 to 0.72 ft/d with geometric mean 0.47 ft/d. Net recharge over the model area was considered by zones with assumptions of 2 inches per year or less for new well-paved areas, 2 to 4 inches per year over site old paved areas, and 10 to 12 inches per year for unpaved or open areas. Available recharge over the model area was calculated from about 250 to 400 cubic feet per day (cu ft/d).

Several methods were applied for estimating the total flow available in the modelled system. Available flux from upgradient was estimated by using average K values, an overall gradient of 0.06, thickness of model layers, and a site width of about 400 feet. This resulted in an estimate of about 200 to 300 cu ft/d. Summing the recharge (i.e., 250 to 400 cu ft/d) and upgradient influx, the overall water available to the model was estimated to be about 450 to 700 cu ft/d. Other estimates were obtained by calculating an apparent linear discharge rate to the Anthony Kill based on reports of a 2 cubic foot per second (cfs) gain between an upstream gaging station and the confluence with the Hudson. This produced an estimate of about 2,300 cu ft/d in the model, which is probably high because this section of the stream is lies primarily directly on bedrock, whereas other reaches intersect the overburden (whose K value is probably higher at other locations than at the site). Another estimate of total flux was based on the seepage meter results, which showed a range of 0.00025 to 0.0114 cu ft/sq ft/d. The higher end of this range results in an estimate of discharge to the Anthony Kill of 114 cu ft/d. Based on evaluation of these various methods, a reasonable estimate for a range of flux to the Anthony Kill is from 100 to 1,000 cu ft/d.

In the model, flux rates and head distributions at the river are controlled primarily by the selected or estimated value of the conductance term, which incorporates the resistance of the river bottom sediments to surface and groundwater exchange. This value is seldom known accurately, and is usually a calibration parameter. This is discussed in the calibration section.

CALIBRATION

Concern for some of the extreme boundary conditions in the model led to an approach of roughly calibrating a preliminary model and applying anticipated remedial measure simulations to identify any numerical stability problems in the model and to provide an initial look at the balances and the probable effects of the alternative measures. When the model proved stable under these conditions, and discussions were held with the feasibility study team to revise the simulation scenarios, the model was recalibrated and the revised simulations run.

In the calibration process, the principal parameters varied were in the general head boundary package (the input data file specifying parameter values controlling the upgradient flux into the model), the river conductance (controlling heads near the river bank), the recharge, and the hydraulic conductivities. During the calibration procedure, the K values in layers one and two were split into two zones based on the observed lower head in MW-10 and to more accurately capture the more easterly flow in this portion of the model. The K values in the final calibration run were 0.1 and 0.2 ft/d in layer one, 0.5 and 0.6 ft/d in layer two, and a constant 0.4 ft/d in layer three. The length of the flux boundary along the southern model perimeter was

also adjusted. In the final calibration, after the flux boundaries and hydraulic conductivities were reasonably set, the final parameter to be adjusted, and the one that seemed most sensitive in obtaining the best point fit with observed heads at wells, was the river conductance. Geraghty and Miller's MODFLOW statistical utility was used to generate the best overall fit with the lowest sum of squares of residuals while varying the conductance value. For the final calibration run (Run 13), the mean residual (observed minus computed) was 0.08 ft, with a standard deviation of 1.3 ft and a ratio of standard deviation to range of heads within the model of about 9 percent (see Calstats output of the fit analysis at the end of this Appendix). Most of the statistical error was in layers one and three, for which the least data were available.

Plotted and contoured model output heads for Run 13 matched interpreted groundwater flow directions and gradients quite well. The overall water balance for the calibrated model included an upgradient flux of 255 cu ft/d, a net recharge of 250 cu ft/d, and a total flow to the Anthony Kill of 505 cu ft/d (2.62 gpm). Thus, total average flows in the modelled system are quite small. Graphical results for each of the three layers for Run 13 are found at the end of this appendix. The black areas in the western portion of the site correspond to the bedrock high in this area, with the model showing layer one to be dry here.

SIMULATIONS

Once the model was calibrated, simulations were run for:

1. an upgradient diversion drain with downgradient barrier, both in the overburden (Run 14);
2. a downgradient overburden barrier only (Run 15);
3. a downgradient overburden barrier with added extraction wells near the ends (Run 16); and
4. the downgradient barrier only, but with site paving extended and improved to allow only 2 inches/yr of net recharge (Run 17).

The results of these simulations are discussed in the following paragraphs. Locations of the remedial measures referenced in the discussion are shown on Figure E-3. The graphical output of the runs are found at the end of this appendix. Note that the modeling provides only one aspect for the consideration of the appropriateness of any remedial measure. Implementability is a particularly important consideration. See Section 14.0 of this FS for a complete discussion of the evaluation and selection of alternatives.

Run 14: Upgradient diversion drain with downgradient barrier. This alternative evaluated the effect of a 170-foot long upgradient drain in the overburden (invert slightly above top of rock) to divert flow, to reduce groundwater flow across the site, and reduce discharge to the river in conjunction with a downgradient barrier wall. At best, the drain was able to intercept about 700 gallons per day, but also increased the flux rate from upgradient slightly. Only part of this increase in upgradient flux may be a long-term contribution, as the upgradient total flow is limited by recharge available to the upgradient recharge area (the model may slightly overestimate available flow from upgradient under an upgradient drain stress). The net result was only a decrease of about 16 percent in the total groundwater discharge to the

Anthony Kill. Discharge to the stream along the barrier wall frontage was reduced by about 21 percent. Flow in the vicinity of the wall is diverted easterly around the wall while some is forced under the wall into the Anthony Kill.

Run 15: Downgradient barrier only. This alternative looked at a 200-foot long barrier in the overburden (seated on top of, or slightly into, the upper shalely bedrock between the site and the Anthony Kill. The primary function of the barrier is to control migration of the coal tar and possible groundwater seeps in that area into the stream. Only slight groundwater mounding occurred in the model run (about 0.5 ft on average along the barrier). Groundwater in the overburden would be directed more easterly in the vicinity of the barrier, but still reach the stream. The groundwater discharge to the stream along the length of the barrier wall decreased only about 3 percent, while overall flow to the stream remained about the same as the simulated present conditions.

Run 16: Downgradient barrier with perimeter containment wells. This simulation evaluated the potential benefits of perimeter containment wells upgradient of the barrier to relieve mounding and control flow. Two wells were located in the overburden, but the simulated wells could not be pumped at more than a total of 0.05 gpm before creating excessive drawdown. Wells were simulated extending through layers one and two, which allowed greater total flow (up to 0.13 gpm before the overburden became dry), but still did not provide significantly greater control of groundwater (only a decrease of 5 percent of total flow and a reduction of about 10 percent in flow to the stream along the location of the barrier). In addition, pumping in the rock could further increase the migration potential of the coal tar into the rock.

Run 17: Downgradient barrier with improved expanded site paving. This remedial action would reduce recharge to the site and lower migration potentials of site contaminants. The model results showed a decrease in total recharge from 245 cu ft/d to 181 cu ft/d. Part of this gain was offset by a slight increase in upgradient flux to 263 cu ft/d. As discussed under Run 14, the model may slightly overestimate flow from upgradient when heads on-site are lowered (by drains or reduced recharge). Total discharge to the Kill was lowered only by about 12 percent. Along the length of the barrier wall, discharge to the Anthony Kill was reduced by about 13 percent. The most noticeable effect was a larger area of layer one going dry near the bedrock high in the western portion of the site.

SUMMARY

This groundwater modeling was conducted to provide a reasonable representation of the site groundwater flow system, and provide a mathematical framework for aiding in the evaluation of the remedial alternatives under consideration. While the modeling has limitations, particularly since fractured rock forms part of the aquifer system, the model behaves much as interpreted from site data, parameter values are consistent with observed and measured values, and mass balances are reasonable. The application of the model provides a rational basis for the comparative analysis of the remedial alternatives and insight into the behavior of the site groundwater system. Even if final calibrated model estimates of total flows are on the low side, estimates of the upper end of probable overall site flows are less than 5 times the best fit analysis. Hence upper end flow estimates would still be only about 13 gpm for the entire modelled system, and only a fraction of that actually flows through the

site. Further, as long as the ratios of the hydraulic conductivities for the layers remains the same, then the remedial alternative simulations would closely retain their relative effectiveness (i.e., with regard to the percentage reductions in flow in the model and to the Anthony Kill along the proposed location of the downgradient barrier wall).

REFERENCES

Harbaugh, A. and M. McDonald, 1988. A Modular Three-Dimensional Finite-Difference Groundwater Flow Model. U.S. Geological Survey - Techniques of Water-Resources Investigations of the USGS, Book 6, Chapter A1.

APPENDIX F

Alternatives Scoring Table

Former Coal Gasification Site
Mechanicville, New York

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE NEW YORK STATE STANDARDS CRITERIA AND GUIDELINES (SCGs) (RELATIVE WEIGHT = 10)			ALTERNATIVE[2]		
ANALYSIS FACTOR	**BASIS FOR EVALUATION DURING DETAILED ANALYSIS**	**SCORE**	**1**	**2**	**3**
1. Compliance with chemical-specific SCGs.	Meets chemical specific SCGs such as groundwater standards.	Yes = 4 No = 0	4	4	4
2. Compliance with action-specific SCGs.	Meets SCGs such as technology standards for incineration or landfill.	Yes = 3 No = 0	3	3	3
3. Compliance with location-specific SCGs.	Meets location-specific SCGs such as Freshwater Wetlands Act.	Yes = 3 No = 0	3	3	3
TOTAL (Maximum = 10)			10	10	10

Notes:

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT (RELATIVE WEIGHT = 20)				ALTERNATIVE[2]		
ANALYSIS FACTOR		**BASIS FOR EVALUATION DURING DETAILED ANALYSIS**	**SCORE**	**1**	**2**	**3**
1. Use of the site after remediation.	Unrestricted use of the land and water. **(If answer is yes, go to next analysis factor.)**		Yes = 20 No = 0	0	0	0
TOTAL (Maximum = 20)						
2. Human health and the environment exposure after the remediation.	(i)	Is the exposure to contaminants via air route acceptable?	Yes = 3 No = 0	3	3	3
	(ii)	Is the exposure to contaminants via groundwater/surface water acceptable?	Yes = 4 No = 0	4	4	4
	(iii)	Is the exposure to contaminants via sediments/soils acceptable?	Yes = 3 No = 0	3	3	3
Subtotal (maximum = 10)						
3. Magnitude of residual public health risks after the remediation.	(i)	Health risk.	≤ 1 in 1,000,000 = 5	5	5	5
	(ii)	Health risk.	≤ 1 in 100,000 = 2			
Subtotal (maximum = 5)						
4. Magnitude of residual environmental risks after remediation.	(i)	Less than acceptable.	= 5			
	(ii)	Slightly greater than acceptable.	= 3			
	(iii)	Significant risk still exists.	= 0	5	5	5
Subtotal (maximum = 5)						
TOTAL (maximum = 20)				20	20	20

Notes:

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

SHORT-TERM EFFECTIVENESS (RELATIVE WEIGHT = 10)			ALTERNATIVE[2]		
ANALYSIS FACTOR	BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	1	2	3
1. Protection of community during remedial actions.	• Are there significant short-term risks to the community that must be addressed? **(If answer is no, go to Factor 2.)**	Yes = 0 No = 4	4	4	4
	• Can the risk be easily controlled?	Yes = 1 No = 0	-	-	-
Subtotal (maximum = 4)	• Does the mitigative effort to control risk impact the community lifestyle?	Yes = 0 No = 2	-	-	-
2. Environmental Impacts.	• Are there significant short-term risks to the environment that must be addressed? **(If answer is no, go to Factor 3.)**	Yes = 0 No = 4	4	4	4
	• Are the available mitigative measures reliable to minimize potential impacts?	Yes = 3 No = 0	-	-	-
Subtotal (maximum = 4)					
3. Time to implement the remedy.	• What is the required time to implement the remedy?	≤ 2 years = 1 > 2 years = 0	1	1	1
	• Required duration of the mitigative effort to control short-term risk.	≤ 2 years = 1 > 2 years = 0	1	1	1
Subtotal (maximum = 2)					
TOTAL (maximum = 10)			10	10	10

Notes:

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

LONG-TERM EFFECTIVENESS AND PERMANENCE (RELATIVE WEIGHT = 15)				ALTERNATIVE[2]		
ANALYSIS FACTOR		BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	1	2	3
1. On-site or off-site treatment or land disposal.	•	On-site treatment*	= 3			
	•	Off-site treatment*	= 1	0	0	0
	•	On-site or off-site land disposal	= 0			
Subtotal (maximum = 3)						
2. Permanence of the remedial alternative.	•	Will the remedy be classified as permanent in accordance with Section 2.1(a), (b), or (c). **(If answer is yes, go to Factor 4.)**	Yes = 3 No = 0	0	0	0
Subtotal (maximum = 3)						
3. Lifetime of remedial actions.	•	Expected lifetime or duration of effectiveness of the remedy.	25-30 years = 3 20-25 years = 2 15-20 years = 1 < 15 years = 0	0	3	3
Subtotal (maximum = 3)						
4. Quantity and nature of waste or residual left at the site after remediation.	(i)	Quantity of untreated hazardous waste left at the site.	None = 3 < 25% = 2 25-50% = 1 ≥ 50% = 0	0	0	0
	(ii)	Is there treated residual left at the site? **(If answer is no, go to Factor 5.)**	Yes = 0 No = 2	0	0	0
	(iii)	Is the treated residual toxic?	Yes = 0 No = 1	0	0	0
	(iv)	Is the treated residual mobile?	Yes = 0 No = 1	0	0	0
Subtotal (maximum = 5)						

continued

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

ANALYSIS FACTOR	BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	ALTERNATIVE[2] 1	2	3
LONG-TERM EFFECTIVENESS AND PERMANENCE (RELATIVE WEIGHT = 15)					
5. Adequacy and reliability of controls. (i)	Operation and maintenance required for a period of:	< 5 years = 1 > 5 years = 0	0	0	0
(ii)	Are environmental controls required as a part of the remedy to handle potential problems? **(If answer is no, go to "iv".)**	Yes = 0 No = 1	0	0	0
(iii)	Degree of confidence that controls can adequately handle potential problems.	Moderate to very confident = 1 Somewhat to not confident = 0	0	0	0
(iv)	Relative degree of long-term monitoring required **(compare with other remedial alternatives)**	Minimum = 2 Moderate = 1 Extensive = 0	0	0	0
Subtotal (maximum = 4)					
TOTAL (maximum = 15)			0	3	3

Notes:

* Treatment is defined as destruction or separation/treatment or solidification/chemical fixation of inorganic wastes or wastes with "low" concentrations of organic contaminants.

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

REDUCTION OF TOXICITY, MOBILITY OR VOLUME (RELATIVE WEIGHT = 15)				ALTERNATIVE[2]		
ANALYSIS FACTOR	BASIS FOR EVALUATION DURING DETAILED ANALYSIS		SCORE	1	2	3
1. Volume of hazardous waste reduced (reduction in volume or toxicity). **If Factor 1 is not applicable, go to Factor 2.)**	(i)	Quantity of hazardous waste destroyed or treated. **Immobilization technologies do not score under Factor 1.**	99-100% = 8 90-99% = 7 80-90% = 6 60-80% = 4 40-60% = 2 20-40% = 1 < 20% = 0	-	-	-
	(ii)	Are there untreated or concentrated hazardous waste produced as a result of (i)? **If answer is no, go to Factor 2.**	Yes = 0 No = 2	-	-	-
Subtotal (maximum = 10) **If subtotal = 10, go to Factor 3**	(iii)	After remediation, how is the untreated, residual hazardous waste material disposed?	Off-site land disposal = 0 On-site land disposal = 1 Off-site destruction or treatment = 2	-	-	-
2. Reduction in mobility of hazardous waste. **If Factor 2 is not applicable, go to Factor 3.**	(i)	Quality of Available Wastes Immobilized After Destruction/Treatment	90-100% = 2 60-90% = 1 < 60% = 0	-	0	0
	(ii)	Method of Immobilization - Reduced mobility by containment - Reduced mobility by alternative treatment technologies	= 0 = 3	-	0	0
Subtotal (maximum = 5)						

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

REDUCTION OF TOXICITY, MOBILITY OR VOLUME (RELATIVE WEIGHT = 15)			ALTERNATIVE[2]		
ANALYSIS FACTOR	BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	1	2	3
3. Irreversibility of the destruction or treatment or immobilization of hazardous waste.	Completely irreversible	= 5			
	Irreversible for most of the hazardous waste constituents.	= 3			
	Irreversible for only some of the hazardous waste constituents.	= 2			
	Reversible for most of the hazardous waste constituents.	= 0	0	0	0
Subtotal (maximum = 5)					
TOTAL (maximum = 15)			0	0	0

Notes:

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

IMPLEMENTABILITY (RELATIVE WEIGHT = 15)				ALTERNATIVE[2]		
ANALYSIS FACTOR		BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	1	2	3
1. Technical Feasibility						
a. Ability to construct technology.	(i)	Not difficult to construct. No uncertainties in construction.	= 3	3	2	2
	(ii)	Somewhat difficult to construct. No uncertainties in construction.	= 2			
	(iii)	Very difficult to construct and/or significant uncertainties in construction	= 1			
b. Reliability of technology.	(i)	Very reliable in meeting the specified process efficiencies or performance goals.	= 3	3	2	2
	(ii)	Somewhat reliable in meeting the specified process efficiencies or performance goals.	= 2			
c. Schedule of delays due to technical problems.	(i)	Unlikely	= 2	2	2	2
	(ii)	Somewhat likely	= 1			
d. Need of undertaking additional remedial action, if necessary.	(i)	No future remedial actions may be anticipated.	= 2			
	(ii)	Some future remedial actions may be necessary.	= 1	1	1	1
Subtotal (maximum = 10)						

continued

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

IMPLEMENTABILITY (RELATIVE WEIGHT = 15)				ALTERNATIVE[2]		
ANALYSIS FACTOR		BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	1	2	3
2. Administrative Feasibility						
a. Coordination with other agencies.	(i)	Minimal coordination is required.	= 2	2	2	2
	(ii)	Required coordination is normal.	= 1			
	(iii)	Extensive coordination is required.	= 0			
Subtotal (maximum = 2)						
3. Availability of Services and Materials						
a. Availability of prospective technologies.	(i)	Are technologies under consideration generally commercially available for the site-specific application?	Yes = 1 No = 0	1	1	1
	(ii)	Will more than one vendor be available to provide a competitive bid?	Yes = 1 No = 0	1	1	1
b. Availability of necessary equipment and specialists.	(i)	Additional equipment and specialists may be available without significant delay.	Yes = 1 No = 0	1	1	1
Subtotal (maximum = 3)						
TOTAL (maximum = 15)				14	12	12

Notes:

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX F

ALTERNATIVES SCORING TABLE[1]
SELECTION OF REMEDY
MECHANICVILLE, NEW YORK

COST (RELATIVE WEIGHT = 15)			ALTERNATIVE[2]		
ANALYSIS FACTOR	BASIS FOR EVALUATION DURING DETAILED ANALYSIS	SCORE	1	2	3
Present Worth Cost	Because the Minimal Action Alternative has the lowest present worth cost, it has been assigned the highest score of 15. Other alternatives are assigned a score inversely proportional to their present worth.		15	9	6
TOTAL ALL FACTORS			69	64	61

Note:

[1] Alternatives Scoring Table from NYSDEC TAGM 90-4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites (NYSDEC, 1990).

[2] Alternative 1 = Minimal Action
Alternative 2 = Downgradient Barrier Wall
Alternative 3 = Upgradient Subsurface Drain with Downgradient Barrier Wall

APPENDIX B

NOTES

Blank : Indicates parameter was not analyzed for.

ND: Indicates parameter was not detected.

<: Indicates parameter was not detected at the quantitation limit shown.

J: Indicates an estimated concentration.

B (Organics): Indicates the parameter was detected in the laboratory blank.

B: (Inorganics): Indicates the parameter result is between the IDL and the contract required detection limit (CRDL)

VOCs: Volatile Organic Compounds

SVOCs: SemiVolatile Organic Compounds

PCBs: Polychlorinated Biphenyls

APPENDIX B-1A

SUMMARY OF ANALYSES
FOR SOIL SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	PCBs	Metals	Total Phenols	Cyanide	Sulfide	Total Organic Carbon
B-1 (8-10) 7/23/86	X	X		X	X	X		X
B-2 (8-9_5) 8/1/86	X	X		X	X	X		X
B-3 (4-6) 8/5/86	X	X		X	X	X		X
B-4 (6-8) 7/29/86	X	X		X	X	X		X
B-5 (10-11) 8/4/96	X	X		X	X	X		X
B-7 (7-9) 7/31/86	X	X		X	X	X		X
B-8 (13_5-15_5) 8/6/86	X	X		X	X	X		X
B-8 (15_5-17_5) 8/6/86	X	X						
B-9 (4-5_5) 11/17/87		X		X	X	X		X
B-10 (16-18) 11/17/87		X		X	X	X		X
B-10 (16-18) 11/17/87 DUP		X		X	X	X		X
B-12 (22-24) 11/19/87	X	X		X	X	X		X
B-14 (18-20) 11/17/87		X		X	X	X		X
B-15 (4-8) 11/19/87	X	X		X	X	X		X
B-16 5/17/93	X	X		X		X	X	
B-17 5/18/93	X	X		X		X	X	
B-17 5/18/93 DUP	X	X		X		X	X	
PE-1 (8) 11/23/99	X	X						
PE-2 (4) 11/23/99	X	X						
PE-3 (5) 11/23/99	X	X						
PE-4 (5) 11/23/99	X	X						
PE-5 (4) 11/23/99	X	X						
PE-6 (4) 11/23/99	X	X						
PE-7 (10) 11/23/99	X	X						
PE-8 (6) 11/23/99	X	X						
PE-9 (7) 11/23/99	X	X						
PE-10 (7) 1/12/00	X	X						
PE-11(8) 1/12/00	X	X						
PE-12 (4) 1/13/00	X	X						
PE-13 (6) 1/14/00	X	X						
PE-14 (12) 1/19/00	X	X						
PE-15 (5) 1/19/00	X	X						
PE-16 (9) 1/19/00	X	X						
PE-17 (8) 1/19/00	X	X						
PE-18 (7) 1/25/00	X	X						
PE-19 (8) 1/25/00	X	X						
PE-20 (7) 4/6/00	X	X						
PE-21 (3) 4/10/00	X	X						
PE-22 (3) 4/10/00	X	X						
PE-23 (3) 4/10/00	X	X						
PE-24 (1) 9/27/00	X	X						
PE-25 (2) 9/27/00	X	X						

APPENDIX B-1A

SUMMARY OF ANALYSES
FOR SOIL SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	PCBs	Metals	Total Phenols	Cyanide	Sulfide	Total Organic Carbon
PE-26 (2) 9/27/00	X	X						
SS-1 8/29/89			X			X		
SS-1 8/30/89	X							
SS-1 9/1/89		X						
SS-2 8/29/89			X			X		
SS-2 8/30/89	X							
SS-2 9/1/89		X						
SS-3 8/29/89			X			X		
SS-3 8/29/89 DUP			X			X		
SS-3 8/30/89	X							
SS-3 8/30/89 DUP	X							
SS-3 9/1/89		X						
SS-3 9/1/89 DUP		X						
SS-4 8/29/89			X			X		
SS-4 8/30/89	X							
SS-4 9/1/89		X						
SS-5 8/29/89			X			X		
SS-5 8/30/89	X							
SS-5 9/1/89		X						
SS-6 8/29/89			X					
SS-6 8/29/89 DUP			X					
SS-7 8/29/89			X					
SS-7 8/29/89 DUP			X					
SS-8 8/29/89			X					
SS-8 8/29/89 DUP			X					
SS-9 8/29/89			X					
SS-22 5/19/93						X	X	
SS-23 5/19/93						X	X	
SS-23 5/19/93 DUP						X	X	
SS-24 5/19/93						X	X	
SS-25 5/22/93			X					
SS-29 5/19/93			X					
SS-30 5/19/93			X					
SS-31 5/19/93			X					
SS-32 5/19/93			X					
SS-33 5/22/93			X					
SS-34 5/22/93			X					
SS-35 5/22/93			X					
SS-36 5/22/93			X					
SS-37 5/22/93			X					
SS-37 5/22/93 DUP			X					
SS-38 5/22/93			X					

APPENDIX B-1A

SUMMARY OF ANALYSES
FOR SOIL SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	PCBs	Metals	Total Phenols	Cyanide	Sulfide	Total Organic Carbon
SS-39 5/22/93			X					
SS-40 5/22/93			X					
SS-41 5/22/93			X					
SS-45 5/22/93			X					
SS-45 5/22/93 DUP			X					
SS-46 5/22/93			X					
SS-47 5/22/93			X					
SS-48 5/22/93			X					
SS-M-1 10/25/91			X					
SS-M-2 10/25/91			X					
SS-M-3 10/25/91			X					
SS-M-4 10/25/91			X					
SS-M-5 10/25/91			X					
TP-1 (6_5-7) 7/21/86	X	X		X	X	X		X
TP-2 (7-7_5) 7/21/86	X	X		X	X	X		X
TP-4 (3-4) 7/21/86	X	X		X	X	X		X
TP-5 (3-4) 7/21/86	X	X		X	X	X		X
TP-5 (3-4) 7/21/86 DUP	X	X		X	X	X		X
TP-5 (4-6) 7/21/86	X	X						

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-1 (8-10) 7/23/86	B-2 (8-9_5) 8/1/86	B-3 (4-6) 8/5/86	B-4 (6-8) 7/29/86	B-5 (10-11) 8/4/96	B-7 (7-9) 7/31/86	B-8 (13_5-15_5) 8/6/86
Cyanide, amenable	<0	<0	3.2	1	<0	<0	<0
Cyanide, ferro-ferri	<0	<0	<0	<0	<0	<0	<0
Cyanide, reactive							
Cyanide, total	<1	<1	3.2	1	<1	<1	<1
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron	34000	30000	31000	35000	27000	26000	19000
Lead							
Manganese							
Nickel							
Zinc	190	75	130	80	1600	320	61
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs							
Sulfide, reactive							
1,2,4-Trichlorobenzene							
1,2-Dichlorobenzene							
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene							
1,4-Dichlorobenzene							
2,2'-oxybis(1-							
2,4,5-Trichlorophenol							
2,4,6-Trichlorophenol							
2,4-Dichlorophenol							
2,4-Dimethylphenol							
2,4-Dinitrophenol							
2,4-Dinitrotoluene							
2,6-Dinitrotoluene							
2-Chloronaphthalene							
2-Chlorophenol							
2-Methylnaphthalene							
2-Methylphenol							
2-Nitroaniline							
2-Nitrophenol							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-1 (8-10) 7/23/86	B-2 (8-9_5) 8/1/86	B-3 (4-6) 8/5/86	B-4 (6-8) 7/29/86	B-5 (10-11) 8/4/96	B-7 (7-9) 7/31/86	B-8 (13_5-15_5) 8/6/86
3,3'-Dichlorobenzidine							
3-Nitroaniline							
4,6-Dinitro-2-Methylphenol							
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether							
4-Chloro-3-Methylphenol							
4-Chloroaniline							
4-Chlorophenyl-phenylether							
4-Methylphenol							
4-Nitroaniline							
4-Nitrophenol							
Acenaphthene	9	<0.55	380	42	250	<0.65	600
Acenaphthylene	<5	<0.55	<170	<24	<54	<0.65	<61
Anthracene	8	<0.55	670	80	450	<0.65	550
Benzidine							
Benzo(a)anthracene	<5	<0.55	<170	<24	<54	<0.65	<61
Benzo(a)pyrene	6.2	<0.55	200	<24	94	1.1	140
Benzo(a,h)anthracene	6.3	<0.55	<170	<24	<54	1.3	<61
Benzo(b)fluoranthene	5.7	<0.55	<170	<24	120	<0.65	200
Benzo(g,h,i)perylene	<5	<0.55	<170	<24	<54	1.4	140
Benzo(k)fluoranthene	<5	<0.55	240	<24	<54	0.98	<61
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether							
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate							
Butylbenzylphthalate							
Carbazole							
Chrysene	17	<0.55	780	100	<54	0.8	480
Di-n-butylphthalate							
Di-n-octylphthalate							
Dibenzo(a,h)anthracene	6.3					1.3	
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Fluoranthene	44	<0.55	1100	130	750	0.89	850
Fluorene	34	<0.55	1300	120	620	1.1	2100
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Indeno(1,2,3-cd)pyrene	<5	<0.55	<170	<24	<54	<0.65	<61
Isophorone							
n-Nitrosodi-n-propylamine							
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-1 (8-10) 7/23/86	B-2 (8-9_5) 8/1/86	B-3 (4-6) 8/5/86	B-4 (6-8) 7/29/86	B-5 (10-11) 8/4/96	B-7 (7-9) 7/31/86	B-8 (13_5-15_5) 8/6/86
n-Nitrosodiphenylamine							
Naphthalene	<5	<0.55	2300	44	760	1.9	1500
Nitrobenzene							
p-Chloro-m-cresol							
Pentachlorophenol							
Phenanthrene	13	<0.55	940	110	630	0.87	760
Phenol							
Pyrene	11	<0.55	1400	170	980	0.87	1400
Total cPAH							
Total PAH							
TOC	110000	6800	100000	23000	110000	76000	190000
Phenols, total	<1	<1	3.6	<1	2.6	<1	<1
1,1,1-Trichloroethane							
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2-Dichloroethane							
1,2-Dichloroethene, total							
1,2-Dichloropropane							
2-Butanone							
2-Chloroethylvinylether							
2-Hexanone							
4-Methyl-2-Pentanone							
Acetone							
Benzene	<0.043	<0.052	13	<0.028	0.88	2.4	640
Benzene, total							
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon Disulfide							
Carbon Tetrachloride							
Chlorobenzene							
Chloroethane							
Chloroform							
Chloromethane							
cis-1,3-Dichloropropene							
Dibromochloromethane							
Ethylbenzene	<0.043	<0.052	120	2.3	6.3	0.17	440
m-Xylene	<0.043	<0.052	25	0.64	1.5	0.18	400
Methylene Chloride							
n-Propylbenzene	<0.043	<0.052	<0.56	<0.028	<0.54	<0.052	<10
o-Xylene	<0.043	<0.052	44	2.4	<0.54	<0.052	320
p-Xylene	<0.043	<0.052	25	0.87	1.5	0.075	210
Styrene	<0.043	<0.052	<0.56	<0.028	<0.54	0.18	780
Tetrachloroethene							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-1 (8-10) 7/23/86	B-2 (8-9_5) 8/1/86	B-3 (4-6) 8/5/86	B-4 (6-8) 7/29/86	B-5 (10-11) 8/4/96	B-7 (7-9) 7/31/86	B-8 (13_5-15_5) 8/6/86
Toluene	<0.043	<0.052	8.6	0.31	1.6	1.3	840
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene							
Trichloroethene							
Trimethylbenzene	<0.043	<0.052	35	3.8	4.2	<0.052	170
Vinyl Acetate							
Vinyl Chloride							
Xylene, total							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-8 (15_5-17_5) 8/6/86	B-9 (4-5_5) 11/17/87	B-10 (16-18) 11/17/87	B-10 (16-18) 11/17/87 DUP	B-12 (22-24) 11/19/87	B-14 (18-20) 11/17/87	B-15 (4-8) 11/19/87
Cyanide, amenable							
Cyanide, ferro-ferri							
Cyanide, reactive							
Cyanide, total		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron		28	24	22	18	21	23
Lead							
Manganese							
Nickel							
Zinc		0.059	0.042	0.044	0.032	0.049	3.98
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs							
Sulfide, reactive							
1,2,4-Trichlorobenzene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
1,2-Dichlorobenzene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
1,2-Diphenylhydrazine					<0.752		<0.931
1,3-Dichlorobenzene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
1,4-Dichlorobenzene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2,2'-oxybis(1-							
2,4,5-Trichlorophenol		<170	<2	<2.2		<2	
2,4,6-Trichlorophenol		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2,4-Dichlorophenol		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2,4-Dimethylphenol		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2,4-Dinitrophenol		<170	<2	<2.2	<3.76	<2	<4.66
2,4-Dinitrotoluene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2,6-Dinitrotoluene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2-Chloronaphthalene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2-Chlorophenol		<34	<0.4	<0.45	<0.752	<0.41	<0.931
2-Methylnaphthalene		26J	0.1J	0.26J		<0.41	
2-Methylphenol		<34	<0.4	<0.45		<0.41	
2-Nitroaniline		<170	<2	<2.2		<2	
2-Nitrophenol		<34	<0.4	<0.45	<3.76	<0.41	<4.66

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-8 (15_5-17_5) 8/6/86	B-9 (4-5_5) 11/17/87	B-10 (16-18) 11/17/87	B-10 (16-18) 11/17/87 DUP	B-12 (22-24) 11/19/87	B-14 (18-20) 11/17/87	B-15 (4-8) 11/19/87
3,3'-Dichlorobenzidine		<68	<0.8	<0.9	<1.5	<0.81	<1.86
3-Nitroaniline		170J	<2	<2.2		<2	
4,6-Dinitro-2-Methylphenol		<170	<2	<2.2		<2	
4,6-Dinitro-o-cresol					<3.76		<4.66
4-Bromophenyl phenyl ether		<34	<0.4	<0.45	<0.752	<0.41	<0.931
4-Chloro-3-Methylphenol		<34	<0.4	<0.45		<0.41	
4-Chloroaniline		<34	<0.4	<0.45		<0.41	
4-Chlorophenyl-phenylether		<34	<0.4	<0.45	<0.752	<0.41	<0.931
4-Methylphenol		<34	<0.4	<0.45		<0.41	
4-Nitroaniline		<170	<2	<2.2		<2	
4-Nitrophenol		<170	<2	<2.2	<3.76	<2	<4.66
Acenaphthene	<130	31J	0.36J	0.53	2.35	<0.41	<0.931
Acenaphthylene	670	<34	0.13J	0.11J	<0.752	<0.41	<0.931
Anthracene	270	11J	0.22J	0.26J	0.8	<0.41	<0.931
Benzidine					<6		<7.45
Benzo(a)anthracene	<130	7.5J	0.22J	0.1J	<0.752	<0.41	<0.931
Benzo(a)pyrene	<130	11J	0.21J	0.085J	<0.752	<0.41	<0.931
Benzo(a,h)anthracene	<130						
Benzo(b)fluoranthene	<130	12J	0.22J	<0.45	<0.752	<0.41	<0.931
Benzo(g,h,i)perylene	<130	4.5J	<0.4	<0.45	<0.752	<0.41	<0.931
Benzo(k)fluoranthene	<130	12J	0.22J	<0.45	<0.752	<0.41	<0.931
Benzoic Acid		<170	<2	<2.2		<2	
Benzyl Alcohol		<34	<0.4	<0.45		<0.41	
bis(2-Chloroethoxy)methane		<34	<0.4	<0.45	<0.752	<0.41	<0.931
bis(2-Chloroethyl)ether		<34	<0.4	<0.45	<0.752	<0.41	<0.931
bis(2-Chloroisopropyl)ether		<34	<0.4	<0.45	<0.752	<0.41	<0.931
bis(2-Ethylhexyl)phthalate	<130	<34	<0.4	<0.45		0.065J	
Butylbenzylphthalate		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Carbazole							
Chrysene	<130	7.2J	0.24J	0.11J	<0.752	<0.41	<0.931
Di-n-butylphthalate		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Di-n-octylphthalate		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Dibenzo(a,h)anthracene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Dibenzofuran		<34	0.041J	0.09J		<0.41	
Diethylphthalate		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Dimethylphthalate		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Fluoranthene	290	18J	0.37J	0.24J	1.01	<0.41	<0.931
Fluorene	380	16J	0.21J	0.35J	1.25	<0.41	<0.931
Hexachlorobenzene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Hexachlorobutadiene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Hexachlorocyclopentadiene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Hexachloroethane		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Indeno(1,2,3-cd)pyrene	<130	4.2J	<0.4	<0.45	<0.752	<0.41	<0.931
Isophorone		<34	<0.4	<0.45	<0.752	<0.41	<0.931
n-Nitrosodi-n-propylamine		<34	<0.4	<0.45	<0.752	<0.41	<0.931
n-Nitrosodimethylamine					<0.752		<0.931

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-8 (15_5-17_5) 8/6/86	B-9 (4-5_5) 11/17/87	B-10 (16-18) 11/17/87	B-10 (16-18) 11/17/87 DUP	B-12 (22-24) 11/19/87	B-14 (18-20) 11/17/87	B-15 (4-8) 11/19/87
n-Nitrosodiphenylamine		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Naphthalene	2500	60	0.18J	0.45	<0.752	<0.41	<0.931
Nitrobenzene		<34	<0.4	<0.45	<0.752	<0.41	<0.931
p-Chloro-m-cresol					<0.752		<0.931
Pentachlorophenol		<170	<2	<2.2	<3.76	<2	<4.66
Phenanthrene	870	58	0.88	1.1	0.8	<0.41	<0.931
Phenol		<34	<0.4	<0.45	<0.752	<0.41	<0.931
Pyrene	460	27J	0.6	0.35J	1.39	<0.41	<0.931
Total cPAH							
Total PAH							
TOC		33000	22000	24000	22000	32000	42000
Phenols, total		0.00074	<0.0005	<0.0005	<0.0005	<0.0005	0.0026
1,1,1-Trichloroethane					<0.14		<0.17
1,1,2,2-Tetrachloroethane					<0.14		<0.17
1,1,2-Trichloroethane					<0.14		<0.17
1,1-Dichloroethane					<0.14		<0.17
1,1-Dichloroethene					<0.46		<0.57
1,2-Dichloroethane					<0.14		<0.17
1,2-Dichloroethene, total							
1,2-Dichloropropane					<0.14		<0.17
2-Butanone					<0.28		<0.34
2-Chloroethylvinylether					<0.28		<0.34
2-Hexanone					<0.28		<0.34
4-Methyl-2-Pentanone					<0.28		<0.34
Acetone	<90				<2.1		<2.6
Benzene	380				<0.58		<0.72
Benzene, total							
Bromodichloromethane					<0.14		<0.17
Bromoform					<0.14		<0.17
Bromomethane					<0.28		<0.34
Carbon Disulfide	<3.6				<0.14		<0.17
Carbon Tetrachloride					<0.14		<0.17
Chlorobenzene					<0.66		<0.81
Chloroethane					<0.28		<0.34
Chloroform					<0.14		<0.17
Chloromethane					<0.28		<0.34
cis-1,3-Dichloropropene					<0.14		<0.17
Dibromochloromethane					<0.14		<0.17
Ethylbenzene	250				<0.14		0.57
m-Xylene							
Methylene Chloride	<9				0.12J		<0.17
n-Propylbenzene							
o-Xylene							
p-Xylene							
Styrene	720				<0.14		<0.17
Tetrachloroethene					<0.14		<0.17

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-8 (15_5-17_5) 8/6/86	B-9 (4-5_5) 11/17/87	B-10 (16-18) 11/17/87	B-10 (16-18) 11/17/87 DUP	B-12 (22-24) 11/19/87	B-14 (18-20) 11/17/87	B-15 (4-8) 11/19/87
Toluene	660				<0.71		<0.88
trans-1,2-Dichloroethene					<0.14		<0.17
trans-1,3-Dichloropropene					<0.14		<0.17
Trichloroethene					<0.61		<0.75
Trimethylbenzene							
Vinyl Acetate					<0.28		<0.34
Vinyl Chloride					<0.28		<0.34
Xylene, total	1400				<0.14		0.88

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-16 5/17/93	B-17 5/18/93	B-17 5/18/93 DUP	PE-1 (8) 11/23/99	PE-2 (4) 11/23/99	PE-3 (5) 11/23/99	PE-4 (5) 11/23/99
Cyanide, amenable							
Cyanide, ferro-ferri							
Cyanide, reactive	<100	<100	<100				
Cyanide, total	<0.002	<0.003	<0.0027				
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum	12.2	6.97	3.82				
Antimony	<0.00027	0.00055J	<0.00033				
Cadmium	0.00073	<0.00046	<0.00043				
Chromium	0.0216	0.0125	0.0111				
Cobalt	0.016	0.007	0.0066				
Copper	0.0504	0.0097	0.0079				
Iron	29.7	15	14.6				
Lead	0.0364	0.0105	0.0361				
Manganese	0.511	0.203	0.141				
Nickel	0.0378	0.011	0.0113				
Zinc	0.138	0.0304	0.0282				
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs							
Sulfide, reactive	<100	<100	<100				
1,2,4-Trichlorobenzene	<0.36	<0.36	<0.39				
1,2-Dichlorobenzene	<0.36	<0.36	<0.39				
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene	<0.36	<0.36	<0.39				
1,4-Dichlorobenzene	<0.36	<0.36	<0.39				
2,2'-oxybis(1-	<0.36	<0.36	<0.39				
2,4,5-Trichlorophenol	<1.8	<1.8	<2				
2,4,6-Trichlorophenol	<0.36	<0.36	<0.39				
2,4-Dichlorophenol							
2,4-Dimethylphenol	<0.36	<0.36	<0.39				
2,4-Dinitrophenol	<1.8	<1.8	<2				
2,4-Dinitrotoluene	<0.36	<0.36	<0.39				
2,6-Dinitrotoluene	<0.36	<0.36	<0.39				
2-Chloronaphthalene	<0.36	<0.36	<0.39				
2-Chlorophenol	<0.36	<0.36	<0.39				
2-Methylnaphthalene	<0.36	<0.36	<0.39				
2-Methylphenol	<0.36	<0.36	<0.39				
2-Nitroaniline	<1.8	<1.8	<2				
2-Nitrophenol	<0.36	<0.36	<0.39				

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-16 5/17/93	B-17 5/18/93	B-17 5/18/93 DUP	PE-1 (8) 11/23/99	PE-2 (4) 11/23/99	PE-3 (5) 11/23/99	PE-4 (5) 11/23/99
3,3'-Dichlorobenzidine	<0.36	<0.36	<0.39				
3-Nitroaniline	<1.8	<1.8	<2				
4,6-Dinitro-2-Methylphenol	<1.8	<1.8	<2				
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether	<0.36	<0.36	<0.39				
4-Chloro-3-Methylphenol	<0.36	<0.36	<0.39				
4-Chloroaniline	<0.36	<0.36	<0.39				
4-Chlorophenyl-phenylether	<0.36	<0.36	<0.39				
4-Methylphenol	<0.36	<0.36	<0.39				
4-Nitroaniline	<1.8	<1.8	<2				
4-Nitrophenol	<1.8	<1.8	<2				
Acenaphthene	<0.36	<0.36	<0.39				
Acenaphthylene	<0.36	<0.36	<0.39				
Anthracene	<0.36	<0.36	<0.39				
Benzidine							
Benzo(a)anthracene	<0.36	0.066J	<0.39				
Benzo(a)pyrene	<0.36	0.048J	<0.39				
Benzo(a,h)anthracene							
Benzo(b)fluoranthene	<0.36	<0.36	<0.39				
Benzo(g,h,i)perylene	<0.36	<0.36	<0.39				
Benzo(k)fluoranthene	<0.36	<0.36	<0.39				
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether	<0.36	<0.36	<0.39				
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate	<0.36	<1.6	<1.3				
Butylbenzylphthalate	<0.36	<0.36	<0.39				
Carbazole	<0.36	<0.36	<0.39				
Chrysene	0.06J	0.069J	<0.39				
Di-n-butylphthalate	<0.36	<0.36	<0.39				
Di-n-octylphthalate	<0.36	<0.36	<0.39				
Dibenzo(a,h)anthracene	<0.36	<0.36	<0.39				
Dibenzofuran	<0.36	<0.36	<0.39				
Diethylphthalate	0.33J	<0.36	<0.39				
Dimethylphthalate	<0.36	<0.36	<0.39				
Fluoranthene	0.089J	0.16J	0.062J				
Fluorene	<0.36	<0.36	<0.39				
Hexachlorobenzene	<0.36	<0.36	<0.39				
Hexachlorobutadiene	<0.36	<0.36	<0.39				
Hexachlorocyclopentadiene	<0.36	<0.36	<0.39				
Hexachloroethane	<0.36	<0.36	<0.39				
Indeno(1,2,3-cd)pyrene	<0.36	<0.36	<0.39				
Isophorone	<0.36	<0.36	<0.39				
n-Nitrosodi-n-propylamine	<0.36	<0.36	<0.39				
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-16 5/17/93	B-17 5/18/93	B-17 5/18/93 DUP	PE-1 (8) 11/23/99	PE-2 (4) 11/23/99	PE-3 (5) 11/23/99	PE-4 (5) 11/23/99
n-Nitrosodiphenylamine	<0.36	<0.36	<0.39				
Naphthalene	<0.36	0.056J	<0.39	320	78	7700	770
Nitrobenzene	<0.36	<0.36	<0.39				
p-Chloro-m-cresol							
Pentachlorophenol	0.33J	<1.8	<2				
Phenanthrene	<0.36	0.2J	0.077J				
Phenol	<0.36	<0.36	<0.39				
Pyrene	0.082J	0.13J	0.049J				
Total cPAH				209.1	76.5	780	299
Total PAH				1603	572.5	24380	2223
TOC							
Phenols, total							
1,1,1-Trichloroethane	<0.005	<0.006	<0.006				
1,1,2,2-Tetrachloroethane	<0.005	<0.006	<0.006				
1,1,2-Trichloroethane	<0.005	<0.006	<0.006				
1,1-Dichloroethane	<0.005	<0.006	<0.006				
1,1-Dichloroethene	<0.005	<0.006	<0.006				
1,2-Dichloroethane	<0.005	<0.006	<0.006				
1,2-Dichloroethene, total	<0.005	<0.006	<0.006				
1,2-Dichloropropane	<0.005	<0.006	<0.006				
2-Butanone	<0.011	<0.012	<0.012				
2-Chloroethylvinylether							
2-Hexanone	<0.011	<0.012	<0.012				
4-Methyl-2-Pentanone	<0.011	<0.012	<0.012				
Acetone	<0.011	<0.032	<0.039				
Benzene	<0.005	<0.006	<0.006				
Benzene, total				9	0.33	140	35
Bromodichloromethane	<0.005	<0.006	<0.006				
Bromoform	<0.005	<0.006	<0.006				
Bromomethane	<0.011	<0.012	<0.012				
Carbon Disulfide	<0.005	<0.006	<0.006				
Carbon Tetrachloride	<0.005	<0.006	<0.006				
Chlorobenzene	<0.005	<0.006	<0.006				
Chloroethane	<0.011	<0.012	<0.012				
Chloroform	<0.005	<0.006	<0.006				
Chloromethane	<0.011	<0.012	<0.012				
cis-1,3-Dichloropropene	<0.005	<0.006	<0.006				
Dibromochloromethane	<0.005	<0.006	<0.006				
Ethylbenzene	<0.005	<0.006	<0.006				
m-Xylene							
Methylene Chloride	<0.005	<0.006	<0.006				
n-Propylbenzene							
o-Xylene							
p-Xylene							
Styrene	<0.005	<0.006	<0.006				
Tetrachloroethene	<0.005	<0.006	<0.006				

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	B-16 5/17/93	B-17 5/18/93	B-17 5/18/93 DUP	PE-1 (8) 11/23/99	PE-2 (4) 11/23/99	PE-3 (5) 11/23/99	PE-4 (5) 11/23/99
Toluene	<0.005	<0.006	<0.006				
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene	<0.005	<0.006	<0.006				
Trichloroethene	<0.005	<0.006	<0.006				
Trimethylbenzene							
Vinyl Acetate							
Vinyl Chloride	<0.011	<0.012	<0.012				
Xylene, total	<0.005	<0.006	<0.006				

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-5 (4) 11/23/99	PE-6 (4) 11/23/99	PE-7 (10) 11/23/99	PE-8 (6) 11/23/99	PE-9 (7) 11/23/99	PE-10 (7) 1/12/00	PE-11(8) 1/12/00
Cyanide, amenable							
Cyanide, ferro-ferri							
Cyanide, reactive							
Cyanide, total							
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron							
Lead							
Manganese							
Nickel							
Zinc							
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs							
Sulfide, reactive							
1,2,4-Trichlorobenzene							
1,2-Dichlorobenzene							
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene							
1,4-Dichlorobenzene							
2,2'-oxybis(1-							
2,4,5-Trichlorophenol							
2,4,6-Trichlorophenol							
2,4-Dichlorophenol							
2,4-Dimethylphenol							
2,4-Dinitrophenol							
2,4-Dinitrotoluene							
2,6-Dinitrotoluene							
2-Chloronaphthalene							
2-Chlorophenol							
2-Methylnaphthalene							
2-Methylphenol							
2-Nitroaniline							
2-Nitrophenol							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-5 (4) 11/23/99	PE-6 (4) 11/23/99	PE-7 (10) 11/23/99	PE-8 (6) 11/23/99	PE-9 (7) 11/23/99	PE-10 (7) 1/12/00	PE-11(8) 1/12/00
3,3'-Dichlorobenzidine							
3-Nitroaniline							
4,6-Dinitro-2-Methylphenol							
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether							
4-Chloro-3-Methylphenol							
4-Chloroaniline							
4-Chlorophenyl-phenylether							
4-Methylphenol							
4-Nitroaniline							
4-Nitrophenol							
Acenaphthene							
Acenaphthylene							
Anthracene							
Benzidine							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(a,h)anthracene							
Benzo(b)fluoranthene							
Benzo(g,h,i)perylene							
Benzo(k)fluoranthene							
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether							
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate							
Butylbenzylphthalate							
Carbazole							
Chrysene							
Di-n-butylphthalate							
Di-n-octylphthalate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Fluoranthene							
Fluorene							
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Indeno(1,2,3-cd)pyrene							
Isophorone							
n-Nitrosodi-n-propylamine							
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-5 (4) 11/23/99	PE-6 (4) 11/23/99	PE-7 (10) 11/23/99	PE-8 (6) 11/23/99	PE-9 (7) 11/23/99	PE-10 (7) 1/12/00	PE-11(8) 1/12/00
n-Nitrosodiphenylamine							
Naphthalene	2200	110	200	0.51	1000	<0.37	0.62
Nitrobenzene							
p-Chloro-m-cresol							
Pentachlorophenol							
Phenanthrene							
Phenol							
Pyrene							
Total cPAH	6220	218	107.4	1.92	1319	0.25	25.1
Total PAH	29930	993.1	935.9	9.886	7891	0.758	48.42
TOC							
Phenols, total							
1,1,1-Trichloroethane							
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2-Dichloroethane							
1,2-Dichloroethene, total							
1,2-Dichloropropane							
2-Butanone							
2-Chloroethylvinylether							
2-Hexanone							
4-Methyl-2-Pentanone							
Acetone							
Benzene							
Benzene, total	6	17	6.2	0.13	9.8	<0.006	<0.008
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon Disulfide							
Carbon Tetrachloride							
Chlorobenzene							
Chloroethane							
Chloroform							
Chloromethane							
cis-1,3-Dichloropropene							
Dibromochloromethane							
Ethylbenzene							
m-Xylene							
Methylene Chloride							
n-Propylbenzene							
o-Xylene							
p-Xylene							
Styrene							
Tetrachloroethene							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-5 (4) 11/23/99	PE-6 (4) 11/23/99	PE-7 (10) 11/23/99	PE-8 (6) 11/23/99	PE-9 (7) 11/23/99	PE-10 (7) 1/12/00	PE-11(8) 1/12/00
Toluene							
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene							
Trichloroethene							
Trimethylbenzene							
Vinyl Acetate							
Vinyl Chloride							
Xylene, total							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-12 (4) 1/13/00	PE-13 (6) 1/14/00	PE-14 (12) 1/19/00	PE-15 (5) 1/19/00	PE-16 (9) 1/19/00	PE-17 (8) 1/19/00	PE-18 (7) 1/25/00
Cyanide, amenable							
Cyanide, ferro-ferri							
Cyanide, reactive							
Cyanide, total							
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron							
Lead							
Manganese							
Nickel							
Zinc							
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs							
Sulfide, reactive							
1,2,4-Trichlorobenzene							
1,2-Dichlorobenzene							
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene							
1,4-Dichlorobenzene							
2,2'-oxybis(1-							
2,4,5-Trichlorophenol							
2,4,6-Trichlorophenol							
2,4-Dichlorophenol							
2,4-Dimethylphenol							
2,4-Dinitrophenol							
2,4-Dinitrotoluene							
2,6-Dinitrotoluene							
2-Chloronaphthalene							
2-Chlorophenol							
2-Methylnaphthalene							
2-Methylphenol							
2-Nitroaniline							
2-Nitrophenol							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-12 (4) 1/13/00	PE-13 (6) 1/14/00	PE-14 (12) 1/19/00	PE-15 (5) 1/19/00	PE-16 (9) 1/19/00	PE-17 (8) 1/19/00	PE-18 (7) 1/25/00
3,3'-Dichlorobenzidine							
3-Nitroaniline							
4,6-Dinitro-2-Methylphenol							
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether							
4-Chloro-3-Methylphenol							
4-Chloroaniline							
4-Chlorophenyl-phenylether							
4-Methylphenol							
4-Nitroaniline							
4-Nitrophenol							
Acenaphthene							
Acenaphthylene							
Anthracene							
Benzidine							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(a,h)anthracene							
Benzo(b)fluoranthene							
Benzo(g,h,i)perylene							
Benzo(k)fluoranthene							
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether							
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate							
Butylbenzylphthalate							
Carbazole							
Chrysene							
Di-n-butylphthalate							
Di-n-octylphthalate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Fluoranthene							
Fluorene							
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Indeno(1,2,3-cd)pyrene							
Isophorone							
n-Nitrosodi-n-propylamine							
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-12 (4) 1/13/00	PE-13 (6) 1/14/00	PE-14 (12) 1/19/00	PE-15 (5) 1/19/00	PE-16 (9) 1/19/00	PE-17 (8) 1/19/00	PE-18 (7) 1/25/00
n-Nitrosodiphenylamine							
Naphthalene	6.4	440	4200	15	6.2	27	3300
Nitrobenzene							
p-Chloro-m-cresol							
Pentachlorophenol							
Phenanthrene							
Phenol							
Pyrene							
Total cPAH	6.61	331	480	885	104	<13	940
Total PAH	46.95	2763	11860	3221	189.1	117.5	17500
TOC							
Phenols, total							
1,1,1-Trichloroethane							
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2-Dichloroethane							
1,2-Dichloroethene, total							
1,2-Dichloropropane							
2-Butanone							
2-Chloroethylvinylether							
2-Hexanone							
4-Methyl-2-Pentanone							
Acetone							
Benzene							
Benzene, total	0.067	3.8	44	2.6	<0.007	<0.016	4J
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon Disulfide							
Carbon Tetrachloride							
Chlorobenzene							
Chloroethane							
Chloroform							
Chloromethane							
cis-1,3-Dichloropropene							
Dibromochloromethane							
Ethylbenzene							
m-Xylene							
Methylene Chloride							
n-Propylbenzene							
o-Xylene							
p-Xylene							
Styrene							
Tetrachloroethene							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-12 (4) 1/13/00	PE-13 (6) 1/14/00	PE-14 (12) 1/19/00	PE-15 (5) 1/19/00	PE-16 (9) 1/19/00	PE-17 (8) 1/19/00	PE-18 (7) 1/25/00
Toluene							
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene							
Trichloroethene							
Trimethylbenzene							
Vinyl Acetate							
Vinyl Chloride							
Xylene, total							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-19 (8) 1/25/00	PE-20 (7) 4/6/00	PE-21 (3) 4/10/00	PE-22 (3) 4/10/00	PE-23 (3) 4/10/00	PE-24 (1) 9/27/00	PE-25 (2) 9/27/00
Cyanide, amenable							
Cyanide, ferro-ferri							
Cyanide, reactive							
Cyanide, total							
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron							
Lead							
Manganese							
Nickel							
Zinc							
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs							
Sulfide, reactive							
1,2,4-Trichlorobenzene							
1,2-Dichlorobenzene							
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene							
1,4-Dichlorobenzene							
2,2'-oxybis(1-							
2,4,5-Trichlorophenol							
2,4,6-Trichlorophenol							
2,4-Dichlorophenol							
2,4-Dimethylphenol							
2,4-Dinitrophenol							
2,4-Dinitrotoluene							
2,6-Dinitrotoluene							
2-Chloronaphthalene							
2-Chlorophenol							
2-Methylnaphthalene							
2-Methylphenol							
2-Nitroaniline							
2-Nitrophenol							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-19 (8) 1/25/00	PE-20 (7) 4/6/00	PE-21 (3) 4/10/00	PE-22 (3) 4/10/00	PE-23 (3) 4/10/00	PE-24 (1) 9/27/00	PE-25 (2) 9/27/00
3,3'-Dichlorobenzidine							
3-Nitroaniline							
4,6-Dinitro-2-Methylphenol							
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether							
4-Chloro-3-Methylphenol							
4-Chloroaniline							
4-Chlorophenyl-phenylether							
4-Methylphenol							
4-Nitroaniline							
4-Nitrophenol							
Acenaphthene							
Acenaphthylene							
Anthracene							
Benzidine							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(a,h)anthracene							
Benzo(b)fluoranthene							
Benzo(g,h,i)perylene							
Benzo(k)fluoranthene							
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether							
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate							
Butylbenzylphthalate							
Carbazole							
Chrysene							
Di-n-butylphthalate							
Di-n-octylphthalate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Fluoranthene							
Fluorene							
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Indeno(1,2,3-cd)pyrene							
Isophorone							
n-Nitrosodi-n-propylamine							
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-19 (8) 1/25/00	PE-20 (7) 4/6/00	PE-21 (3) 4/10/00	PE-22 (3) 4/10/00	PE-23 (3) 4/10/00	PE-24 (1) 9/27/00	PE-25 (2) 9/27/00
n-Nitrosodiphenylamine							
Naphthalene	570	9.3	250	8.1	1.8	7.5	<14
Nitrobenzene							
p-Chloro-m-cresol							
Pentachlorophenol							
Phenanthrene							
Phenol							
Pyrene							
Total cPAH	605	2.9	799	83.5	9.38	93	50.9
Total PAH	6150	88.7	4627	166.3	20.79	190.7	76.1
TOC							
Phenols, total							
1,1,1-Trichloroethane							
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2-Dichloroethane							
1,2-Dichloroethene, total							
1,2-Dichloropropane							
2-Butanone							
2-Chloroethylvinylether							
2-Hexanone							
4-Methyl-2-Pentanone							
Acetone							
Benzene							
Benzene, total	0.31	<0.006	0.22	<0.006	<0.006	<0.006	0.079
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon Disulfide							
Carbon Tetrachloride							
Chlorobenzene							
Chloroethane							
Chloroform							
Chloromethane							
cis-1,3-Dichloropropene							
Dibromochloromethane							
Ethylbenzene							
m-Xylene							
Methylene Chloride							
n-Propylbenzene							
o-Xylene							
p-Xylene							
Styrene							
Tetrachloroethene							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-19 (8) 1/25/00	PE-20 (7) 4/6/00	PE-21 (3) 4/10/00	PE-22 (3) 4/10/00	PE-23 (3) 4/10/00	PE-24 (1) 9/27/00	PE-25 (2) 9/27/00
Toluene							
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene							
Trichloroethene							
Trimethylbenzene							
Vinyl Acetate							
Vinyl Chloride							
Xylene, total							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-26 (2) 9/27/00	SS-1 8/29/89	SS-1 8/30/89	SS-1 9/1/89	SS-2 8/29/89	SS-2 8/30/89	SS-2 9/1/89	SS-3 8/29/89
Cyanide, amenable		0.0018			<0.001			<0.001
Cyanide, ferro-ferri								
Cyanide, reactive								
Cyanide, total								
Cyanide, total (distilled)		0.0018			<0.001			<0.001
Cyanide, total (undistilled)		<0.001			<0.001			<0.001
Aluminum								
Antimony								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Nickel								
Zinc								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1246								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Total PCBs		<0.006			<0.006			<0.006
Sulfide, reactive								
1,2,4-Trichlorobenzene				<0.66			<0.66	
1,2-Dichlorobenzene				<0.66			<0.66	
1,2-Diphenylhydrazine								
1,3-Dichlorobenzene				<0.66			<0.66	
1,4-Dichlorobenzene				<0.66			<0.66	
2,2'-oxybis(1-								
2,4,5-Trichlorophenol				<3.2			<3.2	
2,4,6-Trichlorophenol				<0.66			<0.66	
2,4-Dichlorophenol				<0.66			<0.66	
2,4-Dimethylphenol				<0.66			<0.66	
2,4-Dinitrophenol				<3.2			<3.2	
2,4-Dinitrotoluene				<0.66			<0.66	
2,6-Dinitrotoluene				<0.66			<0.66	
2-Chloronaphthalene				<0.66			<0.66	
2-Chlorophenol				<0.66			<0.66	
2-Methylnaphthalene				<0.66			<0.66	
2-Methylphenol				<0.66			<0.66	
2-Nitroaniline				<3.2			<3.2	
2-Nitrophenol				<0.66			<0.66	

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-26 (2) 9/27/00	SS-1 8/29/89	SS-1 8/30/89	SS-1 9/1/89	SS-2 8/29/89	SS-2 8/30/89	SS-2 9/1/89	SS-3 8/29/89
3,3'-Dichlorobenzidine				<1.3			<1.3	
3-Nitroaniline				<3.2			<3.2	
4,6-Dinitro-2-Methylphenol								
4,6-Dinitro-o-cresol				<3.2			<3.2	
4-Bromophenyl phenyl ether				<0.66			<0.66	
4-Chloro-3-Methylphenol								
4-Chloroaniline				<0.66			<0.66	
4-Chlorophenyl-phenylether				<0.66			<0.66	
4-Methylphenol				<0.66			<0.66	
4-Nitroaniline				<3.2			<3.2	
4-Nitrophenol				<3.2			<3.2	
Acenaphthene				<0.66			<0.66	
Acenaphthylene				2.1			5.2	
Anthracene				1.1			2.8	
Benzidine								
Benzo(a)anthracene				4.5			5.4	
Benzo(a)pyrene				3.4			4.9	
Benzo(a,h)anthracene								
Benzo(b)fluoranthene				2.7			8.7	
Benzo(g,h,i)perylene				1.6			2.9	
Benzo(k)fluoranthene				4.3			7.1	
Benzoic Acid				<0.66			<0.66	
Benzyl Alcohol				<0.66			<0.66	
bis(2-Chloroethoxy)methane				<0.66			<0.66	
bis(2-Chloroethyl)ether				<0.66			<0.66	
bis(2-Chloroisopropyl)ether				<0.66			<0.66	
bis(2-Ethylhexyl)phthalate				3.7			<0.66	
Butylbenzylphthalate				<0.66			<0.66	
Carbazole								
Chrysene				6.2			9.6	
Di-n-butylphthalate				<0.66			0.99	
Di-n-octylphthalate				<0.66			<0.66	
Dibenzo(a,h)anthracene				<0.66			<0.66	
Dibenzofuran				<0.66			<0.66	
Diethylphthalate				<0.66			<0.66	
Dimethylphthalate				<0.66			<0.66	
Fluoranthene				7.4			5.3	
Fluorene				0.71			<0.66	
Hexachlorobenzene				<0.66			<0.66	
Hexachlorobutadiene				<0.66			<0.66	
Hexachlorocyclopentadiene				<0.66			<0.66	
Hexachloroethane				<0.66			<0.66	
Indeno(1,2,3-cd)pyrene				1.4			2.5	
Isophorone				<0.66			<0.66	
n-Nitrosodi-n-propylamine				<0.66			<0.66	
n-Nitrosodimethylamine								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-26 (2) 9/27/00	SS-1 8/29/89	SS-1 8/30/89	SS-1 9/1/89	SS-2 8/29/89	SS-2 8/30/89	SS-2 9/1/89	SS-3 8/29/89
n-Nitrosodiphenylamine				<0.66			<0.66	
Naphthalene	0.064			<0.66			<0.66	
Nitrobenzene				<0.66			<0.66	
p-Chloro-m-cresol				<0.66			<0.66	
Pentachlorophenol				<3.2			<3.2	
Phenanthrene				8.5			2.6	
Phenol				<0.66			<0.66	
Pyrene				16			14	
Total cPAH	6.31							
Total PAH	112.7							
TOC								
Phenols, total								
1,1,1-Trichloroethane			<0.63			<0.86		
1,1,2,2-Tetrachloroethane			<1.3			<1.7		
1,1,2-Trichloroethane			<0.63			<0.86		
1,1-Dichloroethane			<0.63			<0.86		
1,1-Dichloroethene			<0.63			<0.86		
1,2-Dichloroethane			<0.63			<0.86		
1,2-Dichloroethene, total								
1,2-Dichloropropane			<0.63			<0.86		
2-Butanone			<1.3			<1.7		
2-Chloroethylvinylether			<1.3			<1.7		
2-Hexanone			<1.3			<1.7		
4-Methyl-2-Pentanone			<1.3			<1.7		
Acetone			<1.3			<1.7		
Benzene			<0.63			<0.86		
Benzene, total	0.005							
Bromodichloromethane			<0.63			<0.86		
Bromoform			<0.63			<0.86		
Bromomethane			<1.3			<1.7		
Carbon Disulfide			<0.63			<0.86		
Carbon Tetrachloride			<0.63			<0.86		
Chlorobenzene			<0.63			<0.86		
Chloroethane			<1.3			<1.7		
Chloroform			<0.63			<0.86		
Chloromethane			<1.3			<1.7		
cis-1,3-Dichloropropene			<0.63			<0.86		
Dibromochloromethane			<0.63			<0.86		
Ethylbenzene			<0.63			<0.86		
m-Xylene								
Methylene Chloride			<0.63			<0.86		
n-Propylbenzene								
o-Xylene								
p-Xylene								
Styrene			<0.63			<0.86		
Tetrachloroethene			<0.63			<0.86		

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	PE-26 (2) 9/27/00	SS-1 8/29/89	SS-1 8/30/89	SS-1 9/1/89	SS-2 8/29/89	SS-2 8/30/89	SS-2 9/1/89	SS-3 8/29/89
Toluene			<0.63			<0.86		
trans-1,2-Dichloroethene			<0.63			<0.86		
trans-1,3-Dichloropropene			<0.63			<0.86		
Trichloroethene			<0.63			<0.86		
Trimethylbenzene								
Vinyl Acetate			<1.3			<1.7		
Vinyl Chloride			<1.3			<1.7		
Xylene, total			<0.63			<0.86		

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-3 8/29/89 DUP	SS-3 8/30/89	8/30/89 DUP	SS-3 9/1/89	SS-3 9/1/89 DUP	SS-4 8/29/89	SS-4 8/30/89	SS-4 9/1/89
Cyanide, amenable	0.0019					<0.001		
Cyanide, ferro-ferri								
Cyanide, reactive								
Cyanide, total								
Cyanide, total (distilled)	0.0019					<0.001		
Cyanide, total (undistilled)	<0.001					<0.001		
Aluminum								
Antimony								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Nickel								
Zinc								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1246								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Total PCBs	<0.006					<0.006		
Sulfide, reactive								
1,2,4-Trichlorobenzene				<0.66	<0.66			<0.66
1,2-Dichlorobenzene				<0.66	<0.66			<0.66
1,2-Diphenylhydrazine								
1,3-Dichlorobenzene				<0.66	<0.66			<0.66
1,4-Dichlorobenzene				<0.66	<0.66			<0.66
2,2'-oxybis(1-								
2,4,5-Trichlorophenol				<3.2	<3.2			<3.2
2,4,6-Trichlorophenol				<0.66	<0.66			<0.66
2,4-Dichlorophenol				<0.66	<0.66			<0.66
2,4-Dimethylphenol				<0.66	<0.66			<0.66
2,4-Dinitrophenol				<3.2	<3.2			<3.2
2,4-Dinitrotoluene				<0.66	<0.66			<0.66
2,6-Dinitrotoluene				<0.66	<0.66			<0.66
2-Chloronaphthalene				<0.66	<0.66			<0.66
2-Chlorophenol				<0.66	<0.66			<0.66
2-Methylnaphthalene				<0.66	<0.66			<0.66
2-Methylphenol				<0.66	<0.66			<0.66
2-Nitroaniline				<3.2	<3.2			<3.2
2-Nitrophenol				<0.66	<0.66			<0.66

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-3 8/29/89 DUP	SS-3 8/30/89	8/30/89 DUP	SS-3 9/1/89	SS-3 9/1/89 DUP	SS-4 8/29/89	SS-4 8/30/89	SS-4 9/1/89
3,3'-Dichlorobenzidine				<1.3	<1.3			<1.3
3-Nitroaniline				<3.2	<3.2			<3.2
4,6-Dinitro-2-Methylphenol								
4,6-Dinitro-o-cresol				<3.2	<3.2			<3.2
4-Bromophenyl phenyl ether				<0.66	<0.66			<0.66
4-Chloro-3-Methylphenol								
4-Chloroaniline				<0.66	<0.66			<0.66
4-Chlorophenyl-phenylether				<0.66	<0.66			<0.66
4-Methylphenol				<0.66	<0.66			<0.66
4-Nitroaniline				<3.2	<3.2			<3.2
4-Nitrophenol				<3.2	<3.2			<3.2
Acenaphthene				1.5	1.7			<0.66
Acenaphthylene				<0.66	<0.66			<0.66
Anthracene				1.3	1.1			<0.66
Benzidine								
Benzo(a)anthracene				2.8	2.5			1.3
Benzo(a)pyrene				1.8	1.9			0.86
Benzo(a,h)anthracene								
Benzo(b)fluoranthene				2.3	1.9			1.4
Benzo(g,h,i)perylene				<0.66	0.69			<0.66
Benzo(k)fluoranthene				2.1	2.4			1.3
Benzoic Acid				<0.66	<0.66			<0.66
Benzyl Alcohol				<0.66	<0.66			<0.66
bis(2-Chloroethoxy)methane				<0.66	<0.66			<0.66
bis(2-Chloroethyl)ether				<0.66	<0.66			<0.66
bis(2-Chloroisopropyl)ether				<0.66	<0.66			<0.66
bis(2-Ethylhexyl)phthalate				1.1	0.92			<0.66
Butylbenzylphthalate				<0.66	<0.66			<0.66
Carbazole								
Chrysene				3.4	3.1			2.3
Di-n-butylphthalate				1.1	0.93			0.87
Di-n-octylphthalate				<0.66	<0.66			11
Dibenzo(a,h)anthracene				<0.66	<0.66			<0.66
Dibenzofuran				<0.66	<0.66			<0.66
Diethylphthalate				<0.66	<0.66			<0.66
Dimethylphthalate				<0.66	<0.66			<0.66
Fluoranthene				6	4.7			0.7
Fluorene				<0.66	<0.66			<0.66
Hexachlorobenzene				<0.66	<0.66			<0.66
Hexachlorobutadiene				<0.66	<0.66			<0.66
Hexachlorocyclopentadiene				<0.66	<0.66			<0.66
Hexachloroethane				<0.66	<0.66			<0.66
Indeno(1,2,3-cd)pyrene				<0.66	<0.66			<0.66
Isophorone				<0.66	<0.66			<0.66
n-Nitrosodi-n-propylamine				<0.66	<0.66			<0.66
n-Nitrosodimethylamine								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-3 8/29/89 DUP	SS-3 8/30/89	8/30/89 DUP	SS-3 9/1/89	SS-3 9/1/89 DUP	SS-4 8/29/89	SS-4 8/30/89	SS-4 9/1/89
n-Nitrosodiphenylamine				<0.66	<0.66			<0.66
Naphthalene				<0.66	<0.66			<0.66
Nitrobenzene				<0.66	<0.66			<0.66
p-Chloro-m-cresol				<0.66	<0.66			<0.66
Pentachlorophenol				<3.2	<3.2			<3.2
Phenanthrene				6.6	4.1			<0.66
Phenol				<0.66	<0.66			<0.66
Pyrene				13	11			1.2
Total cPAH								
Total PAH								
TOC								
Phenols, total								
1,1,1-Trichloroethane		<0.72	<0.67				<0.71	
1,1,2,2-Tetrachloroethane		<1.4	<1.3				<1.4	
1,1,2-Trichloroethane		<0.72	<0.67				<0.71	
1,1-Dichloroethane		<0.72	<0.67				<0.71	
1,1-Dichloroethene		<0.72	<0.67				<0.71	
1,2-Dichloroethane		<0.72	<0.67				<0.71	
1,2-Dichloroethene, total								
1,2-Dichloropropane		<0.72	<0.67				<0.71	
2-Butanone		<1.4	<1.3				<1.4	
2-Chloroethylvinylether		<1.4	<1.3				<1.4	
2-Hexanone		<1.4	<1.3				<1.4	
4-Methyl-2-Pentanone		<1.4	<1.3				<1.4	
Acetone		<1.4	<1.3				<1.4	
Benzene		<0.72	<0.67				<0.71	
Benzene, total								
Bromodichloromethane		<0.72	<0.67				<0.71	
Bromoform		<0.72	<0.67				<0.71	
Bromomethane		0.3J	<1.3				<1.4	
Carbon Disulfide		<0.72	<0.67				<0.71	
Carbon Tetrachloride		<0.72	<0.67				<0.71	
Chlorobenzene		<0.72	<0.67				<0.71	
Chloroethane		<1.4	<1.3				<1.4	
Chloroform		<0.72	<0.67				<0.71	
Chloromethane		<1.4	<1.3				<1.4	
cis-1,3-Dichloropropene		<0.72	<0.67				<0.71	
Dibromochloromethane		<0.72	<0.67				<0.71	
Ethylbenzene		<0.72	<0.67				<0.71	
m-Xylene								
Methylene Chloride		<0.72	<0.67				<0.71	
n-Propylbenzene								
o-Xylene								
p-Xylene								
Styrene		<0.72	<0.67				<0.71	
Tetrachloroethene		<0.72	<0.67				<0.71	

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-3 8/29/89 DUP	SS-3 8/30/89	8/30/89 DUP	SS-3 9/1/89	SS-3 9/1/89 DUP	SS-4 8/29/89	SS-4 8/30/89	SS-4 9/1/89
Toluene		<0.72	<0.67				<0.71	
trans-1,2-Dichloroethene		<0.72	<0.67				<0.71	
trans-1,3-Dichloropropene		<0.72	<0.67				<0.71	
Trichloroethene		<0.72	<0.67				<0.71	
Trimethylbenzene								
Vinyl Acetate		<1.4	<1.3				<1.4	
Vinyl Chloride		<1.4	<1.3				<1.4	
Xylene, total		<0.72	<0.67				<0.71	

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-5 8/29/89	SS-5 8/30/89	SS-5 9/1/89	SS-6 8/29/89	8/29/89 DUP	SS-7 8/29/89	8/29/89 DUP	SS-8 8/29/89
Cyanide, amenable	<0.001							
Cyanide, ferro-ferri								
Cyanide, reactive								
Cyanide, total								
Cyanide, total (distilled)	<0.001							
Cyanide, total (undistilled)	<0.001							
Aluminum								
Antimony								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Nickel								
Zinc								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1246								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								
Total PCBs	<0.006			<0.006	<0.006	<0.006	<0.006	<0.006
Sulfide, reactive								
1,2,4-Trichlorobenzene			<0.66					
1,2-Dichlorobenzene			<0.66					
1,2-Diphenylhydrazine								
1,3-Dichlorobenzene			<0.66					
1,4-Dichlorobenzene			<0.66					
2,2'-oxybis(1-								
2,4,5-Trichlorophenol			<3.2					
2,4,6-Trichlorophenol			<0.66					
2,4-Dichlorophenol			<0.66					
2,4-Dimethylphenol			<0.66					
2,4-Dinitrophenol			<3.2					
2,4-Dinitrotoluene			<0.66					
2,6-Dinitrotoluene			<0.66					
2-Chloronaphthalene			<0.66					
2-Chlorophenol			<0.66					
2-Methylnaphthalene			<0.66					
2-Methylphenol			<0.66					
2-Nitroaniline			<3.2					
2-Nitrophenol			<0.66					

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-5 8/29/89	SS-5 8/30/89	SS-5 9/1/89	SS-6 8/29/89	8/29/89 DUP	SS-7 8/29/89	8/29/89 DUP	SS-8 8/29/89
3,3'-Dichlorobenzidine			<1.3					
3-Nitroaniline			<3.2					
4,6-Dinitro-2-Methylphenol								
4,6-Dinitro-o-cresol			<3.2					
4-Bromophenyl phenyl ether			<0.66					
4-Chloro-3-Methylphenol								
4-Chloroaniline			<0.66					
4-Chlorophenyl-phenylether			<0.66					
4-Methylphenol			<0.66					
4-Nitroaniline			<3.2					
4-Nitrophenol			<3.2					
Acenaphthene			<0.66					
Acenaphthylene			<0.66					
Anthracene			<0.66					
Benzidine								
Benzo(a)anthracene			<0.66					
Benzo(a)pyrene			<0.66					
Benzo(a,h)anthracene								
Benzo(b)fluoranthene			<0.66					
Benzo(g,h,i)perylene			<0.66					
Benzo(k)fluoranthene			<0.66					
Benzoic Acid			<0.66					
Benzyl Alcohol			<0.66					
bis(2-Chloroethoxy)methane			<0.66					
bis(2-Chloroethyl)ether			<0.66					
bis(2-Chloroisopropyl)ether			<0.66					
bis(2-Ethylhexyl)phthalate			<0.66					
Butylbenzylphthalate			<0.66					
Carbazole								
Chrysene			<0.66					
Di-n-butylphthalate			0.67					
Di-n-octylphthalate			<0.66					
Dibenzo(a,h)anthracene			<0.66					
Dibenzofuran			<0.66					
Diethylphthalate			<0.66					
Dimethylphthalate			<0.66					
Fluoranthene			<0.66					
Fluorene			<0.66					
Hexachlorobenzene			<0.66					
Hexachlorobutadiene			<0.66					
Hexachlorocyclopentadiene			<0.66					
Hexachloroethane			<0.66					
Indeno(1,2,3-cd)pyrene			<0.66					
Isophorone			<0.66					
n-Nitrosodi-n-propylamine			<0.66					
n-Nitrosodimethylamine								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-5 8/29/89	SS-5 8/30/89	SS-5 9/1/89	SS-6 8/29/89	8/29/89 DUP	SS-7 8/29/89	8/29/89 DUP	SS-8 8/29/89
n-Nitrosodiphenylamine			<0.66					
Naphthalene			<0.66					
Nitrobenzene			<0.66					
p-Chloro-m-cresol			<0.66					
Pentachlorophenol			<3.2					
Phenanthrene			<0.66					
Phenol			<0.66					
Pyrene			<0.66					
Total cPAH								
Total PAH								
TOC								
Phenols, total								
1,1,1-Trichloroethane		<0.71						
1,1,2,2-Tetrachloroethane		<1.4						
1,1,2-Trichloroethane		<0.71						
1,1-Dichloroethane		<0.71						
1,1-Dichloroethene		<0.71						
1,2-Dichloroethane		<0.71						
1,2-Dichloroethene, total								
1,2-Dichloropropane		<0.71						
2-Butanone		<1.4						
2-Chloroethylvinylether		<1.4						
2-Hexanone		<1.4						
4-Methyl-2-Pentanone		<1.4						
Acetone		<1.4						
Benzene		<0.71						
Benzene, total								
Bromodichloromethane		<0.71						
Bromoform		<0.71						
Bromomethane		<1.4						
Carbon Disulfide		<0.71						
Carbon Tetrachloride		<0.71						
Chlorobenzene		<0.71						
Chloroethane		<1.4						
Chloroform		<0.71						
Chloromethane		<1.4						
cis-1,3-Dichloropropene		<0.71						
Dibromochloromethane		<0.71						
Ethylbenzene		<0.71						
m-Xylene								
Methylene Chloride		<0.71						
n-Propylbenzene								
o-Xylene								
p-Xylene								
Styrene		<0.71						
Tetrachloroethene		<0.71						

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-5 8/29/89	SS-5 8/30/89	SS-5 9/1/89	SS-6 8/29/89	8/29/89 DUP	SS-7 8/29/89	8/29/89 DUP	SS-8 8/29/89
Toluene		<0.71						
trans-1,2-Dichloroethene		<0.71						
trans-1,3-Dichloropropene		<0.71						
Trichloroethene		<0.71						
Trimethylbenzene								
Vinyl Acetate		<1.4						
Vinyl Chloride		<1.4						
Xylene, total		<0.71						

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	8/29/89 DUP	SS-9 8/29/89	SS-21 5/19/93	SS-22 5/19/93	SS-23 5/19/93	SS-23 5/19/93 DUP	SS-24 5/19/93	SS-25 5/22/93
Cyanide, amenable								
Cyanide, ferro-ferri								
Cyanide, reactive			<100	<100	<100	<100	<100	
Cyanide, total								
Cyanide, total (distilled)								
Cyanide, total (undistilled)								
Aluminum								
Antimony								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Nickel								
Zinc								
Aroclor-1016								<0.037
Aroclor-1221								<0.074
Aroclor-1232								<0.037
Aroclor-1242								<0.037
Aroclor-1246								
Aroclor-1248								<0.037
Aroclor-1254								<0.037
Aroclor-1260								<0.037
Total PCBs	<0.006	<0.006						
Sulfide, reactive			<100	<100	<100	<100	<100	
1,2,4-Trichlorobenzene								
1,2-Dichlorobenzene								
1,2-Diphenylhydrazine								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
2,2'-oxybis(1-								
2,4,5-Trichlorophenol								
2,4,6-Trichlorophenol								
2,4-Dichlorophenol								
2,4-Dimethylphenol								
2,4-Dinitrophenol								
2,4-Dinitrotoluene								
2,6-Dinitrotoluene								
2-Chloronaphthalene								
2-Chlorophenol								
2-Methylnaphthalene								
2-Methylphenol								
2-Nitroaniline								
2-Nitrophenol								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	8/29/89 DUP	SS-9 8/29/89	SS-21 5/19/93	SS-22 5/19/93	SS-23 5/19/93	SS-23 5/19/93 DUP	SS-24 5/19/93	SS-25 5/22/93
3,3'-Dichlorobenzidine								
3-Nitroaniline								
4,6-Dinitro-2-Methylphenol								
4,6-Dinitro-o-cresol								
4-Bromophenyl phenyl ether								
4-Chloro-3-Methylphenol								
4-Chloroaniline								
4-Chlorophenyl-phenylether								
4-Methylphenol								
4-Nitroaniline								
4-Nitrophenol								
Acenaphthene								
Acenaphthylene								
Anthracene								
Benzidine								
Benzo(a)anthracene								
Benzo(a)pyrene								
Benzo(a,h)anthracene								
Benzo(b)fluoranthene								
Benzo(g,h,i)perylene								
Benzo(k)fluoranthene								
Benzoic Acid								
Benzyl Alcohol								
bis(2-Chloroethoxy)methane								
bis(2-Chloroethyl)ether								
bis(2-Chloroisopropyl)ether								
bis(2-Ethylhexyl)phthalate								
Butylbenzylphthalate								
Carbazole								
Chrysene								
Di-n-butylphthalate								
Di-n-octylphthalate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Diethylphthalate								
Dimethylphthalate								
Fluoranthene								
Fluorene								
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Indeno(1,2,3-cd)pyrene								
Isophorone								
n-Nitrosodi-n-propylamine								
n-Nitrosodimethylamine								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	8/29/89 DUP	SS-9 8/29/89	SS-21 5/19/93	SS-22 5/19/93	SS-23 5/19/93	SS-23 5/19/93 DUP	SS-24 5/19/93	SS-25 5/22/93
n-Nitrosodiphenylamine								
Naphthalene								
Nitrobenzene								
p-Chloro-m-cresol								
Pentachlorophenol								
Phenanthrene								
Phenol								
Pyrene								
Total cPAH								
Total PAH								
TOC								
Phenols, total								
1,1,1-Trichloroethane								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,1-Dichloroethane								
1,1-Dichloroethene								
1,2-Dichloroethane								
1,2-Dichloroethene, total								
1,2-Dichloropropane								
2-Butanone								
2-Chloroethylvinylether								
2-Hexanone								
4-Methyl-2-Pentanone								
Acetone								
Benzene								
Benzene, total								
Bromodichloromethane								
Bromoform								
Bromomethane								
Carbon Disulfide								
Carbon Tetrachloride								
Chlorobenzene								
Chloroethane								
Chloroform								
Chloromethane								
cis-1,3-Dichloropropene								
Dibromochloromethane								
Ethylbenzene								
m-Xylene								
Methylene Chloride								
n-Propylbenzene								
o-Xylene								
p-Xylene								
Styrene								
Tetrachloroethene								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	8/29/89 DUP	SS-9 8/29/89	SS-21 5/19/93	SS-22 5/19/93	SS-23 5/19/93	SS-23 5/19/93 DUP	SS-24 5/19/93	SS-25 5/22/93
Toluene								
trans-1,2-Dichloroethene								
trans-1,3-Dichloropropene								
Trichloroethene								
Trimethylbenzene								
Vinyl Acetate								
Vinyl Chloride								
Xylene, total								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-29 5/19/93	SS-30 5/19/93	SS-31 5/19/93	SS-32 5/19/93	SS-33 5/22/93	SS-34 5/22/93	SS-35 5/22/93	SS-36 5/22/93
Cyanide, amenable								
Cyanide, ferro-ferri								
Cyanide, reactive								
Cyanide, total								
Cyanide, total (distilled)								
Cyanide, total (undistilled)								
Aluminum								
Antimony								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Nickel								
Zinc								
Aroclor-1016	<0.036	<0.036	<0.036	<0.036	<0.71	<0.72	<0.22	<0.036
Aroclor-1221	<0.071	<0.073	<0.072	<0.071	<1.4	<1.4	<0.44	<0.073
Aroclor-1232	<0.036	<0.036	<0.036	<0.036	<0.71	<0.72	<0.22	<0.036
Aroclor-1242	<0.036	<0.036	<0.036	<0.036	<0.71	<0.72	<0.22	<0.036
Aroclor-1246								
Aroclor-1248	<0.036	<0.036	<0.036	<0.036	1.8J	2.5J	0.3J	0.057J
Aroclor-1254	<0.036	<0.036	<0.036	<0.036	<0.71	<0.72	<0.22	<0.036
Aroclor-1260	0.05J	<0.036	0.047J	<0.036	<0.71	<0.72	0.36J	0.18J
Total PCBs								
Sulfide, reactive								
1,2,4-Trichlorobenzene								
1,2-Dichlorobenzene								
1,2-Diphenylhydrazine								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
2,2'-oxybis(1-								
2,4,5-Trichlorophenol								
2,4,6-Trichlorophenol								
2,4-Dichlorophenol								
2,4-Dimethylphenol								
2,4-Dinitrophenol								
2,4-Dinitrotoluene								
2,6-Dinitrotoluene								
2-Chloronaphthalene								
2-Chlorophenol								
2-Methylnaphthalene								
2-Methylphenol								
2-Nitroaniline								
2-Nitrophenol								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-29 5/19/93	SS-30 5/19/93	SS-31 5/19/93	SS-32 5/19/93	SS-33 5/22/93	SS-34 5/22/93	SS-35 5/22/93	SS-36 5/22/93
3,3'-Dichlorobenzidine								
3-Nitroaniline								
4,6-Dinitro-2-Methylphenol								
4,6-Dinitro-o-cresol								
4-Bromophenyl phenyl ether								
4-Chloro-3-Methylphenol								
4-Chloroaniline								
4-Chlorophenyl-phenylether								
4-Methylphenol								
4-Nitroaniline								
4-Nitrophenol								
Acenaphthene								
Acenaphthylene								
Anthracene								
Benzidine								
Benzo(a)anthracene								
Benzo(a)pyrene								
Benzo(a,h)anthracene								
Benzo(b)fluoranthene								
Benzo(g,h,i)perylene								
Benzo(k)fluoranthene								
Benzoic Acid								
Benzyl Alcohol								
bis(2-Chloroethoxy)methane								
bis(2-Chloroethyl)ether								
bis(2-Chloroisopropyl)ether								
bis(2-Ethylhexyl)phthalate								
Butylbenzylphthalate								
Carbazole								
Chrysene								
Di-n-butylphthalate								
Di-n-octylphthalate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Diethylphthalate								
Dimethylphthalate								
Fluoranthene								
Fluorene								
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Indeno(1,2,3-cd)pyrene								
Isophorone								
n-Nitrosodi-n-propylamine								
n-Nitrosodimethylamine								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-29 5/19/93	SS-30 5/19/93	SS-31 5/19/93	SS-32 5/19/93	SS-33 5/22/93	SS-34 5/22/93	SS-35 5/22/93	SS-36 5/22/93
n-Nitrosodiphenylamine								
Naphthalene								
Nitrobenzene								
p-Chloro-m-cresol								
Pentachlorophenol								
Phenanthrene								
Phenol								
Pyrene								
Total cPAH								
Total PAH								
TOC								
Phenols, total								
1,1,1-Trichloroethane								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,1-Dichloroethane								
1,1-Dichloroethene								
1,2-Dichloroethane								
1,2-Dichloroethene, total								
1,2-Dichloropropane								
2-Butanone								
2-Chloroethylvinylether								
2-Hexanone								
4-Methyl-2-Pentanone								
Acetone								
Benzene								
Benzene, total								
Bromodichloromethane								
Bromoform								
Bromomethane								
Carbon Disulfide								
Carbon Tetrachloride								
Chlorobenzene								
Chloroethane								
Chloroform								
Chloromethane								
cis-1,3-Dichloropropene								
Dibromochloromethane								
Ethylbenzene								
m-Xylene								
Methylene Chloride								
n-Propylbenzene								
o-Xylene								
p-Xylene								
Styrene								
Tetrachloroethene								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-29 5/19/93	SS-30 5/19/93	SS-31 5/19/93	SS-32 5/19/93	SS-33 5/22/93	SS-34 5/22/93	SS-35 5/22/93	SS-36 5/22/93
Toluene								
trans-1,2-Dichloroethene								
trans-1,3-Dichloropropene								
Trichloroethene								
Trimethylbenzene								
Vinyl Acetate								
Vinyl Chloride								
Xylene, total								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-37 5/22/93	SS-37 5/22/93 DUP	SS-38 5/22/93	SS-39 5/22/93	SS-40 5/22/93	SS-41 5/22/93	SS-45 5/22/93	SS-45 5/22/93 DUP
Cyanide, amenable								
Cyanide, ferro-ferri								
Cyanide, reactive								
Cyanide, total								
Cyanide, total (distilled)								
Cyanide, total (undistilled)								
Aluminum								
Antimony								
Cadmium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Manganese								
Nickel								
Zinc								
Aroclor-1016	<0.037	<1.8	<0.37	<0.035	<0.07	<0.037	<0.036	<0.038
Aroclor-1221	<0.073	<3.6	<0.74	<0.07	<0.14	<0.073	<0.072	<0.076
Aroclor-1232	<0.037	<1.8	<0.37	<0.035	<0.07	<0.037	<0.036	<0.038
Aroclor-1242	<0.037	<1.8	<0.37	<0.035	<0.07	<0.037	<0.036	<0.038
Aroclor-1246								
Aroclor-1248	0.32J	<1.8	0.7J	0.077J	0.29J	<0.037	<0.036	<0.038
Aroclor-1254	<0.037	<1.8	<0.37	<0.035	<0.07	<0.037	<0.036	<0.038
Aroclor-1260	2.6J	2.2J	0.41J	<0.035	<0.07	<0.037	0.058J	0.075J
Total PCBs								
Sulfide, reactive								
1,2,4-Trichlorobenzene								
1,2-Dichlorobenzene								
1,2-Diphenylhydrazine								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
2,2'-oxybis(1-								
2,4,5-Trichlorophenol								
2,4,6-Trichlorophenol								
2,4-Dichlorophenol								
2,4-Dimethylphenol								
2,4-Dinitrophenol								
2,4-Dinitrotoluene								
2,6-Dinitrotoluene								
2-Chloronaphthalene								
2-Chlorophenol								
2-Methylnaphthalene								
2-Methylphenol								
2-Nitroaniline								
2-Nitrophenol								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-37 5/22/93	SS-37 5/22/93 DUP	SS-38 5/22/93	SS-39 5/22/93	SS-40 5/22/93	SS-41 5/22/93	SS-45 5/22/93	SS-45 5/22/93 DUP
3,3'-Dichlorobenzidine								
3-Nitroaniline								
4,6-Dinitro-2-Methylphenol								
4,6-Dinitro-o-cresol								
4-Bromophenyl phenyl ether								
4-Chloro-3-Methylphenol								
4-Chloroaniline								
4-Chlorophenyl-phenylether								
4-Methylphenol								
4-Nitroaniline								
4-Nitrophenol								
Acenaphthene								
Acenaphthylene								
Anthracene								
Benzidine								
Benzo(a)anthracene								
Benzo(a)pyrene								
Benzo(a,h)anthracene								
Benzo(b)fluoranthene								
Benzo(g,h,i)perylene								
Benzo(k)fluoranthene								
Benzoic Acid								
Benzyl Alcohol								
bis(2-Chloroethoxy)methane								
bis(2-Chloroethyl)ether								
bis(2-Chloroisopropyl)ether								
bis(2-Ethylhexyl)phthalate								
Butylbenzylphthalate								
Carbazole								
Chrysene								
Di-n-butylphthalate								
Di-n-octylphthalate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Diethylphthalate								
Dimethylphthalate								
Fluoranthene								
Fluorene								
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Indeno(1,2,3-cd)pyrene								
Isophorone								
n-Nitrosodi-n-propylamine								
n-Nitrosodimethylamine								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-37 5/22/93	SS-37 5/22/93 DUP	SS-38 5/22/93	SS-39 5/22/93	SS-40 5/22/93	SS-41 5/22/93	SS-45 5/22/93	SS-45 5/22/93 DUP
n-Nitrosodiphenylamine								
Naphthalene								
Nitrobenzene								
p-Chloro-m-cresol								
Pentachlorophenol								
Phenanthrene								
Phenol								
Pyrene								
Total cPAH								
Total PAH								
TOC								
Phenols, total								
1,1,1-Trichloroethane								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,1-Dichloroethane								
1,1-Dichloroethene								
1,2-Dichloroethane								
1,2-Dichloroethene, total								
1,2-Dichloropropane								
2-Butanone								
2-Chloroethylvinylether								
2-Hexanone								
4-Methyl-2-Pentanone								
Acetone								
Benzene								
Benzene, total								
Bromodichloromethane								
Bromoform								
Bromomethane								
Carbon Disulfide								
Carbon Tetrachloride								
Chlorobenzene								
Chloroethane								
Chloroform								
Chloromethane								
cis-1,3-Dichloropropene								
Dibromochloromethane								
Ethylbenzene								
m-Xylene								
Methylene Chloride								
n-Propylbenzene								
o-Xylene								
p-Xylene								
Styrene								
Tetrachloroethene								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-37 5/22/93	SS-37 5/22/93 DUP	SS-38 5/22/93	SS-39 5/22/93	SS-40 5/22/93	SS-41 5/22/93	SS-45 5/22/93	SS-45 5/22/93 DUP
Toluene								
trans-1,2-Dichloroethene								
trans-1,3-Dichloropropene								
Trichloroethene								
Trimethylbenzene								
Vinyl Acetate								
Vinyl Chloride								
Xylene, total								

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-46 5/22/93	SS-47 5/22/93	SS-48 5/22/93	SS-M-1 10/25/91	SS-M-2 10/25/91	SS-M-3 10/25/91	SS-M-4 10/25/91
Cyanide, amenable							
Cyanide, ferro-ferri							
Cyanide, reactive							
Cyanide, total							
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron							
Lead							
Manganese							
Nickel							
Zinc							
Aroclor-1016	<0.042	<0.086	<0.086				
Aroclor-1221	<0.084	<0.17	<0.17				
Aroclor-1232	<0.042	<0.006	<0.086				
Aroclor-1242	<0.042	<0.086	<0.086				
Aroclor-1246					1		
Aroclor-1248	<0.042	<0.086	<0.086				
Aroclor-1254	<0.042	<0.086	<0.086				
Aroclor-1260	0.069J	0.24J	0.13J				
Total PCBs				<0.0003		<0.0003	<0.0003
Sulfide, reactive							
1,2,4-Trichlorobenzene							
1,2-Dichlorobenzene							
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene							
1,4-Dichlorobenzene							
2,2'-oxybis(1-							
2,4,5-Trichlorophenol							
2,4,6-Trichlorophenol							
2,4-Dichlorophenol							
2,4-Dimethylphenol							
2,4-Dinitrophenol							
2,4-Dinitrotoluene							
2,6-Dinitrotoluene							
2-Chloronaphthalene							
2-Chlorophenol							
2-Methylnaphthalene							
2-Methylphenol							
2-Nitroaniline							
2-Nitrophenol							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-46 5/22/93	SS-47 5/22/93	SS-48 5/22/93	SS-M-1 10/25/91	SS-M-2 10/25/91	SS-M-3 10/25/91	SS-M-4 10/25/91
3,3'-Dichlorobenzidine							
3-Nitroaniline							
4,6-Dinitro-2-Methylphenol							
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether							
4-Chloro-3-Methylphenol							
4-Chloroaniline							
4-Chlorophenyl-phenylether							
4-Methylphenol							
4-Nitroaniline							
4-Nitrophenol							
Acenaphthene							
Acenaphthylene							
Anthracene							
Benzidine							
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(a,h)anthracene							
Benzo(b)fluoranthene							
Benzo(g,h,i)perylene							
Benzo(k)fluoranthene							
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether							
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate							
Butylbenzylphthalate							
Carbazole							
Chrysene							
Di-n-butylphthalate							
Di-n-octylphthalate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Fluoranthene							
Fluorene							
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Indeno(1,2,3-cd)pyrene							
Isophorone							
n-Nitrosodi-n-propylamine							
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-46 5/22/93	SS-47 5/22/93	SS-48 5/22/93	SS-M-1 10/25/91	SS-M-2 10/25/91	SS-M-3 10/25/91	SS-M-4 10/25/91
n-Nitrosodiphenylamine							
Naphthalene							
Nitrobenzene							
p-Chloro-m-cresol							
Pentachlorophenol							
Phenanthrene							
Phenol							
Pyrene							
Total cPAH							
Total PAH							
TOC							
Phenols, total							
1,1,1-Trichloroethane							
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2-Dichloroethane							
1,2-Dichloroethene, total							
1,2-Dichloropropane							
2-Butanone							
2-Chloroethylvinylether							
2-Hexanone							
4-Methyl-2-Pentanone							
Acetone							
Benzene							
Benzene, total							
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon Disulfide							
Carbon Tetrachloride							
Chlorobenzene							
Chloroethane							
Chloroform							
Chloromethane							
cis-1,3-Dichloropropene							
Dibromochloromethane							
Ethylbenzene							
m-Xylene							
Methylene Chloride							
n-Propylbenzene							
o-Xylene							
p-Xylene							
Styrene							
Tetrachloroethene							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-46 5/22/93	SS-47 5/22/93	SS-48 5/22/93	SS-M-1 10/25/91	SS-M-2 10/25/91	SS-M-3 10/25/91	SS-M-4 10/25/91
Toluene							
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene							
Trichloroethene							
Trimethylbenzene							
Vinyl Acetate							
Vinyl Chloride							
Xylene, total							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-M-5 10/25/91	TP-1 (6_5-7) 7/21/86	TP-2 (7-7_5) 7/21/86	TP-4 (3-4) 7/21/86	TP-5 (3-4) 7/21/86	TP-5 (3-4) 7/21/86 DUP	TP-5 (4-6) 7/21/86
Cyanide, amenable		<0	<0	<0	<0	<0	
Cyanide, ferro-ferri		<0	2	<0	<0	<0	
Cyanide, reactive							
Cyanide, total		<0.3	2	<0.3	<0.3	<0.3	
Cyanide, total (distilled)							
Cyanide, total (undistilled)							
Aluminum							
Antimony							
Cadmium							
Chromium							
Cobalt							
Copper							
Iron		27000	35000	27000	31000	35000	
Lead							
Manganese							
Nickel							
Zinc		260	120	87	79	220	
Aroclor-1016							
Aroclor-1221							
Aroclor-1232							
Aroclor-1242							
Aroclor-1246							
Aroclor-1248							
Aroclor-1254							
Aroclor-1260							
Total PCBs	<0.0003						
Sulfide, reactive							
1,2,4-Trichlorobenzene							
1,2-Dichlorobenzene							
1,2-Diphenylhydrazine							
1,3-Dichlorobenzene							
1,4-Dichlorobenzene							
2,2'-oxybis(1-							
2,4,5-Trichlorophenol							
2,4,6-Trichlorophenol							
2,4-Dichlorophenol							
2,4-Dimethylphenol							
2,4-Dinitrophenol							
2,4-Dinitrotoluene							
2,6-Dinitrotoluene							
2-Chloronaphthalene							
2-Chlorophenol							
2-Methylnaphthalene							
2-Methylphenol							
2-Nitroaniline							
2-Nitrophenol							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-M-5 10/25/91	TP-1 (6_5-7) 7/21/86	TP-2 (7-7_5) 7/21/86	TP-4 (3-4) 7/21/86	TP-5 (3-4) 7/21/86	TP-5 (3-4) 7/21/86 DUP	TP-5 (4-6) 7/21/86
3,3'-Dichlorobenzidine							
3-Nitroaniline							
4,6-Dinitro-2-Methylphenol							
4,6-Dinitro-o-cresol							
4-Bromophenyl phenyl ether							
4-Chloro-3-Methylphenol							
4-Chloroaniline							
4-Chlorophenyl-phenylether							
4-Methylphenol							
4-Nitroaniline							
4-Nitrophenol							
Acenaphthene		<0.043	<11	<5.7	290	<93	140
Acenaphthylene		<0.043	<11	<5.7	<78	<93	33
Anthracene		<0.043	<11	25	470	220	67
Benzidine							
Benzo(a)anthracene		<0.043	<11	<5.7	<78	<93	35
Benzo(a)pyrene		<0.043	<11	13	<78	<93	36
Benzo(a,h)anthracene		<0.043	<11	13	<78	<93	<13
Benzo(b)fluoranthene		<0.043	<11	23	<78	<93	13
Benzo(g,h,i)perylene		<0.043	<11	18	<78	<93	13
Benzo(k)fluoranthene		<0.043	<11	<5.7	<78	<93	21
Benzoic Acid							
Benzyl Alcohol							
bis(2-Chloroethoxy)methane							
bis(2-Chloroethyl)ether							
bis(2-Chloroisopropyl)ether							
bis(2-Ethylhexyl)phthalate							
Butylbenzylphthalate							
Carbazole							
Chrysene		<0.043	<11	59	110	<93	32
Di-n-butylphthalate							
Di-n-octylphthalate							
Dibenzo(a,h)anthracene				13			
Dibenzofuran							
Diethylphthalate							
Dimethylphthalate							
Fluoranthene		<0.043	45	84	880	220	78
Fluorene		<0.043	18	31	620	2600	89
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Indeno(1,2,3-cd)pyrene		<0.043	<11	<5.7	<78	<93	<13
Isophorone							
n-Nitrosodi-n-propylamine							
n-Nitrosodimethylamine							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-M-5 10/25/91	TP-1 (6_5-7) 7/21/86	TP-2 (7-7_5) 7/21/86	TP-4 (3-4) 7/21/86	TP-5 (3-4) 7/21/86	TP-5 (3-4) 7/21/86 DUP	TP-5 (4-6) 7/21/86
n-Nitrosodiphenylamine							
Naphthalene		<0.043	<11	19	350	5200	120
Nitrobenzene							
p-Chloro-m-cresol							
Pentachlorophenol							
Phenanthrene		<0.043	12	31	810	260	210
Phenol							
Pyrene		<0.043	45	96	1100	<93	250
Total cPAH							
Total PAH							
TOC		8300	1400	10000	30000	26000	
Phenols, total		<0.2	<0.2	<0.2	<0.2	<0.2	
1,1,1-Trichloroethane							
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2-Dichloroethane							
1,2-Dichloroethene, total							
1,2-Dichloropropane							
2-Butanone							
2-Chloroethylvinylether							
2-Hexanone							
4-Methyl-2-Pentanone							
Acetone							<2.4
Benzene		<0.022	<0.051	0.22	<0.099	0.094	<0.096
Benzene, total							
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon Disulfide							0.11
Carbon Tetrachloride							
Chlorobenzene							
Chloroethane							
Chloroform							
Chloromethane							
cis-1,3-Dichloropropene							
Dibromochloromethane							
Ethylbenzene		<0.022	<0.051	0.15	6.6	6.1	2.2
m-Xylene		<0.022	<0.051	0.091	4.1	3.1	
Methylene Chloride							1
n-Propylbenzene		<0.022	<0.051	0.083	2.1	2	
o-Xylene		<0.022	<0.051	0.082	3.9	3	
p-Xylene		<0.022	<0.051	0.062	2.1	1.6	
Styrene		<0.022	<0.051	<0.024	<0.099	0.094	<0.096
Tetrachloroethene							

APPENDIX B-1B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK
(All results in mg/kg)

PARAMETER	SS-M-5 10/25/91	TP-1 (6_5-7) 7/21/86	TP-2 (7-7_5) 7/21/86	TP-4 (3-4) 7/21/86	TP-5 (3-4) 7/21/86	TP-5 (3-4) 7/21/86 DUP	TP-5 (4-6) 7/21/86
Toluene		<0.022	<0.051	0.16	1	0.75	0.64
trans-1,2-Dichloroethene							
trans-1,3-Dichloropropene							
Trichloroethene							
Trimethylbenzene		<0.022	<0.051	<0.024	4.6	5.1	
Vinyl Acetate							
Vinyl Chloride							
Xylene, total							11

APPENDIX B-2A

SUMMARY OF ANALYSES
FOR GROUNDWATER SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	Metals	Filtered Metals	Total Phenols	Cyanide	General Chemistry Parameters	Total Organic Carbon
MW-1 9/9/86	X	X					X	
MW-1 9/9/86 HPLC	X	X	X		X	X	X	X
MW-1 12/2/86	X	X	X			X	X	X
MW-1 3/10/87	X	X	X			X	X	X
MW-1 6/2/87	X	X	X		X	X	X	X
MW-1 12/22/87	X	X	X		X	X		X
MW-1 3/29/88	X	X	X		X	X		X
MW-1 10/29/92		X		X	X	X	X	X
MW-1 7/15/93	X	X	X	X		X	X	
MW-1 7/15/93 DUP	X	X	X	X		X	X	
MW-1 7/15/93 NYSEG	X	X	X			X	X	
MW-1 10/12/93	X	X		X	X	X	X	X
MW-1 5/24/94	X	X	X		X	X	X	
MW-1 2/28/95	X	X		X	X	X	X	X
MW-1 2/19/96	X	X		X	X	X	X	X
MW-1 2/26/97	X	X		X	X	X	X	X
MW-1 2/19/98	X	X		X	X	X	X	X
MW-2 12/2/86	X	X	X			X	X	X
MW-2 12/2/86 DUP	X	X	X			X	X	X
MW-2 9/9/86 HPLC	X	X	X		X	X	X	X
MW-2 3/10/87	X	X	X			X	X	X
MW-2 6/2/87	X	X	X		X	X	X	X
MW-2 12/22/87	X	X	X		X	X		X
MW-2 3/29/88	X	X	X		X	X		X
MW-2 3/29/88 DUP		X	X		X	X		X
MW-2 10/29/92		X		X	X	X	X	X
MW-2 7/14/93	X	X	X	X		X	X	
MW-2 10/12/93	X	X		X	X	X	X	X
MW-2 5/24/94	X	X	X		X	X	X	
MW-2 2/28/95	X	X		X	X	X	X	X
MW-2 2/19/96	X	X		X	X	X	X	X
MW-2 2/26/97	X	X		X	X	X	X	X
MW-2 2/19/98	X	X		X	X	X	X	X
MW-3 9/9/86	X	X					X	
MW-3 9/9/86 HPLC	X	X	X		X	X	X	X
MW-3 12/2/86	X	X	X			X	X	X
MW-3 3/10/87	X	X	X			X	X	X
MW-3 6/2/87	X	X	X		X	X	X	X
MW-3 12/22/87	X	X	X		X	X		X
MW-3 3/30/88	X	X	X		X	X		X
MW-4 9/9/86 HPLC	X	X	X		X	X	X	X

APPENDIX B-2A

SUMMARY OF ANALYSES
FOR GROUNDWATER SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	Metals	Filtered Metals	Total Phenols	Cyanide	General Chemistry Parameters	Total Organic Carbon
MW-4 12/2/86	X	X	X			X	X	X
MW-4 3/10/87	X	X	X			X	X	X
MW-4 6/2/87	X	X	X		X	X	X	X
MW-4 12/22/87	X	X	X		X	X		X
MW-4 3/30/88	X	X	X		X	X		X
MW-4 10/12/93	X	X		X	X	X	X	X
MW-4 5/24/94	X	X	X		X	X	X	
MW-4 2/28/95	X	X		X	X	X	X	X
MW-4 2/19/96	X	X		X	X	X	X	X
MW-4 2/19/98	X	X		X	X	X	X	X
MW-4 2/25/99	X					X	X	X
MW-5 9/9/86 HPLC	X	X	X		X	X	X	X
MW-5 12/2/86	X	X	X			X	X	X
MW-5 6/2/87	X	X	X		X	X	X	X
MW-5 6/2/87 DUP	X	X	X		X	X	X	X
MW-5 12/22/87	X	X	X		X	X		X
MW-5 3/30/88	X	X	X		X	X		X
MW-6 9/9/86 HPLC	X	X	X		X	X	X	X
MW-6 9/9/86 HPLC	X	X	X		X	X	X	X
MW-6 9/9/86 HPLC DUP	X	X	X		X	X	X	X
MW-6 9/9/86 HPLC DUP	X	X	X		X	X	X	X
MW-6 12/2/86	X	X	X			X	X	X
MW-6 3/10/87	X	X	X			X	X	X
MW-6 3/10/87 DUP	X	X	X			X	X	X
MW-6 6/2/87	X	X	X		X	X	X	X
MW-6 12/22/87	X	X	X		X	X		X
MW-6 3/30/88	X	X	X		X	X		X
MW-10 12/22/87	X	X	X		X	X		X
MW-10 3/29/88		X	X		X	X		X
MW-11 12/22/87	X	X	X		X	X		X
MW-11 12/22/87 DUP	X	X	X		X	X		X
MW-11 3/29/88	X	X	X		X	X		X
MW-11 7/14/93	X	X	X	X		X	X	
MW-11 7/14/93 NYSEG	X	X	X			X	X	
MW-12 12/22/87	X	X	X		X	X		X
MW-12 3/29/88	X	X	X		X	X		X
MW-12 10/29/92		X		X	X	X	X	X
MW-12 10/12/93	X	X		X	X	X	X	X
MW-12 5/24/94	X	X	X		X	X	X	
MW-12 2/28/95	X	X		X	X	X	X	X
MW-12 2/20/96	X	X		X	X	X	X	X
MW-12 2/26/97	X	X		X	X	X	X	X

APPENDIX B-2A

SUMMARY OF ANALYSES
FOR GROUNDWATER SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	Metals	Filtered Metals	Total Phenols	Cyanide	General Chemistry Parameters	Total Organic Carbon
MW-12 2/19/98	X	X		X	X	X	X	X
MW-12 2/25/99	X					X	X	X
MW-13 12/22/87	X	X	X		X	X		X
MW-13 3/29/88	X	X	X		X	X		X
MW-13 3/29/88 DUP		X	X		X	X		X
MW-13 10/29/92		X		X	X	X	X	X
MW-13 7/14/93	X	X	X	X		X	X	
MW-13 7/15/93 NYSEG	X	X	X			X	X	
MW-13 10/13/93	X	X		X	X	X	X	X
MW-13 5/24/94	X	X	X		X	X	X	
MW-13 2/28/95	X	X		X	X	X	X	X
MW-13 2/20/96	X	X		X	X	X	X	X
MW-13 2/27/97	X	X		X	X	X	X	X
MW-13 2/19/98	X	X		X	X	X	X	X
MW-13 2/25/99	X					X	X	X
MW-14 12/22/87	X	X	X		X	X		X
MW-14 3/29/88	X	X	X		X	X		X
MW-14 10/29/92		X		X	X	X	X	X
MW-14 7/15/93	X	X	X	X		X	X	
MW-14 7/15/93 NYSEG	X	X	X			X	X	
MW-14 10/13/93	X	X		X	X	X	X	X
MW-14 5/24/94	X	X	X		X	X	X	
MW-14 2/28/95	X	X		X	X	X	X	X
MW-14 2/20/96	X	X		X	X	X	X	X
MW-14 2/27/97	X	X		X	X	X	X	X
MW-14 2/19/98	X	X		X	X	X	X	X
MW-14 2/25/99	X					X	X	X
MW-15 12/22/87	X	X	X		X	X		X
MW-15 12/22/87 DUP	X	X	X		X	X		X
MW-15 3/29/88	X	X	X		X	X		X
MW-15 10/29/92		X		X	X	X	X	X
MW-15 7/14/93	X	X	X	X		X	X	
MW-15 7/14/93 DUP	X	X	X	X		X	X	
MW-15 7/14/93 NYSEG	X	X	X			X	X	
MW-15 10/12/93	X	X		X	X	X	X	X
MW-15 5/24/94	X	X	X		X	X	X	
MW-15 2/28/95	X	X		X	X	X	X	X
MW-15 2/19/96	X	X		X	X	X	X	X
MW-15 2/27/97	X	X		X	X	X	X	X
MW-15 2/19/98	X	X		X	X	X	X	X
MW-15 2/25/99	X					X	X	X
MW-16 7/14/93	X	X	X	X		X	X	

APPENDIX B-2A

SUMMARY OF ANALYSES
FOR GROUNDWATER SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	Metals	Filtered Metals	Total Phenols	Cyanide	General Chemistry Parameters	Total Organic Carbon
MW-16 7/14/93 NYSEG	X	X	X			X	X	
MW-16 5/24/94	X	X	X		X	X	X	
MW-16 2/28/95	X	X		X	X	X	X	X
MW-16 2/19/96							X	
MW-16 2/26/97	X	X		X	X	X	X	X
MW-16 2/19/98	X	X		X	X	X	X	X
MW-17 2/19/98	X	X		X	X	X	X	X
MW-17 7/13/93	X	X	X	X		X	X	
MW-17 7/13/93 NYSEG	X	X	X			X	X	
MW-17 5/24/94	X	X	X		X	X	X	
MW-17 2/27/95	X	X		X	X	X	X	X
MW-17 2/20/96	X	X		X	X	X	X	X
MW-17 2/26/97	X	X		X	X	X	X	X
MW-18 7/13/93	X	X	X	X		X	X	
MW-18 5/24/94	X	X	X		X	X	X	
MW-18 2/27/95	X	X		X	X	X	X	X
MW-18 2/20/96	X	X		X	X	X	X	X
MW-18 2/26/97	X	X		X	X	X	X	X
MW-18 2/19/98	X	X		X	X	X	X	X

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 9/9/86	MW-1 9/9/86 HPLC	MW-1 12/2/86	MW-1 3/10/87	MW-1 6/2/87	MW-1 12/22/87	MW-1 3/29/88	MW-1 10/29/92	MW-1 7/15/93	MW-1 7/15/93 DUP
Cyanide, amenable		<0		<0	<0			<0.01	<0	<0
Cyanide, amenable-Filtered									<0	<0
Cyanide, ferro-ferri		<0	0.03	<0	0.01					
Cyanide, iron-cyanide									<0	<0
Cyanide, iron-cyanide-									<0	<0
Cyanide, total		<0.01	0.01	<0.02	0.01	0.01	<0.01		<0	<0
Cyanide, total-Filtered									<0	<0
Cyanide, undistilled						<0.01	<0.01			
Aluminum-Filtered									0.052J	<0
Antimony-Filtered									<0	<0
Arsenic-Filtered								<0.02		
Cadmium-Filtered								<0.01		
Chromium-Filtered								<0.05	0.004J	0.004J
Cobalt-Filtered									<0	<0
Copper-Filtered									<0	0.007J
Iron-Filtered								0.03	0.092J	0.046J
Lead-Filtered								<0.08	<0	<0
Manganese-Filtered									0.123	0.128
Mercury-Filtered								<0.0002		
Nickel-Filtered									0.041	0.033J
Zinc-Filtered								<0.01	<0	0.005J
Ammonia								<0.5		
Conductivity	0.0112	0.0112	0.0084	0.0059	0.0178			1.61		
Organics, Total NYS	0.396	1.73	0.25	0	<0					
pH	0.0053	0.0053	0.0067	0.0075	0.0066			0.0069		
Sulfate			74.6					76.3		
Temperature	1.83	1.83	0.37	2.04	1.68			0.0135		
Turbidity								0.0226	0.0011	0.0013
Aluminum									0.112J	0.113J
Aluminum, total										
Antimony									<0	0.0101J
Antimony, total										
Arsenic, total										
Barium, total										
Beryllium, total										
Cadmium, total										
Calcium, total										
Chromium									0.157	0.824
Chromium, total										
Cobalt									<0	0.007J
Cobalt, total										
Copper									0.007J	0.023
Copper, total										
Iron		<0.1	<0.03	<0.1	0.05	0.07	<0.05		3.27	4.36

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 9/9/86	MW-1 9/9/86 HPLC	MW-1 12/2/86	MW-1 3/10/87	MW-1 6/2/87	MW-1 12/22/87	MW-1 3/29/88	MW-1 10/29/92	MW-1 7/15/93	MW-1 7/15/93 DUP
Iron, total										
Lead									0.0016J	0.0012
Lead, total										
Magnesium, total										
Manganese									0.629	1.63
Manganese, total										
Mercury, total										
Nickel									0.125	0.15
Nickel, total										
Potassium, total										
Selenium, total										
Silver, total										
Sodium, total										
Thallium, total										
Vanadium, total										
Zinc		<0.01	0.007	<0.02	<0.02	<0.005	0.02		0.026	0.025
Zinc, total										
1,2,4-Trichlorobenzene						<0.02	<0.01		<0.01	<0.01
1,2-Dichlorobenzene						<0.02	<0.01		<0.01	<0.01
1,3-Dichlorobenzene						<0.02	<0.01		<0.01	<0.01
1,4-Dichlorobenzene						<0.02	<0.01		<0.01	<0.01
2,2'-oxybis(1-Chloropropane)									<0.01	<0.01
2,4,5-Trichlorophenol						<0.1	<0.05		<0.025	<0.024
2,4,6-Trichlorophenol						<0.02	<0.01		<0.01	<0.01
2,4-Dichlorophenol						<0.02	<0.01		<0.01	<0.01
2,4-Dimethylphenol						<0.02	<0.01		<0.01	<0.01
2,4-Dinitrophenol						<0.1	<0.05		<0.025	<0.024
2,4-Dinitrotoluene						<0.02	<0.01		<0.01	<0.01
2,6-Dinitrotoluene						<0.02	<0.01		<0.01	<0.01
2-Chloronaphthalene						<0.02	<0.01		<0.01	<0.01
2-Chlorophenol						<0.02	<0.01		<0.01	<0.01
2-Methyl-4,6-Dinitrophenol										
2-Methylnaphthalene	<0.02		<0.01	<0.01	<0.01	<0.02	<0.01		<0.01	<0.01
2-Methylphenol						<0.02	<0.01		<0.01	<0.01
2-Nitroaniline						<0.1	<0.05		<0.025	<0.024
2-Nitrophenol						<0.02	<0.01		<0.01	<0.01
3,3'-Dichlorobenzidine						<0.04	<0.02		<0.01	<0.01
3-Nitroaniline						<0.1	<0.05			
4,6-Dinitro-2-methylphenol						<0.1	<0.05		<0.025	<0.024
4-Bromophenyl phenyl ether						<0.02	<0.01		<0.01	<0.01
4-Chloro-3-Methylphenol						<0.02	<0.01		<0.01	<0.01
4-Chloroaniline						<0.02	<0.01		<0.01	<0.01
4-Chlorophenyl-phenylether						<0.02	<0.01		<0.01	<0.01
4-Methylphenol						<0.02	<0.01		<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 9/9/86	MW-1 9/9/86 HPLC	MW-1 12/2/86	MW-1 3/10/87	MW-1 6/2/87	MW-1 12/22/87	MW-1 3/29/88	MW-1 10/29/92	MW-1 7/15/93	MW-1 7/15/93 DUP
4-Nitroaniline						<0.1	<0.05		<0.025	<0.024
4-Nitrophenol						<0.1	<0.05		<0.025	<0.024
6-Nitroaniline									<0.025	<0.024
Acenaphthene	0.022	0.11	0.012	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	0.048	0.25	0.018	<0.01	<0.01	<0.02	<0.01	<0.01	0.001J	0.001J
Anthracene	<0.02	<0.02	0.031	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(a)pyrene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01
Benzo(g,h,i)perylene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01		<0.01	<0.01
Benzo(k)fluoranthene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Benzoic Acid						<0.1	<0.05			
Benzyl Alcohol						<0.02	<0.01			
bis(2-Chloroethoxy)methane						<0.02	<0.01		<0.01	<0.01
bis(2-Chloroethyl)ether						<0.02	<0.01		<0.01	<0.01
bis(2-Chloroisopropyl)ether						<0.02	<0.01			
bis(2-Ethylhexyl)phthalate	0.073		0.016	<0.01	0.04	<0.02	<0.01		0.041	0.044
Butylbenzylphthalate						<0.02	<0.01		<0.01	<0.01
Carbazole									<0.01	<0.01
Chrysene	<0.02	0.024	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Di-n-butylphthalate						<0.02	<0.01		<0.01	<0.01
Di-n-octylphthalate						<0.02	<0.47		<0.01	<0.01
Dibenzo(a,h)anthracene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01
Dibenzofuran						<0.02	<0.01		<0.01	<0.01
Dibromochloromethane										
Dichlorobromomethane										
Diethylphthalate						<0.02	<0.01		<0.01	<0.01
Dimethylphthalate						<0.02	<0.01		<0.01	<0.01
Fluoranthene	0.024	0.061	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Fluorene	0.026	0.24	0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Hexachloro-1,3-butadiene										
Hexachlorobenzene						<0.02	<0.01		<0.025	<0.01
Hexachlorobutadiene						<0.02	<0.01		<0.01	<0.01
Hexachlorocyclopentadiene						<0.02	<0.01		<0.01	<0.01
Hexachloroethane						<0.02	<0.01		<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01
Isophorone						<0.02	<0.01		<0.01	<0.01
n-Nitrosodi-n-propylamine						<0.02	<0.01		<0.01	<0.01
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine						<0.02	<0.01		<0.01	<0.01
Naphthalene	0.26	1.2	0.136	<0.01	<0.01	<0.02	<0.01	<0.01	0.002J	0.002J
Nitrobenzene						<0.02	<0.01		<0.01	<0.01
Pentachlorophenol						<0.1	<0.05		<0.025	<0.024
Phenanthrene	0.039	0.051	0.028	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 9/9/86	MW-1 9/9/86 HPLC	MW-1 12/2/86	MW-1 3/10/87	MW-1 6/2/87	MW-1 12/22/87	MW-1 3/29/88	MW-1 10/29/92	MW-1 7/15/93	MW-1 7/15/93 DUP
Phenol						<0.02	<0.01		<0.01	<0.01
Pyrene	0.025	0.044	0.017	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
Pyridine										
TOC		4.1	14	3.2	4.2	3.4	2.8	1		
Phenols, total		<0.01			<0.005	0.006	<0.005	<0.005		
1,1,1-Trichloroethane						<0.002	<0.005		<0.005	<0.005
1,1,2,2-Tetrachloroethane						<0.002	<0.005		<0.005	<0.005
1,1,2-Trichloroethane						<0.002	<0.005		<0.005	<0.005
1,1-Dichloroethane						<0.002	<0.005		<0.005	<0.005
1,1-Dichloroethene						<0.002	<0.005		<0.005	<0.005
1,2-Dichloroethane						<0.002	<0.005		<0.005	<0.005
1,2-Dichloroethene, total									<0.005	<0.005
1,2-Dichloropropane						<0.002	<0.005		<0.005	<0.005
2-Butanone						<0.01	<0.033		<0.01	<0.01
2-Chloroethylvinylether						<0.01	<0.01			
2-Hexanone						<0.01	<0.01		<0.01	<0.01
4-Methyl-2-Pentanone						<0.01	<0.01		<0.01	<0.01
Acetone	0.22		3.78	0.059	<0.01	<0.05	<0.047		<0.01	<0.01
Benzene	<0.002	<0.001	0.0055	<0.01	<0.005	<0.002	<0.005		<0.005	<0.005
Bromochloromethane										
Bromodichloromethane						<0.002	<0.005		<0.005	<0.005
Bromoethane										
Bromoform						<0.002	<0.005		<0.005	<0.005
Bromomethane						<0.005	<0.01		<0.01	<0.01
Carbon Disulfide						<0.002	<0.005		<0.005	<0.005
Carbon Tetrachloride						<0.002	<0.005		<0.005	<0.005
Chlorobenzene						<0.002	0.0016J		<0.005	<0.005
Chloroethane						<0.005	<0.01		<0.01	<0.01
Chloroform						<0.002	<0.005		<0.005	<0.005
Chloromethane						<0.005	<0.01		<0.01	<0.01
cis-1,3-Dichloropropene						<0.002	<0.005		<0.005	<0.005
Dibromochloromethane						<0.002	<0.005		<0.005	<0.005
Ethylbenzene	<0.002	<0.001	<0.005	<0.01	<0.005	<0.002	<0.005		<0.005	<0.005
m&p-Xylene										
m-Xylene		<0.001								
Methylene Chloride	<0.05		<0.05	<0.01	<0.005	<0.005	<0.013		0.005	0.003J
o-Xylene		<0.001								
p-Xylene		<0.001								
Styrene	<0.002	<0.001	<0.005	<0.01	<0.005	<0.002	<0.005		<0.005	<0.005
Tetrachloroethene						<0.002	<0.005		<0.005	<0.005
Toluene	<0.002	<0.001	<0.005	<0.01	<0.005	<0.002	<0.025		<0.005	<0.005
trans-1,2-Dichloroethene						<0.002	<0.005			
trans-1,3-Dichloropropene						<0.002	<0.005		<0.005	<0.005
Trichloroethene						<0.002	<0.005		<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 9/9/86	MW-1 9/9/86 HPLC	MW-1 12/2/86	MW-1 3/10/87	MW-1 6/2/87	MW-1 12/22/87	MW-1 3/29/88	MW-1 10/29/92	MW-1 7/15/93	MW-1 7/15/93 DUP
Trimethylbenzene		<0.001								
Vinyl Acetate						<0.01	<0.01			
Vinyl Chloride						<0.005	<0.01		<0.01	<0.01
Xylene, total	<0.002		0.01	<0.01	<0.005	<0.002	<0.005		<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 7/15/93 NYSEG	MW-1 10/12/93	MW-1 5/24/94	MW-1 2/28/95	MW-1 2/19/96	MW-1 2/26/97	MW-1 2/19/98	MW-2 9/9/86 HPLC	MW-2 12/2/86	MW-2 12/2/86 DUP
Cyanide, amenable								<0	<0	
Cyanide, amenable-Filtered										
Cyanide, ferro-ferri								<0	<0	0.02
Cyanide, iron-cyanide										
Cyanide, iron-cyanide-										
Cyanide, total	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide, total-Filtered										
Cyanide, undistilled										
Aluminum-Filtered										
Antimony-Filtered										
Arsenic-Filtered		<0.002		<0.003	<0.003	<4	<0.003			
Cadmium-Filtered		<0.004		<0.004	<0.001	<1	<0.001			
Chromium-Filtered		<0.004		<0.007	<0.002	4.6B	0.0044B			
Cobalt-Filtered										
Copper-Filtered										
Iron-Filtered		0.025J/		0.13	<0.05	<37	<0.05			
Lead-Filtered		<0.001		<0.002	<0.001	<2	<0.002			
Manganese-Filtered										
Mercury-Filtered		<0.0001		<0.0001	<0.0001	<0.1	<0.0001			
Nickel-Filtered										
Zinc-Filtered		<0.002		<0.006	<0.001	24.8	0.0918			
Ammonia		0.2	<0.1	<0.1	<0.5	<0.5	<0.5			
Conductivity		1.09	1.635	1.215	1.398	1.505	1.58	0.0178	0.0133	0.0133
Organics, Total NYS								<0	<0	<0
pH		0.0069	0.0069	0.0071	0.007	0.0072	0.007	0.006	0.0064	0.0064
Sulfate		64	75.3	74.4	73.8	0.0578	63		652	60.6
Temperature		0.014	0.01	0.0095	0.01	0.01	0.011	1.68	0.786	0.786
Turbidity	0.0011	0.01615	0.00058	0.0013	0.0223	0.0684	0.0028			
Aluminum										
Aluminum, total	0.052J		<0.029							
Antimony										
Antimony, total	<0.005		<0.003							
Arsenic, total			<0.002							
Barium, total			0.09B							
Beryllium, total			<0.001							
Cadmium, total	<0.004		<0.003							
Calcium, total			119							
Chromium										
Chromium, total	0.004J		0.008B							
Cobalt										
Cobalt, total	<0.005		<0.006							
Copper										
Copper, total	<0.004		<0.004							
Iron								0.5	0.07	0.06

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 7/15/93 NYSEG	MW-1 10/12/93	MW-1 5/24/94	MW-1 2/28/95	MW-1 2/19/96	MW-1 2/26/97	MW-1 2/19/98	MW-2 9/9/86 HPLC	MW-2 12/2/86	MW-2 12/2/86 DUP
Iron, total	0.092J		0.216							
Lead										
Lead, total	<0.001		<0.001							
Magnesium, total			30.4							
Manganese										
Manganese, total	0.123		0.111							
Mercury, total			<0.0001							
Nickel										
Nickel, total	0.125		0.027B							
Potassium, total			5.34							
Selenium, total			<0.001							
Silver, total			<0.003							
Sodium, total			167							
Thallium, total			<0.001							
Vanadium, total			<0.005							
Zinc								<0.01	0.072	0.005
Zinc, total	0.026		0.02							
1,2,4-Trichlorobenzene		<0.01	<0.01	<0.01	<0.01	<0.01				
1,2-Dichlorobenzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
1,3-Dichlorobenzene		<0.01	<0.01	<0.01	<0.01	<0.01				
1,4-Dichlorobenzene		<0.01	<0.01	<0.01	<0.01	<0.01				
2,2'-oxybis(1-Chloropropane)										
2,4,5-Trichlorophenol		<0.024	<0.026	<0.024	<0.024	<0.024				
2,4,6-Trichlorophenol		<0.01	<0.01	<0.01	<0.01	<0.01				
2,4-Dichlorophenol	<0.025	<0.01	<0.01	<0.01	<0.01	<0.01				
2,4-Dimethylphenol		<0.01	<0.01	<0.01	<0.01	<0.01				
2,4-Dinitrophenol	<0.01	<0.024	<0.026	<0.024	<0.024	<0.024				
2,4-Dinitrotoluene		<0.01	<0.01	<0.01	<0.01	<0.01				
2,6-Dinitrotoluene		<0.01	<0.01	<0.01	<0.01	<0.01				
2-Chloronaphthalene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
2-Chlorophenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
2-Methyl-4,6-Dinitrophenol	<0.025	<0.024	<0.026	<0.024	<0.024	<0.024				
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			<0.01	<0.01
2-Methylphenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
2-Nitroaniline	<0.025	<0.024	<0.026	<0.024	<0.024	<0.024				
2-Nitrophenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
3,3'-Dichlorobenzidine	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
3-Nitroaniline	<0.025	<0.024	<0.026	<0.024	<0.024	<0.024				
4,6-Dinitro-2-methylphenol										
4-Bromophenyl phenyl ether	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
4-Chloro-3-Methylphenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
4-Chloroaniline	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
4-Chlorophenyl-phenylether		<0.01	<0.01	<0.01	<0.01	<0.01				
4-Methylphenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 7/15/93 NYSEG	MW-1 10/12/93	MW-1 5/24/94	MW-1 2/28/95	MW-1 2/19/96	MW-1 2/26/97	MW-1 2/19/98	MW-2 9/9/86 HPLC	MW-2 12/2/86	MW-2 12/2/86 DUP
4-Nitroaniline	<0.025	<0.024	<0.026	<0.024	<0.024	<0.024				
4-Nitrophenol	<0.025	<0.01	<0.026	<0.01	<0.01	<0.024				
6-Nitroaniline										
Acenaphthene	0.001J	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Acenaphthylene		<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Anthracene		<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Benzo(a)anthracene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Benzo(a)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Benzo(b)fluoranthene		<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Benzo(g,h,i)perylene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Benzoic Acid		<0.024		<0.024	<0.024	<0.01				
Benzyl Alcohol		<0.01		<0.01	<0.01	<0.01				
bis(2-Chloroethoxy)methane	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
bis(2-Chloroethyl)ether		<0.01	<0.01	<0.01	<0.01	<0.01				
bis(2-Chloroisopropyl)ether	<0.01	<0.01	<0.01	<0.01						
bis(2-Ethylhexyl)phthalate	0.041	<0.01	<0.01	0.008J	0.002J	0.002J			0.016	0.018
Butylbenzylphthalate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Carbazole		<0.01	<0.01	<0.01	<0.01	<0.01				
Chrysene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Di-n-butylphthalate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Di-n-octylphthalate		<0.01	<0.01	<0.01	<0.01	<0.01				
Dibenzo(a,h)anthracene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Dibenzofuran	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Dibromochloromethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Dichlorobromomethane					<0.005	<0.01	<0.005			
Diethylphthalate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Dimethylphthalate		<0.01	<0.01	<0.01	<0.01	<0.01				
Fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Fluorene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Hexachloro-1,3-butadiene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Hexachlorobenzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Hexachlorobutadiene										
Hexachlorocyclopentadiene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Hexachloroethane		<0.01	<0.01	<0.01	<0.01	<0.01				
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Isophorone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
n-Nitrosodi-n-propylamine	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine		<0.01	<0.01	<0.01	<0.01	<0.01				
Naphthalene		<0.01	0.006J	0.004J	<0.01	<0.01		<0.02	<0.01	<0.01
Nitrobenzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Pentachlorophenol	<0.025	<0.024	<0.026	<0.024	<0.024	<0.024				
Phenanthrene		<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 7/15/93 NYSEG	MW-1 10/12/93	MW-1 5/24/94	MW-1 2/28/95	MW-1 2/19/96	MW-1 2/26/97	MW-1 2/19/98	MW-2 9/9/86 HPLC	MW-2 12/2/86	MW-2 12/2/86 DUP
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01				
Pyrene		<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.01	<0.01
Pyridine	<0.01									
TOC		4.8		<0.5	2.8	3.3	2.1	4.6	9	6
Phenols, total		0.014	<0.01	<0.01	<0.01	<0.01	<0.005	<0.01		
1,1,1-Trichloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,1,2,2-Tetrachloroethane		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,1,2-Trichloroethane		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,1-Dichloroethane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,1-Dichloroethene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,2-Dichloroethane		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,2-Dichloroethene, total		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
1,2-Dichloropropane	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
2-Butanone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
2-Chloroethylvinylether	<0.01									
2-Hexanone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
4-Methyl-2-Pentanone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
Acetone	<0.01	<0.01	<0.01	<0.01	<0.01	0.009J	<0.01		<0.01	<0.01
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	0.003J	<0.001	<0.005	<0.005
Bromochloromethane	<0.005									
Bromodichloromethane		<0.005	<0.005	<0.005						
Bromoethane	<0.01				<0.01	<0.01	<0.01			
Bromoform	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Bromomethane		<0.01	<0.01	<0.01						
Carbon Disulfide	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Carbon Tetrachloride	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Chlorobenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Chloroethane	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
Chloroform	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Chloromethane		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
cis-1,3-Dichloropropene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Dibromochloromethane										
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.001	<0.005	<0.005
m&p-Xylene										
m-Xylene								<0.001		
Methylene Chloride	0.005	<0.005	0.002J	<0.005	<0.005	<0.01	<0.005		<0.05	<0.05
o-Xylene								<0.001		
p-Xylene								<0.001		
Styrene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.001	<0.005	<0.005
Tetrachloroethene		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Toluene		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.001	<0.005	<0.005
trans-1,2-Dichloroethene	<0.005									
trans-1,3-Dichloropropene		<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			
Trichloroethene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005			

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-1 7/15/93 NYSEG	MW-1 10/12/93	MW-1 5/24/94	MW-1 2/28/95	MW-1 2/19/96	MW-1 2/26/97	MW-1 2/19/98	MW-2 9/9/86 HPLC	MW-2 12/2/86	MW-2 12/2/86 DUP
Trimethylbenzene								<0.001		
Vinyl Acetate		<0.01		<0.01	<0.01	<0.01	<0.01			
Vinyl Chloride	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
Xylene, total	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005		<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 3/10/87	MW-2 6/2/87	MW-2 12/22/87	MW-2 3/29/88	MW-2 3/29/88 DUP	MW-2 10/29/92	MW-2 7/14/93	MW-2 10/12/93	MW-2 5/24/94	MW-2 2/28/95
Cyanide, amenable	<0	<0				<0.01	<0			0.0108
Cyanide, amenable-Filtered							<0			
Cyanide, ferro-ferri	<0	0.01								
Cyanide, iron-cyanide							<0			
Cyanide, iron-cyanide-							<0			
Cyanide, total	<0.02	0.01	<0.01	<0.01	<0.01		<0	<0.01	<0.01	0.0108
Cyanide, total-Filtered							<0			
Cyanide, undistilled			<0.01	<0.01	<0.01					
Aluminum-Filtered							0.054J			
Antimony-Filtered							<0			
Arsenic-Filtered						<0.02		<0.002		0.0035B
Cadmium-Filtered						<0.01		<0.004		<0.004
Chromium-Filtered						<0.05	<0	<0.004		<0.007
Cobalt-Filtered							<0			
Copper-Filtered							<0			
Iron-Filtered						<0.01	<0	0.104		<0.029
Lead-Filtered						<0.08	<0	<0.001		<0.002
Manganese-Filtered							1.08			
Mercury-Filtered						<0.0002		<0.0001		<0.0001
Nickel-Filtered							<0			
Zinc-Filtered						<0.01	0.002J	<0.002		<0.006
Ammonia						<0.5		0.2	<0.1	0.15
Conductivity	0.0032	0.0126				1.09		0.885	1.175	1.29
Organics, Total NYS	9.694	1.355								
pH	0.0076	0.0068				0.0071		0.007	0.0072	0.0073
Sulfate						56.1		63	55.3	56.5
Temperature	1.89	1.225				0.0157		0.018	0.0105	0.01
Turbidity						0.0444	0.0007	0.536	0.0116	0.377
Aluminum							0.076J			
Aluminum, total									<0.029	
Antimony							0.0145J			
Antimony, total									<0.003	
Arsenic, total									<0.002	
Barium, total									0.092B	
Beryllium, total									<0.001	
Cadmium, total									<0.003	
Calcium, total									90.7	
Chromium							<0			
Chromium, total									0.004B	
Cobalt							<0			
Cobalt, total									<0.006	
Copper							<0			
Copper, total									0.004B	
Iron	<0.1	0.1	0.04	0.12	0.23		0.191			

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 3/10/87	MW-2 6/2/87	MW-2 12/22/87	MW-2 3/29/88	MW-2 3/29/88 DUP	MW-2 10/29/92	MW-2 7/14/93	MW-2 10/12/93	MW-2 5/24/94	MW-2 2/28/95
Iron, total									0.229	
Lead							0.0072			
Lead, total									0.0035	
Magnesium, total									19.8	
Manganese							1.2			
Manganese, total									0.851	
Mercury, total									<0.0001	
Nickel							<0			
Nickel, total									<0.008	
Potassium, total									6.95	
Selenium, total									<0.001	
Silver, total									<0.003	
Sodium, total									120	
Thallium, total									<0.001	
Vanadium, total									0.007B	
Zinc	<0.02	0.09	<0.005	0.02	0.1		0.031			
Zinc, total									0.019B	
1,2,4-Trichlorobenzene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
1,2-Dichlorobenzene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
1,3-Dichlorobenzene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
1,4-Dichlorobenzene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2,2'-oxybis(1-Chloropropane)							<0.01			
2,4,5-Trichlorophenol			<0.1	<31	<1.25		<0.026	<0.024	<0.033	<0.027
2,4,6-Trichlorophenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2,4-Dichlorophenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2,4-Dimethylphenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2,4-Dinitrophenol			<0.1	<31	<1.25		<0.026	<0.024	<0.033	<0.027
2,4-Dinitrotoluene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2,6-Dinitrotoluene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2-Chloronaphthalene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2-Chlorophenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2-Methyl-4,6-Dinitrophenol								<0.024	<0.033	<0.027
2-Methylnaphthalene	<0.01	0.144	<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
2-Methylphenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.00001	<0.011
2-Nitroaniline			<0.1	<31	<0.25		<0.026	<0.024	<0.033	<0.027
2-Nitrophenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
3,3'-Dichlorobenzidine			<0.04	<12.4	<0.5		<0.01	<0.01	<0.013	<0.011
3-Nitroaniline			<0.1	<31	<1.25			<0.024	<0.033	<0.027
4,6-Dinitro-2-methylphenol			<0.1	<31	<1.25		<0.026			
4-Bromophenyl phenyl ether			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
4-Chloro-3-Methylphenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
4-Chloroaniline			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
4-Chlorophenyl-phenylether			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
4-Methylphenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 3/10/87	MW-2 6/2/87	MW-2 12/22/87	MW-2 3/29/88	MW-2 3/29/88 DUP	MW-2 10/29/92	MW-2 7/14/93	MW-2 10/12/93	MW-2 5/24/94	MW-2 2/28/95
4-Nitroaniline			<0.1	<31	<1.25		<0.026	<0.024	<0.033	<0.027
4-Nitrophenol			<0.1	<31	<1.25		<0.026	<0.01	<0.033	<0.011
6-Nitroaniline							<0.026			
Acenaphthene	1.03	0.902	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Acenaphthylene	<0.01	0.084	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Anthracene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Benzo(a)anthracene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Benzo(a)pyrene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Benzo(b)fluoranthene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.02	<0.01	<0.01	<0.013	<0.011
Benzo(g,h,i)perylene	<0.01	<0.05	<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Benzo(k)fluoranthene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.02	<0.01	<0.01	<0.013	<0.011
Benzoic Acid			<0.1	<31	<1.25			<0.024		<0.027
Benzyl Alcohol			<0.02	<6.2	<0.25			<0.01		<0.011
bis(2-Chloroethoxy)methane			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
bis(2-Chloroethyl)ether			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
bis(2-Chloroisopropyl)ether			<0.02	<6.2	<0.25			<0.01	<0.013	<0.011
bis(2-Ethylhexyl)phthalate	1.71	<0.05	<0.02	<6.2	<0.25		<0.01	<0.01	0.007J	<0.011
Butylbenzylphthalate			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Carbazole							<0.01	<0.01	<0.013	<0.011
Chrysene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Di-n-butylphthalate			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Di-n-octylphthalate			<0.02	<291.4	<11.75		<0.01	<0.01	<0.013	<0.011
Dibenzo(a,h)anthracene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.02	<0.01	<0.01	<0.013	<0.011
Dibenzofuran			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Dibromochloromethane								<0.005	<0.005	<0.005
Dichlorobromomethane										
Diethylphthalate			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Dimethylphthalate			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Fluoranthene	0.93	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Fluorene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Hexachloro-1,3-butadiene								<0.01	<0.013	<0.011
Hexachlorobenzene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Hexachlorobutadiene			<0.02	<6.2	<0.25		<0.01			
Hexachlorocyclopentadiene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Hexachloroethane			<0.02	<6.2	<0.25		<0.01	<0.01	<0.13	<0.011
Indeno(1,2,3-cd)pyrene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.02	<0.01	<0.01	<0.013	<0.011
Isophorone			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
n-Nitrosodi-n-propylamine			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Naphthalene	6.034	0.445	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Nitrobenzene			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Pentachlorophenol			<0.1	<31	<1.25		<0.026	<0.024	<0.033	<0.027
Phenanthrene	1.7	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 3/10/87	MW-2 6/2/87	MW-2 12/22/87	MW-2 3/29/88	MW-2 3/29/88 DUP	MW-2 10/29/92	MW-2 7/14/93	MW-2 10/12/93	MW-2 5/24/94	MW-2 2/28/95
Phenol			<0.02	<6.2	<0.25		<0.01	<0.01	<0.013	<0.011
Pyrene	<0.01	<0.05	<0.02	<6.2	<0.25	<0.01	<0.01	<0.01	<0.013	<0.011
Pyridine										
TOC	3.7	4.1	2.9	2.2	2.8	<0.1		4.7		<0.5
Phenols, total		0.008	0.016	0.006	0.011	0.006		<0.01	<0.01	0.01
1,1,1-Trichloroethane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
1,1,2,2-Tetrachloroethane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethene, total							<0.005	<0.005	<0.005	<0.005
1,2-Dichloropropane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
2-Butanone			<0.01	<0.07			<0.01	<0.01	<0.01	<0.01
2-Chloroethylvinylether			<0.01	<0.01						
2-Hexanone			<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
4-Methyl-2-Pentanone			<0.01	<0.01			<0.01	<0.01	<0.01	<0.01
Acetone	0.0536	<0.01	<0.05	<0.099			<0.01	<0.01	<0.01	<0.01
Benzene	<0.01	<0.005	<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Bromochloromethane										
Bromodichloromethane			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Bromoethane										
Bromoform			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Bromomethane			<0.005	<0.01			<0.01	<0.01	<0.01	<0.01
Carbon Disulfide			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Carbon Tetrachloride			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Chlorobenzene			<0.002	0.0016J			<0.005	<0.005	<0.005	<0.005
Chloroethane			<0.005	<0.01			<0.01	<0.01	<0.01	<0.01
Chloroform			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Chloromethane			<0.005	<0.01			<0.01	<0.01	<0.01	<0.01
cis-1,3-Dichloropropene			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Dibromochloromethane			<0.002	<0.005			<0.005			
Ethylbenzene	<0.01	<0.005	<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
m&p-Xylene										
m-Xylene										
Methylene Chloride	0.0086	<0.005	<0.005	<0.012			<0.005	0.004J/	0.003J	<0.005
o-Xylene										
p-Xylene										
Styrene	<0.01	<0.005	<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Tetrachloroethene			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Toluene	<0.01	<0.005	<0.002	<0.025			<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene			<0.002	<0.005						
trans-1,3-Dichloropropene			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005
Trichloroethene			<0.002	<0.005			<0.005	<0.005	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 3/10/87	MW-2 6/2/87	MW-2 12/22/87	MW-2 3/29/88	MW-2 3/29/88 DUP	MW-2 10/29/92	MW-2 7/14/93	MW-2 10/12/93	MW-2 5/24/94	MW-2 2/28/95
Trimethylbenzene										
Vinyl Acetate			<0.01	<0.01				<0.01		<0.01
Vinyl Chloride			<0.005	<0.01			<0.01	<0.01	<0.01	<0.01
Xylene, total	<0.01	<0.005	<0.002	<0.005			<0.005	<0.005	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 2/19/96	MW-2 2/26/97	MW-2 2/19/98	MW-3 9/9/86	MW-3 9/9/86 HPLC	MW-3 12/2/86	MW-3 3/10/87	MW-3 6/2/87	MW-3 12/22/87	MW-3 3/30/88
Cyanide, amenable					<0		<0	<0		
Cyanide, amenable-Filtered										
Cyanide, ferro-ferri					0.46	0.05	0.32	0.42		
Cyanide, iron-cyanide										
Cyanide, iron-cyanide-										
Cyanide, total	<0.01	<0.01	<0.01		0.46	<0.01	0.32	0.42	<5	0.27
Cyanide, total-Filtered										
Cyanide, undistilled										<0.01
Aluminum-Filtered										
Antimony-Filtered										
Arsenic-Filtered	<0.003	<4	<0.003							
Cadmium-Filtered	<0.001	<1	<0.001							
Chromium-Filtered	<0.002	<3	<0.002							
Cobalt-Filtered										
Copper-Filtered										
Iron-Filtered	<0.05	<37	<0.05							
Lead-Filtered	<0.001	<2	<0.002							
Manganese-Filtered										
Mercury-Filtered	<0.0001	<0.1	<0.0001							
Nickel-Filtered										
Zinc-Filtered	0.0014B	32.1	0.0098B							
Ammonia	<0.5	<0.5	<0.5							
Conductivity	1.441	1.915	0.7							
Organics, Total NYS				3.02	25.66	8.127	5.34	3.978		
pH	0.0074	0.0074	0.0072							
Sulfate	63.8	47.7	59.8			17.7				
Temperature	0.007	0.01	0.008							
Turbidity	0.139	0.0123	0.0283							
Aluminum										
Aluminum, total										
Antimony										
Antimony, total										
Arsenic, total										
Barium, total										
Beryllium, total										
Cadmium, total										
Calcium, total										
Chromium										
Chromium, total										
Cobalt										
Cobalt, total										
Copper										
Copper, total										
Iron					20	6.6	9.7	4.9	8.8	14.4

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 2/19/96	MW-2 2/26/97	MW-2 2/19/98	MW-3 9/9/86	MW-3 9/9/86 HPLC	MW-3 12/2/86	MW-3 3/10/87	MW-3 6/2/87	MW-3 12/22/87	MW-3 3/30/88
Iron, total										
Lead										
Lead, total										
Magnesium, total										
Manganese										
Manganese, total										
Mercury, total										
Nickel										
Nickel, total										
Potassium, total										
Selenium, total										
Silver, total										
Sodium, total										
Thallium, total										
Vanadium, total										
Zinc					0.11	0.008	0.03	0.02	0.11	0.2
Zinc, total										
1,2,4-Trichlorobenzene	<0.01	<0.01	<0.01						<6	<0.62
1,2-Dichlorobenzene	<0.01	<0.01	<0.01						<6	<0.62
1,3-Dichlorobenzene	<0.01	<0.01	<0.01						<6	<0.62
1,4-Dichlorobenzene	<0.01	<0.01	<0.01						<6	<0.62
2,2'-oxybis(1-Chloropropane)										
2,4,5-Trichlorophenol	<0.024	<0.024	<0.01						<30	<3.1
2,4,6-Trichlorophenol	<0.01	<0.01	<0.01						<6	<0.62
2,4-Dichlorophenol	<0.01	<0.01	<0.01						<6	<0.62
2,4-Dimethylphenol	<0.01	<0.01	<0.01						<6	<0.62
2,4-Dinitrophenol	<0.024	<0.024	<0.024						<30	<3.1
2,4-Dinitrotoluene	<0.01	<0.01	<0.01						<6	0.3J
2,6-Dinitrotoluene	<0.01	<0.01	<0.01						<6	<0.62
2-Chloronaphthalene	<0.01	<0.01	<0.01						<6	<0.62
2-Chlorophenol	<0.01	<0.01	<0.01						<6	<0.62
2-Methyl-4,6-Dinitrophenol	<0.024	<0.024	<0.024							
2-Methylnaphthalene	0.002J	<0.01	<0.01	<0.2		<0.01	<0.01	0.856	34	<0.62
2-Methylphenol	<0.01	<0.01	<0.01						<6	<0.62
2-Nitroaniline	<0.024	<0.024	<0.024						<30	0.083J
2-Nitrophenol	<0.01	<0.01	<0.01						<6	<0.62
3,3'-Dichlorobenzidine	<0.01	<0.01	<0.02						<12	<1.24
3-Nitroaniline	<0.024	<0.024	<0.024						<30	<3.1
4,6-Dinitro-2-methylphenol									<30	<3.1
4-Bromophenyl phenyl ether	<0.01	<0.01	<0.01						<6	<0.62
4-Chloro-3-Methylphenol	<0.01	<0.01	<0.01						<6	<0.62
4-Chloroaniline	<0.01	<0.01	<0.01						<6	<0.62
4-Chlorophenyl-phenylether	<0.01	<0.01	<0.01						<6	<0.62
4-Methylphenol	<0.01	<0.01	<0.01						<6	<0.62

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 2/19/96	MW-2 2/26/97	MW-2 2/19/98	MW-3 9/9/86	MW-3 9/9/86 HPLC	MW-3 12/2/86	MW-3 3/10/87	MW-3 6/2/87	MW-3 12/22/87	MW-3 3/30/88
4-Nitroaniline	<0.024	<0.024	<0.024						<30	0.12J
4-Nitrophenol	<0.01	<0.024	<0.024						<30	<3.1
6-Nitroaniline										
Acenaphthene	<0.01	<0.01	<0.01	0.42	<0.2	<0.01	0.537	0.524	30	<0.62
Acenaphthylene	<0.01	<0.01	<0.01	<0.2	2.5	<0.01	<0.01	<0.1	<6	<0.62
Anthracene	<0.01	<0.01	<0.01	<0.2	0.3	<0.01	0.226	0.14	9.7	<0.62
Benzo(a)anthracene	<0.01	<0.01	<0.01	<0.2	<0.2	<0.01	0.102	<0.1	<6	<0.62
Benzo(a)pyrene	<0.01	<0.01	<0.01	<0.2	0.28	<0.01	<0.01	<0.1	<6	0.23J
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	<0.2	<0.2	<0.01	<0.01	<0.1	<6	<0.62
Benzo(g,h,i)perylene	<0.01	<0.01	<0.01	<0.2	<0.2	<0.01	<0.01	<0.1	<6	<0.62
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.2	<0.2	<0.01	<0.01	<0.1	<6	<0.62
Benzoic Acid	<0.024	<0.01	<0.01						<30	<3.1
Benzyl Alcohol	<0.01	<0.01	<0.01						<6	<0.62
bis(2-Chloroethoxy)methane	<0.01	<0.01	<0.01						<6	<0.62
bis(2-Chloroethyl)ether	<0.01	<0.01	<0.01						<6	<0.62
bis(2-Chloroisopropyl)ether									<6	<0.62
bis(2-Ethylhexyl)phthalate	<0.01	0.007J	0.002J	0.25		<0.01	<0.01	<0.1	<6	<0.62
Butylbenzylphthalate	<0.01	<0.01	<0.01						<6	<0.62
Carbazole	<0.01	<0.01	<0.01							
Chrysene	<0.01	<0.01	<0.01	<0.2	0.88	<0.01	<0.01	<0.1	<6	<0.62
Di-n-butylphthalate	<0.01	<0.01	<0.01						<6	<0.62
Di-n-octylphthalate	<0.01	<0.01	<0.01						<6	<29.14
Dibenzo(a,h)anthracene	<0.01	<0.01	<0.01	<0.2	<0.2	<0.01	<0.01	<0.1	<6	<0.62
Dibenzofuran	<0.01	<0.01	<0.01						<6	0.088J
Dibromochloromethane	<0.005	<0.01	<0.005							
Dichlorobromomethane	<0.005	<0.01	<0.005							
Diethylphthalate	<0.01	<0.01	<0.01						<6	<0.62
Dimethylphthalate	<0.01	<0.01	<0.01						<6	<0.62
Fluoranthene	<0.01	<0.01	<0.01	<0.2	2.7	0.68	0.223	0.174	12	0.094J
Fluorene	<0.01	<0.01	<0.01	<0.2	<4.7	0.66	0.197	0.198	<13	<0.62
Hexachloro-1,3-butadiene	<0.01	<0.01	<0.01							
Hexachlorobenzene	<0.01	<0.01	<0.01						<6	<0.62
Hexachlorobutadiene									<6	<0.62
Hexachlorocyclopentadiene	<0.01	<0.01	<0.01						<6	<0.62
Hexachloroethane	<0.01	<0.01	<0.01						<6	<0.62
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.2	0.2	<0.01	<0.01	<0.1	<6	<0.62
Isophorone	<0.01	<0.01	<0.01						<6	<0.62
n-Nitrosodi-n-propylamine	<0.01	<0.01	<0.01						<6	<0.62
n-Nitrosodimethylamine			<0.01							
N-Nitrosodiphenylamine	<0.01	<0.01	<0.01						<6	<0.341
Naphthalene	<0.01	<0.01	<0.01	2.6	13	4.13	2.48	1.914	64	<0.62
Nitrobenzene	<0.01	<0.01	<0.01						<6	<0.62
Pentachlorophenol	<0.024	<0.024	<0.024						<30	<3.1
Phenanthrene	0.001J	<0.01	<0.01	0.44	1.3	<0.01	0.624	0.14	38	<0.62

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 2/19/96	MW-2 2/26/97	MW-2 2/19/98	MW-3 9/9/86	MW-3 9/9/86 HPLC	MW-3 12/2/86	MW-3 3/10/87	MW-3 6/2/87	MW-3 12/22/87	MW-3 3/30/88
Phenol	<0.01	<0.01	<0.01						<6	<0.62
Pyrene	<0.01	<0.01	<0.01	0.2	0.66	0.69	0.431	0.264	21	<0.62
Pyridine										
TOC	2.1	1.9	1.5		11	24	15.3	11	50	42
Phenols, total	<0.01	<0.01	<0.005		0.02			0.015	17	0.025
1,1,1-Trichloroethane	<0.005	<0.01	<0.005						<0.02	<0.05
1,1,2,2-Tetrachloroethane	<0.005	<0.01	<0.005						<0.02	<0.05
1,1,2-Trichloroethane	<0.005	<0.01	<0.005						<0.02	<0.05
1,1-Dichloroethane	<0.005	<0.01	<0.005						<0.02	<0.05
1,1-Dichloroethene	<0.005	<0.01	<0.005						<0.02	<0.05
1,2-Dichloroethane	<0.005	<0.01	<0.005						<0.02	<0.05
1,2-Dichloroethene, total	<0.005	<0.01	<0.005							
1,2-Dichloropropane	<0.005	<0.01	<0.005						<0.02	<0.05
2-Butanone	<0.01	<0.01	<0.01						<0.1	<0.7
2-Chloroethylvinylether									<0.1	<0.1
2-Hexanone	<0.01	<0.01	<0.01						<0.1	<0.1
4-Methyl-2-Pentanone	<0.01	<0.01	<0.01						<0.1	<0.1
Acetone	<0.01	<0.01	0.005J	<0.5		<0.5	<0.01	0.1	<0.5	<0.99
Benzene	<0.005	<0.01	<0.005	0.56	0.53	0.608	0.429	0.23	0.17	0.15
Bromochloromethane										
Bromodichloromethane									<0.02	<0.05
Bromoethane	<0.01	<0.01	<0.01							
Bromoform	<0.005	<0.01	<0.005						<0.02	<0.05
Bromomethane									<0.05	<0.1
Carbon Disulfide	<0.005	<0.01	<0.005						<0.02	<0.05
Carbon Tetrachloride	<0.005	<0.01	<0.005						<0.02	<0.05
Chlorobenzene	<0.005	<0.01	<0.005						<0.02	<0.05
Chloroethane	<0.01	<0.01	<0.01						<0.05	<0.1
Chloroform	<0.005	<0.01	<0.005						<0.02	<0.05
Chloromethane	<0.01	<0.01	<0.001						<0.05	<0.1
cis-1,3-Dichloropropene	<0.005	<0.01	<0.005						<0.02	<0.05
Dibromochloromethane									<0.02	<0.05
Ethylbenzene	<0.005	<0.01	<0.005	0.91	0.64	0.715	<0.01	<0.05	0.11	<0.05
m&p-Xylene										
m-Xylene					0.11					
Methylene Chloride	<0.005	<0.01	<0.005	<0.05		<0.25	<0.01	<0.05	<0.05	<0.12
o-Xylene					0.3					
p-Xylene					0.14					
Styrene	<0.005	<0.01	<0.005	<0.02	<0.05	<0.25	<0.01	<0.05	<0.02	<0.05
Tetrachloroethene	<0.005	<0.01	<0.005						<0.02	<0.05
Toluene	<0.005	<0.01	<0.005	0.12	0.1	<0.25	0.0576	<0.05	0.021	<0.25
trans-1,2-Dichloroethene									<0.02	<0.05
trans-1,3-Dichloropropene	<0.005	<0.01	<0.005						<0.02	<0.05
Trichloroethene	<0.005	<0.01	<0.005						<0.02	<0.05

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-2 2/19/96	MW-2 2/26/97	MW-2 2/19/98	MW-3 9/9/86	MW-3 9/9/86 HPLC	MW-3 12/2/86	MW-3 3/10/87	MW-3 6/2/87	MW-3 12/22/87	MW-3 3/30/88
Trimethylbenzene					<0.05					
Vinyl Acetate	<0.01	<0.01	<0.01						<0.1	<0.1
Vinyl Chloride	<0.01	<0.01	<0.01						<0.05	<0.1
Xylene, total	<0.005	<0.01	<0.005	0.07		0.64	0.0329	0.379	0.4	0.42

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 9/9/86 HPLC	MW-4 12/2/86	MW-4 3/10/87	MW-4 6/2/87	MW-4 12/22/87	MW-4 3/30/88	MW-4 10/12/93	MW-4 5/24/94	MW-4 2/28/95	MW-4 2/19/96
Cyanide, amenable	<0	0.04	<0	<0			<0.01	0.0648	<0.01	<0.01
Cyanide, amenable-Filtered										
Cyanide, ferro-ferri	0.072	0.02	0.05	0.06						
Cyanide, iron-cyanide										
Cyanide, iron-cyanide-										
Cyanide, total	0.072	0.06	0.05	0.06	0.05	0.05	0.162	0.662	0.626	0.0829
Cyanide, total-Filtered										
Cyanide, undistilled					<0.01	<0.01				
Aluminum-Filtered										
Antimony-Filtered										
Arsenic-Filtered							<0.002		0.006B	<0.003
Cadmium-Filtered							<0.004		<0.004	<0.001
Chromium-Filtered							<0.004		<0.007	<0.002
Cobalt-Filtered										
Copper-Filtered										
Iron-Filtered							5.13		10.2	19.4
Lead-Filtered							<0.001		<0.002	<0.001
Manganese-Filtered										
Mercury-Filtered							<0.0001		<0.0001	<0.0001
Nickel-Filtered										
Zinc-Filtered							<0.002		0.037	<0.001
Ammonia							1.8	2.3	2.4	3.51
Conductivity							1.165	1.54	2.35	4.6
Organics, Total NYS	62.611	9.553	7.621	5.352						
pH							0.0068	0.0069	0.0066	0.0068
Sulfate		30.9					<0.5	61.6	45.8	64.5
Temperature							0.018	0.011	0.008	0.008
Turbidity							0.00138	0.0322	0.0161	0.00222
Aluminum										
Aluminum, total								<0.029		
Antimony										
Antimony, total								<0.003		
Arsenic, total								0.0044B		
Barium, total								0.232		
Beryllium, total								<0.001		
Cadmium, total								<0.003		
Calcium, total								149		
Chromium										
Chromium, total								0.006B		
Cobalt										
Cobalt, total								<0.006		
Copper										
Copper, total								<0.004		
Iron	61	6.5	3.86	5.1	20	9.25				

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 9/9/86 HPLC	MW-4 12/2/86	MW-4 3/10/87	MW-4 6/2/87	MW-4 12/22/87	MW-4 3/30/88	MW-4 10/12/93	MW-4 5/24/94	MW-4 2/28/95	MW-4 2/19/96
Iron, total								8.06		
Lead										
Lead, total								<0.001		
Magnesium, total								23.1		
Manganese										
Manganese, total								1.87		
Mercury, total								<0.0001		
Nickel										
Nickel, total								<0.008		
Potassium, total								9.37		
Selenium, total								<0.001		
Silver, total								<0.003		
Sodium, total								156		
Thallium, total								<0.001		
Vanadium, total								0.005B		
Zinc	0.29	0.02	0.02	0.01	0.52	0.05				
Zinc, total								0.005B		
1,2,4-Trichlorobenzene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
2,2'-oxybis(1-Chloropropane)										
2,4,5-Trichlorophenol					<1	<1.25	<0.024	<1.3	<0.024	<0.024
2,4,6-Trichlorophenol					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
2,4-Dichlorophenol					<0.2	<0.25	<0.19	<0.01	<0.01	<0.01
2,4-Dimethylphenol					<0.2	<0.25	<0.01	<0.52	0.013	<0.01
2,4-Dinitrophenol					<1	<1.25	<0.024	<0.026	<0.024	<0.024
2,4-Dinitrotoluene					<0.2	<0.25	<0.19	<0.52	<0.01	<0.01
2,6-Dinitrotoluene					<0.2	<0.25	<0.19	<0.52	<0.01	<0.01
2-Chloronaphthalene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
2-Chlorophenol					<0.2	<0.25	<0.19	<0.52	<0.01	<0.01
2-Methyl-4,6-Dinitrophenol							<0.024	<0.026	<0.024	<0.024
2-Methylnaphthalene		<0.01	<0.01	0.58	0.65	0.78	0.9	1.4	0.91	1.2
2-Methylphenol					<0.2	<0.25	<0.19	<0.01	0.008J	<0.01
2-Nitroaniline					<1	<0.25	<0.024	<1.3	<0.024	<0.024
2-Nitrophenol					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
3,3'-Dichlorobenzidine					<0.4	<0.5	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline					<1	<1.25	<0.48	<1.3	<0.024	<0.024
4,6-Dinitro-2-methylphenol					<1	<1.25				
4-Bromophenyl phenyl ether					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
4-Chloro-3-Methylphenol					<0.2	<0.25	<0.01	<0.52	<0.01	<0.01
4-Chloroaniline					<0.2	<0.25	<0.19	<0.01	<0.01	<0.01
4-Chlorophenyl-phenylether					<0.2	<0.25	<0.01	<0.52	<0.01	<0.01
4-Methylphenol					<0.2	<0.25	<0.01	<0.52	0.013	0.009J

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 9/9/86 HPLC	MW-4 12/2/86	MW-4 3/10/87	MW-4 6/2/87	MW-4 12/22/87	MW-4 3/30/88	MW-4 10/12/93	MW-4 5/24/94	MW-4 2/28/95	MW-4 2/19/96
4-Nitroaniline					<1	<1.25	<0.024	<0.026	<0.024	<0.024
4-Nitrophenol					<1	<1.25	<0.01	<0.026	<0.01	<0.01
6-Nitroaniline										
Acenaphthene	0.98	0.24	0.187	0.218	<0.2	0.23J	0.24	0.26J	0.24	0.28
Acenaphthylene	8.3	<0.01	0.041	0.218	<0.2	0.03J	<0.19	<0.52	0.016	0.021
Anthracene	0.51	<0.01	<0.01	<0.1	<0.2	0.039J	0.014	0.011	0.025	0.032
Benzo(a)anthracene	<0.2	<0.01	<0.01	<0.1	<0.2	<0.25	<0.19	<0.52	<0.01	0.006J
Benzo(a)pyrene	0.29	<0.01	<0.01	<0.1	<0.2	<0.25	<0.01	0.002J	<0.01	0.004J
Benzo(b)fluoranthene	<0.2	<0.01	<0.01	<0.1	<0.2	<0.25	<0.01	<0.52	<0.01	0.002J
Benzo(g,h,i)perylene	<0.2	<0.01	<0.01	<0.1	<0.2	<0.25	<0.19	<0.01	<0.01	0.002J
Benzo(k)fluoranthene	<0.2	<0.01	<0.01	<0.1	<0.2	<0.25	<0.01	<0.52	<0.01	0.002J
Benzoic Acid					<1	<1.25	<0.024		<0.024	<0.024
Benzyl Alcohol					<0.2	<0.25	<0.01		<0.01	<0.01
bis(2-Chloroethoxy)methane					<0.2	<0.25	<0.01	<0.52	<0.01	<0.01
bis(2-Chloroethyl)ether					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
bis(2-Chloroisopropyl)ether					<0.2	<0.25	<0.01	<0.52	<0.01	
bis(2-Ethylhexyl)phthalate		<0.01	0.013	<0.1	<0.2	<0.25	<0.01	0.013	<0.01	0.096
Butylbenzylphthalate					<0.2	0.037J	<0.01	<0.01	<0.01	<0.01
Carbazole							0.007J/	<0.52	0.006J	0.007J
Chrysene	1.4	<0.01	<0.01	<0.1	<0.2	<0.25	<0.01	<0.52	<0.01	0.005J
Di-n-butylphthalate					<0.2	<0.25	<0.19	<0.01	<0.01	<0.01
Di-n-octylphthalate					<0.2	<11.75	<0.19	<0.01	<0.01	<0.01
Dibenzo(a,h)anthracene	<0.2	<0.01	<0.01	<0.1	<0.2	<0.25	<0.19	<0.52	<0.01	<0.01
Dibenzofuran					<0.2	<0.25	0.016	0.015	0.015	0.022
Dibromochloromethane							<0.062	<0.005	<0.005	<0.005
Dichlorobromomethane										<0.005
Diethylphthalate					<0.2	<0.25	<0.01	<0.52	<0.01	<0.01
Dimethylphthalate					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
Fluoranthene	4.2	<0.01	0.014	<0.1	<0.2	0.027J	0.006J/	<0.52	0.015	0.024
Fluorene	13	<0.01	0.026	0.1	<0.2	0.099J	0.062	0.056	0.066	0.093
Hexachloro-1,3-butadiene							<0.01	<0.01	<0.01	<0.01
Hexachlorobenzene					<0.2	<0.25	<0.19	<0.01	<0.01	<0.01
Hexachlorobutadiene					<0.2	<0.25				
Hexachlorocyclopentadiene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
Hexachloroethane					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.2	<0.01	<0.01	<0.1	<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
Isophorone					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
n-Nitrosodi-n-propylamine					<0.2	<0.25	<0.19	<0.01	<0.01	<0.01
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine					<0.2	<0.25	<0.19	<0.01	<0.01	<0.01
Naphthalene	33	6.12	3.97	2.392	1.9	1.4	3.1	1.6	5.3	2.6
Nitrobenzene					<0.2	<0.25	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol					<1	<1.25	<0.024	<0.026	<0.024	<0.024
Phenanthrene	2	<0.01	<0.01	<0.1	<0.2	0.18J	0.077	0.054	0.11	0.14

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 9/9/86 HPLC	MW-4 12/2/86	MW-4 3/10/87	MW-4 6/2/87	MW-4 12/22/87	MW-4 3/30/88	MW-4 10/12/93	MW-4 5/24/94	MW-4 2/28/95	MW-4 2/19/96
Phenol					<0.2	<0.25	<0.01	0.005J	<0.01	0.007J
Pyrene	1	<0.01	0.027	<0.1	<0.2	<0.25	0.008J/	<0.52	0.031	0.045
Pyridine										
TOC	12	20	5.2	9.4	8.4	9.9	24.5		25	24
Phenols, total	0.043			0.014	0.021	0.027	0.048	0.076	0.066	0.049
1,1,1-Trichloroethane					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
1,1,2,2-Tetrachloroethane					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
1,1,2-Trichloroethane					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
1,1-Dichloroethane					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
1,1-Dichloroethene					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
1,2-Dichloroethane					<0.02	<0.1	<0.062	<0.36	<0.005	0.021
1,2-Dichloroethene, total							<0.062	<0.36	<0.005	<0.005
1,2-Dichloropropane					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
2-Butanone					<0.1	<0.66	0.22	<0.01	<0.01	<0.01
2-Chloroethylvinylether					<0.1	<0.2				
2-Hexanone					<0.1	<0.2	<0.12	<0.01	<0.01	<0.01
4-Methyl-2-Pentanone					<0.1	<0.2	<0.12	<0.01	<0.01	<0.01
Acetone		<0.1	<0.01	<0.1	<0.5	<0.94	0.11J	<0.01	<0.01	<0.01
Benzene	0.95	0.673	0.482	0.494	0.26	0.2	0.38	0.56	0.053	0.94
Bromochloromethane										
Bromodichloromethane					<0.02	<0.1	<0.062	<0.005	<0.005	
Bromoethane										<0.01
Bromoform					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
Bromomethane					<0.05	<0.2	<0.12	<0.01	<0.01	
Carbon Disulfide					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
Carbon Tetrachloride					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
Chlorobenzene					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
Chloroethane					<0.05	<0.2	<0.12	<0.01	<0.01	<0.01
Chloroform					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
Chloromethane					<0.05	<0.2	<0.12	<0.71	<0.01	<0.01
cis-1,3-Dichloropropene					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
Dibromochloromethane					<0.02	<0.1				
Ethylbenzene	2.3	0.803	1.14	0.378	0.058	0.17	1.6	0.36	0.029	1.6
m&p-Xylene										
m-Xylene	0.85									
Methylene Chloride		<0.05	<0.01	<0.05	<0.05	<0.26	0.045J	0.004J	<0.005	<0.005
o-Xylene	0.81									
p-Xylene	0.43									
Styrene	<0.05	<0.05	0.051	<0.05	<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
Tetrachloroethene					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005
Toluene	0.76	0.487	0.335	0.409	0.23	<0.5	0.14	0.17J	0.01	0.2
trans-1,2-Dichloroethene					<0.02	<0.1				
trans-1,3-Dichloropropene					<0.02	<0.1	<0.062	<0.005	<0.005	<0.005
Trichloroethene					<0.02	<0.1	<0.062	<0.36	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 9/9/86 HPLC	MW-4 12/2/86	MW-4 3/10/87	MW-4 6/2/87	MW-4 12/22/87	MW-4 3/30/88	MW-4 10/12/93	MW-4 5/24/94	MW-4 2/28/95	MW-4 2/19/96
Trimethylbenzene	0.088									
Vinyl Acetate					<0.1	0.027J	<0.12		<0.01	<0.01
Vinyl Chloride					<0.05	<0.2	<0.12	<0.01	<0.01	<0.01
Xylene, total		1.23	1.44	1.347	2.2	1.3	1.7	2.1	0.13	1.8

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 2/19/98	MW-4 2/25/99	MW-5 9/9/86 HPLC	MW-5 12/2/86	MW-5 6/2/87	MW-5 6/2/87 DUP	MW-5 12/22/87	MW-5 3/30/88	MW-6 9/9/86 HPLC	MW-6 9/9/86 HPLC DUP
Cyanide, amenable	0.025		0.013		<0	<0			0.026	0.024
Cyanide, amenable-Filtered										
Cyanide, ferro-ferri			<0	0.06	0.01	0.01			0.049	0.057
Cyanide, iron-cyanide										
Cyanide, iron-cyanide-										
Cyanide, total	0.38	0.2	0.013	0.02	0.01	<0.01	0.01	0.05	0.075	0.061
Cyanide, total-Filtered										
Cyanide, undistilled							0.01	<0.01		
Aluminum-Filtered										
Antimony-Filtered										
Arsenic-Filtered	0.0049B									
Cadmium-Filtered	<0.001									
Chromium-Filtered	<0.002									
Cobalt-Filtered										
Copper-Filtered										
Iron-Filtered	18.4									
Lead-Filtered	<0.002									
Manganese-Filtered										
Mercury-Filtered	0.00032									
Nickel-Filtered										
Zinc-Filtered	0.0177B									
Ammonia	3.78									
Conductivity	6.1		0.0127	0.012					0.016	0.016
Organics, Total NYS			16.129	93.863	1058.386	1368.82			662.08	693.663
pH	0.0069	0.007	0.0058	0.0064					0.0057	0.0057
Sulfate	29.2			84						
Temperature	0.009	0.008	1.64	0.68					1.93	1.93
Turbidity	0.133	0.216								
Aluminum										
Aluminum, total										
Antimony										
Antimony, total										
Arsenic, total										
Barium, total										
Beryllium, total										
Cadmium, total										
Calcium, total										
Chromium										
Chromium, total										
Cobalt										
Cobalt, total										
Copper										
Copper, total										
Iron			1.1	7.5	5.1	9.4	13	25	5.5	14

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 2/19/98	MW-4 2/25/99	MW-5 9/9/86 HPLC	MW-5 12/2/86	MW-5 6/2/87	MW-5 6/2/87 DUP	MW-5 12/22/87	MW-5 3/30/88	MW-6 9/9/86 HPLC	MW-6 9/9/86 HPLC DUP
Iron, total										
Lead										
Lead, total										
Magnesium, total										
Manganese										
Manganese, total										
Mercury, total										
Nickel										
Nickel, total										
Potassium, total										
Selenium, total										
Silver, total										
Sodium, total										
Thallium, total										
Vanadium, total										
Zinc			<0.01	0.021	0.16	0.33	0.54	1.09	<0.01	<0.01
Zinc, total										
1,2,4-Trichlorobenzene	<0.2						<0.24	<0.6		
1,2-Dichlorobenzene	<0.2						<0.24	<0.6		
1,3-Dichlorobenzene	<0.2						<0.24	<0.6		
1,4-Dichlorobenzene	<0.2						<0.24	<0.6		
2,2'-oxybis(1-Chloropropane)										
2,4,5-Trichlorophenol	<0.2						<1.2	<3.1		
2,4,6-Trichlorophenol	<0.2						<0.24	<0.6		
2,4-Dichlorophenol	<0.2						<0.24	<0.6		
2,4-Dimethylphenol	<0.2						<0.24	<0.6		
2,4-Dinitrophenol	<0.5						<1.2	<3.1		
2,4-Dinitrotoluene	<0.2						<0.24	<0.6		
2,6-Dinitrotoluene	<0.2						<0.24	0.26J		
2-Chloronaphthalene	<0.2						<0.24	0.14J		
2-Chlorophenol	<0.2						<0.24	<0.6		
2-Methyl-4,6-Dinitrophenol	<0.5									
2-Methylnaphthalene	1.1			<0.01	197.2	247.69	1.1	35		
2-Methylphenol	<0.2						<0.24	<0.6		
2-Nitroaniline	<0.5						<1.2	0.46J		
2-Nitrophenol	<0.2						<0.24	<0.6		
3,3'-Dichlorobenzidine	<0.4						<0.48	<1.2		
3-Nitroaniline	<0.5						<1.2	1.2J		
4,6-Dinitro-2-methylphenol							<1.2	<3.1		
4-Bromophenyl phenyl ether	<0.2						<0.24	<0.6		
4-Chloro-3-Methylphenol	<0.2						<0.24	<0.6		
4-Chloroaniline	<0.2						<0.24	<0.6		
4-Chlorophenyl-phenylether	<0.2						<0.24	<0.6		
4-Methylphenol	<0.2						<0.24	0.27J		

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 2/19/98	MW-4 2/25/99	MW-5 9/9/86 HPLC	MW-5 12/2/86	MW-5 6/2/87	MW-5 6/2/87 DUP	MW-5 12/22/87	MW-5 3/30/88	MW-6 9/9/86 HPLC	MW-6 9/9/86 HPLC DUP
4-Nitroaniline	<0.5						<1.2	<3.1		
4-Nitrophenol	<0.5						<1.2	<3.1		
6-Nitroaniline										
Acenaphthene	0.24		0.26	17.3	150.28	195.5	0.51	22	37	48
Acenaphthylene	<0.2		2.4	<0.01	150.28	197.2	<0.24	2.7	26	59
Anthracene	<0.2		<0.2	7.6	178.33	227.8	<0.24	<0.6	11	16
Benzo(a)anthracene	<0.2		<0.2	<0.01	18.36	23.97	<0.24	2.6	<4	<4
Benzo(a)pyrene	<0.2		<0.2	<0.01	<0.1	<0.1	<0.24	2.4	4.8	6.5
Benzo(b)fluoranthene	<0.2		<0.2	<0.01	<0.1	<0.1	<0.24	<0.6	4	6.6
Benzo(g,h,i)perylene	<0.2		<0.2	<0.01	<0.1	<0.1	<0.24	<0.6	<4	<4
Benzo(k)fluoranthene	<0.2		<0.2	<0.01	<0.1	<0.1	<0.24	1.3	7.2	4.1
Benzoic Acid	<0.2						<1.2	0.1J		
Benzyl Alcohol	<0.2						<0.24	<0.6		
bis(2-Chloroethoxy)methane	<0.2						<0.24	<0.6		
bis(2-Chloroethyl)ether	<0.2						<0.24	<0.6		
bis(2-Chloroisopropyl)ether							<0.24	<0.6		
bis(2-Ethylhexyl)phthalate	<0.2			<0.01	<0.1	<0.1	<0.24	<0.6		
Butylbenzylphthalate	<0.2						<0.24	<0.6		
Carbazole	<0.2									
Chrysene	<0.2		<0.2	<0.01	<0.1	26.35	<0.24	<0.6	25	17
Di-n-butylphthalate	<0.2						<0.24	<0.6		
Di-n-octylphthalate	<0.2						<0.24	<28.2		
Dibenzo(a,h)anthracene	<0.2		<0.2	<0.01	<0.1	<0.1	<0.24	<0.6	<4	<4
Dibenzofuran	<0.2						<0.24	2		
Dibromochloromethane	<0.12									
Dichlorobromomethane	<0.12									
Diethylphthalate	<0.2						<0.24	<0.6		
Dimethylphthalate	<0.2						<0.24	<0.6		
Fluoranthene	<0.2		0.15	6.3	43.86	59.5	<0.24	9.4	93	74
Fluorene	0.082J		3.9	7.6	62.22	80.92	<0.24	10	120	140
Hexachloro-1,3-butadiene	<0.2									
Hexachlorobenzene	<0.2						<0.24	<0.6		
Hexachlorobutadiene							<0.24	<0.6		
Hexachlorocyclopentadiene	<0.2						<0.24	<0.6		
Hexachloroethane	<0.2						<0.24	<0.6		
Indeno(1,2,3-cd)pyrene	<0.2		<0.2	<0.01	<0.1	<0.1	<0.24	<0.6	<4	<4
Isophorone	<0.2						<0.24	<0.6		
n-Nitrosodi-n-propylamine	<0.2						<0.24	<0.6		
n-Nitrosodimethylamine	<0.2									
N-Nitrosodiphenylamine	<0.2						<0.24	<0.62		
Naphthalene	8.7		11	39.4	331.5	413.1	3.6	30	280	300
Nitrobenzene	<0.2						<0.24	<0.6		
Pentachlorophenol	<0.5						<1.2	<3.1		
Phenanthrene	0.071J		<0.2	6.7	178.33	227.8	0.32	26	36	45

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 2/19/98	MW-4 2/25/99	MW-5 9/9/86 HPLC	MW-5 12/2/86	MW-5 6/2/87	MW-5 6/2/87 DUP	MW-5 12/22/87	MW-5 3/30/88	MW-6 9/9/86 HPLC	MW-6 9/9/86 HPLC DUP
Phenol	<0.2						<0.24	<0.6		
Pyrene	<0.2		<0.2	8.1	93.45	112.37	<0.24	1.4	36	30
Pyridine										
TOC	22.6	18.7	7.4	30	16	12	8000	21	0.016	0.016
Phenols, total	0.068		0.019		0.43	0.017	0.028	0.026	0.05	0.043
1,1,1-Trichloroethane	<0.12						<0.02	<0.05		
1,1,2,2-Tetrachloroethane	<0.12						<0.02	<0.05		
1,1,2-Trichloroethane	<0.12						<0.02	<0.05		
1,1-Dichloroethane	<0.12						<0.02	<0.05		
1,1-Dichloroethene	<0.12						<0.02	<0.05		
1,2-Dichloroethane	<0.12						<0.02	<0.05		
1,2-Dichloroethene, total	<0.12									
1,2-Dichloropropane	<0.12						<0.02	<0.05		
2-Butanone	<0.25						<0.1	<0.7		
2-Chloroethylvinylether							<0.1	<0.1		
2-Hexanone	<0.25						<0.1	<0.1		
4-Methyl-2-Pentanone	<0.25						<0.1	<0.1		
Acetone	<0.25			<0.2	<0.1	<0.1	<0.5	<0.99		
Benzene	1.4	0.743	0.24	0.298	0.412	0.44	0.15	0.039J	1.9	1.6
Bromochloromethane										
Bromodichloromethane							<0.02	<0.05		
Bromoethane	<0.25									
Bromoform	<0.12						<0.02	<0.05		
Bromomethane							<0.05	<0.1		
Carbon Disulfide	<0.12						<0.02	<0.05		
Carbon Tetrachloride	<0.12						<0.02	<0.05		
Chlorobenzene	<0.12						<0.02	<0.05		
Chloroethane	<0.25						<0.05	<0.1		
Chloroform	<0.12						<0.02	<0.05		
Chloromethane	<0.25						<0.05	<0.1		
cis-1,3-Dichloropropene	<0.12						<0.02	<0.05		
Dibromochloromethane							<0.02	<0.05		
Ethylbenzene	2.5	1.7	0.071	0.27	0.541	0.464	<0.02	0.054	1.7	1.3
m&p-Xylene		0.984								
m-Xylene			0.065						1.2	1
Methylene Chloride	<0.12			<0.1	<0.5	<0.5	<0.05	<0.12		
o-Xylene		0.619	0.12						0.94	0.77
p-Xylene			0.058						0.57	0.45
Styrene	<0.12		<0.01	<0.1	<0.05	<0.05	<0.02	<0.05	0.92	0.61
Tetrachloroethene	<0.12						<0.02	<0.05		
Toluene	0.31	0.181	0.2	0.295	0.4	0.362	0.094	<0.25	1.6	1.2
trans-1,2-Dichloroethene							<0.02	<0.05		
trans-1,3-Dichloropropene	<0.12						<0.02	<0.05		
Trichloroethene	<0.12						<0.02	<0.05		

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-4 2/19/98	MW-4 2/25/99	MW-5 9/9/86 HPLC	MW-5 12/2/86	MW-5 6/2/87	MW-5 6/2/87 DUP	MW-5 12/22/87	MW-5 3/30/88	MW-6 9/9/86 HPLC	MW-6 9/9/86 HPLC DUP
Trimethylbenzene			0.046						0.12	0.1
Vinyl Acetate	<0.25						<0.1	<0.1		
Vinyl Chloride	<0.25						<0.05	<0.1		
Xylene, total	2.3			<0.1	0.273	0.227	0.19	0.16		

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-6 12/2/86	MW-6 3/10/87	MW-6 3/10/87 DUP	MW-6 6/2/87	MW-6 12/22/87	MW-6 3/30/88	MW-10 12/22/87	MW-10 3/29/88	MW-11 12/22/87	MW-11 12/22/87 DUP
Cyanide, amenable	0.1	<0	<0	<0						
Cyanide, amenable-Filtered										
Cyanide, ferro-ferri	0.02	0.06	0.05	0.07						
Cyanide, iron-cyanide										
Cyanide, iron-cyanide-										
Cyanide, total	0.12	0.06	0.05	0.07	0.06	0.01	0.01	<0.01	<0.01	<0.01
Cyanide, total-Filtered										
Cyanide, undistilled					0.07	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum-Filtered										
Antimony-Filtered										
Arsenic-Filtered										
Cadmium-Filtered										
Chromium-Filtered										
Cobalt-Filtered										
Copper-Filtered										
Iron-Filtered										
Lead-Filtered										
Manganese-Filtered										
Mercury-Filtered										
Nickel-Filtered										
Zinc-Filtered										
Ammonia										
Conductivity	0.0143	0.006	0.006	0.0131						
Organics, Total NYS	11.91	12.199	13.433	45.438						
pH	0.0069	0.0077	0.0077	0.0067						
Sulfate	14.5									
Temperature	1.138	2.3	2.3	1.385						
Turbidity										
Aluminum										
Aluminum, total										
Antimony										
Antimony, total										
Arsenic, total										
Barium, total										
Beryllium, total										
Cadmium, total										
Calcium, total										
Chromium										
Chromium, total										
Cobalt										
Cobalt, total										
Copper										
Copper, total										
Iron	7.6	10.1	9.7	4.8	11	59.65	0.64	1.41	0.15	0.26

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-6 12/2/86	MW-6 3/10/87	MW-6 3/10/87 DUP	MW-6 6/2/87	MW-6 12/22/87	MW-6 3/30/88	MW-10 12/22/87	MW-10 3/29/88	MW-11 12/22/87	MW-11 12/22/87 DUP
Iron, total										
Lead										
Lead, total										
Magnesium, total										
Manganese										
Manganese, total										
Mercury, total										
Nickel										
Nickel, total										
Potassium, total										
Selenium, total										
Silver, total										
Sodium, total										
Thallium, total										
Vanadium, total										
Zinc	<0.005	0.01	0.01	0.03	0.048	0.02	<0.005	0.02	<0.005	<0.005
Zinc, total										
1,2,4-Trichlorobenzene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
1,2-Dichlorobenzene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
1,3-Dichlorobenzene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
1,4-Dichlorobenzene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2,2'-oxybis(1-Chloropropane)										
2,4,5-Trichlorophenol					<4	<0.5	<0.1	<0.5	<0.1	<0.1
2,4,6-Trichlorophenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2,4-Dichlorophenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2,4-Dimethylphenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2,4-Dinitrophenol					<4	<0.5	<0.1	<0.5	<0.1	<0.1
2,4-Dinitrotoluene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2,6-Dinitrotoluene					<0.8	<0.1	<0.02	0.014J	<0.02	<0.02
2-Chloronaphthalene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2-Chlorophenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2-Methyl-4,6-Dinitrophenol										
2-Methylnaphthalene	<0.01	<0.01	<0.01	7.17	4.6	<0.1	<0.02	<0.1	<0.02	<0.02
2-Methylphenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
2-Nitroaniline					<4	<0.5	<0.1	<0.5	<0.1	<0.1
2-Nitrophenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
3,3'-Dichlorobenzidine					<1.6	<0.2	<0.04	<0.2	<0.04	<0.04
3-Nitroaniline					<4	<0.5	<0.1	<0.5	<0.1	<0.1
4,6-Dinitro-2-methylphenol					<4	<0.5	<0.1	0.015J	<0.1	<0.1
4-Bromophenyl phenyl ether					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
4-Chloro-3-Methylphenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
4-Chloroaniline					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
4-Chlorophenyl-phenylether					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
4-Methylphenol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-6 12/2/86	MW-6 3/10/87	MW-6 3/10/87 DUP	MW-6 6/2/87	MW-6 12/22/87	MW-6 3/30/88	MW-10 12/22/87	MW-10 3/29/88	MW-11 12/22/87	MW-11 12/22/87 DUP
4-Nitroaniline					<4	<0.5	<0.1	<0.5	<0.1	<0.1
4-Nitrophenol					<4	<0.5	<0.1	0.028J	<0.1	<0.1
6-Nitroaniline										
Acenaphthene	<0.01	0.89	1.2	3.58	2.2	0.12J	0.1	0.014J	<0.02	<0.02
Acenaphthylene	<0.01	<0.01	<0.01	3.3	<0.8	0.012J	<0.02	<0.1	<0.02	<0.02
Anthracene	<0.01	<0.01	<0.01	5.29	0.89	0.013J	<0.02	<0.1	<0.02	<0.02
Benzo(a)anthracene	<0.01	<0.01	<0.01	<0.5	<0.8	0.02J	<0.02	0.035J	<0.02	<0.02
Benzo(a)pyrene	<0.01	<0.01	<0.01	0.56	<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	0.54	<0.8	0.014J	<0.02	0.03J	<0.02	<0.02
Benzo(g,h,i)perylene	<0.01	<0.01	<0.01	<0.5	<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	0.58	<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Benzoic Acid					<4	<0.5	<0.1	<0.5	<0.1	<0.1
Benzyl Alcohol					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
bis(2-Chloroethoxy)methane					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
bis(2-Chloroethyl)ether					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
bis(2-Chloroisopropyl)ether					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
bis(2-Ethylhexyl)phthalate	<0.01	<0.01	<0.01	<0.5	<0.8	<0.1	<0.02	0.41	<0.02	<0.02
Butylbenzylphthalate					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Carbazole										
Chrysene	<0.01	<0.01	<0.01	0.68	<0.8	<0.1	<0.02	0.029J	<0.02	<0.02
Di-n-butylphthalate					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Di-n-octylphthalate					<0.8	<4.7	<0.02	<4.7	<0.02	<0.02
Dibenzo(a,h)anthracene	<0.01	<0.01	<0.01	<0.5	<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Dibenzofuran					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Dibromochloromethane										
Dichlorobromomethane										
Diethylphthalate					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Dimethylphthalate					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Fluoranthene	<0.01	<0.01	1.31	2.51	1	0.031J	<0.02	<0.1	<0.02	<0.02
Fluorene	<0.01	<0.01	<0.01	1.98	1.1	<0.1	0.028	0.016J	<0.02	<0.02
Hexachloro-1,3-butadiene										
Hexachlorobenzene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Hexachlorobutadiene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Hexachlorocyclopentadiene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Hexachloroethane					<0.8	<0.1	<0.02	0.016J	<0.02	<0.02
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.5	<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Isophorone					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
n-Nitrosodi-n-propylamine					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Naphthalene	6.98	5.04	5.91	18.76	12	<0.1	<0.02	<0.1	<0.02	<0.02
Nitrobenzene					<0.8	<0.1	<0.02	<0.1	<0.02	<0.02
Pentachlorophenol					<4	<0.5	<0.1	<0.5	<0.1	<0.1
Phenanthrene	<0.01	1.34	1.53	5.29	3.5	0.027J	<0.02	<0.1	<0.02	<0.02

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-6 12/2/86	MW-6 3/10/87	MW-6 3/10/87 DUP	MW-6 6/2/87	MW-6 12/22/87	MW-6 3/30/88	MW-10 12/22/87	MW-10 3/29/88	MW-11 12/22/87	MW-11 12/22/87 DUP
Phenol					<0.8	0.015J	<0.02	<0.1	<0.02	<0.02
Pyrene	<0.01	0.843	<0.01	<0.5	1.6	0.07J	<0.02	<0.1	<0.02	<0.02
Pyridine										
TOC	28	12.5	13.7	14	10000	31	61	11	5.4	8.9
Phenols, total				0.031	0.056	0.037	<0.005	0.029	0.005	0.01
1,1,1-Trichloroethane					<0.002	<0.025	<0.002		0.0026	0.0044
1,1,2,2-Tetrachloroethane					<0.002	<0.025	<0.002		<0.002	<0.002
1,1,2-Trichloroethane					<0.002	<0.025	<0.002		<0.002	<0.002
1,1-Dichloroethane					<0.002	<0.025	<0.002		<0.002	<0.002
1,1-Dichloroethene					<0.002	<0.025	<0.002		<0.002	<0.002
1,2-Dichloroethane					<0.002	<0.025	<0.002		<0.002	<0.002
1,2-Dichloroethene, total										
1,2-Dichloropropane					<0.002	<0.025	<0.002		<0.002	<0.002
2-Butanone					<0.01	<0.195	<0.01		<0.01	<0.01
2-Chloroethylvinylether					<0.01	<0.05	<0.01		<0.01	<0.01
2-Hexanone					<0.01	<0.05	<0.01		<0.01	<0.01
4-Methyl-2-Pentanone					<0.01	<0.07	<0.01		<0.01	<0.01
Acetone	0.85	<0.01	<0.01	<0.1	<0.05	<0.9	<0.05		<0.05	<0.05
Benzene	1.69	1.52	1.63	1.613	0.88	0.06	<0.002		<0.002	<0.002
Bromochloromethane										
Bromodichloromethane					<0.002	<0.025	<0.002		<0.002	<0.002
Bromoethane										
Bromoform					<0.002	<0.025	<0.002		<0.002	<0.002
Bromomethane					<0.005	<0.05	<0.005		<0.005	<0.005
Carbon Disulfide					<0.002	<0.025	<0.002		<0.002	<0.002
Carbon Tetrachloride					<0.002	<0.025	<0.002		<0.002	<0.002
Chlorobenzene					<0.002	<0.025	<0.002		<0.002	<0.002
Chloroethane					<0.005	<0.05	<0.005		<0.005	<0.005
Chloroform					<0.002	<0.025	<0.002		<0.002	<0.002
Chloromethane					<0.005	<0.05	<0.005		<0.005	<0.005
cis-1,3-Dichloropropene					<0.002	<0.025	<0.002		<0.002	<0.002
Dibromochloromethane					<0.002	<0.025	<0.002		<0.002	<0.002
Ethylbenzene	0.855	0.943	1.5	1.956	0.14	<0.025	<0.002		<0.002	<0.002
m&p-Xylene										
m-Xylene										
Methylene Chloride	0.35	<0.01	<0.01	<0.05	<0.005	<0.075	<0.005		<0.005	<0.005
o-Xylene										
p-Xylene										
Styrene	<0.25	<0.01	1.37	<0.05	<0.002	<0.025	<0.002		<0.002	<0.002
Tetrachloroethene					<0.002	<0.025	<0.002		<0.002	<0.002
Toluene	0.815	0.353	0.353	0.616	0.13	<0.13	<0.002		<0.002	<0.002
trans-1,2-Dichloroethene					<0.002	<0.025	<0.002		<0.002	<0.002
trans-1,3-Dichloropropene					<0.002	<0.025	<0.002		<0.002	<0.002
Trichloroethene					<0.002	<0.025	<0.002		<0.002	<0.002

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-6 12/2/86	MW-6 3/10/87	MW-6 3/10/87 DUP	MW-6 6/2/87	MW-6 12/22/87	MW-6 3/30/88	MW-10 12/22/87	MW-10 3/29/88	MW-11 12/22/87	MW-11 12/22/87 DUP
Trimethylbenzene										
Vinyl Acetate					<0.01	<0.05	<0.01		<0.01	<0.01
Vinyl Chloride					<0.005	<0.05	<0.005		<0.005	<0.005
Xylene, total	1.22	1.27	<0.01	1.452	2.4	0.04	0.012		<0.002	<0.002

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-11 3/29/88	MW-11 7/14/93	MW-11 7/14/93 NYSEG	MW-12 12/22/87	MW-12 3/29/88	MW-12 10/29/92	MW-12 10/12/93	MW-12 5/24/94	MW-12 2/28/95	MW-12 2/20/96
Cyanide, amenable		<0				<0.01	<0.01	<0.00001	<0.01	0.152
Cyanide, amenable-Filtered		<0								
Cyanide, ferro-ferri										
Cyanide, iron-cyanide		<0								
Cyanide, iron-cyanide-		<0								
Cyanide, total	<0.01	<0	<0.00001	0.8	0.58		0.45	0.000414	0.448	0.511
Cyanide, total-Filtered		<0								
Cyanide, undistilled	<0.01			0.02	<0.01					
Aluminum-Filtered		<0								
Antimony-Filtered		<0								
Arsenic-Filtered						<0.02	<0.002		0.0108	0.0108
Cadmium-Filtered						<0.01	<0.004		<0.004	<0.001
Chromium-Filtered		<0				<0.05	<0.004		<0.007	<0.002
Cobalt-Filtered		<0								
Copper-Filtered		<0								
Iron-Filtered		0.056J				4.27	5.28		4.47	5.11
Lead-Filtered		<0				<0.08	<0.001		<0.002	<0.001
Manganese-Filtered		2.17								
Mercury-Filtered						<0.0002	<0.0001		<0.0001	<0.0001
Nickel-Filtered		0.064								
Zinc-Filtered		0.003				<0.01	<0.002		<0.006	<0.001
Ammonia						0.96	1.1	0.0014	1.3	1.3
Conductivity						1.605	1.21	1.57	1.69	2.75
Organics, Total NYS										
pH						0.007	0.0069	0.007	0.0069	0.007
Sulfate						92.3	73	0.0809	47.5	35.5
Temperature						0.0111	0.015	0.012	0.0105	0.0125
Turbidity		0.0058	0.0058			0.00718	0.00315	0.01367	0.172	0.196
Aluminum		0.348								
Aluminum, total			<0.048					0.036B		
Antimony		<0								
Antimony, total			<0.005					<0.003		
Arsenic, total								0.0032B		
Barium, total								0.135B		
Beryllium, total								<0.001		
Cadmium, total			<0.004					<0.003		
Calcium, total								163		
Chromium		0.005J								
Chromium, total			<0.004					0.004B		
Cobalt		<0								
Cobalt, total			<0.005					<0.006		
Copper		<0								
Copper, total			<0.004					<0.004		
Iron	0.28	0.332		2.7	4.45					

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-11 3/29/88	MW-11 7/14/93	MW-11 7/14/93 NYSEG	MW-12 12/22/87	MW-12 3/29/88	MW-12 10/29/92	MW-12 10/12/93	MW-12 5/24/94	MW-12 2/28/95	MW-12 2/20/96
Iron, total			0.056J					4.62		
Lead		0.018								
Lead, total			<0.001					<0.001		
Magnesium, total								24.3		
Manganese		2.04								
Manganese, total			2.04					3.13		
Mercury, total								<0.0001		
Nickel		0.063								
Nickel, total			0.064					<0.008		
Potassium, total								5.79		
Selenium, total								<0.001		
Silver, total								<0.003		
Sodium, total								142		
Thallium, total								<0.001		
Vanadium, total								<0.005		
Zinc	0.01	0.042		<0.005	0.02					
Zinc, total			0.003J					0.003B		
1,2,4-Trichlorobenzene	<0.01	<0.01		<0.02	<50		<0.048	<0.012	<0.01	<0.01
1,2-Dichlorobenzene	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
1,3-Dichlorobenzene	<0.01	<0.01		<0.02	<50		<0.048	<0.061	<0.01	<0.01
1,4-Dichlorobenzene	<0.01	<0.01		<0.02	<50		<0.048	<0.061	<0.01	<0.01
2,2'-oxybis(1-Chloropropane)		<0.01								
2,4,5-Trichlorophenol	<0.05	<0.024		<0.1	<250		<0.12	<0.03	<0.024	<0.024
2,4,6-Trichlorophenol	<0.01	<0.01		<0.02	<50		<0.048	<0.061	<0.01	<0.01
2,4-Dichlorophenol	<0.01	<0.01	<0.024	<0.02	<50		<0.048	<0.012	<0.01	<0.01
2,4-Dimethylphenol	<0.01	<0.01		<0.02	<50		<0.048	<0.012	<0.01	<0.01
2,4-Dinitrophenol	<0.05	<0.024	<0.01	<0.1	<250		<0.12	<0.03	<0.024	<0.024
2,4-Dinitrotoluene	<0.01	<0.01		<0.02	<50		<0.048	<0.061	<0.01	<0.01
2,6-Dinitrotoluene	<0.01	<0.01		<0.02	<50		<0.048	<0.061	<0.01	<0.01
2-Chloronaphthalene	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.061	<0.01	<0.01
2-Chlorophenol	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
2-Methyl-4,6-Dinitrophenol			<0.024				<0.12	<0.15	<0.024	<0.024
2-Methylnaphthalene	<0.01	<0.01	<0.01	<0.02	540		0.36	0.1	0.022	0.034
2-Methylphenol	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
2-Nitroaniline	0.0011J	<0.024	<0.024	<0.1	<250		<0.12	<0.03	<0.024	<0.024
2-Nitrophenol	<0.01	<0.01	<0.024	<0.02	<50		<0.048	<0.061	<0.01	<0.01
3,3'-Dichlorobenzidine	<0.02	<0.01	<0.01	<0.04	<100		<0.048	<0.012	<0.01	<0.01
3-Nitroaniline	<0.05		<0.024	<0.1	250		<0.12	<0.03	<0.024	<0.024
4,6-Dinitro-2-methylphenol	<0.05	<0.024		<0.1	<250					
4-Bromophenyl phenyl ether	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.061	<0.01	<0.01
4-Chloro-3-Methylphenol	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
4-Chloroaniline	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.061	<0.01	<0.01
4-Chlorophenyl-phenylether	<0.01	<0.01		<0.02	<50		<0.048	<0.012	<0.01	<0.01
4-Methylphenol	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-11 3/29/88	MW-11 7/14/93	MW-11 7/14/93 NYSEG	MW-12 12/22/87	MW-12 3/29/88	MW-12 10/29/92	MW-12 10/12/93	MW-12 5/24/94	MW-12 2/28/95	MW-12 2/20/96
4-Nitroaniline	<0.05	<0.024	<0.024	<0.1	<250		<0.12	<0.03	<0.024	<0.024
4-Nitrophenol	<0.05	<0.024	<0.024	<0.1	<250		<0.048	<0.15	<0.01	<0.01
6-Nitroaniline		<0.024								
Acenaphthene	<0.01	<0.01	<0.01	<0.02	210	0.242	1.2	0.2	0.15	0.18
Acenaphthylene	<0.01	<0.01		<0.02	26J	0.115	0.18	0.031J	0.02	0.019
Anthracene	<0.01	<0.01		<0.02	86	0.135	0.57	0.075	0.042	0.042
Benzo(a)anthracene	<0.01	<0.01	<0.01	<0.02	34J	0.102	0.24	0.042J	0.025	0.018
Benzo(a)pyrene	<0.01	<0.01	<0.01	<0.02	28J	0.0673	0.25	0.034J	0.019	0.017
Benzo(b)fluoranthene	<0.01	<0.01		<0.02	12J	0.0611	0.12	0.019	0.008J	0.008J
Benzo(g,h,i)perylene	<0.01	<0.01	<0.01	<0.02	<50		0.072	0.017	0.01	0.008J
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.02	8.4J	0.0611	0.15	0.018	0.013	0.008J
Benzoic Acid	<0.05			<0.1	<250		<0.12		<0.024	<0.024
Benzyl Alcohol	<0.01			<0.02	<50		<0.048		<0.01	<0.01
bis(2-Chloroethoxy)methane	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.061	<0.01	<0.01
bis(2-Chloroethyl)ether	<0.01	<0.01		<0.02	<50		<0.048	<0.012	<0.01	<0.01
bis(2-Chloroisopropyl)ether	<0.01		<0.01	<0.02	<50		<0.048	<0.012	<0.01	
bis(2-Ethylhexyl)phthalate	<0.01	<0.01	0.019	<0.02	<50		<0.048	<0.012	0.009J	0.008J
Butylbenzylphthalate	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
Carbazole		<0.01					<0.048	<0.061	<0.01	0.002J
Chrysene	<0.01	<0.01	<0.01	<0.02	32J	0.0697	0.24	0.039J	0.022	0.017
Di-n-butylphthalate	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
Di-n-octylphthalate	<0.47	<0.01		<0.02	<2350		<0.048	<0.012	<0.01	<0.01
Dibenzo(a,h)anthracene	<0.01	<0.01	<0.01	<0.02	<50	0.0422	0.033J	<0.012	<0.01	<0.01
Dibenzofuran	<0.01	<0.01	<0.01	<0.02	23J		0.11	0.017	0.012	0.015
Dibromochloromethane			<0.005				<0.05	<0.017	<0.005	<0.005
Dichlorobromomethane										<0.005
Diethylphthalate	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
Dimethylphthalate	<0.01	<0.01		<0.02	<50		<0.048	<0.061	<0.01	<0.01
Fluoranthene	<0.01	<0.01	<0.01	<0.02	82	0.154	0.67	0.086	0.044	0.04
Fluorene	<0.01	<0.01	<0.01	<0.02	110	0.212	0.63	0.062	0.056	0.077
Hexachloro-1,3-butadiene			<0.01				<0.048	<0.012	<0.01	<0.01
Hexachlorobenzene	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.061	<0.01	<0.01
Hexachlorobutadiene	<0.01	<0.01		<0.02	<50					
Hexachlorocyclopentadiene	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.061	<0.01	<0.01
Hexachloroethane	<0.01	<0.01		<0.02	<50		<0.048	<0.012	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.02	<50	0.0422	0.07	0.014	0.008J	0.006J
Isophorone	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
n-Nitrosodi-n-propylamine	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine	<0.01	<0.01		<0.02	<27.5		<0.048	<0.061	<0.01	<0.01
Naphthalene	<0.01	<0.01		<0.02	580	0.221	0.86	0.23	0.36	0.012
Nitrobenzene	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
Pentachlorophenol	<0.05	<0.024	<0.024	<0.1	<250		<0.12	<0.15	<0.024	<0.024
Phenanthrene	<0.01	<0.01		<0.02	320	0.401	0.6	0.26	0.14	0.16

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-11 3/29/88	MW-11 7/14/93	MW-11 7/14/93 NYSEG	MW-12 12/22/87	MW-12 3/29/88	MW-12 10/29/92	MW-12 10/12/93	MW-12 5/24/94	MW-12 2/28/95	MW-12 2/20/96
Phenol	<0.01	<0.01	<0.01	<0.02	<50		<0.048	<0.012	<0.01	<0.01
Pyrene	<0.01	<0.01		<0.02	130	0.25	0.98	0.16	0.09	0.075
Pyridine			<0.01							
TOC	4.9			18	13	12	2.2		15.4	15.5
Phenols, total	0.005			0.016	0.2	0.016	0.017	0.011	0.017	0.012
1,1,1-Trichloroethane	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
1,1,2,2-Tetrachloroethane	<0.005	<0.005		<0.002	<0.025		<0.05	<0.005	<0.005	<0.005
1,1,2-Trichloroethane	<0.005	<0.005		<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
1,1-Dichloroethane	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.005	<0.005	<0.005
1,1-Dichloroethene	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
1,2-Dichloroethane	<0.005	<0.005		<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
1,2-Dichloroethene, total		<0.005					<0.05	<0.005	<0.005	<0.005
1,2-Dichloropropane	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
2-Butanone	<0.07	<0.01	<0.01	<0.01	<0.17		<0.1	<0.01	<0.01	<0.01
2-Chloroethylvinylether	<0.01		<0.01	<0.01	<0.05					
2-Hexanone	<0.01	<0.01	<0.01	<0.01	<0.05		<0.1	<0.01	<0.01	<0.01
4-Methyl-2-Pentanone	<0.01	<0.01	<0.01	<0.01	<0.05		<0.1	<0.033	<0.01	<0.01
Acetone	<0.099	<0.01	<0.01	<0.05	<0.235		<0.1	<0.01	<0.01	<0.01
Benzene	<0.005	<0.005	<0.005	<0.002	0.12		0.34	0.4	<0.005	0.37
Bromochloromethane			<0.005							
Bromodichloromethane	<0.005	<0.005		<0.002	<0.025		<0.05	<0.017	<0.005	
Bromoethane			<0.01							<0.01
Bromoform	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
Bromomethane	<0.01	<0.01		<0.005	<0.05		<0.1	<0.01	<0.01	
Carbon Disulfide	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
Carbon Tetrachloride	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
Chlorobenzene	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.005	<0.005	<0.005
Chloroethane	<0.01	<0.01	<0.01	<0.005	<0.05		<0.1	<0.003	<0.01	<0.01
Chloroform	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.005	<0.005	<0.005
Chloromethane	<0.01	<0.01		<0.005	<0.05		<0.1	<0.033	<0.01	<0.01
cis-1,3-Dichloropropene	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
Dibromochloromethane	<0.005	<0.005		<0.002	<0.025					
Ethylbenzene	<0.005	<0.005	<0.005	<0.002	1.1		0.39	0.013	<0.005	0.25
m&p-Xylene										
m-Xylene										
Methylene Chloride	<0.012	<0.01	0.004J	<0.005	<0.065		0.051	<0.005	<0.005	<0.005
o-Xylene										
p-Xylene										
Styrene	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
Tetrachloroethene	<0.005	<0.005		<0.002	<0.025		<0.05	<0.017	<0.005	<0.005
Toluene	<0.025	<0.005		<0.002	<0.23		0.021J	0.016J	<0.005	0.016
trans-1,2-Dichloroethene	<0.005		<0.005	<0.002	<0.025					
trans-1,3-Dichloropropene	<0.005	<0.005		<0.002	<0.025		<0.05	<0.005	<0.005	<0.005
Trichloroethene	<0.005	<0.005	<0.005	<0.002	<0.025		<0.05	<0.017	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-11 3/29/88	MW-11 7/14/93	MW-11 7/14/93 NYSEG	MW-12 12/22/87	MW-12 3/29/88	MW-12 10/29/92	MW-12 10/12/93	MW-12 5/24/94	MW-12 2/28/95	MW-12 2/20/96
Trimethylbenzene										
Vinyl Acetate	<0.01			<0.01	<0.05		<0.1		<0.01	<0.01
Vinyl Chloride	<0.01	<0.01	<0.01	<0.005	<0.05		<0.1	<0.01	<0.01	<0.01
Xylene, total	<0.005	<0.005	<0.005	0.075	1.2		0.26	0.21B	<0.005	0.19

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-12 2/26/97	MW-12 2/19/98	MW-12 2/25/99	MW-13 12/22/87	MW-13 3/29/88	MW-13 3/29/88 DUP	MW-13 10/29/92	MW-13 7/14/93	MW-13 7/15/93 NYSEG	MW-13 10/13/93
Cyanide, amenable	71.5	<0.01					<0.01	<0		<0.01
Cyanide, amenable-Filtered								<0		
Cyanide, ferro-ferri										
Cyanide, iron-cyanide								<0		
Cyanide, iron-cyanide-								<0		
Cyanide, total	406	0.354	0.29	0.15	0.1	0.13		<0	<0.01	0.106
Cyanide, total-Filtered								<0		
Cyanide, undistilled				<0.01	<0.01	<0.01				
Aluminum-Filtered								<0		
Antimony-Filtered								<0		
Arsenic-Filtered	9.3B	0.0042B					<0.02			<0.002
Cadmium-Filtered	<1	<0.001					<0.01			<0.004
Chromium-Filtered	<3	<0.002					<0.05	<0		<0.004
Cobalt-Filtered								<0		
Copper-Filtered								<0		
Iron-Filtered	6390	10.1					0.12	0.052J		0.069J/
Lead-Filtered	<2	<0.002					<0.08	<0		<0.001
Manganese-Filtered								0.518		
Mercury-Filtered	<0.1	<0.0001					<0.002			<0.0001
Nickel-Filtered								<0		
Zinc-Filtered	63.3	0.109					<0.01	0.012J		<0.002
Ammonia	1.29	1.87					1.85			2.1
Conductivity	2.56	2.56					1.46			1.075
Organics, Total NYS										
pH	0.0072	0.0069	0.0071				0.0072			0.0071
Sulfate	31	52.2					18.3			33
Temperature	0.01	0.011	0.01				0.0118			0.013
Turbidity	0.113	0.0283	0.094				0.0226	0.033	0.033	0.00648
Aluminum								0.062J		
Aluminum, total									0.062J	
Antimony								<0		
Antimony, total									<0.005	
Arsenic, total										
Barium, total										
Beryllium, total										
Cadmium, total									<0.004	
Calcium, total										
Chromium								0.004J		
Chromium, total									0.004J	
Cobalt								<0		
Cobalt, total									<0.005	
Copper								<0		
Copper, total									<0.004	
Iron				0.14	0.26	0.18		0.087J		

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-12 2/26/97	MW-12 2/19/98	MW-12 2/25/99	MW-13 12/22/87	MW-13 3/29/88	MW-13 3/29/88 DUP	MW-13 10/29/92	MW-13 7/14/93	MW-13 7/15/93 NYSEG	MW-13 10/13/93
Iron, total									0.052J	
Lead								0.0021J		
Lead, total									0.0021J	
Magnesium, total										
Manganese								0.469		
Manganese, total									0.469	
Mercury, total										
Nickel								<0		
Nickel, total									<0.008	
Potassium, total										
Selenium, total										
Silver, total										
Sodium, total										
Thallium, total										
Vanadium, total										
Zinc				<0.005	0.01	0.02		0.02		
Zinc, total									0.012J	
1,2,4-Trichlorobenzene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
1,2-Dichlorobenzene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
1,3-Dichlorobenzene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.098
1,4-Dichlorobenzene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.098
2,2'-oxybis(1-Chloropropane)								<0.011		
2,4,5-Trichlorophenol	<0.024	<0.03		<2	<1.25	<1.25		<0.028		<0.24
2,4,6-Trichlorophenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
2,4-Dichlorophenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<1.4	<0.01
2,4-Dimethylphenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
2,4-Dinitrophenol	<0.024	<0.075		<2	<1.25	<1.25		<0.028	<0.011	<0.024
2,4-Dinitrotoluene	<0.01	<0.03		<0.4	0.052J	<0.25		<0.011		<0.098
2,6-Dinitrotoluene	<0.01	<0.03		<0.4	0.036J	<0.25		<0.011		<0.098
2-Chloronaphthalene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
2-Chlorophenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.098
2-Methyl-4,6-Dinitrophenol	<0.024	<0.075							<0.028	<0.24
2-Methylnaphthalene	0.028	0.016J		0.78	2.7	2.1		0.2	<0.011	0.5
2-Methylphenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
2-Nitroaniline	<0.024	<0.075		<2	<1.25	<1.25		<0.028	<0.028	<0.024
2-Nitrophenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.57	<0.098
3,3'-Dichlorobenzidine	<0.01	<0.06		<0.8	<0.5	<0.5		<0.011	<0.011	<0.01
3-Nitroaniline	<0.024	<0.075		<2	<1.25	<1.25			<1.4	<0.024
4,6-Dinitro-2-methylphenol				<2	<1.25	<1.25		<0.028		
4-Bromophenyl phenyl ether	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.098
4-Chloro-3-Methylphenol	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
4-Chloroaniline	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.57	<0.01
4-Chlorophenyl-phenylether	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
4-Methylphenol	<0.01	<0.03		<0.4	<0.25	<0.25		0.004J	<0.57	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-12 2/26/97	MW-12 2/19/98	MW-12 2/25/99	MW-13 12/22/87	MW-13 3/29/88	MW-13 3/29/88 DUP	MW-13 10/29/92	MW-13 7/14/93	MW-13 7/15/93 NYSEG	MW-13 10/13/93
4-Nitroaniline	<0.024	<0.075		<2	<1.25	<1.25		<0.028	<0.028	<0.024
4-Nitrophenol	<0.024	<0.075		<2	<1.25	<1.25		<0.028	<1.4	<0.098
6-Nitroaniline								<0.028		
Acenaphthene	0.14	0.12		<0.4	0.22J	0.17J	0.247	0.058	0.022	0.16
Acenaphthylene	0.015	0.014J		<0.4	0.94	0.72	0.0867	0.022		0.048
Anthracene	0.022	0.009J		<0.4	0.31J	0.21J	0.0583	0.002J		0.011
Benzo(a)anthracene	0.006J	0.004J		<0.4	0.1J	0.074J	0.0292	<0.011	<0.011	<0.098
Benzo(a)pyrene	0.005J	<0.03		<0.4	0.1J	0.072J		<0.011	<0.011	<0.01
Benzo(b)fluoranthene	0.002J	<0.03		<0.4	0.038J	0.085J	<0.02	<0.011		<0.01
Benzo(g,h,i)perylene	<0.01	<0.03		<0.4	<0.25	<0.25	<0.01	<0.011	<0.57	<0.098
Benzo(k)fluoranthene	0.004J	<0.03		<0.4	0.041J	<0.25	<0.02	<0.011	<0.57	<0.098
Benzoic Acid	<0.01	<0.03		<2	<1.25	<1.25				<0.024
Benzyl Alcohol	<0.01	<0.03		<0.4	<0.25	<0.25				<0.01
bis(2-Chloroethoxy)methane	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
bis(2-Chloroethyl)ether	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
bis(2-Chloroisopropyl)ether				<0.4	<0.25	<0.25			<0.011	<0.01
bis(2-Ethylhexyl)phthalate	0.001J	<0.03		<0.4	<0.25	<0.25		0.044	0.044	<0.098
Butylbenzylphthalate	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.098
Carbazole	<0.01	<0.03						0.005J		0.01
Chrysene	0.006J	0.004J		<0.4	0.13J	0.11J	0.025	<0.011	<0.57	<0.01
Di-n-butylphthalate	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
Di-n-octylphthalate	<0.01	<0.03		<0.4	<11.75	<11.75		<0.011		<0.01
Dibenzo(a,h)anthracene	<0.01	<0.03		<0.4	<0.25	<0.25	<0.02	<0.011	<0.011	<0.098
Dibenzofuran	0.01	0.007J		<0.4	0.064J	0.048J		0.002J	0.002J	0.006J/
Dibromochloromethane	<0.05	<0.025							<0.005	<0.25
Dichlorobromomethane	<0.05	<0.025								
Diethylphthalate	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.57	<0.098
Dimethylphthalate	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
Fluoranthene	0.016	0.015J		<0.4	0.3	0.23J	0.055	0.002J	<0.57	0.008J/
Fluorene	0.06	0.05		<0.4	<0.25	<0.25	0.158	0.017	0.017	0.043
Hexachloro-1,3-butadiene	<0.01	<0.03							<0.011	<0.01
Hexachlorobenzene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.098
Hexachlorobutadiene				<0.4	<0.25	<0.25		<0.011		
Hexachlorocyclopentadiene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.57	<0.098
Hexachloroethane	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011		<0.01
Indeno(1,2,3-cd)pyrene	<0.01	<0.03		<0.4	<0.25	<0.25	<0.02	<0.011	<0.011	<0.098
Isophorone	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.01
n-Nitrosodi-n-propylamine	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.57	<0.01
n-Nitrosodimethylamine		<0.03								
N-Nitrosodiphenylamine	<0.01	<0.03		<0.4	<0.137	<0.25		<0.011		<0.01
Naphthalene	0.16	0.36		4.6	8.1	7.8	5.55	2.6		1.9
Nitrobenzene	<0.01	<0.03		<0.4	<0.25	<0.25		<0.011	<0.011	<0.098
Pentachlorophenol	<0.024	<0.075		<2	<1.25	<1.25		<0.028	<0.028	<0.024
Phenanthrene	0.075	0.052		<0.4	1.3	0.92	0.128	0.02		0.057J

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-12 2/26/97	MW-12 2/19/98	MW-12 2/25/99	MW-13 12/22/87	MW-13 3/29/88	MW-13 3/29/88 DUP	MW-13 10/29/92	MW-13 7/14/93	MW-13 7/15/93 NYSEG	MW-13 10/13/93
Phenol	<0.01	<0.03		0.58	<0.25	<0.25		0.051	0.048J	<0.098
Pyrene	0.028	0.021J		<0.4	0.45	0.33	0.0794	0.002J		0.01
Pyridine									<0.57	
TOC	13.9	12.1	12	9	7.6	8.5	5			14.5
Phenols, total	B	0.01		0.053	0.064	0.058	0.0001			0.028
1,1,1-Trichloroethane	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
1,1,2,2-Tetrachloroethane	<0.05	<0.025		<0.04	<0.5			<0.005		<0.25
1,1,2-Trichloroethane	<0.05	<0.025		<0.04	<0.5			<0.005		<0.25
1,1-Dichloroethane	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
1,1-Dichloroethene	<0.05	<0.025		<0.04	<0.5			<0.005	<0.57	<0.25
1,2-Dichloroethane	<0.05	<0.025		<0.04	<0.5			<0.005		<0.25
1,2-Dichloroethene, total	<0.05	<0.025						<0.005		<0.25
1,2-Dichloropropane	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
2-Butanone	<0.05	0.052		<0.2	<2			<0.01	<0.01	<0.5
2-Chloroethylvinylether				<0.2	<1				<0.57	
2-Hexanone	<0.05	<0.05		<0.2	<1			<0.01	<0.01	<0.5
4-Methyl-2-Pentanone	<0.05	<0.05		<0.2	<1			<0.01	<0.01	<0.5
Acetone	<0.05	<0.05		<1	<57			<0.01	<0.01	0.7
Benzene	0.41	0.38	0.132	9.6	12			<0.005	<0.005	5.7
Bromochloromethane									<0.005	
Bromodichloromethane				<0.04	<0.5			<0.005		<0.25
Bromoethane	<0.05	<0.05								
Bromoform	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
Bromomethane				<0.1	<1			<0.01	<0.01	<0.5
Carbon Disulfide	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
Carbon Tetrachloride	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
Chlorobenzene	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
Chloroethane	<0.05	<0.05		<0.1	<1			<0.01	<0.01	<0.5
Chloroform	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
Chloromethane	<0.05	<0.05		<0.1	<1			<0.01		<0.5
cis-1,3-Dichloropropene	<0.05	<0.025		<0.04	<0.5			<0.005	<0.005	<0.25
Dibromochloromethane				<0.04	<0.5			<0.005		
Ethylbenzene	0.57	0.44	0.121	2	2			<0.005	<0.005	2.6
m&p-Xylene			0.0168							
m-Xylene										
Methylene Chloride	<0.05	<0.025		<0.1	36			0.004J	0.004J	1.2
o-Xylene			0.0782							
p-Xylene										
Styrene	<0.05	<0.025		0.94	1.8			<0.005	<0.005	<0.25
Tetrachloroethene	<0.05	<0.025		<0.04	<0.5			<0.005		<0.25
Toluene	0.021J	0.015J	0.005	3.6	6.4			<0.005		1.1
trans-1,2-Dichloroethene				<0.04	<0.5				<0.005	
trans-1,3-Dichloropropene	<0.05	<0.025		<0.04	<0.5			<0.005		<0.25
Trichloroethene	<0.05	<0.025		0.053	<0.5			<0.005	<0.005	<0.25

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-12 2/26/97	MW-12 2/19/98	MW-12 2/25/99	MW-13 12/22/87	MW-13 3/29/88	MW-13 3/29/88 DUP	MW-13 10/29/92	MW-13 7/14/93	MW-13 7/15/93 NYSEG	MW-13 10/13/93
Trimethylbenzene										
Vinyl Acetate	<0.05	<0.05		<0.2	<1					<0.5
Vinyl Chloride	<0.05	<0.05		<0.1	<1			<0.01	<0.01	<0.5
Xylene, total	0.24	0.21		2.2	3.5			<0.005	<0.005	1.9

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-13 5/24/94	MW-13 2/28/95	MW-13 2/20/96	MW-13 2/27/97	MW-13 2/19/98	MW-13 2/25/99	MW-14 12/22/87	MW-14 3/29/88	MW-14 10/29/92	MW-14 7/15/93
Cyanide, amenable	<0.01	<0.01	<0.01	<10	0.01				<0.01	<0
Cyanide, amenable-Filtered										<0
Cyanide, ferro-ferri										
Cyanide, iron-cyanide										0.196
Cyanide, iron-cyanide-										0.196
Cyanide, total	0.0288	0.0564	0.102	79.5	0.108	0.07	0.12	0.09		0.0793
Cyanide, total-Filtered										<0
Cyanide, undistilled							0.02	<0.01		
Aluminum-Filtered										0.075J
Antimony-Filtered										<0
Arsenic-Filtered		0.0048B	<0.003	4B	0.0045B				<0.02	
Cadmium-Filtered		<0.004	<0.001	<1	<0.001				<0.01	
Chromium-Filtered		<0.007	<0.002	<3	<0.002				<0.05	<0
Cobalt-Filtered										<0
Copper-Filtered										<0
Iron-Filtered		0.064B	<0.05	<37	<0.05				0.078	0.079J
Lead-Filtered		<0.002	<0.001	<2	<0.002				<0.08	<0
Manganese-Filtered										0.787
Mercury-Filtered		<0.0001	<0.0001	<0.1	<0.0001				<0.0002	
Nickel-Filtered										<0
Zinc-Filtered		<0.006	<0.001	24.1	0.0136B				<0.1	0.002J
Ammonia	2	2	1.92	1.99	1.42				1.52	
Conductivity	1.37	1.46	1.52	1.7	1.805				1.46	
Organics, Total NYS										
pH	0.0071	0.0073	0.0073	0.0074	0.0071	0.0069			0.0071	
Sulfate	16	29	46.6	21.7	29.8				25.5	
Temperature	0.013	0.011	0.0115	0.011	0.013	0.012			0.012	
Turbidity	0.00546	0.0061	0.0148	0.0332	0.0224	0.0173			0.01148	0.033
Aluminum										0.086J
Aluminum, total	<0.029									
Antimony										0.0167J
Antimony, total	<0.003									
Arsenic, total	<0.002									
Barium, total	2.69									
Beryllium, total	<0.001									
Cadmium, total	<0.003									
Calcium, total	112									
Chromium										<0
Chromium, total	<0.004									
Cobalt										<0
Cobalt, total	<0.006									
Copper										<0
Copper, total	<0.004									
Iron							0.4	0.16		0.142

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-13 5/24/94	MW-13 2/28/95	MW-13 2/20/96	MW-13 2/27/97	MW-13 2/19/98	MW-13 2/25/99	MW-14 12/22/87	MW-14 3/29/88	MW-14 10/29/92	MW-14 7/15/93
Iron, total	0.192									
Lead										0.001J
Lead, total	<0.001									
Magnesium, total	27.5									
Manganese										0.727
Manganese, total	0.493									
Mercury, total	<0.0001									
Nickel										<0
Nickel, total	<0.008									
Potassium, total	7.9									
Selenium, total	<0.001									
Silver, total	<0.003									
Sodium, total	140									
Thallium, total	<0.001									
Vanadium, total	<0.005									
Zinc							<0.005	0.03		0.012J
Zinc, total	0.006B									
1,2,4-Trichlorobenzene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
1,2-Dichlorobenzene	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
1,3-Dichlorobenzene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
1,4-Dichlorobenzene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2,2'-oxybis(1-Chloropropane)										<0.01
2,4,5-Trichlorophenol	<2.4	<0.024	<0.024	<0.24	<0.78		<0.1	<0.25		<0.025
2,4,6-Trichlorophenol	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2,4-Dichlorophenol	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2,4-Dimethylphenol	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	0.0069J		<0.01
2,4-Dinitrophenol	<2.4	<0.024	<0.024	<0.24	<2		<0.1	<0.25		<0.025
2,4-Dinitrotoluene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2,6-Dinitrotoluene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2-Chloronaphthalene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2-Chlorophenol	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
2-Methyl-4,6-Dinitrophenol	<0.024	<0.024	<0.024	<0.24	<2					
2-Methylnaphthalene	0.66	0.53	0.61	0.93	0.77J		0.08	0.22		0.19
2-Methylphenol	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	0.0055J		<0.01
2-Nitroaniline	<0.024	<0.024	<0.024	<0.24	<2		<0.1	<0.25		<0.025
2-Nitrophenol	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
3,3'-Dichlorobenzidine	<0.01	<0.01	<0.01	<0.095	<1.6		<0.04	<0.1		<0.01
3-Nitroaniline	<2.4	<0.024	<0.024	<0.24	<2		<0.1	<0.25		
4,6-Dinitro-2-methylphenol							<0.1	<0.25		<0.025
4-Bromophenyl phenyl ether	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
4-Chloro-3-Methylphenol	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
4-Chloroaniline	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
4-Chlorophenyl-phenylether	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
4-Methylphenol	0.003J	<0.01	<0.01	<0.095	<0.78		0.029	<0.05		<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-13 5/24/94	MW-13 2/28/95	MW-13 2/20/96	MW-13 2/27/97	MW-13 2/19/98	MW-13 2/25/99	MW-14 12/22/87	MW-14 3/29/88	MW-14 10/29/92	MW-14 7/15/93
4-Nitroaniline	<0.024	<0.024	<0.024	<0.24	<2		<0.1	<0.25		<0.025
4-Nitrophenol	<0.024	<0.24	<0.01	<0.24	<2		<0.1	<0.25		<0.025
6-Nitroaniline										<0.025
Acenaphthene	<0.96	0.18	0.19	0.32	0.3J		0.069	0.076	0.171	0.1
Acenaphthylene	0.1	0.092	0.052	0.091J	<0.78		<0.02	0.018J	<0.01	0.013
Anthracene	0.02	0.014	0.015	0.092J	<0.78		<0.02	<0.05	<0.01	0.004J
Benzo(a)anthracene	0.006J	<0.01	0.002J	0.035J	<0.78		<0.02	<0.05	<0.01	<0.01
Benzo(a)pyrene	0.004J	<0.01	0.002J	0.026J	<0.78		<0.02	<0.05	<0.01	<0.01
Benzo(b)fluoranthene	<0.96	<0.01	<0.01	0.017J	<0.78		<0.02	<0.05	<0.02	<0.01
Benzo(g,h,i)perylene	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Benzo(k)fluoranthene	<0.96	<0.01	<0.01	0.012J	<0.78		<0.02	<0.05	<0.02	<0.01
Benzoic Acid		<0.024	<0.024	<0.095	<0.78		<0.1	0.009J		
Benzyl Alcohol		<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		
bis(2-Chloroethoxy)methane	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
bis(2-Chloroethyl)ether	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
bis(2-Chloroisopropyl)ether	<0.96	<0.01					<0.02	<0.05		
bis(2-Ethylhexyl)phthalate	0.004J	0.005J	0.002J	<0.095	<0.78		<0.02	<0.05		<0.01
Butylbenzylphthalate	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Carbazole	<0.96	0.009J	0.008J	<0.095	<0.78					0.005J
Chrysene	0.006J	<0.01	0.002J	0.033J	<0.78		<0.02	<0.05	<0.01	<0.01
Di-n-butylphthalate	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Di-n-octylphthalate	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<2.35		<0.01
Dibenzo(a,h)anthracene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05	<0.02	<0.01
Dibenzofuran	0.008J	0.007J	0.009J	0.016J	<0.78		<0.02	<0.05		0.004J
Dibromochloromethane	<0.12	<0.12	<0.005	<0.5	<0.05					
Dichlorobromomethane			<0.005	<0.5	<0.05					
Diethylphthalate	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Dimethylphthalate	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Fluoranthene	0.016	0.006J	0.009J	0.091J	<0.78		<0.02	<0.05	<0.01	0.002J
Fluorene	0.065	0.062	0.072	0.19	0.089J		<0.02	0.021J	0.0573	0.028
Hexachloro-1,3-butadiene	<0.96	<0.01	<0.01	<0.095	<0.78					
Hexachlorobenzene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Hexachlorobutadiene							<0.02	<0.05		<0.01
Hexachlorocyclopentadiene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Hexachloroethane	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05	<0.02	<0.01
Isophorone	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
n-Nitrosodi-n-propylamine	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
n-Nitrosodimethylamine					<0.78					
N-Nitrosodiphenylamine	<0.96	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Naphthalene	1.2	4.9	2.5	4.9	7.2		<0.02	1.8	3.95	2.8
Nitrobenzene	<0.01	<0.01	<0.01	<0.095	<0.78		<0.02	<0.05		<0.01
Pentachlorophenol	<2.4	<0.024	<0.024	<0.24	<2		<0.1	<0.25		<0.025
Phenanthrene	<0.96	0.073	0.087	0.32	0.13J		<0.02	0.023J	0.0481	0.032

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-13 5/24/94	MW-13 2/28/95	MW-13 2/20/96	MW-13 2/27/97	MW-13 2/19/98	MW-13 2/25/99	MW-14 12/22/87	MW-14 3/29/88	MW-14 10/29/92	MW-14 7/15/93
Phenol	0.015	<0.01	0.02	0.03J	<0.78		0.36	0.044J		0.044
Pyrene	<0.96	0.01	0.015	0.14	<0.78		<0.02	<0.05	<0.01	0.002J
Pyridine										
TOC		<0.5	8.4	5.9	6.8	7.93	9.2	8.6	3	
Phenols, total	0.011	0.029	0.027	B	0.026		0.063	0.3	0.057	
1,1,1-Trichloroethane	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
1,1,2,2-Tetrachloroethane	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
1,1,2-Trichloroethane	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
1,1-Dichloroethane	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
1,1-Dichloroethene	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
1,2-Dichloroethane	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
1,2-Dichloroethene, total	<0.12	<0.12	<0.005	<0.5	<0.05					<0.12
1,2-Dichloropropane	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
2-Butanone	<1	<0.25	<0.01	<0.5	<0.1		<0.1	<0.78		<0.25
2-Chloroethylvinylether							<0.1	<0.2		
2-Hexanone	<0.25	<0.25	<0.01	<0.5	<0.1		<0.1	<0.2		<0.25
4-Methyl-2-Pentanone	<0.25	<0.25	<0.01	<0.5	<0.1		<0.1	<0.28		<0.25
Acetone	<1	<0.25	<0.01	<0.5	<0.1		<0.5	<3.6		<0.25
Benzene	2.2	3.7	4	4.5	5	3.63	2.3	2.2		4.3
Bromochloromethane										
Bromodichloromethane	<0.12	<0.12					<0.02	<0.1		<0.12
Bromoethane			<0.01	<0.5	<0.1					
Bromoform	<0.5	<0.12	<0.005	<0.5	<0.05		<0.22	<0.1		<0.12
Bromomethane	<0.25	<0.25					<0.05	<0.2		<0.25
Carbon Disulfide	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Carbon Tetrachloride	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Chlorobenzene	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Chloroethane	<1	<0.25	<0.01	<0.5	<0.1		<0.05	<0.2		<0.25
Chloroform	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Chloromethane	<0.25	<0.25	<0.01	<0.5	<0.1		<0.05	<0.2		<0.25
cis-1,3-Dichloropropene	<0.12	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Dibromochloromethane							<0.02	<0.1		<0.12
Ethylbenzene	1.1	2.2	2.2	2.3	3.1	2.01	0.061	0.081J		1.9
m&p-Xylene						0.899				
m-Xylene										
Methylene Chloride	<0.12	<0.12	<0.005	0.11J	<0.05		<0.05	<0.3		0.084J
o-Xylene						0.575				
p-Xylene										
Styrene	0.13	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Tetrachloroethene	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Toluene	0.77	0.65	0.62	1.4	0.83	0.42	0.34	<0.52		0.12
trans-1,2-Dichloroethene							<0.02	<0.1		
trans-1,3-Dichloropropene	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12
Trichloroethene	<0.5	<0.12	<0.005	<0.5	<0.05		<0.02	<0.1		<0.12

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-13 5/24/94	MW-13 2/28/95	MW-13 2/20/96	MW-13 2/27/97	MW-13 2/19/98	MW-13 2/25/99	MW-14 12/22/87	MW-14 3/29/88	MW-14 10/29/92	MW-14 7/15/93
Trimethylbenzene										
Vinyl Acetate		<0.25	<0.01	<0.5	<0.1		<0.1	<0.2		
Vinyl Chloride	<0.25	<0.25	<0.01	<0.5	<0.1		<0.05	<0.2		<0.25
Xylene, total	0.97	1.5	1.5	1.8	1.7		0.79	0.16		0.85

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-14 7/15/93 NYSEG	MW-14 10/13/93	MW-14 5/24/94	MW-14 2/28/95	MW-14 2/20/96	MW-14 2/27/97	MW-14 2/19/98	MW-14 2/25/99	MW-15 12/22/87	MW-15 12/22/87 DUP
Cyanide, amenable	<0.01	<0.01	0.0623	<0.01	<0.01	<10	0.052			
Cyanide, amenable-Filtered										
Cyanide, ferro-ferri										
Cyanide, iron-cyanide										
Cyanide, iron-cyanide-										
Cyanide, total	0.0793	0.168	0.103	0.172	0.152	166	0.168	0.12	<0.01	0.06
Cyanide, total-Filtered										
Cyanide, undistilled									<0.01	<0.01
Aluminum-Filtered										
Antimony-Filtered										
Arsenic-Filtered		<0.002		0.0044B	<3	6.8B	0.0037B			
Cadmium-Filtered		<0.004		<0.004	<1	<1	<0.001			
Chromium-Filtered		<0.004		<0.007	<2	<3	<0.002			
Cobalt-Filtered										
Copper-Filtered										
Iron-Filtered		0.088J/		0.078B	<50	<37	<0.05			
Lead-Filtered		<0.001		<0.002	<1	<2	<0.002			
Manganese-Filtered										
Mercury-Filtered		<0.0001		<0.0001	<0.1	<0.1	<0.0001			
Nickel-Filtered										
Zinc-Filtered		<0.002		<0.006	<1	17.8B	0.0166B			
Ammonia		1.7	1.7	1.5	1.52	1.58	1.63			
Conductivity		1.055	1.465	1.44	1.541	1.715	1.865			
Organics, Total NYS										
pH		0.0073	0.007	0.0073	0.0072	0.0073	0.0071	0.0071		
Sulfate		56	23	27.8	36.5	27.6	27.9			
Temperature		0.013	0.0125	0.0115	0.012	0.01	0.013	0.012		
Turbidity	0.033	0.01164	0.0028	0.008	0.0164	0.029	0.0208	0.0138		
Aluminum										
Aluminum, total	0.075J		<0.029							
Antimony										
Antimony, total	<0.005		<0.003							
Arsenic, total			<0.002							
Barium, total			1.84							
Beryllium, total			<0.001							
Cadmium, total	<0.004		<0.003							
Calcium, total			128							
Chromium										
Chromium, total	<0.004		<0.004							
Cobalt										
Cobalt, total	<0.005		<0.006							
Copper										
Copper, total	<0.004		<0.004							
Iron									0.13	<0.03

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-14 7/15/93 NYSEG	MW-14 10/13/93	MW-14 5/24/94	MW-14 2/28/95	MW-14 2/20/96	MW-14 2/27/97	MW-14 2/19/98	MW-14 2/25/99	MW-15 12/22/87	MW-15 12/22/87 DUP
Iron, total	0.142		0.268							
Lead										
Lead, total	0.001J		<0.001							
Magnesium, total			30.4							
Manganese										
Manganese, total	0.787		0.749							
Mercury, total			<0.0001							
Nickel										
Nickel, total	<0.008		<0.008							
Potassium, total			6							
Selenium, total			<0.001							
Silver, total			<0.003							
Sodium, total			123							
Thallium, total			<0.001							
Vanadium, total			<0.005							
Zinc									<0.005	0.014
Zinc, total	0.012J		<0.003							
1,2,4-Trichlorobenzene		<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
1,2-Dichlorobenzene	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
1,3-Dichlorobenzene		<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
1,4-Dichlorobenzene		<0.23	<0.01	<0.097	<0.01	<0.01	<0.01		<0.02	<0.02
2,2'-oxybis(1-Chloropropane)										
2,4,5-Trichlorophenol		<0.029	<0.026	<0.024	<0.024	<0.025	<0.01		<0.1	<0.1
2,4,6-Trichlorophenol		<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2,4-Dichlorophenol	<1.2	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2,4-Dimethylphenol		<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2,4-Dinitrophenol	<0.01	<0.57	<0.026	<0.024	<0.024	<0.025	<0.024		<0.1	<0.1
2,4-Dinitrotoluene		<0.23	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2,6-Dinitrotoluene		<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2-Chloronaphthalene	<0.01	<0.23	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2-Chlorophenol	<0.49	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2-Methyl-4,6-Dinitrophenol	<0.025	<0.57	<0.65	<0.024	<0.024	<0.025	<0.024			
2-Methylnaphthalene	<0.01	0.066J	0.16J	0.14	0.12	0.044	0.047		0.03	<0.02
2-Methylphenol	<0.49	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
2-Nitroaniline	<1.2	<0.029	<0.026	<0.024	<0.024	<0.025	<0.024		<0.1	<0.1
2-Nitrophenol	<0.01	<0.23	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
3,3'-Dichlorobenzidine	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.02		<0.04	<0.04
3-Nitroaniline	<0.025	<0.029	<0.026	<0.024	<0.024	<0.025	<0.024		<0.1	<0.1
4,6-Dinitro-2-methylphenol									<0.1	<0.1
4-Bromophenyl phenyl ether	<0.01	<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
4-Chloro-3-Methylphenol	<0.01	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
4-Chloroaniline	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
4-Chlorophenyl-phenylether		<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
4-Methylphenol	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-14 7/15/93 NYSEG	MW-14 10/13/93	MW-14 5/24/94	MW-14 2/28/95	MW-14 2/20/96	MW-14 2/27/97	MW-14 2/19/98	MW-14 2/25/99	MW-15 12/22/87	MW-15 12/22/87 DUP
4-Nitroaniline	<1.2	<0.57	<0.65	<0.024	<0.024	<0.025	<0.024		<0.1	<0.1
4-Nitrophenol	<0.025	<0.011	<0.65	<0.01	<0.01	<0.025	<0.024		<0.1	<0.1
6-Nitroaniline										
Acenaphthene	<0.49	0.051J	0.14J	0.14	0.12	0.11	0.14		0.04	0.026
Acenaphthylene		<0.23	0.018	0.017	0.011	0.016	0.018		0.045	0.027
Anthracene		<0.011	0.009J	0.007J	0.006J	0.007J	0.008J		<0.02	<0.02
Benzo(a)anthracene	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Benzo(a)pyrene	<0.01	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Benzo(b)fluoranthene		<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Benzo(g,h,i)perylene	<0.49	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Benzo(k)fluoranthene	<0.49	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Benzoic Acid		<0.57		<0.024	<0.024	<0.01	<0.01		<0.1	<0.1
Benzyl Alcohol		<0.011		<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
bis(2-Chloroethoxy)methane	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
bis(2-Chloroethyl)ether		<0.11	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
bis(2-Chloroisopropyl)ether	<0.01	<0.011	<0.01	<0.01					<0.02	<0.02
bis(2-Ethylhexyl)phthalate	<0.01	<0.23	<0.26	0.005J	0.092	0.001J	<0.01		<0.02	<0.02
Butylbenzylphthalate	<0.49	<0.23	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Carbazole		<0.011	0.006J	0.005J	0.004J	0.004J	<0.01			
Chrysene	<0.49	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Di-n-butylphthalate	<0.01	<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Di-n-octylphthalate		<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Dibenzo(a,h)anthracene	<0.01	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Dibenzofuran	<0.49	<0.011	0.005J	0.005J	0.004J	0.005J	0.005J		<0.02	<0.02
Dibromochloromethane	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05			
Dichlorobromomethane					<0.005	<0.1	<0.05			
Diethylphthalate	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Dimethylphthalate		<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Fluoranthene	0.002J	<0.011	0.004J	0.003J	0.003J	0.005J	0.004J		<0.02	<0.02
Fluorene	0.026J	<0.23	0.042	0.035	0.031	0.044	0.045		<0.02	<0.02
Hexachloro-1,3-butadiene	<0.49	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01			
Hexachlorobenzene	<0.01	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Hexachlorobutadiene									<0.02	<0.02
Hexachlorocyclopentadiene	<0.01	<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Hexachloroethane		<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Indeno(1,2,3-cd)pyrene	<0.49	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Isophorone	<0.49	<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
n-Nitrosodi-n-propylamine	<0.01	<0.23	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
n-Nitrosodimethylamine							<0.01			
N-Nitrosodiphenylamine		<0.011	<0.01	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Naphthalene		0.41	0.64	2.9	1.3	1.5	2		0.091	<0.02
Nitrobenzene	<0.49	<0.011	<0.26	<0.01	<0.01	<0.01	<0.01		<0.02	<0.02
Pentachlorophenol	<0.025	<0.029	<0.65	<0.024	<0.024	<0.025	<0.024		<0.1	<0.1
Phenanthrene		0.017	0.048J	0.046	0.041	0.05	0.05		<0.02	<0.02

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-14 7/15/93 NYSEG	MW-14 10/13/93	MW-14 5/24/94	MW-14 2/28/95	MW-14 2/20/96	MW-14 2/27/97	MW-14 2/19/98	MW-14 2/25/99	MW-15 12/22/87	MW-15 12/22/87 DUP
Phenol	0.044	0.025	<0.26	0.021	0.012	0.035	0.015		<0.02	<0.02
Pyrene		<0.011	0.006J	0.004J	0.004J	0.006J	0.005J		<0.02	<0.02
Pyridine	0.002J									
TOC		13.3		<0.5	6.7	5.9	6.3	5.26	2.9	3.2
Phenols, total		0.016	0.014	0.031	0.025	B	0.026		0.006	0.006
1,1,1-Trichloroethane	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		0.017	0.025
1,1,2,2-Tetrachloroethane		<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
1,1,2-Trichloroethane		<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
1,1-Dichloroethane	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		0.0033	0.0031
1,1-Dichloroethene	<0.01	<0.12	<1.2	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
1,2-Dichloroethane		<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
1,2-Dichloroethene, total		<0.12	<0.12	<0.12	<0.005	<0.1	<0.05			
1,2-Dichloropropane	<0.12	<0.12	<1.2	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
2-Butanone	<0.25	<0.25	<2.5	<0.25	<0.01	<0.1	<0.1		<0.01	<0.01
2-Chloroethylvinylether	<0.01								<0.01	<0.01
2-Hexanone	<0.25	<0.25	<2.5	<0.25	<0.01	<0.1	<0.1		<0.01	<0.01
4-Methyl-2-Pentanone	<0.25	<0.25	<0.25	<0.25	<0.01	<0.1	<0.1		<0.01	<0.01
Acetone	<0.25	0.29	<0.25	<0.25	<0.01	<0.1	<0.1		<0.05	<0.05
Benzene	4.3	3.8	3.4	3.4	2.9	1.7	3.9	2.37	0.0026	0.0058
Bromochloromethane	<0.12									
Bromodichloromethane		<0.12	<1.2	<0.12					<0.002	<0.002
Bromoethane	<0.25				<0.01	<0.1	<0.1			
Bromoform	<0.12	<0.12	<1.2	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Bromomethane		<0.25	<0.25	<0.25					<0.005	<0.005
Carbon Disulfide	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Carbon Tetrachloride	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Chlorobenzene	<0.12	<0.12	<1.2	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Chloroethane	<0.25	<0.25	<0.25	<0.25	<0.01	<0.1	<0.1		<0.005	<0.005
Chloroform	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Chloromethane		<0.25	<0.25	<0.25	<0.01	<0.1	<0.1		<0.005	<0.005
cis-1,3-Dichloropropene	<0.12	<0.12	<1.2	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Dibromochloromethane									<0.002	<0.002
Ethylbenzene	1.9	1.7	1.4	1.6	1.3	0.8	1.4	0.931	<0.002	<0.002
m&p-Xylene								0.125		
m-Xylene										
Methylene Chloride	0.084J	0.62	<0.12	<0.12	<0.005	0.018J	0.011J		<0.005	<0.005
o-Xylene								0.209		
p-Xylene										
Styrene	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Tetrachloroethene		<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Toluene		0.12	0.076J	0.095J	0.062	0.05J	0.1	0.042	<0.002	<0.002
trans-1,2-Dichloroethene	<0.12								<0.002	<0.002
trans-1,3-Dichloropropene		<0.12	<1.2	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002
Trichloroethene	<0.12	<0.12	<0.12	<0.12	<0.005	<0.1	<0.05		<0.002	<0.002

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-14 7/15/93 NYSEG	MW-14 10/13/93	MW-14 5/24/94	MW-14 2/28/95	MW-14 2/20/96	MW-14 2/27/97	MW-14 2/19/98	MW-14 2/25/99	MW-15 12/22/87	MW-15 12/22/87 DUP
Trimethylbenzene										
Vinyl Acetate		<0.25		<0.25	<0.01	<0.1	<0.1		<0.01	<0.01
Vinyl Chloride	<0.25	<0.25	<2.5	<0.25	<0.01	<0.1	<0.1		<0.005	<0.005
Xylene, total	0.85	0.72	0.52	0.6	0.46	0.27	0.53		0.0027	0.0031

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 3/29/88	MW-15 10/29/92	MW-15 7/14/93	MW-15 7/14/93 DUP	MW-15 7/14/93 NYSEG	MW-15 10/12/93	MW-15 5/24/94	MW-15 2/28/95	MW-15 2/19/96	MW-15 2/27/97
Cyanide, amenable		<0.01	<0	<0						
Cyanide, amenable-Filtered			<0	<0						
Cyanide, ferro-ferri										
Cyanide, iron-cyanide			<0	<0						
Cyanide, iron-cyanide-			<0	<0						
Cyanide, total	<0.01		<0	<0	<0.01	<0.01	<0.01	<0.01	<0.01	<10
Cyanide, total-Filtered			<0	<0						
Cyanide, undistilled	<0.01									
Aluminum-Filtered			<0	<0						
Antimony-Filtered			<0	<0						
Arsenic-Filtered		<0.02				<0.002		0.0031B	<0.003	5.7B
Cadmium-Filtered		<0.01				<0.004		<0.004	<0.001	<1
Chromium-Filtered		<0.05	<0	<0		<0.004		<0.007	<0.002	<3
Cobalt-Filtered			<0	<0						
Copper-Filtered			<0	<0						
Iron-Filtered		0.02	0.008J	<0		<0.008		<0.029	0.0614B	<37
Lead-Filtered		<0.08	<0	<0		<0.001		<0.002	<0.001	<2
Manganese-Filtered			0.403	0.403						
Mercury-Filtered		<0.0002				<0.0001		<0.0001	<0.0001	<0.1
Nickel-Filtered			<0	<0						
Zinc-Filtered		<0.01	<0	0.009J		<0.002		<0.006	<0.001	12.7B
Ammonia		1.02				1	1.1	1.1	1.18	1.04
Conductivity		1.1				0.83	1.17	1.09	1.392	1.265
Organics, Total NYS										
pH		0.0073				0.0073	0.0072	0.0073	0.0073	0.0074
Sulfate		33				36	35.4	35.1	33.4	28
Temperature		0.0127				0.0145	0.011	0.011	0.0095	0.01
Turbidity		0.087	0.0043	0.0046	0.0043	0.0216	0.0406	0.12	0.00589	0.0668
Aluminum			0.078J	0.141J						
Aluminum, total					<0.048		<0.029			
Antimony			0.017J	<0						
Antimony, total					<0.005		<0.003			
Arsenic, total							<0.002			
Barium, total							0.874			
Beryllium, total							<0.001			
Cadmium, total					<0.004		<0.003			
Calcium, total							112			
Chromium			0.004J	<0						
Chromium, total					0.004J		0.004B			
Cobalt			<0	<0						
Cobalt, total					<0.005		<0.006			
Copper			<0	<0						
Copper, total					<0.004		<0.004			
Iron	0.16		0.103	0.199						

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 3/29/88	MW-15 10/29/92	MW-15 7/14/93	MW-15 7/14/93 DUP	MW-15 7/14/93 NYSEG	MW-15 10/12/93	MW-15 5/24/94	MW-15 2/28/95	MW-15 2/19/96	MW-15 2/27/97
Iron, total					0.103		0.168			
Lead			<0	0.0012J						
Lead, total					<0.001		<0.001			
Magnesium, total							24.8			
Manganese			0.369	0.383						
Manganese, total					0.369		0.425			
Mercury, total							<0.0001			
Nickel			<0	<0						
Nickel, total					<0.008		<0.008			
Potassium, total							4.35B			
Selenium, total							<0.001			
Silver, total							<0.003			
Sodium, total							86.3			
Thallium, total							<0.001			
Vanadium, total							<0.005			
Zinc	0.01		0.016J	0.021						
Zinc, total					0.016J		0.005B			
1,2,4-Trichlorobenzene	<0.01		<0.011	<0.01		<0.01	<0.012	<0.061	<0.01	<0.01
1,2-Dichlorobenzene	<0.01		<0.011	<0.01	<0.011	<0.01	<0.24	<0.061	<0.01	<0.01
1,3-Dichlorobenzene	<0.01		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
1,4-Dichlorobenzene	<0.01		<0.011	<0.01		<0.01	<0.24	<0.012	<0.01	<0.01
2,2'-oxybis(1-Chloropropane)			<0.011	<0.01						
2,4,5-Trichlorophenol	<0.05		<0.028	<0.026		<0.024	<0.59	<0.03	<0.024	<0.025
2,4,6-Trichlorophenol	<0.01		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
2,4-Dichlorophenol	<0.01		<0.011	<0.01	<0.14	<0.01	<0.012	<0.012	<0.01	<0.01
2,4-Dimethylphenol	<0.01		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
2,4-Dinitrophenol	<0.05		<0.028	<0.026	<0.011	<0.024	<0.029	<0.03	<0.024	<0.025
2,4-Dinitrotoluene	<0.01		<0.011	<0.01		<0.01	<0.24	<0.012	<0.01	<0.01
2,6-Dinitrotoluene	<0.01		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
2-Chloronaphthalene	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
2-Chlorophenol	<0.01		<0.011	<0.01	<0.056	<0.01	<0.012	<0.012	<0.01	<0.01
2-Methyl-4,6-Dinitrophenol					<0.028	<0.024	<0.029	<0.03	<0.024	<0.025
2-Methylnaphthalene	<0.01		0.046	0.048	<0.011	0.075	0.22	0.074	0.035	0.019
2-Methylphenol	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
2-Nitroaniline	<0.05		<0.028	<0.026	<0.14	<0.024	<29	<0.03	<0.024	<0.025
2-Nitrophenol	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
3,3'-Dichlorobenzidine	<0.02		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
3-Nitroaniline	<0.05			<0.026	<0.028	<0.024	<0.029	<0.03	<0.024	<0.025
4,6-Dinitro-2-methylphenol	<0.05		<0.028	<0.026						
4-Bromophenyl phenyl ether	<0.01		<0.011	<0.01	<0.056	<0.01	<0.24	<0.012	<0.01	<0.01
4-Chloro-3-Methylphenol	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
4-Chloroaniline	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
4-Chlorophenyl-phenylether	<0.01		<0.011	<0.01		<0.01	<0.24	<0.012	<0.01	<0.01
4-Methylphenol	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 3/29/88	MW-15 10/29/92	MW-15 7/14/93	MW-15 7/14/93 DUP	MW-15 7/14/93 NYSEG	MW-15 10/12/93	MW-15 5/24/94	MW-15 2/28/95	MW-15 2/19/96	MW-15 2/27/97
4-Nitroaniline	<0.05		<0.028	<0.026	<0.14	<0.024	<0.029	<0.03	<0.024	<0.025
4-Nitrophenol	<0.05		<0.028	<0.026	<0.028	<0.01	<0.59	<0.012	<0.01	<0.025
6-Nitroaniline			<0.028	<0.026						
Acenaphthene	0.031	0.0954	0.11	0.11	0.13	0.14	0.28	0.24	0.17	0.14
Acenaphthylene	0.0058J	<0.01	0.01J	0.01		0.012	<0.24	0.024	0.008J	0.008J
Anthracene	<0.01	<0.01	0.002J	0.002J		0.004J/	0.049J	0.023	0.008J	0.009J
Benzo(a)anthracene	<0.01	<0.01	<0.011	<0.01	<0.011	<0.01	<0.24	0.015	0.002J	0.004J
Benzo(a)pyrene	<0.01		<0.011	<0.01	<0.056	<0.01	0.026	0.015	0.003J	0.004J
Benzo(b)fluoranthene	<0.01	<0.02	<0.011	<0.01		<0.01	<0.24	0.007J	0.001J	0.001J
Benzo(g,h,i)perylene	<0.01	<0.01	<0.011	<0.01	<0.011	<0.01	0.013	0.006J	<0.01	<0.01
Benzo(k)fluoranthene	<0.01	<0.02	<0.011	<0.01	<0.011	<0.01	0.015	0.009J	0.002J	0.003J
Benzoic Acid	<0.05					<0.024		<0.03	<0.024	<0.01
Benzyl Alcohol	0.001J					<0.01		<0.012	<0.01	<0.01
bis(2-Chloroethoxy)methane	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
bis(2-Chloroethyl)ether	<0.01		<0.011	<0.01		<0.01	<0.24	<0.012	<0.01	<0.01
bis(2-Chloroisopropyl)ether	<0.01				<0.056	<0.01	<0.012	<0.012		
bis(2-Ethylhexyl)phthalate	<0.01		0.045	0.1	0.045	<0.01	0.015	0.01J	0.002J	0.001J
Butylbenzylphthalate	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Carbazole			<0.011	<0.01		<0.01	<0.24	<0.012	<0.01	<0.01
Chrysene	<0.01	<0.01	<0.011	<0.01	<0.011	<0.01	0.026	0.013	0.002J	0.003J
Di-n-butylphthalate	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Di-n-octylphthalate	<0.47		<0.011	<0.01		<0.01	<0.24	<0.012	<0.01	<0.01
Dibenzo(a,h)anthracene	<0.01	<0.02	<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Dibenzofuran	0.0011J		0.003J	0.003J	0.004J	0.004J/	0.013	0.008J	0.005J	0.005J
Dibromochloromethane					<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Dichlorobromomethane									<0.005	<0.01
Diethylphthalate	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Dimethylphthalate	<0.01		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
Fluoranthene	<0.01	<0.01	0.002J	0.001J	0.002J	0.003J/	0.052J	0.025	0.006J	0.012
Fluorene	0.011	0.0315	0.024	0.025	0.024	0.034	0.097	0.054	0.044	0.049
Hexachloro-1,3-butadiene					<0.056	<0.01	<0.012	<0.012	<0.01	<0.01
Hexachlorobenzene	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Hexachlorobutadiene	<0.01		<0.011	<0.01						
Hexachlorocyclopentadiene	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Hexachloroethane	<0.01		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.01	<0.02	<0.011	<0.01	<0.011	<0.01	0.01J	<0.012	<0.01	<0.01
Isophorone	<0.01		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
n-Nitrosodi-n-propylamine	<0.01		<0.011	<0.01	<0.011	<0.01	<0.24	<0.012	<0.01	<0.01
n-Nitrosodimethylamine										
N-Nitrosodiphenylamine	<0.0055		<0.011	<0.01		<0.01	<0.012	<0.012	<0.01	<0.01
Naphthalene	0.0051J	0.308	0.48	0.48		0.23	0.32	0.79	0.26	0.31
Nitrobenzene	0.0011J		<0.011	<0.01	<0.056	<0.01	<0.012	<0.012	<0.01	<0.01
Pentachlorophenol	<0.05		<0.028	<0.026	<0.028	<0.024	<0.59	<0.03	<0.024	<0.025
Phenanthrene	0.0057J	0.0352	0.034	0.031		0.048	0.21	0.12	0.06	0.062

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 3/29/88	MW-15 10/29/92	MW-15 7/14/93	MW-15 7/14/93 DUP	MW-15 7/14/93 NYSEG	MW-15 10/12/93	MW-15 5/24/94	MW-15 2/28/95	MW-15 2/19/96	MW-15 2/27/97
Phenol	0.0017J		<0.011	<0.01	<0.011	<0.01	<0.012	<0.012	<0.01	<0.01
Pyrene	0.0017J	<0.01	0.002J	0.002J		0.004J/	0.11	0.046	0.01	0.017
Pyridine					<0.056					
TOC	3.9	<10				6.6		<0.5	1.6	1.6
Phenols, total	0.005	<0.005				<0.01	<0.01	<0.01	0.011	<0.01
1,1,1-Trichloroethane	0.012		0.006	0.006	<0.005	0.007	0.007	0.004J	0.003J	0.002J
1,1,2,2-Tetrachloroethane	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.01
1,1,2-Trichloroethane	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.01
1,1-Dichloroethane	<0.005		0.003J	0.003J	0.006	0.005	0.005	0.005	0.004J	<0.01
1,1-Dichloroethene	<0.005		<0.005	<0.005	<0.011	<0.005	<0.005	<0.005	<0.005	0.004J
1,2-Dichloroethane	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.01
1,2-Dichloroethene, total			<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.01
1,2-Dichloropropane	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
2-Butanone	<0.07		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chloroethylvinylether	<0.01				<0.011					
2-Hexanone	<0.0011		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Methyl-2-Pentanone	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acetone	<0.099		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzene	0.018		0.027	0.024	0.027	0.028	0.034	0.035	0.026	0.03
Bromochloromethane					<0.005					
Bromodichloromethane	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005		
Bromoethane					<0.01				<0.01	<0.01
Bromoform	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Bromomethane	<0.01		<0.01	<0.01		<0.01	<0.01	<0.01		
Carbon Disulfide	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Carbon Tetrachloride	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Chlorobenzene	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Chloroethane	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.002J
Chloroform	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Chloromethane	<0.01		<0.01	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01
cis-1,3-Dichloropropene	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Dibromochloromethane	<0.005		<0.005	<0.005						
Ethylbenzene	<0.005		0.047	0.041	0.047	0.041	0.066	0.029	0.036	0.042
m&p-Xylene										
m-Xylene										
Methylene Chloride	<0.012		<0.01	<0.01	0.003J	<0.005	<0.005	<0.005	<0.005	0.002J
o-Xylene										
p-Xylene										
Styrene	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Tetrachloroethene	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.01
Toluene	<0.025		0.007	0.006		0.008	0.012	0.009	0.007	0.008J
trans-1,2-Dichloroethene	<0.005				<0.005					
trans-1,3-Dichloropropene	<0.005		<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.01
Trichloroethene	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 3/29/88	MW-15 10/29/92	MW-15 7/14/93	MW-15 7/14/93 DUP	MW-15 7/14/93 NYSEG	MW-15 10/12/93	MW-15 5/24/94	MW-15 2/28/95	MW-15 2/19/96	MW-15 2/27/97
Trimethylbenzene										
Vinyl Acetate	<0.01					<0.01		<0.01	<0.01	<0.01
Vinyl Chloride	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Xylene, total	0.013		0.029	0.025	0.029	0.029	0.045	0.035	0.024	0.023

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 2/19/98	MW-15 2/25/99	MW-16 7/14/93	MW-16 7/14/93 NYSEG	MW-16 5/24/94	MW-16 2/28/95	MW-16 2/19/96	MW-16 2/26/97	MW-16 2/19/98	MW-17 7/13/93
Cyanide, amenable			<0							<0
Cyanide, amenable-Filtered			<0							<0
Cyanide, ferro-ferri										
Cyanide, iron-cyanide			<0							<0
Cyanide, iron-cyanide-			<0							<0
Cyanide, total	<0.01	0.003	<0	<0.01	<0.01	<0.01		<0.01	<0.01	0.0659
Cyanide, total-Filtered			<0							<0
Cyanide, undistilled										
Aluminum-Filtered			0.055J							0.086J
Antimony-Filtered			<0							<0
Arsenic-Filtered	<0.003					0.0042B		4.1B	<0.003	
Cadmium-Filtered	<0.001					<0.004		<1	<0.001	
Chromium-Filtered	<0.002		<0			<0.007		<3	<0.002	<0
Cobalt-Filtered			<0							<0
Copper-Filtered			<0							0.02J
Iron-Filtered	<0.05		0.058			0.193		291	<0.05	0.043J
Lead-Filtered	<0.002		<0			<0.002		<2	<0.002	<0
Manganese-Filtered			0.91							2.32
Mercury-Filtered	<0.0001					<0.0001		<0.1	<0.0001	
Nickel-Filtered			<0							<0
Zinc-Filtered	<0.003		<0			<0.006		8.3B	0.0104B	<0
Ammonia	1.21				0.84	0.62		0.68	0.613	
Conductivity	1.46				1.11	0.99		0.915	0.87	
Organics, Total NYS										
pH	0.0073	0.0073			0.0075	0.0076		0.0078	0.0077	
Sulfate	32.6				45.9	62.9		18.1	29.3	
Temperature	0.013	0.01			0.0105	0.006		0.008	0.01	
Turbidity	0.0116	0.051	1.1	1.1	0.00833	0.0109		0.019	0.0136	4.6
Aluminum			20.1							182
Aluminum, total				20.1	0.04B					
Antimony			<0							<0
Antimony, total				<0.005	<0.003					
Arsenic, total					<0.002					
Barium, total					0.421					
Beryllium, total					<0.001					
Cadmium, total				<0.004	<0.003					
Calcium, total					111					
Chromium			0.033							0.272
Chromium, total				<0.004	<0.004					
Cobalt			0.013J							0.117
Cobalt, total				<0.005	<0.006					
Copper			0.03							0.349
Copper, total				<0.004	<0.004					
Iron			18.8							306

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 2/19/98	MW-15 2/25/99	MW-16 7/14/93	MW-16 7/14/93 NYSEG	MW-16 5/24/94	MW-16 2/28/95	MW-16 2/19/96	MW-16 2/26/97	MW-16 2/19/98	MW-17 7/13/93
Iron, total				0.058J	0.601					
Lead			0.0222							0.142
Lead, total				<0.001	<0.001					
Magnesium, total					28.9					
Manganese			1.1							5.75
Manganese, total				0.91	0.811					
Mercury, total					<0.0001					
Nickel			0.019J							0.284
Nickel, total				0.019J	<0.008					
Potassium, total					3.12B					
Selenium, total					<0.001					
Silver, total					<0.003					
Sodium, total					73.3					
Thallium, total					<0.001					
Vanadium, total					<0.005					
Zinc			0.093							0.879
Zinc, total				<0.002	0.006B					
1,2,4-Trichlorobenzene	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
1,2-Dichlorobenzene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
1,3-Dichlorobenzene	<0.025		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
1,4-Dichlorobenzene	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
2,2'-oxybis(1-Chloropropane)			<0.01							<0.012
2,4,5-Trichlorophenol	<0.01		<0.026		<0.026	<0.024		<0.024	<0.01	<0.029
2,4,6-Trichlorophenol	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
2,4-Dichlorophenol	<0.01		<0.01	<0.026	<0.01	<0.01		<0.01	<0.01	<0.012
2,4-Dimethylphenol	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
2,4-Dinitrophenol	<0.025		<0.026	<0.01	<0.026	<0.024		<0.024	<0.025	<0.029
2,4-Dinitrotoluene	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
2,6-Dinitrotoluene	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
2-Chloronaphthalene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
2-Chlorophenol	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
2-Methyl-4,6-Dinitrophenol	<0.025			<0.026	<0.026	<0.024		<0.024	<0.025	
2-Methylnaphthalene	0.011		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
2-Methylphenol	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
2-Nitroaniline	<0.025		<0.026	<0.026	<0.026	<0.024		<0.024	<0.025	<0.029
2-Nitrophenol	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
3,3'-Dichlorobenzidine	<0.02		<0.01	<0.01	<0.01	<0.01		<0.01	<0.02	<0.012
3-Nitroaniline	<0.025			<0.026	<0.026	<0.024		<0.024	<0.025	
4,6-Dinitro-2-methylphenol			<0.026							<0.029
4-Bromophenyl phenyl ether	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
4-Chloro-3-Methylphenol	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
4-Chloroaniline	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
4-Chlorophenyl-phenylether	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
4-Methylphenol	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 2/19/98	MW-15 2/25/99	MW-16 7/14/93	MW-16 7/14/93 NYSEG	MW-16 5/24/94	MW-16 2/28/95	MW-16 2/19/96	MW-16 2/26/97	MW-16 2/19/98	MW-17 7/13/93
4-Nitroaniline	<0.025		<0.026	<0.026	<0.026	<0.024		<0.024	<0.025	<0.029
4-Nitrophenol	<0.025		<0.026	<0.026	<0.026	<0.01		<0.024	<0.025	<0.029
6-Nitroaniline			<0.026							<0.029
Acenaphthene	0.12		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Acenaphthylene	0.007J		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Anthracene	0.003J		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Benzo(a)anthracene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Benzo(a)pyrene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Benzo(b)fluoranthene	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Benzo(g,h,i)perylene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Benzo(k)fluoranthene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Benzoic Acid	<0.01					<0.024		<0.01	<0.01	
Benzyl Alcohol	<0.01					<0.01		<0.01	<0.01	
bis(2-Chloroethoxy)methane	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
bis(2-Chloroethyl)ether	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
bis(2-Chloroisopropyl)ether				<0.01	<0.01	<0.01				
bis(2-Ethylhexyl)phthalate	<0.01		0.022	0.022	<0.01	<0.01		<0.01	0.002J	<0.012
Butylbenzylphthalate	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Carbazole	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Chrysene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Di-n-butylphthalate	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Di-n-octylphthalate	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Dibenzo(a,h)anthracene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Dibenzofuran	0.004J		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Dibromochloromethane	<0.005			<0.005	<0.005	<0.005		<0.01	<0.005	
Dichlorobromomethane	<0.005							<0.01	<0.005	
Diethylphthalate	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Dimethylphthalate	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Fluoranthene	0.003J		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Fluorene	0.038		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Hexachloro-1,3-butadiene	<0.01			<0.01	<0.01	<0.01		<0.01	<0.01	
Hexachlorobenzene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Hexachlorobutadiene			<0.01							<0.012
Hexachlorocyclopentadiene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Hexachloroethane	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Indeno(1,2,3-cd)pyrene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Isophorone	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
n-Nitrosodi-n-propylamine	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
n-Nitrosodimethylamine	<0.01								<0.01	
N-Nitrosodiphenylamine	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Naphthalene	0.38		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Nitrobenzene	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Pentachlorophenol	<0.025		<0.026	<0.026	<0.026	<0.024		<0.024	<0.025	<0.029
Phenanthrene	0.046		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 2/19/98	MW-15 2/25/99	MW-16 7/14/93	MW-16 7/14/93 NYSEG	MW-16 5/24/94	MW-16 2/28/95	MW-16 2/19/96	MW-16 2/26/97	MW-16 2/19/98	MW-17 7/13/93
Phenol	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.012
Pyrene	0.005J		<0.01		<0.01	<0.01		<0.01	<0.01	<0.012
Pyridine				<0.01						
TOC	2.2	1.93				<0.5		1.8	1.1	
Phenols, total	<0.005				<0.01	<0.01		<0.01	<0.005	
1,1,1-Trichloroethane	0.002J		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
1,1,2,2-Tetrachloroethane	<0.005		<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
1,1,2-Trichloroethane	<0.005		<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
1,1-Dichloroethane	0.004J		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
1,1-Dichloroethene	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
1,2-Dichloroethane	<0.005		<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
1,2-Dichloroethene, total	<0.005		<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
1,2-Dichloropropane	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
2-Butanone	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
2-Chloroethylvinylether				<0.01						
2-Hexanone	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
4-Methyl-2-Pentanone	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Acetone	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Benzene	0.037	0.0303	<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Bromochloromethane				<0.005						
Bromodichloromethane			<0.005		<0.005	<0.005				<0.005
Bromoethane	<0.01			<0.01				<0.01	<0.01	
Bromoform	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Bromomethane			<0.01		<0.01	<0.01				<0.01
Carbon Disulfide	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Carbon Tetrachloride	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Chlorobenzene	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Chloroethane	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Chloroform	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Chloromethane	<0.01		<0.01		<0.01	<0.01		<0.01	<0.01	<0.01
cis-1,3-Dichloropropene	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Dibromochloromethane			<0.005							<0.005
Ethylbenzene	0.04	0.0388	<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
m&p-Xylene		0.0097								
m-Xylene										
Methylene Chloride	<0.005		<0.01	0.004J	<0.005	<0.005		0.001J	<0.005	<0.01
o-Xylene		0.0138								
p-Xylene										
Styrene	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005
Tetrachloroethene	<0.005		<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
Toluene	0.008	0.0063	<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
trans-1,2-Dichloroethene				<0.005						
trans-1,3-Dichloropropene	<0.005		<0.005		<0.005	<0.005		<0.01	<0.005	<0.005
Trichloroethene	<0.005		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-15 2/19/98	MW-15 2/25/99	MW-16 7/14/93	MW-16 7/14/93 NYSEG	MW-16 5/24/94	MW-16 2/28/95	MW-16 2/19/96	MW-16 2/26/97	MW-16 2/19/98	MW-17 7/13/93
Trimethylbenzene										
Vinyl Acetate	<0.01					<0.01		<0.01	<0.01	
Vinyl Chloride	<0.01		<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Xylene, total	0.023		<0.005	<0.005	<0.005	<0.005		<0.01	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-17 7/13/93 NYSEG	MW-17 5/24/94	MW-17 2/27/95	MW-17 2/20/96	MW-17 2/26/97	MW-17 2/19/98	MW-18 7/13/93	MW-18 5/24/94	MW-18 2/27/95	MW-18 2/20/96
Cyanide, amenable	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0	<0.01	<0.01	
Cyanide, amenable-Filtered							<0			
Cyanide, ferro-ferri										
Cyanide, iron-cyanide							0.0225			
Cyanide, iron-cyanide-							0.023			
Cyanide, total	0.0191	0.0739	0.0593	0.0653	135	0.0344	0.0191	0.0272	0.0208	<0.01
Cyanide, total-Filtered							<0			
Cyanide, undistilled										
Aluminum-Filtered							0.097J			
Antimony-Filtered							<0			
Arsenic-Filtered			0.0039B	<0.003	6.1B	<0.003			0.0048B	0.0074B
Cadmium-Filtered			<0.004	<0.001	<0.001	<0.001			<0.004	<0.001
Chromium-Filtered			<0.007	0.0253	5.2B	0.0034B	<0		<0.007	<0.002
Cobalt-Filtered							<0			
Copper-Filtered							0.007J			
Iron-Filtered			0.438	0.669	<37	<0.05	0.029J		<0.029	1.96
Lead-Filtered			<0.002	<0.001	<2	<0.002	<0		<0.002	0.001B
Manganese-Filtered							0.709			
Mercury-Filtered			<0.0001	<0.0001	<0.1	<0.0001			<0.0001	<0.0001
Nickel-Filtered							<0			
Zinc-Filtered			<0.006	<0.001	40.8	0.11	0.006J		<0.006	<0.001
Ammonia		0.14	0.19	<0.5	<0.5	<0.5		1.2	1.3	0.95
Conductivity		2.25	2.7	2.65	2.56	3.19		1.795	2	1.815
Organics, Total NYS										
pH		0.0067	0.0069	0.0068	0.007	0.0069		0.0071	0.0072	0.0075
Sulfate		151	178	148	143	143		138	145	51.1
Temperature		0.011	0.01	0.0125	0.012	0.011		0.0145	0.0115	0.0135
Turbidity	4.6		0.118	0.064	1	0.117	0.0062	0.036	0.0195	0.131
Aluminum							1.02			
Aluminum, total	0.097J	0.069B						<0.029		
Antimony							<0			
Antimony, total	<0.005	<0.003						<0.003		
Arsenic, total		<0.002						<0.002		
Barium, total		0.074B						0.177B		
Beryllium, total		<0.001						<0.001		
Cadmium, total	<0.004	<0.003						<0.003		
Calcium, total		161						200		
Chromium							0.005J			
Chromium, total	0.272	<0.004						0.004B		
Cobalt							<0			
Cobalt, total	<0.005	<0.006						<0.006		
Copper							<0			
Copper, total	<0.004	<0.004						<0.004		
Iron							1.28			

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-17 7/13/93 NYSEG	MW-17 5/24/94	MW-17 2/27/95	MW-17 2/20/96	MW-17 2/26/97	MW-17 2/19/98	MW-18 7/13/93	MW-18 5/24/94	MW-18 2/27/95	MW-18 2/20/96
Iron, total	0.029J	0.484						0.132		
Lead							0.0038			
Lead, total	<0.001	<0.001						<0.001		
Magnesium, total		46.6						54.5		
Manganese							0.688			
Manganese, total	2.32	0.397						0.546		
Mercury, total		<0.0001						<0.0001		
Nickel							<0			
Nickel, total	0.284	0.259						0.011B		
Potassium, total		7.31						5.26		
Selenium, total		<0.001						<0.001		
Silver, total		<0.003						<0.003		
Sodium, total		257						95.8		
Thallium, total		<0.001						<0.001		
Vanadium, total		0.005B						<0.005		
Zinc							0.046			
Zinc, total	<0.002	0.013B						0.004B		
1,2,4-Trichlorobenzene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,2'-oxybis(1-Chloropropane)							<0.01			
2,4,5-Trichlorophenol		<0.026	<0.024	<0.027	<0.024	<0.01	<0.024	<0.026	<0.024	<0.024
2,4,6-Trichlorophenol		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dichlorophenol	<0.024	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dimethylphenol		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,4-Dinitrophenol	<0.01	<0.026	<0.024	<0.027	<0.024	<0.025	<0.024	<0.026	<0.024	<0.024
2,4-Dinitrotoluene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,6-Dinitrotoluene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chloronaphthalene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chlorophenol	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methyl-4,6-Dinitrophenol	<0.024	<0.026	<0.024	<0.027	<0.024	<0.025		<0.026	<0.024	<0.024
2-Methylnaphthalene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylphenol	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Nitroaniline	<0.024	<0.026	<0.024	<0.027	<0.024	<0.025	<0.024	<0.026	<0.024	<0.024
2-Nitrophenol	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3,3'-Dichlorobenzidine	<0.01	<0.01	<0.01	<0.011	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01
3-Nitroaniline	<0.029	<0.026	<0.024	<0.027	<0.024	<0.025		<0.026	<0.024	<0.024
4,6-Dinitro-2-methylphenol							<0.024			
4-Bromophenyl phenyl ether	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chloro-3-Methylphenol	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chloroaniline	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chlorophenyl-phenylether		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Methylphenol	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-17 7/13/93 NYSEG	MW-17 5/24/94	MW-17 2/27/95	MW-17 2/20/96	MW-17 2/26/97	MW-17 2/19/98	MW-18 7/13/93	MW-18 5/24/94	MW-18 2/27/95	MW-18 2/20/96
4-Nitroaniline	<0.029	<0.026	<0.024	<0.027	<0.024	<0.025	<0.024	<0.026	<0.024	<0.024
4-Nitrophenol	<0.024	<0.026	<0.01	<0.011	<0.024	<0.025	<0.024	<0.026	<0.01	<0.01
6-Nitroaniline							<0.024			
Acenaphthene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)pyrene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzoic Acid			<0.024	<0.027	<0.01	<0.01			<0.024	<0.024
Benzyl Alcohol			<0.01	<0.011	<0.01	<0.01			<0.01	<0.01
bis(2-Chloroethoxy)methane	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
bis(2-Chloroethyl)ether		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
bis(2-Chloroisopropyl)ether	<0.01	<0.01	<0.01					<0.01	<0.01	
bis(2-Ethylhexyl)phthalate	0.001J	0.009J	<0.01	<0.011	0.087	0.002J	<0.01	<0.01	<0.01	0.003J
Butylbenzylphthalate	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Carbazole		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Di-n-butylphthalate	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Di-n-octylphthalate		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzo(a,h)anthracene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzofuran	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibromochloromethane	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005		<0.005	<0.005	<0.005
Dichlorobromomethane				<0.005	<0.01	<0.005				<0.005
Diethylphthalate	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dimethylphthalate		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.002J
Fluorene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachloro-1,3-butadiene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01		<0.01	<0.01	<0.01
Hexachlorobenzene	<0.012	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorobutadiene							<0.01			
Hexachlorocyclopentadiene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hexachloroethane		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isophorone	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Nitrosodi-n-propylamine	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Nitrosodimethylamine						<0.01				
N-Nitrosodiphenylamine		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrobenzene	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pentachlorophenol	<0.029	<0.026	<0.024	<0.027	<0.024	<0.025	<0.024	<0.026	<0.024	<0.024
Phenanthrene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.001J

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-17 7/13/93 NYSEG	MW-17 5/24/94	MW-17 2/27/95	MW-17 2/20/96	MW-17 2/26/97	MW-17 2/19/98	MW-18 7/13/93	MW-18 5/24/94	MW-18 2/27/95	MW-18 2/20/96
Phenol	<0.01	<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene		<0.01	<0.01	<0.011	<0.01	<0.01	<0.01	<0.01	<0.01	0.002J
Pyridine	<0.01									
TOC			<0.5	7.4	8.8	4.8			<0.5	5.4
Phenols, total		<0.01	<0.01	<0.01	B	<0.005		<0.01	<0.01	<0.01
1,1,1-Trichloroethane		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2,2-Tetrachloroethane		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2-Trichloroethane		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethane	0.00044J	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,1-Dichloroethene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethane	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloroethene, total		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-Dichloropropane	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
2-Butanone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chloroethylvinylether	<0.01									
2-Hexanone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Methyl-2-Pentanone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acetone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Bromochloromethane	<0.001									
Bromodichloromethane		<0.005	<0.005				<0.005	<0.005	<0.005	
Bromoethane	<0.001			<0.01	<0.01	<0.01				<0.01
Bromoform	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Bromomethane		<0.01	<0.01				<0.01	<0.01	<0.01	
Carbon Disulfide	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Carbon Tetrachloride	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Chlorobenzene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroethane	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chloroform	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
cis-1,3-Dichloropropene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Dibromochloromethane							<0.005			
Ethylbenzene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
m&p-Xylene										
m-Xylene										
Methylene Chloride	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.01	0.002J	<0.005	<0.005
o-Xylene										
p-Xylene										
Styrene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	<0.001									
trans-1,3-Dichloropropene		<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethene	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-17 7/13/93 NYSEG	MW-17 5/24/94	MW-17 2/27/95	MW-17 2/20/96	MW-17 2/26/97	MW-17 2/19/98	MW-18 7/13/93	MW-18 5/24/94	MW-18 2/27/95	MW-18 2/20/96
Trimethylbenzene										
Vinyl Acetate	<0.001		<0.01	<0.01	<0.01	<0.01			<0.01	<0.01
Vinyl Chloride	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Xylene, total	<0.001	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-18 2/26/97	MW-18 2/19/98
Cyanide, amenable	<0.01	0.0195
Cyanide, amenable-Filtered		
Cyanide, ferro-ferri		
Cyanide, iron-cyanide		
Cyanide, iron-cyanide-		
Cyanide, total	24.6	0.0195
Cyanide, total-Filtered		
Cyanide, undistilled		
Aluminum-Filtered		
Antimony-Filtered		
Arsenic-Filtered	7.6B	0.0048B
Cadmium-Filtered	<1	<0.001
Chromium-Filtered	<3	<0.002
Cobalt-Filtered		
Copper-Filtered		
Iron-Filtered	<37	0.0692B
Lead-Filtered	<2	<0.002
Manganese-Filtered		
Mercury-Filtered	<0.1	<0.0001
Nickel-Filtered		
Zinc-Filtered	78.5	0.0865
Ammonia	1.24	1.27
Conductivity	2.12	2.36
Organics, Total NYS		
pH	0.0075	0.0072
Sulfate	102	121
Temperature	0.013	0.013
Turbidity	0.126	0.071
Aluminum		
Aluminum, total		
Antimony		
Antimony, total		
Arsenic, total		
Barium, total		
Beryllium, total		
Cadmium, total		
Calcium, total		
Chromium		
Chromium, total		
Cobalt		
Cobalt, total		
Copper		
Copper, total		
Iron		

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-18 2/26/97	MW-18 2/19/98
Iron, total		
Lead		
Lead, total		
Magnesium, total		
Manganese		
Manganese, total		
Mercury, total		
Nickel		
Nickel, total		
Potassium, total		
Selenium, total		
Silver, total		
Sodium, total		
Thallium, total		
Vanadium, total		
Zinc		
Zinc, total		
1,2,4-Trichlorobenzene	<0.01	<0.01
1,2-Dichlorobenzene	<0.01	<0.01
1,3-Dichlorobenzene	<0.01	<0.01
1,4-Dichlorobenzene	<0.01	<0.01
2,2'-oxybis(1-Chloropropane)		
2,4,5-Trichlorophenol	<0.024	<0.01
2,4,6-Trichlorophenol	<0.01	<0.01
2,4-Dichlorophenol	<0.01	<0.01
2,4-Dimethylphenol	<0.01	<0.01
2,4-Dinitrophenol	<0.024	<0.024
2,4-Dinitrotoluene	<0.01	<0.01
2,6-Dinitrotoluene	<0.01	<0.01
2-Chloronaphthalene	<0.01	<0.01
2-Chlorophenol	<0.01	<0.01
2-Methyl-4,6-Dinitrophenol	<0.024	<0.024
2-Methylnaphthalene	<0.01	<0.01
2-Methylphenol	<0.01	<0.01
2-Nitroaniline	<0.024	<0.024
2-Nitrophenol	<0.01	<0.01
3,3'-Dichlorobenzidine	<0.01	<0.019
3-Nitroaniline	<0.024	<0.024
4,6-Dinitro-2-methylphenol		
4-Bromophenyl phenyl ether	<0.01	<0.01
4-Chloro-3-Methylphenol	<0.01	<0.01
4-Chloroaniline	<0.01	<0.01
4-Chlorophenyl-phenylether	<0.01	<0.01
4-Methylphenol	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-18 2/26/97	MW-18 2/19/98
4-Nitroaniline	<0.024	<0.024
4-Nitrophenol	<0.024	<0.024
6-Nitroaniline		
Acenaphthene	<0.01	<0.01
Acenaphthylene	<0.01	<0.01
Anthracene	<0.01	<0.01
Benzo(a)anthracene	<0.01	<0.01
Benzo(a)pyrene	<0.01	<0.01
Benzo(b)fluoranthene	<0.01	<0.01
Benzo(g,h,i)perylene	<0.01	<0.01
Benzo(k)fluoranthene	<0.01	<0.01
Benzoic Acid	<0.01	<0.01
Benzyl Alcohol	<0.01	<0.01
bis(2-Chloroethoxy)methane	<0.01	<0.01
bis(2-Chloroethyl)ether	<0.01	<0.01
bis(2-Chloroisopropyl)ether		
bis(2-Ethylhexyl)phthalate	0.001J	0.002J
Butylbenzylphthalate	<0.01	<0.01
Carbazole	<0.01	<0.01
Chrysene	<0.01	<0.01
Di-n-butylphthalate	<0.01	<0.01
Di-n-octylphthalate	<0.01	<0.01
Dibenzo(a,h)anthracene	<0.01	<0.01
Dibenzofuran	<0.01	<0.01
Dibromochloromethane	<0.01	<0.005
Dichlorobromomethane	<0.01	<0.005
Diethylphthalate	<0.01	<0.01
Dimethylphthalate	<0.01	<0.01
Fluoranthene	<0.01	<0.01
Fluorene	<0.01	<0.01
Hexachloro-1,3-butadiene	<0.01	<0.01
Hexachlorobenzene	<0.01	<0.01
Hexachlorobutadiene		
Hexachlorocyclopentadiene	<0.01	<0.01
Hexachloroethane	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.01	<0.01
Isophorone	<0.01	<0.01
n-Nitrosodi-n-propylamine	<0.01	<0.01
n-Nitrosodimethylamine		<0.01
N-Nitrosodiphenylamine	<0.01	<0.01
Naphthalene	<0.01	<0.01
Nitrobenzene	<0.01	<0.01
Pentachlorophenol	<0.024	<0.024
Phenanthrene	<0.01	<0.01

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-18 2/26/97	MW-18 2/19/98
Phenol	<0.01	<0.01
Pyrene	<0.01	<0.01
Pyridine		
TOC	2	1.7
Phenols, total	<0.01	<0.005
1,1,1-Trichloroethane	<0.01	<0.005
1,1,2,2-Tetrachloroethane	<0.01	<0.005
1,1,2-Trichloroethane	<0.01	<0.005
1,1-Dichloroethane	<0.01	<0.005
1,1-Dichloroethene	<0.01	<0.005
1,2-Dichloroethane	<0.01	<0.005
1,2-Dichloroethene, total	<0.01	<0.005
1,2-Dichloropropane	<0.01	<0.005
2-Butanone	<0.01	<0.01
2-Chloroethylvinylether		
2-Hexanone	<0.01	<0.01
4-Methyl-2-Pentanone	<0.01	<0.01
Acetone	<0.01	<0.01
Benzene	<0.01	<0.005
Bromochloromethane		
Bromodichloromethane		
Bromoethane	<0.01	<0.01
Bromoform	<0.01	<0.005
Bromomethane		
Carbon Disulfide	<0.01	<0.005
Carbon Tetrachloride	<0.01	<0.005
Chlorobenzene	<0.01	<0.005
Chloroethane	<0.01	<0.01
Chloroform	<0.01	<0.005
Chloromethane	<0.01	<0.01
cis-1,3-Dichloropropene	<0.01	<0.005
Dibromochloromethane		
Ethylbenzene	<0.01	<0.005
m&p-Xylene		
m-Xylene		
Methylene Chloride	0.001J	<0.005
o-Xylene		
p-Xylene		
Styrene	<0.01	<0.005
Tetrachloroethene	<0.01	<0.005
Toluene	<0.01	<0.005
trans-1,2-Dichloroethene		
trans-1,3-Dichloropropene	<0.01	<0.005
Trichloroethene	<0.01	<0.005

APPENDIX B-2B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	MW-18 2/26/97	MW-18 2/19/98
Trimethylbenzene		
Vinyl Acetate	<0.01	<0.01
Vinyl Chloride	<0.01	<0.01
Xylene, total	<0.01	<0.005

APPENDIX B-3A

SUMMARY OF ANALYSES
FOR SEDIMENT SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	Metals	Cyanide	Total Phenols	General Chemistry Parameters	Total Organic Carbon
SD-1 (0-1) 5/21/93	X	X	X	X			
SD-2 (0-1) 5/21/93	X	X	X	X			
SD-3 (0-1) 5/21/93	X	X	X	X			
SD-3 (0-1) 5/21/93 DUP	X	X	X	X			
SD-4 (0-1) 5/21/93	X	X	X	X			
SD-5 (0-1) 5/21/93	X	X	X	X			
SD-6 (0-1) 5/21/93	X	X	X	X			
SED-1 9/9/86	X	X	X	X	X		X
SED-1 12/2/86	X	X	X	X	X	X	X
SED-1 3/10/87	X	X	X	X	X		X
SED-1 3/10/87 DUP	X	X	X	X	X		X
SED-1 6/2/87	X	X	X	X	X		X
SED-1 12/22/87	X	X	X	X	X		X
SED-1 3/30/88	X	X					
SED-2 9/9/86	X	X	X	X	X		X
SED-2 12/2/86	X	X	X	X	X	X	X
SED-2 12/2/86 DUP	X	X	X	X	X	X	X
SED-2 3/10/87	X	X	X	X	X		X
SED-2 6/2/87	X	X	X	X	X		X
SED-2 6/2/87 DUP	X	X	X	X	X		X
SED-2 12/22/87	X	X	X	X	X		X
SED-2 3/30/88	X	X					
SED-3 9/9/86	X	X	X	X	X		X
SED-3 9/9/86 DUP	X	X	X	X	X		X
SED-3 12/2/86	X	X	X	X	X	X	X
SED-3 3/10/87	X	X	X	X	X		X
SED-3 6/2/87	X	X	X	X	X		X
SED-4 12/22/87	X	X	X	X	X		X
SED-4 12/22/87 DUP	X	X	X	X	X		X
SED-4 3/30/88	X	X					
SED-4 3/30/88 DUP	X	X					

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SD-1 (0-1) 5/21/93	SD-2 (0-1) 5/21/93	SD-3 (0-1) 5/21/93	SD-3 (0-1) 5/21/93 DUP	SD-4 (0-1) 5/21/93	SD-5 (0-1) 5/21/93	SD-6 (0-1) 5/21/93	SED-1 9/9/86
Cyanide, amenable	<0	<0	<0	<0	<0	<0	<0	<0
Cyanide, ferro-ferri								<0
Cyanide, iron-cyanide	<0	<0	<0	<0	<0	<0	<0	
Cyanide, total								<0.01
Sulfate								
Aluminum	5640	5020	7540	6390	6550	5000	6390	
Antimony	<0	<0	<0	<0	<0	<0	<0	
Cadmium	<0	<0	<0	<0	<0	<0	<0	
Chromium	9	8	12	11	11	11	12	
Cobalt	5	4J	8	6	6	7	6	
Copper	20	18	20	16	16	27	18	
Iron	14300	13900	23100	16600	16400	16300	16900	16000
Lead	14	16	15	15	13	36	12	
Manganese	337	236	368	309	278	412	270	
Nickel	12	10	16	14	13	13	13	
Zinc	64	75	89	55	66	96J	56	47
1,2,4-Trichlorobenzene								
1,2-Dichlorobenzene								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
2,4,5-Trichlorophenol								
2,4,6-Trichlorophenol								
2,4-Dichlorophenol								
2,4-Dimethylphenol								
2,4-Dinitrophenol								
2,4-Dinitrotoluene								
2,6-Dinitrotoluene								
2-Chloronaphthalene								
2-Chlorophenol								
2-Methylnaphthalene	<0	<0	1	0.59	0.057J	<0	<0	
2-Methylphenol								
2-Nitroaniline								
2-Nitrophenol								
3,3'-Dichlorobenzidine								
3-Nitroaniline								
4,6-Dinitro-2-Methylphenol								
4-Bromophenyl phenyl								
4-Chloro-3-Methylphenol								
4-Chloroaniline								
4-Chlorophenyl-phenylether								
4-Methylphenol								
4-Nitroaniline								
4-Nitrophenol								
Acenaphthene	<0	0.86	1.6	0.84	0.66	0.071J	0.04J	<0.42
Acenaphthylene	0.086J	0.066J	0.074J	<0	0.086J	<0	<0	0.74

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SD-1 (0-1) 5/21/93	SD-2 (0-1) 5/21/93	SD-3 (0-1) 5/21/93	SD-3 (0-1) 5/21/93 DUP	SD-4 (0-1) 5/21/93	SD-5 (0-1) 5/21/93	SD-6 (0-1) 5/21/93	SED-1 9/9/86
Anthracene	<0	0.079J	0.095J	0.091J	3.3	0.13J	<0	<0.42
Benzo(a)anthracene	0.058J	0.081J	0.1J	0.072J	0.2J	0.51	<0	<0.42
Benzo(a)pyrene	0.17J	0.082J	0.12J	0.061J	0.18J	0.49	<0	<0.42
Benzo(b)fluoranthene	0.11J	0.088J	0.12J	<0	0.16J	<0	<0	<0.42
Benzo(g,h,i)perylene	0.11J	<0	0.1J	<0	0.099J	0.15J	<0	<0.42
Benzo(k)fluoranthene	<0	<0	<0	<0	<0	0.46	<0	<0.42
Benzoic Acid								
Benzyl Alcohol								
bis(2-								
bis(2-Chloroethyl)ether								
bis(2-Chloroisopropyl)ether								
bis(2-Ethylhexyl)phthalate	0.24J	<0	0.14J	<0	0.3J	0.42	0.28J	
Butylbenzylphthalate								
Carbazole	<0	<0	<0	<0	<0	0.12J	<0	
Chrysene	0.09J	0.095J	0.11J	0.077J	0.24J	0.67	<0	0.52
Di-n-butylphthalate								
Di-n-octylphthalate								
Dibenzo(a,h)anthracene	<0	<0	<0	<0	<0	0.12J	<0	<0.42
Dibenzofuran	<0	<0	0.08J	<0	<0	<0	<0	
Diethylphthalate								
Dimethylphthalate								
Fluoranthene	0.12J	0.15J	0.19J	0.18J	0.4J	1.3	0.08J	0.96
Fluorene	<0	0.21J	0.42	0.23J	0.29J	0.074J	<0	1.5
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Indeno(1,2,3-cd)pyrene	0.12J	0.081J	0.072J	0.041J	0.14J	0.33J	<0	<0.42
Isophorone								
n-Nitrosodi-n-propylamine								
n-Nitrosodiphenylamine								
Naphthalene	<0	<0	3.6	2	<0	<0	<0	3.6
Nitrobenzene								
Pentachlorophenol	0.11J	<0	<0	<0	<0	<0	<0	
Phenanthrene	0.064J	0.38J	0.46	0.39J	0.79	0.82	<0	0.57
Phenol								
Pyrene	0.14J	0.21J	0.24J	0.18J	0.51J	1.1	<0	0.69
TOC								3000
Phenols, total								<0.01
1,1,1-Trichloroethane								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,1-Dichloroethane								
1,1-Dichloroethene								
1,2-Dichloroethane								

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SD-1 (0-1) 5/21/93	SD-2 (0-1) 5/21/93	SD-3 (0-1) 5/21/93	SD-3 (0-1) 5/21/93 DUP	SD-4 (0-1) 5/21/93	SD-5 (0-1) 5/21/93	SD-6 (0-1) 5/21/93	SED-1 9/9/86
1,2-Dichloroethene, total								
1,2-Dichloropropane								
2-Butanone								
2-Chloroethylvinylether								
2-Hexanone								
4-Methyl-2-Pentanone								
Acetone	0.012	0.012J	0.005J	0.012	0.008J	0.004J	0.004J	
Benzene	<0	0.001J	0.002J	0.004J	0.014	<0	<0	<0.024
Bromodichloromethane								
Bromoform								
Bromomethane								
Carbon Disulfide								
Carbon Tetrachloride								
Chlorobenzene								
Chloroethane								
Chloroform								
Chloromethane	<0	<0	<0	<0	<0	0.004J	<0	
cis-1,3-Dichloropropene								
Dibromochloromethane								
Ethylbenzene	<0	<0	<0	0.003J	0.003J	<0	<0	<0.024
m-Xylene								<0.024
Methylene Chloride	0.005J	0.006	0.006	0.006	0.006J	0.004J	0.004J	
o-Xylene								<0.024
p-Xylene								<0.024
Styrene								<0.024
Tetrachloroethene								
Toluene								<0.024
trans-1,2-Dichloroethene								
trans-1,3-Dichloropropene								
Trichloroethene								
Vinyl Acetate								
Vinyl Chloride								
Xylene, total	<0	<0	<0	0.01	<0	<0	<0	

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-1 12/2/86	SED-1 3/10/87	SED-1 3/10/87 DUP	SED-1 6/2/87	SED-1 12/22/87	SED-1 3/30/88	SED-2 9/9/86	SED-2 12/2/86	SED-2 12/2/86 DUP
Cyanide, amenable	<0	<0	<0	<0			<0	<0	<0
Cyanide, ferro-ferri	<0	<0	<0	<0			<0	<0	<0
Cyanide, iron-cyanide									
Cyanide, total	<0.1	<0.01	<0.01	<0.3	<1		<0.01	<0.1	<0.1
Sulfate	<32							60	40
Aluminum									
Antimony									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron	9200	10800	8320	15600	7700		21000	19000	16000
Lead									
Manganese									
Nickel									
Zinc	36	37	31		27		51	69	100
1,2,4-Trichlorobenzene					<0.46	<0.85			
1,2-Dichlorobenzene					<0.46	<0.85			
1,3-Dichlorobenzene					<0.46	<0.85			
1,4-Dichlorobenzene					<0.46	<0.85			
2,4,5-Trichlorophenol					<2.3	<4.1			
2,4,6-Trichlorophenol					<0.46	<0.85			
2,4-Dichlorophenol					<0.46	<0.85			
2,4-Dimethylphenol					<0.46	<0.85			
2,4-Dinitrophenol					<2.3	<4.1			
2,4-Dinitrotoluene					<0.46	<0.85			
2,6-Dinitrotoluene					<0.46	<0.85			
2-Chloronaphthalene					<0.46	<0.85			
2-Chlorophenol					<0.46	<0.85			
2-Methylnaphthalene		<1.1	<1.1	<0.6	<0.46	<0.85			
2-Methylphenol					<0.46	<0.85			
2-Nitroaniline					<2.3	<4.1			
2-Nitrophenol					<0.46	<0.85			
3,3'-Dichlorobenzidine					<0.91	<1.7			
3-Nitroaniline					<2.3	<4.1			
4,6-Dinitro-2-Methylphenol					<2.3	<4.1			
4-Bromophenyl phenyl					<0.46	<0.85			
4-Chloro-3-Methylphenol					<0.46	<0.85			
4-Chloroaniline					<0.46	<0.85			
4-Chlorophenyl-phenylether					<0.46	<0.85			
4-Methylphenol					<0.46	<0.85			
4-Nitroaniline					<2.3	<4.1			
4-Nitrophenol					<2.3	<4.1			
Acenaphthene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	<0.9
Acenaphthylene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	0.9	<0.51	<0.9

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-1 12/2/86	SED-1 3/10/87	SED-1 3/10/87 DUP	SED-1 6/2/87	SED-1 12/22/87	SED-1 3/30/88	SED-2 9/9/86	SED-2 12/2/86	SED-2 12/2/86 DUP
Anthracene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	<0.9
Benzo(a)anthracene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	<0.9
Benzo(a)pyrene	0.45	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	6.1
Benzo(b)fluoranthene	0.58	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	2
Benzo(g,h,i)perylene	3.1	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	15
Benzo(k)fluoranthene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	4.8
Benzoic Acid					<2.3	<4.1			
Benzyl Alcohol					<0.46	<0.85			
bis(2-					<0.46	<0.85			
bis(2-Chloroethyl)ether					<0.46	<0.85			
bis(2-Chloroisopropyl)ether					<0.46	<0.85			
bis(2-Ethylhexyl)phthalate		<1.1	<1.1	<0.6	<0.46	<0.85			
Butylbenzylphthalate					<0.46	<0.85			
Carbazole									
Chrysene	0.61	<1.1	<1.1	<0.6	<0.46	<0.85	0.46	<0.51	8.5
Di-n-butylphthalate				2.1	<0.46	<0.85			
Di-n-octylphthalate					<0.46	25			
Dibenzo(a,h)anthracene	0.93	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	7.1
Dibenzofuran					<0.46	<0.85			
Diethylphthalate					<0.46	<0.85			
Dimethylphthalate					<0.46	<0.85			
Fluoranthene	0.47	<1.1	<1.1	<0.6	<0.46	<0.85	0.92	<0.51	5.6
Fluorene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	1.4	<0.51	<0.9
Hexachlorobenzene					<0.46	<0.85			
Hexachlorobutadiene					<0.46	<0.85			
Hexachlorocyclopentadiene					<0.46	<0.85			
Hexachloroethane					<0.46	<0.85			
Indeno(1,2,3-cd)pyrene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	<0.9
Isophorone					<0.46	<0.85			
n-Nitrosodi-n-propylamine					<0.46	<0.85			
n-Nitrosodiphenylamine					<0.46	<0.85			
Naphthalene	<0.36	<1.1	<1.1	<0.6	<0.46	<0.85	3.3	<0.51	19
Nitrobenzene					<0.46	<0.85			
Pentachlorophenol					<2.3	<4.1			
Phenanthrene	0.39	<1.1	<1.1	<0.6	<0.46	<0.85	<0.41	<0.51	1.8
Phenol					<0.46	<0.85			
Pyrene	0.77	<1.1	<1.1	<0.6	<0.46	<0.85	0.96	<0.51	5.9
TOC	4600	4790	3320	9700	12000		7.7	3500	7600
Phenols, total	<0.01	<0.01	<0.01	3.1	1.3		<0.01	<0.01	<0.01
1,1,1-Trichloroethane					<0.079	<0.64			
1,1,2,2-Tetrachloroethane					<0.079	<0.64			
1,1,2-Trichloroethane					<0.079	<0.64			
1,1-Dichloroethane					<0.079	<0.64			
1,1-Dichloroethene					<0.079	<0.64			
1,2-Dichloroethane					<0.079	<0.64			

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-1 12/2/86	SED-1 3/10/87	SED-1 3/10/87 DUP	SED-1 6/2/87	SED-1 12/22/87	SED-1 3/30/88	SED-2 9/9/86	SED-2 12/2/86	SED-2 12/2/86 DUP
1,2-Dichloroethene, total						<0.64			
1,2-Dichloropropane					<0.079	<0.64			
2-Butanone					<0.395	<8.4			
2-Chloroethylvinylether					<0.395	<1.3			
2-Hexanone					<0.395	<1.3			
4-Methyl-2-Pentanone					<0.395	<1.3			
Acetone		<2	<1.6	5.3	<1.974	<62			
Benzene	<0.025	<0.08	<0.062	<1	<0.079	<0.64	<0.025	<0.028	<0.025
Bromodichloromethane					<0.079	<0.64			
Bromoform					<0.079	<0.64			
Bromomethane					<0.197	<1.3			
Carbon Disulfide					<0.079	<0.64			
Carbon Tetrachloride					<0.079	<0.64			
Chlorobenzene					<0.079	<0.64			
Chloroethane					<0.197	<1.3			
Chloroform					<0.079	<0.64			
Chloromethane					<0.197	<1.3			
cis-1,3-Dichloropropene					<0.079	<0.64			
Dibromochloromethane					<0.079	<0.64			
Ethylbenzene	<0.025	<0.08	<0.062	<1	<0.079	<0.64	<0.025	<0.028	<0.025
m-Xylene	<0.025						<0.025	<0.028	<0.025
Methylene Chloride		<0.08	<0.062	2.4	<0.197	<45			
o-Xylene	<0.025						<0.025	<0.028	<0.025
p-Xylene	<0.025						<0.025	<0.028	<0.025
Styrene	<0.025	<0.08	<0.062	<1	<0.079	<0.64	<0.025	<0.028	<0.025
Tetrachloroethene					<0.079	<0.64			
Toluene	<0.025	<0.08	<0.062	<1	<0.079	<4.3	<0.025	<0.028	<0.025
trans-1,2-Dichloroethene					<0.079				
trans-1,3-Dichloropropene					<0.079	<0.64			
Trichloroethene					<0.079	<0.64			
Vinyl Acetate					<0.395	<1.3			
Vinyl Chloride					<0.197	<1.3			
Xylene, total		<0.08	<0.062	<1	<0.079	<0.64			

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-2 3/10/87	SED-2 6/2/87	SED-2 6/2/87 DUP	SED-2 12/22/87	SED-2 3/30/88	SED-3 9/9/86	SED-3 9/9/86 DUP	SED-3 12/2/86	SED-3 3/10/87
Cyanide, amenable	<0	<0	<0			<0	<0	<0	<0
Cyanide, ferro-ferri	<0	<0	<0			<0	<0	<0	<0
Cyanide, iron-cyanide									
Cyanide, total	<0.01	<0.3	<0.3	1.3		<0.01	<0.01	<0.1	<0.01
Sulfate								30	
Aluminum									
Antimony									
Cadmium									
Chromium									
Cobalt									
Copper									
Iron	9980	3080	23600	8400		13000	13000	20000	13000
Lead									
Manganese									
Nickel									
Zinc	46			45		65	60	88	76
1,2,4-Trichlorobenzene				<0.43	<2.3				
1,2-Dichlorobenzene				<0.43	<2.3				
1,3-Dichlorobenzene				<0.43	<2.3				
1,4-Dichlorobenzene				<0.43	<2.3				
2,4,5-Trichlorophenol				<2.2	<11				
2,4,6-Trichlorophenol				<0.43	<2.3				
2,4-Dichlorophenol				<0.43	<2.3				
2,4-Dimethylphenol				<0.43	<2.3				
2,4-Dinitrophenol				<2.2	<11				
2,4-Dinitrotoluene				<0.43	<2.3				
2,6-Dinitrotoluene				<0.43	<2.3				
2-Chloronaphthalene				<0.43	<2.3				
2-Chlorophenol				<0.43	<2.3				
2-Methylnaphthalene	<0.94	0.9	<0.6	<0.43	<2.3				<0.99
2-Methylphenol				<0.43	<2.3				
2-Nitroaniline				<2.2	<11				
2-Nitrophenol				<0.43	<2.3				
3,3'-Dichlorobenzidine				<0.87	<4.6				
3-Nitroaniline				<2.2	<11				
4,6-Dinitro-2-Methylphenol				<2	<11				
4-Bromophenyl phenyl				<0.43	<2.3				
4-Chloro-3-Methylphenol				<0.43	<2.3				
4-Chloroaniline				<0.43	<2.3				
4-Chlorophenyl-phenylether				<0.43	<2.3				
4-Methylphenol				<0.43	<2.3				
4-Nitroaniline				<2.2	<11				
4-Nitrophenol				<2.2	<11				
Acenaphthene	<0.94	0.7	1.6	<0.43	<2.3	0.91	1.1	<0.31	<0.99
Acenaphthylene	<0.94	<0.6	1.3	<0.43	<2.3	2.7	3.5	8.8	<0.99

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-2 3/10/87	SED-2 6/2/87	SED-2 6/2/87 DUP	SED-2 12/22/87	SED-2 3/30/88	SED-3 9/9/86	SED-3 9/9/86 DUP	SED-3 12/2/86	SED-3 3/10/87
Anthracene	<0.94	<0.6	<0.6	<0.43	<2.3	1.1	1.2	<0.31	<0.99
Benzo(a)anthracene	<0.94	<0.6	<0.6	0.53	<2.3	<0.5	<0.52	<0.31	<0.99
Benzo(a)pyrene	<0.94	<0.6	<0.6	0.59	<2.3	0.74	0.8	0.65	<0.99
Benzo(b)fluoranthene	<0.94	<0.6	<0.6	0.94	<2.3	1	0.94	0.63	<0.99
Benzo(g,h,i)perylene	<0.94	<0.6	<0.6	<0.43	<2.3	<0.5	<0.52	4.4	<0.99
Benzo(k)fluoranthene	<0.94	<0.6	<0.6	<0.43	<2.3	0.93	1	<0.31	<0.99
Benzoic Acid				<2.2	<11				
Benzyl Alcohol				<0.43	<2.3				
bis(2-				<0.43	<2.3				
bis(2-Chloroethyl)ether				<0.43	<2.3				
bis(2-Chloroisopropyl)ether				<0.43	<2.3				
bis(2-Ethylhexyl)phthalate	<0.94	<0.6	<0.6	<0.43	<2.3				<0.99
Butylbenzylphthalate				<0.43	<2.3				
Carbazole									
Chrysene	<0.94	<0.6	<0.6	0.58	<2.3	2	2.1	<0.31	<0.99
Di-n-butylphthalate		<0.6	4	<0.43	<2.3				
Di-n-octylphthalate				<0.43	<2				
Dibenzo(a,h)anthracene	<0.94	<0.6	<0.6	<0.43	<2.3	<0.5	1.6	2.3	<0.99
Dibenzofuran				<0.43	<2.3				
Diethylphthalate				<0.43	<2.3				
Dimethylphthalate				<0.43	<2.3				
Fluoranthene	<0.94	<0.6	<0.6	1	<2.3	2.2	4.7	<0.31	<0.99
Fluorene	<0.94	<0.6	0.5	<0.43	<2.3	4	4.3	<0.31	<0.99
Hexachlorobenzene				<0.43	<2.3				
Hexachlorobutadiene				<0.43	<2.3				
Hexachlorocyclopentadiene				<0.43	<2.3				
Hexachloroethane				<0.43	<2.3				
Indeno(1,2,3-cd)pyrene	<0.94	<0.6	<0.6	<0.43	<2.3	<0.5	<0.52	<0.31	<0.99
Isophorone				<0.43	<2.3				
n-Nitrosodi-n-propylamine				<0.43	<2.3				
n-Nitrosodiphenylamine				<0.43	<2.3				
Naphthalene	<0.94	4.4	13	0.48	<2.3	10	19	<0.31	<0.99
Nitrobenzene				<0.43	<2.3				
Pentachlorophenol				<2.2	<11				
Phenanthrene	<0.94	<0.6	<0.6	0.9	1.9J	2	2.3	<0.31	<0.99
Phenol				<0.43	<2.3				
Pyrene	<0.94	<0.6	<0.6	1.1	<2.3	1.9	3.1	<0.31	<0.99
TOC	16100	11000	22000	32000		4500	4600	4600	9350
Phenols, total	<0.01	6.1	3.1	2.3		<0.01	<0.01	<0.01	<0.01
1,1,1-Trichloroethane				<0.086	<0.71				
1,1,2,2-Tetrachloroethane				<0.086	<0.71				
1,1,2-Trichloroethane				<0.086	<0.71				
1,1-Dichloroethane				<0.086	<0.71				
1,1-Dichloroethene				<0.086	<0.71				
1,2-Dichloroethane				<0.086	<0.71				

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-2 3/10/87	SED-2 6/2/87	SED-2 6/2/87 DUP	SED-2 12/22/87	SED-2 3/30/88	SED-3 9/9/86	SED-3 9/9/86 DUP	SED-3 12/2/86	SED-3 3/10/87
1,2-Dichloroethene, total					<0.71				
1,2-Dichloropropane				<0.086	<0.71				
2-Butanone				<0.429	<9.1				
2-Chloroethylvinylether				<0.429	<1.4				
2-Hexanone				<0.429	<1.4				
4-Methyl-2-Pentanone				<0.429	<1.4				
Acetone	<1.7	6.6	3.8	<2.143	<68				<1.7
Benzene	0.07	<1	<1	<0.086	0.19J	<0.025	<0.024	<0.027	<0.066
Bromodichloromethane				<0.086	<0.71				
Bromoform				<0.086	<0.71				
Bromomethane				<0.214	<1.4				
Carbon Disulfide				<0.086	<0.71				
Carbon Tetrachloride				<0.086	<0.71				
Chlorobenzene				<0.086	<0.71				
Chloroethane				<0.214	<1.4				
Chloroform				<0.086	<0.71				
Chloromethane				<0.214	<1.4				
cis-1,3-Dichloropropene				<0.086	<0.71				
Dibromochloromethane				<0.086	<0.71				
Ethylbenzene	<0.07	<1	<1	0.087	<0.71	<0.025	<0.024	<0.027	<0.066
m-Xylene						<0.025	<0.024	<0.027	
Methylene Chloride	<0.07	3	2.9	<0.214	<54				<0.066
o-Xylene						<0.025	<0.024	<0.027	
p-Xylene						<0.025	<0.024	<0.027	
Styrene	<0.07	<1	<1	<0.086	<0.71	<0.025	<0.024	<0.027	<0.066
Tetrachloroethene				<0.086	<0.71				
Toluene	<0.07	<1	<1	<0.086	<4.8	<0.025	<0.024	<0.027	0.07
trans-1,2-Dichloroethene				<0.086					
trans-1,3-Dichloropropene				<0.086	<0.71				
Trichloroethene				<0.086	<0.71				
Vinyl Acetate				<0.429	<1.4				
Vinyl Chloride				<0.214	<1.4				
Xylene, total	<0.07	<1	<1	<0.086	<0.71				<0.066

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-3 6/2/87	SED-4 12/22/87	SED-4 12/22/87 DUP	SED-4 3/30/88	SED-4 3/30/88 DUP
Cyanide, amenable					
Cyanide, ferro-ferri					
Cyanide, iron-cyanide					
Cyanide, total	<0.3	<1	<1		
Sulfate					
Aluminum					
Antimony					
Cadmium					
Chromium					
Cobalt					
Copper					
Iron	33100	8700	7100		
Lead					
Manganese					
Nickel					
Zinc		25	28		
1,2,4-Trichlorobenzene		<0.45	<0.4	<0.85	<0.86
1,2-Dichlorobenzene		<0.45	<0.4	<0.85	<0.86
1,3-Dichlorobenzene		<0.45	<0.4	<0.85	<0.86
1,4-Dichlorobenzene		<0.45	<0.4	<0.85	<0.86
2,4,5-Trichlorophenol		<2.3	<2	<4.1	<4.2
2,4,6-Trichlorophenol		<0.45	<0.4	<0.85	<0.86
2,4-Dichlorophenol		<0.45	<0.4	<0.85	<0.86
2,4-Dimethylphenol		<0.45	<0.4	<0.85	<0.86
2,4-Dinitrophenol		<2.3	<2	<4.1	<4.2
2,4-Dinitrotoluene		<0.45	<0.4	<0.85	<0.86
2,6-Dinitrotoluene		<0.45	<0.4	<0.85	<0.86
2-Chloronaphthalene		<0.45	<0.4	<0.85	<0.86
2-Chlorophenol		<0.45	<0.4	<0.85	<0.86
2-Methylnaphthalene	<0.6	<0.45	<0.4	<0.85	<0.86
2-Methylphenol		<0.45	<0.4	<0.85	<0.86
2-Nitroaniline		<2.3	<2	<4.1	<4.2
2-Nitrophenol		<0.45	<0.4	<0.85	<0.86
3,3'-Dichlorobenzidine		<0.9	<0.79	<1.7	<1.7
3-Nitroaniline		<2.3	<2	<4.1	<4.2
4,6-Dinitro-2-Methylphenol		<2.3	<2	<4.1	<4.2
4-Bromophenyl phenyl		<4.55	<0.4	<0.85	<0.86
4-Chloro-3-Methylphenol		<0.45	<0.4	<0.85	<0.86
4-Chloroaniline		<0.45	<0.4	<0.85	<0.86
4-Chlorophenyl-phenylether		<0.45	<0.4	<0.85	<0.86
4-Methylphenol		<0.45	<0.4	<0.85	<0.86
4-Nitroaniline		<2.3	<2	<4.1	<4.2
4-Nitrophenol		<2.3	<2	<4.1	<4.2
Acenaphthene	<0.6	<0.45	<0.4	<0.85	<0.86
Acenaphthylene	<0.6	<0.45	<0.4	<0.85	<0.86

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-3 6/2/87	SED-4 12/22/87	SED-4 12/22/87 DUP	SED-4 3/30/88	SED-4 3/30/88 DUP
Anthracene	<0.6	<0.45	<0.4	<0.85	<0.86
Benzo(a)anthracene	<0.6	<0.45	<0.4	<0.85	<0.86
Benzo(a)pyrene	<0.6	<0.45	<0.4	<0.85	<0.86
Benzo(b)fluoranthene	<0.6	<0.45	<0.4	<0.85	<0.86
Benzo(g,h,i)perylene	<0.6	<0.45	<0.4	<0.85	<0.86
Benzo(k)fluoranthene	<0.6	<0.45	<0.4	<0.85	<0.86
Benzoic Acid		<2.3	<2	<4.1	<4.2
Benzyl Alcohol		<0.45	<0.4	<0.85	<0.86
bis(2-		<0.45	<0.4	<0.85	<0.86
bis(2-Chloroethyl)ether		<0.45	<0.4	<0.85	<0.86
bis(2-Chloroisopropyl)ether		<0.45	<0.4	<0.85	<0.86
bis(2-Ethylhexyl)phthalate	<0.6	<0.45	<0.4	<0.85	<0.86
Butylbenzylphthalate		<0.45	<0.4	<0.85	<0.86
Carbazole					
Chrysene	<0.6	<0.45	<0.4	<0.85	<0.86
Di-n-butylphthalate	3.2	<0.45	<0.4	<0.85	<0.86
Di-n-octylphthalate		<0.45	<0.4	<1.8	<0.52
Dibenzo(a,h)anthracene	<0.6	<0.45	<0.4	<0.85	<0.86
Dibenzofuran		<0.45	<0.4	<0.85	<0.86
Diethylphthalate		<0.45	<0.4	<0.85	<0.86
Dimethylphthalate		<0.45	<0.4	<0.85	<0.86
Fluoranthene	<0.6	<0.45	<0.4	<0.85	<0.86
Fluorene	<0.6	<0.45	<0.4	<0.85	<0.86
Hexachlorobenzene		<0.45	<0.4	<0.85	<0.86
Hexachlorobutadiene		<0.45	<0.4	<0.85	<0.86
Hexachlorocyclopentadiene		<0.45	<0.4	<0.85	<0.86
Hexachloroethane		<0.45	<0.4	<0.85	<0.86
Indeno(1,2,3-cd)pyrene	<0.6	<0.45	<0.4	<0.85	<0.86
Isophorone		<0.45	<0.4	<0.85	<0.86
n-Nitrosodi-n-propylamine		<0.45	<0.4	<0.85	<0.86
n-Nitrosodiphenylamine		<0.45	<0.4	<0.85	<0.86
Naphthalene	<0.6	<0.45	<0.4	<0.85	<0.86
Nitrobenzene		<0.45	<0.4	<0.85	<0.86
Pentachlorophenol		<2.3	<2	<4.1	<4.2
Phenanthrene	<0.6	<0.45	<0.4	<0.85	<0.86
Phenol		<0.45	<0.4	<0.85	<0.86
Pyrene	<0.6	<0.45	<0.4	<0.85	<0.86
TOC	15000	18000	11000		
Phenols, total	1.8	1.2	0.68		
1,1,1-Trichloroethane		<0.08	<0.075	<0.64	<0.63
1,1,2,2-Tetrachloroethane		<0.08	<0.075	<0.64	<0.63
1,1,2-Trichloroethane		<0.08	<0.075	<0.64	<0.63
1,1-Dichloroethane		<0.08	<0.075	<0.64	<0.63
1,1-Dichloroethene		<0.08	<0.075	<0.64	<0.63
1,2-Dichloroethane		<0.08	<0.075	<0.64	<0.63

APPENDIX B-3B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/kg)

PARAMETER	SED-3 6/2/87	SED-4 12/22/87	SED-4 12/22/87 DUP	SED-4 3/30/88	SED-4 3/30/88 DUP
1,2-Dichloroethene, total				<0.64	<0.63
1,2-Dichloropropane		<0.08	<0.075	<0.64	<0.63
2-Butanone		<0.4	<0.375	<9	<8.4
2-Chloroethylvinylether		<0.4	<0.375	<1.3	<1.3
2-Hexanone		<0.4	<0.375	<1.3	<1.3
4-Methyl-2-Pentanone		<0.4	<0.375	<1.3	<1.3
Acetone	4	<2	<1.875	<61	<60
Benzene	<1	<0.08	<0.075	<0.64	<0.63
Bromodichloromethane		<0.08	<0.075	<0.64	<0.63
Bromoform		<0.08	<0.075	<0.64	<0.63
Bromomethane		<0.2	<0.188	<1.3	<1.3
Carbon Disulfide		<0.08	<0.075	<0.64	<0.63
Carbon Tetrachloride		<0.08	<0.075	<0.64	<0.63
Chlorobenzene		<0.08	<0.075	<0.64	<0.63
Chloroethane		<0.2	<0.188	<1.3	<1.3
Chloroform		<0.08	<0.075	<0.64	<0.63
Chloromethane		<0.2	<0.188	<1.3	<1.3
cis-1,3-Dichloropropene		<0.08	<0.075	<0.64	<0.63
Dibromochloromethane		<0.08	<0.075	<0.64	<0.63
Ethylbenzene	<1	<0.08	<0.075	<0.64	<0.63
m-Xylene					
Methylene Chloride	2.3	<0.2	<0.188	<48	<36
o-Xylene					
p-Xylene					
Styrene	<1	<0.08	<0.075	<0.64	<0.63
Tetrachloroethene		<0.08	<0.075	<0.64	<0.63
Toluene	<1	<0.08	<0.075	<4.3	<4.3
trans-1,2-Dichloroethene		<0.08	<0.075		
trans-1,3-Dichloropropene		<0.08	<0.075	<0.64	<0.63
Trichloroethene		<0.08	<0.075	<0.64	<0.63
Vinyl Acetate		<0.4	<0.375	<1.3	<1.3
Vinyl Chloride		<0.2	<0.188	<1.3	<1.3
Xylene, total	<1	<0.08	<0.075	<0.64	<0.63

APPENDIX B-4A

SUMMARY OF ANALYSES
FOR SURFACE WATER SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

Sample ID	VOCs	SVOCs	Cyanide	Metals	Total Phenols	General Chemistry Parameters	Total Organic Carbon
SW-1 9/9/86	X	X	X	X	X	X	X
SW-1 12/2/86	X	X	X	X		X	X
SW-1 3/10/87	X	X	X	X			X
SW-1 3/10/87 DUP	X	X	X	X			X
SW-1 6/2/87	X	X	X	X	X		X
SW-1 12/22/87	X	X	X	X	X		X
SW-1 3/30/88	X	X	X	X	X		X
SW-2 9/9/86	X	X	X	X	X		X
SW-2 12/2/86	X	X	X	X		X	X
SW-2 12/2/86 DUP	X	X	X	X		X	X
SW-2 3/10/87	X	X	X	X			X
SW-2 6/2/87	X	X	X	X	X		X
SW-2 6/2/87 DUP	X	X	X	X	X		X
SW-2 12/22/87	X	X	X	X	X		X
SW-2 3/30/88		X	X	X	X		X
SW-3 9/9/86	X	X	X	X	X	X	X
SW-3 9/9/86 DUP	X	X	X	X	X		X
SW-3 12/2/86	X	X	X	X		X	X
SW-3 3/10/87	X	X	X	X			X
SW-3 6/2/87	X	X	X	X	X		X
SW-4 12/22/87	X	X	X	X	X		X
SW-4 12/22/87 DUP	X	X	X	X	X		X
SW-4 3/30/88		X	X	X	X		X
SW-4 3/30/88 DUP	X	X	X	X	X		X
SP-1 7/14/93	X	X					
SP-2 7/13/93	X	X					
SP-4 7/15/93	X						

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-1 9/9/86	SW-1 12/2/86	SW-1 3/10/87	SW-1 3/10/87 DUP	SW-1 6/2/87	SW-1 12/22/87	SW-1 3/30/88	SW-2 9/9/86	SW-2 12/2/86	SW-2 12/2/86 DUP
Cyanide, amenable	<0	<0	<0	<0	<0			<0		
Cyanide, ferro-ferri	<0	0.01	<0	<0	<0			<0	0.02	0.03
Cyanide, total	<0.01	0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Cyanide, undistilled						<0.01	<0.01			
Oil and Grease	11									
Sulfate		16.4							19.3	18.6
Iron	0.23	0.47	1.09	0.99	0.037	0.2	0.38	0.23	0.4	0.45
Zinc	<0.01	<0.005	<0.02	<0.02	0.01	<0.005	0.03	<0.01	<0.005	<0.005
1,2,4-Trichlorobenzene						<0.04	<0.01			
1,2-Dichlorobenzene						<0.04	<0.01			
1,3-Dichlorobenzene						<0.04	<0.01			
1,4-Dichlorobenzene						<0.04	<0.01			
2,4,5-Trichlorophenol						<0.2	<0.05			
2,4,6-Trichlorophenol						<0.04	<0.01			
2,4-Dichlorophenol						<0.04	<0.01			
2,4-Dimethylphenol						<0.04	<0.01			
2,4-Dinitrophenol						<0.2	<0.05			
2,4-Dinitrotoluene						<0.04	<0.01			
2,6-Dinitrotoluene						<0.04	<0.01			
2-Chloronaphthalene						<0.04	<0.01			
2-Chlorophenol						<0.04	<0.01			
2-Methylnaphthalene		<0.01	<0.01	<0.01	<0.01	<0.04	<0.01		<0.01	<0.01
2-Methylphenol						<0.04	<0.01			
2-Nitroaniline						<0.2	<0.05			
2-Nitrophenol						<0.04	<0.01			
3,3'-Dichlorobenzidine						<0.08	<0.02			
3-Nitroaniline						<0.2	<0.05			
4,6-Dinitro-2-Methylphenol						<0.2	<0.05			
4-Bromophenyl phenyl						<0.04	<0.01			
4-Chloro-3-Methylphenol						<0.04	<0.01			
4-Chloroaniline						<0.04	<0.01			
4-Chlorophenyl-phenylether						<0.04	<0.01			
4-Methylphenol						<0.04	<0.01			
4-Nitroaniline						<0.2	<0.05			
4-Nitrophenol						<0.2	<0.05			
Acenaphthene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Acenaphthylene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Anthracene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Benzo(a)anthracene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Benzo(a)pyrene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Benzo(b)fluoranthene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Benzo(g,h,i)perylene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Benzo(k)fluoranthene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Benzoic Acid						<0.2	<0.05			

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-1 9/9/86	SW-1 12/2/86	SW-1 3/10/87	SW-1 3/10/87 DUP	SW-1 6/2/87	SW-1 12/22/87	SW-1 3/30/88	SW-2 9/9/86	SW-2 12/2/86	SW-2 12/2/86 DUP
Benzyl Alcohol						<0.04	<0.01			
bis(2-						<0.04	<0.01			
bis(2-Chloroethyl)ether						<0.04	<0.01			
bis(2-Chloroisopropyl)ether						<0.04	<0.01			
bis(2-Ethylhexyl)phthalate		<0.01	<0.01	<0.01	0.016	0.39	0.034		<0.01	<0.01
Butylbenzylphthalate						<0.04	<0.01			
Chrysene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Di-n-butylphthalate						<0.04	<0.01			
Di-n-octylphthalate						<0.04	<0.47			
Dibenzo(a,h)anthracene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Dibenzofuran						<0.04	<0.01			
Diethylphthalate						<0.04	<0.01			
Dimethylphthalate						<0.04	<0.01			
Fluoranthene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Fluorene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Hexachlorobenzene						<0.04	<0.01			
Hexachlorobutadiene						<0.04	<0.01			
Hexachlorocyclopentadiene						<0.04	<0.01			
Hexachloroethane						<0.04	<0.01			
Indeno(1,2,3-cd)pyrene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Isophorone						<0.04	<0.01			
n-Nitrosodi-n-propylamine						<0.04	<0.01			
n-Nitrosodiphenylamine						<0.04	<0.01			
Naphthalene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Nitrobenzene						<0.04	<0.01			
Pentachlorophenol						<0.2	<0.05			
Phenanthrene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
Phenol						<0.04	<0.01			
Pyrene	<0.02	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	<0.02	<0.01	<0.01
TOC	5.5	11	11.9	7.3	6.4	6.1	4.2	<0.5	10	9
Phenols, total	<0.01				0.24	<0.005	0.005	<0.01		
1,1,1-Trichloroethane						<0.002	<0.005			
1,1,2,2-Tetrachloroethane						<0.002	<0.005			
1,1,2-Trichloroethane						<0.002	<0.005			
1,1-Dichloroethane						<0.002	<0.005			
1,1-Dichloroethene						<0.002	<0.005			
1,2-Dichloroethane						<0.002	<0.005			
1,2-Dichloropropane						<0.002	<0.005			
2-Butanone						<0.01	<0.07			
2-Chloroethylvinylether						<0.01	<0.01			
2-Hexanone						<0.01	<0.01			
4-Methyl-2-Pentanone						<0.01	<0.01			
Acetone		<0.01	<0.01	<0.01	<0.01	<0.05	<0.099		<0.01	0.01
Benzene	<0.001	<0.005	<0.01	<0.01	<0.005	<0.002	<0.005	<0.001	<0.005	<0.005

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-1 9/9/86	SW-1 12/2/86	SW-1 3/10/87	SW-1 3/10/87 DUP	SW-1 6/2/87	SW-1 12/22/87	SW-1 3/30/88	SW-2 9/9/86	SW-2 12/2/86	SW-2 12/2/86 DUP
Bromodichloromethane						<0.002	<0.005			
Bromoform						<0.002	<0.005			
Bromomethane						<0.005	<0.01			
Carbon Disulfide						<0.002	<0.005			
Carbon Tetrachloride						<0.002	<0.005			
Chlorobenzene						<0.002	<0.005			
Chloroethane						<0.005	<0.01			
Chloroform						<0.002	<0.005			
Chloromethane						<0.005	<0.01			
cis-1,3-Dichloropropene						<0.002	<0.005			
Dibromochloromethane						<0.002	<0.005			
Ethylbenzene	<0.001	<0.005	<0.01	<0.01	<0.005	<0.002	<0.005	<0.001	<0.005	<0.005
m-Xylene	<0.001							<0.001		
Methylene Chloride			0.0054	<0.01	<0.005	<0.005	<0.012			
o-Xylene	<0.001							<0.001		
p-Xylene	<0.001							<0.001		
Styrene	<0.001	<0.005	<0.01	<0.01	<0.005	<0.002	<0.005	<0.001	<0.005	<0.005
Tetrachloroethene						<0.002	<0.005			
Toluene	<0.001	<0.005	<0.01	<0.01	<0.005	<0.002	<0.025	<0.001	<0.005	<0.005
trans-1,2-Dichloroethene						<0.002	<0.005			
trans-1,3-Dichloropropene						<0.002	<0.005			
Trichloroethene						<0.002	<0.005			
Trimethylbenzene	<0.001							<0.001		
Vinyl Acetate						<0.01	<0.01			
Vinyl Chloride						<0.005	<0.01			
Xylene, total		<0.005	<0.01	<0.01	<0.005	<0.002	<0.005		<0.005	<0.005

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-2 3/10/87	SW-2 6/2/87	SW-2 6/2/87 DUP	SW-2 12/22/87	SW-2 3/30/88	SW-3 9/9/86	SW-3 9/9/86 DUP	SW-3 12/2/86	SW-3 3/10/87	SW-3 6/2/87
Cyanide, amenable	<0	<0	<0			<0	<0		<0	<0
Cyanide, ferro-ferri	<0	0.01	<0			<0	<0	0.01	<0	0.01
Cyanide, total	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	0.01
Cyanide, undistilled				<0.01	<0.01					
Oil and Grease						<0				
Sulfate								18.4		
Iron	0.79	0.36	0.33	1.1	1.8	0.22	0.24	0.41	0.78	0.33
Zinc	<0.02	<0.02	0.01	0.014	0.02	<0.01	<0.01	<0.005	<0.02	0.01
1,2,4-Trichlorobenzene				<0.02	<0.01					
1,2-Dichlorobenzene				<0.02	<0.01					
1,3-Dichlorobenzene				<0.02	<0.01					
1,4-Dichlorobenzene				<0.02	<0.01					
2,4,5-Trichlorophenol				<0.1	<0.05					
2,4,6-Trichlorophenol				<0.02	<0.01					
2,4-Dichlorophenol				<0.02	<0.01					
2,4-Dimethylphenol				<0.02	<0.01					
2,4-Dinitrophenol				<0.1	<0.05					
2,4-Dinitrotoluene				<0.02	<0.01					
2,6-Dinitrotoluene				<0.02	<0.01					
2-Chloronaphthalene				<0.02	<0.01					
2-Chlorophenol				<0.02	<0.01					
2-Methylnaphthalene	<0.01	0.069	<0.01	<0.02	<0.01			<0.01	<0.01	<0.01
2-Methylphenol				<0.02	<0.01					
2-Nitroaniline				<0.1	<0.05					
2-Nitrophenol				<0.02	<0.01					
3,3'-Dichlorobenzidine				<0.04	<0.02					
3-Nitroaniline				<0.1	<0.05					
4,6-Dinitro-2-Methylphenol				<0.1	<0.05					
4-Bromophenyl phenyl				<0.02	<0.01					
4-Chloro-3-Methylphenol				<0.02	<0.01					
4-Chloroaniline				<0.02	<0.01					
4-Chlorophenyl-phenylether				<0.02	<0.01					
4-Methylphenol				<0.02	<0.01					
4-Nitroaniline				<0.1	<0.05					
4-Nitrophenol				<0.1	<0.05					
Acenaphthene	<0.01	0.042	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Acenaphthylene	<0.01	0.043	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Anthracene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Benzo(a)anthracene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Benzo(a)pyrene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Benzoic Acid				<0.1	<0.05					

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-2 3/10/87	SW-2 6/2/87	SW-2 6/2/87 DUP	SW-2 12/22/87	SW-2 3/30/88	SW-3 9/9/86	SW-3 9/9/86 DUP	SW-3 12/2/86	SW-3 3/10/87	SW-3 6/2/87
Benzyl Alcohol				<0.02	<0.01					
bis(2-				<0.02	<0.01					
bis(2-Chloroethyl)ether				<0.02	<0.01					
bis(2-Chloroisopropyl)ether				<0.02	<0.01					
bis(2-Ethylhexyl)phthalate	<0.01	<0.01	0.012	<0.02	<0.01			0.025	<0.01	0.03
Butylbenzylphthalate				<0.02	<0.01					
Chrysene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Di-n-butylphthalate				<0.02	<0.01					
Di-n-octylphthalate				<0.02	<0.47					
Dibenzo(a,h)anthracene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Dibenzofuran				<0.02	<0.01					
Diethylphthalate				<0.02	<0.01					
Dimethylphthalate				<0.02	<0.01					
Fluoranthene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Fluorene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Hexachlorobenzene				<0.02	<0.01					
Hexachlorobutadiene				<0.02	<0.01					
Hexachlorocyclopentadiene				<0.02	<0.01					
Hexachloroethane				<0.02	<0.01					
Indeno(1,2,3-cd)pyrene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Isophorone				<0.02	<0.01					
n-Nitrosodi-n-propylamine				<0.02	<0.01					
n-Nitrosodiphenylamine				<0.02	<0.01					
Naphthalene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Nitrobenzene				<0.02	<0.01					
Pentachlorophenol				<0.1	<0.05					
Phenanthrene	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
Phenol				<0.02	<0.01					
Pyrene	<0.01	0.02	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01
TOC	7.5	6	6	6.1	4.9	5	5.4	10	6.2	5.5
Phenols, total		0.013	0.005	<0.005	0.005	<0.01	0.037			<0.005
1,1,1-Trichloroethane				<0.002						
1,1,2,2-Tetrachloroethane				<0.002						
1,1,2-Trichloroethane				<0.002						
1,1-Dichloroethane				<0.002						
1,1-Dichloroethene				<0.002						
1,2-Dichloroethane				<0.002						
1,2-Dichloropropane				<0.002						
2-Butanone				<0.01						
2-Chloroethylvinylether				<0.01						
2-Hexanone				<0.01						
4-Methyl-2-Pentanone				<0.01						
Acetone	<0.01	<0.01	<0.01	<0.05				<0.01	<0.01	<0.01
Benzene	<0.01	<0.005	<0.005	<0.002		<0.001	<0.001	<0.005	<0.01	<0.005

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-2 3/10/87	SW-2 6/2/87	SW-2 6/2/87 DUP	SW-2 12/22/87	SW-2 3/30/88	SW-3 9/9/86	SW-3 9/9/86 DUP	SW-3 12/2/86	SW-3 3/10/87	SW-3 6/2/87
Bromodichloromethane				<0.002						
Bromoform				<0.002						
Bromomethane				<0.005						
Carbon Disulfide				<0.002						
Carbon Tetrachloride				<0.002						
Chlorobenzene				<0.002						
Chloroethane				<0.005						
Chloroform				<0.002						
Chloromethane				<0.005						
cis-1,3-Dichloropropene				<0.002						
Dibromochloromethane				<0.002						
Ethylbenzene	<0.01	<0.005	<0.005	<0.002		<0.001	<0.001	<0.005	<0.01	<0.005
m-Xylene						<0.001	<0.001			
Methylene Chloride	<0.01	<0.005	<0.005	<0.005					<0.01	<0.005
o-Xylene						<0.001	<0.001			
p-Xylene						<0.001	<0.001			
Styrene	<0.01	<0.005	<0.005	<0.002		<0.001	<0.001	<0.005	<0.01	<0.005
Tetrachloroethene				<0.002						
Toluene	<0.01	<0.005	<0.005	<0.002		<0.001	<0.001	<0.005	<0.01	<0.005
trans-1,2-Dichloroethene				<0.002						
trans-1,3-Dichloropropene				<0.002						
Trichloroethene				<0.002						
Trimethylbenzene						<0.001	<0.001			
Vinyl Acetate				<0.01						
Vinyl Chloride				<0.005						
Xylene, total	<0.01	<0.005	<0.005	<0.002				<0.005	<0.01	<0.005

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-4 12/22/87	SW-4 12/22/87 DUP	SW-4 3/30/88	SW-4 3/30/88 DUP
Cyanide, amenable				
Cyanide, ferro-ferri				
Cyanide, total	<0.01	<0.01	<0.01	<0.01
Cyanide, undistilled	<0.01	<0.01	<0.01	<0.01
Oil and Grease				
Sulfate				
Iron	0.24	0.25	0.42	0.33
Zinc	<0.005	<0.005	<0.01	0.02
1,2,4-Trichlorobenzene	<0.02	<0.02	<0.01	<0.01
1,2-Dichlorobenzene	<0.02	<0.02	<0.01	<0.01
1,3-Dichlorobenzene	<0.02	<0.02	<0.01	<0.01
1,4-Dichlorobenzene	<0.02	<0.02	<0.01	<0.01
2,4,5-Trichlorophenol	<0.1	<0.1	<0.05	<0.05
2,4,6-Trichlorophenol	<0.02	<0.02	<0.01	<0.01
2,4-Dichlorophenol	<0.02	<0.02	<0.01	<0.01
2,4-Dimethylphenol	<0.02	<0.02	<0.01	<0.01
2,4-Dinitrophenol	<0.1	<0.1	<0.05	<0.05
2,4-Dinitrotoluene	<0.02	<0.02	<0.01	<0.01
2,6-Dinitrotoluene	<0.02	<0.02	<0.01	<0.01
2-Chloronaphthalene	<0.02	<0.02	<0.01	<0.01
2-Chlorophenol	<0.02	<0.02	<0.01	<0.01
2-Methylnaphthalene	<0.02	<0.02	<0.01	<0.01
2-Methylphenol	<0.02	<0.02	<0.01	<0.01
2-Nitroaniline	<0.1	<0.1	<0.05	<0.05
2-Nitrophenol	<0.02	<0.02	<0.01	<0.01
3,3'-Dichlorobenzidine	<0.04	<0.04	<0.02	<0.02
3-Nitroaniline	<0.1	<0.1	<0.05	<0.05
4,6-Dinitro-2-Methylphenol	<0.1	<0.1	<0.05	<0.05
4-Bromophenyl phenyl	<0.02	<0.02	<0.01	<0.01
4-Chloro-3-Methylphenol	<0.02	<0.02	<0.01	<0.01
4-Chloroaniline	<0.02	<0.02	<0.01	<0.01
4-Chlorophenyl-phenylether	<0.02	<0.02	<0.01	<0.01
4-Methylphenol	<0.02	<0.02	<0.01	<0.01
4-Nitroaniline	<0.1	<0.1	<0.05	<0.05
4-Nitrophenol	<0.1	<0.1	<0.05	<0.05
Acenaphthene	<0.02	<0.02	<0.01	<0.01
Acenaphthylene	<0.02	<0.02	<0.01	<0.01
Anthracene	<0.02	<0.02	<0.01	<0.01
Benzo(a)anthracene	<0.02	<0.02	<0.01	<0.01
Benzo(a)pyrene	<0.02	<0.02	<0.01	<0.01
Benzo(b)fluoranthene	<0.02	<0.02	<0.01	<0.01
Benzo(g,h,i)perylene	<0.02	<0.02	<0.01	<0.01
Benzo(k)fluoranthene	<0.02	<0.02	<0.01	<0.01
Benzoic Acid	<0.1	<0.1	<0.05	<0.05

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

PARAMETER	SW-4 12/22/87	SW-4 12/22/87 DUP	SW-4 3/30/88	SW-4 3/30/88 DUP
Benzyl Alcohol	<0.02	<0.02	<0.01	<0.01
bis(2-	<0.02	<0.02	<0.01	<0.01
bis(2-Chloroethyl)ether	<0.02	<0.02	<0.01	<0.01
bis(2-Chloroisopropyl)ether	<0.02	<0.02	<0.01	<0.01
bis(2-Ethylhexyl)phthalate	<0.02	<0.02	<0.01	<0.01
Butylbenzylphthalate	<0.02	<0.02	<0.01	<0.01
Chrysene	<0.02	<0.02	<0.01	<0.01
Di-n-butylphthalate	<0.02	<0.02	<0.01	<0.01
Di-n-octylphthalate	<0.02	<0.02	<0.47	<0.47
Dibenzo(a,h)anthracene	<0.02	<0.02	<0.01	<0.01
Dibenzofuran	<0.02	<0.02	<0.01	<0.01
Diethylphthalate	<0.02	<0.02	<0.01	<0.01
Dimethylphthalate	<0.02	<0.02	<0.01	<0.01
Fluoranthene	<0.02	<0.02	<0.01	<0.01
Fluorene	<0.02	<0.02	<0.01	<0.01
Hexachlorobenzene	<0.02	<0.02	<0.01	<0.01
Hexachlorobutadiene	<0.02	<0.02	<0.01	<0.01
Hexachlorocyclopentadiene	<0.02	<0.02	<0.01	<0.01
Hexachloroethane	<0.02	<0.02	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	<0.02	<0.02	<0.01	<0.01
Isophorone	<0.02	<0.02	<0.01	<0.01
n-Nitrosodi-n-propylamine	<0.02	<0.02	<0.01	<0.01
n-Nitrosodiphenylamine	<0.02	<0.02	<0.01	<0.01
Naphthalene	<0.02	<0.02	<0.01	<0.01
Nitrobenzene	<0.02	<0.02	<0.01	<0.01
Pentachlorophenol	<0.1	<0.1	<0.05	<0.05
Phenanthrene	<0.02	<0.02	<0.01	<0.01
Phenol	<0.02	<0.02	<0.01	<0.01
Pyrene	<0.02	<0.02	<0.01	<0.01
TOC	4.8	5	4.7	3.7
Phenols, total	<0.005	0.01	0.011	<0.005
1,1,1-Trichloroethane	<0.002	<0.002		<0.005
1,1,2,2-Tetrachloroethane	<0.002	<0.002		<0.005
1,1,2-Trichloroethane	<0.002	<0.002		<0.005
1,1-Dichloroethane	<0.002	<0.002		<0.005
1,1-Dichloroethene	<0.002	<0.002		<0.005
1,2-Dichloroethane	<0.002	<0.002		<0.005
1,2-Dichloropropane	<0.002	<0.002		<0.005
2-Butanone	<0.01	<0.01		<0.033
2-Chloroethylvinylether	<0.01	<0.01		<0.01
2-Hexanone	<0.01	<0.01		<0.01
4-Methyl-2-Pentanone	<0.01	<0.01		<0.01
Acetone	<0.05	<0.05		<0.047
Benzene	<0.002	<0.002		<0.005

APPENDIX B-4B

SUMMARY OF ANALYTICAL RESULTS FOR SAMPLES COLLECTED PRIOR TO APRIL 2001

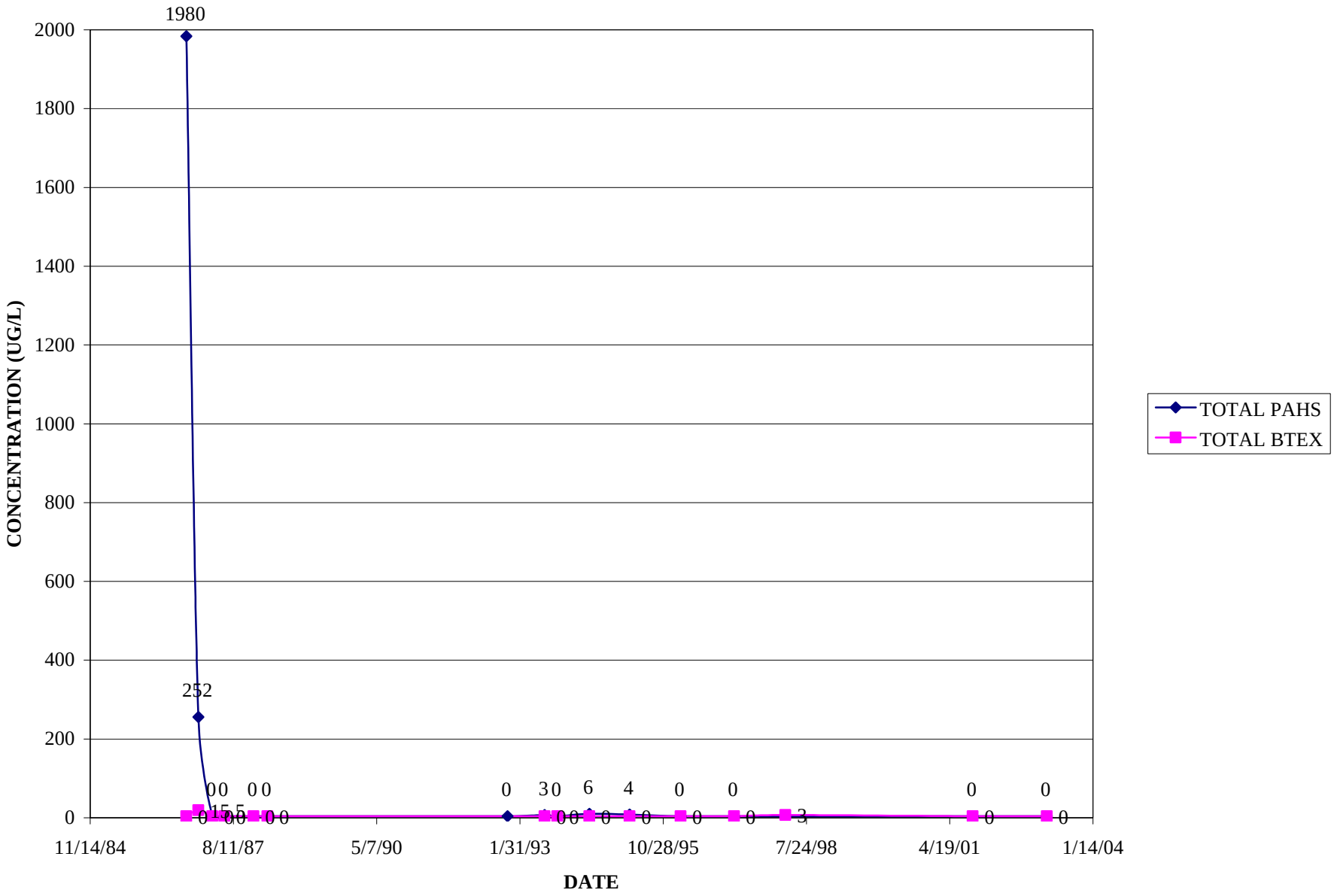
NYSEG
MECHANICVILLE, NEW YORK

(All results in mg/L)

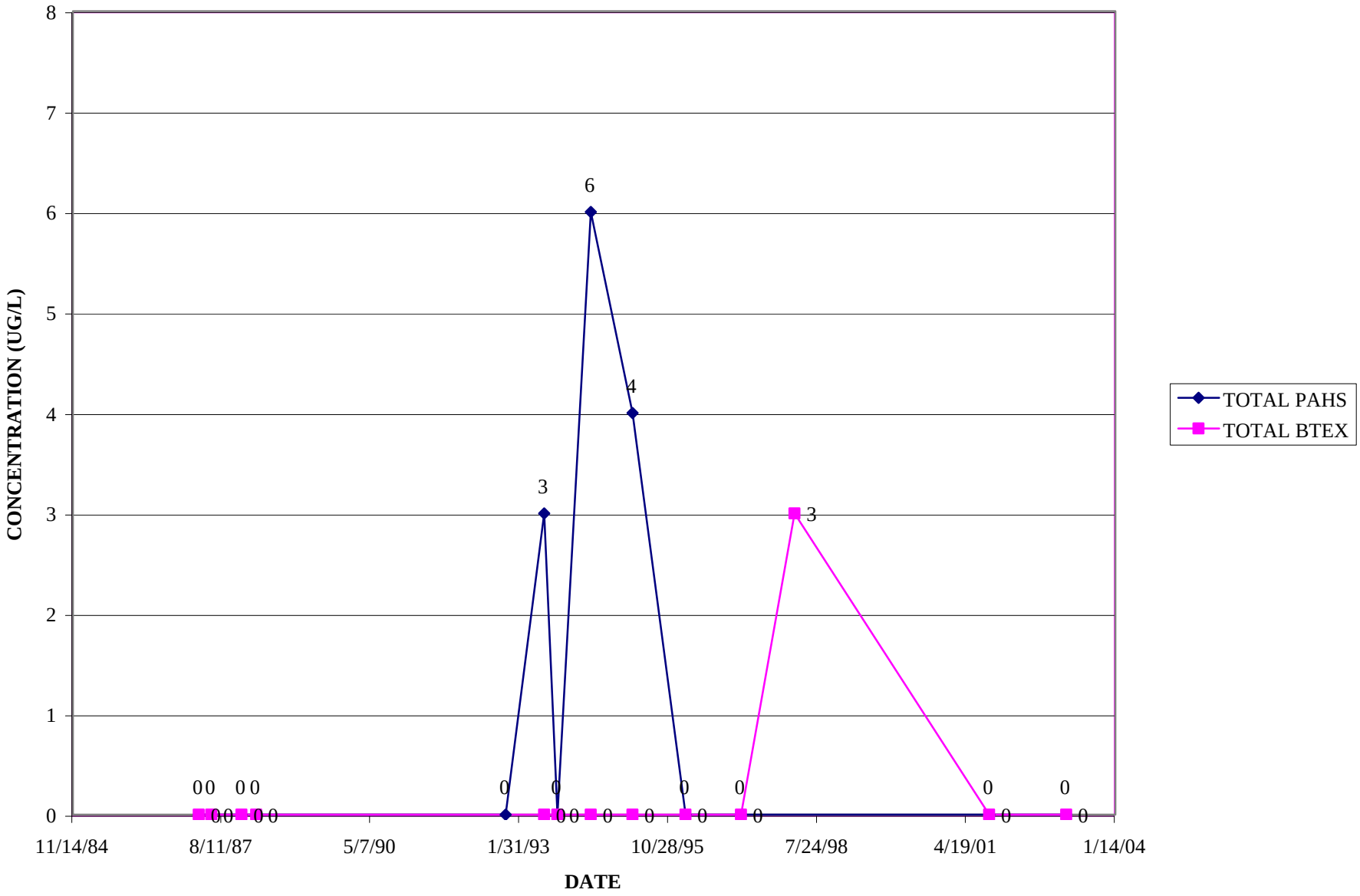
PARAMETER	SW-4 12/22/87	SW-4 12/22/87 DUP	SW-4 3/30/88	SW-4 3/30/88 DUP
Bromodichloromethane	<0.002	<0.002		<0.005
Bromoform	<0.002	<0.002		<0.005
Bromomethane	<0.005	<0.005		<0.01
Carbon Disulfide	<0.002	<0.002		<0.005
Carbon Tetrachloride	<0.002	<0.002		<0.005
Chlorobenzene	<0.002	<0.002		0.0026J
Chloroethane	<0.005	<0.005		<0.01
Chloroform	<0.002	<0.002		<0.005
Chloromethane	<0.005	<0.005		<0.01
cis-1,3-Dichloropropene	<0.002	<0.002		<0.005
Dibromochloromethane	<0.002	<0.002		<0.005
Ethylbenzene	<0.002	<0.002		<0.005
m-Xylene				
Methylene Chloride	<0.005	<0.005		<0.013
o-Xylene				
p-Xylene				
Styrene	<0.002	<0.002		<0.005
Tetrachloroethene	<0.002	<0.002		<0.005
Toluene	<0.002	<0.002		<0.025
trans-1,2-Dichloroethene	<0.002	<0.002		<0.005
trans-1,3-Dichloropropene	<0.002	<0.002		<0.005
Trichloroethene	<0.002	<0.002		<0.005
Trimethylbenzene				
Vinyl Acetate	<0.01	<0.01		<0.01
Vinyl Chloride	<0.005	<0.005		<0.01
Xylene, total	<0.002	<0.002		<0.005

APPENDIX C
BTEX AND PAHS IN GROUNDWATER CONCENTRATION TRENDS

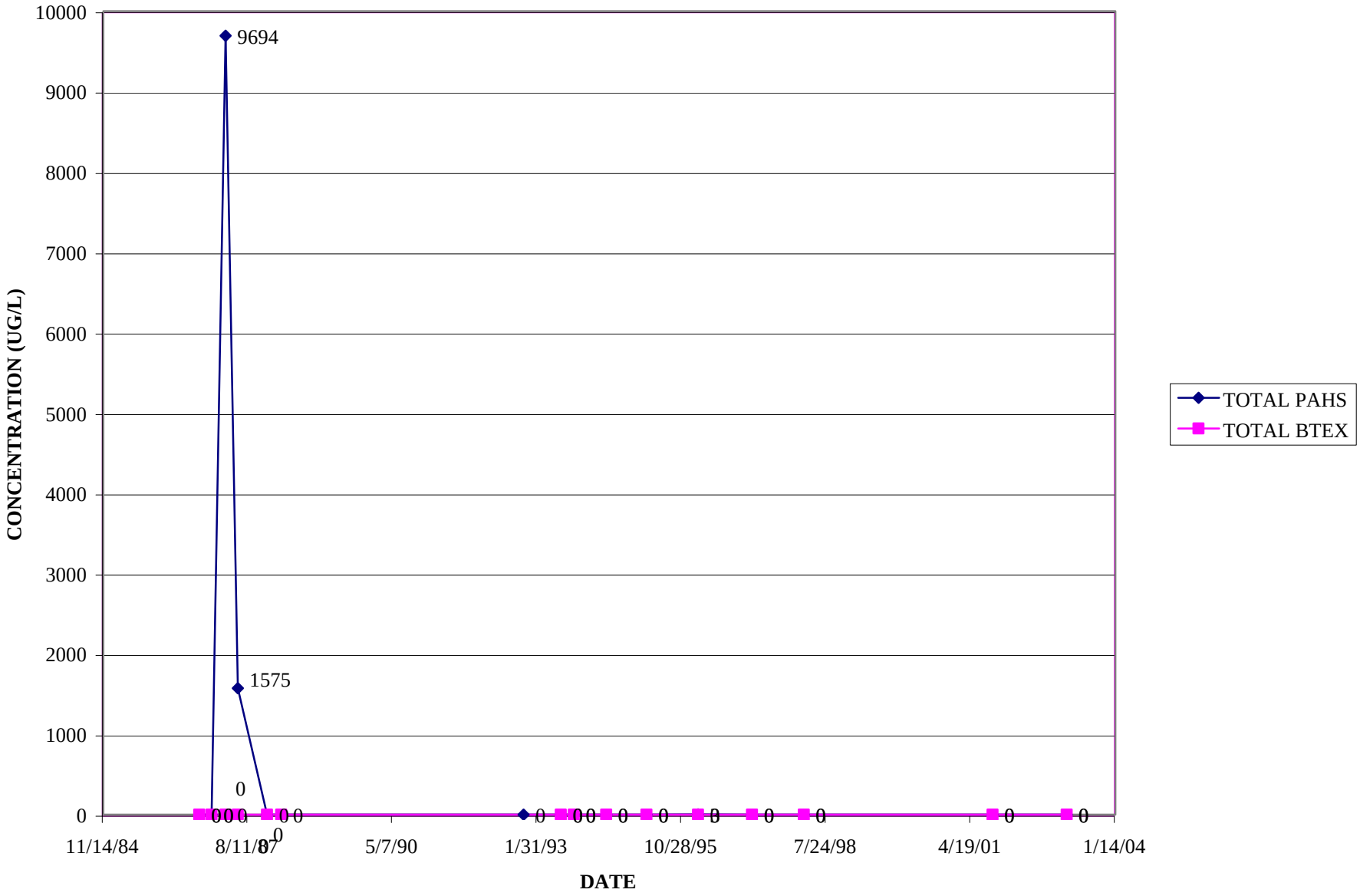
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-1



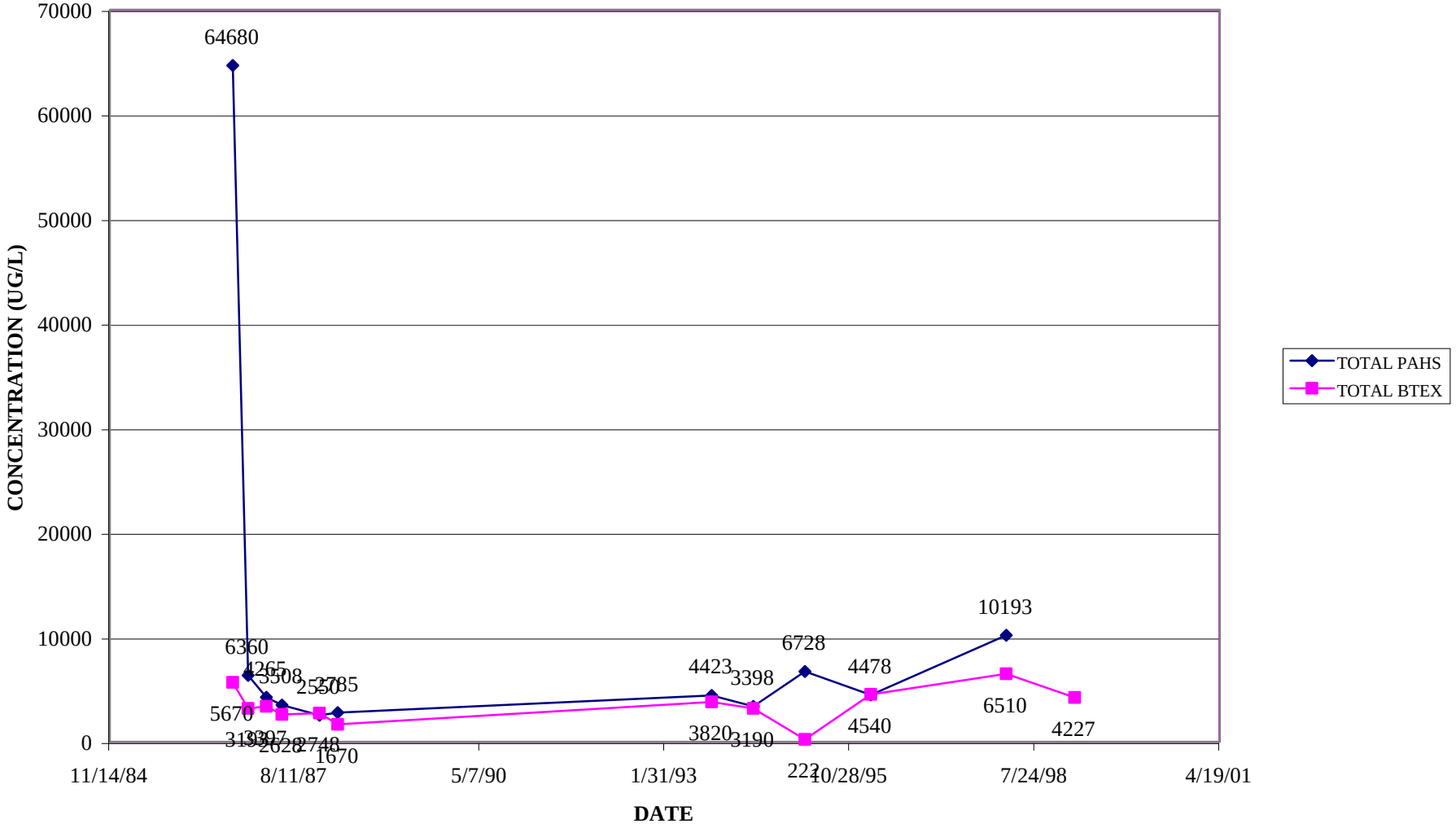
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-1



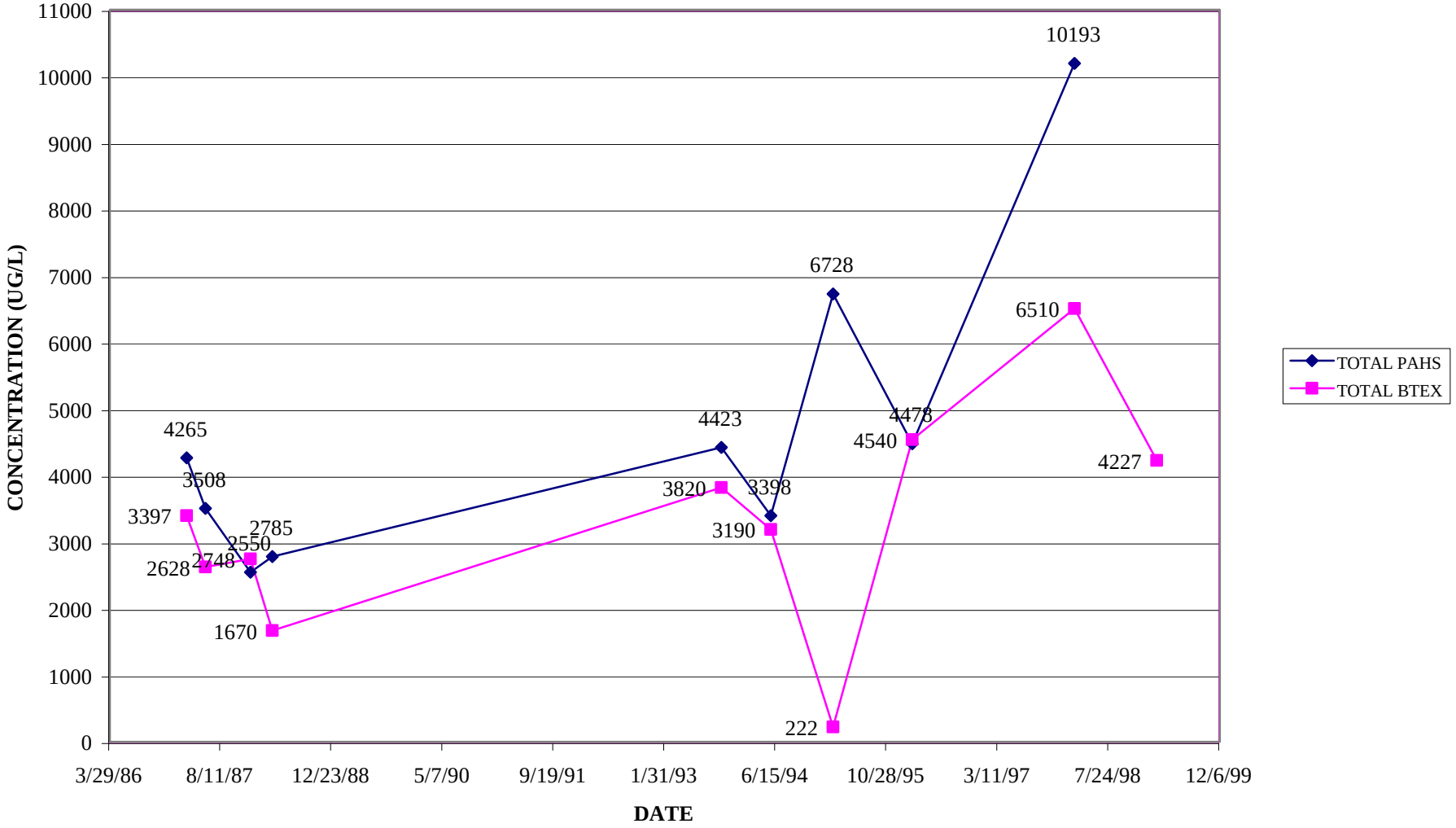
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-2



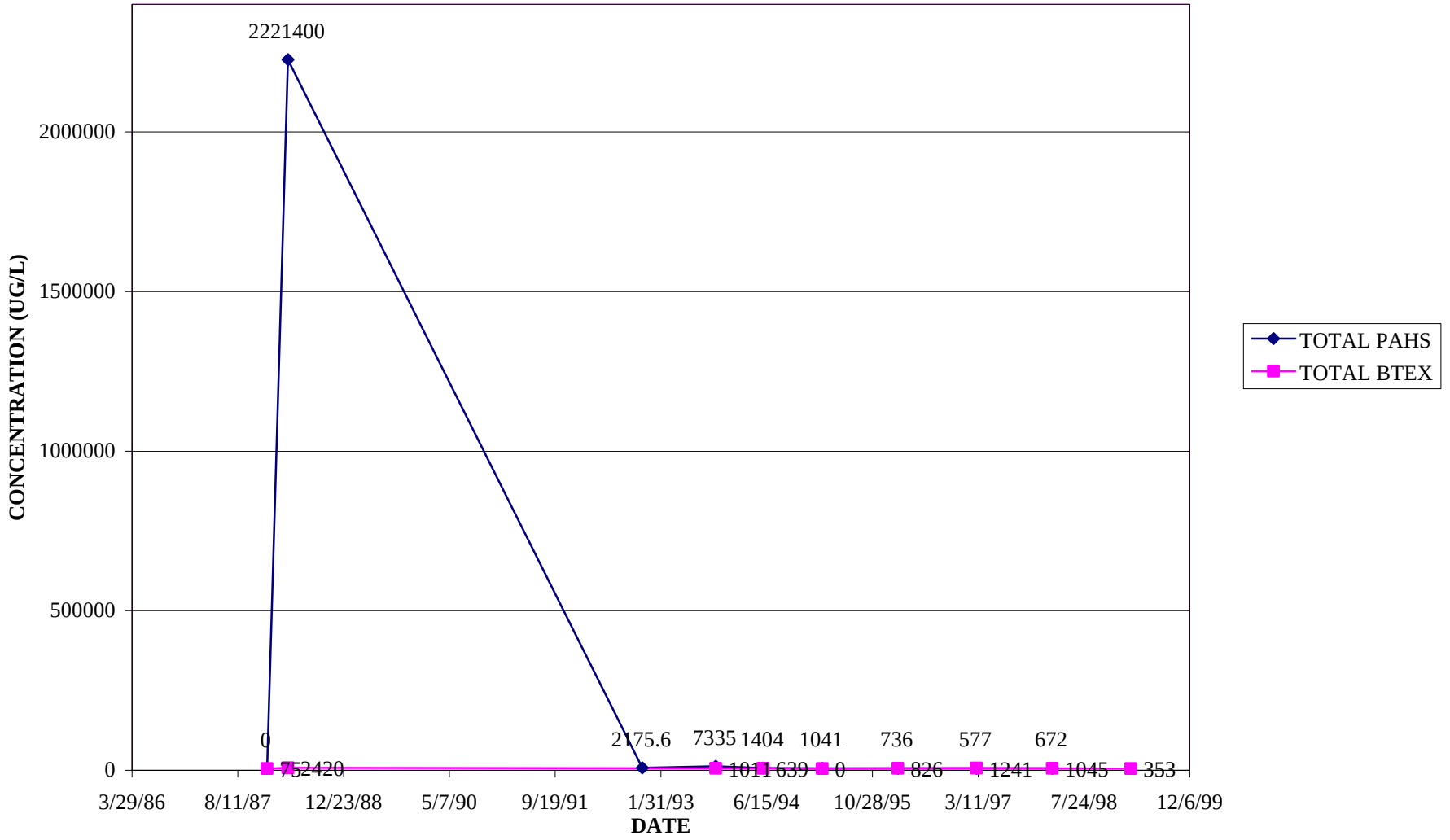
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-4



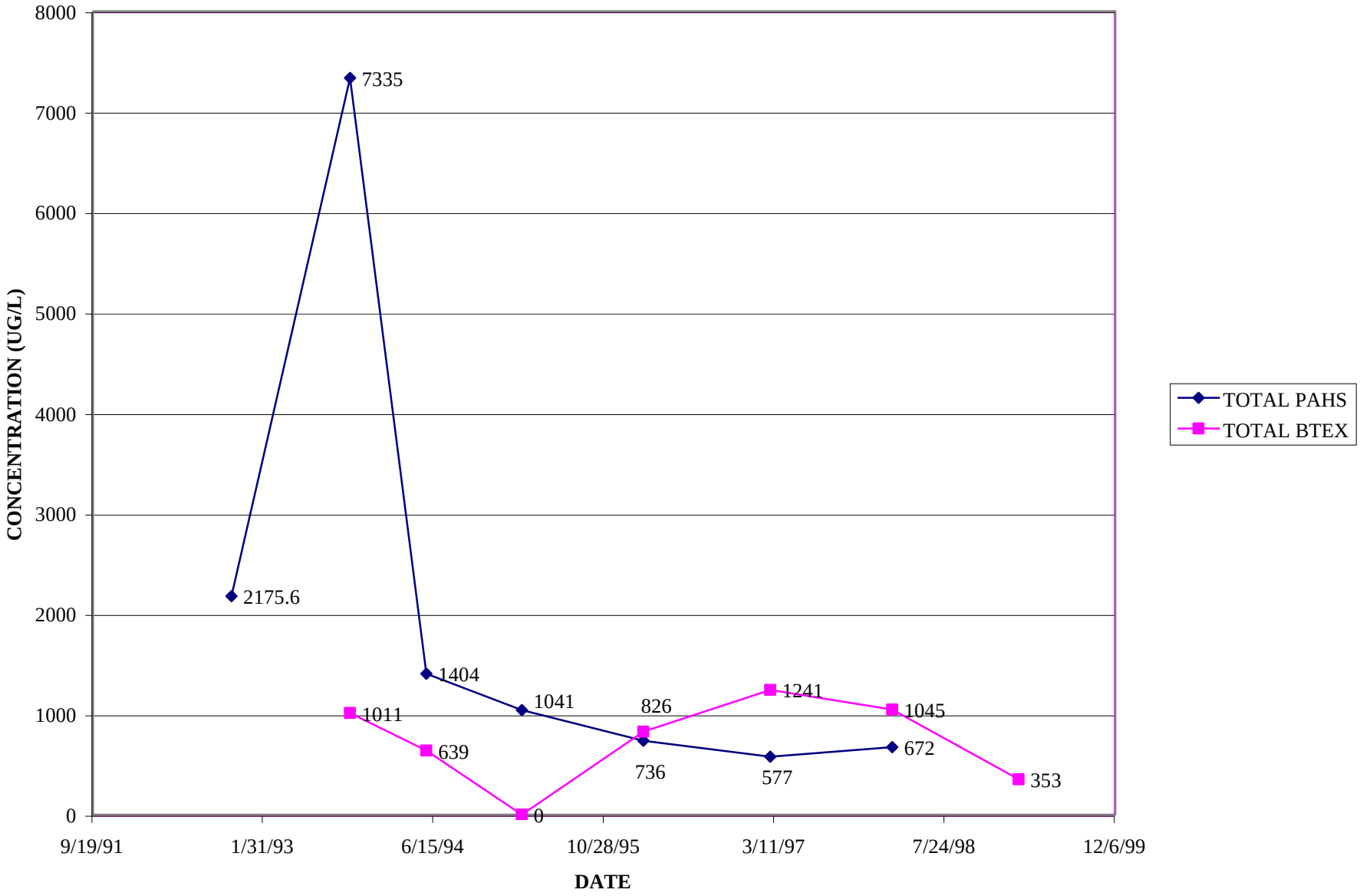
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-4



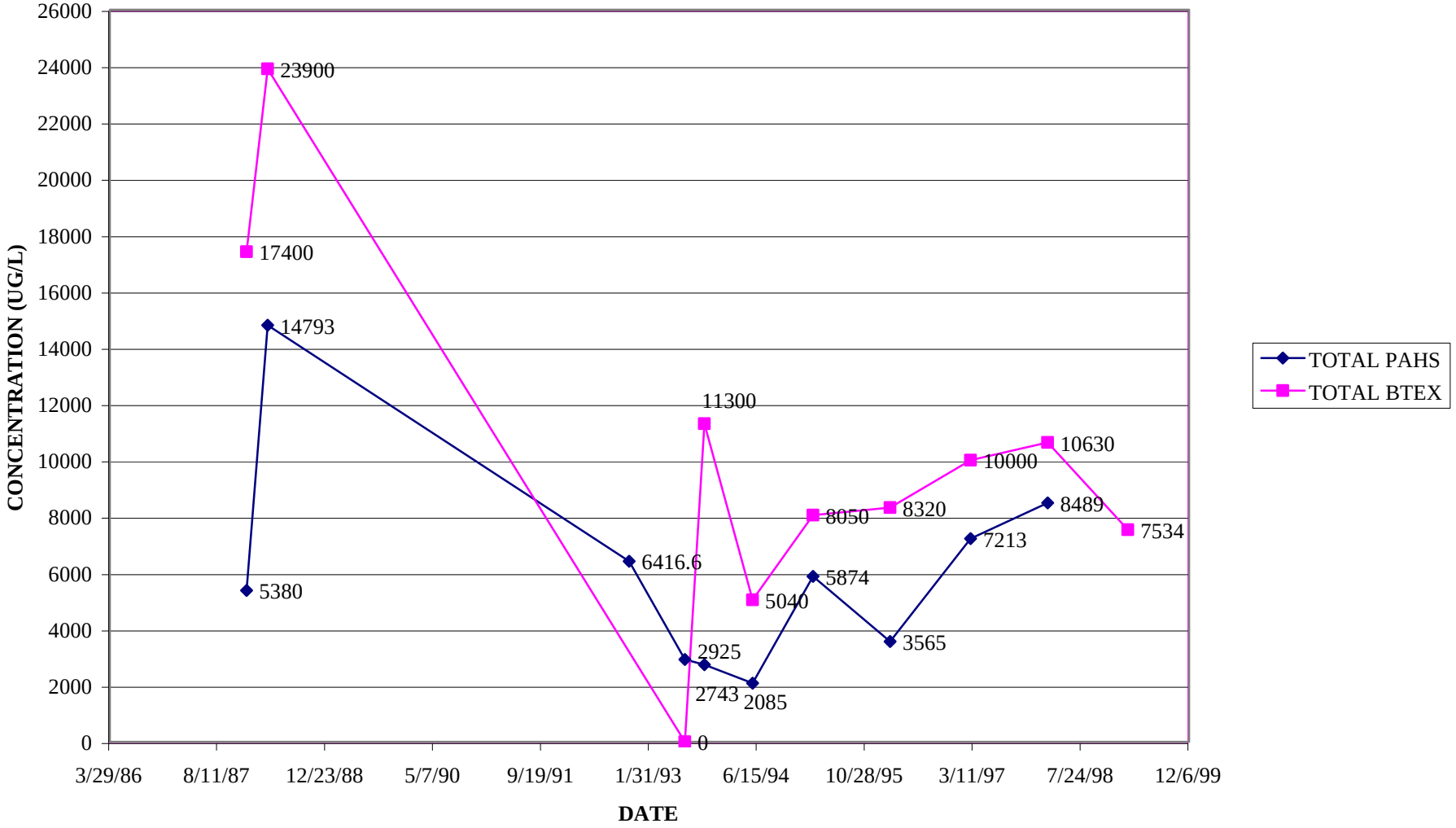
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-12



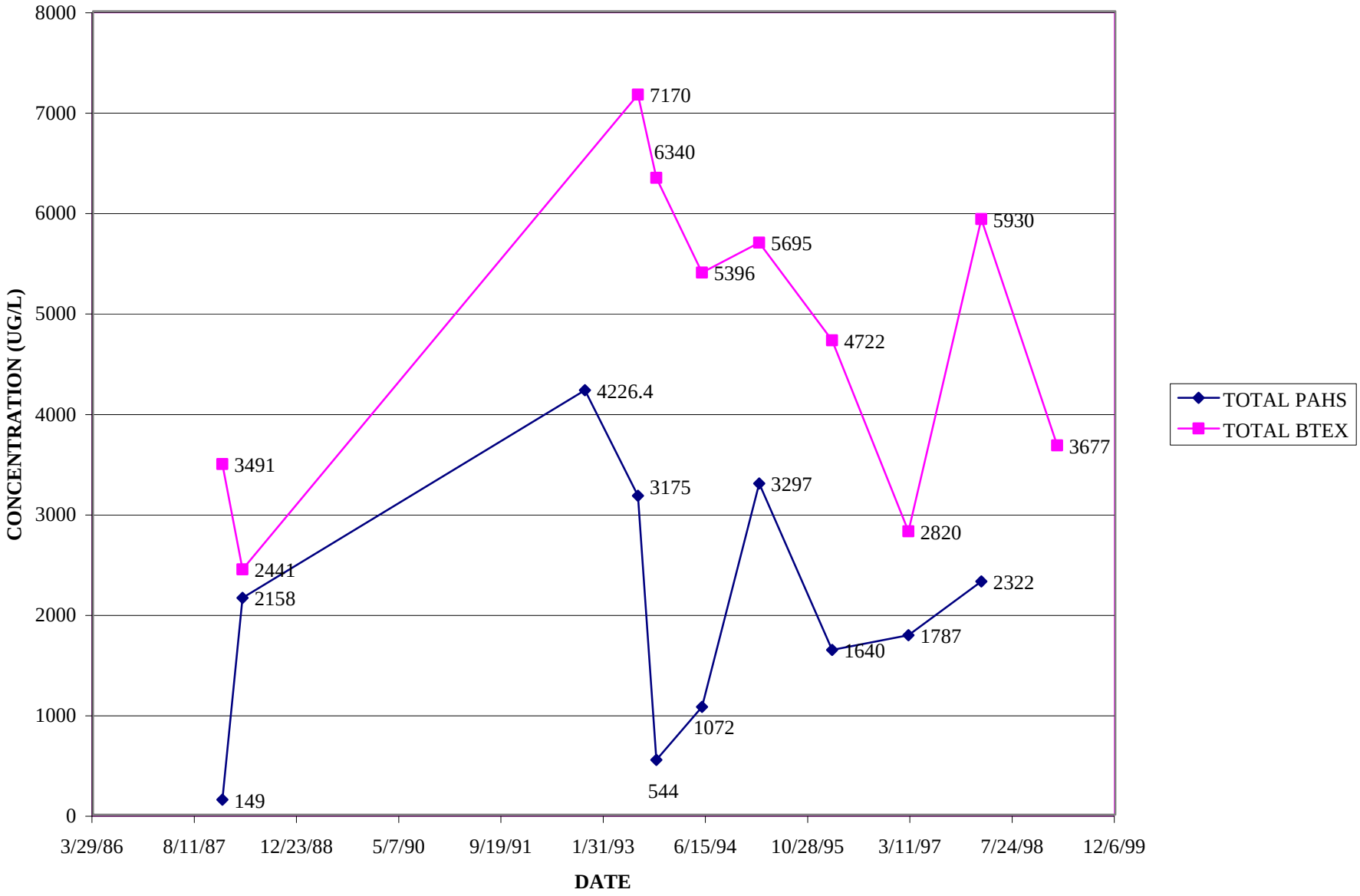
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-12



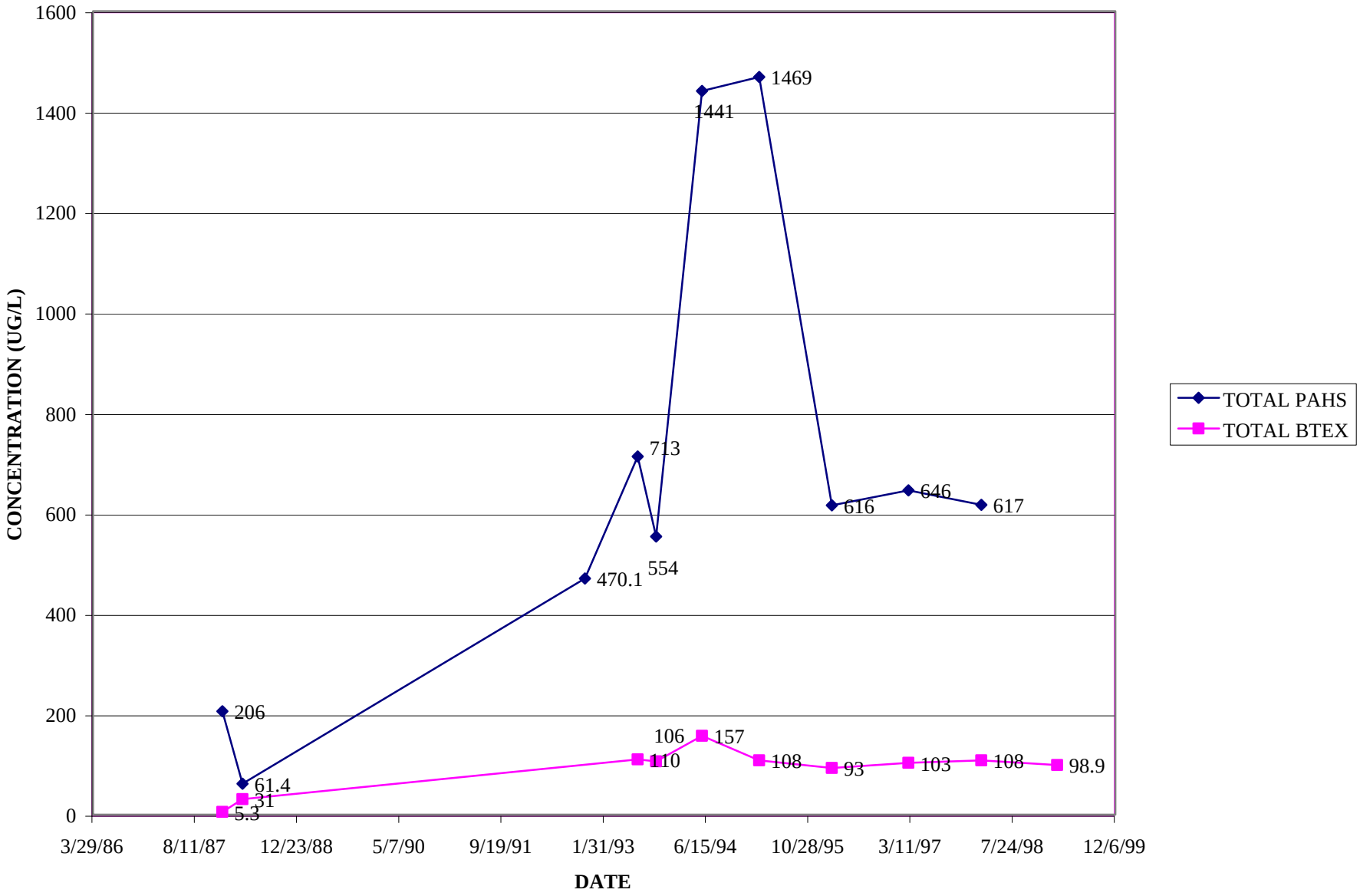
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-13



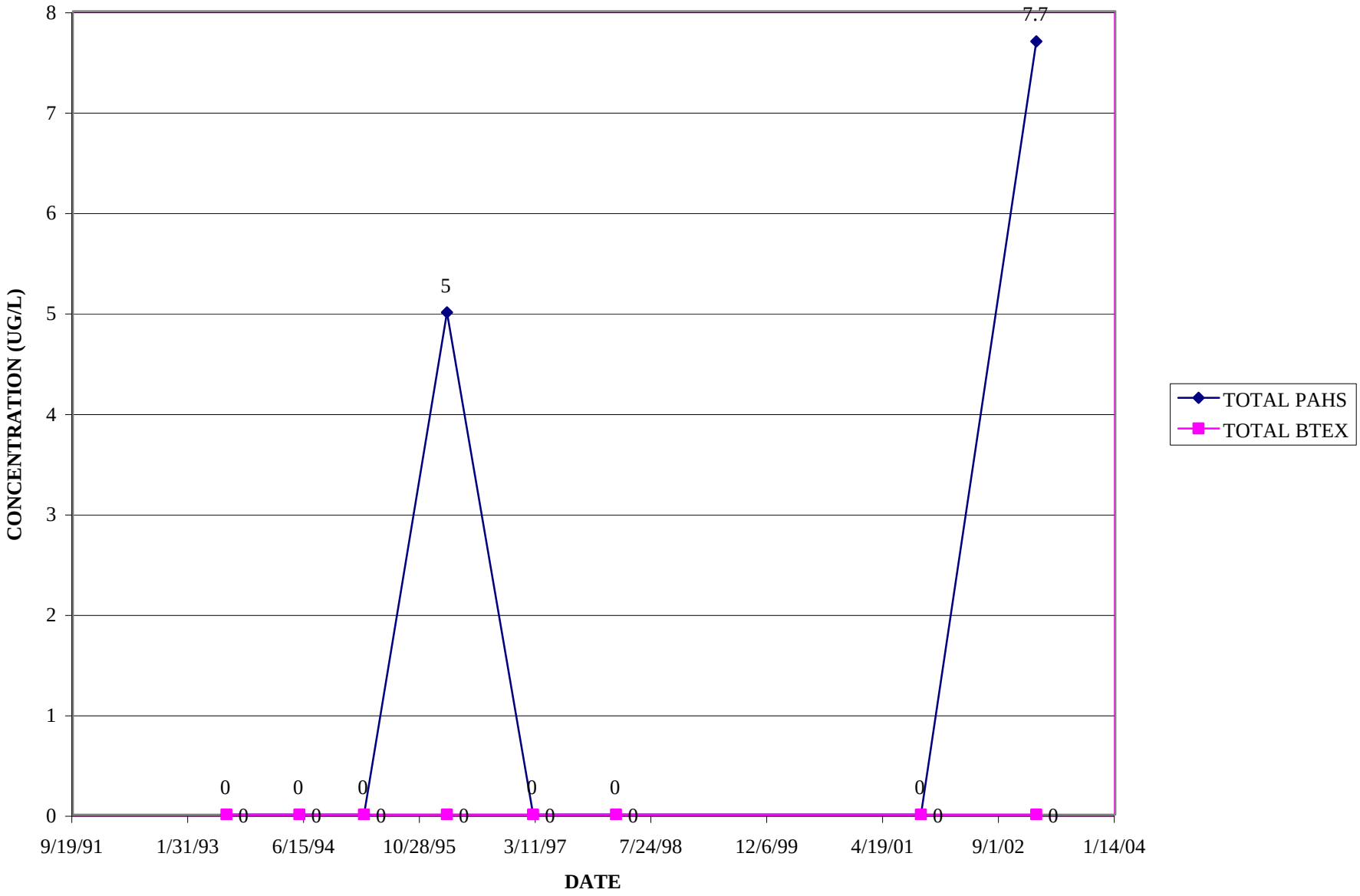
TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-14



TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-15



TOTAL BTEX AND TOTAL PAH IN GROUNDWATER
MW-18



APPENDIX D
FIELD METHODS

1.0 SAMPLING PROCEDURES

The scope of work for the field investigation of the *SRI* at the site consisted of the following:

X Advanced soil borings;

X Installed additional (overburden and bedrock) monitoring wells;

X Collected surface soil samples;

X Measured groundwater elevations;

X Checked wells for liquid phase hydrocarbons;

X Collected groundwater samples from monitoring wells; and

X Collected sediment samples.

Project Files

Throughout the field investigation, URS field personnel maintained field notebooks to document project activities. Each individual making an entry into a field notebook dated and signed their entry. The field notebook entries contain accurate and inclusive information of the project activities. Only facts and observations were written in the field notebooks.

In addition, URS field personnel did note all measurements, calculations, as well as all data relating to location, date, time, weather conditions, and sample types directly on the appropriate field record.

The field notebooks, field records, and photos are maintained in the project files. The original (final) copies of the field sheets are maintained by the field personnel and project manager in URS' office in Clifton Park, New York. The project manager will keep copies of all files while the project is active.

Other data files maintained in the project files, include, equipment calibration sheets, air monitoring records, analytical requests to subcontract laboratories, survey data, photographs and chains of custody documentation.

Originals of the contract laboratory reports are stored in the project files and maintained at the contracted laboratory. The laboratory analytical data was entered into the laboratory's computer database. The data was manipulated in order to achieve the quality assurance/quality control (QA/QC) and reporting requirements described in the *Quality Assurance Project Plan* (QAPP).

1.1 SAMPLE LOCATION DESIGNATION

The names of each soil boring, monitoring well, sediment sampling location, and surface water sampling location follow the guidelines below.

Soil borings were designated by a "SB". Each surficial soil sampling location was designated by an "SS". A number followed the "SB" or "SS" name to associate the boring with a specific location.

The monitoring wells installed in the relief holder have been designated by "RH", followed by the number "1". The well names for the remaining wells have been designated by a "MW", followed by a one or two digit number to associate the well with a specific location. Because many proposed wells were installed in pairs or clusters to target overburden and bedrock geologic units in the same area, a suffix was added to each well name to indicate the screened geologic unit. Monitoring wells installed to screen the overburden unit were denoted with a suffix "S" (e.g., monitoring well MW-15S). Monitoring wells installed to screen the shallow bedrock are denoted with a suffix "I" (e.g., MW-15I). Monitoring wells installed to screen the deep bedrock were denoted with a suffix "D" (e.g., MW-15D). The overburden well installed in the relief holder is identified as RH-1S and the proposed deep bedrock monitoring well was identified as RH-1D.

The sediment sampling locations in the Anthony Kill were denoted with "SED00", followed by a number. The sediment sampling locations in the Hudson River are denoted with "SED-H", followed by a number.

Sample names were designated using NYSEG's sample identification system, which is described in Section 3.0.

1.2 SUBSURFACE SOIL SAMPLING PROCEDURES

Soil borings were advanced and continuous overburden soil samples were obtained to verify the geologic profile and assure proper placement of the well screens at boring locations completed as wells. The collection of subsurface soil sampling was conducted using spilt-spoon samplers during drilling with a conventional drill rig or using MacroCore® open samplers with a Geoprobe® unit mounted to a truck or van.

1.2.1 Field Equipment

Some or all of the following equipment was used during soil sampling:

X Field boring log sheet and field notebook;
X Photo-ionization detector (PID);
X Stainless-steel knife, trowels, spoons, scoops, and bowls;
X Personal protective equipment (PPE);
X Disposable gloves;
X Distilled/deionized water;
X Cleaning detergents and decontamination chemicals;
X Five-gallon pails for decontamination;
X Brushes;
X Sample bottles;
X Coolers;
X Sufficient ice or freezer packs to maintain the samples at four degrees Celsius; and
X Chain of Custody (COC) forms.

1.2.2 Soil Sampling Using Split-Spoons

The soil samples were collected using two-inch diameter by two-foot long split-spoons in accordance with ASTM D-1586-84: *Standard for Penetration Test and Split-Barrel Sampling of Soils*. The split-spoons are driven into the overburden materials using a 140-pound hammer-drop system until the desired depth of the boring is reached. The blow counts for each six-inch increment of penetration was recorded on the boring log. At each boring location, drilling was conducted through a mud box or at a minimum a sheet of plywood with a hole cut through the center to contain the drill cuttings. The hollow stem augers (HSAs) were advanced two feet after each split spoon was collected to avoid borehole cave-in. Furthermore, a plug inside of the HSAs was advanced during drilling. At locations where borings were completed as monitoring wells in a well cluster, the deepest well was drilled and continuously sampled first. Subsequent borings in the cluster were not sampled.

The length of sample recovery, percent recovery, and soil description, including odors is recorded on the boring log. Immediately upon retrieval of the split spoon, an aliquot of soil was transferred into the VOC sample containers. The VOC sample containers were completely filled in order to minimize head-space in the containers.

A second aliquot of soil from the split spoon was immediately retained for head-space analysis using a PID. Calibration of the PID and more detailed head-space analysis procedures are described in Section 1.2.4.1. The rationale behind this sequence of procedures (i.e., collecting a sample first, and then screening) is to minimize the loss of VOCs from samples that will be sent to a laboratory for analysis.

The remaining soil was placed in a clean re-sealable plastic bag. After removal of any stones, large twigs, or other vegetation, the sample was thoroughly homogenized by mixing the sample in the bag. After mixing, the sample was placed into containers for non-volatile constituent analysis. This type of homogenized sample will not be analyzed for VOCs.

Field personnel wore disposable gloves for the collection and handling of samples. The gloves were changed between samples. Any reuseable equipment was decontaminated between samples in accordance with Section 1.11.

Delineation of contaminated zones within a boring were based on the following field screening parameters:

X discoloration or staining;
X unusual odors or VOC head-space measurements (PID);
X unusual textures; and
X presence of liquid phase hydrocarbons or other anthropogenic features.

During sample collection, the field geologist recorded a soil description on the basis of visual observations in accordance with the Unified Soil Classification System (equivalent to ASTM D 2487-69) on a soil boring log or in a field notebook. The soil boring log and field notebook entries included the following information:

X Soil sampling location;
X Weather conditions;
X Notes on the physical appearance of the soil, including unique or unexpected colors or odors;
X Date and time of sample collection;
X Name of sample collector; and
X Notes on unexpected or unique conditions or events related to sample collection.

The samples were packed into sample coolers containing sufficient bags of ice or freezer packs to maintain the samples at 4º Celsius.

Upon completion of sampling at each location, all sampling equipment was decontaminated in accordance with the procedures described in Section 1.11. Quality assurance samples, including duplicate samples and trip blanks were collected as necessary in accordance with the procedures described in Section 1.10. The sample custody procedures for the soil samples are described in Section 3.0.

1.2.3 Soil Sampling Using Geoprobe® Equipped With MacroCore® Samplers

Soil borings which were not completed as monitoring wells were advanced using a Geoprobe unit mounted to a truck or van. Macro Core open samplers were used to collect the samples. These samplers had an open tube design and measure approximately two-inches in diameter (outer) by 44-inches long. The samplers were fitted with a removable cutting shoe and disposable acetate liners. Each of the samplers were fitted with a new acetate liner prior to collection of a sample. The acetate liner was split open to collect the soil.

The length of sample recovery, percent recovery, and soil description, including odors was recorded on the boring log. The soil samples obtained from the Macro Core open samplers were collected and handled in a similar manner as the soil samples obtained from split spoon samplers, described in Section 1.2.2.

All acetate liners were discarded after use. Upon completion of sampling at each location, all sampling equipment was decontaminated in accordance with the procedures described in Section 1.11. Quality assurance samples, including duplicate samples and trip blanks were collected as necessary in accordance with the procedures described in Section 1.10. The sample custody procedures are described in Section 2.0.

1.2.4 Field Screening Methodologies

Field screening methodologies included screening the headspace of each sample with a PID. This field screening method is described below.

1.2.4.1 Head-Space Analysis Procedures

Field screening of collected soil samples was completed using head-space analysis using a PID to detect the presence of VOCs. The operation, maintenance, and calibration of the PID (Thermo Environmental Instruments, Inc., Model 580B) was performed in accordance with the manufacturer's specifications and the Quality Assurance Project Plan for this project.

This section describes the maintenance, calibration, and operation of the PID and its accessories in the field.

The activities covered by this procedure did:

X Ensure quality control in field use of a PID;

X Provide uniformity and continuity in operation, calibration, and maintenance of both the equipment and measuring techniques by different qualified field analysts or technicians;

X Provide semi-quantitative data of the presence of volatile organic compounds in the head-space air of field samples. (It should be noted that the PID's utility as a quantitative measuring tool cannot be established and is questionable); and

X Indirectly serve as a means to evaluate the air quality near the sampling or field work locations.

EQUIPMENT:

X PID and its accompanying probe;

X Flow regulator or a rotameter T-connector;

X Calibration gas; and

X Battery charger.

A Thermo Environmental Organic Vapor Meter (OVM) 580B PID with a 11.8 eV lamp was used by URS field personnel. At the start of each day, the PID was examined for cleanliness and checked for defects and any possible need of repair. The battery check included measurements to determine if it is functional to full scale. The PID was recharged, overnight, as required, with the probe connected to the detector inlet. The probe check consisted of making sure that the probe was properly functioning by checking UV light flow when connected to the meter. Scheduled maintenance included daily checks by URS personnel according to procedures provided by the equipment's manufacturer. The PID was calibrated with 10 ppm isobutylene in accordance with the manufacturer's specifications and the Quality Assurance Project Plan for this project. Once the instrument was calibrated and recorded on instrument calibration log, the PID was used to collect head-space measurements. If the calibrated PID was not to used immediately, it was turned off.

Immediately upon retrieval of a soil sample, two aliquots of soil were collected. One aliquot was used to completely fill the VOC sample containers and the second aliquot was used for head-space analysis using a PID. The rationale behind this sequence of procedures (i.e., collecting a sample first, and then screening) was to minimize the loss of VOCs from samples that were sent to the laboratory for analysis. The soil was placed in new sealable polyethylene bags for head-space analysis. Each bag was labeled with the location, depth interval, and date of the soil sample.

The soil was allowed to warm to room temperature (approximately 68° Fahrenheit) to allow the vapors in the soil to equilibrate with the air in the bag. A measurement was collected by inserting the probe of the PID through an opened corner of the bag. Care had to be taken to avoid uptake of water droplets and soil particles. The highest meter response was recorded as the head-space concentration. Each PID measurement was recorded on the appropriate soil boring log or in a field notebook.

1.3 MONITORING WELL INSTALLATION PROCEDURES

This section describes the procedures that were used to install monitoring wells using a drill rig. The procedures described in this section did:

X Provide reliable information about penetrated soils;
X Provide representative samples of groundwater for analysis;
X Permit collection of representative water level data; and
X Effectively isolate the separate hydrogeologic strata penetrated during drilling.

EQUIPMENT:

X Drilling rig, drilling tools, and support truck with water tanks;
X Sheet of plywood, or mud box;
X Core boxes;
X Steam cleaner;
X Tremie pipe;

X Two-inch or four-inch flush threaded polyvinyl chloride (PVC) well risers and screens with a minimum wall thickness of Schedule 40. Screen slot sizes of 0.010-inch, 0.020-inch, and 0.040-inch;

X Seven-inch outside diameter by 4-inch inside diameter by 18-inch long polyethylene mechanical packer;

X Six-inch carbon steel casing;

X Four-inch carbon steel casing;

X Schedule 40 PVC or steel well caps and bottom plugs;

X Washed Morie No. 0 or equivalent quartz sand for filter pack with 0.010-inch slot screen;

X Washed Morie No. 1 or equivalent quartz sand for filter pack with 0.020-inch slot screen;

X Washed Morie No. 3 or equivalent quartz sand for filter pack with 0.040-inch slot screen;

X Portland cement, Type I or II;

X Bentonite pellets;

X Powdered bentonite;

X Protective casings and/or roadboxes, and padlocks;

X Concrete mix for surface completions;

X Polyethylene sheeting; and

X Field notebook, soil boring logs, and well construction logs.

1.3.1 Drilling, Borehole Logging, Well Installation, and Construction

All necessary drilling/well permits (if applicable) and utility clearances from NYSEG and non-NYSEG utilities were obtained prior to the start of drilling operations. All drill rigs used necessary tools, supplies, and equipment, which were supplied by the drilling subcontractor. The drill crew consisted of a licensed and experienced driller and one or more driller's assistants. Appropriate URS personnel was onsite to supervise the drill crew and for logging the soils and sampling. Drilling subcontractor personnel transported water to the rigs, cleaned tools, assisted in the installation of security and marker pipes, constructed the concrete aprons, and developed the wells.

All soil boring and well construction details were properly logged by the supervising field geologist. All notes were entered on a standard boring log sheet marked with indelible ink. The following information was recorded on the boring log sheet: project name and number, boring or well number and location, drilling contractor, drilling method and equipment, sampling method and equipment, start and finish, time and date, and name of the supervising field geologist.

Supplies and equipment were transported to the lay-down area designated onsite. Before moving onto the first well location, all reusable drilling equipment and tools were steam-cleaned at a designated onsite decontamination station using a portable steam cleaner supplied by the drilling subcontractor. Decontamination procedures are in Section 1.11.

Standard penetration tests were performed in accordance with ASTM D-1586-84: *Standard for Penetration Test and Split-Barrel Sampling of Soils*. Soil sampling procedures, including field screening of the soil samples using head- space analysis are described in Section 1.4. At the proposed well cluster locations, the soils were continuously sampled and logged at only one of the well locations.

At each boring location, drilling was conducted through a mud box or at a minimum a sheet of plywood with a hole cut through the center to contain the drill cuttings. Hollow stem augers (HSA), drive and wash casing or air rotary tools were used to drill through the overburden materials. A plug was lowered to the bottom of the HSA drill string (inside of the HSAs) and advanced with the HSAs during drilling.

Shallow Monitoring Well Construction

Shallow monitoring wells were installed in the unconsolidated material by using continuous-flight, 4.25-inch diameter (or larger as necessary) inner diameter (ID) hollow-stem augers (HSAs) for two-inch wells.

URS onsite personnel prepared a soil boring log and a time log of significant events during each working day. The soil boring logs were used to record field classification of soils, sampling types and number of samples, sampling depths, first encountered and static groundwater levels, progress of drilling, final completion depth, and the nature and resolution of any problems encountered. The Unified Soil Classification (USC) System was used for soil descriptions. The information recorded on well construction logs was used to create computer-generated soil boring and well construction logs for each boring location.

After the boring is drilled to the required depth, a string of flush-threaded, new PVC well riser and screen was installed through the HSAs. A threaded bottom plug was placed in the bottom of the screen and the top of the wells were protected with a vented cap. The wells were set at the desired horizon of the overburden materials. The lengths of the monitoring well screens were ten to 15 feet. The well risers were of sufficient length to extend from the top of the screen to approximately six inches below grade for wells to be completed as flush-mount wells. If the well was to be completed above grade, the well riser was of sufficient length to extend from the top of the screen to approximately two to three feet above the ground surface.

Two- inch diameter schedule 40 PVC screens and risers were used for overburden monitoring wells unless significant amounts of NAPL were observed in the soil during drilling. Where significant amount of NAPLs was observed in the soils, four-inch diameter well construction was used to allow for more efficient NAPL recovery. Furthermore, a two-foot long riser with a bottom cap (installed into rock) was installed below the well screen to serve as a sump for NAPL recovery at all locations that were suspected to contain NAPLs, based on soil borings. The sumps were sealed to the borehole by bentonite, to prevent any NAPL accumulation outside of the sump.

The screen slot sizes were determined by the URS personnel supervising the well installation based on the visual inspection of particle size of the material to be screened. The screen slot size (0.010, 0.020 or

0.040-inch) and appropriate sand pack materials were chosen to adjust for grain size variations in the formation.

Where fine-grained sand and silt were present in the screened interval, a 0.010-inch slot size screen were used, otherwise a 0.020-inch slot size screen were used for the coarser formation material. A 0.040-inch slot size screen was selected for monitoring well RH-1S to promote NAPL accumulation in the well sump for recovery. Washed Morie No. 0 or equivalent sand was used for 0.010-inch slot screens. Washed Morie No. 1 or equivalent sand was used for 0.020-inch slot screens. Washed Morie No. 3 or equivalent sand was used for 0.040-inch slot screen.

Where groundwater conditions permitted, the top portion of the shallow well screens were set approximately two feet above the water table to detect light nonaqueous phase liquids (LNAPLs) such as petroleum products (if any) and to allow for observations of seasonal water level fluctuations.

URS marked a survey reference point on the top of the well riser. Water level recordings will be made with respect to this reference mark. All risers and screens were wrapped in plastic during transport to the site and prior to installation in the borehole.

A sand pack was installed around well screens to a depth extending two to three feet above the top of the screen. During installation of the sand pack, the augers were withdrawn in small increments so as to avoid disturbing the sand pack. URS field personnel recorded the amount of sand used. A weighted fiberglass tape was used to measure the top of the sand pack and detect bridging of the sand pack material. If bridging was detected it was corrected prior to the addition of more filter pack material. If a two-foot long PVC sump was installed into the weathered bedrock at an overburden monitoring well due to the presence of NAPL in the soil, then the sump was sealed to the borehole with bentonite. The bentonite seal will prevent any NAPL from the weathered bedrock to preferentially migrate and collect around sump in the weathered bedrock. A 24-inch thick (minimum) seal of bentonite pellets was placed over the sand pack and hydrated. For shallow monitoring wells, where the top of the screen is above the water table, hydration of the bentonite clay pellets was accomplished using distilled or potable water.

A bentonite-cement grout consisting of approximately seven pounds of powdered bentonite per 94-pound sack of Portland cement, and not more than six gallons of clean water per 94-pound sack of cement, was introduced into the borehole annular space by injection under pressure using a tremie pipe. The grout was allowed to set and cure for at least 48 hours before commencing well development or other activities, which might disturb the seal.

Shallow Bedrock Monitoring Well Construction

At the shallow bedrock monitoring well locations, single-cased wells were installed using four or six-inch diameter (overburden) casing. The screened interval for the shallow bedrock monitoring wells are either open hole or two-inch diameter screens (double-cased well). Drilling through the overburden was conducted using 8-1/4-inch ID HSAs with continuous split spoon sampling. Continuous split-spoon samples will be collected in the overburden, described by a field geologist, and field screened for the presence of NAPLs and VOCs. At each well cluster, the overburden was continuously sampled and logged at only the deepest well location. At the well locations where soil samples were not collected, the overburden was drilled using HSAs equipped with a bottom plug or air rotary drilling tools (roller bit or air hammer).

A 7 7/8-inch air or wash-rotary bit was be used to install a rock socket, a minimum of two feet into the bedrock. Then, the four-inch diameter schedule 40 PVC or six-inch diameter steel casing was installed into the shallow bedrock to seal off the overburden and upper bedrock. The casings were equipped with a bottom plug to prevent cross contamination from the overburden or upper bedrock. Prior to lowering casing into the borehole, the lower portion of the borehole was filled with cement bentonite grout. The casings were either threaded or welded together in ten to 20 foot long sections. As the casing was lowered into the borehole, potable water was added to the inside of the casing in order to displace the air inside so the casing would sink. The annular space between the outside of the casing and the borehole walls was sealed with cement-bentonite grout.

After the grout had been allowed to cure for at least 48 hours, bedrock was drilled using HQ (3.75-inch nominal diameter) core sample tools or a 3 7/8 or 5 7/8 inch diameter wash roller bit to the desired total depth.

In addition to fracture size and orientation from each bedrock core run, URS also calculated and recorded a Rock Quality Determination (RQD). The RQD is typically most useful for geotechnical purposes (i.e., foundation stability), however, it is routinely used for evaluating the rock quality for environmental purposes. The RQD is calculated by measuring the total length of all sound pieces of core four or more inches long, dividing this total length by the length of the core run, and multiplying by 100 to convert to a percent. When considering breaks in the recovered rock core, mechanical breaks are treated as sound rock. Higher RQDs correspond to higher rock quality and more competent rock.

Based on the observations from the bedrock core, the well remained open hole, or the boring was reamed out to allow for construction of a two-inch diameter monitoring well. If a monitoring well screen was installed, then the well construction included a two-foot sump (constructed of a riser with a bottom cap). The two-foot long sump was sealed to the borehole using bentonite. Furthermore, if well casing and screen were installed, the annulus between the well screen and the borehole was filled with a sand pack. A minimum of a two-foot thick bentonite seal was placed above the sand pack. The remaining portion of the annulus, above the bentonite seal, was filled with cement-bentonite grout.

Deep Bedrock Monitoring Well Construction

Deep bedrock wells were single, double, triple or quadruple-cased monitoring wells and installed in the competent bedrock. The goal for the deep bedrock monitoring wells was to set the screened or open hole portion on the monitoring well beneath any NAPL bearing zones, resulting in "clean" (NAPL free) wells.

These monitoring wells were drilled by first sealing off the overburden material with either a permanent steel or PVC casing grouted in place, or a temporary steel casing hammered into the bedrock to create a temporary seal. Both the permanent and temporary casings were advanced a minimum of two feet below the

bedrock surface. Temporary casings were only used in locations were NAPLs were not encountered in the overburden.

After the grout had cured for at least 48 hours, the bedrock was cored to the target depth. Bedrock core samples were collected using HQ, NQ, or AX core sampling tools to evaluate the bedrock and the presence of NAPL in the bedrock.

At selected boreholes, packer testing was typically performed at twenty-foot intervals in order to evaluate groundwater yield and the presence or absence of NAPLs. Groundwater samples for laboratory analysis were collected from some of these intervals.

After a twenty-foot long section of bedrock was cored, the HQ core pipe was removed from the core-hole and the packer testing apparatus was lowered in to the hole. The packer testing apparatus consisted of a four-foot long by 3.5 inch outside diameter inflatable stainless steel and rubber packer attached to two-inch PVC and an air-line for inflating the packer. Ten-foot sections of PVC riser were threaded onto the packer as it was lowered into the corehole by the drill rig's wire line winch. The packer was lowered to the top of the 20-foot interval to be tested and the rubber exterior of the packer was inflated with compressed air. This secured and sealed the packer to the inside of the corehole, so the zone beneath the packer was isolated.

A Grundfos® Redi-flo II submersible pump equipped with new 0.5 inch inside diameter polyethylene tubing was lowered inside the two-inch PVC riser through the packer and to the bottom of the corehole. The pump was turned on to a steady flow rate. The water level draw down was monitored with a water level indicator. If the interval was not pumped dry or if NAPL did not enter the packer testing interval, a groundwater sample was collected directly from the tubing after three times the amount of standing water in the tested interval was removed. If the interval was pumped dry, recovery was monitored with a water level indicator. Once a sufficient amount of water entered the interval, the pump was turned back on to collect a groundwater sample. In some cases the pump was removed from the core hole after the interval was pumped dry. In these cases a water sample was collected with a disposable polyethylene bailer. If, after pumping the interval dry and waiting for approximately 20 to 30 minutes, there was no groundwater

recharge, the interval was considered 'dry' and no samples were collected. If NAPL entered the packer testing interval, no samples were collected.

Once the packer test was completed, the PVC, packer, pump and tubing were removed. The PVC piping was set aside and steam cleaned. The packer and pump were decontaminated with a non-phosphate detergent wash and water rinse. The tubing was disposed in a roll-off container.

The final depth of each well was established based on the observations from the packer tests and bedrock cores, including RQD determinations in the field.

When NAPL was encountered during coring, the borehole was cored a minimum of 20 feet past the NAPL bearing zone. The borehole was then reamed using an appropriately sized (a minimum diameter of 2 inches larger than the casing diameter that was to be set) wash rotary bit. After reaming, the borehole was sealed off by pressure grouting a carbon steel or PVC casing in place with a bentonite-cement grout mixture. After the grout cured for at least 48 hours, bedrock coring resumed to the target depth or at least 20 feet past any signs of NAPL. Where NAPL was encountered, the same reaming casing and coring procedures as described above were performed until the vertical extent of the NAPL was delineated. This process of coring, reaming and setting casings resulted in double triple and one (RH-1D) quadruple cased monitoring wells

Where DNAPL was not visible in the bedrock cores, the boring was advanced to the desired depth. After completing coring, the borehole was reamed using a 5 7/8 inch diameter wash rotary bit to the total cored depth of the borehole. A four-inch casing with a mechanical doughnut style packer at the base was then installed to the desired depth above the bottom of the borehole and grouted in place. The purpose for the mechanical packer is to hold the casing at the desired depth and to create a shelf seal for the grout.

All wells were completed with protective stickup risers or flush-mounted roadboxes. For stickup wells, a steel outer protective riser with a hinged, lockable cover was installed in the grout to a depth of 2.5 feet and equipped with a padlock. For flush-mount wells, a steel protective cover with water-tight seal was installed

in the grout. The integrity of the wells were protected with a new, lockable, sealing, vented well cap with an expandable O-ring which forms an air-tight seal. All locks are keyed alike.

For stickup wells, the drilling subcontractor constructed a (2' x 2' x 0.5') concrete apron around each well. Concrete aprons are sloped to promote runoff away from the well. For the flush-mount wells, the space around the flush-mount road box was filled with concrete and sloped to promote runoff away from the well.

Quality Control Requirements for drilling are described below. Drilling procedures did:

X Prevent cross-contamination;
X Minimize the disruption of existing conditions;
X Minimize long-term impacts to adjacent water-bearing zones; and
X Ensure worker safety.

Cuttings were containerized in Department of Transportation (DOT) approved 55-gallon drums or in an approved lined roll-off container and disposed of in accordance with all relevant regulations. Drilling fluids were containerized in polyethylene holding tanks for off-site disposal. The drums, roll-off and tanks were labeled, staged on-site, and subsequently removed for proper off-site disposal by NYSEG.

Drilling tools were steam cleaned between each drilling location to prevent cross-contamination. Decontamination was performed on the temporary decontamination pad that was constructed in an area specified by the client. In some cases split-spoon samplers were cleaned near the drilling rig, in a designated area equipped with large buckets or other containers capable of containing the decontamination water. All decontamination water was subsequently containerized for proper off-site disposal.

1.3.2 Well Development

This section describes the groundwater well development procedures and quality control requirements.
EQUIPMENT:

X Centrifugal, Waterra inertial, or submersible pump;

X Air lift purging apparatus

X High density polyethylene (HDPE) tubing;

X Foot valves;

X Surge blocks;

X Generator and extension cords;

X ASTM Type II or analyte-free distilled water;

X Water level indicator;

X Five-gallon bucket;

X Fifty-five gallon drums;

X Polyethylene sheeting; and

X Well development record and field notebook.

Well development began no sooner than 48 hours after grout placement and was accomplished through a combination of surging and high volume pumping using a centrifugal, Waterra, or submersible pump.

Development of overburden wells began by lowering submersible pump equipped with polyethylene tubing to the bottom of the well. Approximate flow rate, water color, appearance, odors, sheens or presence of NAPLs, and water level were recorded on a well development log. The position of the pump intake was raised and lowered across the screened interval to remove sediment and drilling fluids from the sand pack.

Development of bedrock wells began by lowering high density polyethylene tubing attached to a Grundfos Redi-Flo II submersible pump, Waterra inertial or air lift system to the bottom of the well. The pump was started and approximate flow rate, water color, appearance, odors, sheens, or presence of NAPLs, and water levels were recorded on a well development log. The position of the pump intake or tubing was raised and lowered across the open interval to remove any sediment and drilling fluids from the formation.

Development was continued until three to five well volumes were removed, the well was pumped dry or until the discharged water contained no visible particles or turbidity. Well development procedures were documented in the field notebook or on a well development record.

The development water from each well was containerized and stored on-site in DOT-approved 55-gallon drums or a holding tank for later off-site disposal in accordance with all relevant regulations.

1.3.3 Well Surveying

The locations and elevations of all new wells were surveyed by a New York licensed surveyor, using a United States Geodetic Survey benchmark as a datum. NYSEG provided surveying services for this project. The survey data was essential for construction of potentiometric maps from which groundwater gradients were determined. The geographic location or horizontal survey measurement was surveyed to an accuracy of one foot.

A reference point was marked on the top of the well riser at the time of construction. The elevation of the well riser was surveyed to the reference point, and all water level recordings have been made with respect to the reference point. The elevation of the reference mark at the top of the well riser on all monitoring wells was surveyed to the nearest 0.01 foot. The ground elevation at the base of each well was surveyed to an accuracy of 0.01 foot.

The surveyor provided tabular summaries of the vertical elevations and horizontal coordinates of the boring locations, benchmarks, and other reference points as specified in the work plan. The survey data was used to update the existing computer-aided design (CAD) base map that depicts boring locations, samples, and other reference points.

1.4 MANUAL COLLECTION OF SURFACE SOIL SAMPLES

Surface soil samples (0 to 2-inches below ground surface) were collected using hand augers and stainless-steel trowels. In some cases, the surface soil samples were collected from two-inches beneath the vegetative cover. The following section describes the equipment and procedures for soil sample collection with a hand auger or stainless-steel trowel.

EQUIPMENT:

X Hand auger with stainless-steel scoop or stainless-steel hand trowel;
X Clean, airtight soil sampling jars to store samples;
X Photo-ionization detector (PID); and
X Field soil boring log or field notebook.

The trowel or hand auger were decontaminated, examined for cleanliness, and checked for defects or any need of repair. Decontamination procedures are described in Section 1.11. A description of the sampling area from which the sample was taken, and other pertinent sample information was recorded on a field soil boring log or in a field notebook.

PROCEDURES:

Surface soil samples were either scooped up with a trowel and put into the sample jars or when the hand auger was used, the sample was scooped from auger into the sample jars using a trowel. If the soil was analyzed for VOCs, an aliquot of soil was immediately transferred into the VOC sample containers. The VOC sample containers were completely filled in order to minimize head-space in the containers. A second aliquot of soil was immediately retained for head-space analysis using a PID. The remaining sample containers were then filled (grab samples).

Calibration of the PID and more detailed head-space analysis procedures are described in Section 2.2.4.1. The rationale behind this sequence of procedures (i.e., collecting a sample first, and then screening) was to minimize the loss of VOCs from samples that will be sent to a laboratory for analysis.

If a homogenized sample was needed for non-volatile constituent analysis, additional soil was placed in a clean stainless-steel bowl. After removal of any stones, large twigs, or other vegetation, the sample was thoroughly homogenized by mixing the sample in the bowl with a stainless-steel spoon. The sample was then quartered in the bowl and each quarter mixed separately, before finally mixing the entire sample again. The sample was then placed in sample containers using a trowel for non-volatile constituent analysis. This type of sample, defined as a homogenized sample, was not analyzed for VOCs.

The field observations and sample details were recorded in a field notebook. Sample labels were filled out away from the sample bottles whenever possible. All soil sample locations were marked on the ground. Identification materials and markings, lasted until the locations were surveyed.

To prevent cross-contamination of samples, the field personnel wore disposable gloves when collecting and handling samples. The gloves were changed between samples. The hand augers and stainless-steel hand trowels were decontaminated between samples.

1.5 GROUNDWATER LEVEL MEASUREMENTS

After the new wells were developed, the new wells and the existing and accessible wells at the site were gauged using an electronic water level meter or interface probe to obtain water level elevations. The water level data was used to further refine the groundwater flow regime beneath the site.

The depth to groundwater in the new and existing wells was measured using an electronic interface probe (i.e., Model P-1 Solinst or equivalent). The electronic interface probe was used to detect LNAPL in the wells (Section 1.6). Groundwater levels were measured in all monitoring wells using the following procedures:

1. Verify the identification of the monitoring well.
2. Observe the wellhead for signs of deterioration. Record observations.
3. Identify the surveyed elevation point on the well. If one does not exist, create a mark using a permanent ink marker. This mark was the measuring point for subsequent rounds of water level measurements.
4. Slowly lower the electronic water level indicator probe into the well.
5. When the water level indicator contacts groundwater, note the point on the water level indicator as referenced by the measuring point on the well.
6. Record the water level to within 0.01 foot in the field notebook and/or gauging form.
7. Retrieve the water level indicator and re-lock the well.
8. Decontaminate the water level indicator after each use with an Alconox/distilled water wash followed by a distilled water rinse.

The order of gauging was based on the known level of contamination in the well. The clean wells were checked first. The gauging data was recorded on a gauging form.

1.6 CHECK WELLS FOR NAPL

All new and existing monitoring wells were checked for the presence of NAPL. After the newly installed wells were allowed to equilibrate for one to two weeks following development, the depth to water in each existing and newly installed well was measured using the procedure described in Section 1.5. Wells in which NAPL was observed during drilling were monitored for the presence of NAPLs using a dedicated chain and cotton or nylon string. The chain was lowered to the water surface and retrieved to check for the presence of LNAPLs. If LNAPLs were observed the chain was decontaminated using a biodegradable degreaser. In each well that contained NAPL the thickness was monitored using an electronic interface probe. In wells where NAPL was observed, checks were continued either weekly or biweekly.

The procedure for detecting LNAPL using a oil/water interface probe is described below.

1. Verify the identification of the monitoring well.
2. Observe the wellhead for signs of deterioration. Record observations.
3. Identify the surveyed elevation point on the well. If one does not exist, create a mark using a steel file. This mark will be the measuring point for subsequent rounds of water level measurements.
4. Slowly lower the oil/water interface probe into the well.
5. When the oil/water interface probe contacts the light phase and air interface, note the point on the oil/water interface probe as referenced by the measuring point on the well.
6. Record the level to within 0.01 foot in the field notebook or gauging form.
7. Continue to lower the probe through the light phase layer. Record the depth to the water level in the field notebook.
8. Retrieve the oil/water interface probe and re-lock the well.
9. Decontaminate the oil/water interface probe after each use with a Alconox/distilled water wash followed by a distilled water rinse.

1.7 GROUNDWATER SAMPLING PROCEDURES

Upon completion of the gauging event, all new wells and existing wells were sampled. The upgradient and background wells were purged and sampled before downgradient wells. Prior to purging a well, the presence or absence of NAPLs was evaluated by using the procedures described in Section 1.6. Wells that contained NAPLs were not sampled.

Groundwater sampling procedures that were followed at the site to obtain representative groundwater samples from the existing wells, and proposed monitoring wells are described below.

1.7.1 WELL PURGING AND STABILIZATION

Purging procedures have a great influence on the reliability of groundwater samples, and inconsistent purging can be a source of variability among groundwater analyses. Therefore, purging procedures were standardized as much as possible as described below. Once a specific purging procedure has been used and documented on a well, the same procedure will be used in subsequent purging events, when possible. Waterra hydrolift or Grundfor Rediflo II pumping equipment was used for well purging. The purge water from each well was containerized and stored on-site in holding tanks for later off-site disposal in accordance with all relevant regulations.

Upgradient wells, background wells, and other wells that are considered to be relatively uncontaminated, based on available data, were purged and sampled first, whenever feasible. This practice is intended to guard against cross-contamination from more contaminated wells.

All wells were purged before sampling. A minimum of three and a maximum of six well volumes were purged from those wells that were not purged dry. A well volume is defined as the volume of water within the screen and riser. The volume of water in the well was calculated using the following equation:

V (in cubic feet) = pr^2h or
V (in gallons) = h x (d^2 x 0.0408).

where:

V = volume of water in well;

h = height of the water column in the well in feet. and

d = well diameter in inches

r = well radius in inches

The depth to water was measured to the nearest 0.01-foot. The total depth of the well was determined from well installation logs or by sounding the depth of the well by lowering the water level indicator to the bottom of the well.

The pump or tubing intake was lowered to approximately two feet from the bottom of the well. The purge rate was at a rate equal to or less than 2 gallons per minute (gpm). Once the pumping is started, the flow rate will be checked using a stopwatch and five-gallon bucket. Pumping will continue until three to five well volumes have been removed or until the well is purged dry.

During purging, the pH, conductivity, dissolved oxygen, oxidation-reduction potential and temperature measurements of the water will be monitored continuously using a flow-through cell or equivalent meter. The end of the discharge tubing was connected to the flow-through cell where groundwater is constantly being analyzed by the various monitoring probes prior to coming into contact with air. The field parameter values are displayed on a hand held monitor. Measurements were recorded at consistent intervals on a groundwater sampling data sheet. The stabilization of temperature, pH, and specific conductance during purging increases confidence that samples are representative of the groundwater (Keely and Boateng, 1987).

Criteria for stabilization are as follows:

X Temperature does not vary by more than 2°C between three successive five minute readings.

X pH does not vary by more than 0.1 standard units between three five minute readings.

X Specific conductance does not vary by more than 10% between three five minute readings.

If all three parameters had stabilized after purging three well volumes, purging was considered complete. If any parameter had not stabilized, purging continued until all parameters stabilized or until six well volumes had been purged. Stabilization of dissolved oxygen and oxidation-reduction potential will not be required prior to sampling a well

Turbidity measurements of the purge water were also continuously monitored using a turbidity meter. An attempt was made to stabilize the turbidity of the purge water from each well at a value of 50 nephelometric units (NTUs) or less, prior to sample collection. The turbidity was controlled by decreasing the flow rate. If turbidity stabilized above 50 NTUs at any given groundwater sampling location, this condition was documented on the groundwater sampling data sheet.

URS will followed the calibration procedures for all sampling and monitoring equipment in accordance to the manufacturers instructions.

1.7.2 GROUNDWATER SAMPLING METHODS

This procedure describes steps involved in collecting groundwater samples using dedicated tubing and a hydrolift or submersible pump.

The objectives of the activities covered by this procedure were to:

X Obtain groundwater samples for laboratory and field analysis;

X Ensure that the groundwater samples will be representative of actual groundwater quality;

X Ensure quality control and consistency during sampling; and

X Serve as a means to allow traceability of error(s) in sampling and data recording.

When using a hydrolift pump at wells that were not purged dry, groundwater sampling commenced immediately after purging without turning the pump off, The discharge hose was disconnected or cut off from the flow-through cell prior to sampling to minimize cross-contamination. The groundwater samples were collected using VOC sampling kits compatible with the hydrolift pump. Disposable weighted polyethylene bailers were used to collect the VOC groundwater samples when using a submersible pump.

Containers used for VOC analysis were filled first using bottom-filling, small diameter tubing designed for VOC sampling with the pump, which reduces air bubbles and minimizes agitation so as to prevent aeration. The pumping rate was lowered while VOC vials are being filled.

Groundwater samples for metals analysis included both unfiltered and field filtered samples. At well locations where turbidity was greater than 50 NTUs then the groundwater samples for metals analysis was field-filtered. Filtered samples for analysis were field filtered using a 0.45-micron (µm) in-line disposable filter. The field filtered aliquot for metals analysis was preserved by adding a sufficient amount of concentrated nitric acid to maintain the sample at a pH of less than 2 SU.

The sample containers were wiped dry and each sample container was labeled. The sample number, date, time, location, depth, type of analysis, preservative, and sample collector's name was recorded on the sample label. This information was also recorded on the groundwater sampling data sheet along with a description of the physical appearance of the sample including color, clarity, suspended solids, and odor.

The samples were placed in coolers with sufficient bagged ice or ice packs to maintain a temperature of 4ºC during shipment. Sample vials for VOC analyses were placed in resealable plastic bags prior to placement in the coolers.

1.8 SEDIMENT SAMPLING PROCEDURES

Sediment samples were collected from the Anthony Kill and the Hudson River. Access to the Anthony Kill and the Hudson River was from NYSEG's property or from public access points. Therefore, access agreements from off-site properties were not necessary.

Sediment samples were collected with a stainless steel trowel from the Anthony Kill. Personnel collecting the sediment samples approached the sampling location from the downstream direction. Disposable gloves were worn during collection and handling of the samples. The gloves were changed between samples.

Sediment samples collected from the Hudson River were collected using a vibratory coring subcontractor. The crew accessed the river via an outboard motor boat equipped with front and rear anchors and vibratory sampling equipment. The sediment was sampled using a ten-foot long by three-inch diameter aluminum pipe equipped with Lexan liners. The sampling apparatus was driven into the sediment with a pneumatic vibrator that was attached to the aluminum pipe. After the sampler was driven to the desired depth, the sampler was removed and the liner was cut open. URS personnel described the sediment and placed a portion of the sample into sample jars for laboratory analyses. Disposable gloves were worn during collection and handling of the samples. The gloves were changed between samples. The remaining sediment and other waste was returned to the site and contained for off-site disposal.

All data relating to weather conditions, time of collection, sampling method, field observation, sample location, and analysis was recorded on a field sampling record or field notebook.

1.9 SURFACE WATER GUAGING

Three staff gauges were installed in the portion of the Anthony Kill along the site's northern boundary. The gauges were surveyed by a New York State certified surveyor provided by NYSEG. Surface water levels were gauged during the groundwater level measuring rounds to help evaluate the relationship between surface

water and groundwater at the site. Access to the Anthony Kill was from NYSEG's property. Therefore, access agreements from off-site properties were not necessary.

1.10 QUALITY ASSURANCE SAMPLES

As part of the quality assurance (QA) program, QA samples were prepared and collected to provide control over the collection of environmental measurements and subsequent validation and interpretation of the analytical data. Three types of QA samples were prepared or collected: 1) trip blanks; 2) field (equipment rinseate) blanks; and 3) duplicate samples. Field blanks and duplicate samples were prepared for all sampling parameters. Trip blanks were only analyzed for VOCs when aqueous sampling for VOCs was conducted. The three types of QA samples are discussed in the following sections.

1.10.1 Trip Blanks

The primary purpose of a trip blank is to detect sources of VOCs that might potentially influence VOC concentration values reported in actual samples. Thus, trip blanks serve as a mechanism of control on sample bottle preparation and blank water quality, as well as, sample handling. The trip blank is prepared by the laboratory and travels to the site with the empty sample bottles and back from the site with the collected samples in an effort to simulate sample handling conditions.

Contaminated trip blanks may indicate inadequate bottle cleaning or blank water of questionable quality. The following have been identified as potential sources of contamination:

X Laboratory reagent water;

X Sample containers;

X Cross contamination in shipment;

X Ambient air or contact with analytical instrumentation during preparation and analysis at the laboratory; and

X Laboratory reagents used in analytical procedures.

A trip blank consists of a set of sample bottles filled at the laboratory with analyte-free water. The trip blank and laboratory method blank water must originate from one common source and physical location within the laboratory. Trip blanks were handled, transported, and analyzed in the same manner as the other analytical samples, except that the sample containers for the trip blanks were not be opened in the field. Trip blanks must return to the lab with the same set of bottles they accompanied to the field.

The trip blanks were shipped and analyzed at a frequency of one trip blank per shipment of aqueous samples for VOC analysis. Trip blank sample identification consists of a "TB" followed by the six digit date (i.e.,: TBYYMMDD). Note that trip blanks are not required for solid samples.

1.10.2 Field And Equipment Rinseate Blanks

A field blank is used to test for potential contamination from ambient air. An equipment rinseate blank is used to test for potential contamination from sampling instruments used to collect and transfer samples from point of collection into sample containers. Field blanks were collected at the discretion of the project manager. If re-usable equipment is used, equipment rinseate blanks were collected at a rate of one per 20 samples per matrix. Field and equipment rinseate blanks were collected in the most contaminated area of the site in order to simulate a worst case scenario regarding ambient air contributions to sample contamination.

A field blank is prepared by filling a sample container with analyte-free water from the laboratory. This container is then opened and exposed to the ambient atmosphere in the most contaminated area of the site. After this exposure, the field blank container is sealed and the field blank is then handled, transported, and analyzed in the same manner as the other analytical samples. Field blanks were denoted as "FB" followed by the six digit date (i.e., FBYYMMDD).

Equipment rinseate blanks were prepared by passing laboratory-supplied analyte-free water (or the distilled/deionized water that is used for decontamination) through decontaminated sampling equipment and collecting it in an empty sample container for analysis. Rinseate blanks were denoted with a "RB" followed by the six digit date (i.e.,: RBYYMMDD).

1.10.3 Duplicate Samples

The analysis of blind duplicate samples provides a means of evaluating the relative precision of the sample collection and analytical procedures. An important factor in evaluating the analytical data from sample pairs is the homogeneity of the analyte within the sample matrix. Therefore, whenever possible, one will homogenize an aliquot from a discrete location or interval before the sample and duplicate are collected. However, VOC samples must never be homogenized in order to prevent the loss of VOCs. In general, the handling of VOC samples was minimized to preserve the physical integrity of the VOC fraction. Duplicate samples were prepared for each sample matrix at a rate of one duplicate per twenty samples. Duplicates were designated with "DUP" followed by a six-digit date (ie. DUPYYMMDD).

Duplicates of liquid samples were obtained by alternately filling the sample and duplicate containers with aliquots of liquid collected with the same sampling device. VOC samples and duplicates were collected first in order to minimize the potential for loss of VOCs. After the VOC samples were collected, any liquid remaining in the sampling device was equally apportioned among all the sample containers. Upon retrieval of the next aliquot of liquid, the order in which the sample bottles were filled changed by one increment.

Duplicates of solid samples for VOC analysis were obtained by alternately filling the sample containers for the sample and duplicate for VOC analysis with aliquots collected form the same discrete location or interval. Once samples for VOC analysis have been collected, the sample was thoroughly homogenized. Following homogenization, the sample containers for the remaining parameters were filled.

1.11 SAMPLING EQUIPMENT DECONTAMINATION PROCEDURES

Sampling equipment was decontaminated in the laboratory or the field prior to site use and between sampling locations. The sampling device and equipment decontamination method involved a non-phosphate detergent wash, tap water rinse, distilled/deionized water rinse, air drying, and a second distilled/deionized water rinse.

Drilling tools were steam cleaned between each drilling location to prevent cross-contamination. If steam cleaning did not remove coal tar from the drilling tools or other equipment, then a biodegradeable degreaser (CitruSolv) was sprayed onto the drill tools and a scrub brush was used to help breakdown the coal tar. A tap water rinse followed by another round of steam-cleaning completed decontamination. Decontamination was conducted on the temporary decontamination pad constructed north of the storage and tool house. The decontamination fluids were containerized for proper off-site disposal.

Following well development and prior to sampling, the depth to groundwater in the new and existing wells were measured using an electronic water level meter or interface probe. To avoid cross-contamination between wells, the water level meter or interface probe was decontaminated after each use with an Alconox/distilled water wash followed by a distilled water rinse. The use of dedicated weighted cords to check wells for NAPL precluded the need to decontaminate between wells.

2.0 SAMPLE HANDLING AND CUSTODY

All samples were collected and handled in a manner such that sample agitation, cross-contamination, and contact with the atmosphere is reduced or kept to minimum. Field personnel wore disposable gloves when collecting and handling samples.

Sample chain of custody was initiated by the laboratory with the selection and preparation of the sample containers. To reduce the chance for error, the number of personnel assuming custody of the sample and sample containers was held to a minimum. Personnel involved in the chain of custody and transfer of samples were briefed on the procedures and their purposes prior to the initiation of sampling.

2.1 Field Sample Custody

A Chain of Custody (COC) form accompanied the sample from initial sample container selection and preparation commencing at the laboratory, to the field for sample containment and preservation, through its return to the laboratory.

The Project Manager notified the laboratory of upcoming field sampling activities and the subsequent transfer of samples to the laboratory. This notification included information concerning the number and type of samples to be shipped as well as the anticipated date of arrival. Sample shipping containers (coolers or "shuttles") were provided by the laboratory. The shipping containers were insulated. All sample bottles within each shipping container were individually labeled with an identification label.

All sample bottle labels included the following information:

a. site name;
b. sample number;
c. name of collector;
d. date and time of collection;

e. place of collection;

f. type of sample;

g. sample volume;

h. analyses required; and

i. preservative (if used).

If a sample shipping container was assigned a unique identification number by the laboratory, then this number was recorded on the COC.

Personnel receiving the sample containers checked each cooler for the integrity of the seals. Coolers or shuttles with broken seals were returned to the laboratory, and the sample containers were not used. The receiving personnel broke the seal, inspect the contents for breakage, and record and sign on the chain-of-custody form that the sample containers have been received. A temporary seal was affixed to each cooler until the sample containers were filled.

Sample Designation

Each sample collected was designated using NYSEG's sample identification system. NYSEG's sample identification system allows a unique code (a combination of up to 12 letters and numbers) to be established for every sample collected. By following NYSEG's sample identification system, persons familiar with the system can deduce the project location, the sample media, the depth interval of the sample, the year the well was installed or sample was collected, and the sampling location number from the sample name. NYSEG's sample identification system is described below.

Each surface soil sample was identified by using the following code MESSXY01ZZ where:

ME = Mechanicville Central Avenue site;

SS = surface soil sample;

X = starting depth (inches) of sample interval;

Y = ending depth (inches) of sample interval;

01 = sample collected in 2001; and

ZZ = sample number.

For example, a sample collected from the top two inches (zero to two inches) at surface soil location SS-15 would be coded MESS020115.

For each subsurface soil sample collected from a soil boring location was identified using the following code MESBXXYY01ZZ where:

ME = Mechanicville Central Avenue site;

SB = soil boring;

XX = the starting depth (feet) of the interval from which the sample was collected;

YY = the end depth (feet) of the interval from which the sample was collected;

01 = boring installed in 2001; and

ZZ = the boring number.

For example, a subsurface soil sample collected from 8-10 from soil boring SB-24 would be coded MESB08100124.

Groundwater samples were identified by using the following code MEG@##01ZZ where,

ME = the Mechanicville Central Avenue site;

G = groundwater sample;

@ = location relative to the "source on the site" which is very subjective, but in general U is for an upgradient well, D is for a downgradient well, and C is for a cross-gradient well;

= the depth of the well, SH is for shallow wells, IM is for intermediate wells, and D- is for deep wells;

01 means the well was installed in 2001; and

ZZ is the well number.

For example, groundwater samples to be collected from the two proposed wells MW-10I and MW-10D will be coded MEGCIM0110 for the intermediate well and MEGCD-0110 for the deep well. Groundwater samples collected from proposed overburden monitoring well RH-1S and deep bedrock monitoring well RH-1D were coded MEGCSH01RH1 and MEGCD01RH1.

Each surface water sample was identified using the following code MESW--01ZZ where:

ME = Mechanical Central Avenue site;
SW = surface water sample;
-- = will always be the same in surface water samples because there is no true depth for which the sample is collected;
01 = sample collected in 2001; and
ZZ = the sample number.
For example, a surface water sample collected from surface water sampling location SW-2 would be coded MESW--0102.

This system allows a unique code to be established for every sample collected, even if samples were collected from different depths at the same location. QC samples can be coded using this same system and simply adding a MS or MSD (for matrix spike, or matrix spike duplicate) to the end of the code. Note that during this investigation MS and MSD samples were not collected.

Once the sample containers are filled, the samples were immediately preserved, as required and stored at 4ºC until delivered to the laboratory. Preservation requirements are provided in Table 1. The samples were kept cool at 4ºC using insulated containers containing sufficient ice or ice packs. If ice was used, the ice was double-bagged at a minimum. VOC sample jars were placed in resealable plastic bags prior to placement in coolers. The field sampler indicated sample designation/location number in the spaces provided on the appropriate COC for each sample of water or soil. The COC was signed and placed in the cooler. The cooler was sealed. The samples were delivered to the laboratory no later than 24 hours after sample collection.

If samples were split and sent to different laboratories, a copy of the COC accompanied the replicate sample. The original COC accompanied the sample for the primary laboratory. The "remarks" column of the COC was used to record specific considerations associated with sample acquisition such as: sample type, container type, sample preservation methods, and analyses to be performed. The laboratory maintained on file the completed original forms. Copies are submitted as a part of the final analytical report.

The specific analyses for each sample were outlined in the workplan. Samples were collected according to the procedures in this *FSP*. Samples were hand-delivered or shipped in coolers with sufficient packing material and ice to insure that samples arrived at the laboratory intact, below 4ºC, and within 18 hours of shipping.

2.2 Laboratory Sample Custody

Receipt, storage, and tracking of samples submitted to the laboratory were conducted according to NYSDEC protocol to prevent sample contamination or loss, as well as, the production of invalid laboratory data as a result of sample deterioration or tampering.

3.0 REFERENCES

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TABLE 1

SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS

NYSEG CENTRAL AVENUE FORMER MGP SITE
MECHANICVILLE, NEW YORK

TYPE OF ANALYSIS	SAMPLE VOLUME/CONTAINER	PRESERVATION REQUIREMENTS	MAXIMUM HOLDING TIMES
NON-AQUEOUS SAMPLES			
TCL (EPA Method 8260)	4 oz. Glass jar, Teflon cap	Cool 4 ^{o}C	Analyze within 14 days.
SVOCs (EPA Method 8270, Base/Neutral Extractables)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	Extract within 14 days; analyze within 40 days.
PCBs (EPA Method 8082)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	Extract within 14 days; analyze within 40 days
PPL Metals (EPA Method 6010)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	Analyze within 6 months.
Acid Volatile Sulfide/ Simultaneously Exractable Metals (EPA Method 6010)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	Analyze for most metals within six months Except for Sulfide analyze within 7 days.
Cyanide Total, Amenable (EPA 9012/335.3)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	
Weak and Dissociable Cyanide	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	
Total Phenols (EPA Method 9065/420.1)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	
TOC, Dissolved (EPA 415.2)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	
BTU (ASTM D240)	1-6oz. Glass jar, Teflon cap	Cool 4 ^{o}C	
AQUEOUS SAMPLES			
TCL (EPA Method 8260)	Two (2) 40 ml septa vials, Glass	HCL to pH < 2	Analyze within 14 days.
SVOCs (EPA Method 8270, Base/Neutral Extractables)	1 Liter Glass	Cool 4 ^{o}C	Extract within seven days; analyze within 40 days
PCBs (EPA Method 8082)	1 Liter Glass	Cool 4 ^{o}C	Extract within 14 days; analyze within 40 days
PPL Metals (EPA Method 6010)	32 oz., Plastic	HNO_3	Analyze within 6 months.
Total Phenols (EPA Method 9065/420.1)	500 ml, Glass	H_2SO_4 to pH < 2	
Cyanide Total, Amenable (EPA 9012/335.3)	8 oz., Plastic	NaOH to pH > 12 0.6g ascorbic acid	
Weak and Dissociable Cyanide	8 oz., Plastic	NaOH to pH > 12 0.6g ascorbic acid	
Alkalinity (EPA 310.1)	4 oz., Glass	Cool 4 ^{o}C	
Chloride (EPA 9252/325.3)	32 oz., Plastic	Cool 4 ^{o}C	
TOC, Dissolved (EPA 415.2)	8 oz., Plastic	Cool 4 ^{o}C	

TABLE 1

SAMPLE PRESERVATION AND HOLDING TIME REQUIREMENTS

NYSEG CENTRAL AVENUE FORMER MGP SITE
MECHANICVILLE, NEW YORK

TYPE OF ANALYSIS	SAMPLE VOLUME/CONTAINER	PRESERVATION REQUIREMENTS	MAXIMUM HOLDING TIMES
Nitrate (EPA 9200/353.1)	8 oz., Plastic	H_2SO_4	
Nitrite (EPA 1983/354.1)	32 oz., Plastic	Cool 4 ^{o}C	
Sulfate (EPA 9038/375.4)	32 oz., Plastic	Cool 4 ^{o}C	
sulfide (EPA 9030/376.2	8 oz., Plastic	NaOH / Zinc Acetate	
Dissolved Iron (EPA 200.7)	8 oz., Plastic	Cool 4 ^{o}C	
Ethane, Ethene, Methane (GC)	40 ml (2 per sample), Glass	Cool 4 ^{o}C	
Ignitability (EPA 1010)	All of these parameters can be done on the same sample in one 32oz. Plastic container	Cool 4 ^{o}C	
Corrosivity (SM16 203)			
Reactivity (SM 7.3.2.1.)			

Notes:
VOCs indicates Volatile Organic Compounds
SVOCs indicates Semivolatile organic compounds
PCBs indicates polychlorinated biphenyls
PPL indicates Priority Pollutant Metals (Al, Sb, As, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, V, Zn)
Selected samples may be initially processed using the Toxicity Characteristic Leachate Procedure (TCLP) (Method 1311).

APPENDIX E
BORING LOGS, MONITORING WELL CONSTRUCTION LOGS, AND BEDROCK CORE LOGS

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	89.89 NAVD88
BORING NO.:	SB-1	**BORING LOCATION:**	N 1484977.30 / E 709272.81
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	12 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0		Light brown fine SAND, damp.	0-2	48/28	NA	0		Soil Boring: No Well Installed.
		Black sand and coal fragments, mothball odor, damp.	2-4			1		
5 / 85		Light brown-grey clayey silt, trace gravel, brown wood chips, mothball odor, damp.	4-6	48/24	NA	0		
			6-8			0		
			8-10	48/44	NA	0		
10 / 80		Light grey gravelly SAND, very tight, dry, moist at bottom. Refusal at 12'.	10-12			0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.49 NAVD88
BORING NO.:	SB-2	**BORING LOCATION:**	N 1484936.17 / E 709266.91
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, black cinders, coal, little gravel, damp.	0-2	48/24	NA	0		Soil Boring: No Well Installed.
		Light-brown to brown fine SAND, trace bricks, damp.	2-4			1		
5 / 85		Red brick fragments.	4-5	12/8	NA	0		
		Dark brown medium SAND, some coal, damp.	4-6	48/44	NA	1		
		Light brown medium-fine SAND, some gravel, moist.	6-8			1		
		Light brown-grey gravelly SAND, dry, rock fragments in nose of barrel. Refusal at 8'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.78 NAVD88
BORING NO.:	SB-3	**BORING LOCATION:**	N 1484912.44 / E 709264.75
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Light brown to black medium SAND, some brick fragments and coal, dry.	0-2	48/34	NA	0		Soil Boring: No Well Installed.
		Light brown medium to fine SAND, trace fine gravel, damp.	2-4			0		
5 / 85		Light grey to brown SAND and GRAVEL, dry, very tight. Refusal at 8'.	4-6	48/40	NA	0		
			6-8			0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	88.82 NAVD88
BORING NO.:	SB-4	**BORING LOCATION:**	N 1484965.92 / E 709319.96
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	10 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Light brown to brown SAND and GRAVEL, some coal fragments, trace glass, dry.	0-2	48/34	NA	0		Soil Boring: No Well Installed.
		Brown SAND, wood fibers, strong mothball odor, little coal fragments, moist.	2-4			6.8		
5		Brown medium SAND, trace coal fragments, grades to silty clay.	4-6	48/36	NA	25		
		Grey clayey SILT, trace glass.	6-8			4.3		
10 / 80		Light brown to grey gravelly SAND, wet. Refusal at 10'.	8-10	24/21.7	NA	3.1		

LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	88.57 NAVD88
BORING NO.:	SB-4A	**BORING LOCATION:**	N 1484956.85 / E 709343.72
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 85 5		Gravelly SAND, some brick.	0-2	48/30	NA	1		Soil Boring: No Well Installed.
		Black coal fragments, slight odor.						
		Brown medium SAND, little gravel, odor.	2-4			0		
		Brown wood chips, strong napthalene odor.	4-5	12/12	NA	3.1		
		Same as 1.5' to 2.5'. Refusal at 5'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	89.45 NAVD88
BORING NO.:	SB-5	**BORING LOCATION:**	N 1484924.27 / E 709310.61
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0		Light brown medium to fine SAND, trace gravel.	0-2	48/36	NA	1		Soil Boring: No Well Installed.
		Black medium SAND and coal, dry.						
85		Brown medium SAND, trace silt and medium gravel, dry.	2-4			0		
5		Light brown medium SAND, little gravel, damp.	4-6	48/48	NA	0		
		Light grey to light brown sandy GRAVEL, tight, dry. Refusal at 8'.	6-8			1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	88.17 NAVD88
BORING NO.:	SB-6	**BORING LOCATION:**	N 1484947.36 / E 709367.73
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 85 5		Light brown medium SAND, trace brick, dry.	0-2	48/34	NA	0		Soil Boring: No Well Installed.
		Black coal fragments, some sand, damp.	2-4			0		
		Light brown fine SAND, some ash-like material, moist.	4-6	48/26	NA	0		
		Light brown-grey stiff clay, trace fine gravel, moist.	6-8			0		
		Light brown-orange medium SAND, little gravel, wet.						
		Light brown-grey stiff CLAY, trace gravel, moist to dry.						
		Light grey gravelly SAND, tight, dry. Refusal at 8'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	89.53 NAVD88
BORING NO.:	SB-7	**BORING LOCATION:**	N 1484905.05 / E 709353.77
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

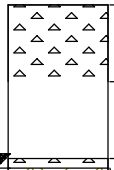
Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, little gravel, trace brick fragments, trace wood chips, coal fragments at 3'.	0-2	48/30	NA	1		Soil Boring: No Well Installed.
			2-4			1		
5		Grey gravelly SAND, wet.	4-6	48/30	NA	1		
		Grey silty LOAM grading to CLAY with gravel.	6-8			0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	87.50 NAVD88
BORING NO.:	SB-8	**BORING LOCATION:**	N 1484953.40 / E 709414.79
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, some coal fragments, damp.	0-2	48/14	NA	1		Soil Boring: No Well Installed.
			NA			NA		
5		Same as 0-2', trace ash-like material.						
		Grey medium GRAVEL, wet. Refusal at 7'.	4-7	36/12	NA	1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	88.19 NAVD88
BORING NO.:	SB-9	**BORING LOCATION:**	N 1484919.12 / E 709406.05
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0		Light brown medium SAND, trace gravel, grey gravelly sand, wood fibers, moist.	0-2	48/13	NA	1		Soil Boring: No Well Installed.
85			NA			NA		
5		Grey gravelly SAND, very tight. Refusal at 8'.	4-6	48/48	NA	0		
			6-8			1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	86.50 NAVD88
BORING NO.:	SB-10	**BORING LOCATION:**	N 1484949.79 / E 709457.36
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	10 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium to coarse SAND, little gravel, trace roots, moist.	0-2	48/30	NA	0		Soil Boring: No Well Installed.
		Dark brown-black medium SAND, little coal fragments.	2-4			0		
		Light grey-white ash-like material, musty odor, damp.	4-6	48/39	NA	0		
5 / 80		Same as 1.25' to 2.5'.						
		Dark green SAND, moist. Odor and NAPL.	6-8			7.1		
		Dark green clayey SILT, slight odor, trace roots, damp.	8-10	24/24	NA	12.4		
10		Same as 6' to 7', slight odor.						
		Grey broken SHALE, wet. Slight odor and trace NAPL. Refusal at 10'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.32 NAVD88
BORING NO.:	SB-11	**BORING LOCATION:**	N 1484860.80 / E 709422.92
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 90		Brown medium SAND, trace gravel.	0-2	48/36	NA	0		Soil Boring: No Well Installed.
		Brown-Dark brown medium SAND, some gravel, trace coal fragments, moist layers, mostly dry.	2-4			0		
5 — 85		Grey-brown sandy GRAVEL, slight petroleum odor with depth, grey rock fragments in nose at 7'. Refusal at 7'.	4-6	36/36	NA	1.2		
			6-7			3.7		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.63 NAVD88
BORING NO.:	SB-12	**BORING LOCATION:**	N 1484824.73 / E 709411.15
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	9 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, little coal fragment layers, some gravel, moist.	0-2	48/36	NA	0		**Soil Boring: No Well Installed.**
			2-4			0		
5 / 85		Same as 0-4', wet, clayey brown SILT in nose of barrel.	4-8	48/NA	NA	0		**Macrocore sample spilled out of barrel.**
		Grey weathered SHALE, trace sand, wet. Refusal at 9'.	8-9	12/12	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	87.67 NAVD88
BORING NO.:	SB-13	**BORING LOCATION:**	N 1484854.69 / E 709488.08
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	10 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, little gravel, trace brick, moist.	0-2	48/23	NA	4.1		Soil Boring: No Well Installed.
		Brown medium to coarse SAND, some gravel, damp to moist.	2-4			0		
5 / 80		Same as 0.7' to 4', wet.	4-6	48/24	NA	0		
			6-8			0		
10		Dark grey gravelly SAND, damp to dry, grey silty shale in nose. Refusal at 10'.	8-10	24/24	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.87 NAVD88
BORING NO.:	SB-14	**BORING LOCATION:**	N 1484872.26 / E 709508.06
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	9.3 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium to coarse SAND, some gravel, damp.	0-2	48/26	NA	0		Soil Boring: No Well Installed.
		Black coarse SAND, trace gravel.	2-4			5.3		
5 / 80		Brown medium to coarse SAND, trace gravel, black staining and slight odor at 3.3' to 4.0'.	4-6	48/48	NA	12.5		
		Grey clayey GRAVEL, stained black, moist, NAPL in soil at 3.2' to 3.5'.	6-8			7.1		
		Grey-brown sandy GRAVEL, trace silt, very tight, slight odor, dry.	8-9.3	16/16	NA	17.7		
		Grey weathered SHALE, sheen, odor, NAPL, wet. Refusal at 9.3.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	87.12 NAVD88
BORING NO.:	SB-15	**BORING LOCATION:**	N 1484872.26 / E 709508.06
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, some gravel, moist.	0-2	48/36	NA	5.3		Soil Boring: No Well Installed.
		12" of Brown-black fine SAND and GRAVEL, dry, little ash-like material, 3" light brown fine sand.	2-4			4.4		
5 / 80		Light brown fine SAND, ash-like material and GRAVEL, dry.	4-6	48/36	NA	23.1		
		Light brown-grey sandy GRAVEL, wet.	6-8			6.2		
		Light brown-grey clayey SILT, slight odor, moist.						
		Brown fine SAND, damp, silty sand and shale in nose.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.04 NAVD88
BORING NO.:	SB-16	**BORING LOCATION:**	N 1484884.61 / E 709629.94
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	14 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 85		Brown medium SAND, little gravel, moist.	0-2	48/24	NA	7.1		Soil Boring: No Well Installed.
		Grey medium GRAVEL, dry.						
		Brown medium SAND, some gravel, little ash-like material, black stained in last 3", moist.	2-4			5.3		
5 — 80		Brown medium SAND, some gravel, some ash-like material.	4-6	48/14	NA	0		
		Light grey SILT, some coarse sand, moist.	6-8					
		Dark gray SILT AND SAND, little ash-like material, heavy sheen and odor, some NAPL.	8-10	48/12	NA	16.8		
10 — 75			10-12					
		Dark gray SILT, some shale, odor, sheen, wet to dry at 13'. Refusal at 14'.	12-14	24/12	NA	NA		

LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.72 NAVD
BORING NO.:	SB-17	**BORING LOCATION:**	N 1484845.66 / E 709622.11
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	11 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, little gravel, trace brick fragments, moist to damp.	0-2	48/36	NA	9.1		Soil Boring: No Well Installed.
		Black stained SAND and wood chips, strong purifier odor, damp.	2-4			95.8		
5 / 80		Black stained SAND and wood chips, strong odor, NAPL, damp.	4-6	48/36	NA	57.4		
		Grey-green clayey SILT, odor, trace NAPL.	6-8			84.1		
		Grey-green clayey SILT, odor, little NAPL.						
10 / 75		Grey silty SHALE, wet. Refusal at 11.0'.	8-11	36/36	NA	14.1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	91.49 NAVD88
BORING NO.:	SB-18	**BORING LOCATION:**	N 1484743.12 / E 709630.60
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	16 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace gravel, damp.	0-2	48/30	NA	0		Soil Boring: No Well Installed.
		Brown-black medium SAND and GRAVEL, some coal fragments and ash-like material 1.7' to 2.0', moist, odor.	2-4			0		
5 / 85		Gray-brown SAND AND GRAVEL, dry.	4-6	48/36	NA	0		
		6" Gray-brown ash-like material, trace SAND, moist. 30" White ash-like material, moist, soft.	6-8			0		
10 / 80		Brown medium SAND, some gravel, trace brick and wood, moist to wet. Bottom 6" stained with black NAPL.	8-10	48/24	NA	9.1		
			10-12			14.1		
		Grey silty CLAY, trace gravel, wet. Saturated with NAPL.	12-14	48/24	NA	NA		
15			14-16			NA		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	88.31 NAVD88
BORING NO.:	SB-19	**BORING LOCATION:**	N 1484790.67 / E 709518.16
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	9 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, little gravel, moist.	0-1	48/10	NA	0		Soil Boring: No Well Installed.
			1-4			NA		
5 / 80		Brown medium SAND, trace brick, wet.	4-6	48/38	NA	0		
		Grey weathered SHALE fragments, some sand, trace clay, damp to wet. Refusal at 9'.	6-8			0		
			8-9	12/6	NA	4.1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.24 NAVD88
BORING NO.:	SB-20	**BORING LOCATION:**	N 1484791.69 / E 709468.63
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	10 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some gravel, trace roots, moist.	0-2	48/24	NA	11.2		Soil Boring: No Well Installed.
		Dark brown medium SAND, little gravel, moist.	2-4			6.2		
		Light brown to brown medium SAND.	4-6	48/24	NA	5.4		
5 / 85		Dark brown medium SAND, some gravel, trace light brown SAND, wet.	6-8			1.2		
		Light brown to gray SILT, trace gravel, moist to wet.	8-10	24/24	NA	37.2		
		Brown silty GRAVEL, wet.						
10		Gray silty SHALE pieces, trace fine sand, wet. Refusal at 10'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	86.45 NAVD88
BORING NO.:	SB-21	**BORING LOCATION:**	N 1484835.35 / E 709566.59
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	11 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown, medium SAND, some gravel, damp to wet.	0-2	48/30	NA	0		Soil Boring: No Well Installed.
			2-4			0		
5 / 80		Dark brown medium SAND, trace brick, wet.	4-6	48/24	NA	0		
			6-8			0		
10		Dark brown medium to coarse SAND, slight odor bottom 6" to 8", wet.	8-11	36/36	NA	7.4		
		Gray silty SHALE, little NAPL odor, wet. Refusal at 11'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.65 NAVD88
BORING NO.:	SB-22	**BORING LOCATION:**	N 1484855.48 / E 709580.59
DATE:	4/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, little gravel, moist.	0-2	48/36	NA	0		Soil Boring: No Well Installed.
		Black medium SAND, some brick, little gravel, trace ash-like material, odor, moist.	2-4			9.1		
5 / 80		Dark grey silty GRAVEL, NAPL, odor, sheen, moist.	4-6	48/48	NA	0		
		Grey brown gravelly SAND, little NAPL, dry, odor.	6-8			25.8		
		Grey silty SHALE.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	84.85 NAVD88
BORING NO.:	SB-23	**BORING LOCATION:**	N 1484896.92 / E 709597.10
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	9 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0		Brown SAND, some brick, moist.	0-2	48/24	NA	5.3		Soil Boring: No Well Installed.
		Brown medium SAND, some medium gravel.						
		Black foundry SLAG.						
5 — 80		Red brick fragments, moist.						
		Ceramic pieces and black paste, NAPL test. Slight odor	6-8	48/36	NA	6.2		
		Grey gravelly SAND, very tight, dry.						
		Grey gravelly SAND, very tight, wet, slight odor. Refusal at 9'.		12/6	NA			

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.04 NAVD88
BORING NO.:	SB-23A	**BORING LOCATION:**	N 1484896.92 / E 709597.10
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	9 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 85		Brown medium SAND. little gravel, wet.	0-2	48/24	NA	5.3		Soil Boring: No Well Installed.
		Grey GRAVEL, some fine sand, dry.	2-4			5.3		
		Black foundry SLAG, and red brick fragments.	4-6	48/20	NA	6.2		
5 — 80		12" Red brick fragments and foundry Slag.	6-8			27		
		Gray silty SHALE. odor, slight signs of NAPL, damp to moist.	8-9	12/12	NA	20.4		
		Same as 6' to 8', sheen, wet. Refusal at 9'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.34 NAVD88
BORING NO.:	SB-24	**BORING LOCATION:**	N 1484903.62 / E 709562.05
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 – 85		Brown medium SAND, little gravel, moist.	0-2	48/30	NA	5.3		Soil Boring: No Well Installed.
		Grey sandy GRAVEL, dry.						
		Black stained sandy GRAVEL, Red brick, dry.	2-4			4.4		
5 – 80		Brown medium SAND, little wood chips, trace gravel, moist to wet at bottom.	4-6	36/36	NA	7.1		
		Grey gravelly SAND, very tight, dry. Refusal at 7'.	6-7			7.1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	85.34 NAVD88
BORING NO.:	SB-24A	**BORING LOCATION:**	N 1484906.51 / E 709562.69
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	6.8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 – 85		Brown medium SAND, trace gravel, damp. Grey rock fragments, dry.	0-2	48/36	NA	2		Soil Boring: No Well Installed.
		Brown medium SAND, some rock and brick fragments.	2-4			5.3		
5 – 80		Ash-like material at 3.0', damp, dry at 4.0'.	4-6	34/34	NA	6.2		
		Brown-grey gravelly SAND, very tight, dry, slight odor at 6.8'. Refusal at 6.8'.	6-6.8			6.2		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	86.93 NAVD88
BORING NO.:	SB-25	**BORING LOCATION:**	N 1484910.18 / E 709472.18
DATE:	4/3/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	7.1 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		0-1.7' Brown medium SAND, some gravel, moist.	0-2	48/36	NA	0		Soil Boring: No Well Installed.
		1.7' to 4' Black medium SAND, some coal fragments, little gravel, damp.	2-4			0		
5 / 80		Black medium SAND, some coal fragments, little gravel, moist to wet.	4-6	37/40	NA	0		
		Same as 4' to 5', slight oily appearance, slight petroleum odor.	6-7.1			2.6		
		Brown-grey fine soft SILT, wet.						
		Brown-black gravelly SAND, dry.						
		Light brown-grey gravelly SAND, dry, tight. Refusal at 7.1'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.36 NAVD88
BORING NO.:	SB-26	**BORING LOCATION:**	N 1484864.39 / E 709342.38
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 90		Brown SAND and gravel, trace concrete fragments, dry.	0-2	48/36	NA	0		Soil Boring: No Well Installed.
		Dark brown SAND with layers of coal, trace brick fragments, layer of wood chips at 12-13", moist.	2-4			0		
5 — 85		Soft black (stained) fine SAND, moist.	4-6			0		
		COAL fragments, some black sand, damp.	6-8	48/40	NA	0		
		Light brown GRAVEL AND SAND, trace wood chips, damp.						
		Light gray-brown GRAVEL AND SAND, very tight, dry.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	90.95 NAVD88
BORING NO.:	SB-27	**BORING LOCATION:**	N 1484896.11 / E 709266.95
DATE:	4/2/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	10 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Light brown medium-fine SAND, black (stained?) at 2.0 feet, little concrete and gravel, dry.	0-2	48/36	NA	0		Soil Boring: No Well Installed.
			2-4			0		
5 / 85		Light grey-light brown medium fine SAND, some fine gravel, dry.	4-6	48/46	NA	0		
		7.3' to 8.7' Light brown CLAY lens in light brown medium SAND, trace clay, moist.	6-8			1		
10		Grey gravelly SAND with rock fragments in nose, dry. Refusal at 10'.	8-10	24/24	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	88.70 NAVD88
BORING NO.:	SB-28	**BORING LOCATION:**	N 1484774.89 / E 709552.97
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	12 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		0-.5' Brown medium SAND AND GRAVEL, damp.	0-2	48/24	NA	0		Soil Boring: No Well Installed.
		0 .5'-1.2' Dark brown medium SAND, some gravel, slight MGP odor, damp to moist.	2-4			16		
5		1.2' -4' Black stained medium SAND, some gravel, strong diesel and MGP odor, moist to wet, NAPL soaked.	4-6	48/18	NA	31		
		Black stained medium SAND, some gravel, strong diesel and MGP odor at 6'-7', moist to wet, NAPL soaked.	6-8			7.0		
80		8-10.5' same as above, wet, NAPL, MGP odor.	8-10	48/48	NA	4.5		
10		10.5'-11.5' gray-brown gravelly sand, dry. MGP odor, red NAPL at bottom.	10-12			7.0		
		11.5' to 12' Brown-grey SHALE fragments, NAPL, MGP odor, wet. Refusal at 12'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	91.55 NAVD88
BORING NO.:	SB-29	**BORING LOCATION:**	N 1484726.94 / E 709624.78
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	15 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace gravel, moist.	0-2	48/40	NA	4.5		Soil Boring: No Well Installed.
		Brown medium SAND, trace ash-like material, trace coal fragments, damp.	2-4			2.0		
5 / 85		Black stained medium-fine SAND, some fine coal fragments, damp.	4-6	48/30	NA	2.9		
		Brown medium SAND, some white and red ash-like material, damp.	6-8			1.2		
10 / 80		Black fine coal fragments, some ash-like material and SAND, damp.	8-12	48/NA	NA	7.0		
		Black stained gravelly SAND, some ash-like material, red NAPL saturated.						
15		Same as 8' to 12'. Refusal at 15'.	12-15	36/NA	NA	7.0		

LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	92.28 NAVD88
BORING NO.:	SB-30	**BORING LOCATION:**	N 1484739.89 / E 709643.02
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	24.8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, areas of black staining and coal fragments, trace brick, damp.	0-2	48/36	NA	3.7		
		White ash, moist.	2-4			3.7		
5 / 85		Brown medium SAND, moist.	4-6	48/30	NA	2.0		
		White ash, some gravel, some black coarse coal fragments, moist.	6-8			2.0		
		Brown medium SAND, some gravel, moist.						
10 / 80		Same as 7' to 8', wet at 9.1'.	8-12	48/18	NA	2.9		
		Same as 8' to 9.1', wet.						
		Same as 9.1' to 11', wet, MGP odor at 12'.	12-14	48/40	NA	20		Soil Boring: No Well Installed.
15 / 75		Black stained GRAVEL, trace silt, some dark red NAPL, wet.	14-16			7.0		
		Grey stained grading to gray-brown SILTY CLAY, moist to damp.	16-18			4.5		
		Brown medium SAND, wet.		48/48	NA			
20 / 70		Grey-brown silty SAND, trace gravel, trace clay, possible NAPL odor.	18-20			3.7		
		BLIND PROBED: Refusal on bedrock at 24.8'.						End of boring 24.8'.

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	91.23 NAVD88
BORING NO.:	SB-31	**BORING LOCATION:**	N 1484747.36 / E 709618.25
DATE:	4/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	20.2 feet	**SURFACE CONDITIONS:**	Gravel

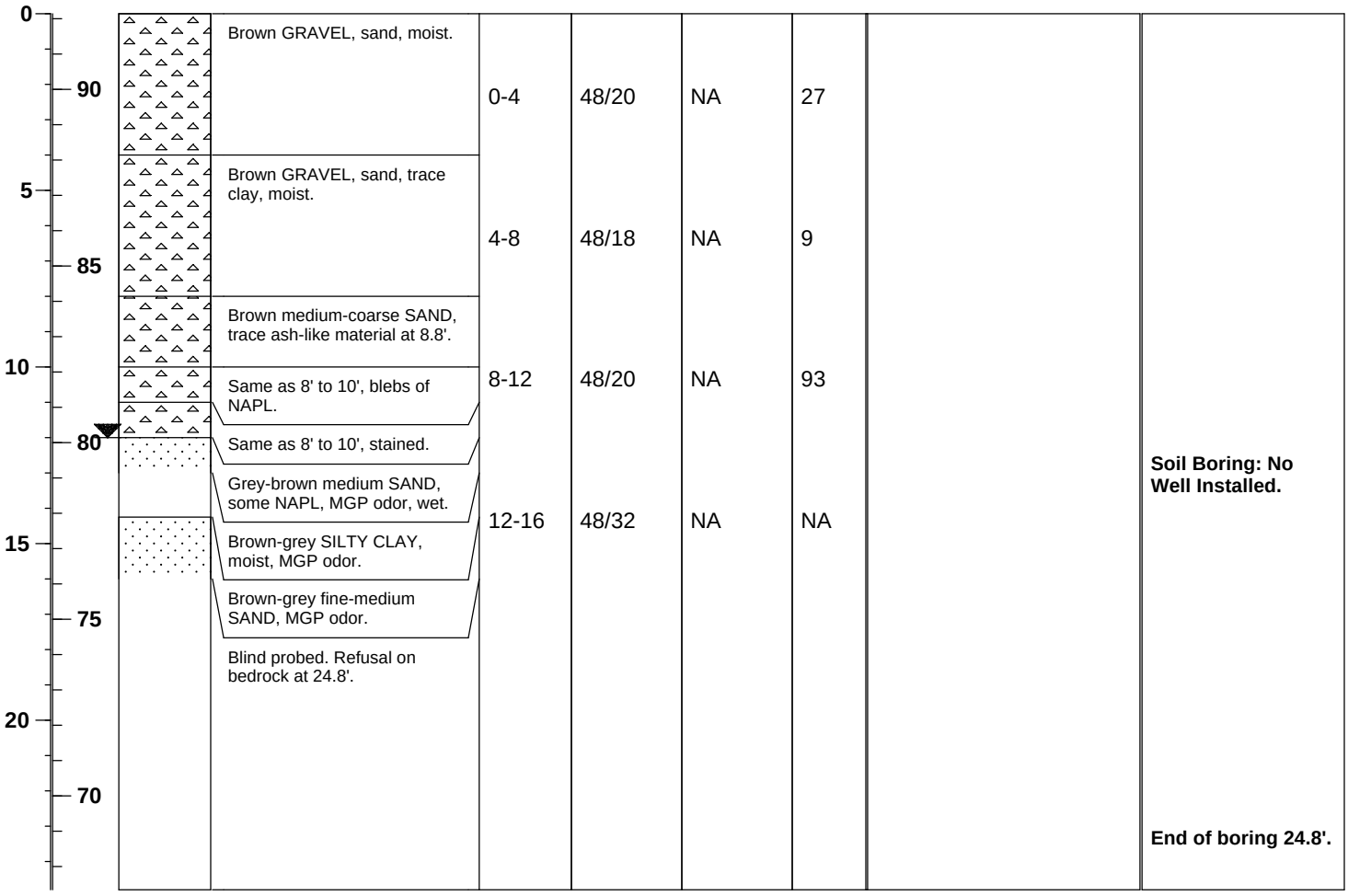
Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some gravel, trace coal fragments at 3.5', moist.	0-2	48/30	NA	2.0		Soil Boring: No Well Installed.
			2-4			2.0		
5 / 85		Brown medium SAND, some gravel, trace brick, moist, wet at 7.5'.	4-6	48/30	NA	2.9		
			6-8			7.0		
		White ash, moist, trace NAPL.	8-10	48/30	NA	105		
10 / 80		Gravelly SAND, saturated with red NAPL.						
		Brown-gray SILTY SAND, trace NAPL at top, trace gravel, moist to damp.	10-12			127		
15 / 75		Recovery lost. Apears to be gray-brown SILTY SAND, trace clay, wet, MGP odor.	12-16	48/NA	NA	48		
		Refusal at 20.2'.						
20			16-20	48/NA	NA	NA		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	92.14 NAVD88
BORING NO.:	SB-32	**BORING LOCATION:**	N 1484751.16 / E 709637.58
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	24.8 feet	**SURFACE CONDITIONS:**	Gravel



Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		Brown GRAVEL, sand, moist.	0-4	48/20	NA	27		
		Brown GRAVEL, sand, trace clay, moist.	4-8	48/18	NA	9		
		Brown medium-coarse SAND, trace ash-like material at 8.8'.						
		Same as 8' to 10', blebs of NAPL.	8-12	48/20	NA	93		
		Same as 8' to 10', stained.						
		Grey-brown medium SAND, some NAPL, MGP odor, wet.						**Soil Boring: No Well Installed.**
		Brown-grey SILTY CLAY, moist, MGP odor.	12-16	48/32	NA	NA		
		Brown-grey fine-medium SAND, MGP odor.						
		Blind probed. Refusal on bedrock at 24.8'.						**End of boring 24.8'.**

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	91.39 NAVD88
BORING NO.:	SB-33	**BORING LOCATION:**	N 1484723.35 / E 709611.74
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	15 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Grey-brown medium SAND, some fine gravel, trace coarse gravel, moist.	0-2	48/24	NA	0		Soil Boring: No Well Installed.
		Black stained medium SAND, some coal fragments, moist.	2-4			3		
5 / 85		White ash-like material, moist.	4-8	48/15	NA	0		
10 / 80		White ash-like material, grey brown gravely sand, wet.	8-12	48/NA	NA	0		
15		Same as 8' TO 12', wet. Refusal at 15'.	12-15	36/NA	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	92.48 NAVD88
BORING NO.:	SB-34	**BORING LOCATION:**	N 1484712.87 / E 709637.12
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	11.9 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Grey-brown medium SAND, some fine gravel, moist.						
		Black coal fragments, some SAND, moist.	0-4	48/24	NA	11		
5 / 85		Same as 2' to 4', brown SILTY SAND in nose, moist.	4-8	48/1	NA	3		**Soil Boring: No Well Installed.**
		Grey SILTY CLAY, moist.						
10		Brown coarse SAND, trace gravel, wet. Refusal at 11.9'.	8-11.9	48/24	NA	5		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	89.81 NAVD88
BORING NO.:	SB-35	**BORING LOCATION:**	N 1484766.82 / E 709595.20
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	15feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, some gravel, moist.	0-4	48/40	NA	0 0		Soil Boring: No Well Installed.
5 / 80		Same as 0' to 4'.	4-8	48/1	NA	0		
10 / 75		Same as 0' to 4', wet, MGP odor.	8-12	48/3	NA	0		
15		Brown-grey tight SAND, trace shale fragments, little NAPL, damp.	12-15	36/12	NA	35		
		Brown medium SAND, wet, NAPL blebs. Refusal at 15'.						

LOG OF BORING

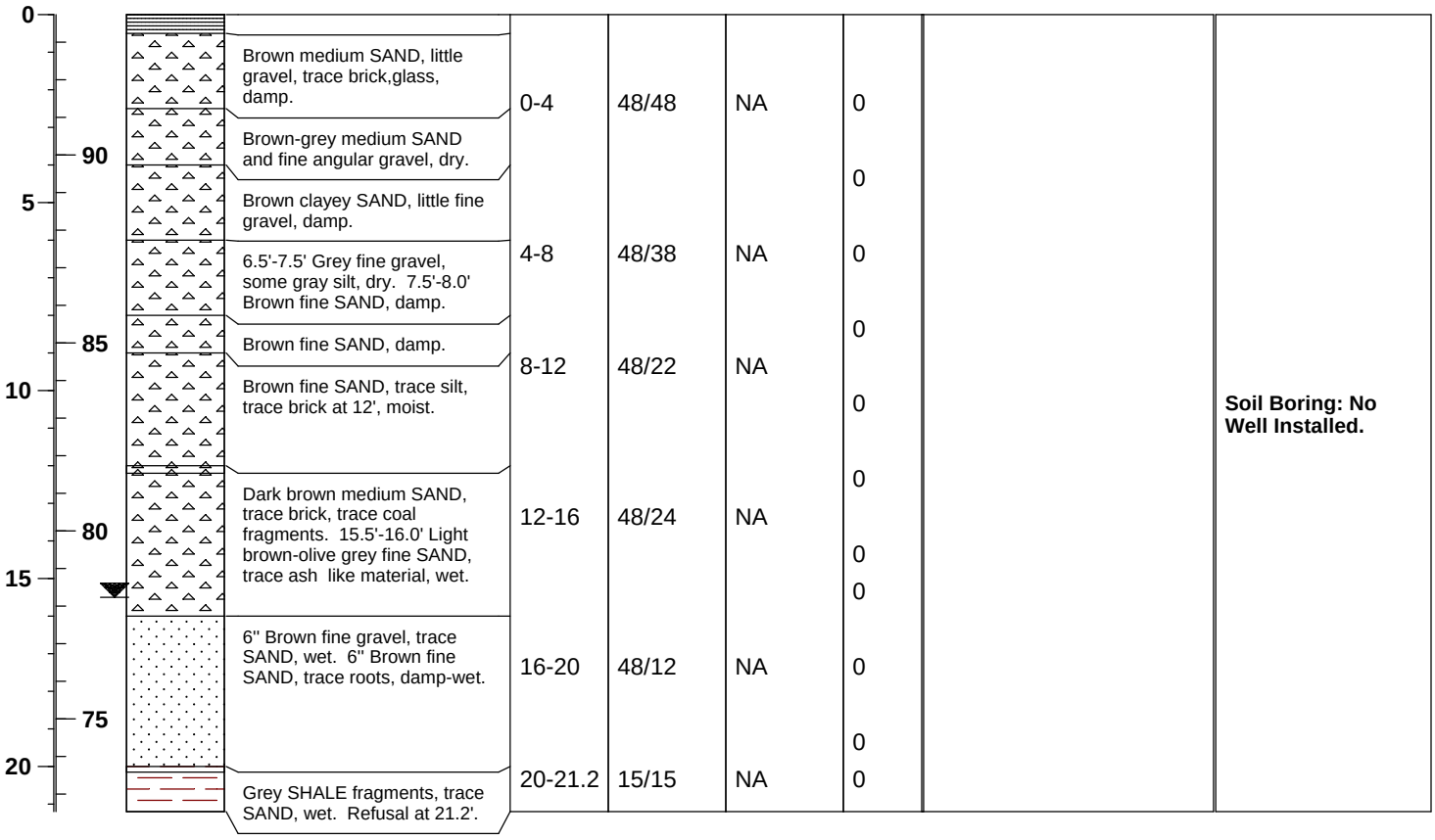
URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.73 NAVD88
BORING NO.:	SB-36	**BORING LOCATION:**	N 1484850.52 / E 709756.94
DATE:	6/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	21.2 feet	**SURFACE CONDITIONS:**	Asphalt



Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		Brown medium SAND, little gravel, trace brick,glass, damp.	0-4	48/48	NA	0		
		Brown-grey medium SAND and fine angular gravel, dry.				0		
		Brown clayey SAND, little fine gravel, damp.	4-8	48/38	NA	0		
		6.5'-7.5' Grey fine gravel, some gray silt, dry. 7.5'-8.0' Brown fine SAND, damp.				0		
		Brown fine SAND, damp.	8-12	48/22	NA			
		Brown fine SAND, trace silt, trace brick at 12', moist.				0		**Soil Boring: No Well Installed.**
		Dark brown medium SAND, trace brick, trace coal fragments. 15.5'-16.0' Light brown-olive grey fine SAND, trace ash like material, wet.	12-16	48/24	NA	0 0		
		6" Brown fine gravel, trace SAND, wet. 6" Brown fine SAND, trace roots, damp-wet.	16-20	48/12	NA	0		
		Grey SHALE fragments, trace SAND, wet. Refusal at 21.2'.	20-21.2	15/15	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.71 NAVD88
BORING NO.:	SB-37	**BORING LOCATION:**	N 1484829.37 / E 709749.69
DATE:	6/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	21 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some fine coal fragments, trace coarse gravel, damp.	0-4	48/42	NA	0		Soil Boring: No Well Installed.
		Light brown fine SAND, trace fine gravel, damp.				0		
5 / 85		Light brown fine SAND, little fine gravel, trace roots, moist.	4-8	48/42	NA	0		
						0		
10 / 80		Dark brown medium SAND, little brick, trace concrete, damp.	8-12	48/24	NA	0		
						0		
		Brown medium SAND, little coal fragments, trace roots, trace brick, moist.	12-14	24/6	NA	0		
15		Brown medium SAND, trace gravel, wet.	14-16	24/5	NA	0		
		Brown medium SAND and gravel, wet.	16-18	24/3	NA	0		
20 / 75		Brown fine SAND, musty odor, shale fragments, wet.	18-20	24/8	NA	0		
		Grey silty SHALE, wet. Refusal at 21'.	20-21	12/6	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.97 NAVD88
BORING NO.:	SB-38	**BORING LOCATION:**	N 1484774.75 / E 709741.43
DATE:	6/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium to fine SAND, little gravel and brick, trace ash like material, damp.	0-2	48/36	NA	0		Soil Boring: No Well Installed.
			2-4			0		
5 / 85		Dark brown-black medium to fine SAND, some fine coal like material, trace gravel, damp.	4-6	48/24	NA	0		
			6-8			0		
		8.0'-8.5' Wood pieces. 8.5'-12.0' Dark brown fine SAND, some silt, damp.	8-10	48/15	NA	0		
10 / 80			10-12			0		
		Brown medium-coarse SAND, little fine gravel, moist to wet.	12-16	24/12	NA	0		
15 / 75		Brown medium SAND, wet.	16-18	24/8	NA	0		
		18'-18.5' Brown medium SAND, trace gravel, wet. 18.5'-20.0' Light Brown-olive grey fine SAND, silt, moist to wet.	18-21	30/24	NA	0		
20		Light brown-olive grey medium to coarse SAND, wet.	20-22	24/6	NA	0		
		Grey silty SHALE, wet. Refusal at 23'.	22-23	12/10	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.93 NAVD88
BORING NO.:	SB-39	**BORING LOCATION:**	N 1484750.64 / E 709736.61
DATE:	6/4/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	22.8 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some coal fragments, little brick, trace gravel, dry.	0-2	48/34	NA	0		Soil Boring: No Well Installed.
			2-4			0		
5 / 85		Brown medium SAND, some coal fragments, little brick, trace gravel, dry.	4-8	48/12	NA	0		
		Brown medium SAND, some coal fragments, little brick, trace gravel, dry.	8-12	48/10	NA	0		
10 / 80		Light brown medium coarse SAND, trace gravel, moist.	12-14	48/26	NA	0		
			14-16			0		
15 / 75		Brown olive grey silty SAND, moist.	16-18	24/12	NA	0		
		Olive grey fine SAND and silt slightly marbled, moist.						
20		Olive grey fine SAND, moist.	18-20	24/15	NA	0		
		Light brown gravelly SAND, trace clay, moist to wet. Refusal at 22.8'.	20-22	24/10	NA	NA		
			22-22.8	10/8	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.18 NAVD88
BORING NO.:	SB-40	**BORING LOCATION:**	N 1484722.85 / E 709730.36
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23.9 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some angular gravel, trace clinkers and ash-like material, damp.	0-4	48/28	NA	0 0		
5 / 85		Dark brown medium SAND, some silt, trace wood, brick and ash-like material, moist.	4-8	48/24	NA	0 0		
10 / 80		Brown medium SAND, trace fine to coarse gravel, damp.	8-12	48/18	NA	0		**Soil Boring: No Well Installed.**
		Brown medium SAND, trace fine to coarse gravel and brick, wet at 15'.	12-16	48/32	NA	0		
15		Brown medium SAND, some clay, trace angular shale, wet.	16-18	24/4	NA	0		
20 / 75		Olive grey fine SAND, moist (ODOR - organic/swamp).	18-20	24/10	NA	0		
			20-22	24/12	NA	0		
		Brown medium to coarse SAND, trace silt and shale fragments, wet. Refusal at 23.9'.	22-23.9	23/18	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.16 NAVD88
BORING NO.:	SB-41	**BORING LOCATION:**	N 1484699.15 / E 709705.76
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	17.8 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, little fine gravel, dry.	0-4	48/25	NA	0		
						0		
5 / 85			4-8	48/8	NA	0		
		Dark brown medium SAND, trace ash-like material, coal fragments, and gravel, dry.				0		
10 / 80		Brown fine SAND and SILT, moist.	8-12	48/24	NA	0		Soil Boring: No Well Installed.
		Brown medium SAND, little gravel, wet at 15.5'.						
15			12-16	48/20	NA	0		
		Brown medium SAND, little gravel, damp. Refusal at 17.8'	16-17.8	22/22	NA	NA		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.00 NAVD88
BORING NO.:	SB-42	**BORING LOCATION:**	N 1484664.40 / E 709706.93
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	10.2 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace gravel, damp.	0-4	48/28	NA	0		Soil Boring: No Well Installed.
		Dark brown medium SAND, some angular gravel, trace brick, moist.				0		
5 / 85		Dark brown medium SAND, some angular gravel, trace brick and coal fragments, moist.	4-8	48/24	NA	0		
10		Dark brown medium SAND, some angular gravel, trace brick and shale fragments, moist. Refusal at 10.2'.	8-10.2	26/12	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.32 NAVD88
BORING NO.:	SB-43	**BORING LOCATION:**	N 1484712.10 / E 709753.85
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	18.2 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown fine to medium SAND, some coal fragments, trace ash-like material, moist.	0-4	48/31	NA	0 0		
5 / 85		Brown fine to medium SAND, some coal fragments, trace ash-like material and brick, moist.	4-8	48/12	NA	0		
10 / 80		Olive grey silty CLAY, trace fine gravel, moist.	8-12	48/48	NA	0 0		**Soil Boring: No Well Installed.**
15		Olive grey silty CLAY, trace fine gravel, moist/wet. [ODOR - organic/swamp]	12-16	48/36	NA	0 0		
		Dark brown coarse SAND, some wood, clinkers, and gravel, wet.	16-18.2	26/14	NA	0		
		Dark brown medium to coarse SAND, some gravel, little glass, wet. Refusal at 18.2'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.14 NAVD88
BORING NO.:	SB-44	**BORING LOCATION:**	N 1484744.31 / E 709760.40
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	22.5 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown fine to medium SAND, trace gravel, dry.	0-4	48/34	NA	5.9		Soil Boring: No Well Installed.
5 / 85		Dark brown medium SAND, some gravel, trace coal fragments and brick, damp.	4-8	48/36	NA	9.9 9.9 38.4		
10 / 80		Dark brown medium SAND, some brick, trace ash-like material, damp.	8-12	48/20	NA	50.7		
15 / 75		Olive grey SILT, trace fine gravel, moist.	12-16	48/8	NA	246		
20		Wood, wet. [ODOR - strong gasoline]	16-18	48/30	NA	>1000		
		Black-stained coarse SAND, trace brick, wet. [ODOR - strong gasoline]	18-20			227.5		
		Olive grey silty fine SAND, moist.	20-22.5	30/27		131.9		
		Olive grey silty SAND, moist. [ODOR - gasoline] Refusal at 22.5'.						

LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.70 NAVD88
BORING NO.:	SB-45	**BORING LOCATION:**	N 1484704.25 / E 709776.80
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23.8 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown fine to medium SAND, trace brick, coal fragments and ash-like material, damp.	0-4	48/24	NA	5.9 5.9		
5 / 85			4-8	48/22	NA	5.9		
10 / 80		Brown medium SAND, some fine gravel, trace coal fragments and ash-like material, moist.	8-12	48/18	NA	9.9		**Soil Boring: No Well Installed.**
		Brown medium SAND, some fine gravel, little coal fragments, moist.	12-16	48/32	NA	38.4 671		
15 / 75		Black-stained coarse SAND, trace gravel, wet. [ODOR - gasoline]	16-20	48/20	NA	>1000		
20		Olive grey silty fine SAND, damp. [ODOR - organic/swamp] Refusal at 23.8'.	20-23.8	46/40	NA	105.3 22.1		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.62 NAVD88
BORING NO.:	SB-46	**BORING LOCATION:**	N 1484738.35 / E 709784.58
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace brick and gravel, dry.	0-4	48/20	NA	1.4 2.3		
5 / 85		Dark brown fine to medium SAND, some gravel, little coal fragments and ash-like material, damp.	4-8	48/30	NA	6.0 2.3		
10 / 80		Olive grey to brown fine to medium SAND, some fine gravel, trace brick, dry to wet. [ODOR- gasoline @15.5']	8-12	48/36	NA	2.3 22.4		**Soil Boring: No Well Installed.**
15 / 75		Black-stained coarse SAND, trace brick, wet. [ODOR - gasoline]	12-16	48/40	NA	120.6 212.5		
20		Black-stained fine SAND, trace clay, moist.	16-20	48/20	NA	500		
		Olive grey fine SAND, wet. Refusal at 23.0'.	20-23	36/24	NA	87.8		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.80 NAVD88
BORING NO.:	SB-47	**BORING LOCATION:**	N 1484688.86 / E 709821.20
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	15.8 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some fine gravel, trace brick, damp.	0-4	48/24	NA	0		Soil Boring: No Well Installed.
5 / 85		Same as above with trace clay, moist.	4-8	48/14	NA	0		
10 / 80		Brown medium coarse SAND, little ash-like material, trace brick, moist.	8-12	48/20	NA	0		
15		Same as above, brick at 15.6-15.8. Refusal at 15.8'.	12-16	47/20	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.00 NAVD88
BORING NO.:	SB-48	**BORING LOCATION:**	N 1484797.35 / E 709767.71
DATE:	6/5/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	19 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some medium gravel, little coal fragments, trace brick, dry.	0-2	48/36	NA	21.5		Soil Boring: No Well Installed.
			2-4			5.2		
5 / 85		Same as above.						
		Olive grey silty CLAY, some fine gravel, damp.	4-8	48/30	NA	1.4		
		Same as above, moist.						
10 / 80			8-12	48/30	NA	1.4		
		Same as above, moist to wet.						
15 / 75			12-16	48/30	NA	0		
		Same as above, moist.						
			16-19	36/30	NA	0		
		Black fine SAND, trace organics, wet. [ODOR-organic/swamp] Refusal at 19.0'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.88 NAVD88
BORING NO.:	SB-49	**BORING LOCATION:**	N 1484842.04 / E 709778.55
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	21.3 feet	**SURFACE CONDITIONS:**	Asphalt

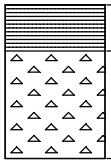
Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, little gravel, trace ash-like material, damp.	0-4	48/36	NA	0		
5 / 85		Light brown clayey SAND, trace gravel, damp.			NA			
		Brown medium SAND, some gravel, trace clay, damp.	4-8	48/42		0		
		Same as above.						
10 / 80			8-12	48/24	NA	0		**Soil Boring: No Well Installed.**
		Same as above, wet, rock in nose.						
15 / 75			12-16	48/8	NA	0		
		Light brown to olive grey silty clay, some fine gravel, wet.						
		Dark brown fine SAND, some silt, trace wood, organics and glass, moist [ODOR-organic/swamp]	16-20	48/32	NA	0		
20		Gray silty shale, trace clay. Refusal at 21.3'.	20-21.3	16/12	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.18 NAVD88
BORING NO.:	SB-50	**BORING LOCATION:**	N 1484536.39 / E 709714.92
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	4 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 90		Brown medium SAND, little gravel, damp. Refusal at 4.0'.	0-4	48/36	NA	0		**Soil Boring: No Well Installed.**

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.1 NAVD88
BORING NO.:	SB-51	**BORING LOCATION:**	N 1484493.56 / E 709720.18
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	0.0 Feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90								No soil recovery from SB-51. Soil Boring: No Well Installed.

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.67 NAVD88
BORING NO.:	SB-52	**BORING LOCATION:**	N 1484623.01 / E 709707.67
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	0.0 Feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90								No soil recovery from SB-52. Soil Boring: No Well Installed.

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.49 NAVD88
BORING NO.:	SB-53	**BORING LOCATION:**	N 1484677.14 / E 709853.72
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	17.3 Feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, little fine gravel, dry.	0-4	48/36	NA	0		Soil Boring: No Well Installed.
5 / 85		Same as above, rock fragments in nose of split spoon.	4-8	48/12	NA	0		
10 / 80		Brown medium SAND, some brick, trace wood, damp to moist.	8-12	48/12	NA	0		
15		Brown medium coarse SAND, some gravel, moist to wet.	12-16	48/12	NA	0		
		Light brown coarse SAND, some gravel, wet.						
		As above, wet. Refusal at 17.3'.	16-17.3	12/12	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.77 NAVD88
BORING NO.:	SB-54	**BORING LOCATION:**	N 1484698.89 / E 709866.87
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	29.5 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Blind probed to 29.5'.						Soil Boring: No Well Installed.
5 / 85								
10 / 80								
15 / 75								
20 / 70								
25								

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.67 NAVD88
BORING NO.:	SB-55	**BORING LOCATION:**	N 1484680.16 / E 709909.16
DATE:	6/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	26.1 feet	**SURFACE CONDITIONS:**	Asphalt

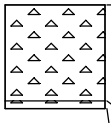
Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Blind probed to 26.1'.						Soil Boring: No Well Installed.
5 / 85								
10 / 80								
15 / 75								
20 / 70								
25								

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	92.13 NAVD88
BORING NO.:	SB-56	**BORING LOCATION:**	N 1484836.90 / E 709644.82
DATE:	6/12/01	**METHOD OF DRILLING:**	Hand Auger
BORING DIAMETER:	3.5 inches	**SAMPLE TYPE:**	Hand Auger
BORING DEPTH:	2.7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 90		Black-dark brown coarse coal fragments and slag, some medium SAND, little wood chips, purifier odor. Brown-olive grey SAND and clay, little brick, slight purifier odor, wet. Refusal at 2.7'.	0-2 2-2.7		NA NA	1.3 1.3		**Soil Boring: No Well Installed.**

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.02 NAVD88
BORING NO.:	SB-57	**BORING LOCATION:**	N 1484823.27 / E 709642.88
DATE:	6/12/01	**METHOD OF DRILLING:**	Hand Auger
BORING DIAMETER:	3.5 inches	**SAMPLE TYPE:**	Hand Auger
BORING DEPTH:	2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0		Dark brown-black coarse SAND and coal, trace brick, purifier odor. Refusal at 2.0'.	0-2		NA	2.3		**Soil Boring: No Well Installed.**

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.04 NAVD88
BORING NO.:	SB-58	**BORING LOCATION:**	N 1484823.27 / E 709642.88
DATE:	6/12/01	**METHOD OF DRILLING:**	Hand Auger
BORING DIAMETER:	3.5 inches	**SAMPLE TYPE:**	Hand Auger
BORING DEPTH:	2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0		Brown medium SAND, some gravel.	0-2		NA	0		**Soil Boring: No Well Installed.**
		Black coarse SAND and coal, purifier odor.						
		Brown medium SAND, some pencil shale fragments. Refusal at 2.0'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	92.44 NAVD88
BORING NO.:	SB-59	**BORING LOCATION:**	N 1484849.91 / E 709646.48
DATE:	6/12/01	**METHOD OF DRILLING:**	Hand Auger
BORING DIAMETER:	3.5 inches	**SAMPLE TYPE:**	Hand Auger
BORING DEPTH:	3.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90		Brown medium SAND, trace coarse SAND.	0-2		NA	121.6		Soil Boring: No Well Installed.
		Black stained medium SAND, some wood chips, strong purifier odor.	2-3.5		NA	37.8		
		Same as 1'-2', not as strong of an odor. Refusal at 3.5'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	92.45 NAVD88
BORING NO.:	SB-60	**BORING LOCATION:**	N 1484864.00 / E 709647.97
DATE:	6/12/01	**METHOD OF DRILLING:**	Hand Auger
BORING DIAMETER:	3.5 inches	**SAMPLE TYPE:**	Hand Auger
BORING DEPTH:	2.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90		Brown medium SAND and gravel.	0-2		NA	8.8		Soil Boring: No Well Installed.
		Black stained medium SAND, some wood, strong purifier odor.	2-2.5		NA	2.3		
		Olive grey silty, pencil shale fragments, slight purifier odor. Refusal at 2.5'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.49 NAVD88
BORING NO.:	SB-61	**BORING LOCATION:**	N 1484543.37 / E 709677.14
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4' Macrocore
BORING DEPTH:	10.2 feet	**SURFACE CONDITIONS:**	Concrete Sidewalk

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown silty fine to coarse SAND grading to white ash-like material with some coal fragments, damp.	0-4	48/27	NA	0		
5 / 85		White ash-like material with some coal fragments gradingto brown sandy SILT at 6.0', trace gravel, coal fragments and ash-like material, damp.	4-8	48/27	NA	0		
10		Brown sandy SILT with gravel, damp. Moved boring twice-refusal on rock at 8.5' and 10.2'.	8-10	24/24	NA	0		**Soil Boring: No Well Installed.**

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.7 NAVD88
BORING NO.:	SB-62	**BORING LOCATION:**	N 1484588.46 / E 709662.34
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4' Macrocore
BORING DEPTH:	7.5 feet	**SURFACE CONDITIONS:**	Concrete sidewalk

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90 5		Brown fine to coarse SAND some silt and gravel, trace coal fragments and ash-like material at 3.5' slight odor, moist.	0-4	48/24	NA	0		Soil Boring: No Well Installed.
		Ash-like material and coal fragments (slight odor) grading to brown sandy SILT, some gravel, trace brick and CLM, moist. Refusal at 7.5'.	4-7.5	36/18	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.43 NAVD88
BORING NO.:	SB-63	**BORING LOCATION:**	N 1484645.25 / E 709662.82
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Grey fine SAND, some coal fragments and white ash-like material, trace gravel, moist.	0-4	48/24	NA	0		
5 / 85		Grey to brown sandy SILT with white ash-like material and gravel, trace coal fragments and brick fragments, damp.	4-8	48/24	NA	0		
10 / 80		Brown fine to coarse sandy SILT, with gravel, wet at13.5.	8-12	48/30	NA	0		**Soil Boring: No Well Installed.**
15 / 75		Brown sandy SILT, firm, wet.	12-16	48/36	NA	0		
20		Brown fine SAND, firm, wet.	16-20	48/48	NA	0		
		Brown grading to grey silty SAND with shale fragments, wet. Bedrock refusal at 23'.	20-23	36/36	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.32 NAVD88
BORING NO.:	SB-64	**BORING LOCATION:**	N 1484688.33 / E 709660.00
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23.1 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown fine to medium SAND with silt, trace glass, coal fragments, and gravel, damp.	0-4	48/28	NA	0		
5 / 85			4-8	48/28	NA	0		
10 / 80		Brown fine to coarse SAND with silt, some gravel, wet.	8-12	48/32	NA	8.1		Soil Boring: No Well Installed.
15 / 75		Brown fine to coarse SAND and GRAVEL, trace silt, wet.	12-16	48/24	NA	3.1		
20		GRAVEL and SILT, trace sand, wet.	16-20	48/40	NA	1.8		
		Brown fine to coarse SAND, trace gravel, wet.						
		Brown fine SAND, trace silt, firm, wet. Refusal at 23.1'.	20-23.1	36/36	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.99 NAVD88
BORING NO.:	SB-65	**BORING LOCATION:**	N 1484821.76 / E 709646.02
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Bark Chips

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90 5		Brown SAND grading to black SAND with coal fragments, some brick and gravel, dry, slight odor.	0-4	48/36	NA	11.8		Soil Boring: No Well Installed.
		Black SAND and GRAVEL, trace silt, slight odor, grading to grey GRAVEL at 7.5', dry.	4-8	48/28	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.99 NAVD88
BORING NO.:	SB-66	**BORING LOCATION:**	N 1484833.09 / E 709647.92
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Bark Chips

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90 5		Brown SAND grading to black SAND with silt and coal fragments, trace gravel, dry.	0-4	48/18	NA	0		Soil Boring: No Well Installed.
		Black and brown SAND and GRAVEL, trace silt and coal fragments, moist.	4-8	48/36	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.87 NAVD88
BORING NO.:	SB-67	**BORING LOCATION:**	N 1484837.96 / E 709648.19
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Bark Chips

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90 5		Brown SAND grading to black SAND with purifer chips, trace gravel, odor grading to coal fragments with sand grading to sandy SILT with gravel, moist.	0-4	48/24	NA	0		Soil Boring: No Well Installed.
		GRAVEL, trace coal fragments and purifer chips, odor, damp.	4-8	48/22	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.95 NAVD88
BORING NO.:	SB-68	**BORING LOCATION:**	N 1484849.55 / E 709650.81
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Bark Chips

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 — 90 — 5		Brown SAND grading to black silty SAND with gravel and coal fragments, moist, purifier odor.	0-4	48/30	NA	0		Soil Boring: No Well Installed.
			4-8	48/28	NA	0		
		Brown sandy SILT with gravel, wet, purifier odor.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.94 NAVD88
BORING NO.:	SB-69	**BORING LOCATION:**	N 1484854.13 / E 709650.47
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrcore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Bark Chips

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90 5		Brown SAND grading to black SAND and GRAVEL with coal fragments, moist. Purifier odor.	0-4	48/24	NA	0		Soil Boring: No Well Installed.
		Brown silty SAND and GRAVEL, trace coal fragments, wet.	4-8	48/36	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	93.92 NAVD88
BORING NO.:	SB-70	**BORING LOCATION:**	N 1484862.52 / E 709652.46
DATE:	6/20/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	8 feet	**SURFACE CONDITIONS:**	Bark Chips

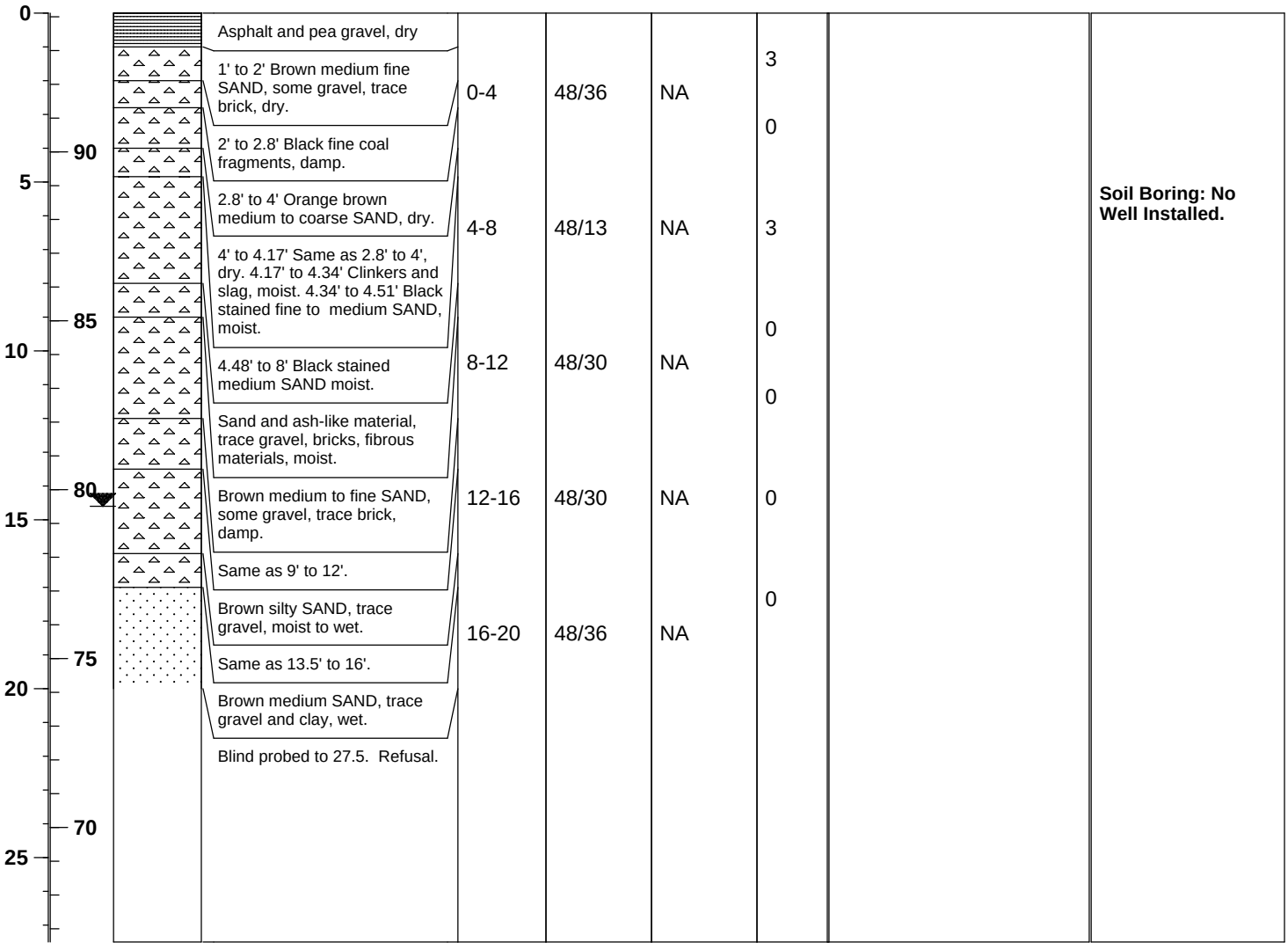
Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 90 5		Brown SAND grading to black SAND and GRAVEL, trace silt, coal fragments, and ash-like material, moist.	0-4	48/24	NA	0		Soil Boring: No Well Installed.
		Brown silty SAND and GRAVEL, trace coal fragments, wet.	4-8	48/22	NA	0		

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.1 NAVD88
BORING NO.:	CC-1	**BORING LOCATION:**	N 1484668.46 / E 709678.65
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	27.5 feet	**SURFACE CONDITIONS:**	Asphalt



Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		Asphalt and pea gravel, dry						
		1' to 2' Brown medium fine SAND, some gravel, trace brick, dry.	0-4	48/36	NA	3		
		2' to 2.8' Black fine coal fragments, damp.				0		
		2.8' to 4' Orange brown medium to coarse SAND, dry.	4-8	48/13	NA	3		Soil Boring: No Well Installed.
		4' to 4.17' Same as 2.8' to 4', dry. 4.17' to 4.34' Clinkers and slag, moist. 4.34' to 4.51' Black stained fine to medium SAND, moist.				0		
		4.48' to 8' Black stained medium SAND moist.	8-12	48/30	NA	0		
		Sand and ash-like material, trace gravel, bricks, fibrous materials, moist.						
		Brown medium to fine SAND, some gravel, trace brick, damp.	12-16	48/30	NA	0		
		Same as 9' to 12'.						
		Brown silty SAND, trace gravel, moist to wet.	16-20	48/36	NA	0		
		Same as 13.5' to 16'.						
		Brown medium SAND, trace gravel and clay, wet.						
		Blind probed to 27.5. Refusal.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.62 NAVD88
BORING NO.:	CC-2	**BORING LOCATION:**	N 1484806.78 / E 709682.95
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	29.5 feet	**SURFACE CONDITIONS:**	Asphalt

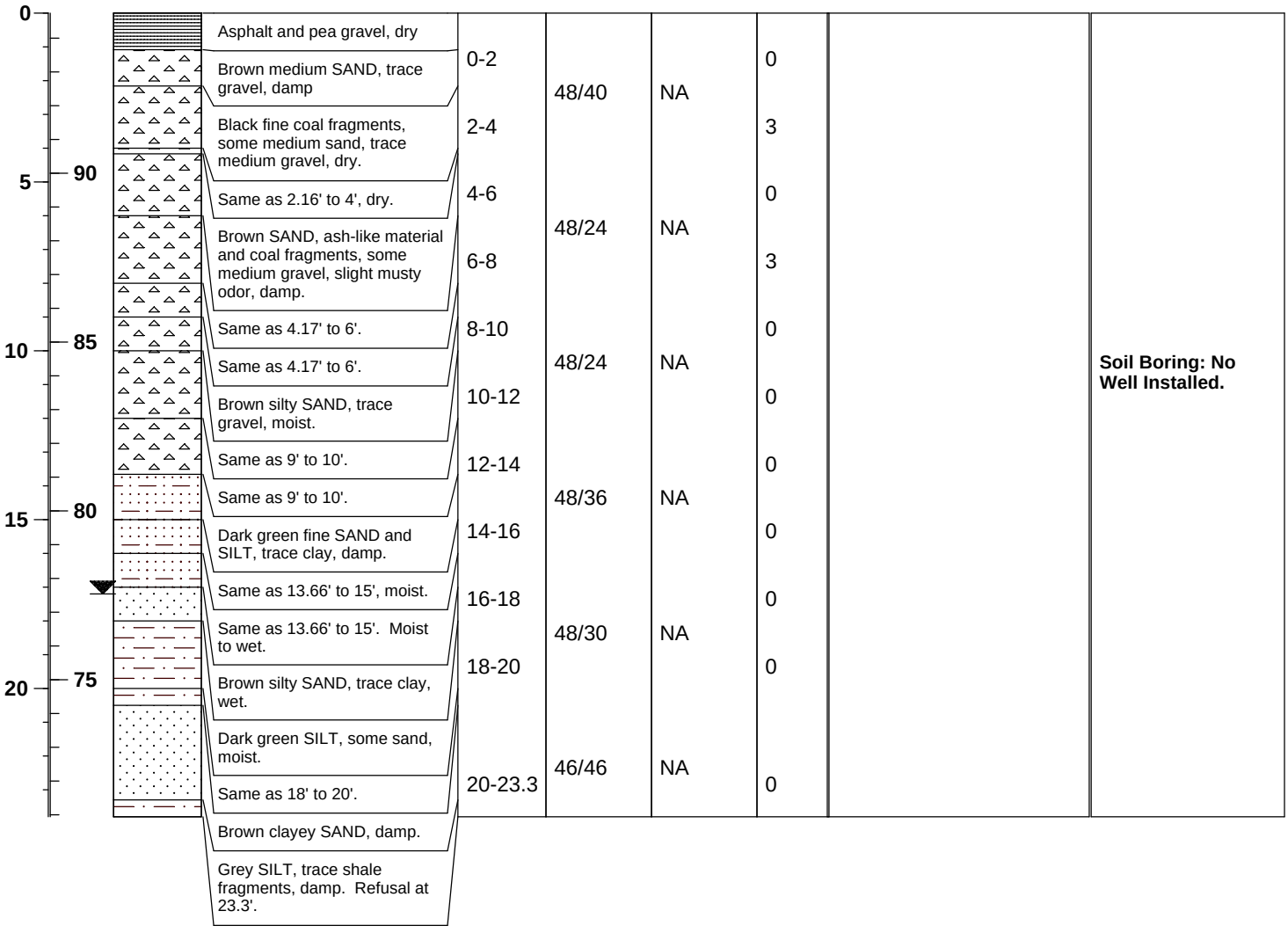
Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Asphalt and pea gravel, dry	0-2	48/36	NA	0		Soil Boring: No Well Installed.
		Brown medium fine SAND, some gravel, dry	2-4			3		
5 / 85		Black stained fine to medium SAND, and fine coal fragments, trace brick, trace ash, dry to damp.	4-6	48/13	NA	3		
		Ash-like material, coal fragments and SAND, trace brick, moist, musty odor.	6-8			0		
		19" Same as above with clinkers and slag bottom 3", moist to wet.	8-10	48/30	NA	0		
10 / 80		Brown silty sand, trace clay, moist.	10-12			0		
		4" same as 10'-12', 3" gravel, trace SAND, moist. 13" Brown medium SAND, some gravel, moist. 4" Brown medium to fine SAND, trace gravel, wet, MGP odor. 2" Gravel in nose, sheen, little NAPL.	12-14	48/30	NA	0		
15 / 75		Dark green fine SAND and SILT, smeared with NAPL.	14-16			0		
			16-20	48/36	NA	3		
20 / 70		Blind probed to 29.5'. Refusal.						
25								

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	94.74 NAVD88
BORING NO.:	CC-3	**BORING LOCATION:**	N 1484888.57 / E 709687.47
DATE:	4/6/01	**METHOD OF DRILLING:**	Geoprobe
BORING DIAMETER:	2 inches	**SAMPLE TYPE:**	4 foot macrocore
BORING DEPTH:	23.5 feet	**SURFACE CONDITIONS:**	Asphalt



Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		Asphalt and pea gravel, dry	0-2	48/40	NA	0		Soil Boring: No Well Installed.
		Brown medium SAND, trace gravel, damp						
		Black fine coal fragments, some medium sand, trace medium gravel, dry.	2-4			3		
		Same as 2.16' to 4', dry.	4-6	48/24	NA	0		
		Brown SAND, ash-like material and coal fragments, some medium gravel, slight musty odor, damp.	6-8			3		
		Same as 4.17' to 6'.	8-10	48/24	NA	0		
		Same as 4.17' to 6'.						
		Brown silty SAND, trace gravel, moist.	10-12			0		
		Same as 9' to 10'.	12-14	48/36	NA	0		
		Same as 9' to 10'.						
		Dark green fine SAND and SILT, trace clay, damp.	14-16			0		
		Same as 13.66' to 15', moist.	16-18	48/30	NA	0		
		Same as 13.66' to 15'. Moist to wet.						
		Brown silty SAND, trace clay, wet.	18-20			0		
		Dark green SILT, some sand, moist.	20-23.3	46/46	NA	0		
		Same as 18' to 20'.						
		Brown clayey SAND, damp.						
		Grey SILT, trace shale fragments, damp. Refusal at 23.3'.						

LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.45 / GRD 90.83
BORING NO.:	MW-1I	**BORING LOCATION:**	N 1484745.85 / E 709550.55
DATE:	5/20/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	75 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown gravel, some medium sand, damp.	0-2	24/18	NA	0		
		Black coarse SAND, some coal granulas, trace ash like material, damp.	2-4	24/12	NA	0		
5 / 85		Black granular coal like material. Some coarse gravel, little brown sand, damp.	4-6	24/12	NA	0		
		Same as above with musty mold odor.	6-8	24/0	NA	NA		
		Spoon was wet.						
10 / 80		Brown coarse SAND, wet, musty odor.	8-10	24/8	NA	0		
		Angular dark grey SHALE fragments, trace medium sand, wet.	10-11.2	24/.5	NA	0		
		Weathered shale from 9.5-11.2'. Refusal.						
15 / 75		Air hammered to 17.5'. Tar encountered at 16.5'. Set 6 inch temp steel casing.						
20 / 70		5 3/4 inch air hammered to 45'. Grout 4 inch PVC casing to 45'. Removed 6 inch casing.						**4 inch PVC casing to 45'.**
25 / 65								
30 / 60								
35 / 55								

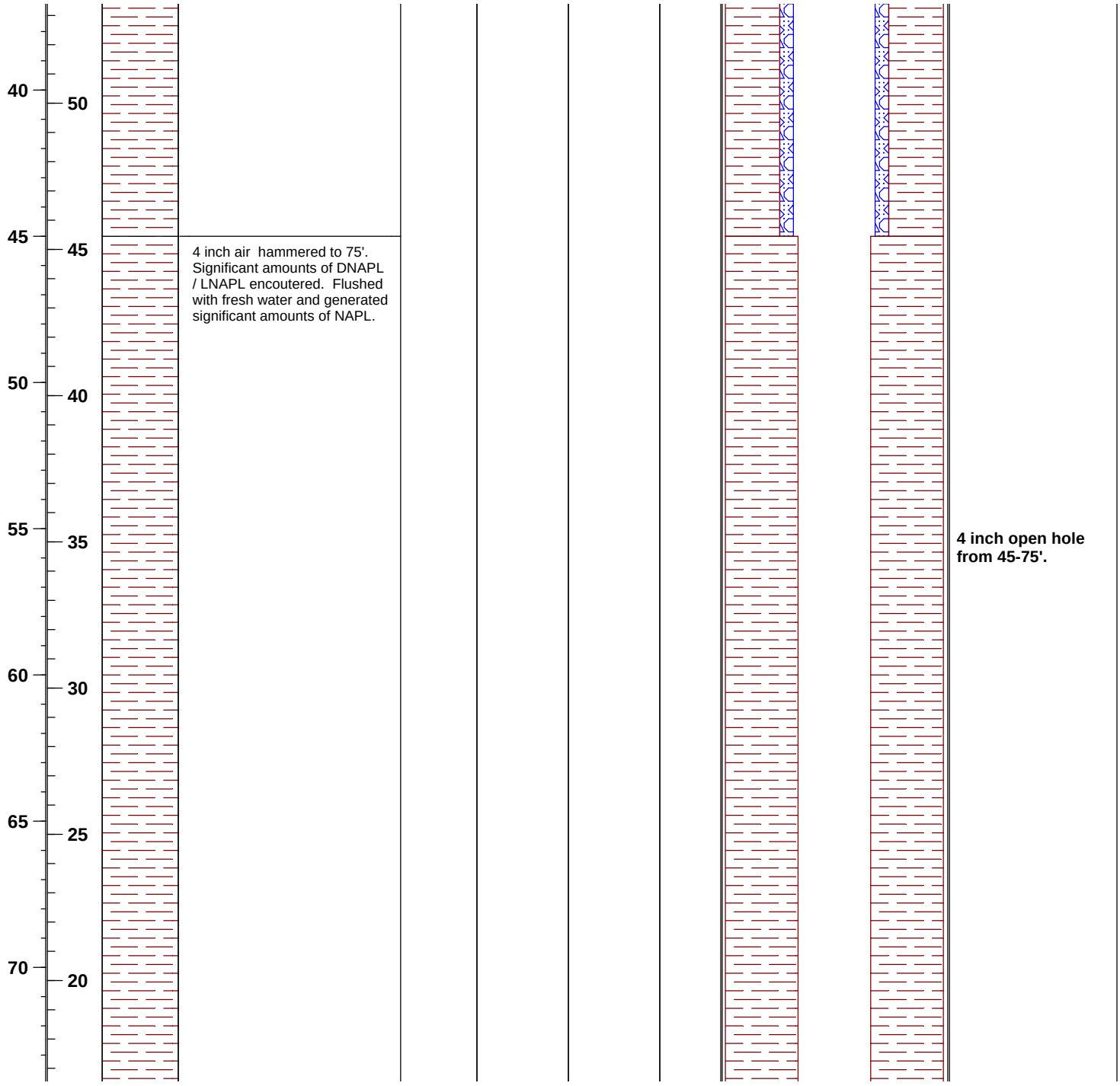
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.45 / GRD 90.83
BORING NO.:	MW-1I	**BORING LOCATION:**	N 1484745.85 / E 709550.55
DATE:	5/20/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	75 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description

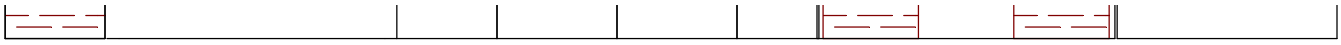


LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.45 / GRD 90.83
BORING NO.:	MW-1I	**BORING LOCATION:**	N 1484745.85 / E 709550.55
DATE:	5/20/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	75 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
75								

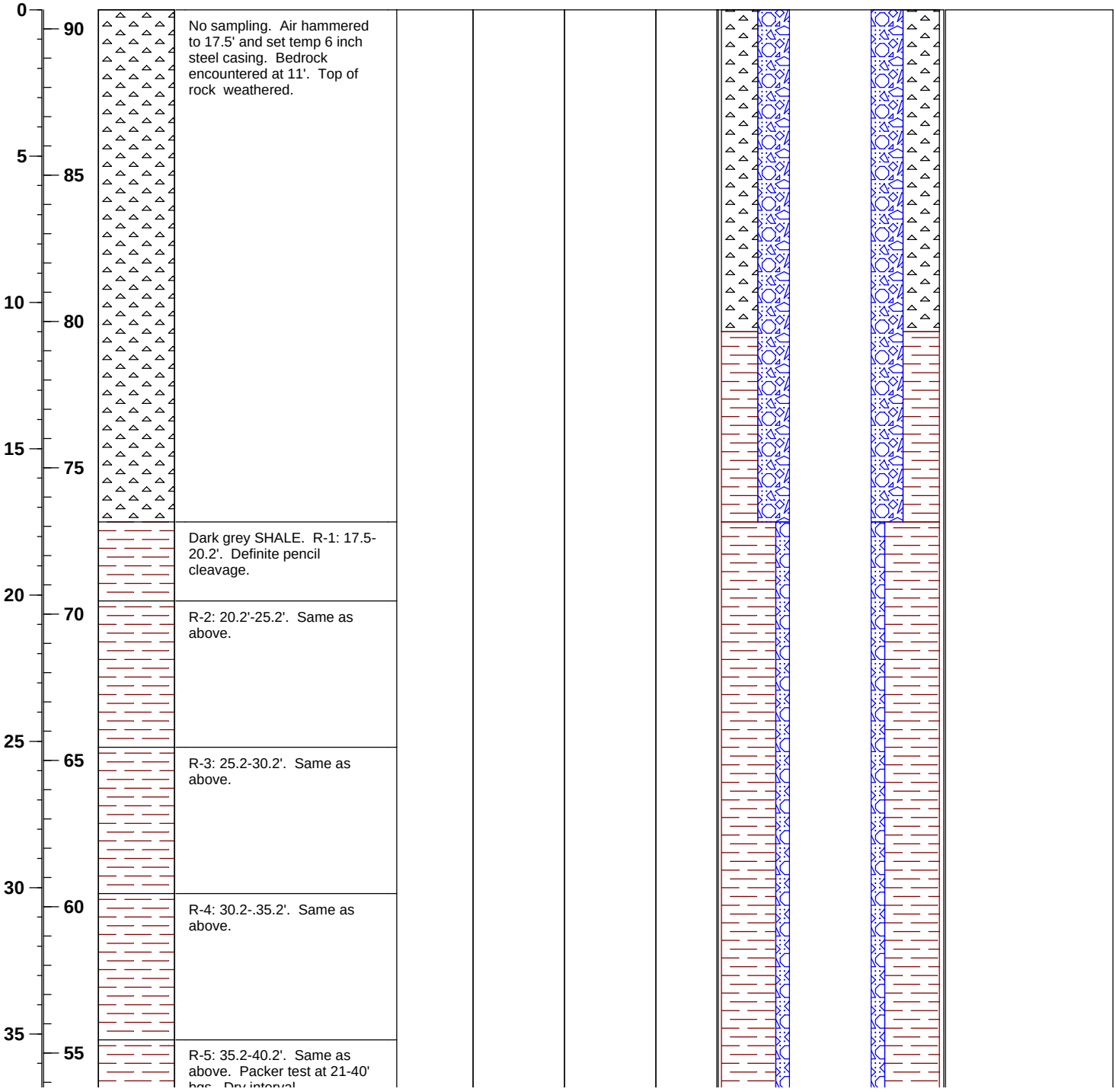
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.65 / GRD 90.99
BORING NO.:	MW-1D	**BORING LOCATION:**	N 1484740.96 / E 709557.53
DATE:	4/10/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	155.2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



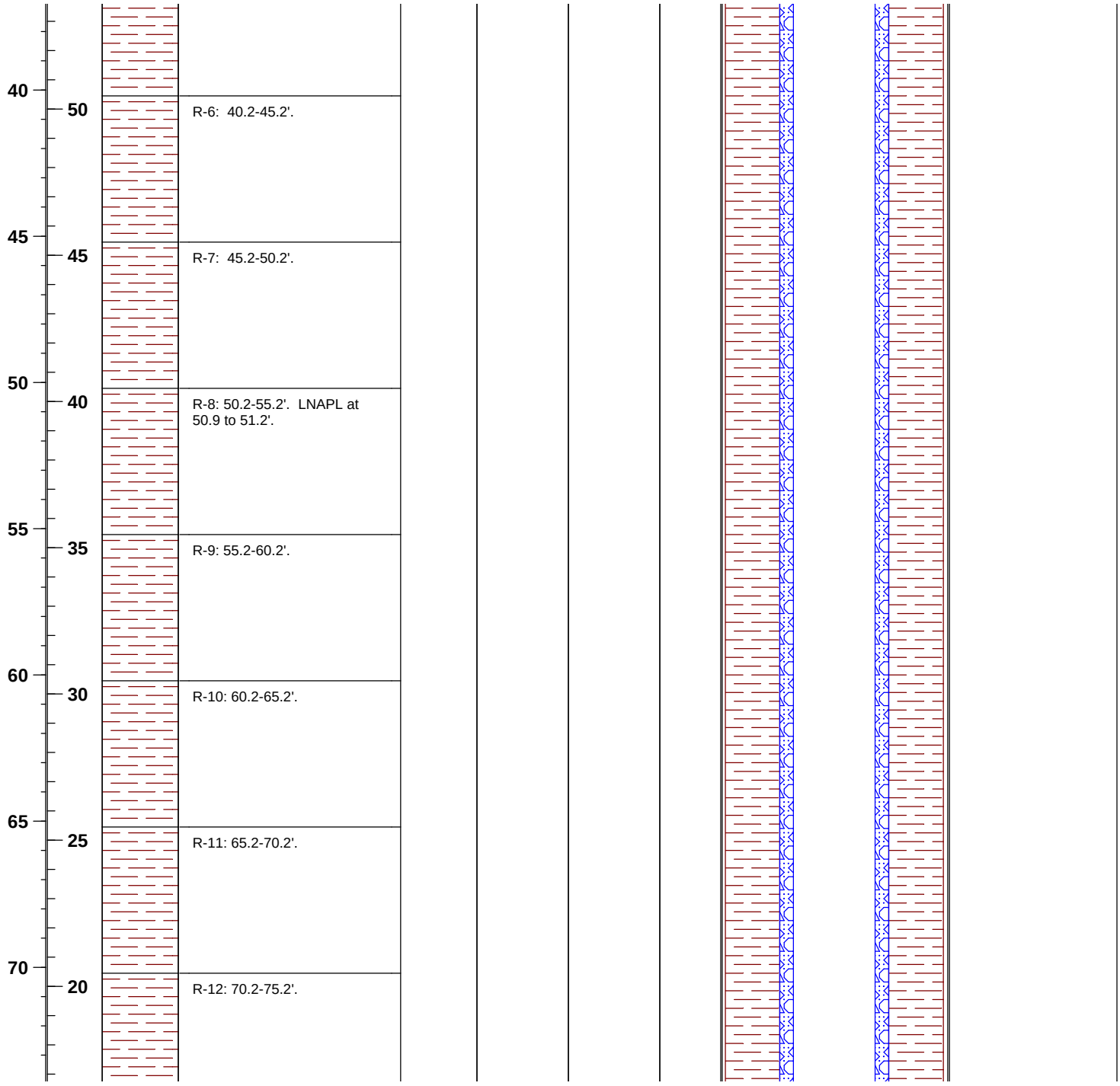
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.65 / GRD 90.99
BORING NO.:	MW-1D	**BORING LOCATION:**	N 1484740.96 / E 709557.53
DATE:	4/10/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	155.2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
40 / 50		R-6: 40.2-45.2'.						
45 / 45		R-7: 45.2-50.2'.						
50 / 40		R-8: 50.2-55.2'. LNAPL at 50.9 to 51.2'.						
55 / 35		R-9: 55.2-60.2'.						
60 / 30		R-10: 60.2-65.2'.						
65 / 25		R-11: 65.2-70.2'.						
70 / 20		R-12: 70.2-75.2'.						



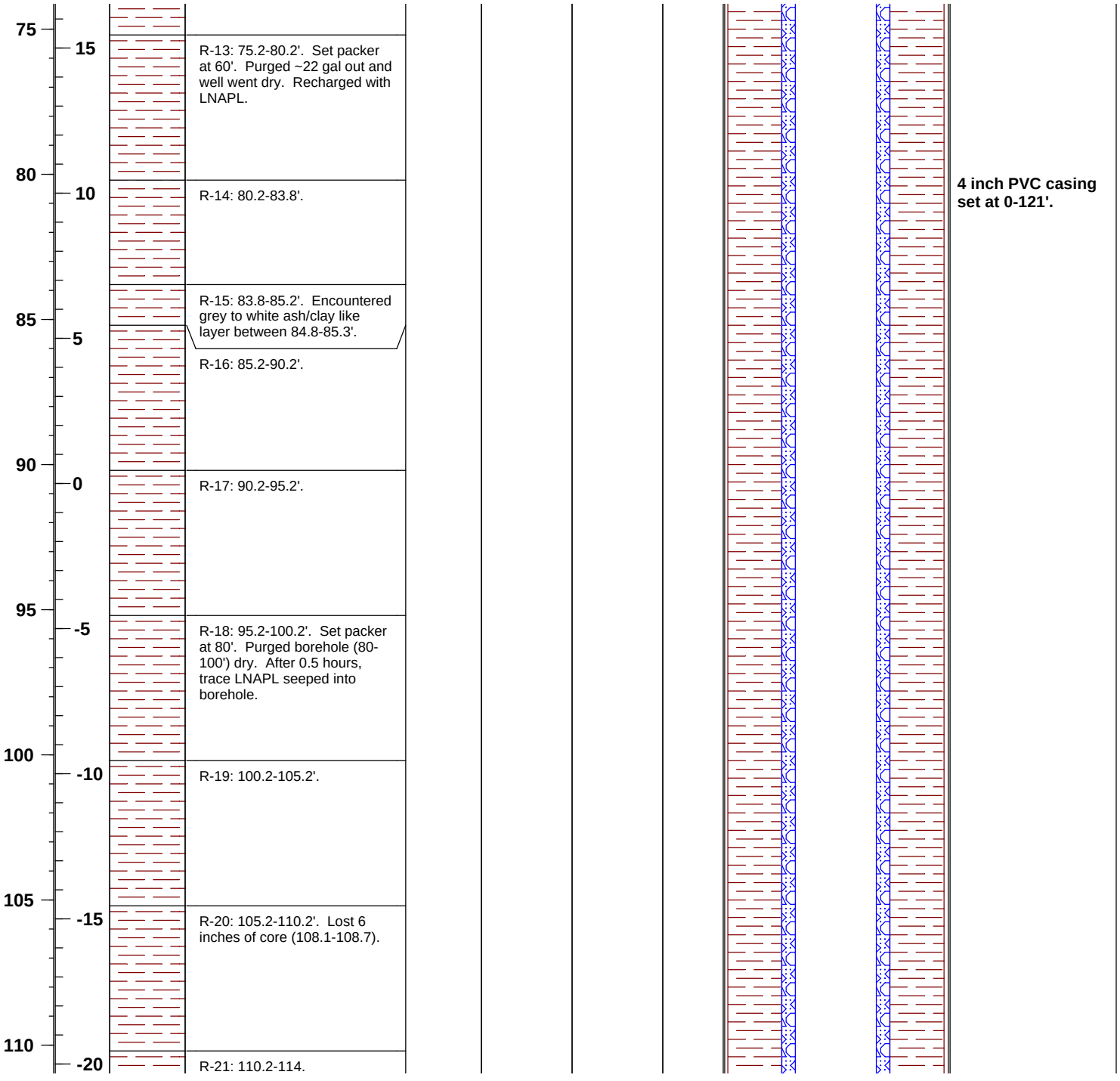
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.65 / GRD 90.99
BORING NO.:	MW-1D	**BORING LOCATION:**	N 1484740.96 / E 709557.53
DATE:	4/10/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	155.2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



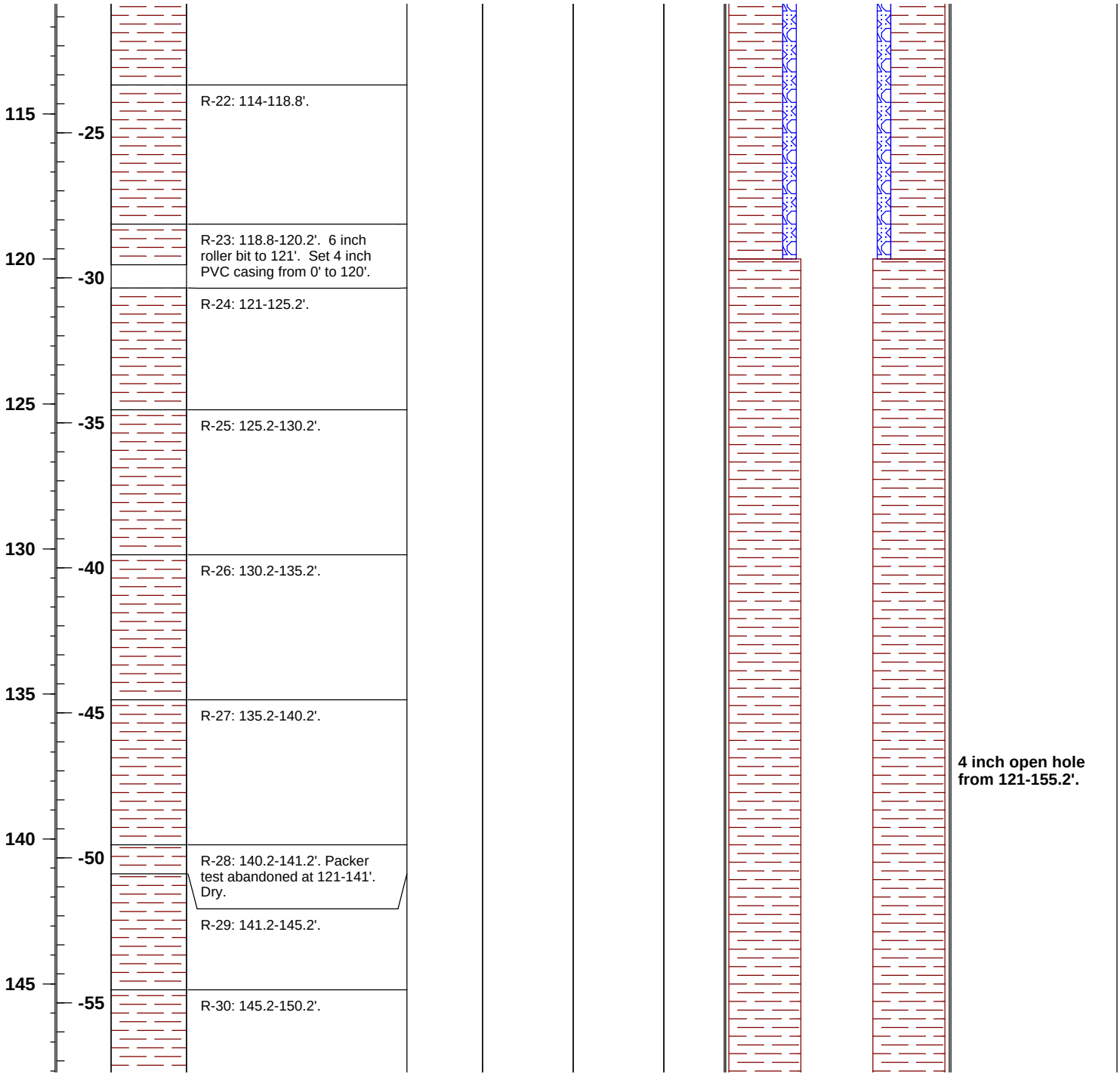
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.65 / GRD 90.99
BORING NO.:	MW-1D	**BORING LOCATION:**	N 1484740.96 / E 709557.53
DATE:	4/10/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	155.2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



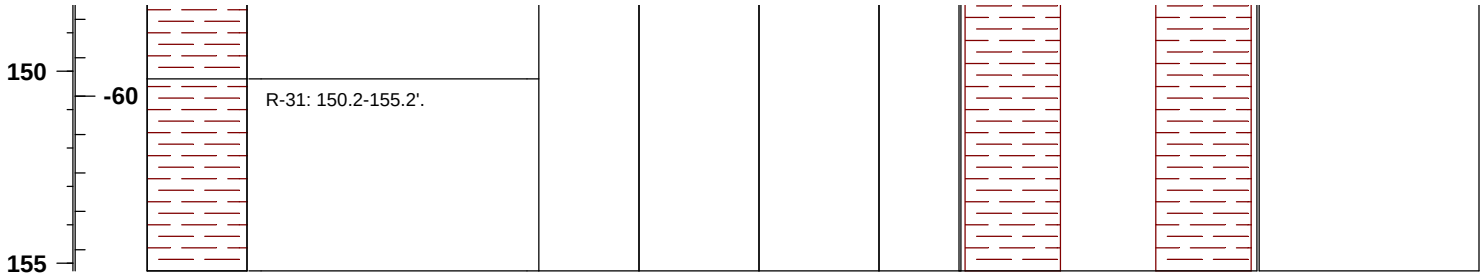
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 90.65 / GRD 90.99
BORING NO.:	MW-1D	**BORING LOCATION:**	N 1484740.96 / E 709557.53
DATE:	4/10/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	155.2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



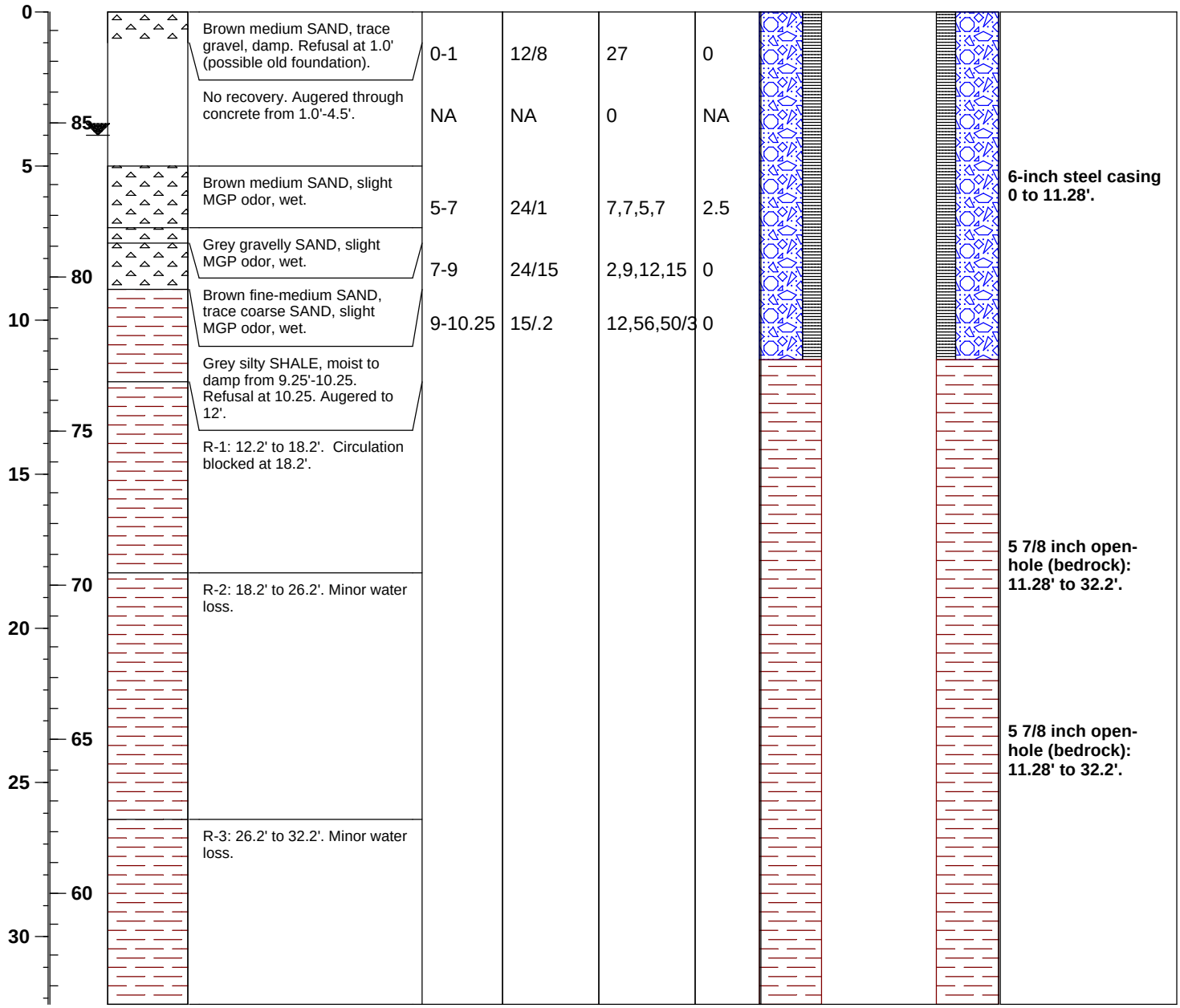
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 88.32 / GRD 88.60
BORING NO.:	MW-2I	**BORING LOCATION:**	N 1,484,843/E 709,495
DATE:	4/16/01	**METHOD OF DRILLING:**	4.25 inch Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot Split Spoon
BORING DEPTH:	32.2 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, trace gravel, damp. Refusal at 1.0' (possible old foundation).	0-1	12/8	27	0		
		No recovery. Augered through concrete from 1.0'-4.5'.	NA	NA	0	NA		
5 / 80		Brown medium SAND, slight MGP odor, wet.	5-7	24/1	7,7,5,7	2.5		
		Grey gravelly SAND, slight MGP odor, wet.	7-9	24/15	2,9,12,15	0		
10 / 75		Brown fine-medium SAND, trace coarse SAND, slight MGP odor, wet.	9-10.25	15/.2	12,56,50/3	0		
		Grey silty SHALE, moist to damp from 9.25'-10.25. Refusal at 10.25. Augered to 12'.						
15		R-1: 12.2' to 18.2'. Circulation blocked at 18.2'.						
20 / 70		R-2: 18.2' to 26.2'. Minor water loss.						
25 / 65		R-3: 26.2' to 32.2'. Minor water loss.						
30 / 60								



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.22 / GRD 92.58
BORING NO.:	MW-10I	**BORING LOCATION:**	N 1,484,714/E 709,638
DATE:	6/19/01	**METHOD OF DRILLING:**	4.25 inch Hollow Stem Auger
BORING DIAMETER:	8. 25 inches	**SAMPLE TYPE:**	2 inch x 2 foot Split Sploon
BORING DEPTH:	43 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace gravel grading to black fine SAND, some coal fragments, trace brick, moist.	0-2	24/18	5,18,24,12	0		
5 / 85		Brown medium SAND, some ash-like material and coal fragments, trace brick, damp. (ODOR-hydrocarbon)	2-4	24/18	10,7,7,6	0		
			4-6	24/12	5,4,2,2	0		6-inch steel casing grouted 0' to 22'.
		Brown medium SAND, little ash-like material and coal fragments, trace brick, damp.	6-8	24/10	4,3,2,6	0		
10 / 80		Brownish orange silty SAND, damp.	8-10	24/12	4,1,6,7	0		
			10-12	24/6	12,7,6,15	0		
		Brownish orange silty SAND, some coarse sand, staining with NAPL @13.8', wet. (ODOR)(SHEEN)	12-14	24/6	23,16,12,9	0		
15 / 75		Brown medium to fine SAND, some fine gravel, trace coarse gravel, stained, wet. (ODOR)	14-16	24/4	9,8,7,11	2.6		
		Grey green SAND grading to light brown SILT (stained), trace medium to coarse sand in nose of split spoon, wet (ODOR)(SHEEN)	16-18	24/14	14,4,6,8	0		
20 / 70			18-20	24/0	26,23,18,20	0		
		No recovery.	20-20.25	3/3	50/.3'	NA		
		Brown fine SAND, trace silt, moist to wet. (ODOR) Refusal @20.25'.						
25 / 65		Dark Grey SHALE. 5 7/8-inch rollerbit to 43'.						
30 / 60		Dark Grey Shale						5 7/8 inch open-hole (bedrock) 22'-43'.
35								

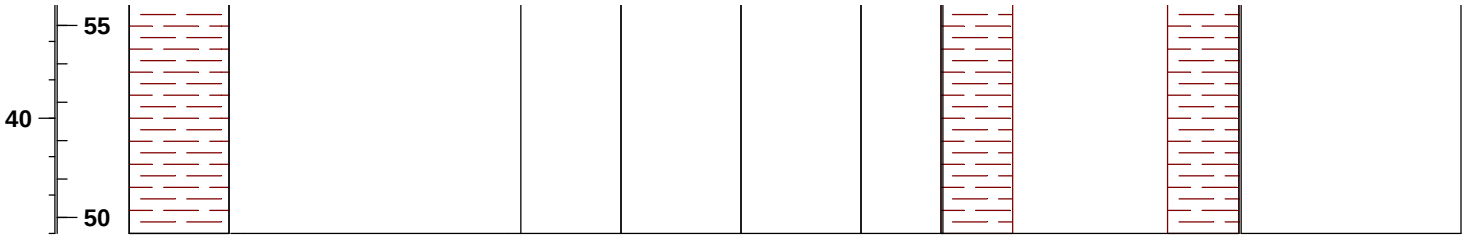
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.22 / GRD 92.58
BORING NO.:	MW-10I	**BORING LOCATION:**	N 1,484,714/E 709,638
DATE:	6/19/01	**METHOD OF DRILLING:**	4.25 inch Hollow Stem Auger
BORING DIAMETER:	8. 25 inches	**SAMPLE TYPE:**	2 inch x 2 foot Split Sploon
BORING DEPTH:	43 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

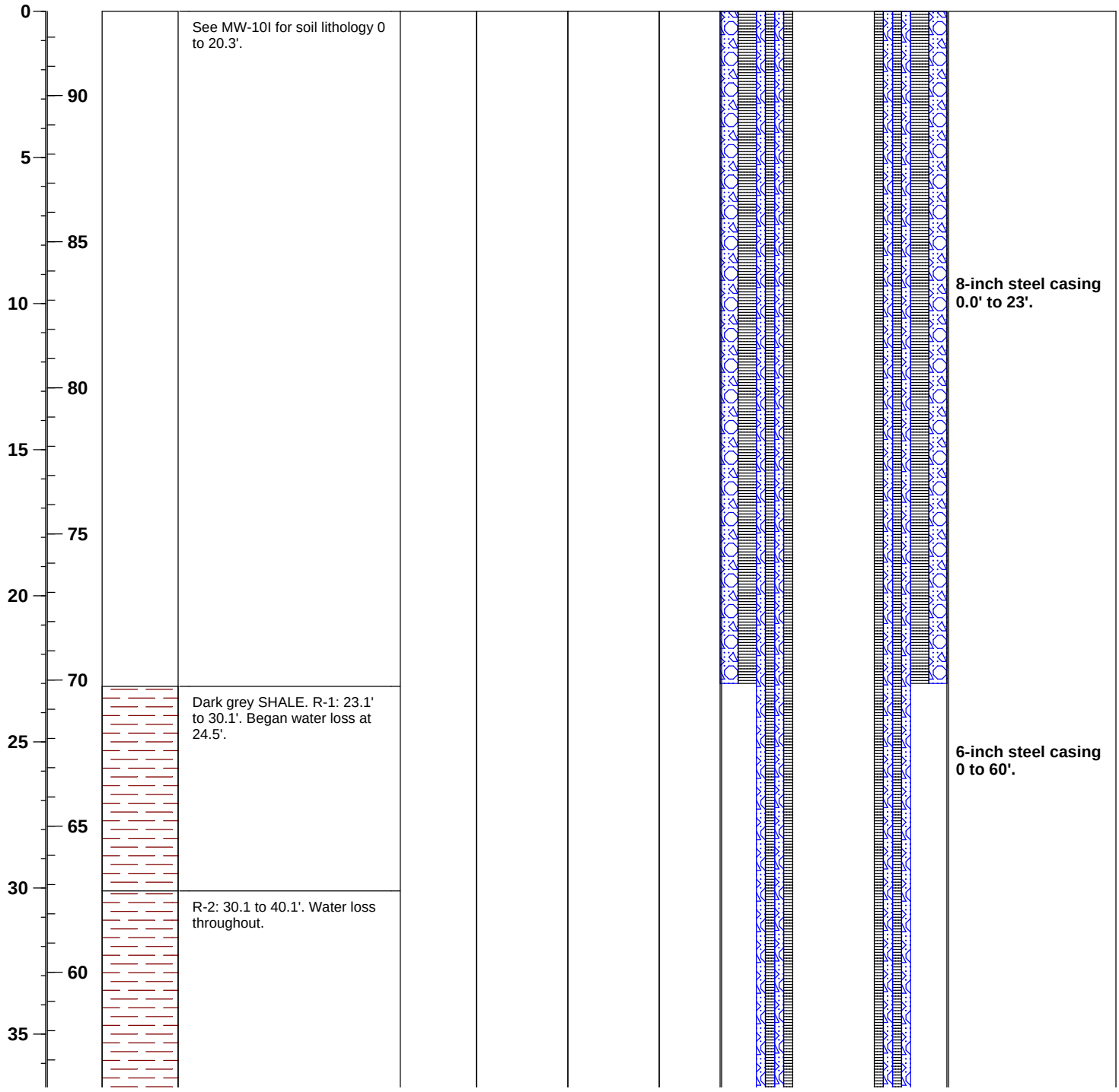
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.67 / GRD 92.88
BORING NO.:	MW-10D	**BORING LOCATION:**	N 1,484,711/E 709,645
DATE:	6/6/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	114 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

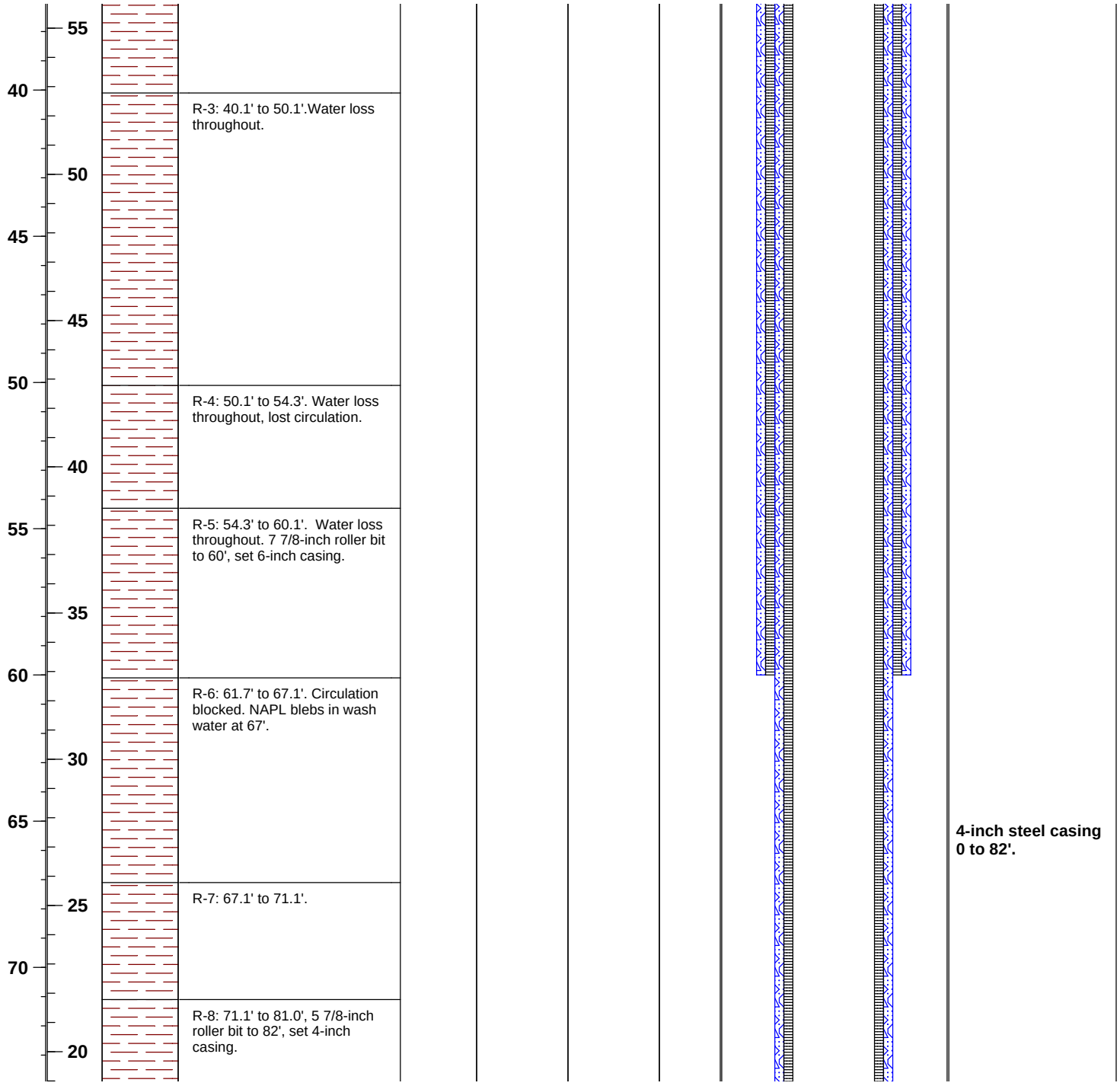
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.67 / GRD 92.88
BORING NO.:	MW-10D	**BORING LOCATION:**	N 1,484,711/E 709,645
DATE:	6/6/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	114 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



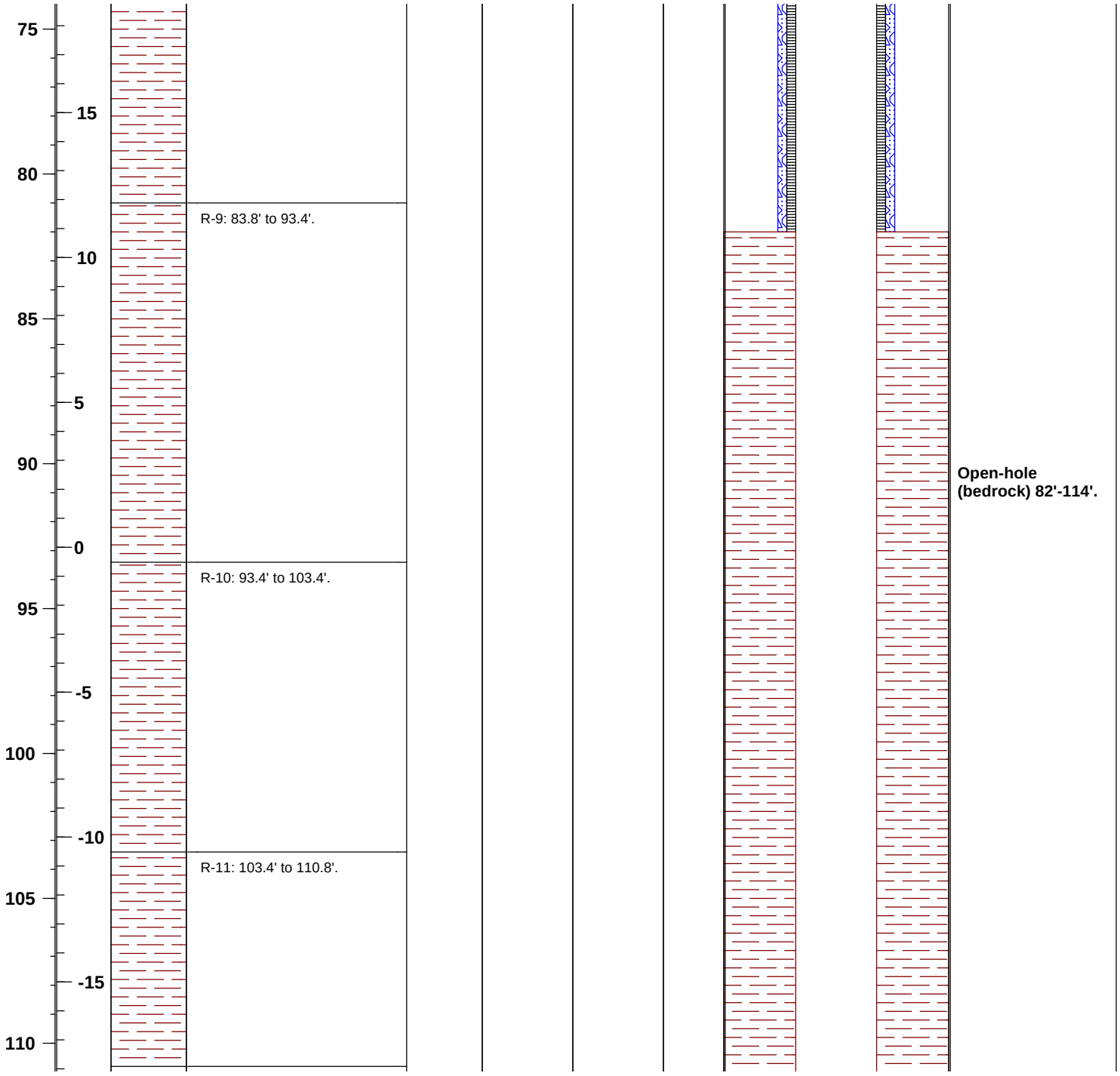
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.67 / GRD 92.88
BORING NO.:	MW-10D	**BORING LOCATION:**	N 1,484,711/E 709,645
DATE:	6/6/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	114 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.67 / GRD 92.88
BORING NO.:	MW-10D	**BORING LOCATION:**	N 1,484,711/E 709,645
DATE:	6/6/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	114 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
-20		R-12: 110.8' to 115'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.67 / GRD 93.88
BORING NO.:	MW-12S	**BORING LOCATION:**	N 1484813.90 / E 709651.04
DATE:	4/10/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	28 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, some coal fragments, trace ash-like material and blue grains, damp.	0-2	24/20	6,8,9,9	5.2	Cement	
		Grey brown gravelly SAND, trace ash-like material, damp.	2-4	24/12	7,9,11,12	0	Cement/Bentonite Grout	
5		Same as 2'-4' moist.	4-6	24/14	9,7,6,7	3.3	4" Sch. 40 PVC casing.	
		Brown medium SAND, trace gravel, moist.	6-8	24/2	38,36, 46,56	1.4		
		Same as 4.67' to 6'.					Bentonite Chips	
10 / 85		Red brick fragment in nose.	8-10	10/0	66,50/4	NA		
		No recovery	10-12	9/0	78,50/3	NA		
		No recovery. Spoon wet at 13'.	12-14	24/0	45,29, 35,32	NA		
15 / 80		Grey brown gravelly SAND, some NAPL (red), wet.	14-16	24/10	13,16, 36,32	109	#1 Sand	
		Same as 14' to 16'. Saturated, NAPL throughout.	16-18	24/NA	49,48, 24,58	NA		
		Same as 16' to 18'.						
20 / 75		Brown grey medium SAND, trace gravel, trace clay, MGP odor, possible NAPL.	18-20	24/12	51,71, 47,25	22.3		
		Brown grey medium SAND, trace gravel, wet. NAPL at 21'.	20-22	24/18	2,5,6,8	9		
		Same as 20' to 22'. NAPL at 23.2'. Clay lense at 23.3'.	22-24	24/20	8,7,6,7	4.2	4" Sch. 40 PVC 0.020" slot screen 11'-26'.	
25 / 70		Grey brown fine SAND, trace medium sand, wet.	24-26	24/20	2,3,2,3	4.2		
		Same as 23.17' to 24'. Trace wood chips at 25.9'.	26-26.3	3/3	100/3	45	Bentonite 4" Sch. 40 PVC Riser (sump) 26'-28'.	
		Same as 24' to 25.9.						
		Grey silty SHALE, NAPL. Augered to 28'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.45 / GRD 94.09
BORING NO.:	MW-14S	**BORING LOCATION:**	N 1484891.37 / E 709665.25
DATE:	4/9/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	25.3 ft.	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace brick, moist.	0-2	24/20	5,7,7,20	0		Cement
		Black fine coal fragments, some brick, moist.	2-4	24/18	17,10, 12,10	0		Cement/Bentonite Grout
		Same as 0' - 1'.						
5 / 85		Brown silty SAND, trace coal fragments and brick, damp to moist.	4-6	24/18	6,6,7,9	0		2" Sch.40 PVC casing.
		Same as 2.25' to 4'.	6-8	24/20	6,6,6,9	0		Bentonite Chips
		Brown silty SAND, trace roots, moist	8-10	24/20	4,6,6,18	0		
10 / 80		Same as 6' to 8', moist.						
		Same as 6' to 8', rock in nose of split spoon, moist to wet.	10-12	24/4	3, 14,19,20	0		
		Brown medium SAND, some coarse gravel, rock in nose of split spoon, moist to wet.	12-14	24/4	20,22 21,26	0		#1 Sand
15 / 75		No recovery, possibly sand.	14-16	24/0	25,24, 31,26	NA		
		No recovery, possibly sand.	16-18	24/0	7, 13,15,19	NA		
		Dark brown to black fine SAND, trace coarse sand, wet.	18-20	24/4	17,15, 12,18	0		2" Sch. 40 PVC 0.010" slot screen: 10'-25'
20 / 70		Dark grey to brown medium SAND, trace silty clay , and shale fragments, MGP odor, wet.	20-22	24/24	7,8,7,7	0		
		Same as 20' to 22'.	22-24	24/18	7, 12,13,18	0		
25		Dark grey medium SAND, some shale fragments, wet.	24-25.3	15/12	4,8,6	4.5		
		Same as 22.75' to 24'. Wet.						

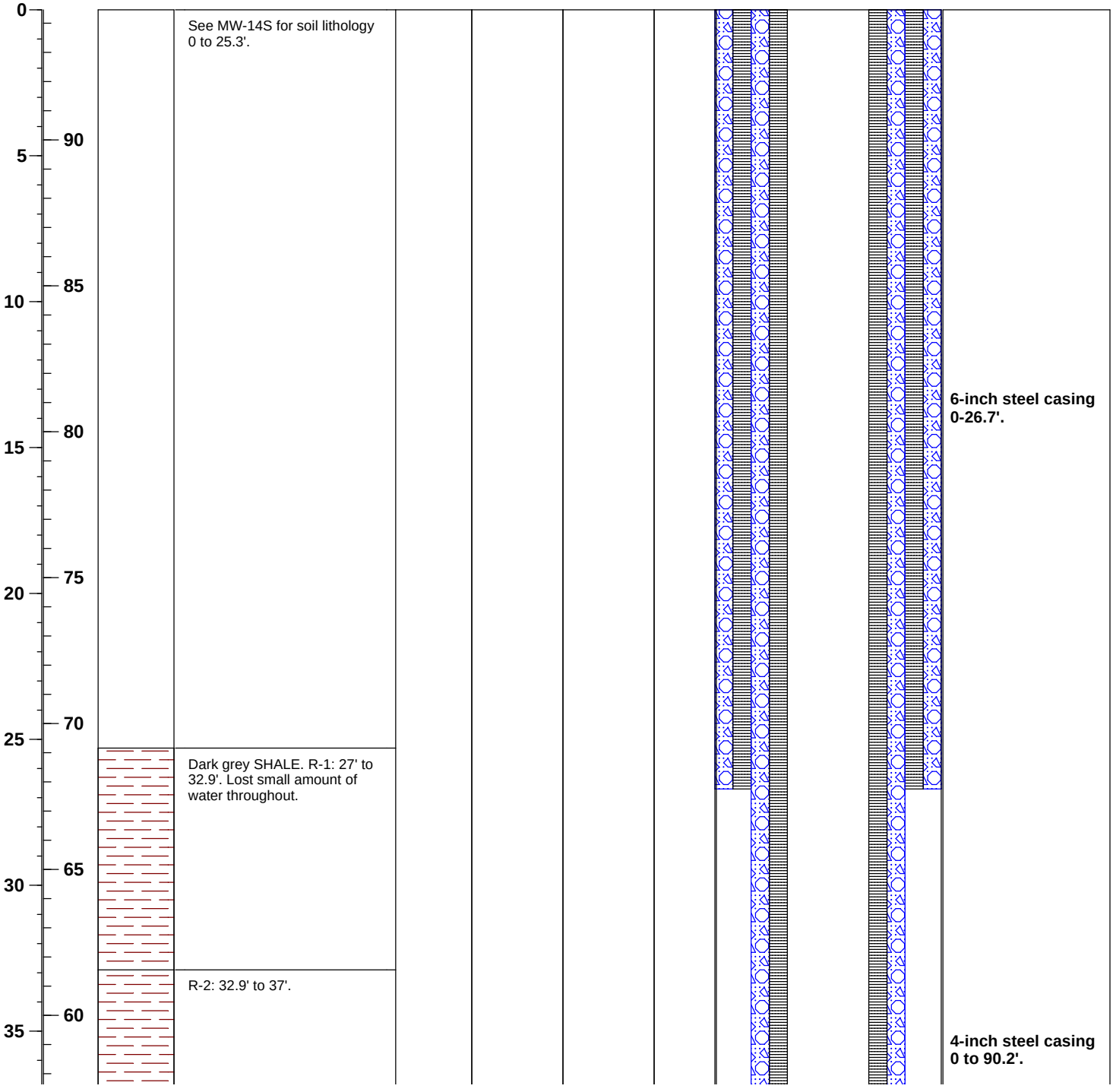
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.07 / GRD 94.46
BORING NO.:	MW-14D	**BORING LOCATION:**	N 1484886.74 / E 709667.26
DATE:	6/29/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	121.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

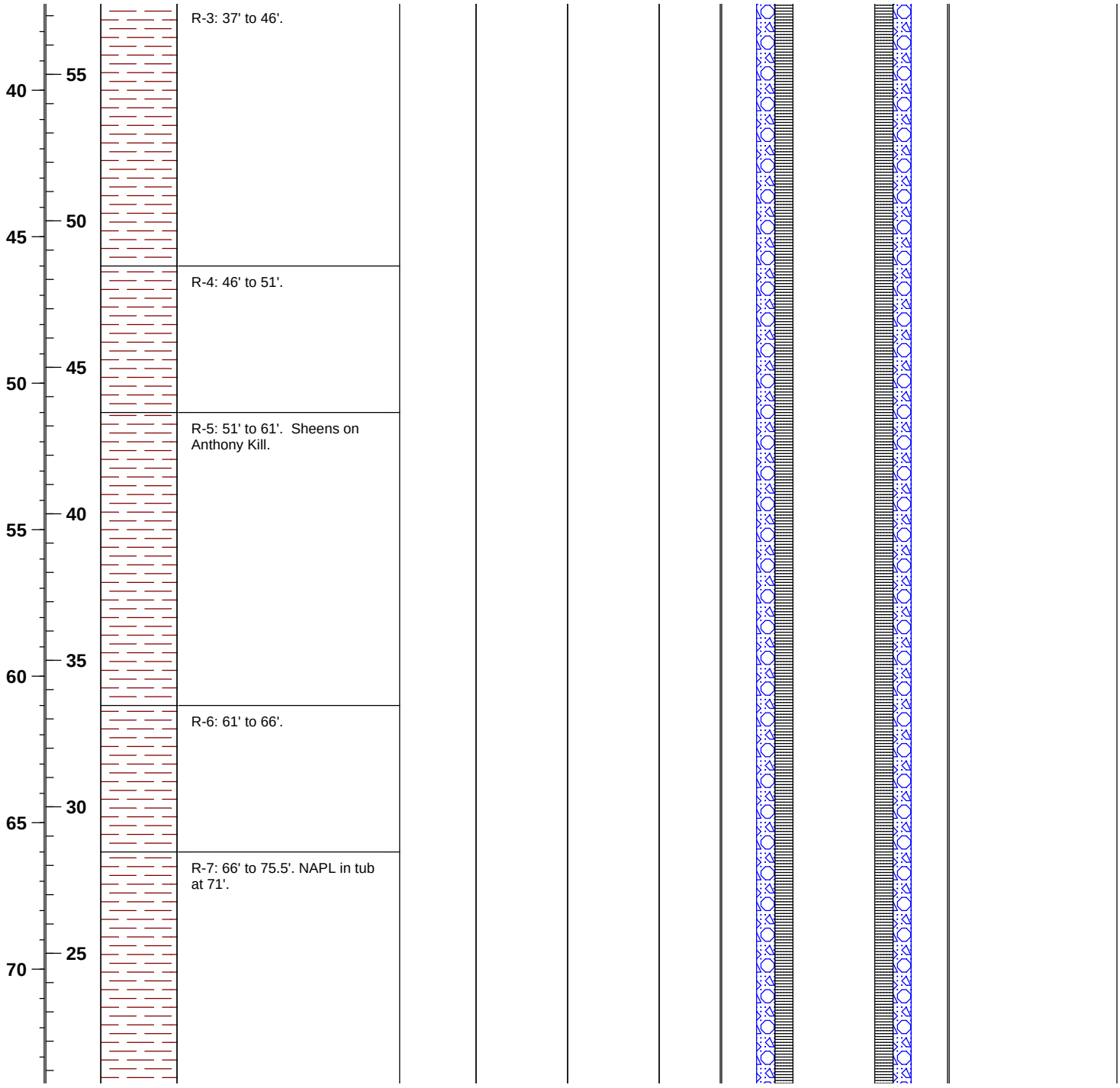
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.07 / GRD 94.46
BORING NO.:	MW-14D	**BORING LOCATION:**	N 1484886.74 / E 709667.26
DATE:	6/29/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	121.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



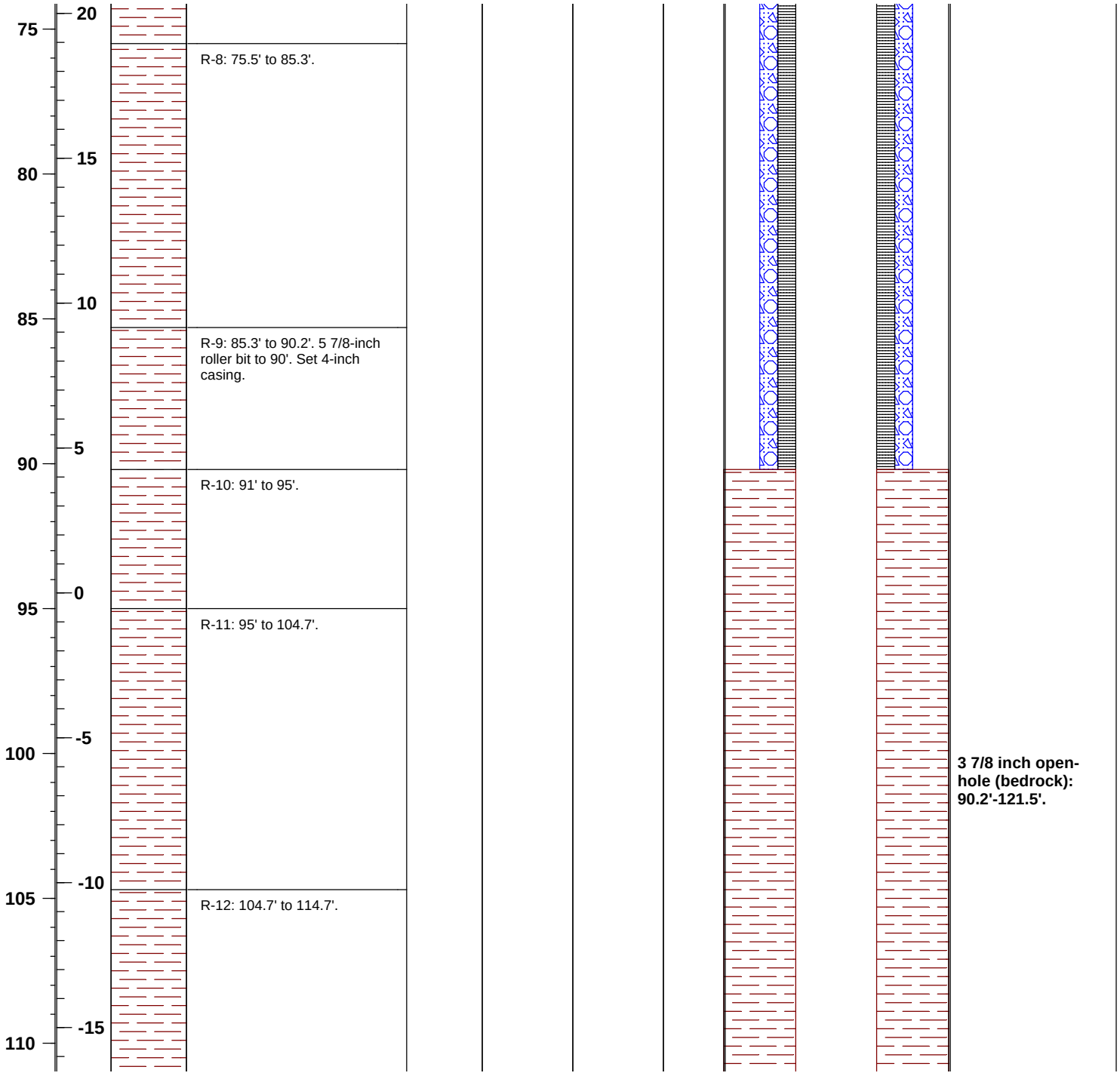
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.07 / GRD 94.46
BORING NO.:	MW-14D	**BORING LOCATION:**	N 1484886.74 / E 709667.26
DATE:	6/29/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	121.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



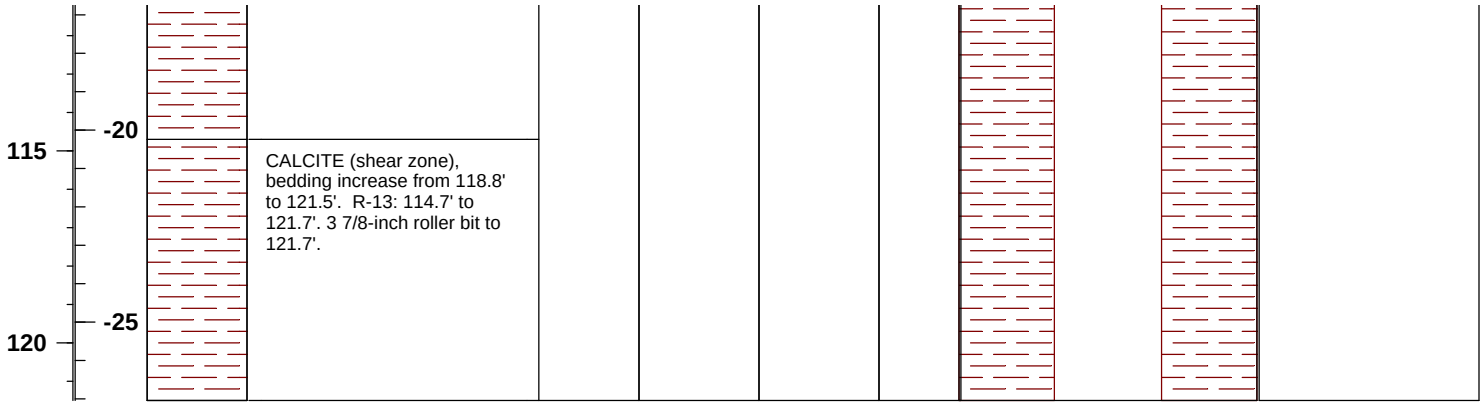
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.07 / GRD 94.46
BORING NO.:	MW-14D	**BORING LOCATION:**	N 1484886.74 / E 709667.26
DATE:	6/29/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	121.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description

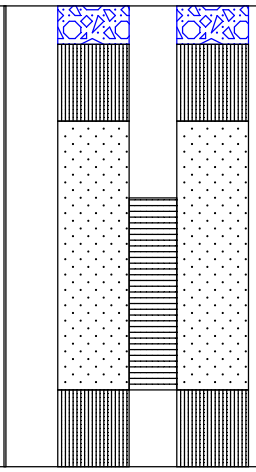


LOG OF BORING

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Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 88.53 / GRD 85.51
BORING NO.:	MW-15S	**BORING LOCATION:**	N 1484942.83 / E 709516.39
DATE:	4/12/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	12 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, trace gravel, silty lens at 1.5', damp.	0-2	24/8	1,2,3,4	4.9		Cement/Bentonite Grout Bentonite Chips 2" Sch. 40 PVC casing. #1 Sand 2" Sch. 40 PVC 0.020" slot screen: 5'-10'. Bentonite 2" Sch. 40 PVC Riser (sump): 10'-12'.
		Brown medium SAND, trace coarse sand, damp.	2-4	24/8	6,4,4,3	0		
5 / 80		3" same as above, Grey-brown medium fine SAND, little coarse coal fragments, slight MGP odor, moist.	4-6	24/8	4,4,3,3	0		
		Brown medium SAND, some ash-like material, MGP odor, wet.	6-8	24/16	2,4,2,3	2.1		
10 / 75		Brown medium SAND, grey stained throughout, spots of NAPL, MGP odor, trace wood, wet.	8-10	22/16	6,1,1,50/4	82		
		Augered to 12'						

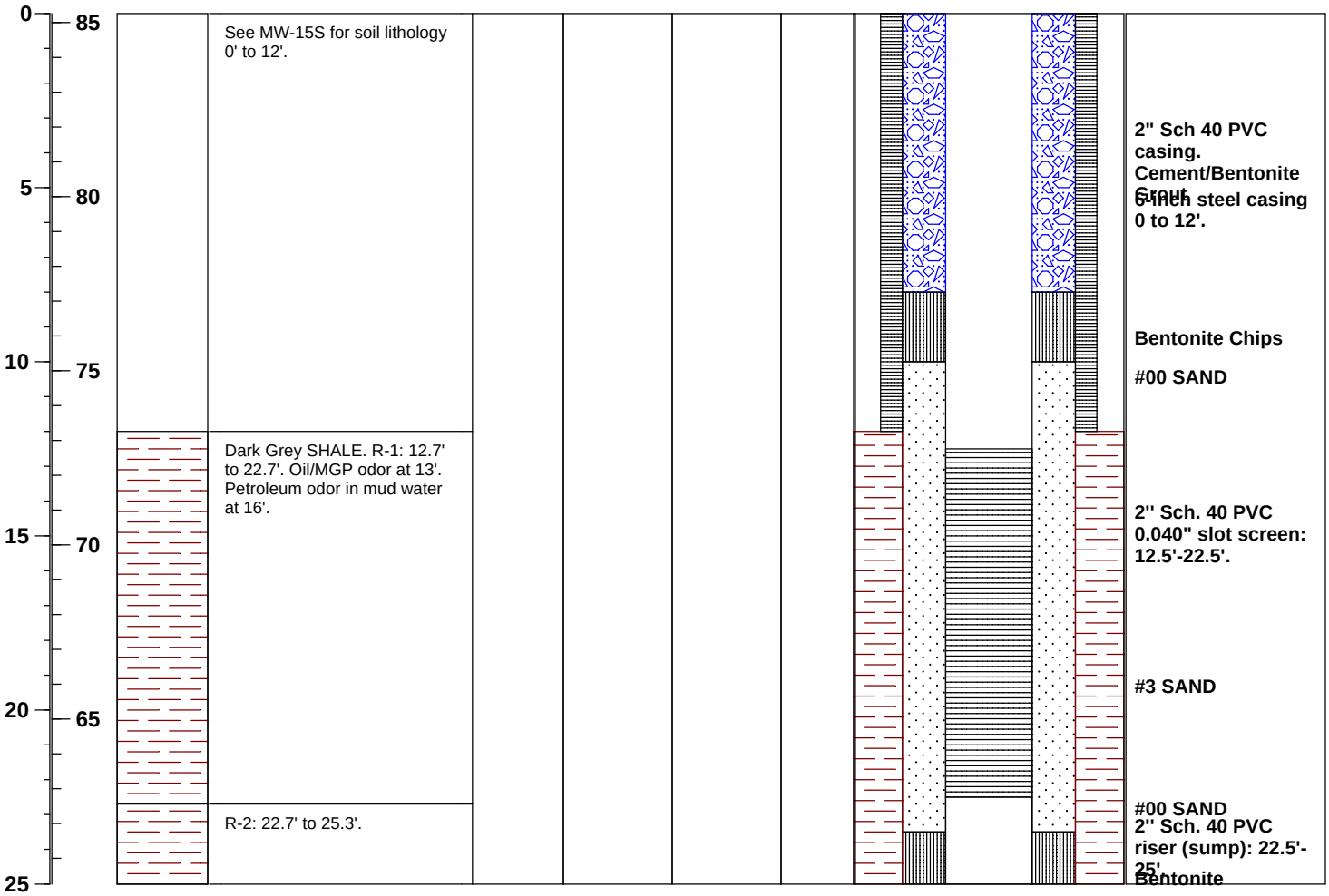
LOG OF BORING

URS
Clifton Park, New York

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PROJECT:	NYSEG	**ELEVATION:**	TOC 87.94 / GRD 85.26
BORING NO.:	MW-15I	**BORING LOCATION:**	N 1484943.34 / E 709511.08
DATE:	5/4/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	25 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

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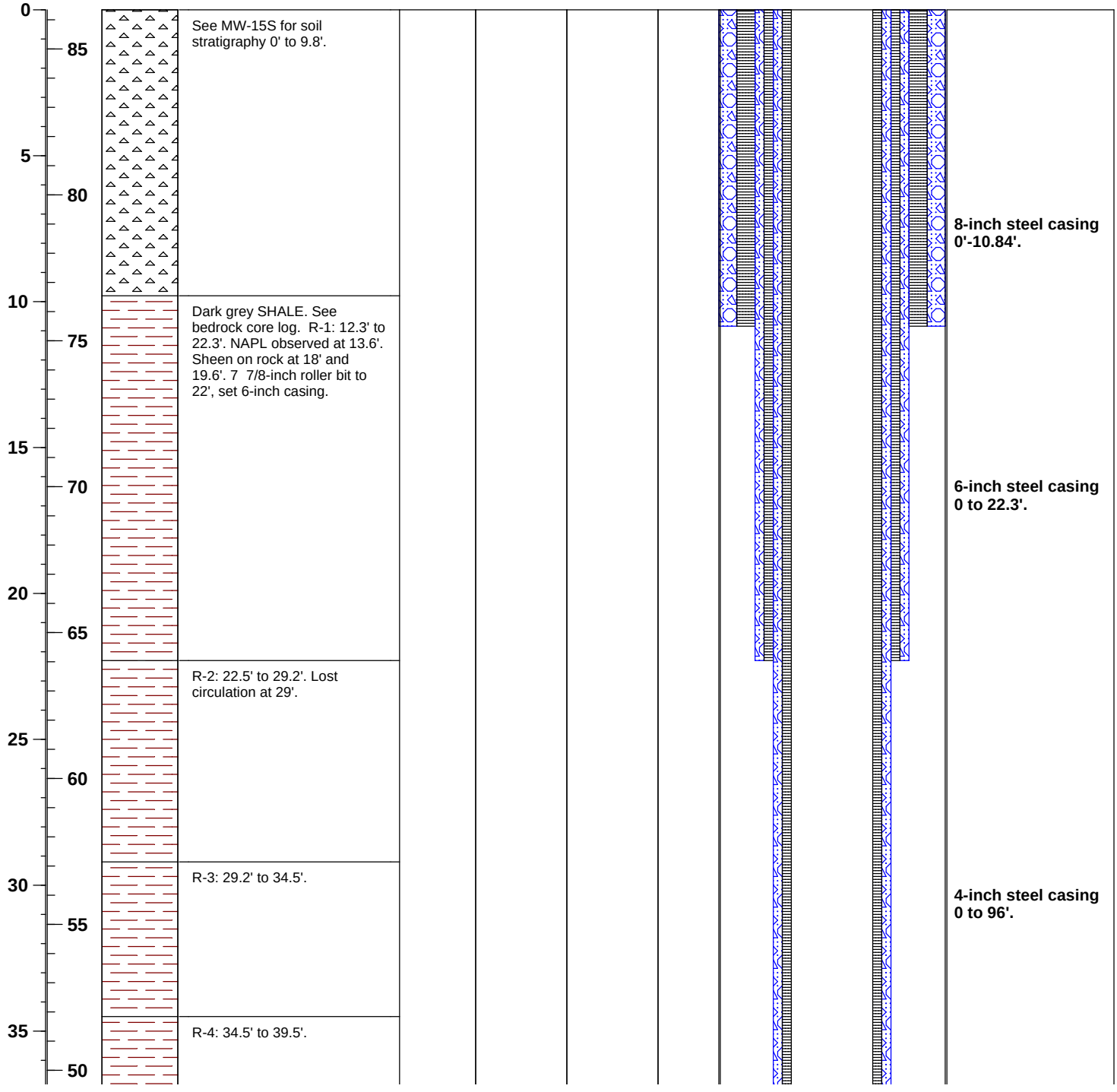
Clifton Park, New York

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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 87.33 / GRD 86.34
BORING NO.:	MW-15D	**BORING LOCATION:**	N 1484941.71 / E 709521.01
DATE:	6/18/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Coring
BORING DEPTH:	105.8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
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NYSEG
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PROJECT:	NYSEG	**ELEVATION:**	TOC 87.33 / GRD 86.34
BORING NO.:	MW-15D	**BORING LOCATION:**	N 1484941.71 / E 709521.01
DATE:	6/18/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Coring
BORING DEPTH:	105.8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
40 / 45		R-5: 39.5' to 49.3'.						
45 / 40								
50 / 35		R-6: 49.3' to 59.5'.						
55 / 30								
60 / 25		R-7: 59.5' to 69.5'.						
65 / 20								4-inch steel casing 0 to 96'.
70 / 15		R-8: 69.5' to 79.5'. Trace NAPL at 78'.						

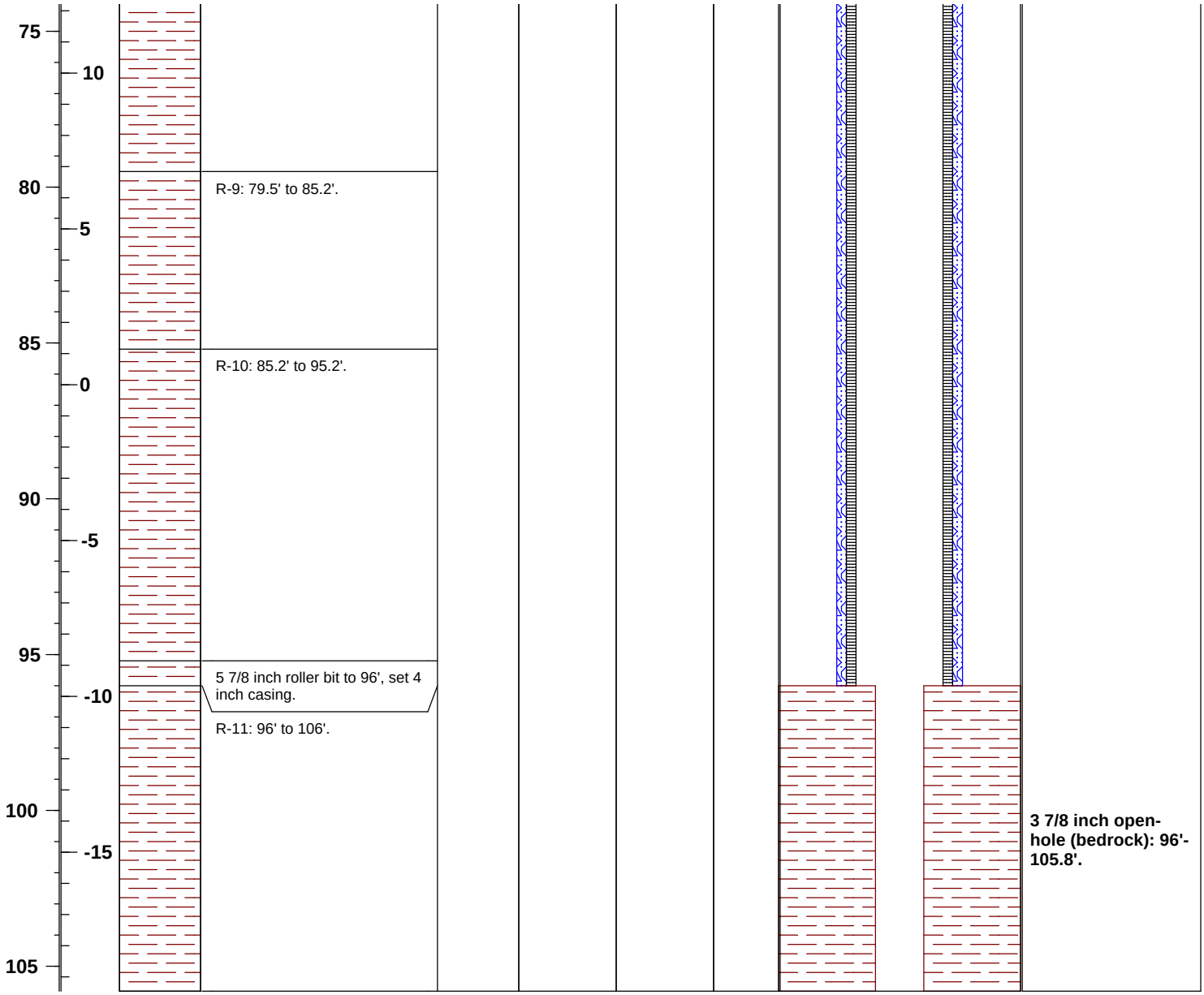
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 87.33 / GRD 86.34
BORING NO.:	MW-15D	**BORING LOCATION:**	N 1484941.71 / E 709521.01
DATE:	6/18/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Coring
BORING DEPTH:	105.8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.29 / GRD 93.55
BORING NO.:	MW-17I	**BORING LOCATION:**	N 1484870.22 / E 709772.76
DATE:	4/23/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	45 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Augered through 0.5' of asphalt.	0.5-2	18/12	4,4,1,0	0		
		Brown medium SAND, some ash, trace gravel, damp.	2-4	24/.8	13,22,13,9	0		
5 / 85		Brown medium SAND and gravel, trace silt and slag, damp, musty swamp odor.	4-6	24/2	10,15,15,12	0		6-inch steel casing 0 to 23'.
		Brown medium SAND, trace gravel, moist.	6-8	24/.2	10,7,9,10	0		
		Brown medium SAND, some shale fragments, trace brick, trace ash-like material, moist.	8-10	24/.5	12,10,6,7	0		
10 / 80		Brown medium SAND, moist.						
		Brown medium SAND, some silt, trace gravel, wet, musty/swamp odor.	10-12	24/20	5,5,7,25	0		
		Light brown medium-fine SAND, some silt, little shale fragments, wet, musty/swamp odor.	12-14	24/18	WOH,3,6,9	0		
15 / 75			14-16	24/20	5,7,7,10	4.1		
		Grey-green fine SAND (marbled), trace gravel, trace organics, swamp odor, wet.	16-18	24/12	17,17,13,7	4.1		
20 / 70			18-20	24/20	2,7,8,15	2.9		
		Same as 16' to 19.8' with silty shale fragments, wet.	20-21.3	16/16	12,52,50/4"	5.2		
		Grey-green silty SAND, some shale, wet.						
25 / 65		Grey silty shale fragments, wet. (Refusal at 21.3').						
		Grey SHALE						
30 / 60		5 7/8 inch roller bit to 45'.						5 7/8 inch open-hole (bedrock): 23' to 45'.
35								

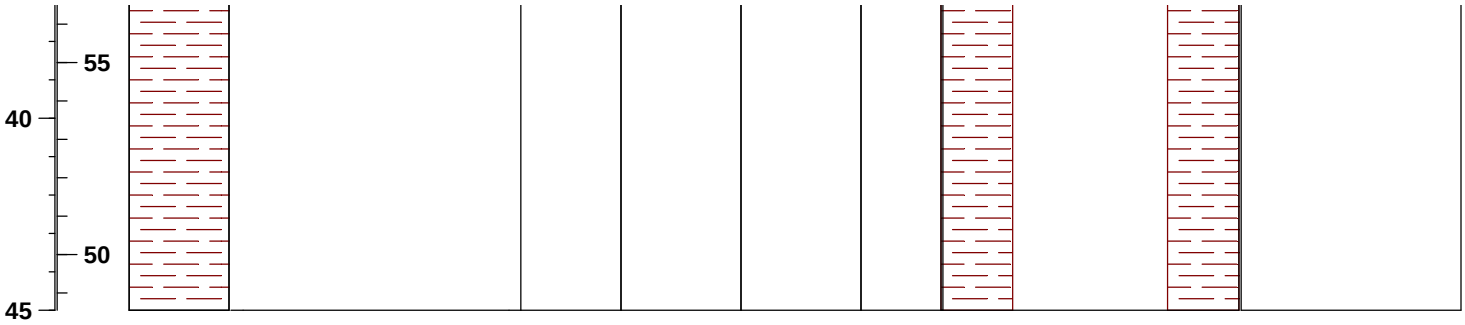
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.29 / GRD 93.55
BORING NO.:	MW-17I	**BORING LOCATION:**	N 1484870.22 / E 709772.76
DATE:	4/23/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	45 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



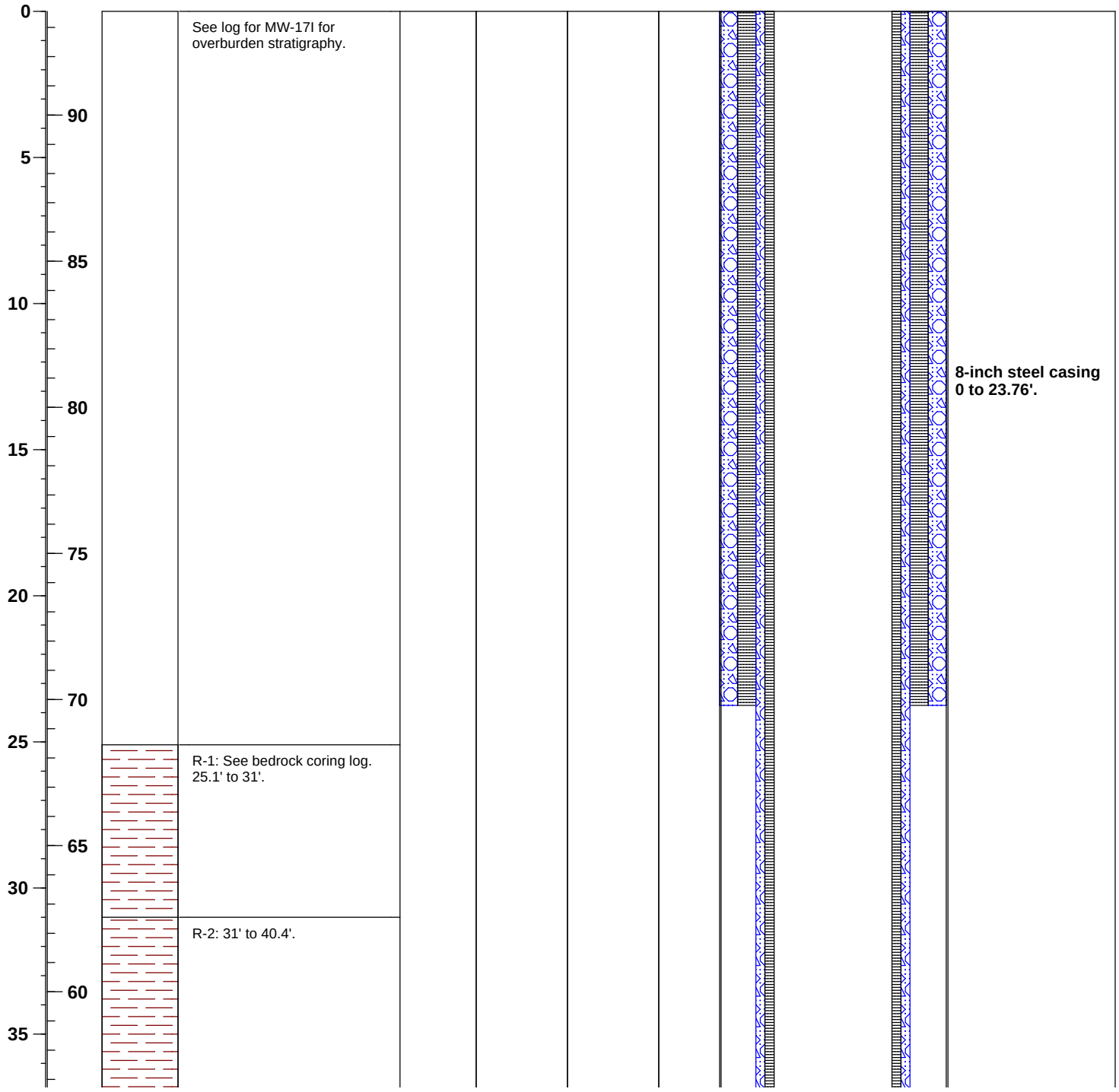
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.60 / GRD 93.55
BORING NO.:	MW-17D	**BORING LOCATION:**	N 1484872.01 / E 709765.43
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	142.2 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.60 / GRD 93.55
BORING NO.:	MW-17D	**BORING LOCATION:**	N 1484872.01 / E 709765.43
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	142.2 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
40 / 55		R-3: 40.4' to 50.6'. Minor water loss at 45'.						6-inch steel casing 0 to 121'.
45 / 50								
50 / 45		R-4: 50.6' to 60.6'. MGP odor at 58'.						
55 / 40								
60 / 35		R-5: 60.6' to 71'.						
65 / 30								
70 / 25		R-6: 71' to 81'.						

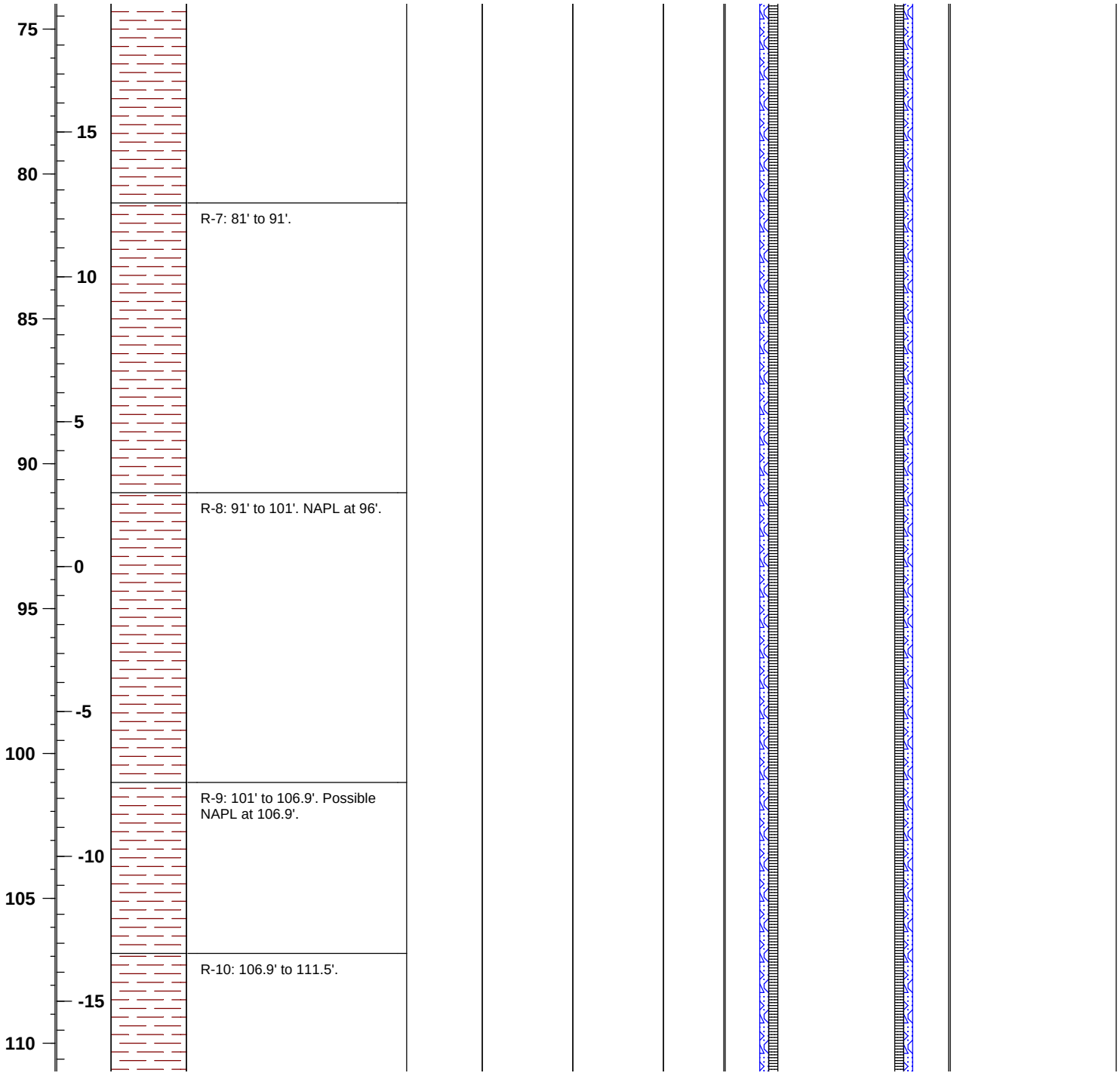
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.60 / GRD 93.55
BORING NO.:	MW-17D	**BORING LOCATION:**	N 1484872.01 / E 709765.43
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	142.2 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



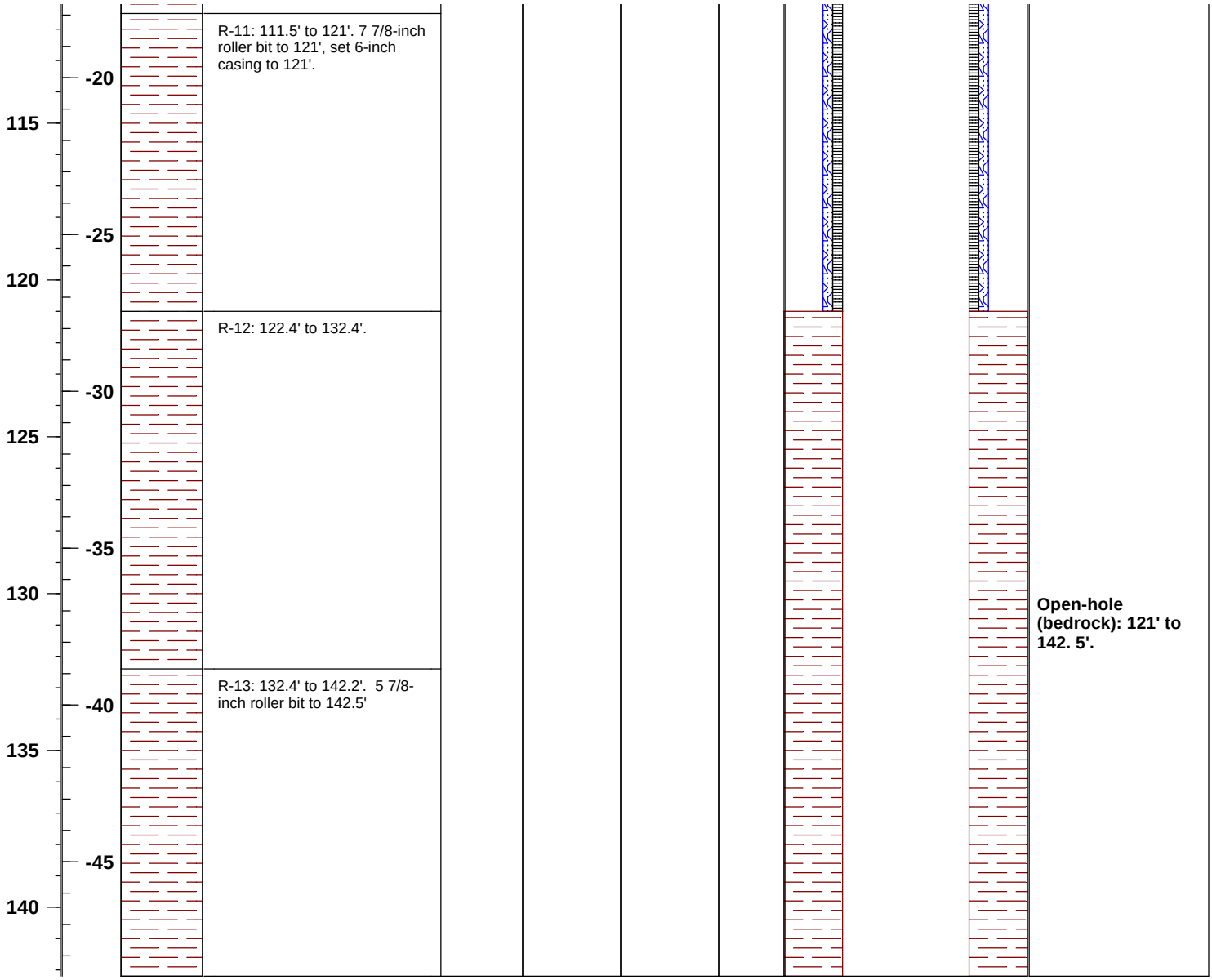
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.60 / GRD 93.55
BORING NO.:	MW-17D	**BORING LOCATION:**	N 1484872.01 / E 709765.43
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	142.2 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

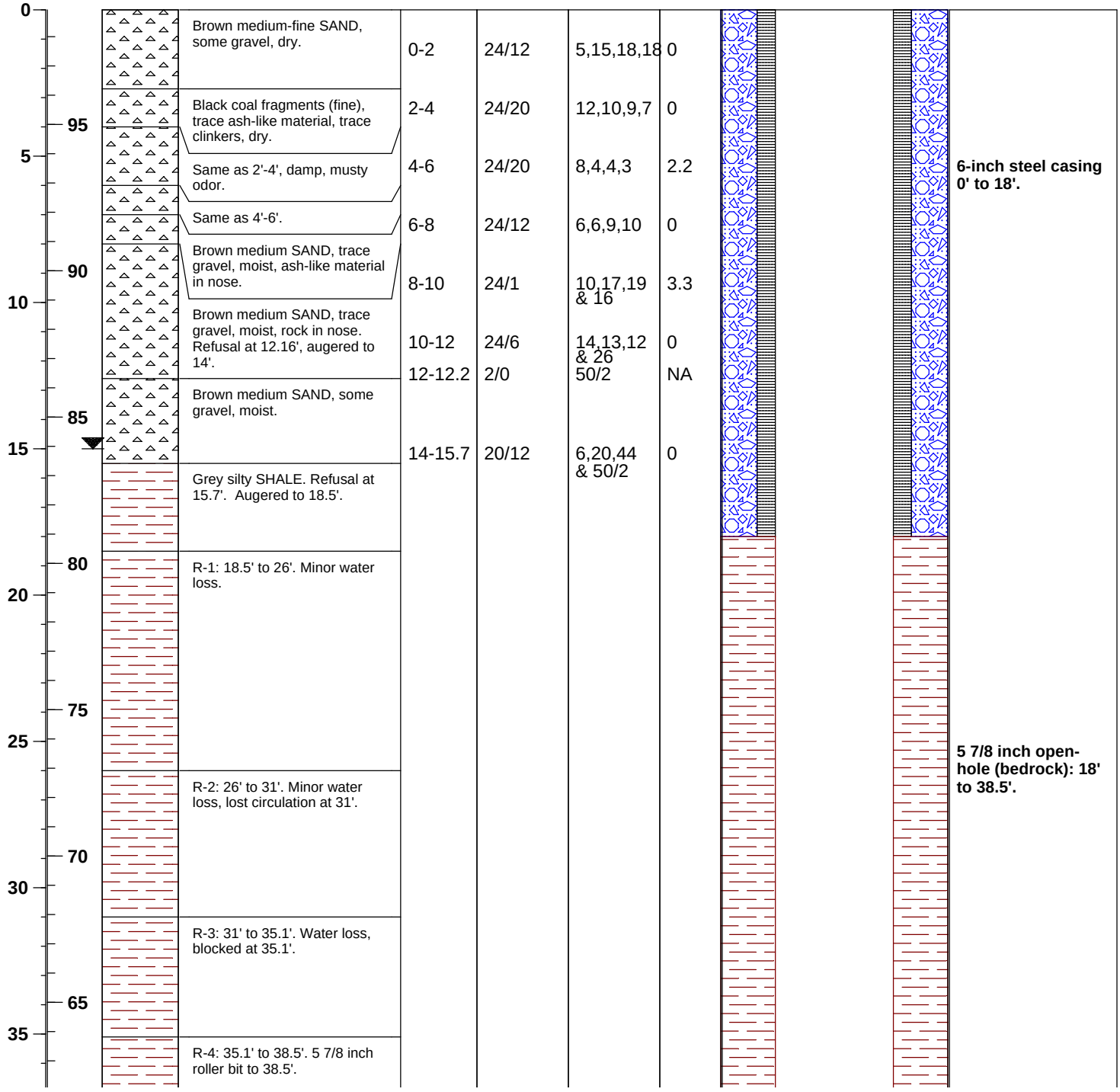
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.92 / GRD 99.2
BORING NO.:	MW-19I	**BORING LOCATION:**	N 1484796.29 / E 709342.40
DATE:	4/24/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	38.5 feet	**SURFACE CONDITIONS:**	Landscaped Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 95		Brown medium-fine SAND, some gravel, dry.	0-2	24/12	5,15,18,18	0		
5 / 90		Black coal fragments (fine), trace ash-like material, trace clinkers, dry.	2-4	24/20	12,10,9,7	0		
		Same as 2'-4', damp, musty odor.	4-6	24/20	8,4,4,3	2.2		
		Same as 4'-6'.	6-8	24/12	6,6,9,10	0		
10 / 85		Brown medium SAND, trace gravel, moist, ash-like material in nose.	8-10	24/1	10,17,19 & 16	3.3		
		Brown medium SAND, trace gravel, moist, rock in nose. Refusal at 12.16', augered to 14'.	10-12	24/6	14,13,12 & 26	0		
15 / 80		Brown medium SAND, some gravel, moist.	12-12.2	2/0	50/2	NA		
		Grey silty SHALE. Refusal at 15.7'. Augered to 18.5'.	14-15.7	20/12	6,20,44 & 50/2	0		
20 / 75		R-1: 18.5' to 26'. Minor water loss.						
25 / 70		R-2: 26' to 31'. Minor water loss, lost circulation at 31'.						
30 / 65		R-3: 31' to 35.1'. Water loss, blocked at 35.1'.						
35		R-4: 35.1' to 38.5'. 5 7/8 inch roller bit to 38.5'.						



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.92 / GRD 99.2
BORING NO.:	MW-19I	**BORING LOCATION:**	N 1484796.29 / E 709342.40
DATE:	4/24/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	38.5 feet	**SURFACE CONDITIONS:**	Landscaped Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
								

LOG OF BORING

URS
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NYSEG
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PROJECT:	NYSEG	**ELEVATION:**	TOC 96.37 / GRD 94.87
BORING NO.:	MW-20D	**BORING LOCATION:**	N 1485096.99 / E 709437.96
DATE:	8/20/01	**METHOD OF DRILLING:**	3.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	5.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	110.1 feet	**SURFACE CONDITIONS:**	Weeds

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Light brown medium-fine sand, little roots, brick, trace clinker, dry.	0-2	24/8	7,14,16,21	0		
		Brown medium fine SAND, some concrete fragments, trace brick and clinkers, dry.	2-4	24/12	20,21,15,12	0		
5 / 85		Black granular, crystaline material, little brick, moist.	4-6	24/18	10,8,0,9	0		
			6-7.4	17/12	6,4,50/4	0		
		Concrete.						
		Concrete fragments.						
10 / 80		Olive green silty fine sand, trace slag, moist.	8-10	24/12	4,1,2,3	0		
		Light grey, clayey SAND, trace fine gravel, damp.	10-12	24/8	3,4,13,6	0		
		Dark brown- black coal fragments, little white granular and orange granular material, moist.	12-14	24/12	9,17,10,9	0		
15 / 75		Dark brown silty SAND, wet at 15'.	14-16	24/8	6,7,5,2	0		
		Olive grey fine SAND wet.	16-18	24/24	1,1,3,4	0		
20 / 70		Brown medium to fine SAND, trace shale, moist. Refusal at 20.4'.	18-20	24/24	3,2,3,6	0		
		Dark grey SHALE fragments. Overdrilled with 10.25" HSA, cleared hole with 10" roller bit. Set 8-inch casing at 23.5'. R-1: 23.5' to 29.4'						8-inch steel casing 0 to 23.5'.
25 / 65		R-2: 29.4' to 36.4'.						
30 / 60								6-inch steel casing 0 to 51'.
35		R-3: 36.4' to 45.8'						

LOG OF BORING

URS

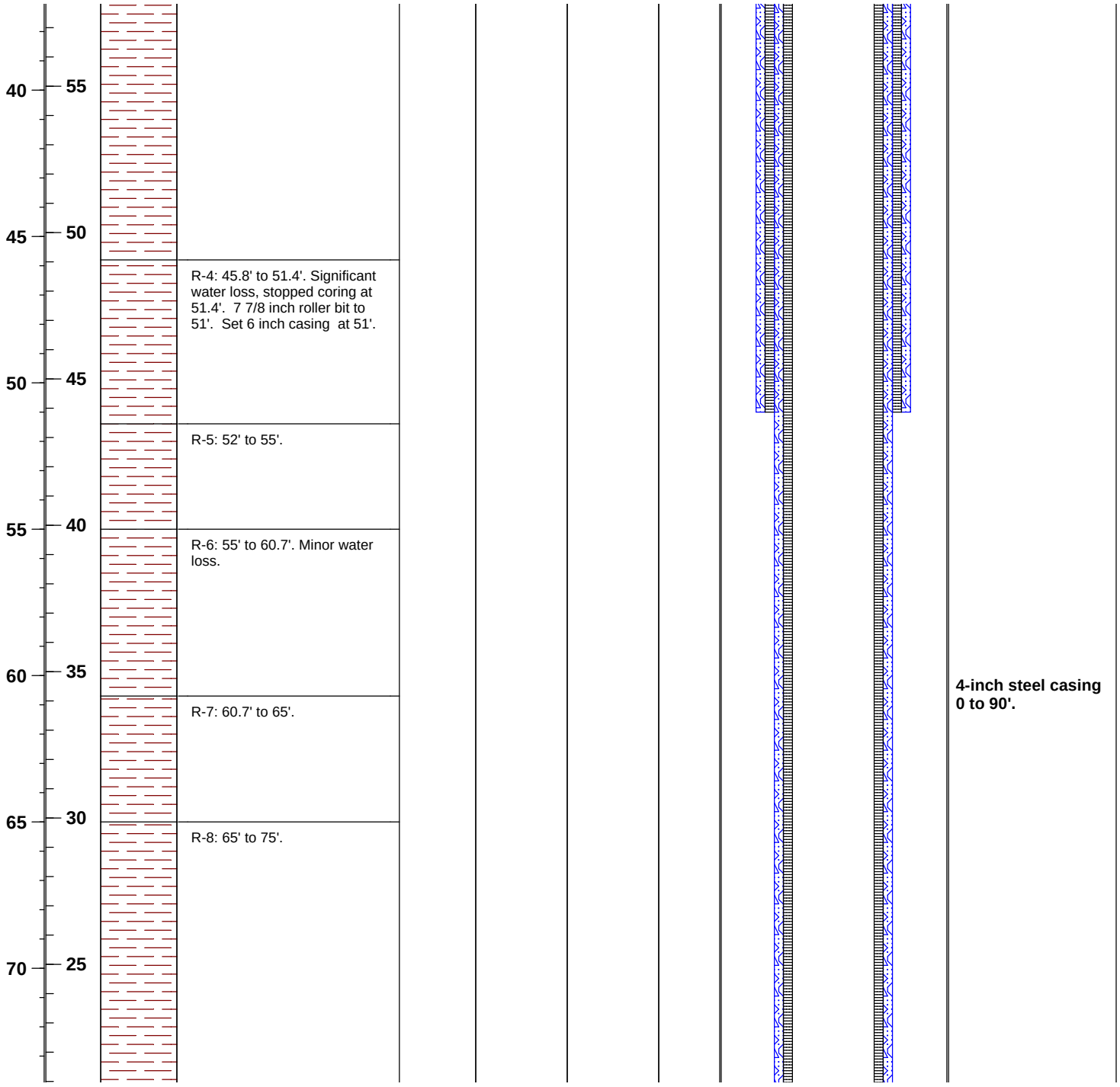
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 96.37 / GRD 94.87
BORING NO.:	MW-20D	**BORING LOCATION:**	N 1485096.99 / E 709437.96
DATE:	8/20/01	**METHOD OF DRILLING:**	3.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	5.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	110.1 feet	**SURFACE CONDITIONS:**	Weeds

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



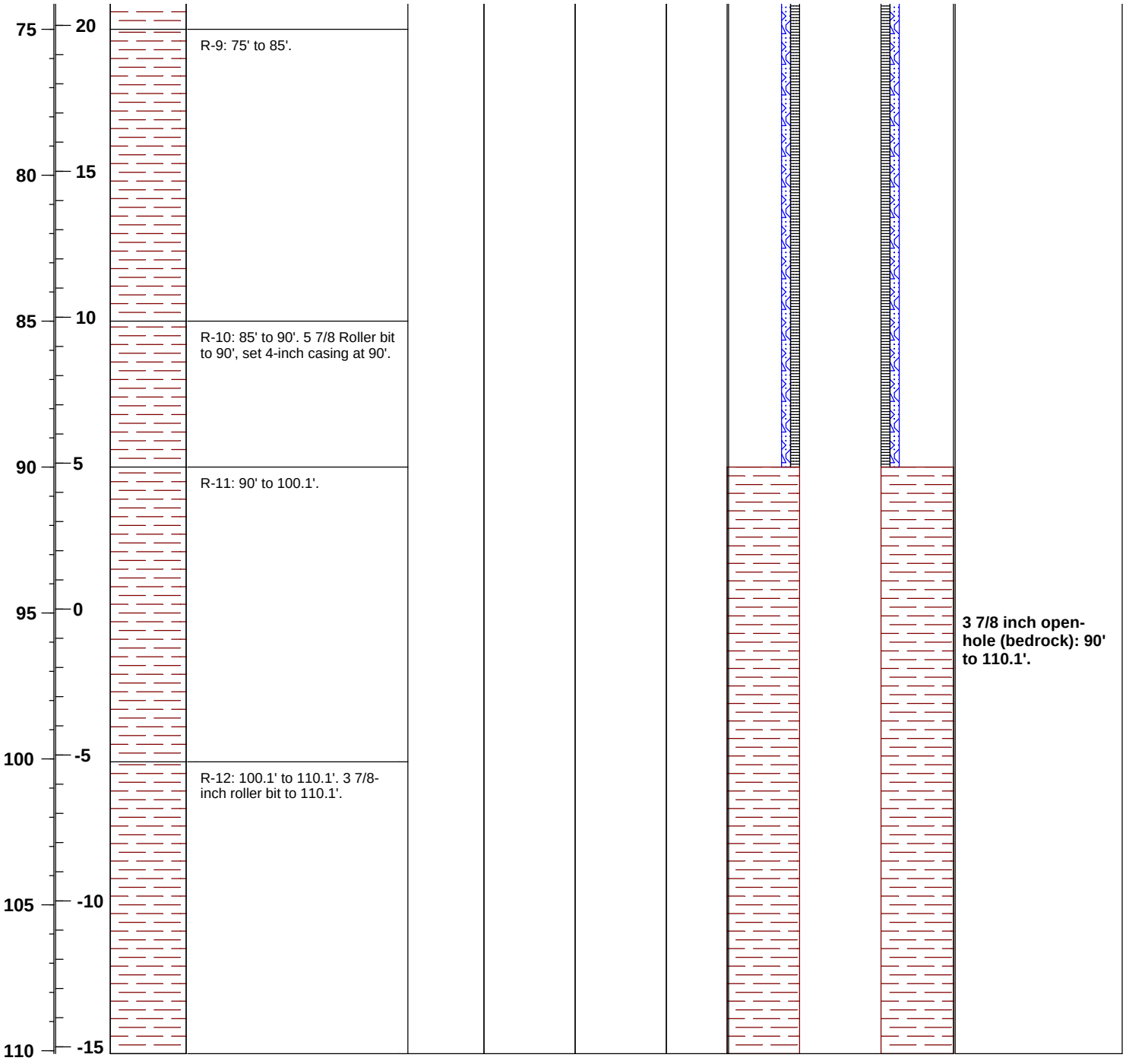
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 96.37 / GRD 94.87
BORING NO.:	MW-20D	**BORING LOCATION:**	N 1485096.99 / E 709437.96
DATE:	8/20/01	**METHOD OF DRILLING:**	3.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	5.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	110.1 feet	**SURFACE CONDITIONS:**	Weeds

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



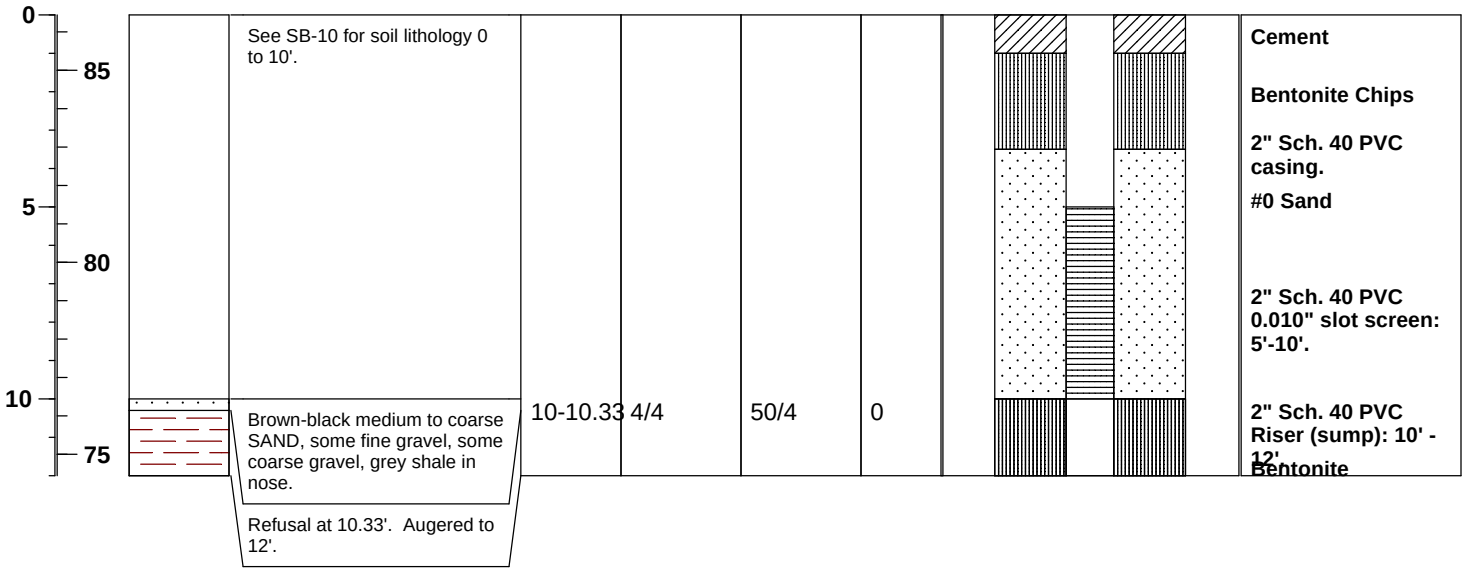
LOG OF BORING

URS
Clifton Park, New York

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Central Avenue
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PROJECT:	NYSEG	**ELEVATION:**	TOC 89.05 / GRD 86.44
BORING NO.:	MW-21S	**BORING LOCATION:**	N 1484947.53 / E 709456.93
DATE:	4/12/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	12 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		See SB-10 for soil lithology 0 to 10'.						Cement
								Bentonite Chips
								2" Sch. 40 PVC casing.
5 / 80								#0 Sand
								2" Sch. 40 PVC 0.010" slot screen: 5'-10'.
10 / 75		Brown-black medium to coarse SAND, some fine gravel, some coarse gravel, grey shale in nose.	10-10.33	4/4	50/4	0		2" Sch. 40 PVC Riser (sump): 10' - 12'
		Refusal at 10.33'. Augered to 12'.						Bentonite



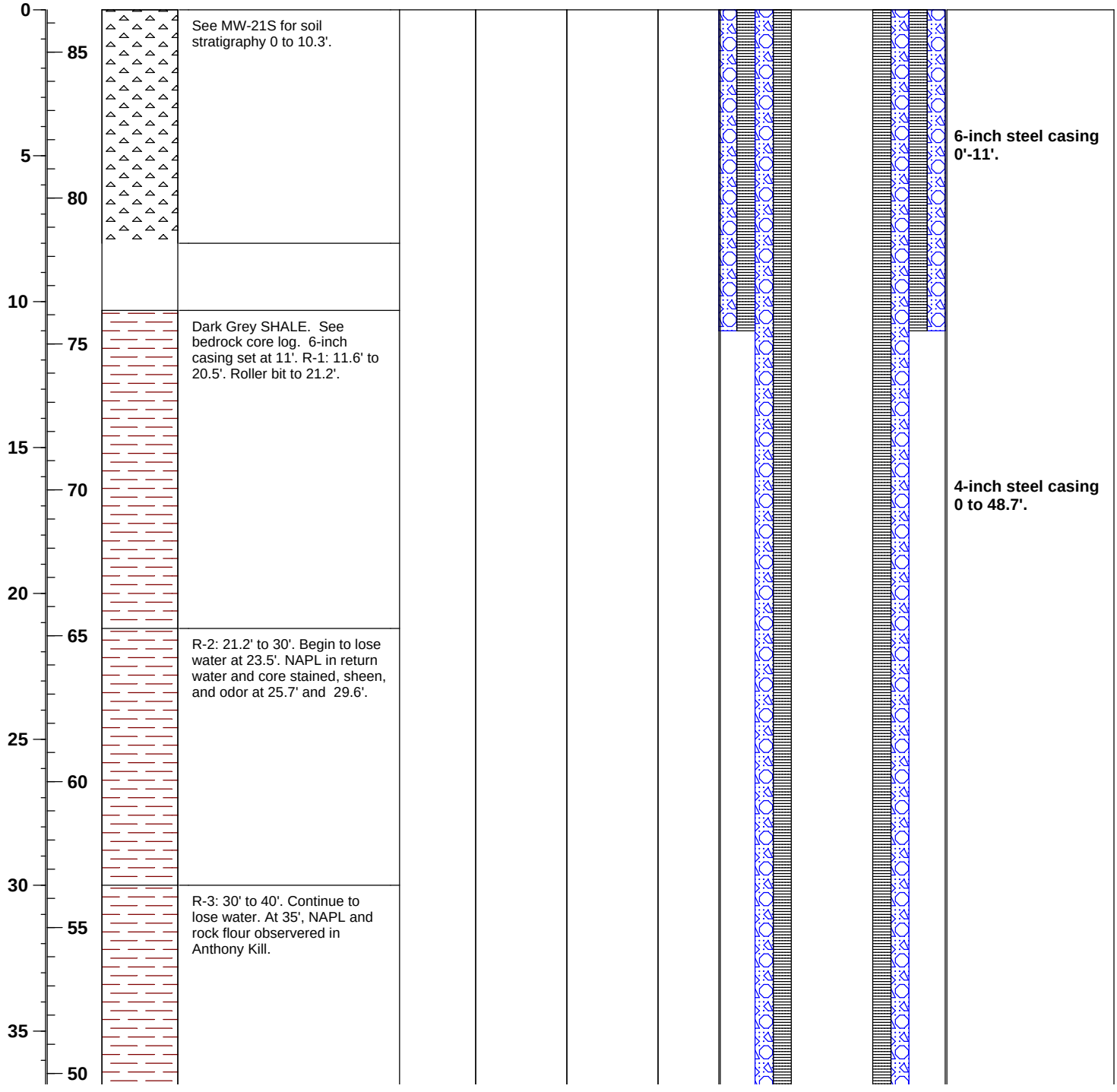
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 89.17/ GRD 86.45
BORING NO.:	MW-21D	**BORING LOCATION:**	N 1484946.13 / E 709462.59
DATE:	5/51/01	**METHOD OF DRILLING:**	8.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	12.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	59.4 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



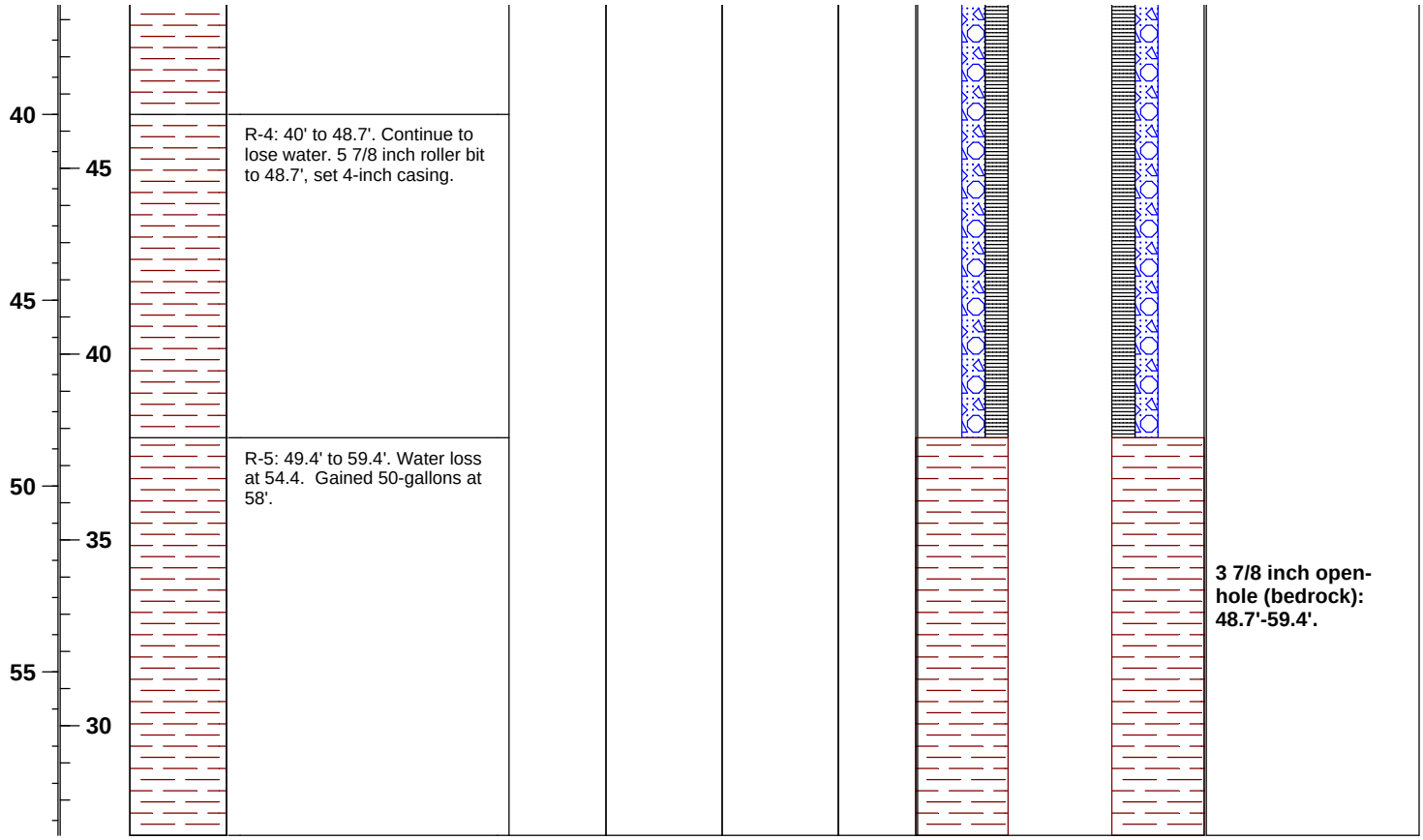
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PROJECT:	NYSEG	**ELEVATION:**	TOC 89.17/ GRD 86.45
BORING NO.:	MW-21D	**BORING LOCATION:**	N 1484946.13 / E 709462.59
DATE:	5/51/01	**METHOD OF DRILLING:**	8.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	12.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	59.4 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



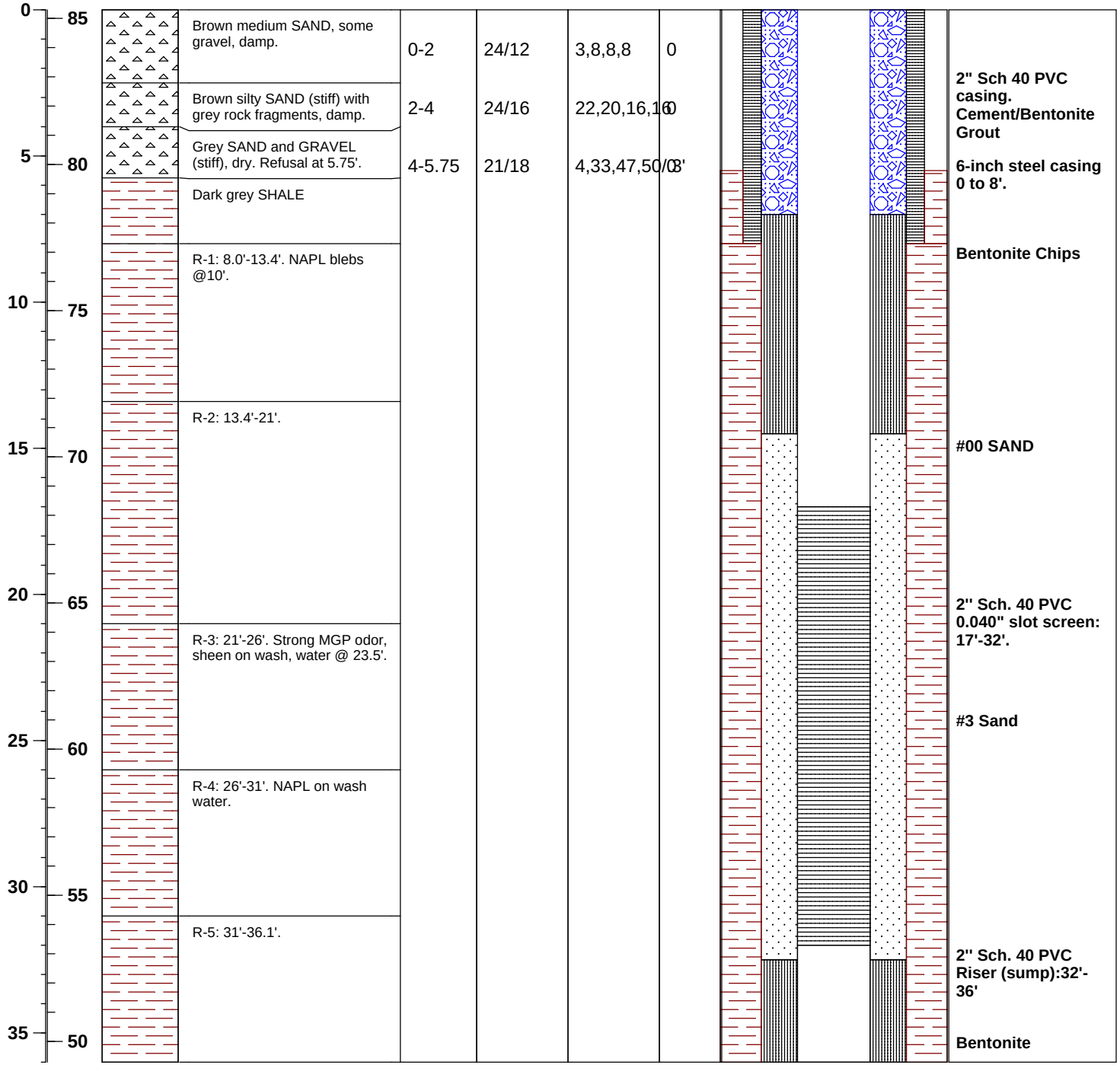
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 87.94 / GRD 85.29
BORING NO.:	MW-22I	**BORING LOCATION:**	N 1484927.19 / E 709557.67
DATE:	5/8/01	**METHOD OF DRILLING:**	8.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	12.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	36 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, some gravel, damp.	0-2	24/12	3,8,8,8	0		
		Brown silty SAND (stiff) with grey rock fragments, damp.	2-4	24/16	22,20,16,16	0		
5 / 80		Grey SAND and GRAVEL (stiff), dry. Refusal at 5.75'.	4-5.75	21/18	4,33,47,50/0.3'	0		
		Dark grey SHALE						
10 / 75		R-1: 8.0'-13.4'. NAPL blebs @10'.						
15 / 70		R-2: 13.4'-21'.						
20 / 65		R-3: 21'-26'. Strong MGP odor, sheen on wash, water @ 23.5'.						
25 / 60		R-4: 26'-31'. NAPL on wash water.						
30 / 55		R-5: 31'-36.1'.						
35 / 50								



LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 87.52 / GRD 84.97
BORING NO.:	MW-23S	**BORING LOCATION:**	N 1484895.70 / E 709631.76
DATE:	4/12/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	14.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 /		Brown medium SAND,some gravel, moist. Encountered concrete at 1.0', augered to 3.0'	0-2	15/8	2,6,50/3	4.8		Cement
		Brown medium SAND, some gravel, trace coal fragments, damp. Ash-like material in nose.	3-4	12/8	4,2	0		Cement/Bentonite Grout 2" Sch. 40 PVC casing.
5 / 80		Brown medium SAND, some ash-like material and coal fragments, moist, musty odor.	4-6	24/12	3,1,WOH,1	15		Bentonite Chips
		Brown medium fine SAND, trace coarse sand, moist.	6-8	24/9	2,3,2,3	0		#1 Sand
10 / 75		6" same as above, 4" black stained medium SAND, Kerosene/diesel odor.	8-10	24/10	3,7,4,4	21		2" Sch. 40 PVC 0.020" slot screen: 12.5'-7.5'.
		Black stained SAND, slight odor/sheen.	10-12	24/1	4,4,3,7	NA		Bentonite
		Grey silty shale, MGP odor, wet, sheen, augered to 14.5'.	12-12.5	8/4	22,50/2	19.5		2" Sch. 40 PVC Riser (sump): 12.5'-14.5'.

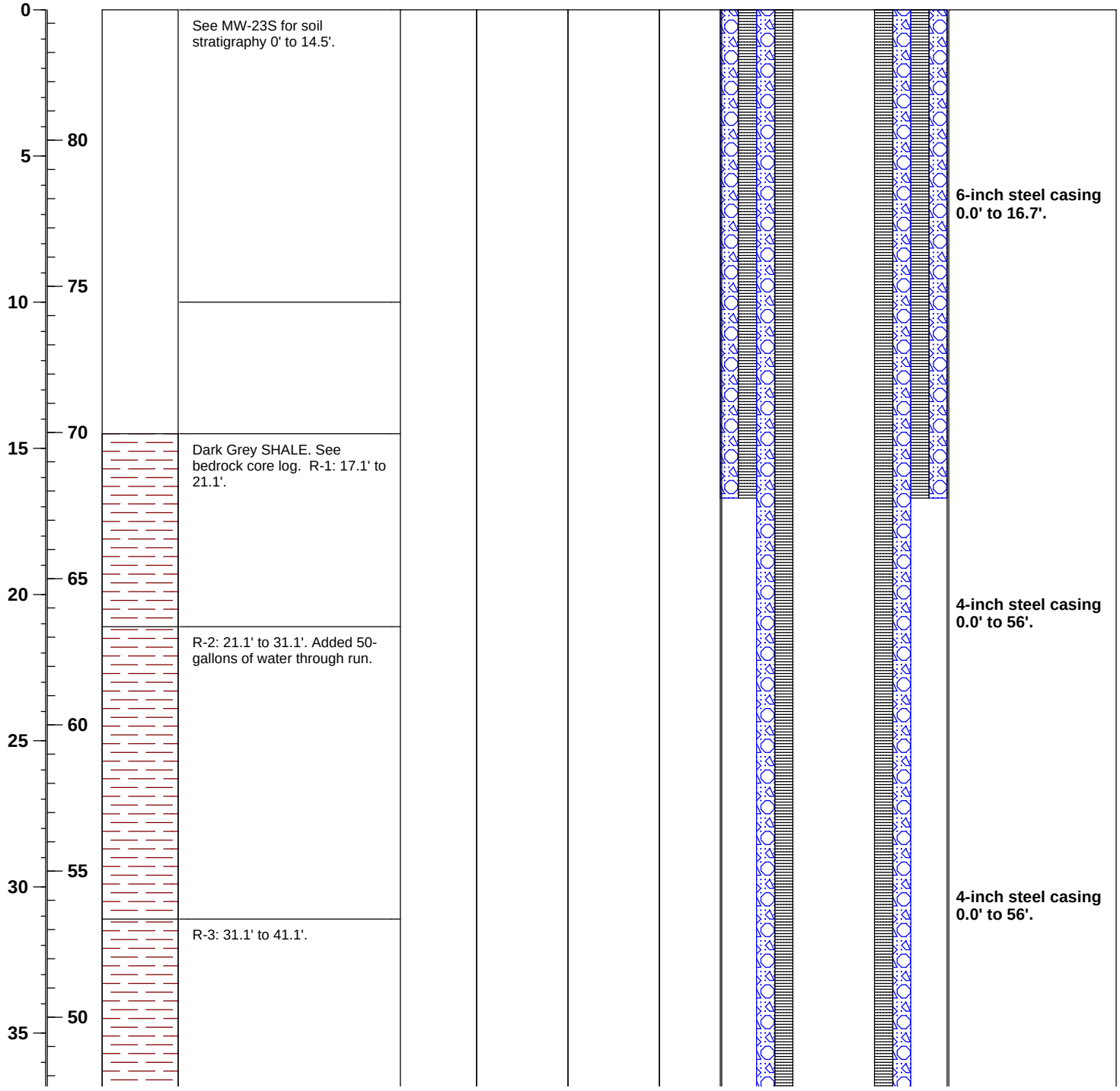
LOG OF BORING

URS
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Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 87.08 / GRD 84.46
BORING NO.:	MW-23D	**BORING LOCATION:**	N 1484897.55 / E 709622.38
DATE:	6/7/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	79.3 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



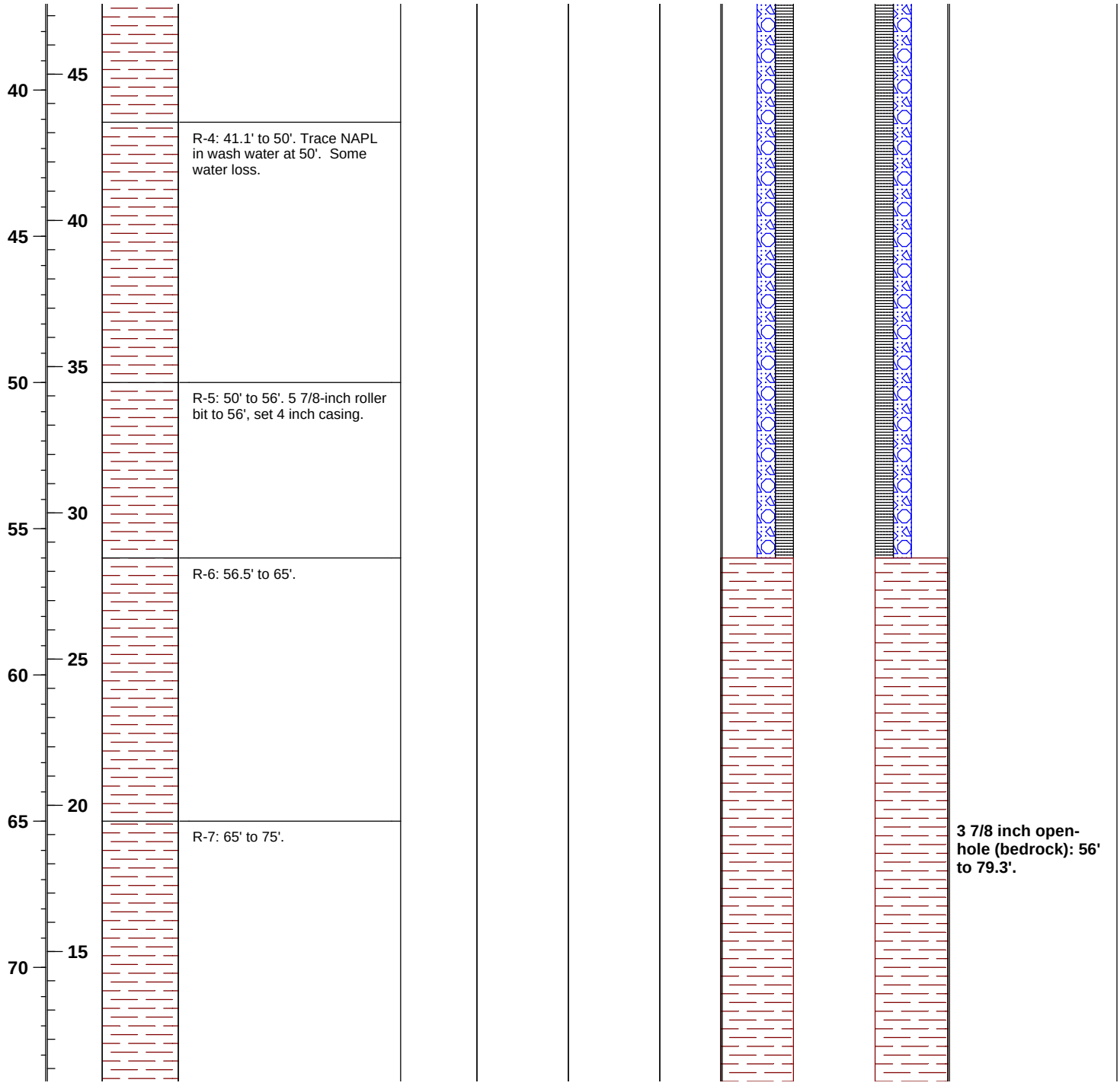
LOG OF BORING

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Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 87.08 / GRD 84.46
BORING NO.:	MW-23D	**BORING LOCATION:**	N 1484897.55 / E 709622.38
DATE:	6/7/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	79.3 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



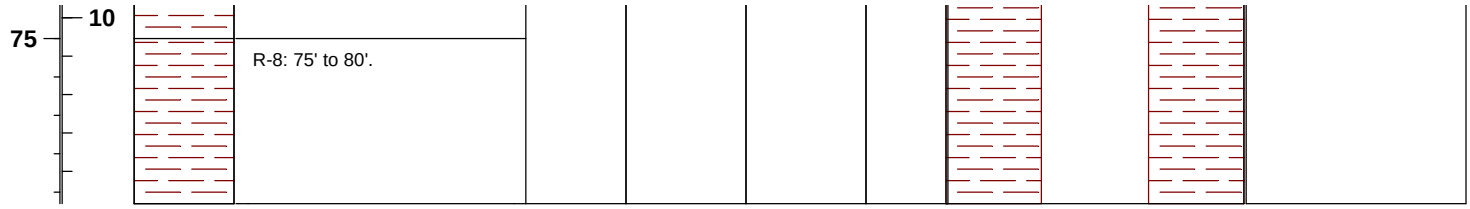
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 87.08 / GRD 84.46
BORING NO.:	MW-23D	**BORING LOCATION:**	N 1484897.55 / E 709622.38
DATE:	6/7/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	79.3 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
75 — 10		R-8: 75' to 80'.						



LOG OF BORING

URS
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PROJECT:	NYSEG	**ELEVATION:**	TOC 93.35 / GRD 93.76
BORING NO.:	MW-25S	**BORING LOCATION:**	N 1484852.78 / E 709654.82
DATE:	4/10/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	28 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, trace wood, trace coal fragments, moist.	0-2	24/28	5,8,20,10	0		Cement
		Same as above, moist.	2-4	24/12	NA	0		Cement/Bentonite Grout
5 / 85		Brown medium SAND, trace roots, moist.	4-6	24/3	3,7,17,20	9.5		2" Sch. 40 PVC casing.
		Same as above, some gravel, moist.	6-8	28/12	8,11,12,13	0		
		Brown to light brown medium SAND, trace clay, trace gravel, moist.	8-10	24/12	17,15,15,12	0		Bentonite Chips
10 / 80		Same as above	10-12	24/12	8,9,10,14	0		
		Gravel, trace medium SAND.	12-14	24/3	13,15,23,15	0		
		3" Brown medium SAND, trace gravel, wet. 15" Grey-brown medium SAND, trace clay, trace gravel, slight MGP odor.	14-16	24/18	WOH,5,4,5	0		#1 Sand
15 / 75		3" Grey stained medium SAND, trace clay, moist, trace NAPL. 21" Brown clayey SAND, some silt, damp, MGP odor, possible NAPL.	16-18	24/24	4,6,4,5	22.7		
		Grey-brown sandy CLAY, some coarse SAND, wet, slight MGP odor.	18-20	24/22	3,4,10,10	6.3		
20 / 70		Brown/grey medium SAND, layers of silty clay, NAPL throughout, wet, MGP odor.	20-22	24/24	6,5,8,7	29.9		2" Sch. 40 PVC 0.020" slot screen: 11'-26'.
		Brown/grey fine SAND, NAPL throughout, wet.	22-24	24/24	6,5,6,8	49.9		
25		Same as 22' to 24': Augered to 28'.	24-26	24/20	6,5,8,50/4	11.8		Bentonite 2" Sch. 40 PVC Riser (sump): 26'-28'.

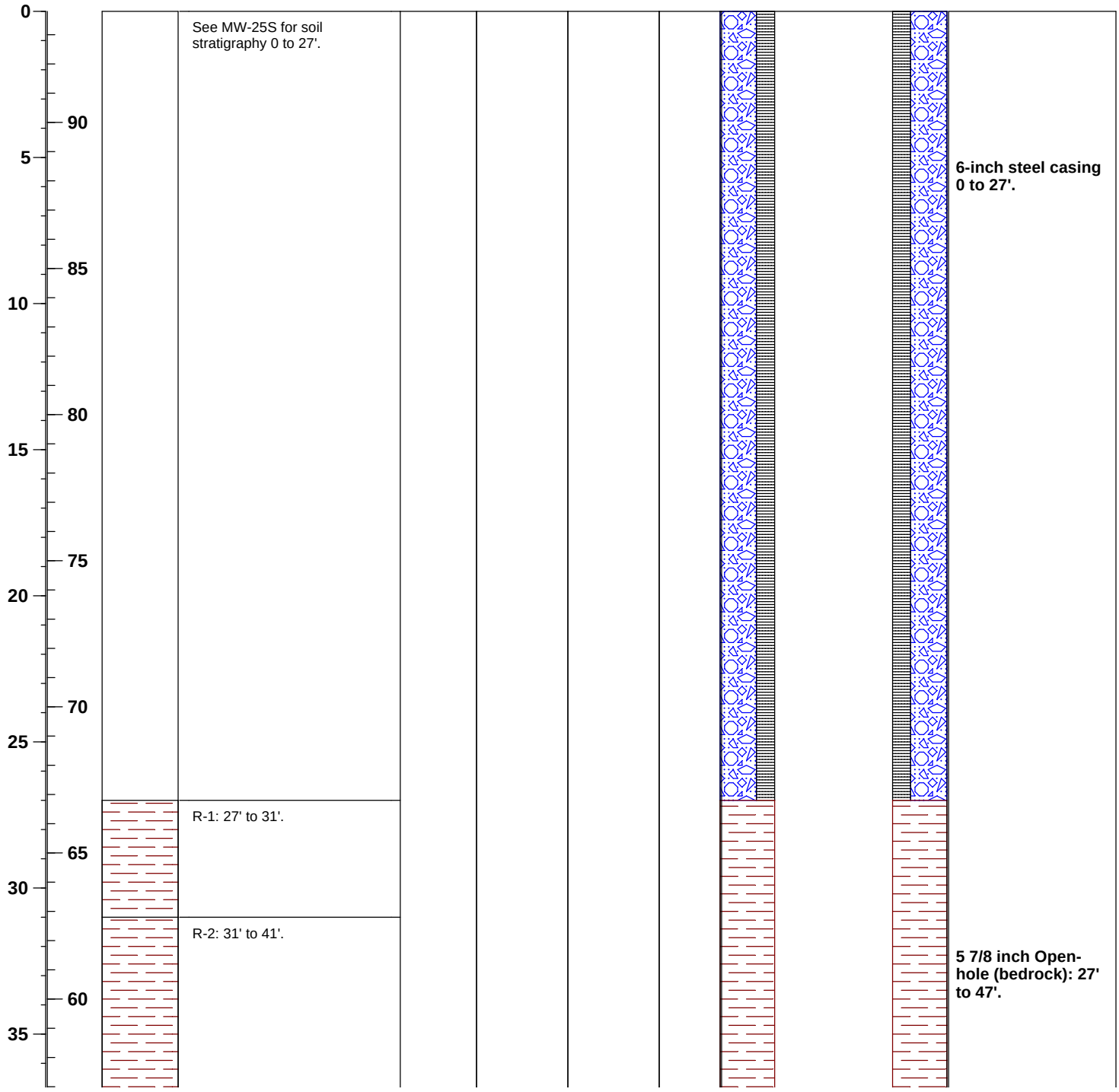
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.8 / GRD 94.17
BORING NO.:	MW- 25I	**BORING LOCATION:**	N 1,484,852 / E 709,663
DATE:	7/10/01	**METHOD OF DRILLING:**	NA
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	47 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
Clifton Park, New York

NYSEG
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PROJECT:	NYSEG	**ELEVATION:**	TOC 93.8 / GRD 94.17
BORING NO.:	MW- 25I	**BORING LOCATION:**	N 1,484,852 / E 709,663
DATE:	7/10/01	**METHOD OF DRILLING:**	NA
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	47 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
55 40 50 45		R-3: 41' to 47'. Significant water loss at 43.5'. 5 7/8-inch roller bit to 47'.						

LOG OF BORING

URS

Clifton Park, New York

NYSEG

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PROJECT:	NYSEG	**ELEVATION:**	TOC 91.33 / GRD 91.50
BORING NO.:	MW-26S	**BORING LOCATION:**	N 1484743.20 / E 709630.36
DATE:	4/11/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	6.5 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	24.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		See SB-18 for soil stratigraphy 0 to 16'.					Cement	Cement
							Cement/Bentonite Grout	Cement/Bentonite Grout
							4" Sch. 40 PVC casing.	4" Sch. 40 PVC casing.
5 / 85							Bentonite Chips	Bentonite Chips
10 / 80							#1 Sand	#1 Sand
15 / 75		Grey medium to fine SAND, trace coarse sand, stained at 16-16.2', wet, trace MGP odor.	16-18	24/24	4,4,6,6	24	4" Sch. 40 PVC 0.020" slot screen: 7.5'-22.5'.	4" Sch. 40 PVC 0.020" slot screen: 7.5'-22.5'.
		Same as 16'-18', wet.	18-20	24/18	8,6,5,4	5.7		
20 / 70		Same as 16'-18', slight odor, wet.	20-22	24/3	27,16,11,17	3.6		
		6" Same as 16'-18', no odor, wet. 7" Grey medium SAND, trace silt, shale fragments in nose, wet. Augered to 24.5'.	22-23.1	13/13	5,50,50/1	2.6	Bentonite 4" Sch. 40 PVC Riser (sump): 22.5' - 24.5.	Bentonite 4" Sch. 40 PVC Riser (sump): 22.5' - 24.5.

LOG OF BORING

URS

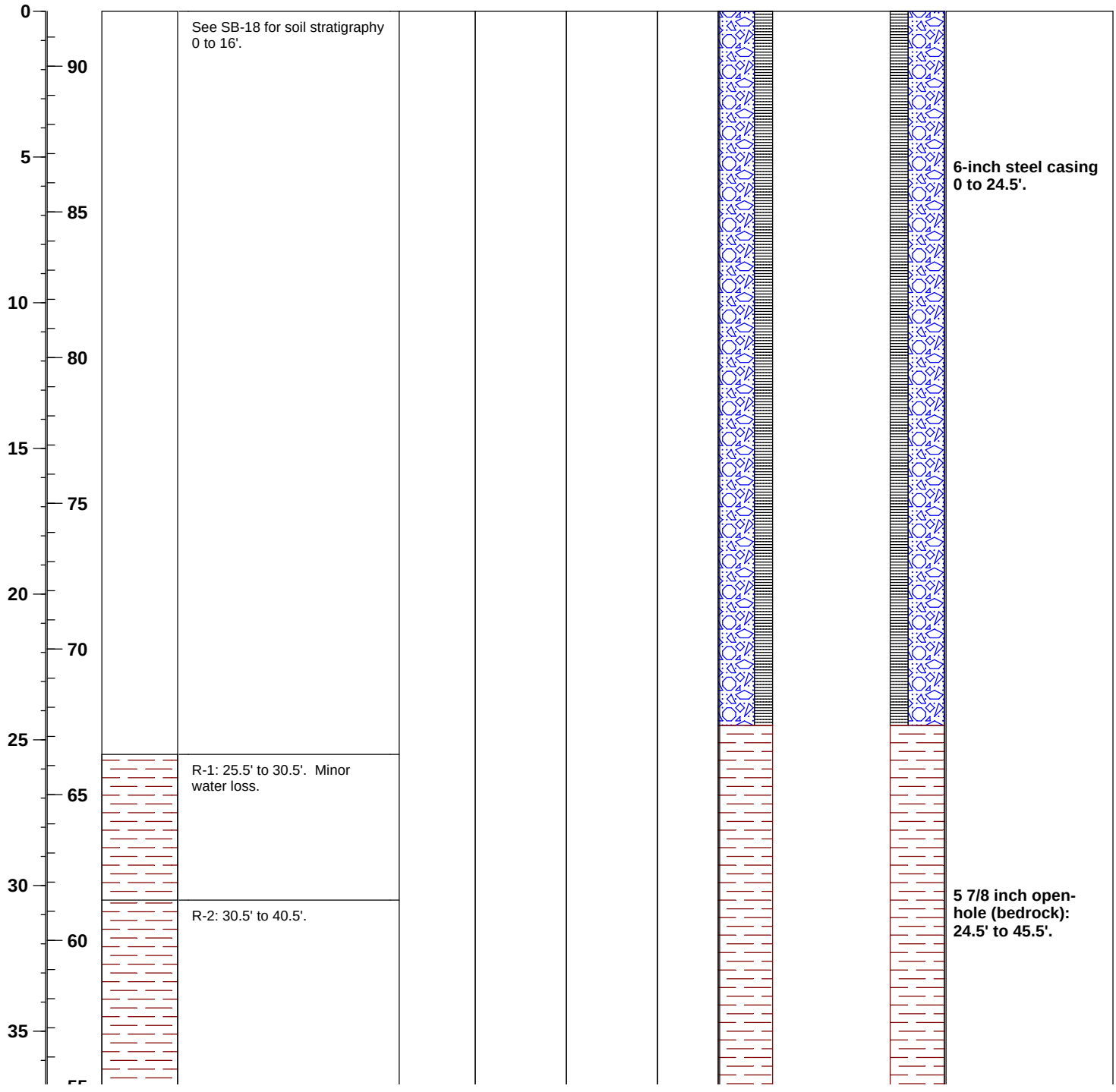
Clifton Park, New York

NYSEG

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Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.47 / GRD 91.88
BORING NO.:	MW- 26I	**BORING LOCATION:**	N 1484741.39 / E 709636.66
DATE:	7/11/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	45.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



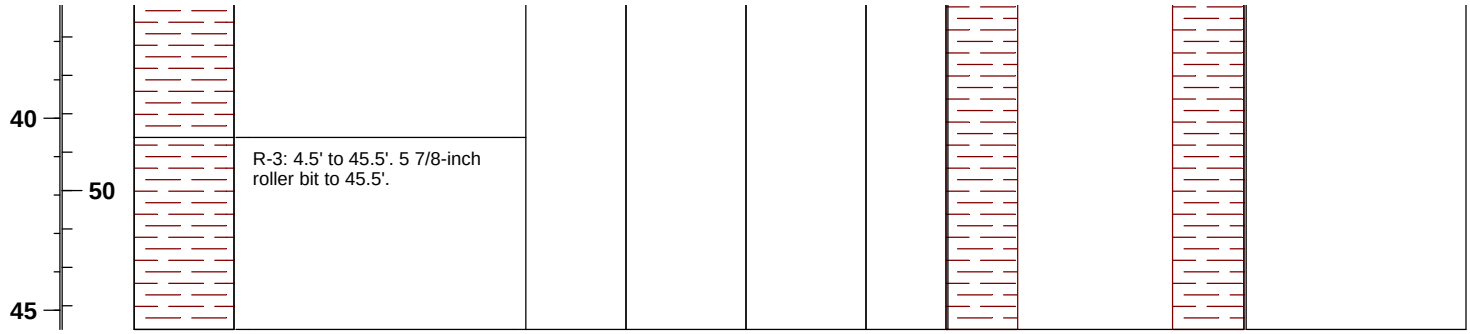
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.47 / GRD 91.88
BORING NO.:	MW- 26I	**BORING LOCATION:**	N 1484741.39 / E 709636.66
DATE:	7/11/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	HQ coring
BORING DEPTH:	45.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

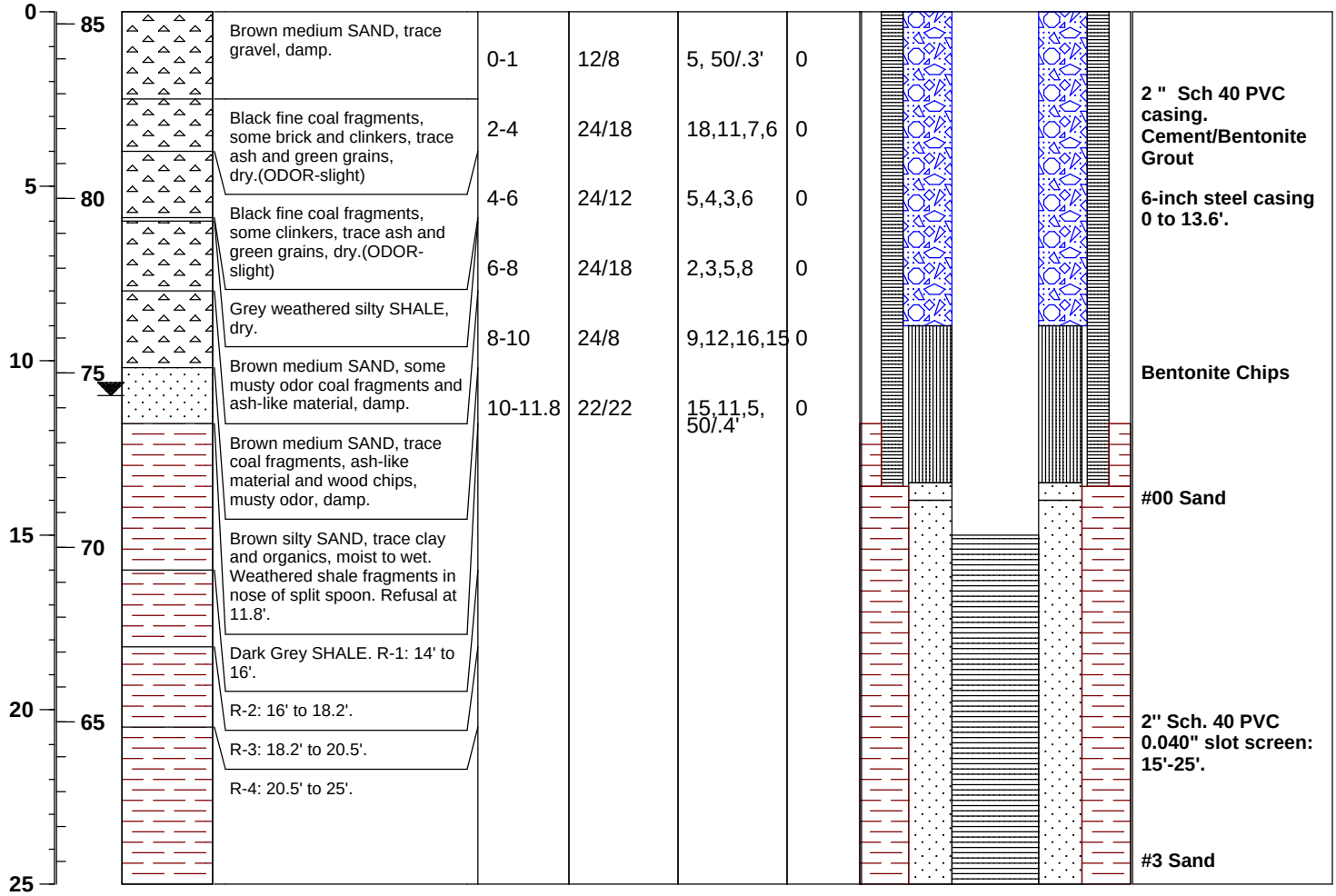
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 88.70 / GRD 85.35
BORING NO.:	MW-28I	**BORING LOCATION:**	N 1484935.33 / E 709536.77
DATE:	5/7/01	**METHOD OF DRILLING:**	8.25 " I.D. Hollow Stem Augers
BORING DIAMETER:	12.25 inches	**SAMPLE TYPE:**	2 foot split spoon
BORING DEPTH:	25 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND, trace gravel, damp.	0-1	12/8	5, 50/.3'	0		
		Black fine coal fragments, some brick and clinkers, trace ash and green grains, dry.(ODOR-slight)	2-4	24/18	18,11,7,6	0		
5 / 80		Black fine coal fragments, some clinkers, trace ash and green grains, dry.(ODOR-slight)	4-6	24/12	5,4,3,6	0		
		Grey weathered silty SHALE, dry.	6-8	24/18	2,3,5,8	0		
10 / 75		Brown medium SAND, some musty odor coal fragments and ash-like material, damp.	8-10	24/8	9,12,16,15	0		
		Brown medium SAND, trace coal fragments, ash-like material and wood chips, musty odor, damp.	10-11.8	22/22	15,11,5, 50/.4'	0		
15 / 70		Brown silty SAND, trace clay and organics, moist to wet. Weathered shale fragments in nose of split spoon. Refusal at 11.8'.						
		Dark Grey SHALE. R-1: 14' to 16'.						
20 / 65		R-2: 16' to 18.2'.						
		R-3: 18.2' to 20.5'.						
25		R-4: 20.5' to 25'.						



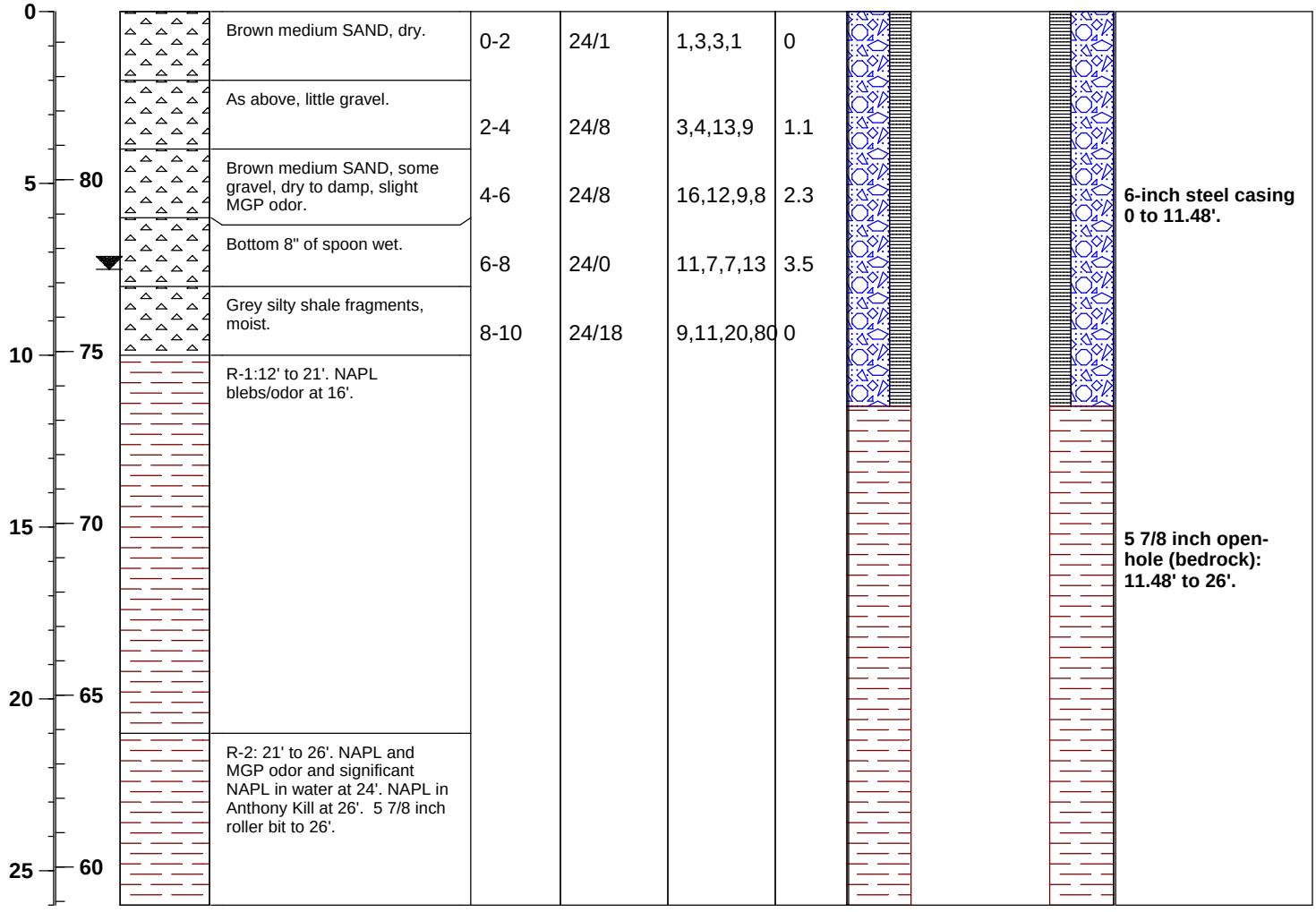
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 87.10 / GRD 84.89
BORING NO.:	MW-29I	**BORING LOCATION:**	N 1484913.40 / E 709592.17
DATE:	4/16/01	**METHOD OF DRILLING:**	4.25 inch Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	2 foot split spoon
BORING DEPTH:	26 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 80		Brown medium SAND, dry.	0-2	24/1	1,3,3,1	0		
		As above, little gravel.	2-4	24/8	3,4,13,9	1.1		
5 / 80		Brown medium SAND, some gravel, dry to damp, slight MGP odor.	4-6	24/8	16,12,9,8	2.3		
		Bottom 8" of spoon wet.	6-8	24/0	11,7,7,13	3.5		
		Grey silty shale fragments, moist.	8-10	24/18	9,11,20,80	0		
10 / 75		R-1:12' to 21'. NAPL blebs/odor at 16'.						
15 / 70								
20 / 65								
		R-2: 21' to 26'. NAPL and MGP odor and significant NAPL in water at 24'. NAPL in Anthony Kill at 26'. 5 7/8 inch roller bit to 26'.						
25 / 60								



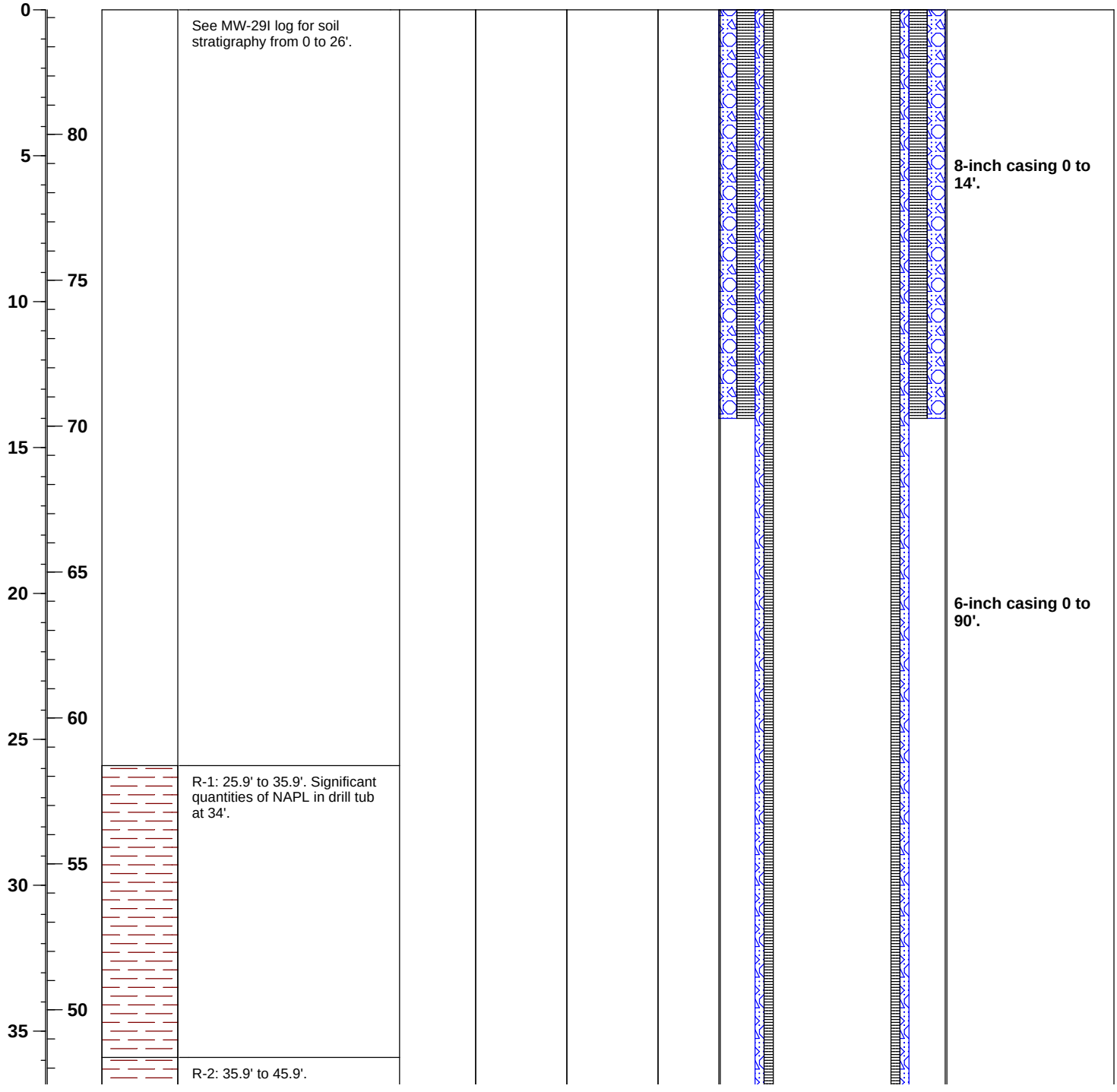
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 86.97 / GRD 84.27
BORING NO.:	MW-29D	**BORING LOCATION:**	N 709600.88 / E 1484912.05
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	109.7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



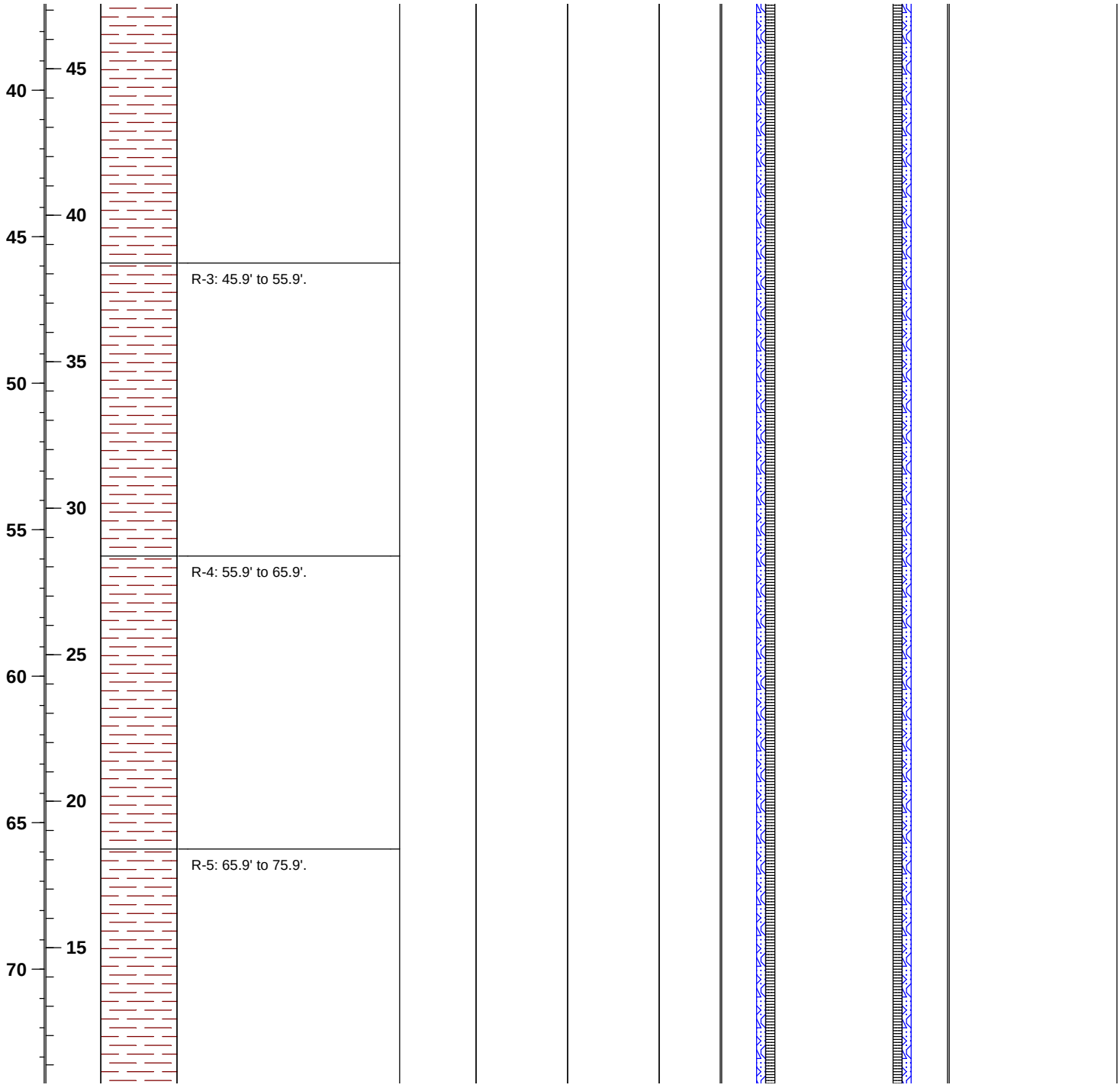
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 86.97 / GRD 84.27
BORING NO.:	MW-29D	**BORING LOCATION:**	N 709600.88 / E 1484912.05
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	109.7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



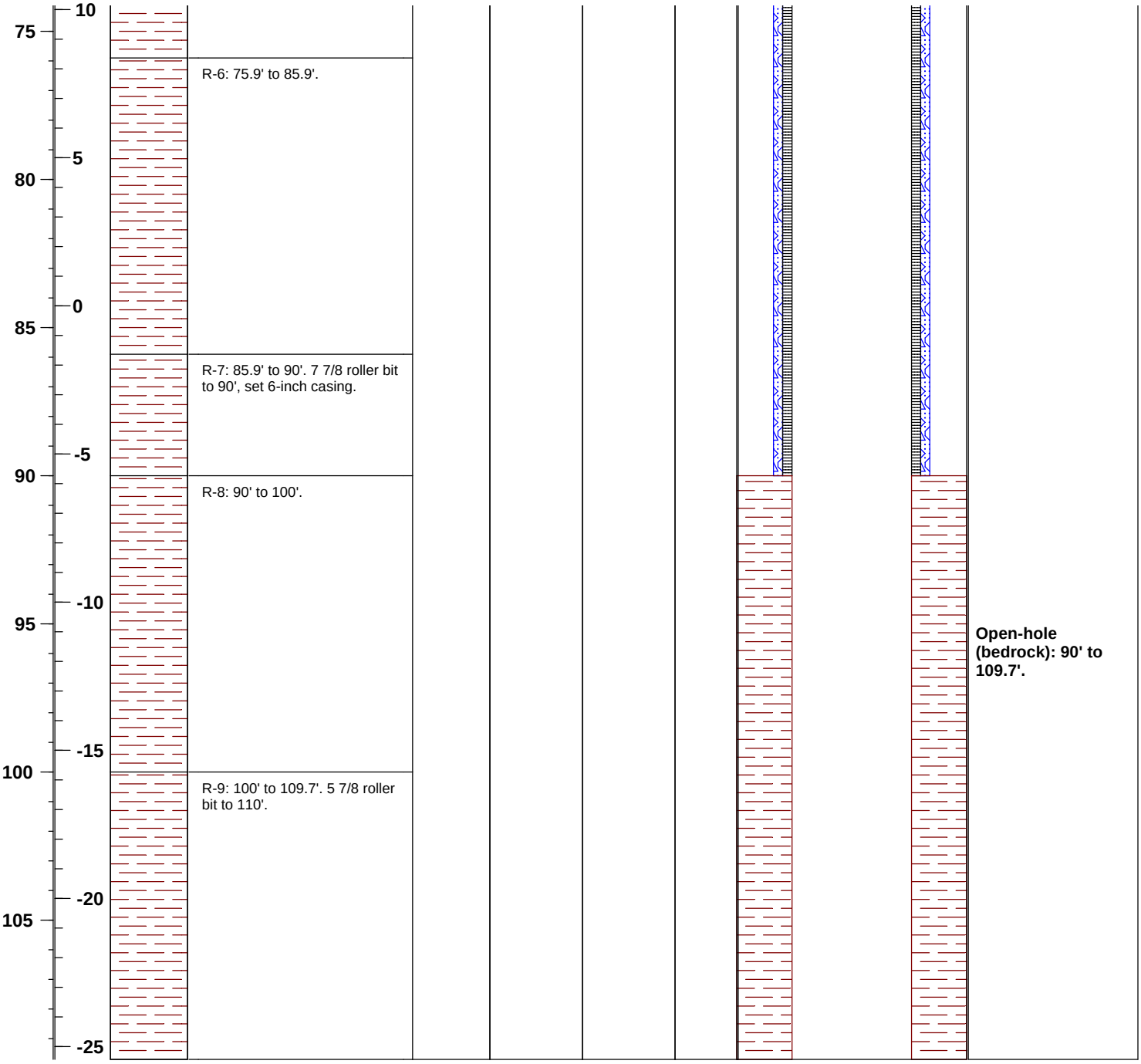
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 86.97 / GRD 84.27
BORING NO.:	MW-29D	**BORING LOCATION:**	N 709600.88 / E 1484912.05
DATE:	8/22/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	109.7 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 92.99 / GRD 93.22
BORING NO.:	MW-30S	**BORING LOCATION:**	N 1484772.19 / E 709646.89
DATE:	8/15/01	**METHOD OF DRILLING:**	6.25" I.D. Hollow Stem Auger
BORING DIAMETER:	6.5 inches	**SAMPLE TYPE:**	NA
BORING DEPTH:	27 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90 to 5 / 85		See MW-30 for stratigraphy 0 to 24'.						Cement/bentonite grout
5 / 85 to 10 / 80								Bentonite
10 / 80 to 15 / 75								#2 Sand
15 / 75 to 20 / 70								4" Sch. 40 PVC 0.020" slot screen: 10' to 25'.
20 / 70 to 25								Bentonite 4" Sch. 40 PVC Riser (sump): 25' to 27'.

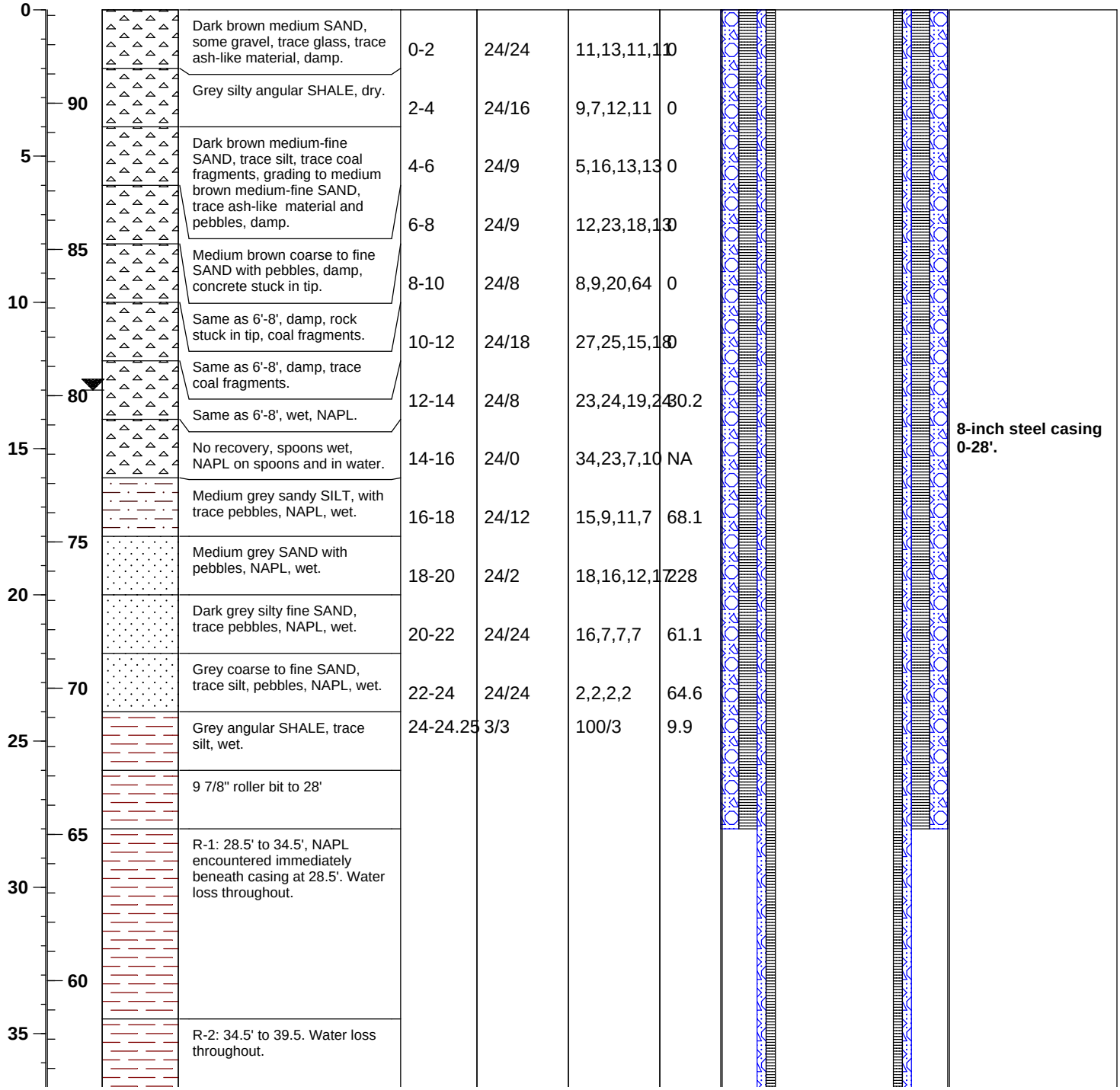
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 92.87 / GRD 93.19
BORING NO.:	MW-30D	**BORING LOCATION:**	N 1484778.10 / E 709647.49
DATE:	7/2/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	101.1 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Dark brown medium SAND, some gravel, trace glass, trace ash-like material, damp.	0-2	24/24	11,13,11,11	0		
		Grey silty angular SHALE, dry.	2-4	24/16	9,7,12,11	0		
5 / 85		Dark brown medium-fine SAND, trace silt, trace coal fragments, grading to medium brown medium-fine SAND, trace ash-like material and pebbles, damp.	4-6	24/9	5,16,13,13	0		
			6-8	24/9	12,23,18,13	0		
10 / 80		Medium brown coarse to fine SAND with pebbles, damp, concrete stuck in tip.	8-10	24/8	8,9,20,64	0		
		Same as 6'-8', damp, rock stuck in tip, coal fragments.	10-12	24/18	27,25,15,18	0		
		Same as 6'-8', damp, trace coal fragments.	12-14	24/8	23,24,19,24	80.2		
15 / 75		Same as 6'-8', wet, NAPL.						
		No recovery, spoons wet, NAPL on spoons and in water.	14-16	24/0	34,23,7,10	NA		
		Medium grey sandy SILT, with trace pebbles, NAPL, wet.	16-18	24/12	15,9,11,7	68.1		
20 / 70		Medium grey SAND with pebbles, NAPL, wet.	18-20	24/2	18,16,12,17	228		
		Dark grey silty fine SAND, trace pebbles, NAPL, wet.	20-22	24/24	16,7,7,7	61.1		
		Grey coarse to fine SAND, trace silt, pebbles, NAPL, wet.	22-24	24/24	2,2,2,2	64.6		
25 / 65		Grey angular SHALE, trace silt, wet.	24-24.25	3/3	100/3	9.9		
		9 7/8" roller bit to 28'						
30 / 60		R-1: 28.5' to 34.5', NAPL encountered immediately beneath casing at 28.5'. Water loss throughout.						
35		R-2: 34.5' to 39.5. Water loss throughout.						



LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 92.87 / GRD 93.19
BORING NO.:	MW-30D	**BORING LOCATION:**	N 1484778.10 / E 709647.49
DATE:	7/2/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	101.1 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
55 / 40		R-3: 39.5' to 49.3'.						6-inch steel casing 0-90'.
50 / 45		R-4: 49.3' to 51'. Re-set temp. casing roller bit to 51'.						
45 / 50		R-5: 51' to 59'.						
40 / 55								
35 / 60		R-6: 59' to 69.3'.						6-inch steel casing 0-90'.
30 / 65								
25 / 70		R-7: 69.3' to 79.5'. NAPL observed at 70.5'.						
20								

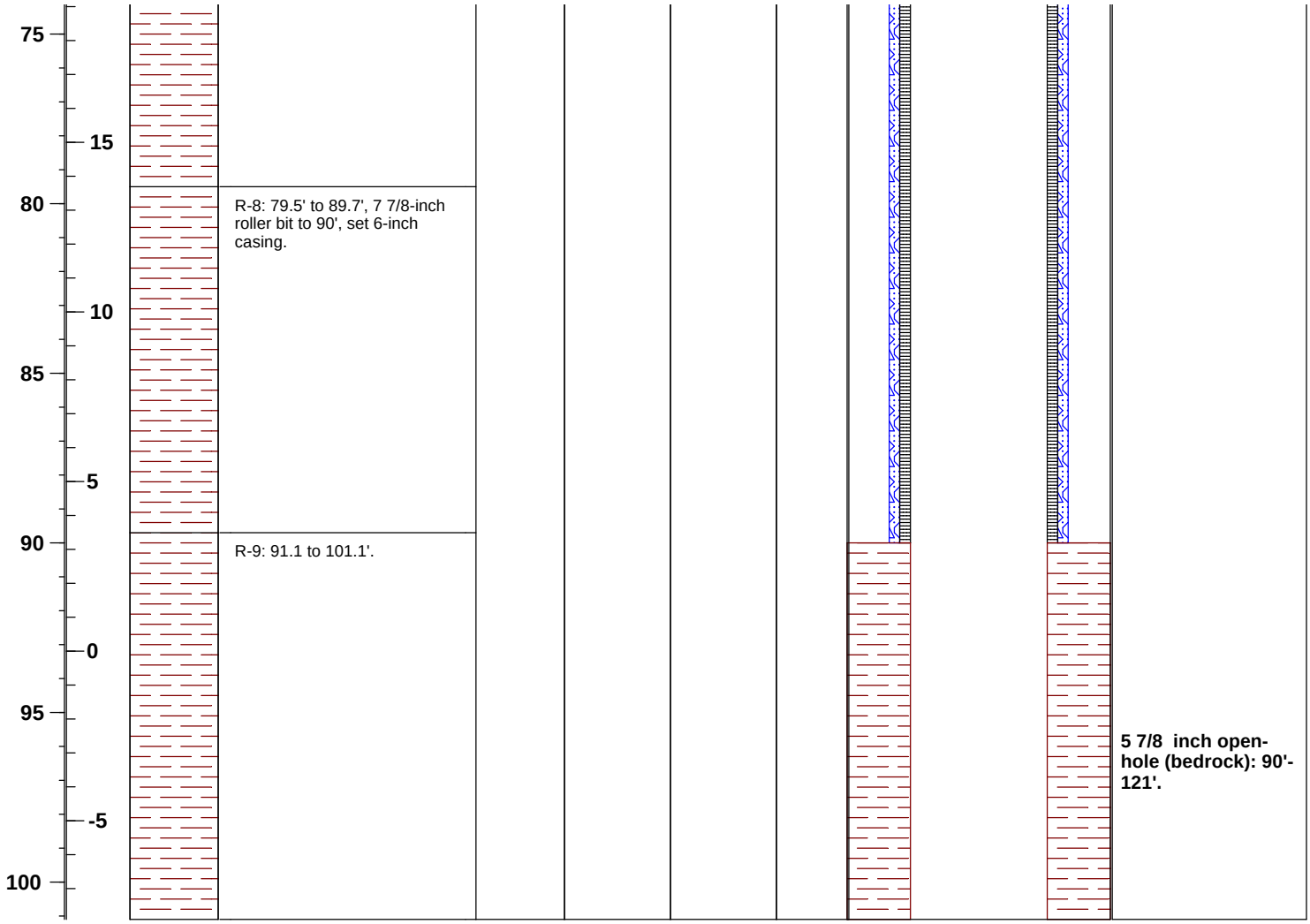
LOG OF BORING

URS
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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 92.87 / GRD 93.19
BORING NO.:	MW-30D	**BORING LOCATION:**	N 1484778.10 / E 709647.49
DATE:	7/2/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	101.1 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 98.39 / GRD 98.61
BORING NO.:	MW-31S	**BORING LOCATION:**	N 1484547.55 / E 709634.47
DATE:	5/30/01	**METHOD OF DRILLING:**	4.25 I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	20 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 95		Brown to light brown medium SAND, some organics and white ash-like material, damp.	0-2	24/8	1,3,9,12	1.3		Cement / Bentonite Grout
			2-4	24/6	7,5,8,9	0		Bentonite Chips
5			4-6	24/6	9,14,6,8	0		
		No recovery.	6-8	24/0	12,13,14,16	NA		2" Sch. 40 PVC casing.
90		Light brown fine SAND, some gravel, damp.	8-10	24/6	16,19,28,20	0		
10		Brown medium SAND, some coarse sand, dry.	10-12	24/6	56,48,64,31	0		#1 Sand
			12-13.7	21/6	42,33,36, 50/.2'	0		
85		Brown medium SAND, some coarse sand and shale fragments, dry.	14-14.7	9/3	28,50/.2'	0		2" Sch. 40 PVC 0.020" slot screen: 8'-18'.
15		No recovery.	16-16.3	3/0	50/.3'	NA		
80		No recovery. Augered to 20'.	18-18.3	3/0	50/.3'	NA		Bentonite 2" Sch. 40 PVC Riser (sump): 18'-20'.
20								

LOG OF BORING

URS
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PROJECT:	NYSEG	**ELEVATION:**	TOC 98.40 / GRD 98.84
BORING NO.:	MW-31D	**BORING LOCATION:**	N 1484531.45 / E 709631.21
DATE:	6/5/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 95		See MW-31S for soil stratigraphy 0' to 20'.						
20 / 75		Brown coarse SAND and fine GRAVEL, wet.	20-22	24/12	53, 37, 31, 34	0		
			22-23.4	17/3	47, 76, 100/.4'	0		
25 / 70		Brown fine SAND, moist.						
		Grey fine SAND and SILT, moist.	24-25.3	16/12	15, 42, 100/.3'	0		
		Grey silty SHALE fragments, moist.	26-26.3	5/3	100/.4'	0		
30 / 65		Dark grey SHALE. 4-inch steel casing set at 28' bgs.						4-inch steel casing 0' to 28'.
35 / 60		3 7/8 inch open hole roller bit from 28' to 150'.						3 7/8 inch open-hole (bedrock) 28' to 150'.

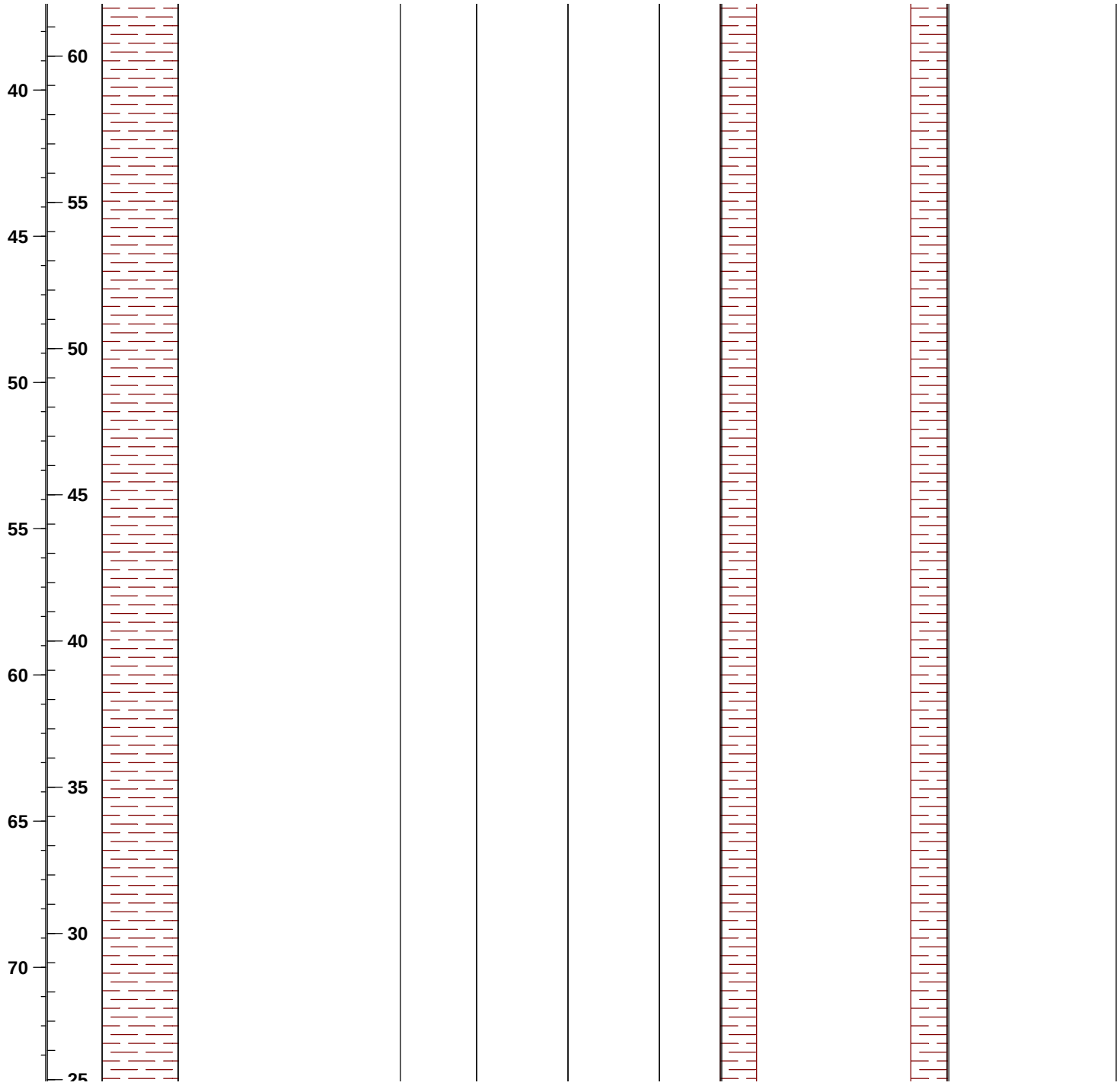
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.40 / GRD 98.84
BORING NO.:	MW-31D	**BORING LOCATION:**	N 1484531.45 / E 709631.21
DATE:	6/5/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



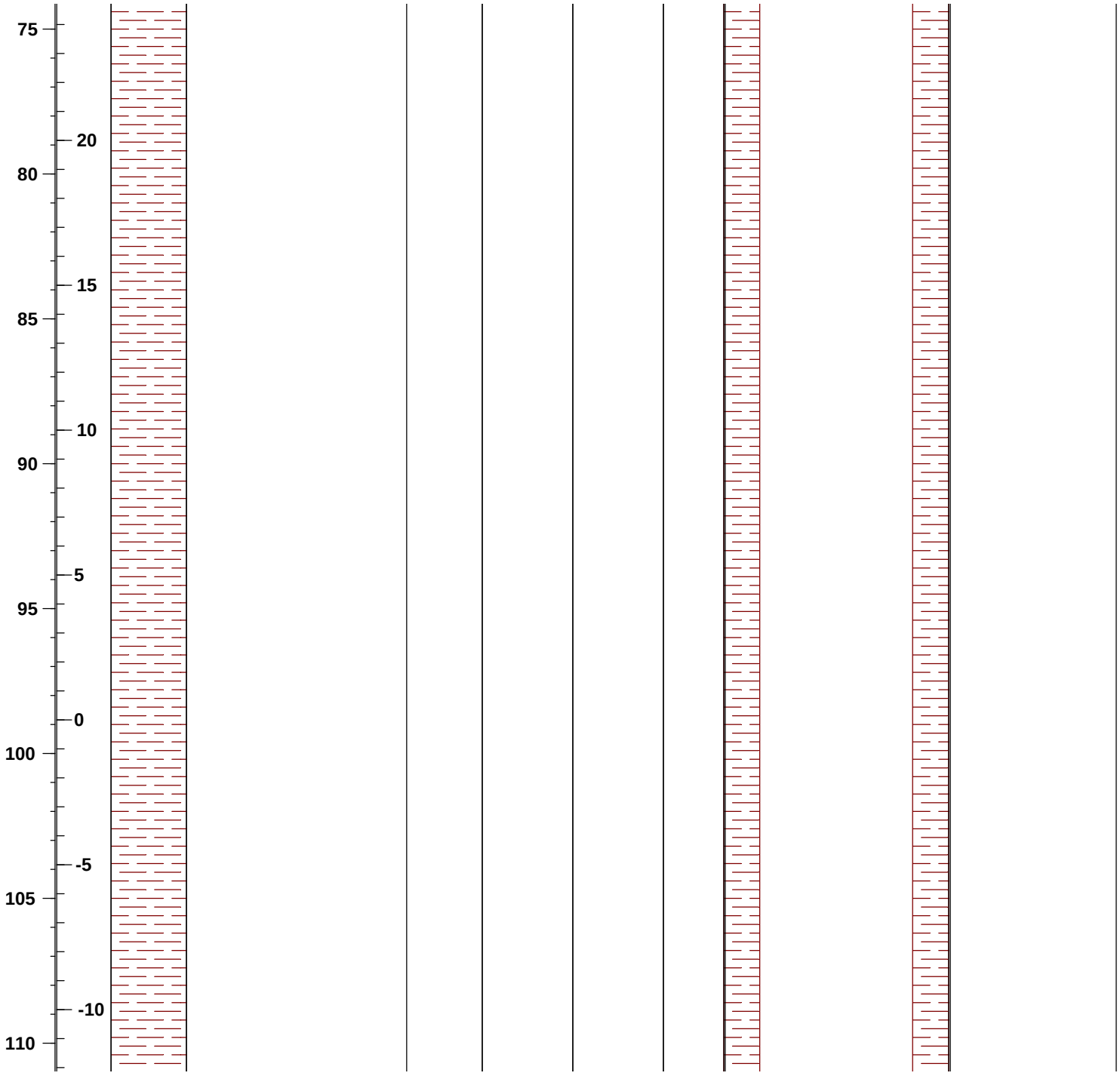
LOG OF BORING

URS
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PROJECT:	NYSEG	**ELEVATION:**	TOC 98.40 / GRD 98.84
BORING NO.:	MW-31D	**BORING LOCATION:**	N 1484531.45 / E 709631.21
DATE:	6/5/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



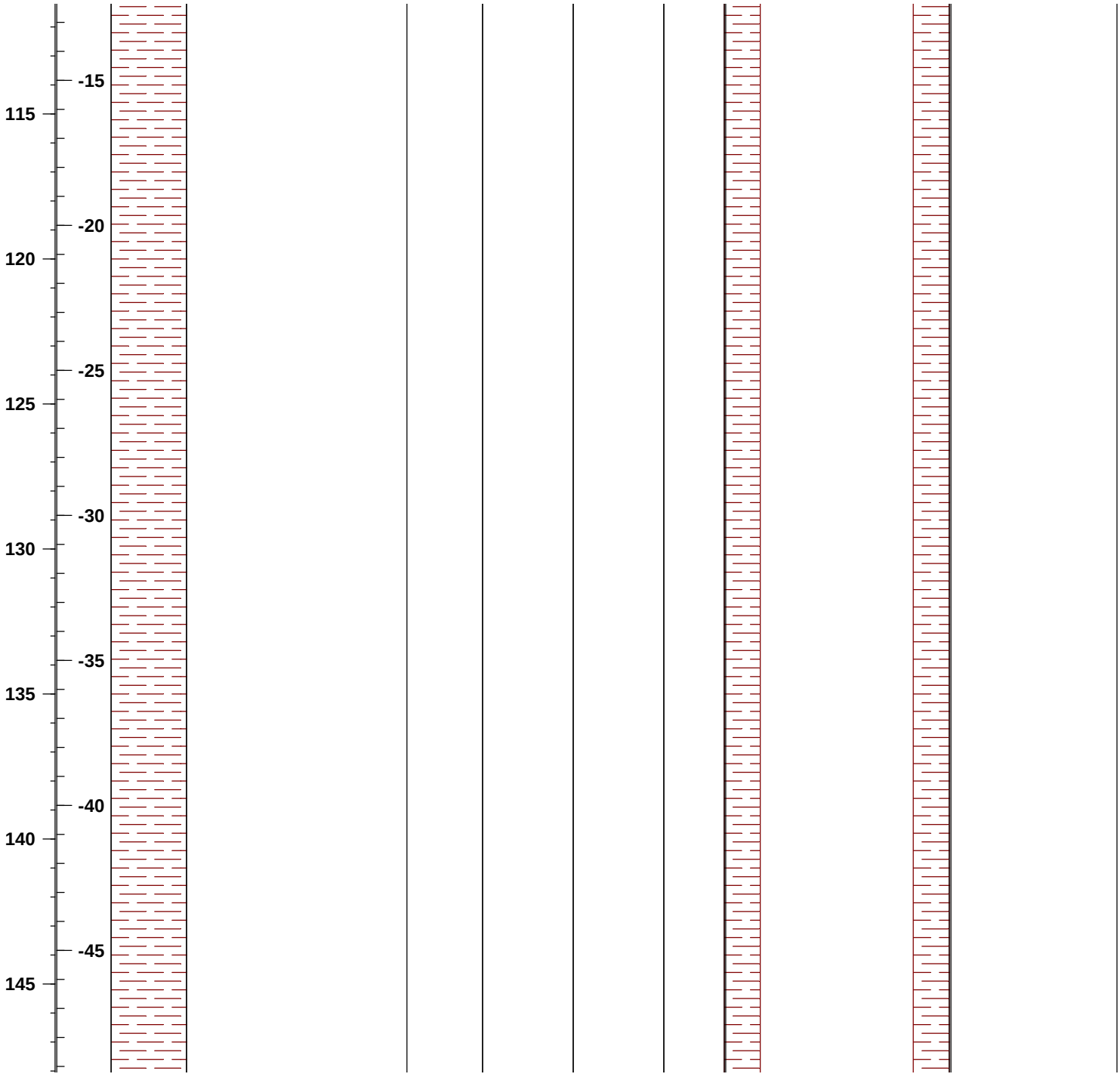
LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 98.40 / GRD 98.84
BORING NO.:	MW-31D	**BORING LOCATION:**	N 1484531.45 / E 709631.21
DATE:	6/5/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 98.40 / GRD 98.84
BORING NO.:	MW-31D	**BORING LOCATION:**	N 1484531.45 / E 709631.21
DATE:	6/5/01	**METHOD OF DRILLING:**	6.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	10.25 inches	**SAMPLE TYPE:**	3 inch x 2 foot split spoon
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Grass

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
-50 / 150								

LOG OF BORING

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PROJECT:	NYSEG	**ELEVATION:**	TOC 89.77 / GRD 87.23
BORING NO.:	MW-32D	**BORING LOCATION:**	N 1484963.72 / E 709401.77
DATE:	7/24/01	**METHOD OF DRILLING:**	HQ Coring
BORING DIAMETER:	14.25"	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	111.5 feet	**SURFACE CONDITIONS:**	Gravel and Dirt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown coarse to fine SAND, some gravel. Grading to black coal fragments, moist.	0-2	24/19	2,7,10,11	0		
		White ash-like material, some rock fragments, grading to coarse to fine SAND with coal fragments. Grading to brown silt with trace coal fragments, moist, musty odor.	2-4	24/19	5,4,4,4	0		
5 / 80		Brown SILT with thick pebbles and coal fragments, Grading to coarse to fine Sand with coal fragments, white ash-like material, wet at 6', organic odor.	4-6	24/17	2,4,4,1	0		8-inch steel casing 0 to 11.5'.
		White ash-like material to 6.2'. Grading to Tan SILT with trace pebbles, slight odor. 7.7' Black-grey rock fragments (BEDROCK) Wet.	6-8	24/24	3,7,18,80	0		
10 / 75		Grey-Black weathered, broken, rock, trace of SAND and SILT, wet. Refusal at 9.75 feet.	8-9.75	21/16	62,100, 91, 100/3"	0		
15 / 70		Dark grey SHALE. See bedrock core log.						
		R-1: 11.95' to 16.45'.						
20 / 65		R-2: 16.45' to 22.1'. Circulation blocked at 22.1'.						6-inch steel casing 0 to 91'.
25 / 60		R-3: 22.1' to 27.9'. Circulation blocked at 27.9'.						
30 / 55		R-4: 27.9' to 34'. Circulation blocked at 34'.						
35		R-5: 34; to 37.6'. Circulation blocked at 37.6'						

LOG OF BORING

URS

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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 89.77 / GRD 87.23
BORING NO.:	MW-32D	**BORING LOCATION:**	N 1484963.72 / E 709401.77
DATE:	7/24/01	**METHOD OF DRILLING:**	HQ Coring
BORING DIAMETER:	14.25"	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	111.5 feet	**SURFACE CONDITIONS:**	Gravel and Dirt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
50 / 40		R-6: 37.6' to 46'. Circulation blocked at 46.0'.						
45 / 40		R-7: 46' to 52.7'. Circulation blocked at 52.7'. Significant water loss at 49'.						
50 / 35		R-8: 52.7' to 56'. Lost water thoughout run.						
55 / 30		R-9: 56' to 66'. Lost water thought out run.						
60 / 25								
65 / 20		R-10: 66' to 71'. Lost water thoughout run.						
70 / 15		R-11: 71' to 81. Lost water thoughout run.						

LOG OF BORING

URS

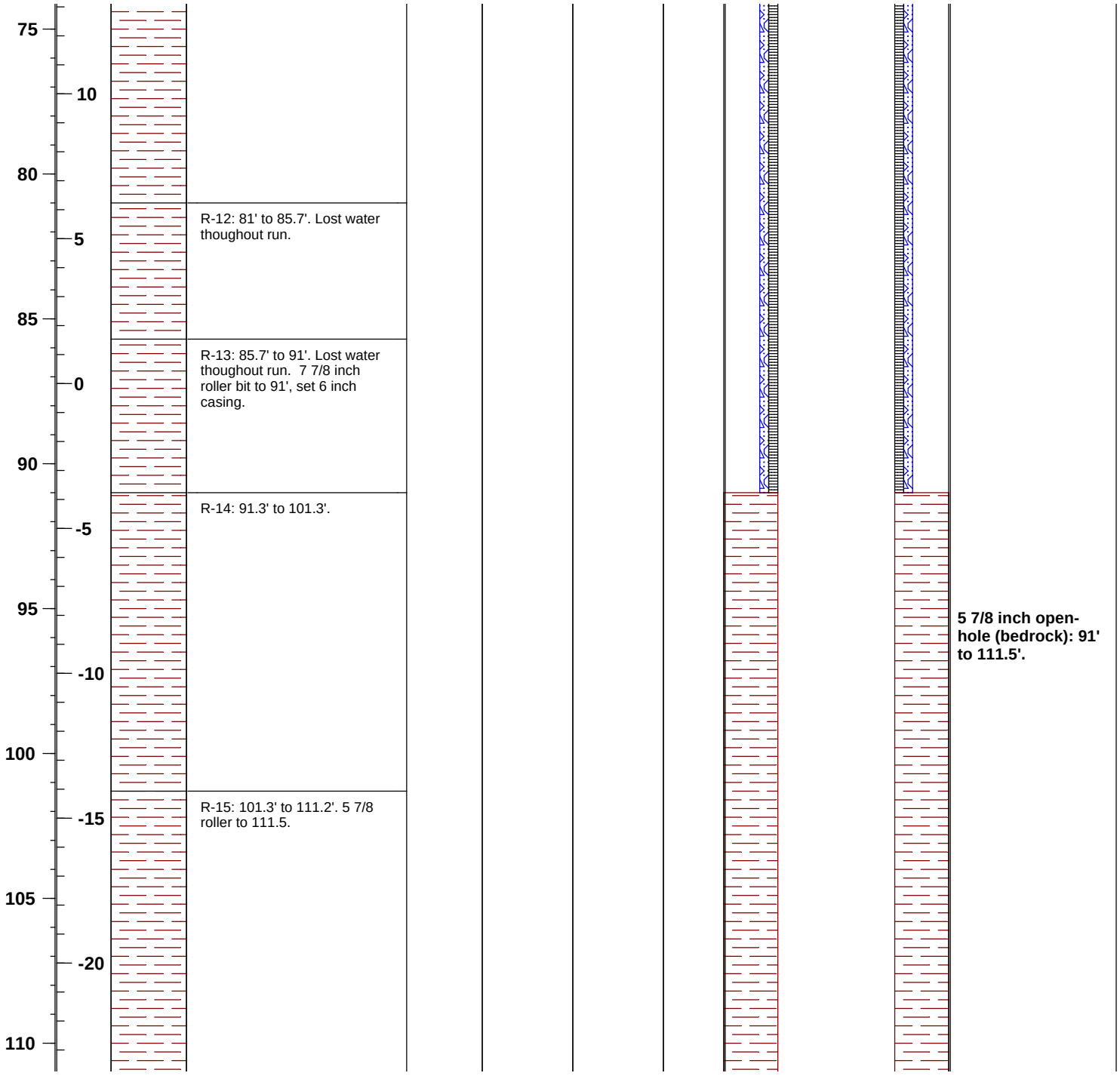
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 89.77 / GRD 87.23
BORING NO.:	MW-32D	**BORING LOCATION:**	N 1484963.72 / E 709401.77
DATE:	7/24/01	**METHOD OF DRILLING:**	HQ Coring
BORING DIAMETER:	14.25"	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	111.5 feet	**SURFACE CONDITIONS:**	Gravel and Dirt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 89.77 / GRD 87.23
BORING NO.:	MW-32D	**BORING LOCATION:**	N 1484963.72 / E 709401.77
DATE:	7/24/01	**METHOD OF DRILLING:**	HQ Coring
BORING DIAMETER:	14.25"	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	111.5 feet	**SURFACE CONDITIONS:**	Gravel and Dirt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description

LOG OF BORING

URS

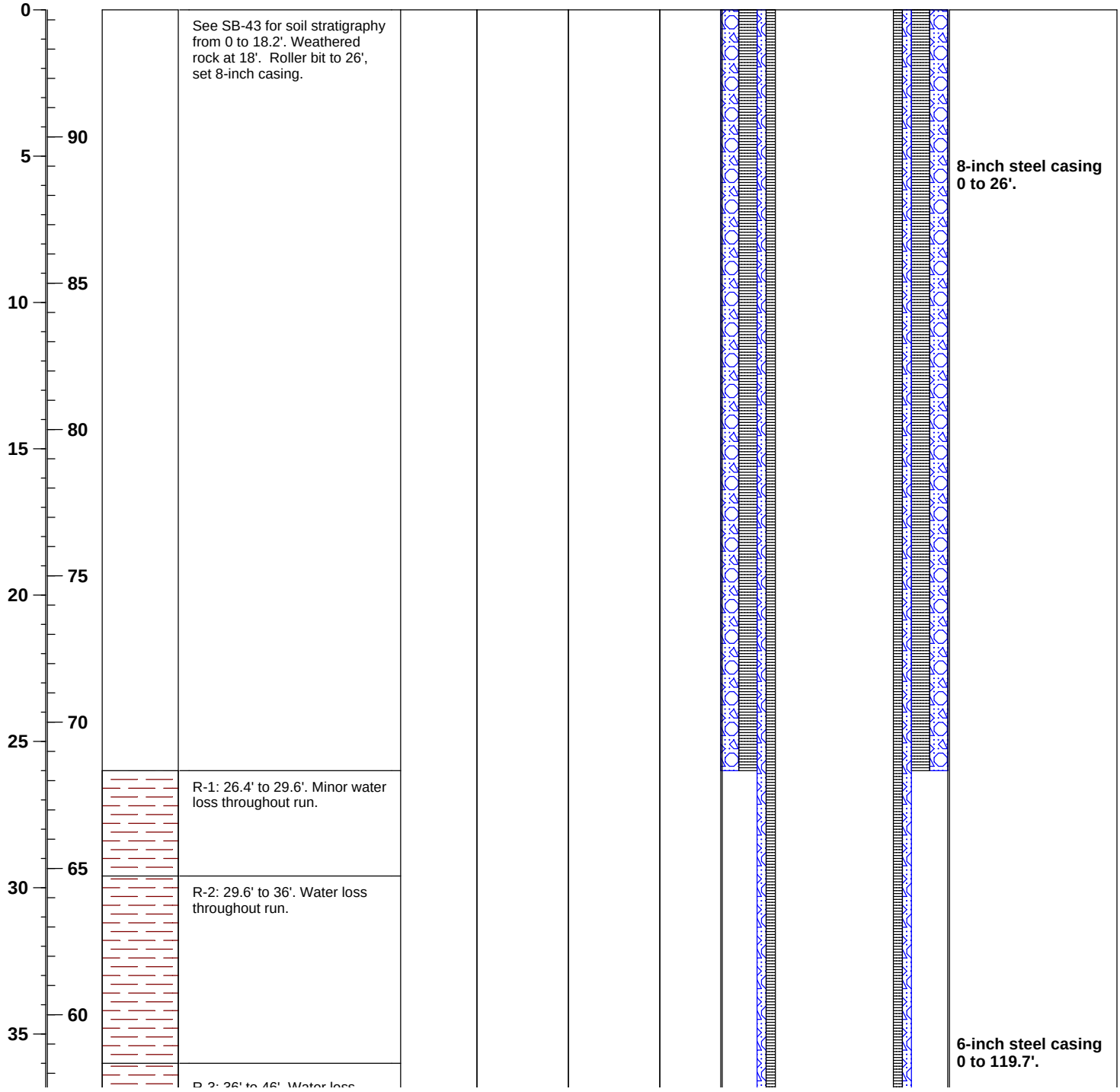
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.80 / GRD 94.34
BORING NO.:	MW-33D	**BORING LOCATION:**	N 1484713.06 / E 709752.83
DATE:	8/20/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140.5 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



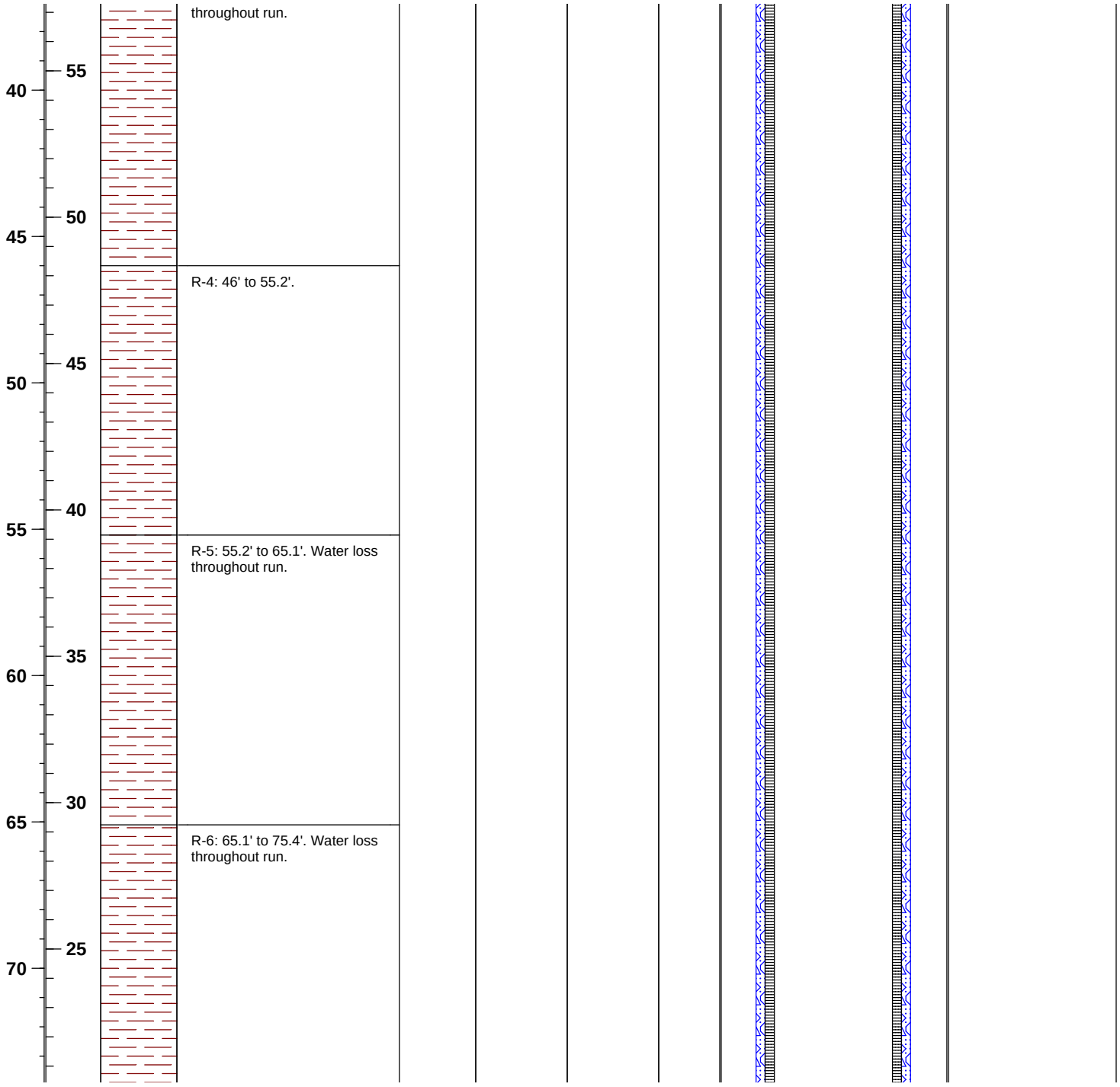
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.80 / GRD 94.34
BORING NO.:	MW-33D	**BORING LOCATION:**	N 1484713.06 / E 709752.83
DATE:	8/20/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140.5 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



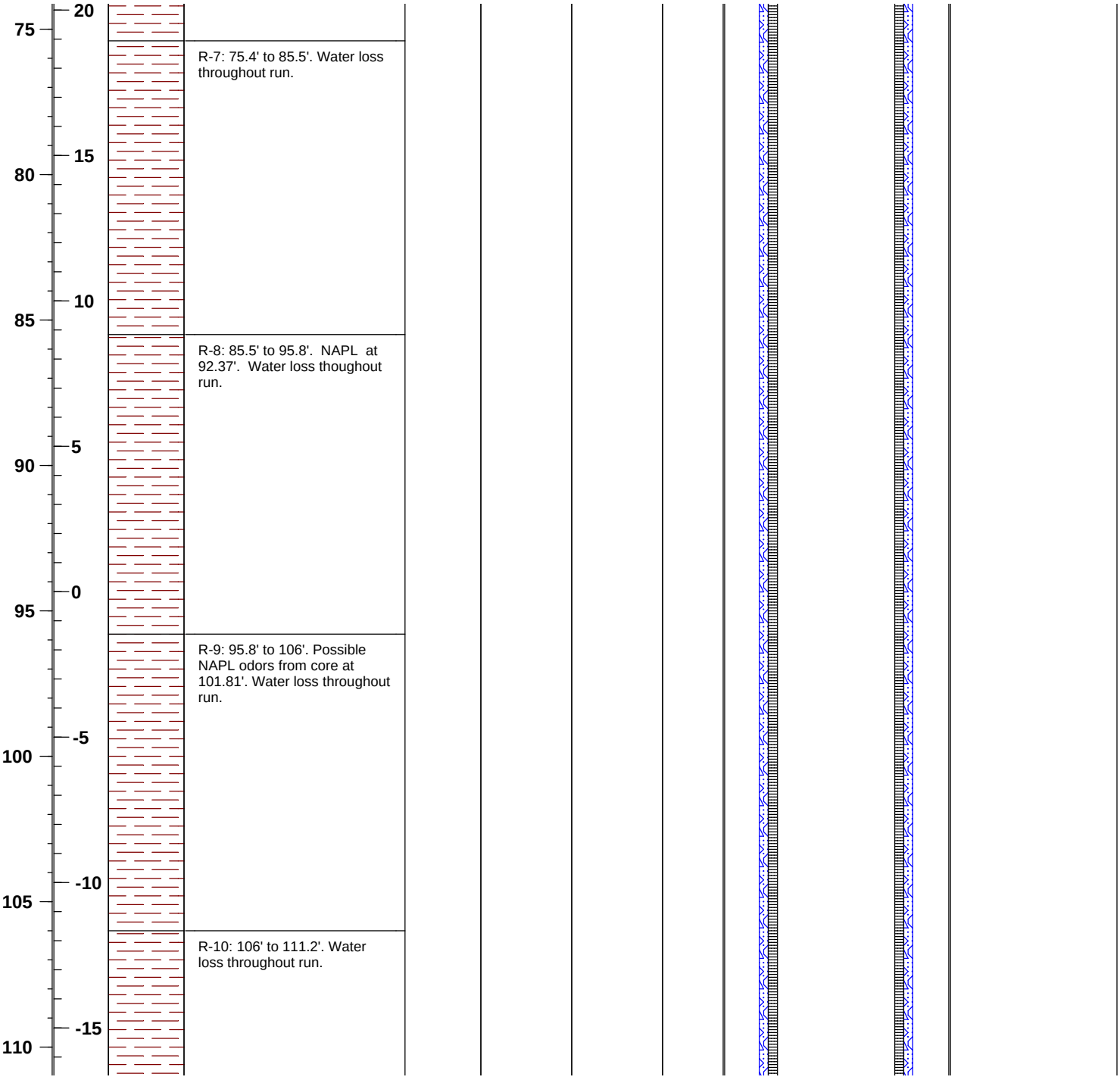
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.80 / GRD 94.34
BORING NO.:	MW-33D	**BORING LOCATION:**	N 1484713.06 / E 709752.83
DATE:	8/20/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140.5 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



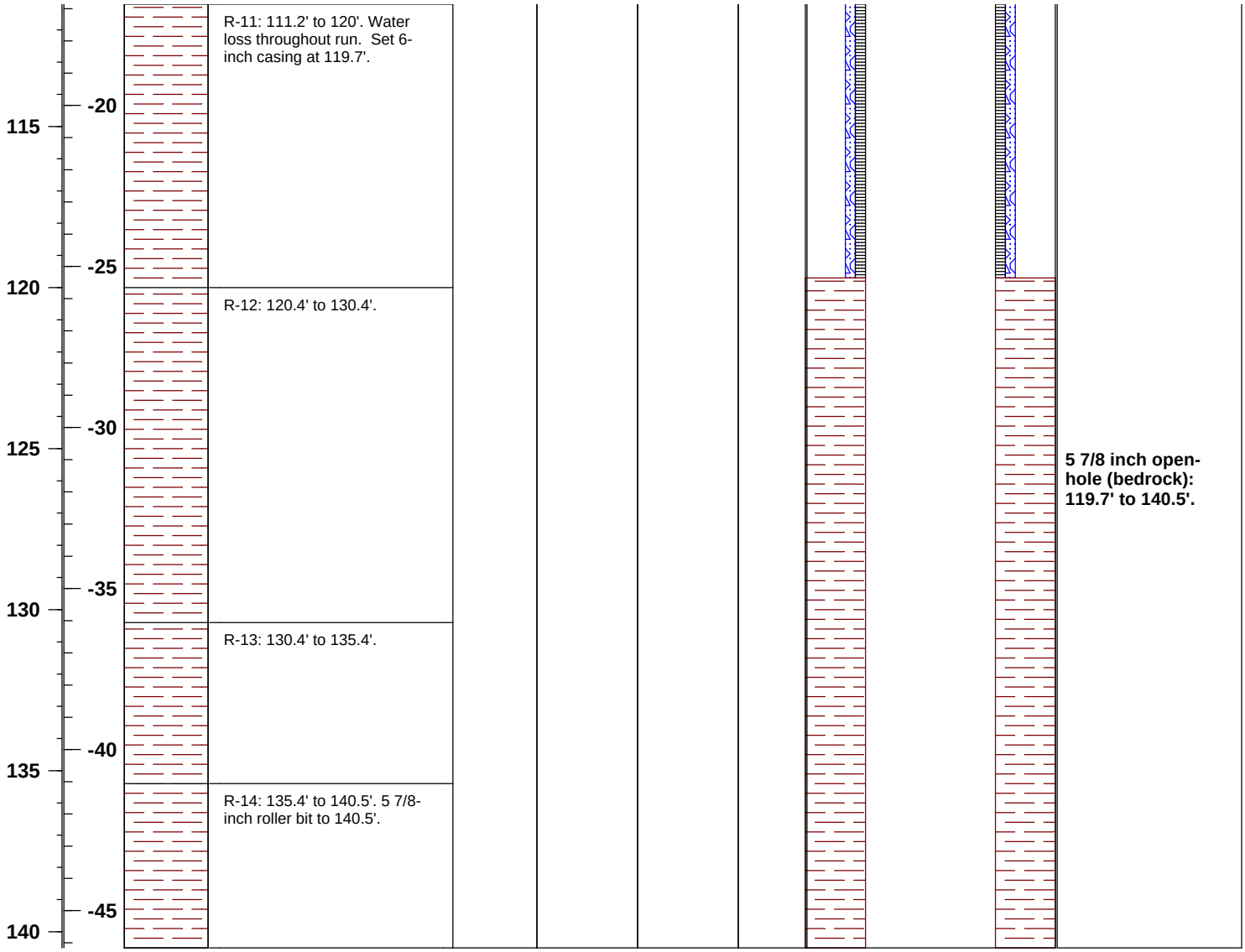
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.80 / GRD 94.34
BORING NO.:	MW-33D	**BORING LOCATION:**	N 1484713.06 / E 709752.83
DATE:	8/20/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140.5 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



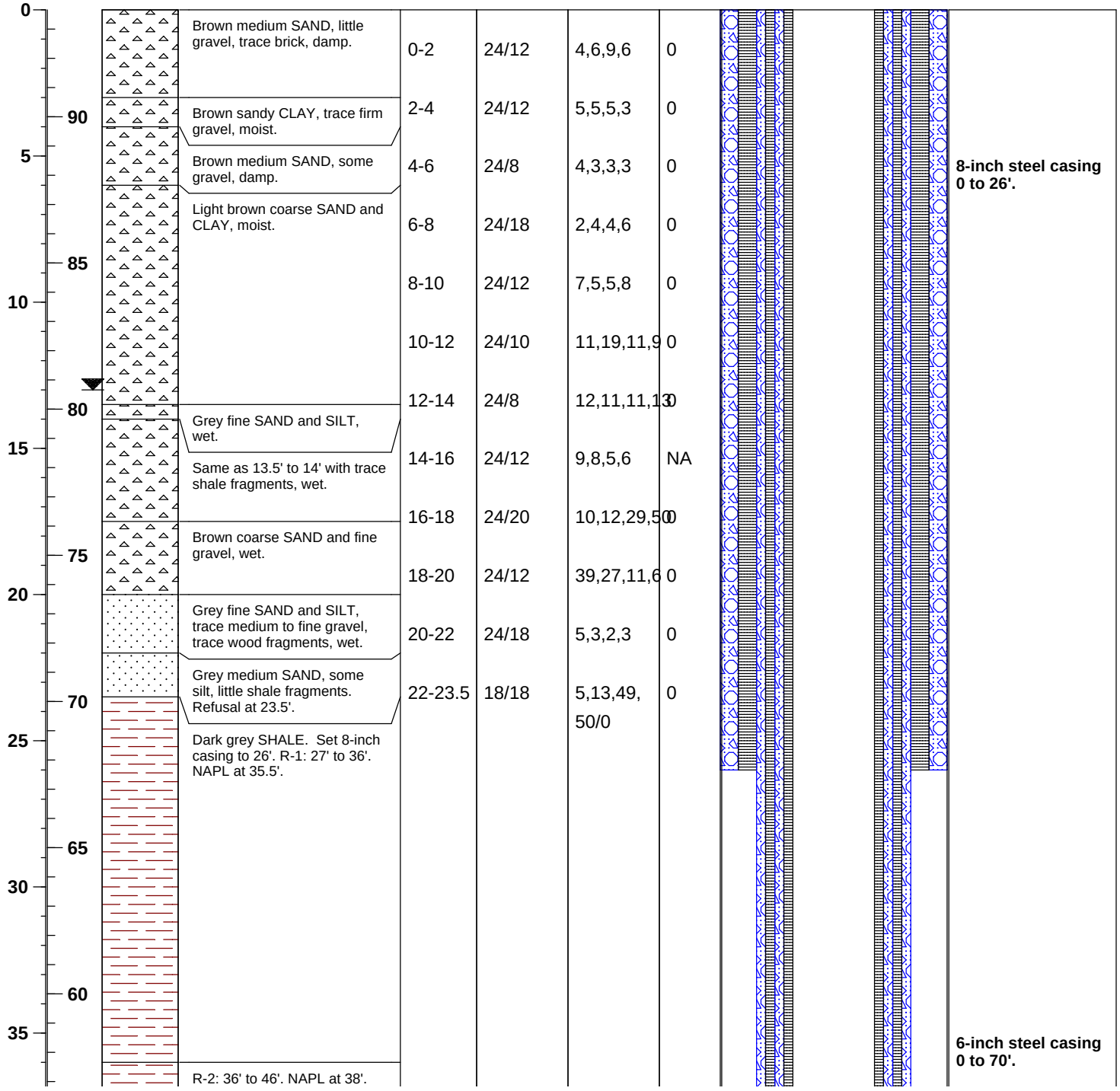
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.66 / GRD 94.26
BORING NO.:	MW-34D	**BORING LOCATION:**	N 1481996.84 / E 709676.61
DATE:	9/10/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	120.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND, little gravel, trace brick, damp.	0-2	24/12	4,6,9,6	0		
5 / 85		Brown sandy CLAY, trace firm gravel, moist.	2-4	24/12	5,5,5,3	0		
		Brown medium SAND, some gravel, damp.	4-6	24/8	4,3,3,3	0		
		Light brown coarse SAND and CLAY, moist.	6-8	24/18	2,4,4,6	0		
10			8-10	24/12	7,5,5,8	0		
			10-12	24/10	11,19,11,9	0		
80			12-14	24/8	12,11,11,13	0		
15		Grey fine SAND and SILT, wet.	14-16	24/12	9,8,5,6	NA		
		Same as 13.5' to 14' with trace shale fragments, wet.	16-18	24/20	10,12,29,50	0		
75		Brown coarse SAND and fine gravel, wet.	18-20	24/12	39,27,11,6	0		
20		Grey fine SAND and SILT, trace medium to fine gravel, trace wood fragments, wet.	20-22	24/18	5,3,2,3	0		
		Grey medium SAND, some silt, little shale fragments. Refusal at 23.5'.	22-23.5	18/18	5,13,49, 50/0	0		
70								
25		Dark grey SHALE. Set 8-inch casing to 26'. R-1: 27' to 36'. NAPL at 35.5'.						
65								
30								
60								
35		R-2: 36' to 46'. NAPL at 38'.						



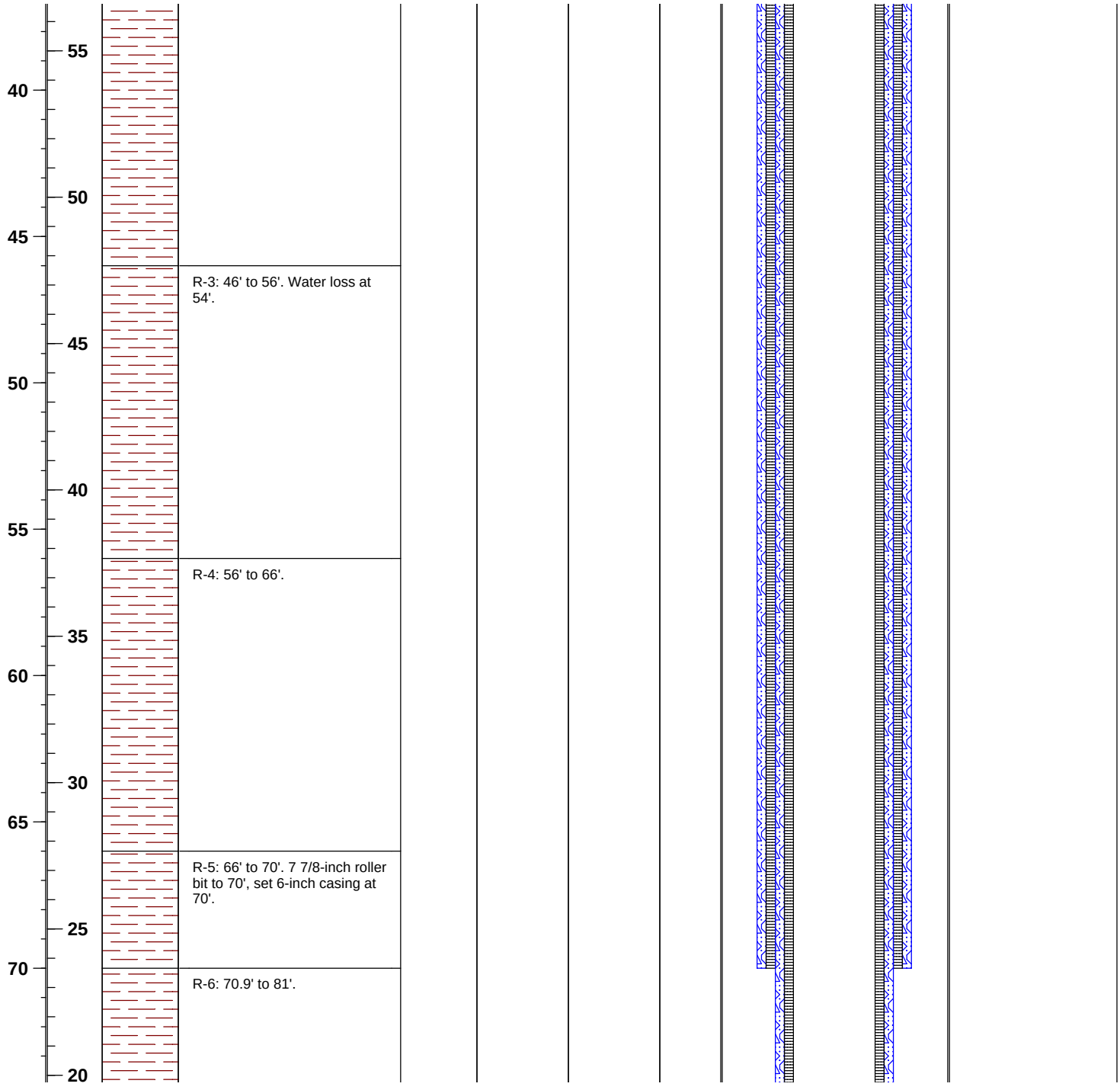
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.66 / GRD 94.26
BORING NO.:	MW-34D	**BORING LOCATION:**	N 1481996.84 / E 709676.61
DATE:	9/10/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	120.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



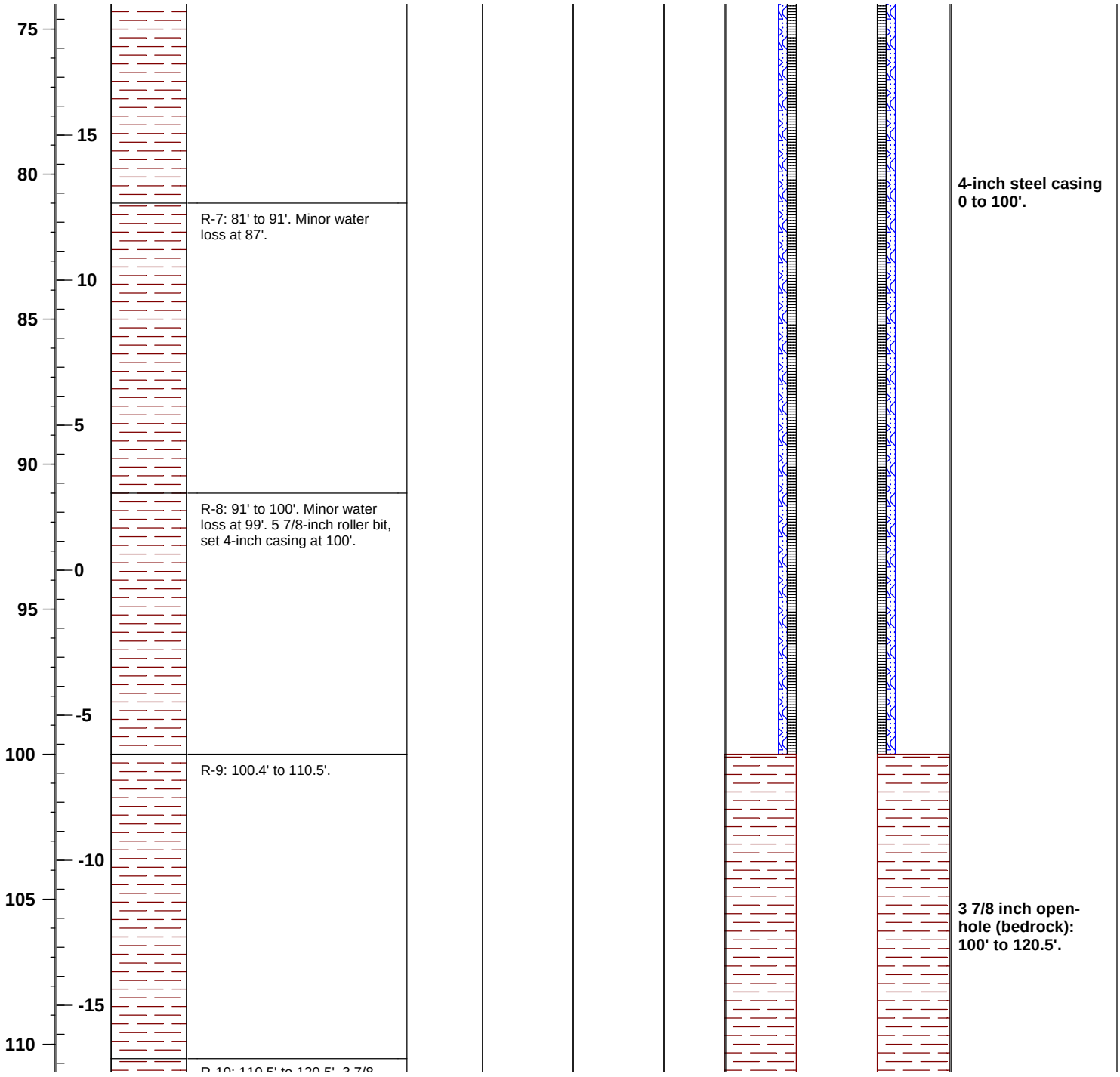
LOG OF BORING

URS
Clifton Park, New York

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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.66 / GRD 94.26
BORING NO.:	MW-34D	**BORING LOCATION:**	N 1481996.84 / E 709676.61
DATE:	9/10/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	120.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



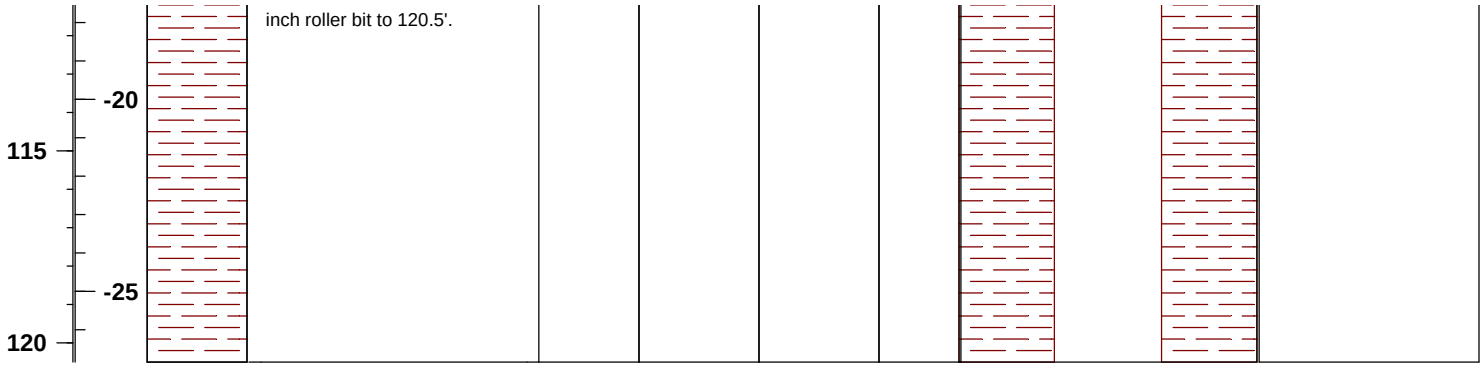
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.66 / GRD 94.26
BORING NO.:	MW-34D	**BORING LOCATION:**	N 1481996.84 / E 709676.61
DATE:	9/10/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	8.25 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	120.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		inch roller bit to 120.5'.						



LOG OF BORING

URS

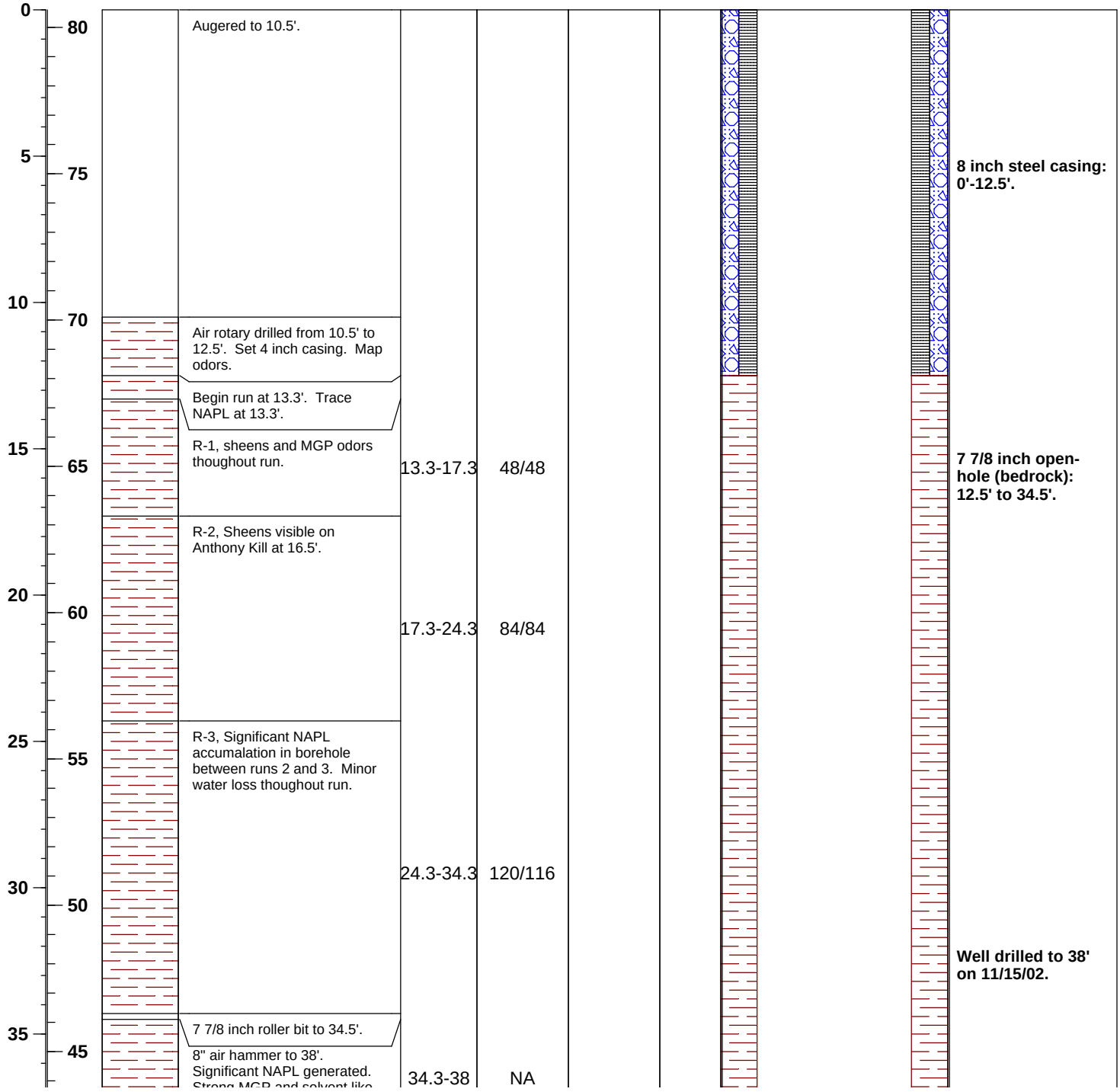
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 80.6 / GRD 80.94
BORING NO.:	MW-35 I	**BORING LOCATION:**	N 1485020 / E 709610
DATE:	4/16/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	38 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 80		Augered to 10.5'.						
10 / 70		Air rotary drilled from 10.5' to 12.5'. Set 4 inch casing. Map odors.						
		Begin run at 13.3'. Trace NAPL at 13.3'.						
15 / 65		R-1, sheens and MGP odors thoughout run.	13.3-17.3	48/48				
		R-2, Sheens visible on Anthony Kill at 16.5'.						
20 / 60			17.3-24.3	84/84				
25 / 55		R-3, Significant NAPL accumalation in borehole between runs 2 and 3. Minor water loss thoughout run.						
30 / 50			24.3-34.3	120/116				
35 / 45		7 7/8 inch roller bit to 34.5'.						
		8" air hammer to 38'. Significant NAPL generated. Strong MGP and solvent like	34.3-38	NA				



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 80.6 / GRD 80.94
BORING NO.:	MW-35 I	**BORING LOCATION:**	N 1485020 / E 709610
DATE:	4/16/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	38 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		odors also noted.						

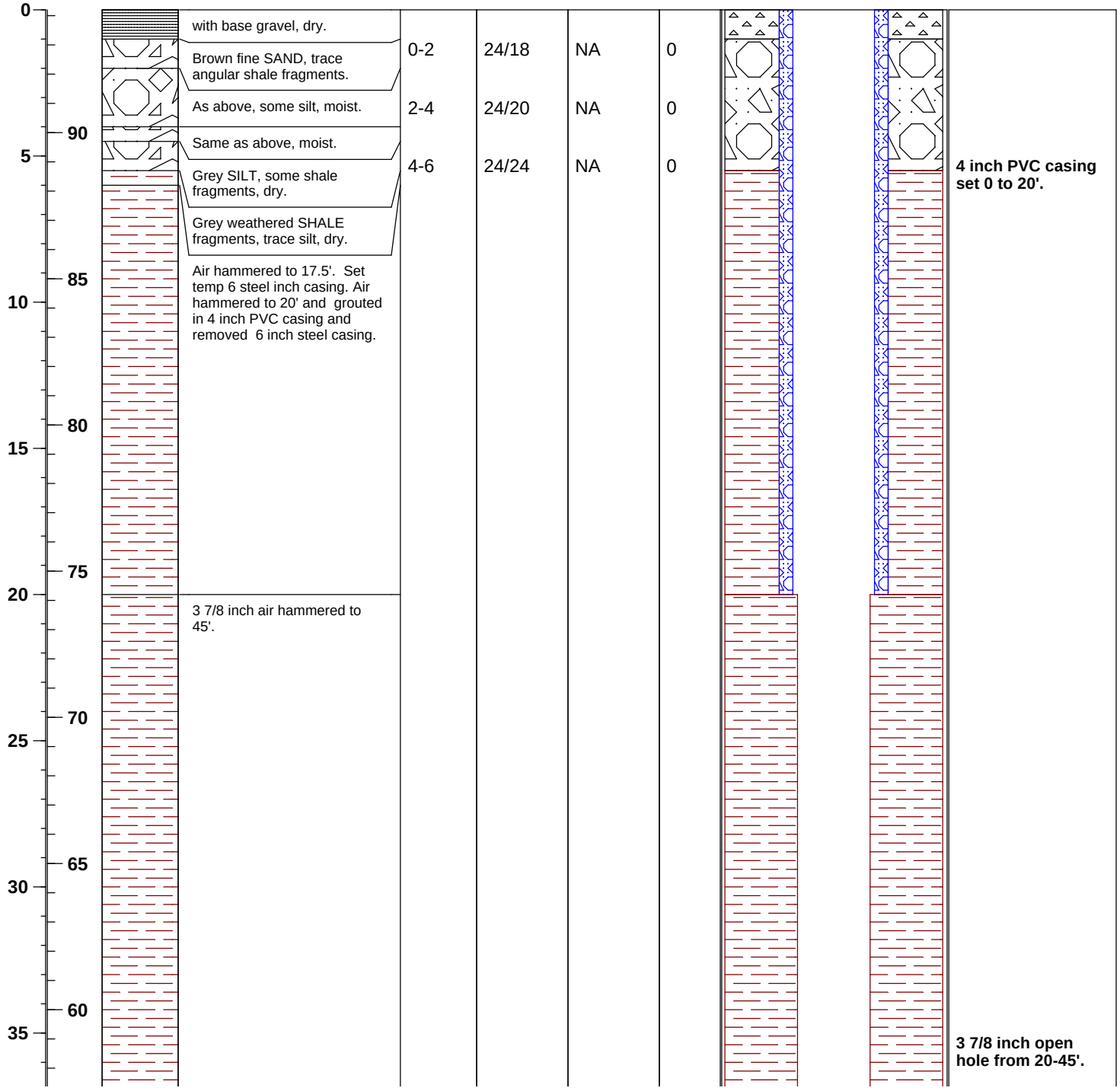
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.2 / GRD 94.61
BORING NO.:	MW-36I	**BORING LOCATION:**	N 1485190.59 / E 709627.29
DATE:	6/5/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	45 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		with base gravel, dry.	0-2	24/18	NA	0		
		Brown fine SAND, trace angular shale fragments.						
		As above, some silt, moist.	2-4	24/20	NA	0		
5 / 85		Same as above, moist.						
		Grey SILT, some shale fragments, dry.	4-6	24/24	NA	0		
		Grey weathered SHALE fragments, trace silt, dry.						
10 / 80		Air hammered to 17.5'. Set temp 6 steel inch casing. Air hammered to 20' and grouted in 4 inch PVC casing and removed 6 inch steel casing.						
15 / 75								
20 / 70		3 7/8 inch air hammered to 45'.						
25 / 65								
30 / 60								
35								



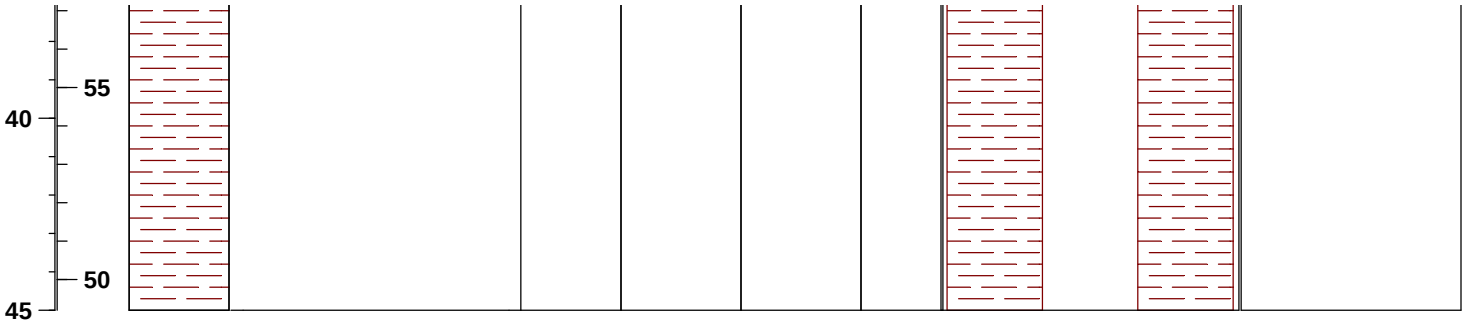
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.2 / GRD 94.61
BORING NO.:	MW-36I	**BORING LOCATION:**	N 1485190.59 / E 709627.29
DATE:	6/5/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	45 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

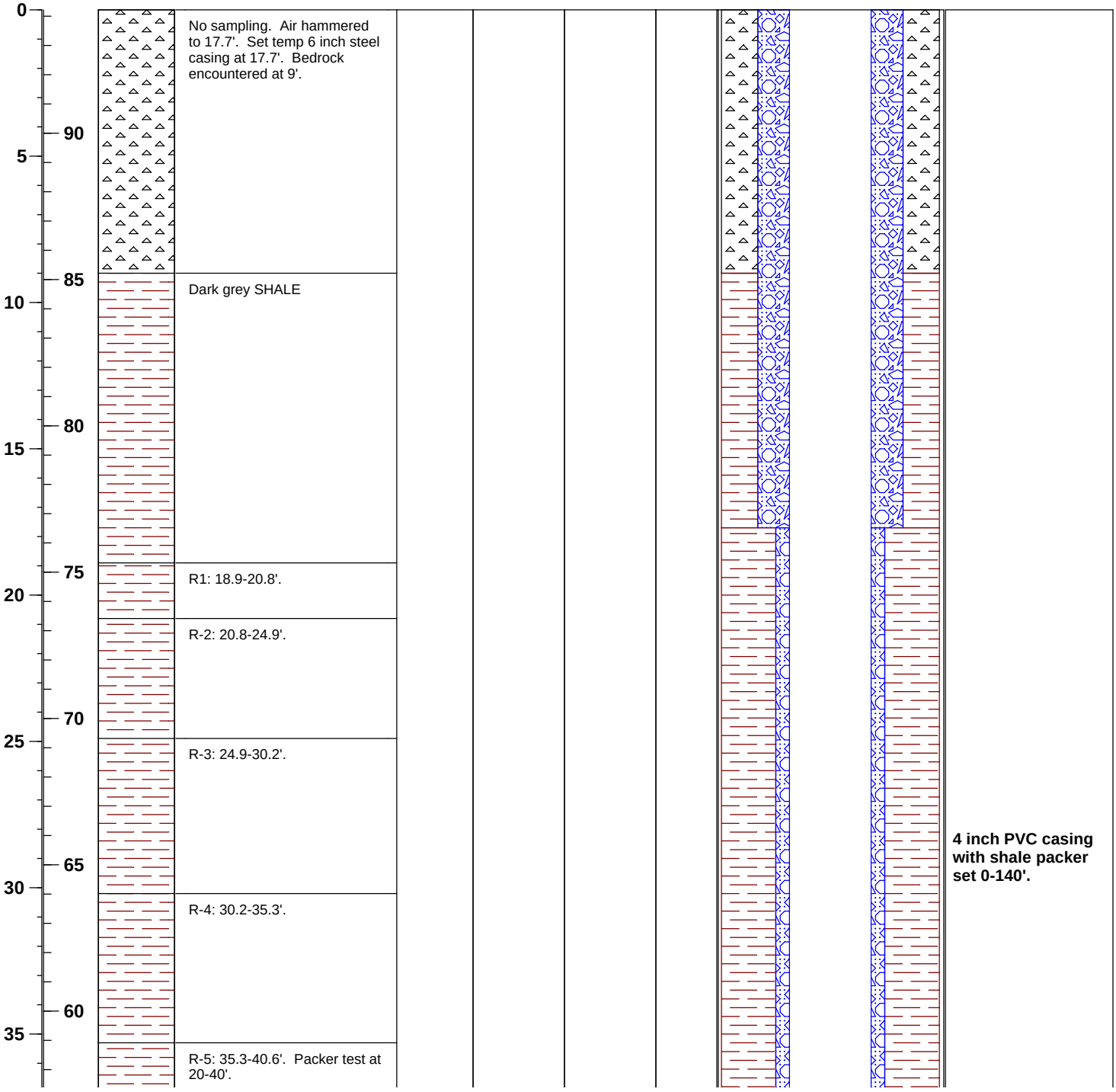
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.22 / GRD 94.58
BORING NO.:	MW-36D	**BORING LOCATION:**	N 1485184.72 / E 709628.59
DATE:	5/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	161 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



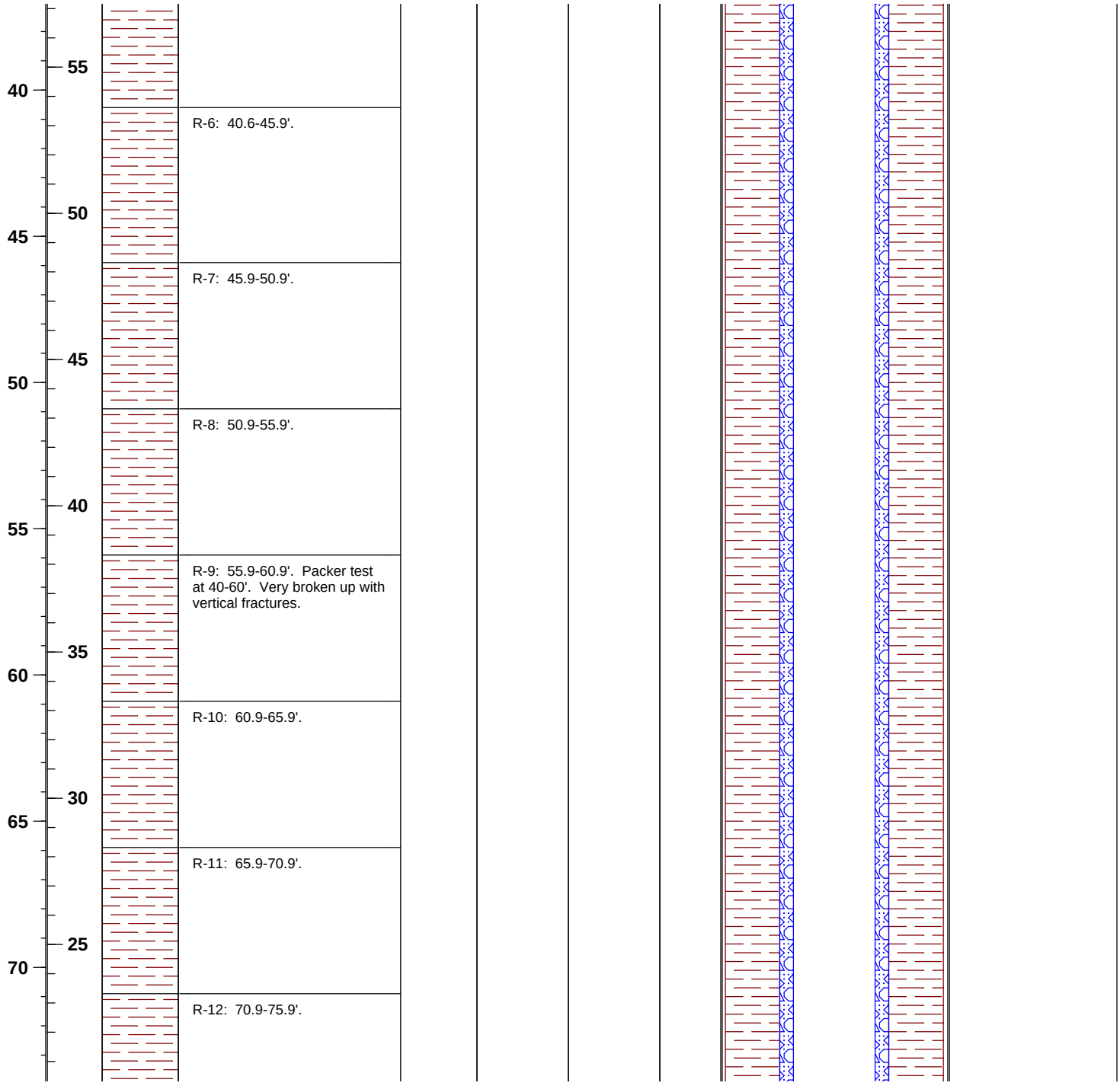
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.22 / GRD 94.58
BORING NO.:	MW-36D	**BORING LOCATION:**	N 1485184.72 / E 709628.59
DATE:	5/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	161 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
40 / 55		R-6: 40.6-45.9'.						
45 / 50		R-7: 45.9-50.9'.						
50 / 45		R-8: 50.9-55.9'.						
55 / 40		R-9: 55.9-60.9'. Packer test at 40-60'. Very broken up with vertical fractures.						
60 / 35		R-10: 60.9-65.9'.						
65 / 30		R-11: 65.9-70.9'.						
70 / 25		R-12: 70.9-75.9'.						



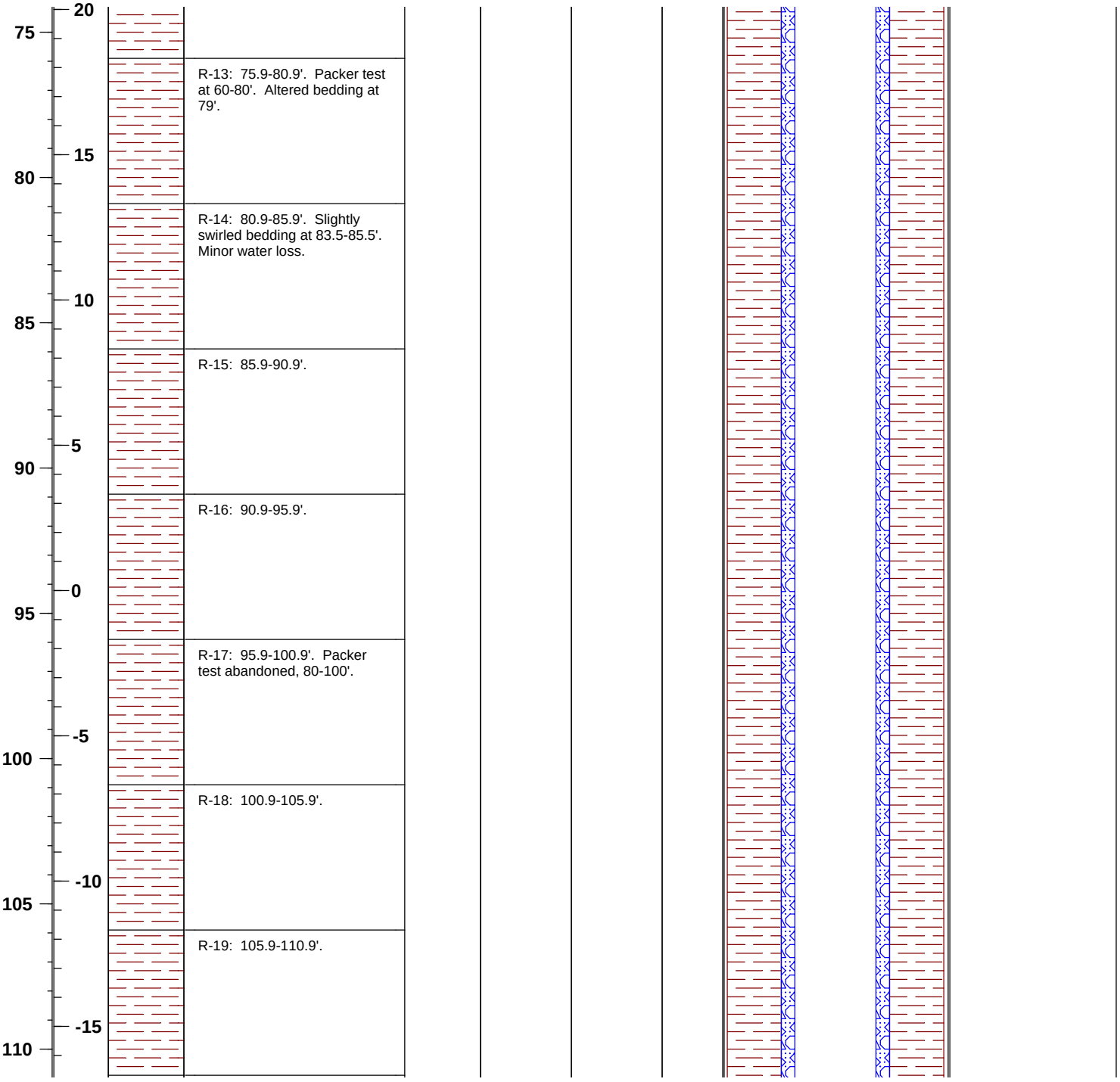
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.22 / GRD 94.58
BORING NO.:	MW-36D	**BORING LOCATION:**	N 1485184.72 / E 709628.59
DATE:	5/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	161 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



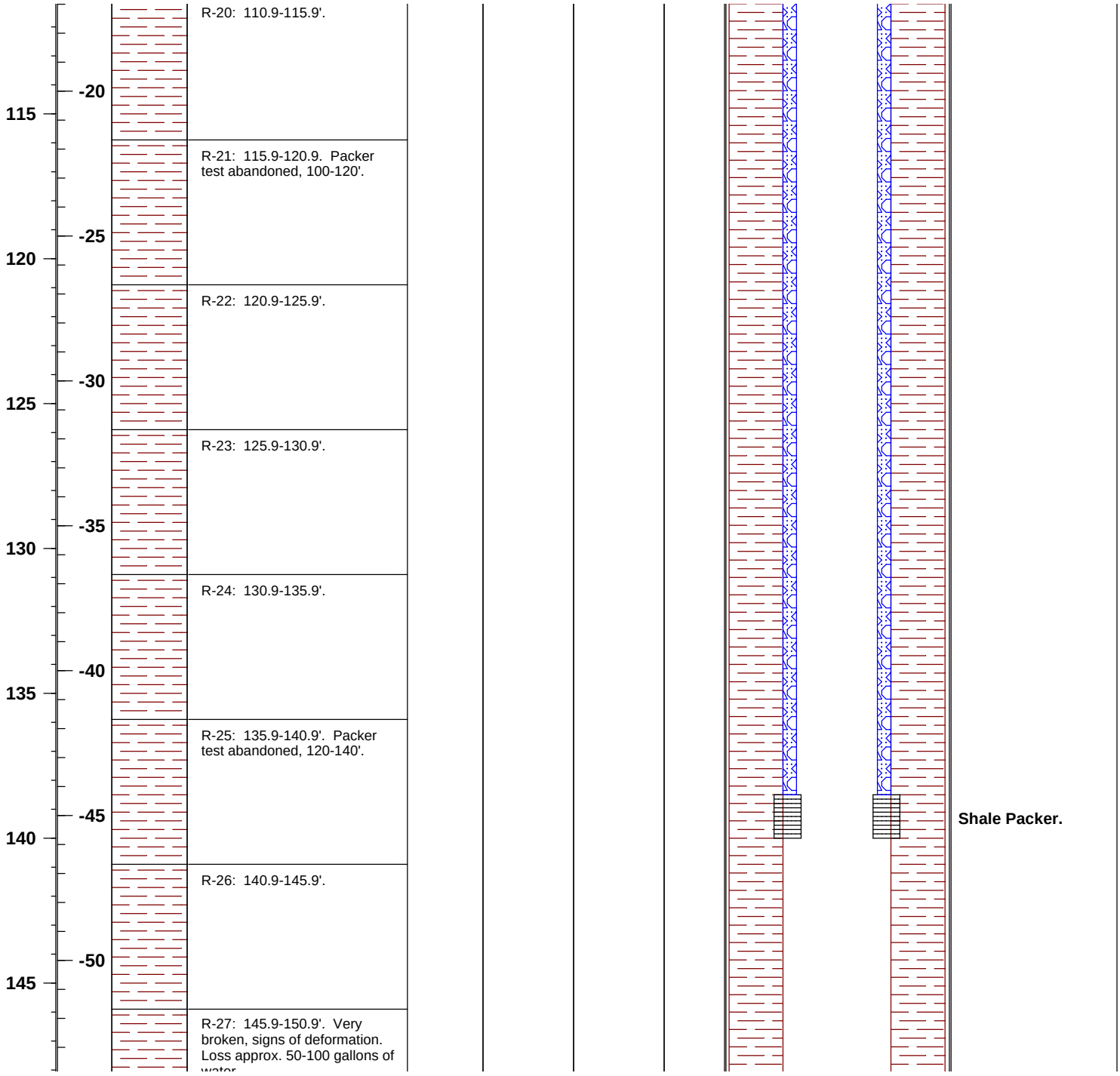
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.22 / GRD 94.58
BORING NO.:	MW-36D	**BORING LOCATION:**	N 1485184.72 / E 709628.59
DATE:	5/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	161 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



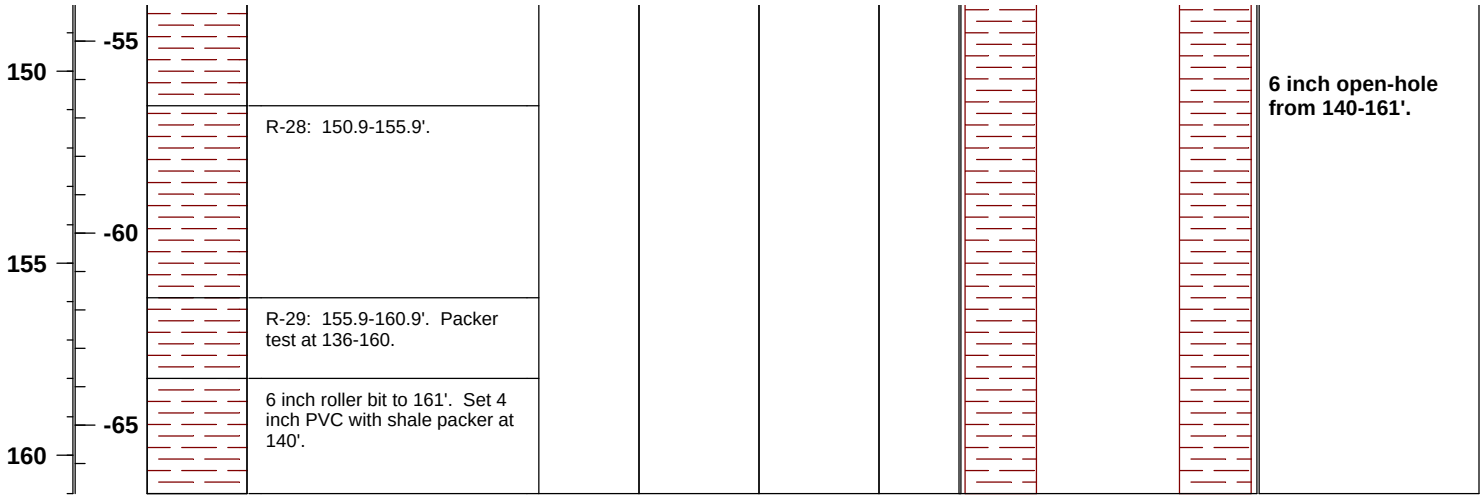
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 94.22 / GRD 94.58
BORING NO.:	MW-36D	**BORING LOCATION:**	N 1485184.72 / E 709628.59
DATE:	5/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	161 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



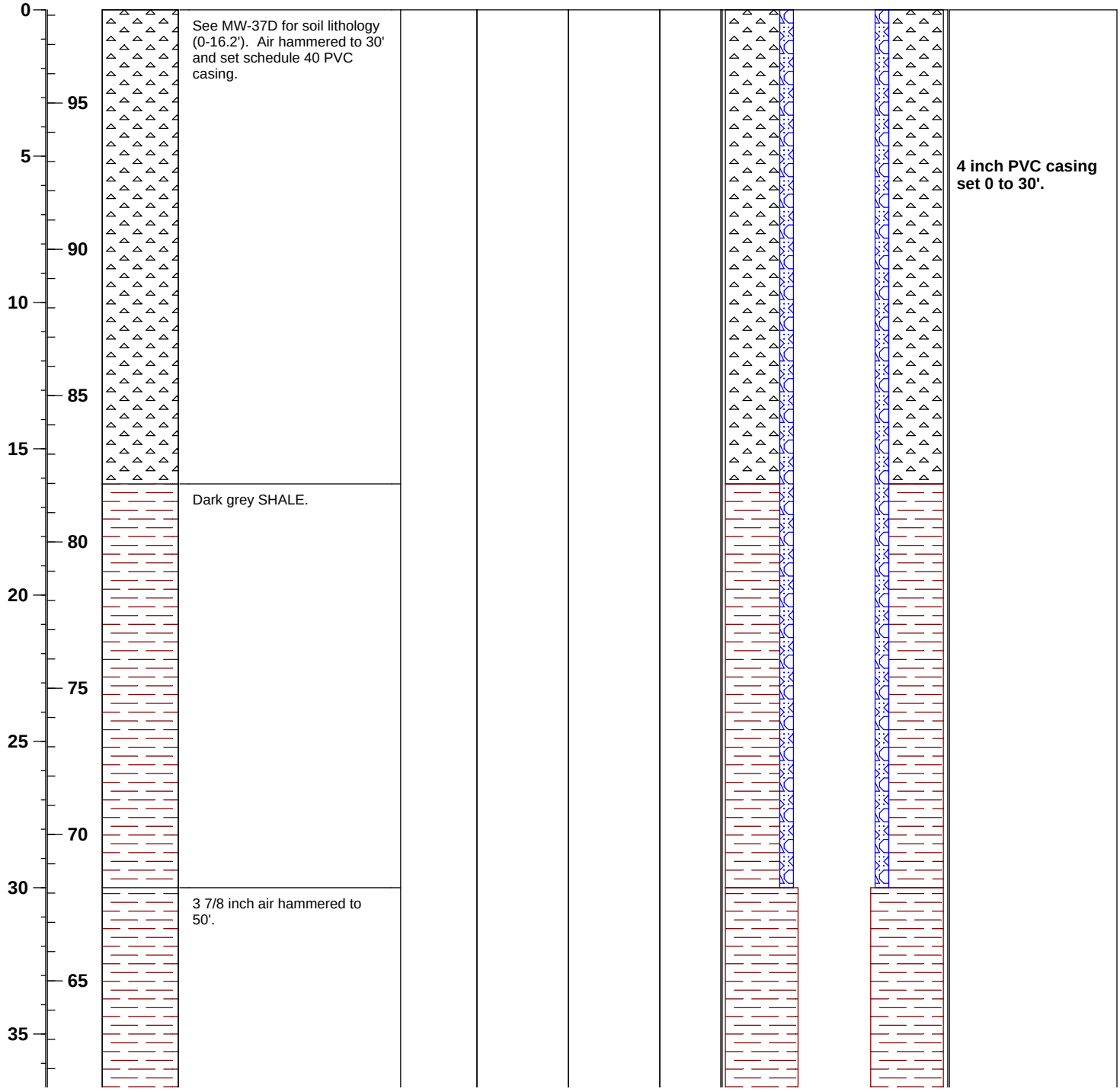
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.18 / GRD 98.54
BORING NO.:	MW-37I	**BORING LOCATION:**	N 1485194.56 / E 709857.99
DATE:	6/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	50 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



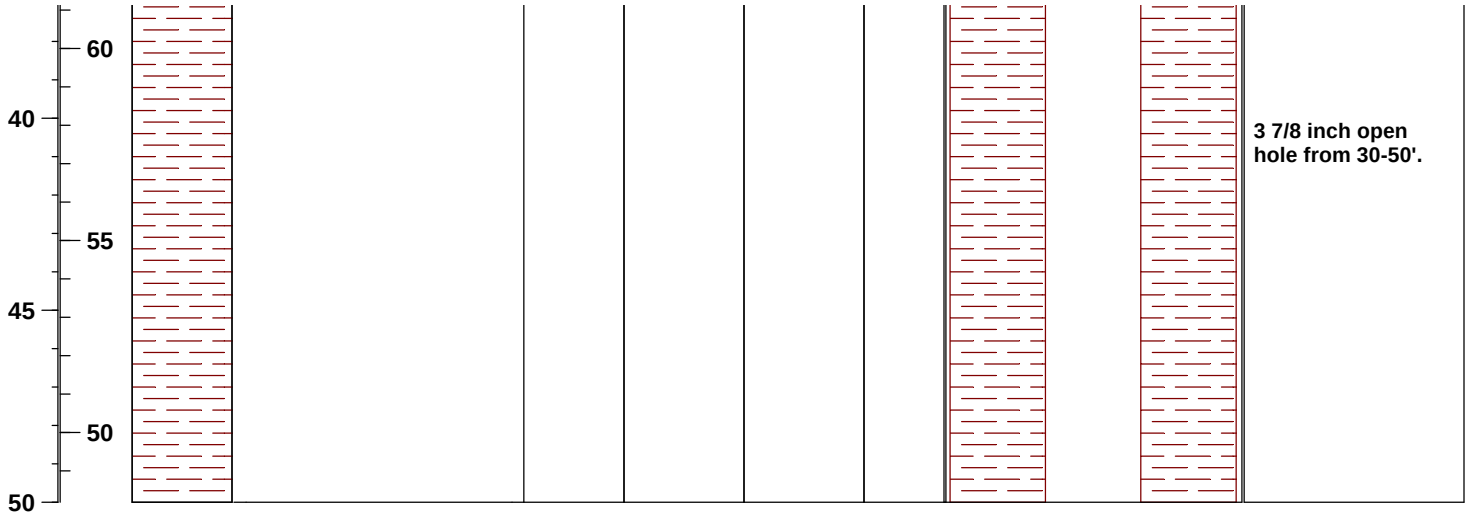
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.18 / GRD 98.54
BORING NO.:	MW-37I	**BORING LOCATION:**	N 1485194.56 / E 709857.99
DATE:	6/17/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	50 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



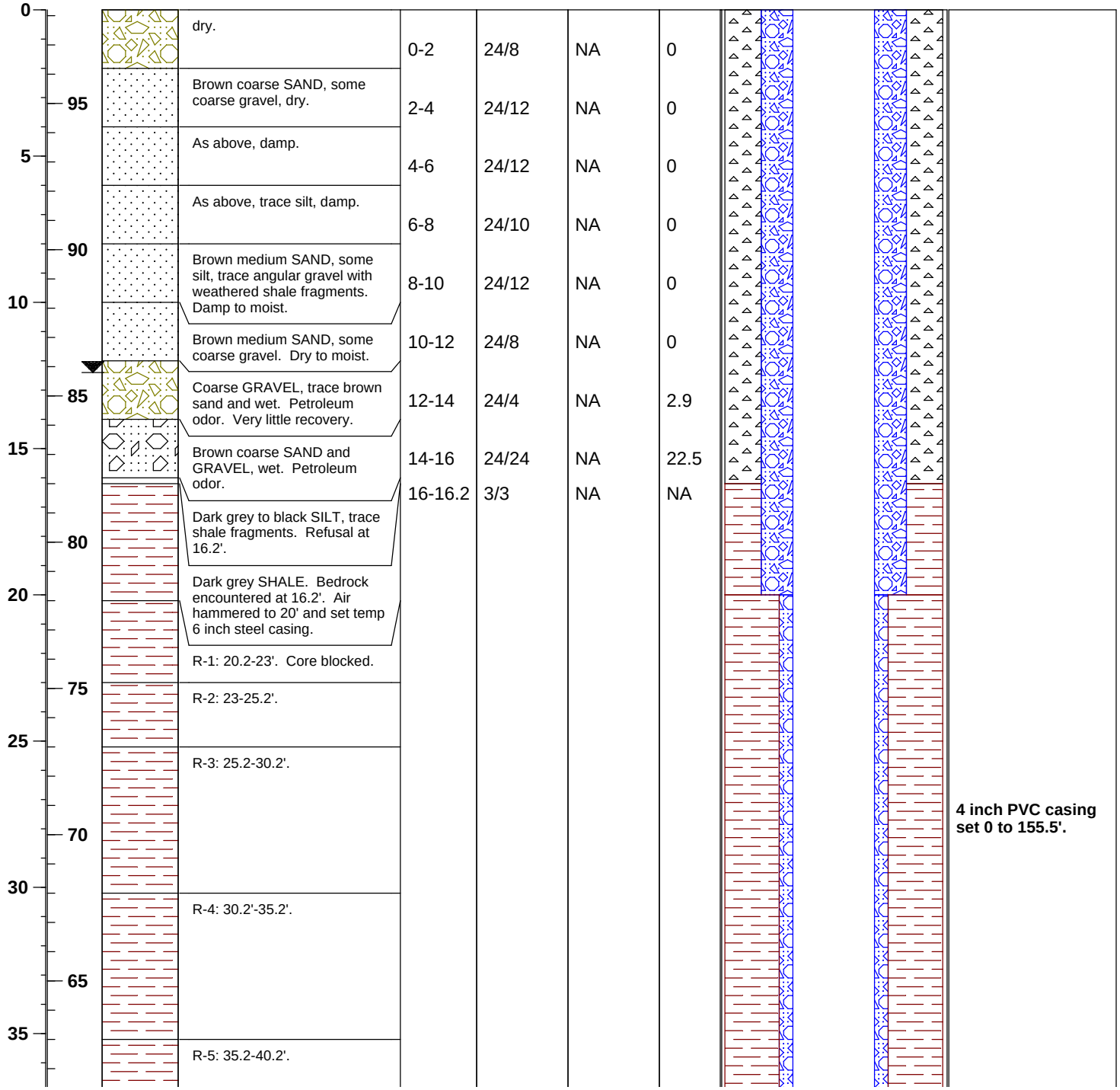
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.2 / GRD 98.59
BORING NO.:	MW-37D	**BORING LOCATION:**	N 1485190.06 / E 709859.34
DATE:	6/13/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	186 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 95		dry.	0-2	24/8	NA	0		
		Brown coarse SAND, some coarse gravel, dry.	2-4	24/12	NA	0		
5 / 90		As above, damp.	4-6	24/12	NA	0		
		As above, trace silt, damp.	6-8	24/10	NA	0		
10 / 85		Brown medium SAND, some silt, trace angular gravel with weathered shale fragments. Damp to moist.	8-10	24/12	NA	0		
		Brown medium SAND, some coarse gravel. Dry to moist.	10-12	24/8	NA	0		
15 / 80		Coarse GRAVEL, trace brown sand and wet. Petroleum odor. Very little recovery.	12-14	24/4	NA	2.9		
		Brown coarse SAND and GRAVEL, wet. Petroleum odor.	14-16	24/24	NA	22.5		
20 / 75		Dark grey to black SILT, trace shale fragments. Refusal at 16.2'.	16-16.2	3/3	NA	NA		
		Dark grey SHALE. Bedrock encountered at 16.2'. Air hammered to 20' and set temp 6 inch steel casing.						
		R-1: 20.2-23'. Core blocked.						
25 / 70		R-2: 23-25.2'.						
		R-3: 25.2-30.2'.						
30 / 65		R-4: 30.2'-35.2'.						
35		R-5: 35.2-40.2'.						



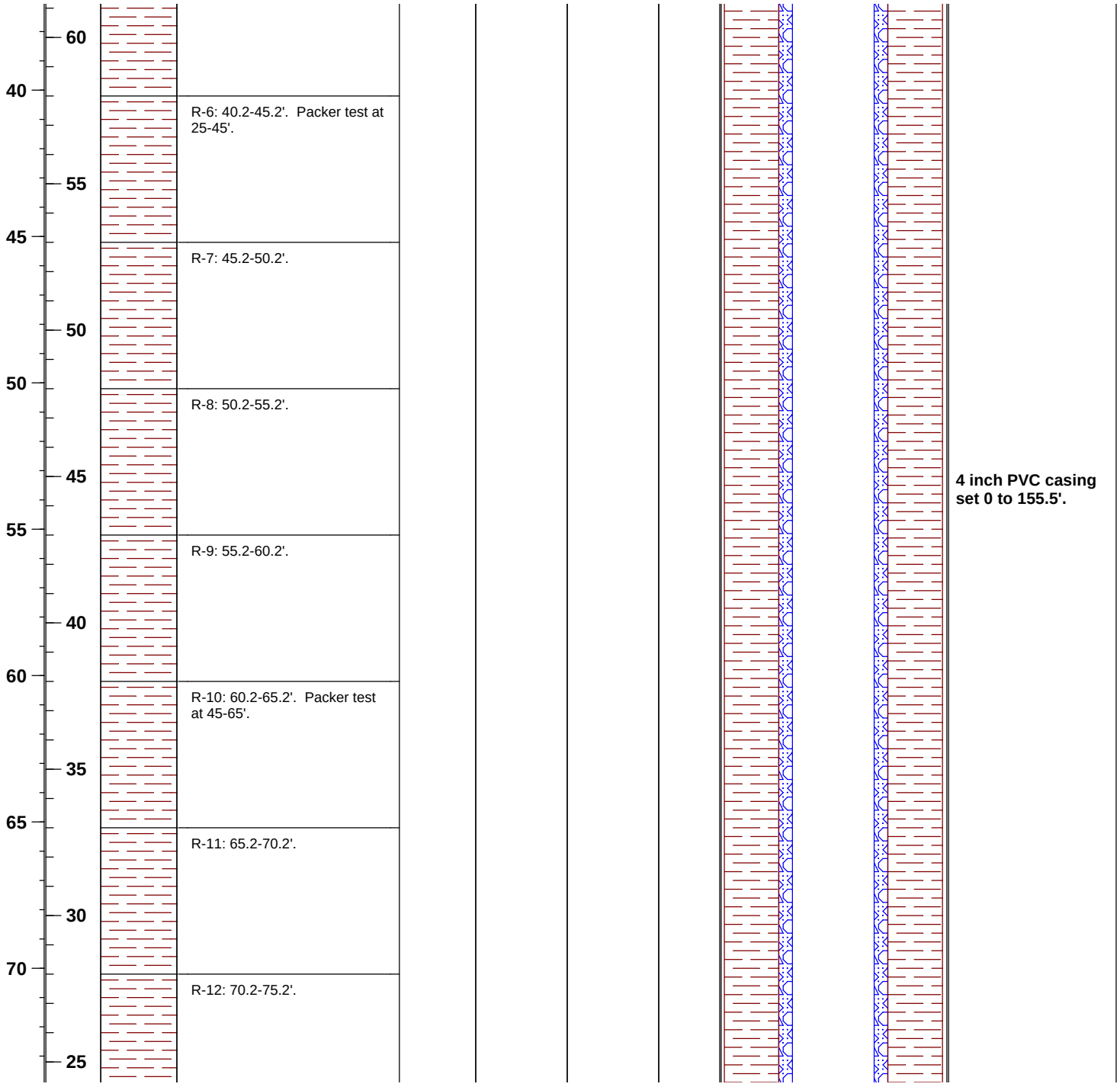
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.2 / GRD 98.59
BORING NO.:	MW-37D	**BORING LOCATION:**	N 1485190.06 / E 709859.34
DATE:	6/13/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	186 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



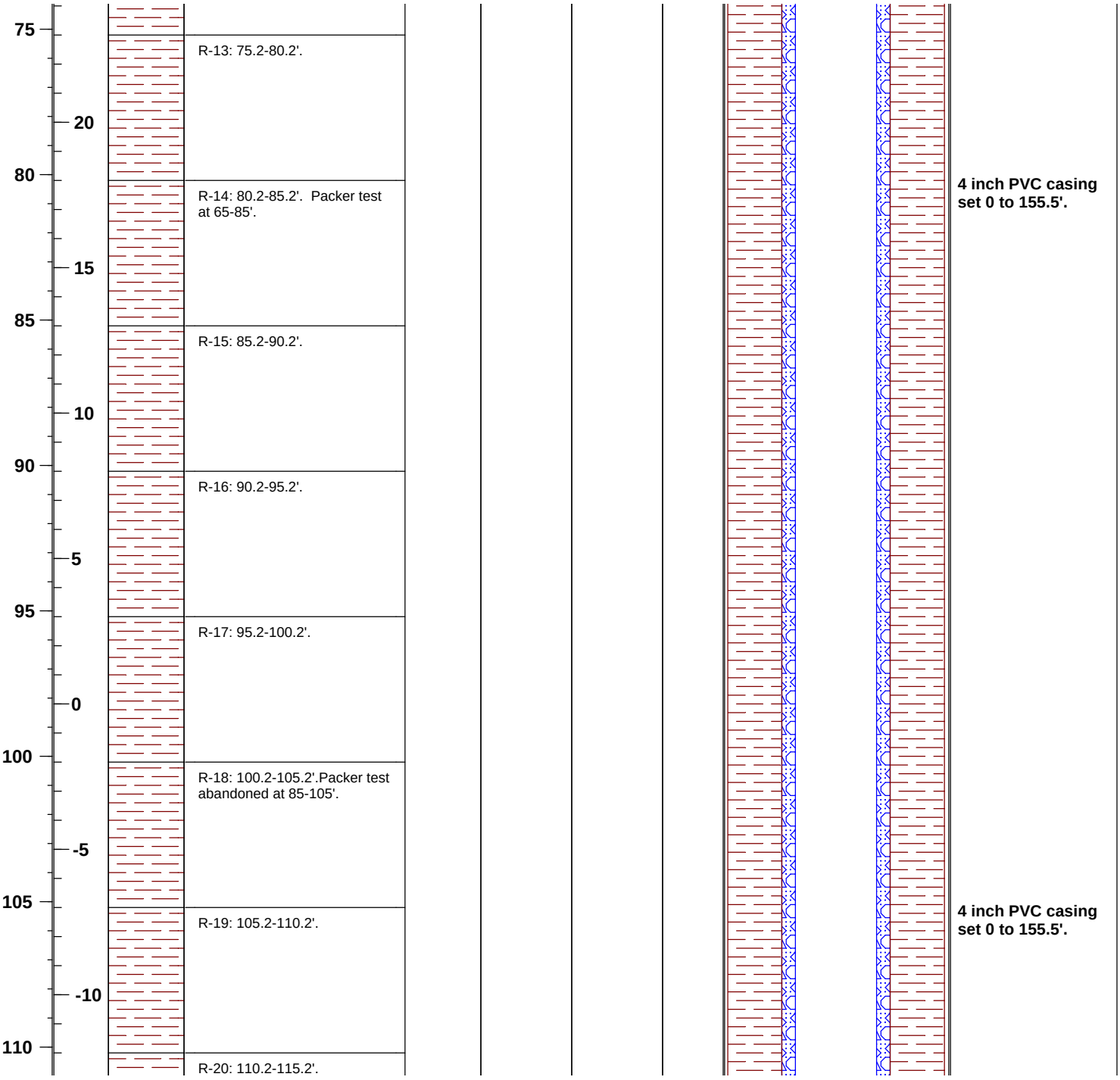
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.2 / GRD 98.59
BORING NO.:	MW-37D	**BORING LOCATION:**	N 1485190.06 / E 709859.34
DATE:	6/13/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	186 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



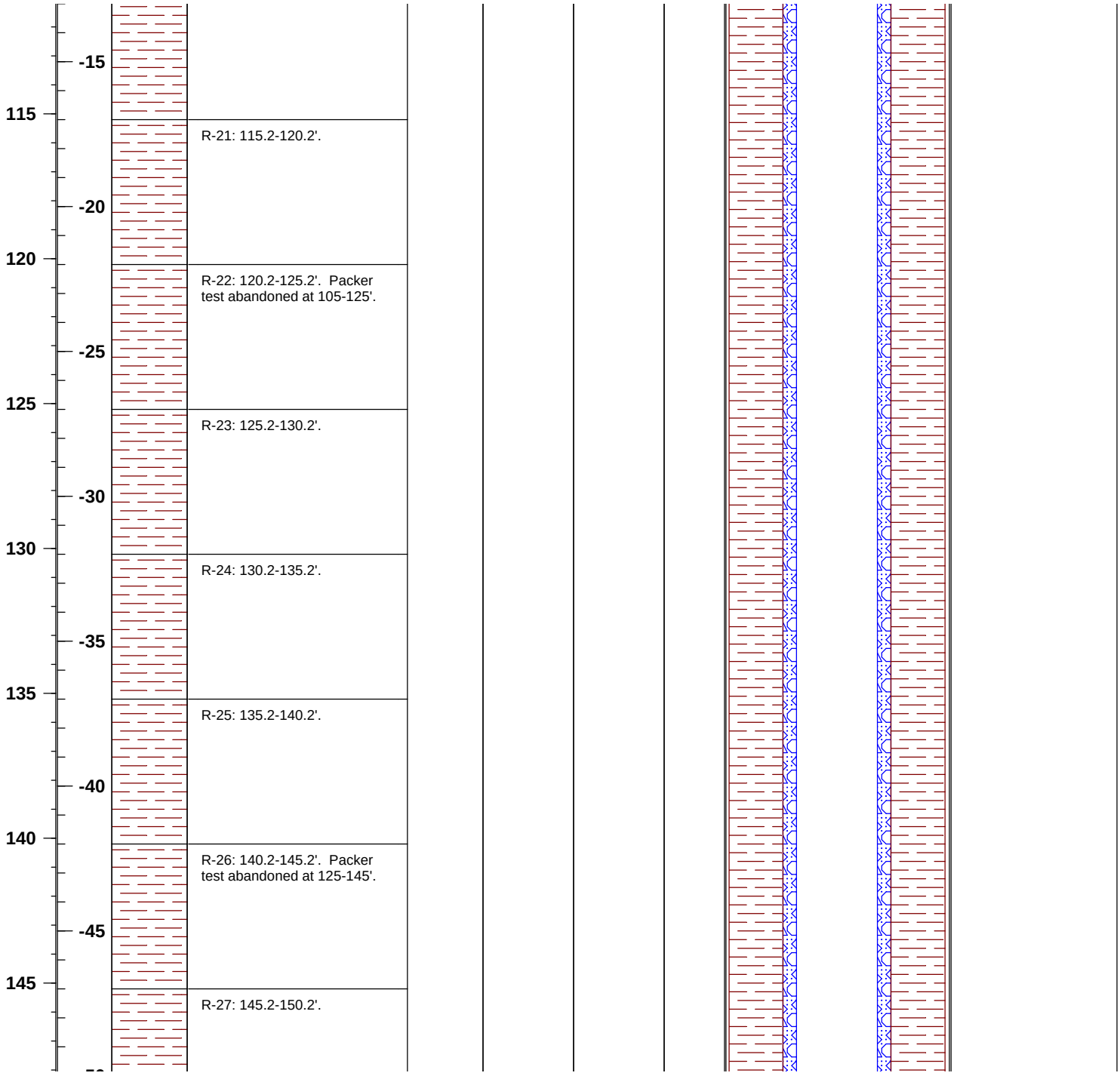
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.2 / GRD 98.59
BORING NO.:	MW-37D	**BORING LOCATION:**	N 1485190.06 / E 709859.34
DATE:	6/13/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	186 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

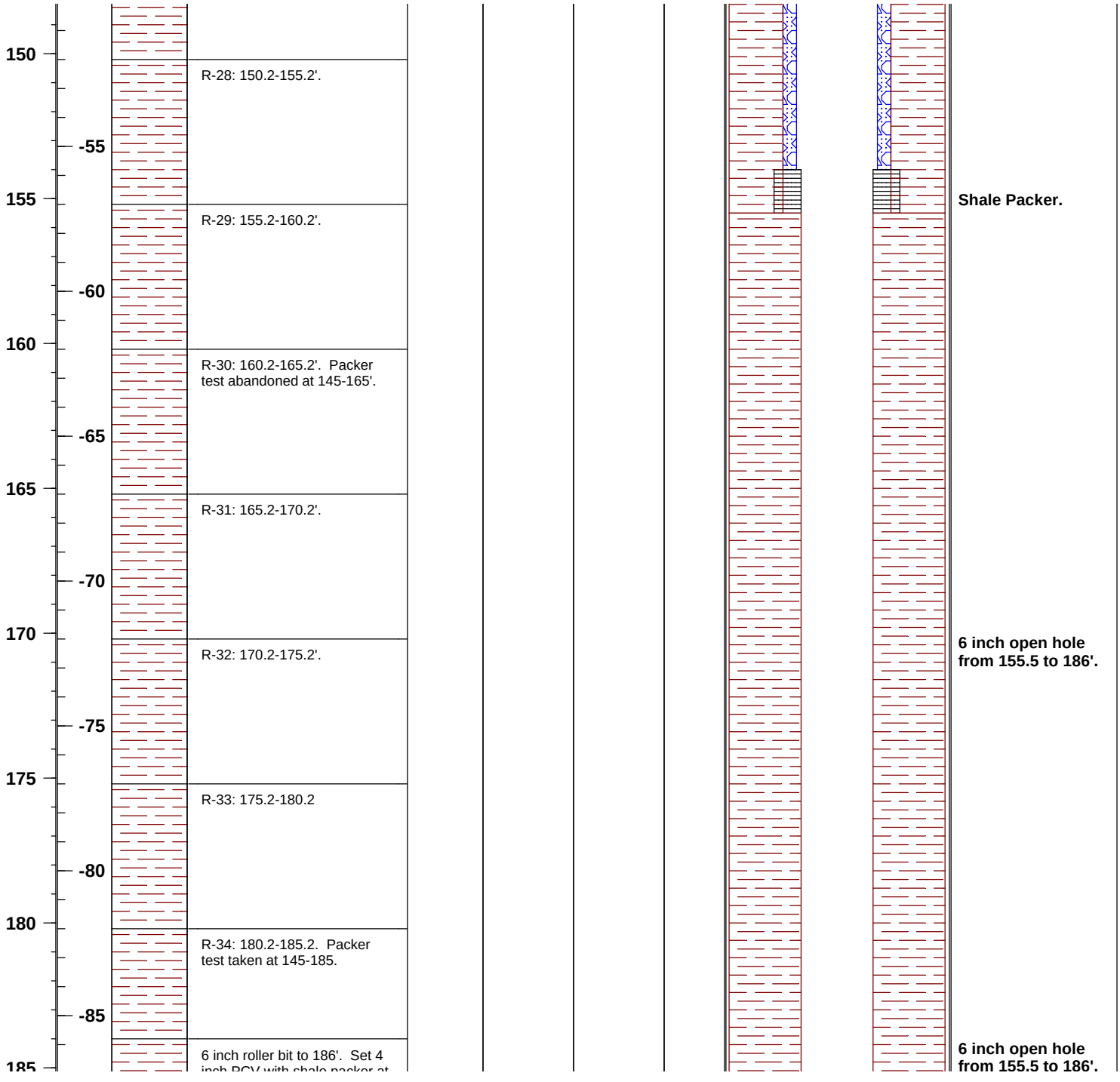
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.2 / GRD 98.59
BORING NO.:	MW-37D	**BORING LOCATION:**	N 1485190.06 / E 709859.34
DATE:	6/13/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	186 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 98.2 / GRD 98.59
BORING NO.:	MW-37D	**BORING LOCATION:**	N 1485190.06 / E 709859.34
DATE:	6/13/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	186 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
		155.5'.						

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.66 / GRD 78.9
BORING NO.:	MW-38I	**BORING LOCATION:**	N 1484669.89 / E 710053.64
DATE:	5/30/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	120 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 75		Asphalt and base material.	0-2	24/10	NA	0		
		Brown coarse SAND, trace gravel, dry.						
		Light brown stiff CLAY, some fine gravel. Very compact, dry.	2-4	24/10	NA	0		
5		Brown fine SAND, trace organics, damp.	4-6	24/4	NA	0		
		Same as above.	6-8	24/24	NA	0		
70		Grey to brown SILT, trace wood and roots, wet.						
10		Same as above wtih round gravel at 9'. Wet.	8-10	24/12	NA	0		
		Shale fragments, some silt, wet.	10-11.9	24/12	NA	0		
65		Shale fragments, some silt. Refusal at 11.9'.						
15		Dark grey SHALE. Air hammered to 18'. Set temp 6 inch steel casing.						
60		6 inch roller bit to 90'. Set 4 inch PVC casing. Removed temp 6 inch steel casing.						4 inch PVC casing to 90'.
20								
55								
25								
50								
30								
45								
35								

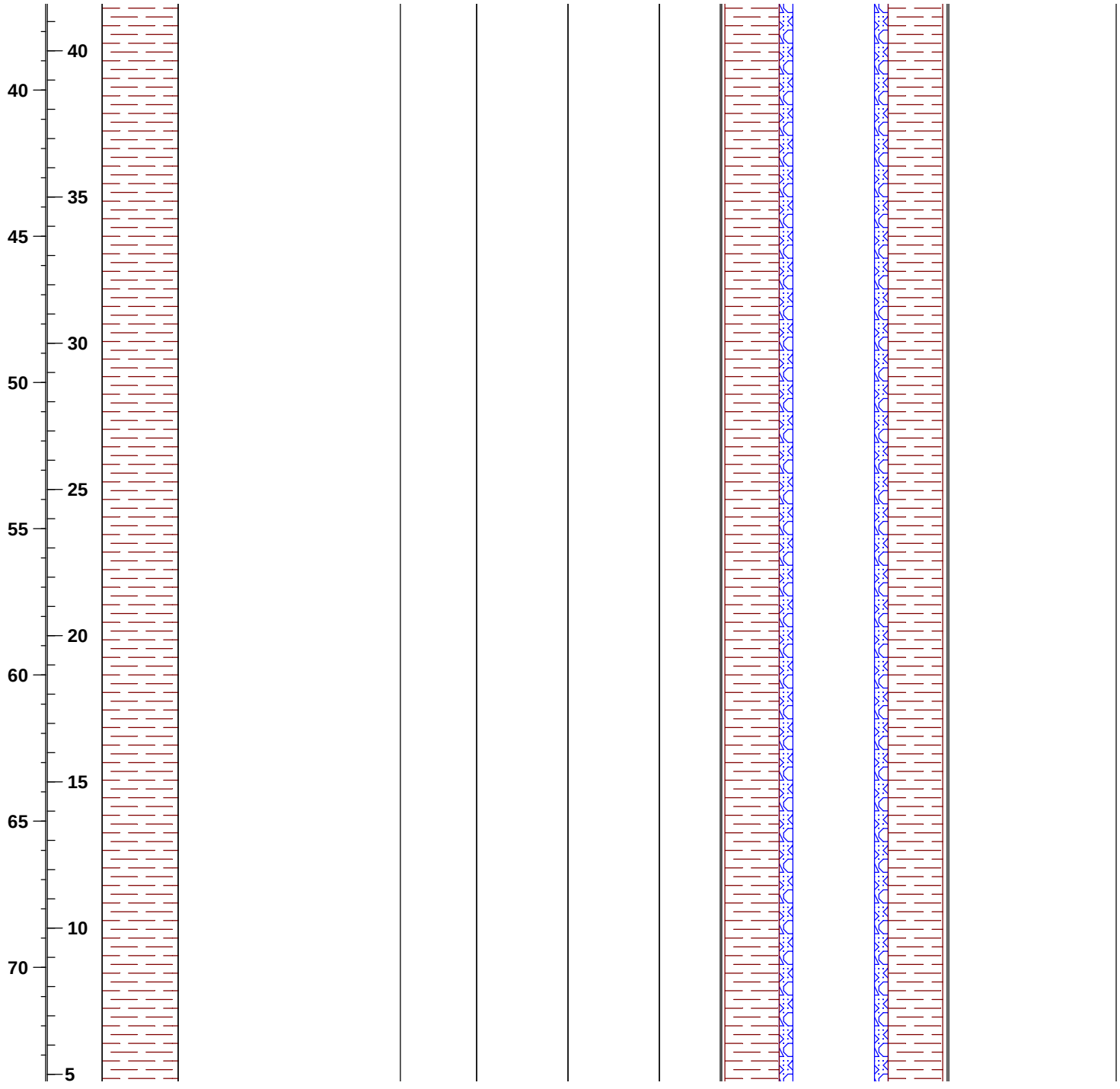
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.66 / GRD 78.9
BORING NO.:	MW-38I	**BORING LOCATION:**	N 1484669.89 / E 710053.64
DATE:	5/30/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	120 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



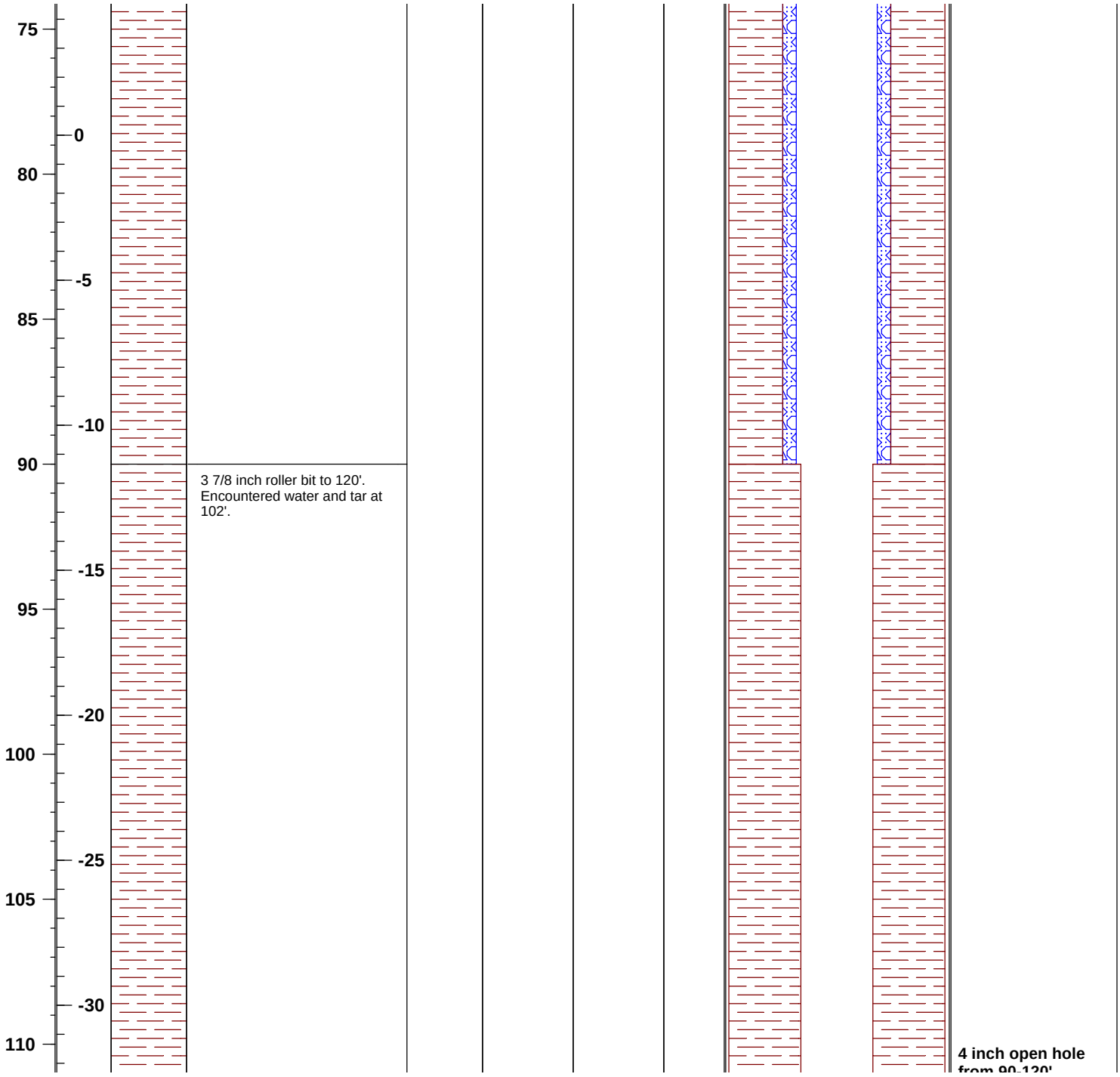
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.66 / GRD 78.9
BORING NO.:	MW-38I	**BORING LOCATION:**	N 1484669.89 / E 710053.64
DATE:	5/30/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	120 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



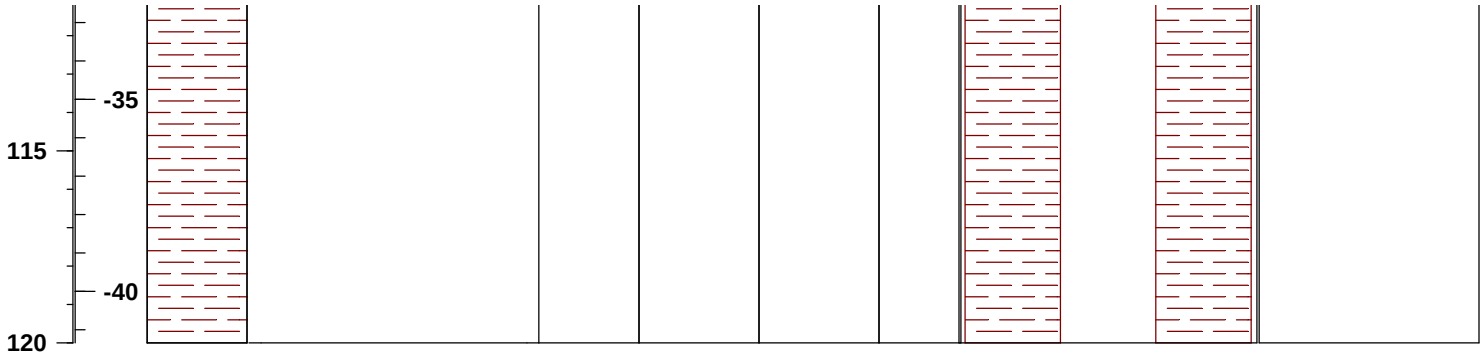
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.66 / GRD 78.9
BORING NO.:	MW-38I	**BORING LOCATION:**	N 1484669.89 / E 710053.64
DATE:	5/30/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	2' x 2" Split spoons
BORING DEPTH:	120 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

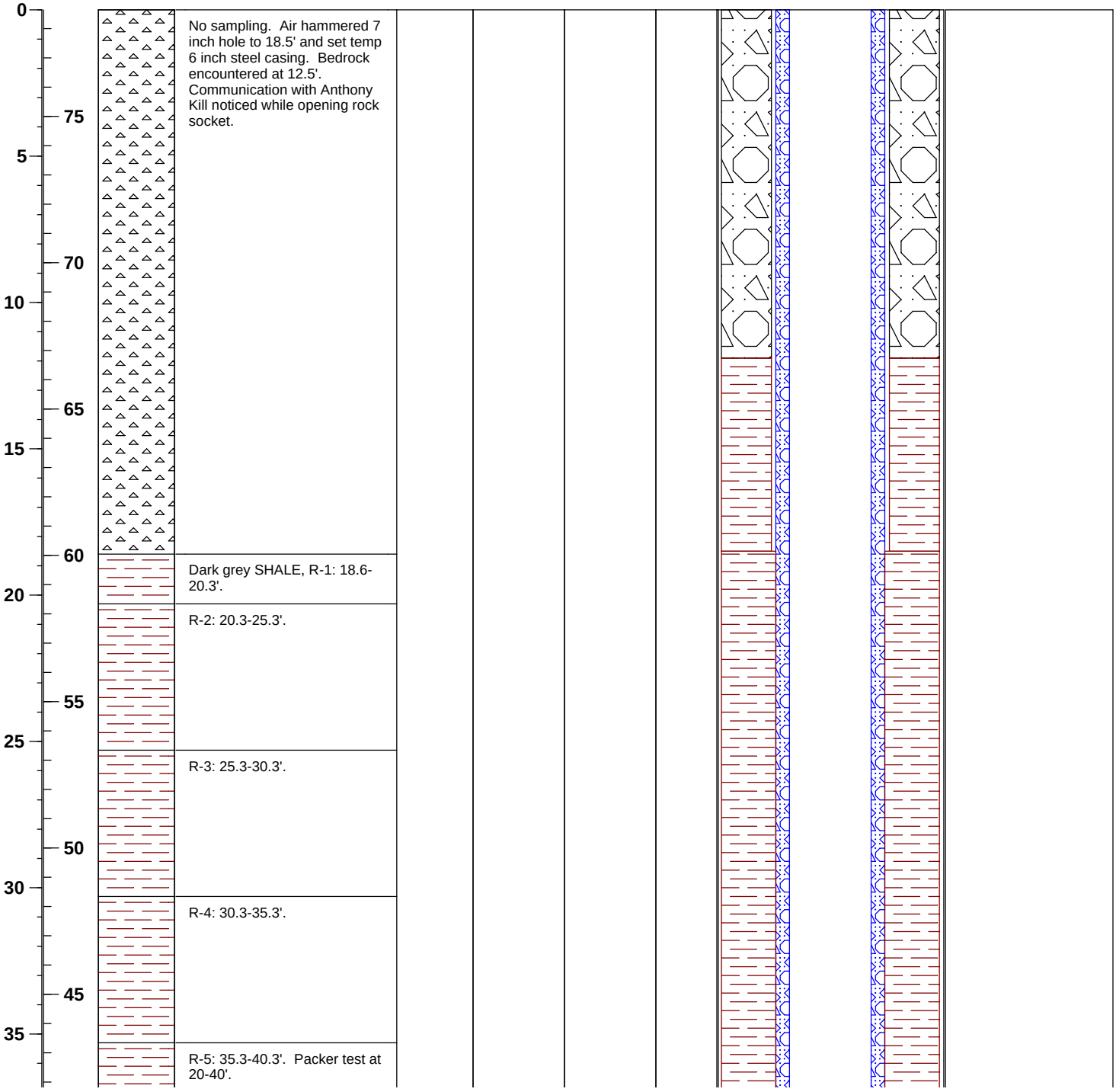
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.64 / GRD 78.96
BORING NO.:	MW-38D	**BORING LOCATION:**	N 1484677.57 / E 710050.18
DATE:	5/6/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170.1 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.64 / GRD 78.96
BORING NO.:	MW-38D	**BORING LOCATION:**	N 1484677.57 / E 710050.18
DATE:	5/6/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170.1 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
40 / 40		R-6: 40.3-45.3'.						
45 / 35		R-7: 45.3-50.3'.						
50 / 30		R-8: 50.3-55.3'.						
55 / 25		R-9: 55.3-60.3'. Packer test taken at 40-60'.						
60 / 20		R-10: 60.3-65.3'.						
65 / 15		R-11: 65.3-70.3'.						
70 / 10		R-12: 70.3-75.3'. Many high angle vertical fractures.						
5								

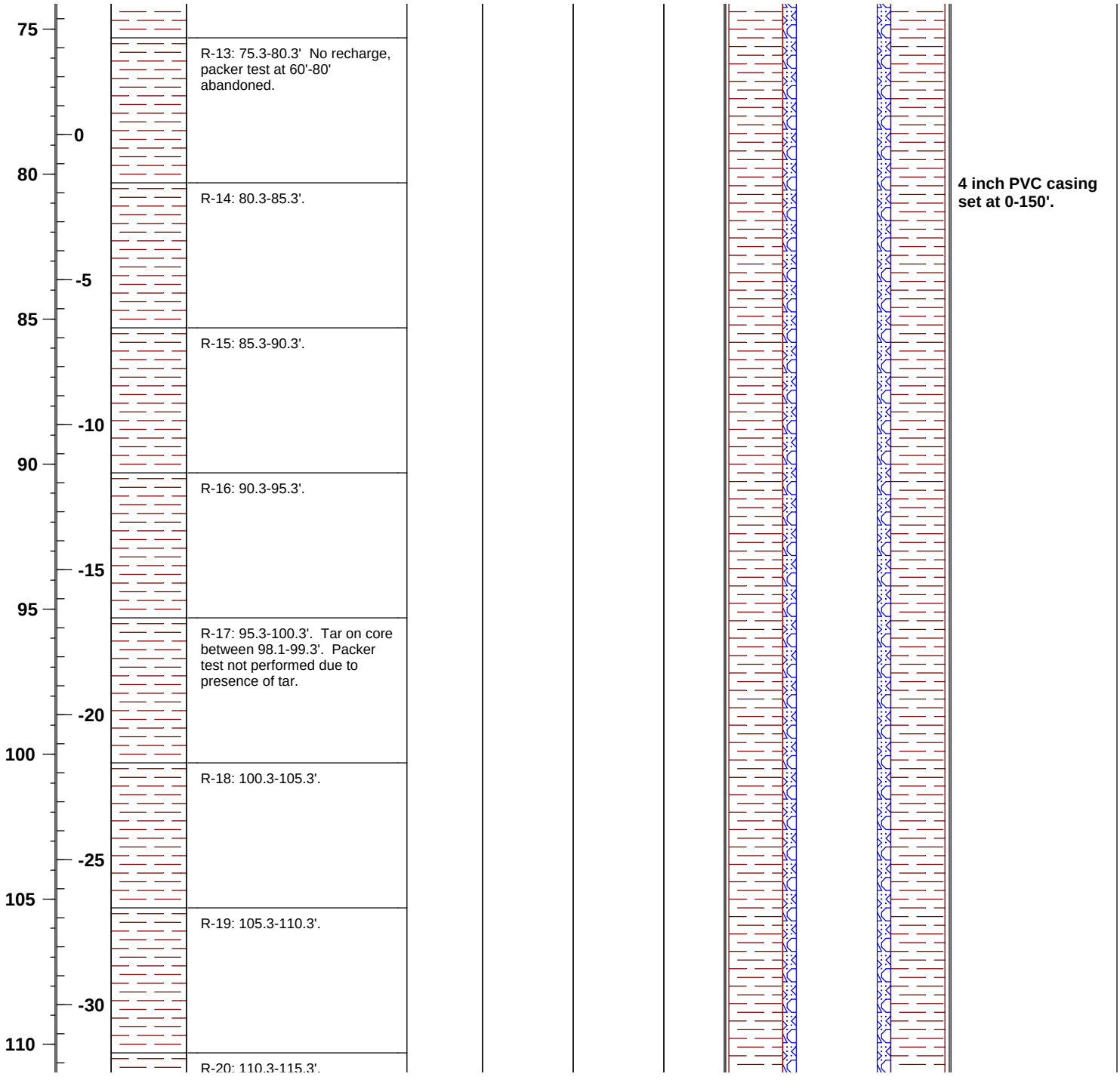
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.64 / GRD 78.96
BORING NO.:	MW-38D	**BORING LOCATION:**	N 1484677.57 / E 710050.18
DATE:	5/6/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170.1 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



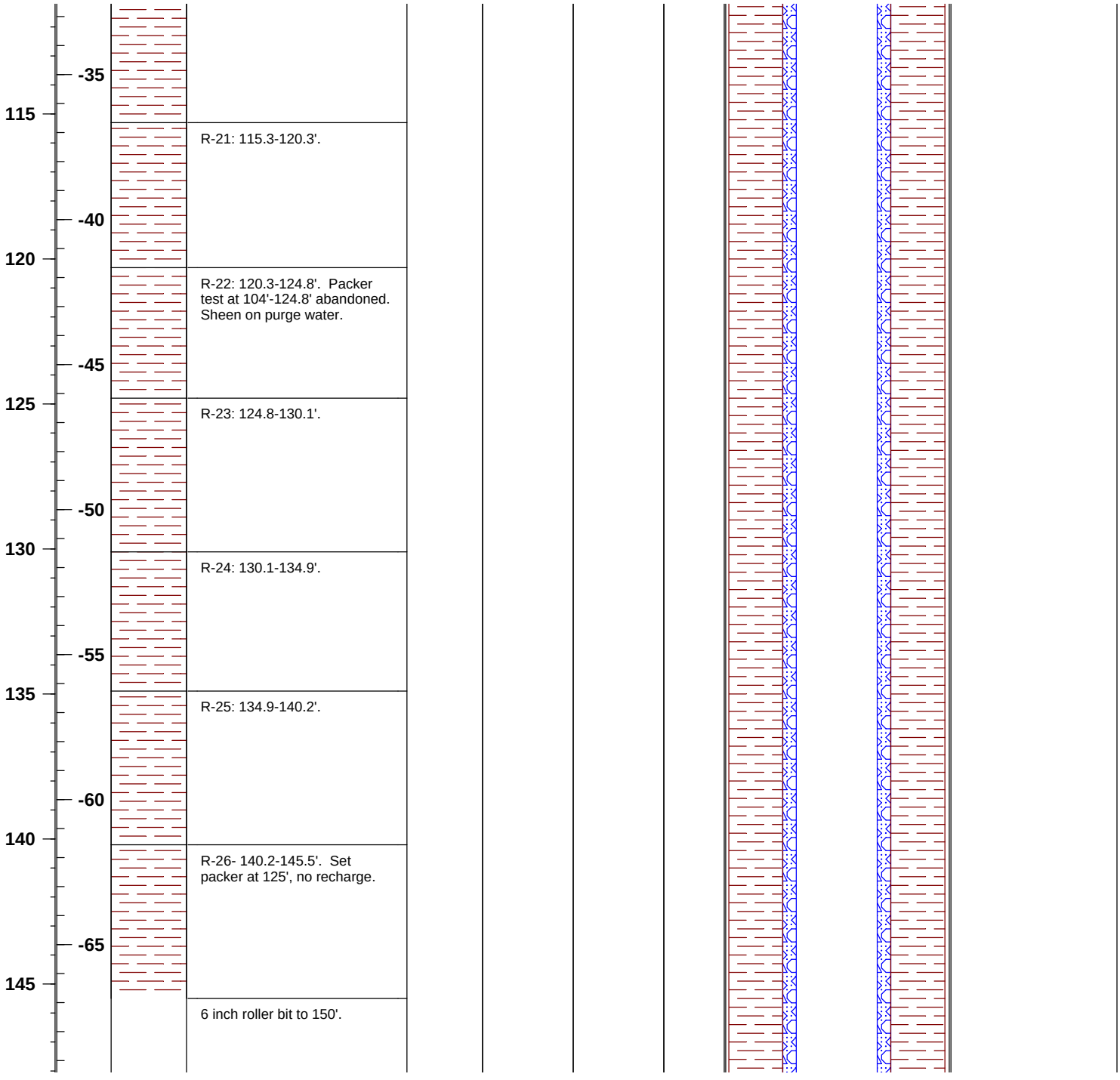
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.64 / GRD 78.96
BORING NO.:	MW-38D	**BORING LOCATION:**	N 1484677.57 / E 710050.18
DATE:	5/6/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170.1 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



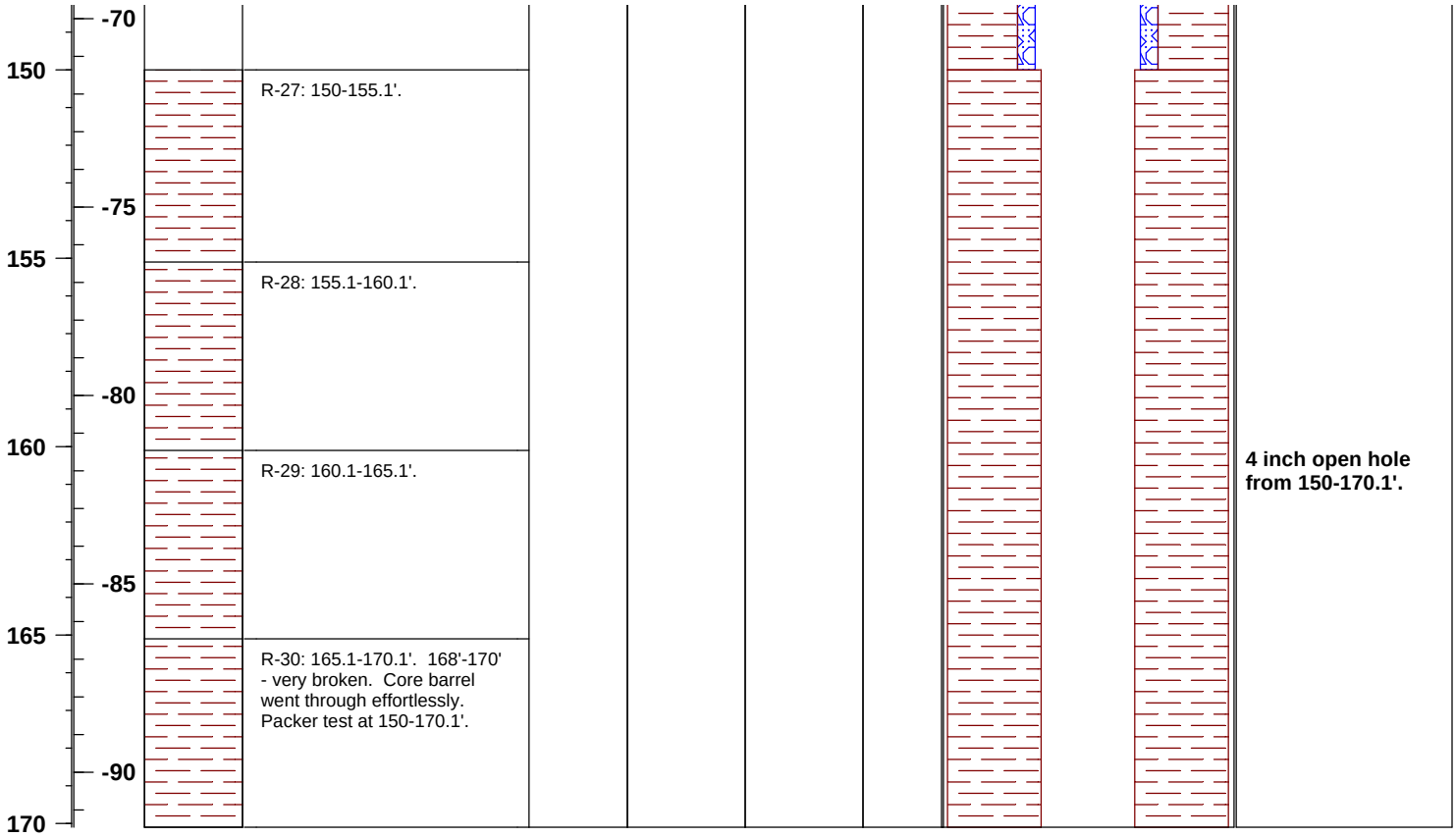
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 78.64 / GRD 78.96
BORING NO.:	MW-38D	**BORING LOCATION:**	N 1484677.57 / E 710050.18
DATE:	5/6/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170.1 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.9 / GRD 92.22
BORING NO.:	MW-39D	**BORING LOCATION:**	N 1484572 / E 709896.41
DATE:	5/3/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	150.4 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		Brown medium SAND. some fine gravel, dry.	0-2	24/24	NA	0		
		Dark brown SILT and SAND, some angular fine gravel, damp.	2-4	24/18	NA	0		
5 / 85			4-6	24/0	NA	NA		
		Brown SILT and SAND, some fine angular gravel. Trace white particles, moist.	6-8	24/8	NA	0		
		Light brown to grey fine SAND, trace silt. Dry.	8-10	24/10	NA	0		
10 / 80		Grey brown SILT and SAND, some ash, trace broken ceramics, wet.	10-12	24/8	NA	0		
		Very little recovery. Appears to be same as above.	12-14	24/2	NA	0		
15 / 75			14-16	24/0	NA	NA		
		Grey brown SILT and SAND, some ash, wet.	16-18	24/6	NA	0		
		Grey green SAND and SILT, slightly marbled (brown), wet.	18-20	24/20	NA	0		
20 / 70		Same as above.	20-22	24/20	NA	0		
		Dark brown fine SAND, wet.	22-24	24/22	NA	0		
		Same as above, wet.						
		Light brown SILT, moist.	24-26	24/3	NA	0		
25 / 65		Very little recovery. Broken shale fragments in nose of spoons.	26-28	24/10	NA	0		
		Grey coarse SAND, some shale fragments, wet.	28-30	24/18	NA	0		
30 / 60		Grey coarse SAND, little silt, wet.	30-32	24/12	NA	0		
		Same as above with shale fragments. Bedrock encountered at 32'. Drilled to 33' and set temp. 6 inch casing.						
35 / 55		R-1: 33.1-35.4'.						
		R-2: 35.4-40.4'.						

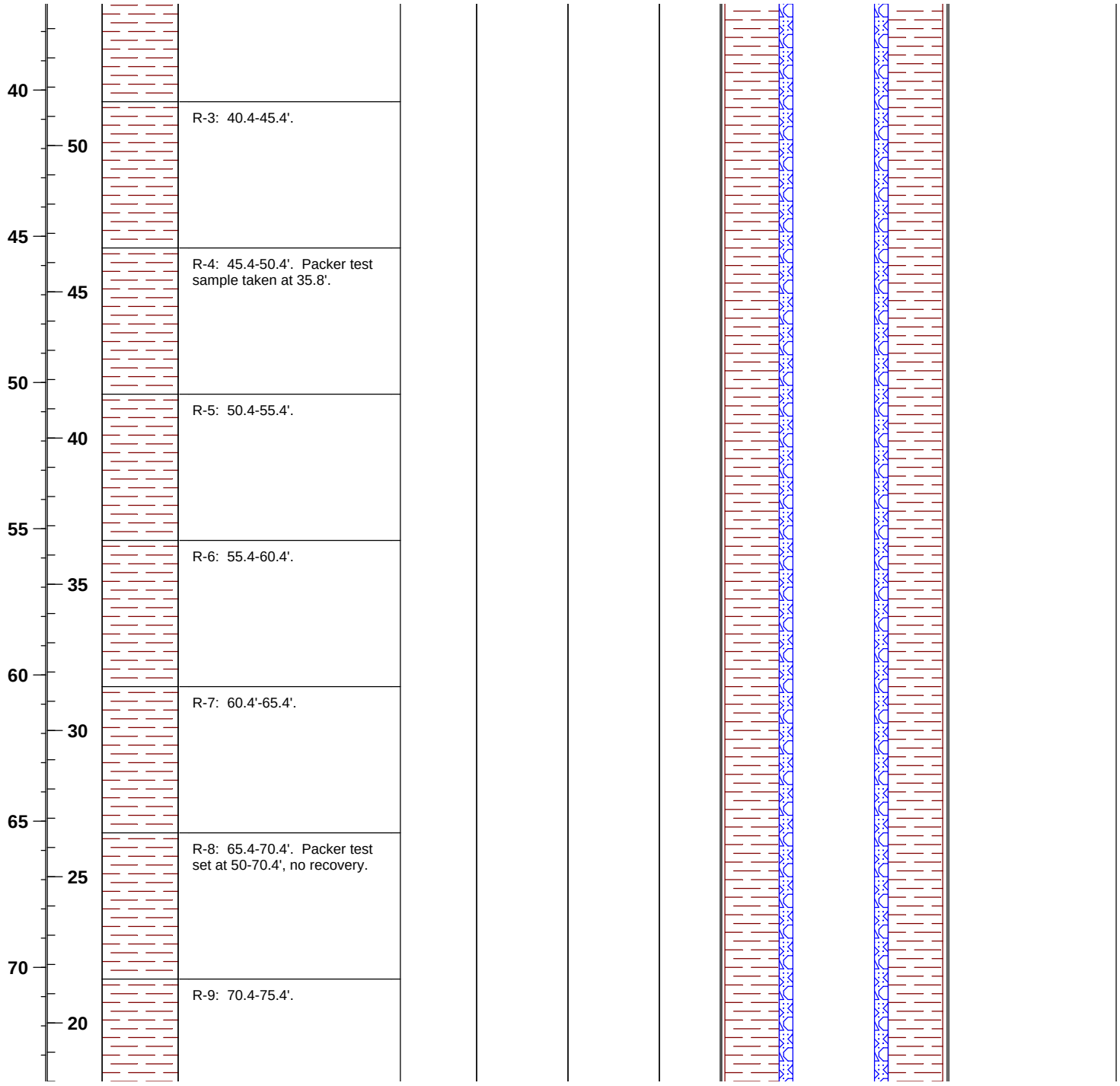
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.9 / GRD 92.22
BORING NO.:	MW-39D	**BORING LOCATION:**	N 1484572 / E 709896.41
DATE:	5/3/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	150.4 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
40 / 50		R-3: 40.4-45.4'.						
45 / 45		R-4: 45.4-50.4'. Packer test sample taken at 35.8'.						
50 / 40		R-5: 50.4-55.4'.						
55 / 35		R-6: 55.4-60.4'.						
60 / 30		R-7: 60.4'-65.4'.						
65 / 25		R-8: 65.4-70.4'. Packer test set at 50-70.4', no recovery.						
70 / 20		R-9: 70.4-75.4'.						



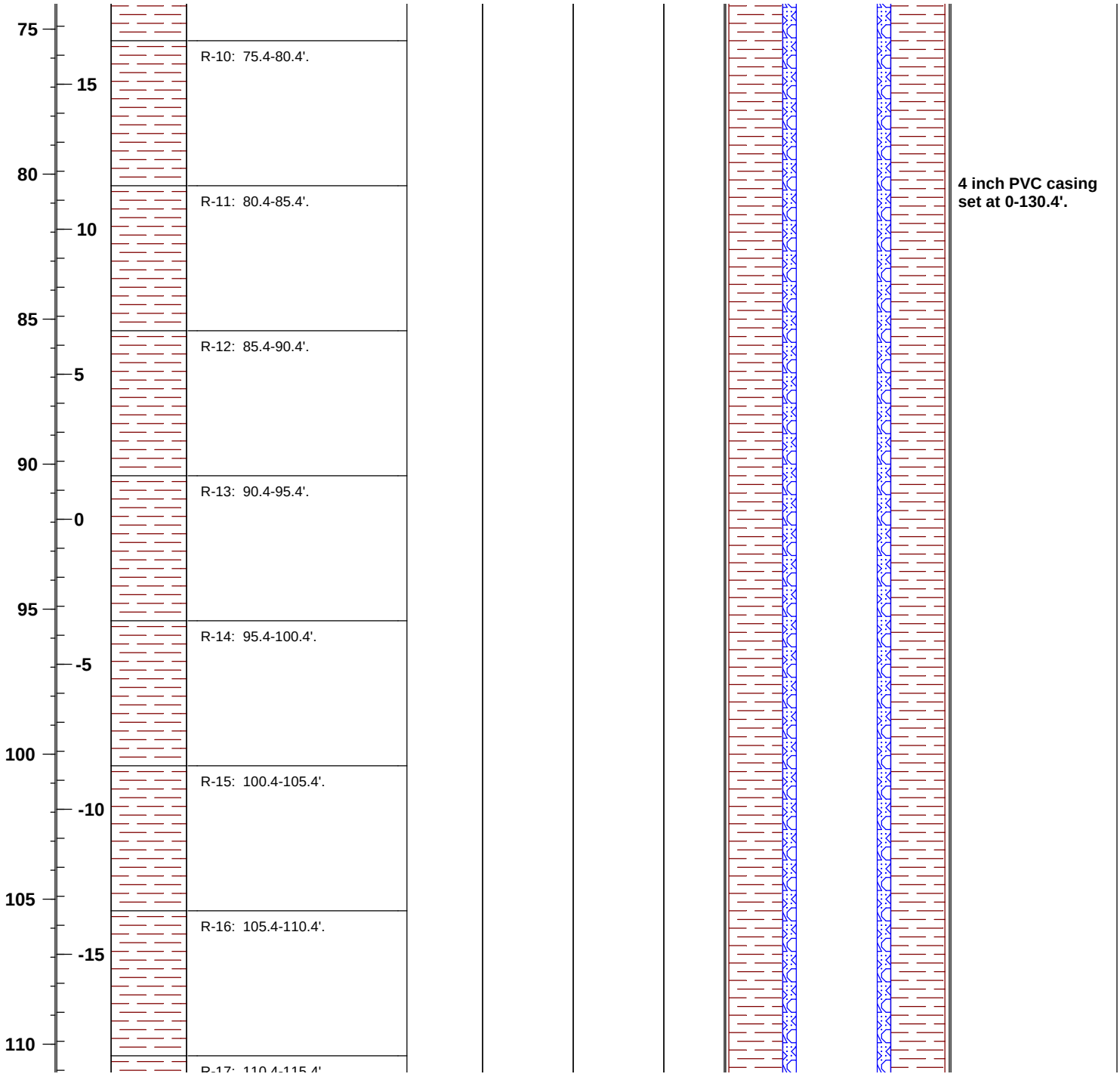
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.9 / GRD 92.22
BORING NO.:	MW-39D	**BORING LOCATION:**	N 1484572 / E 709896.41
DATE:	5/3/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	150.4 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



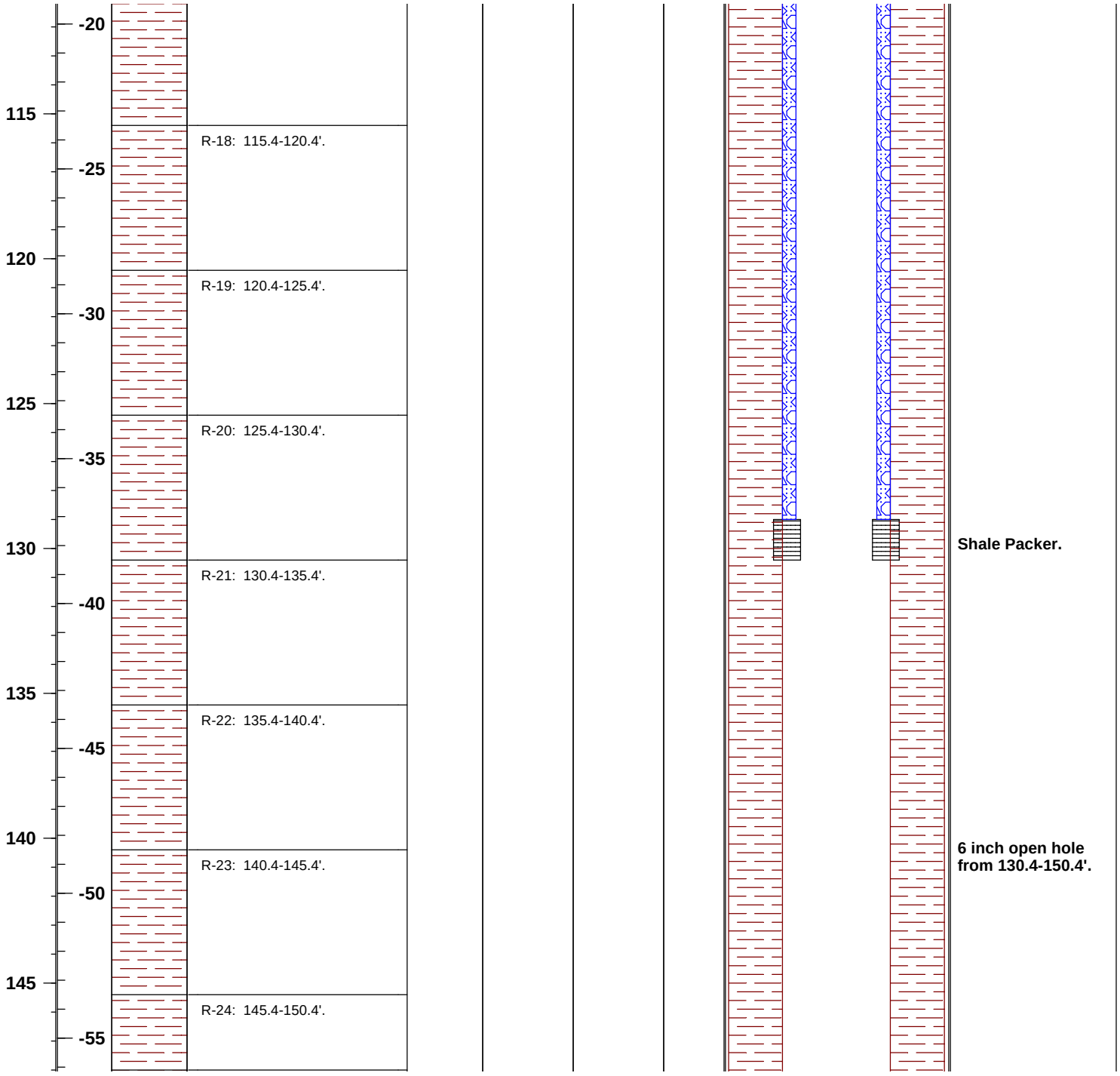
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.9 / GRD 92.22
BORING NO.:	MW-39D	**BORING LOCATION:**	N 1484572 / E 709896.41
DATE:	5/3/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	150.4 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description

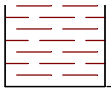


LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 91.9 / GRD 92.22
BORING NO.:	MW-39D	**BORING LOCATION:**	N 1484572 / E 709896.41
DATE:	5/3/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	150.4 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
150		6 inch roller bit to 150.4'. Set 4 inch PVC with shale packer at 130.4'.						

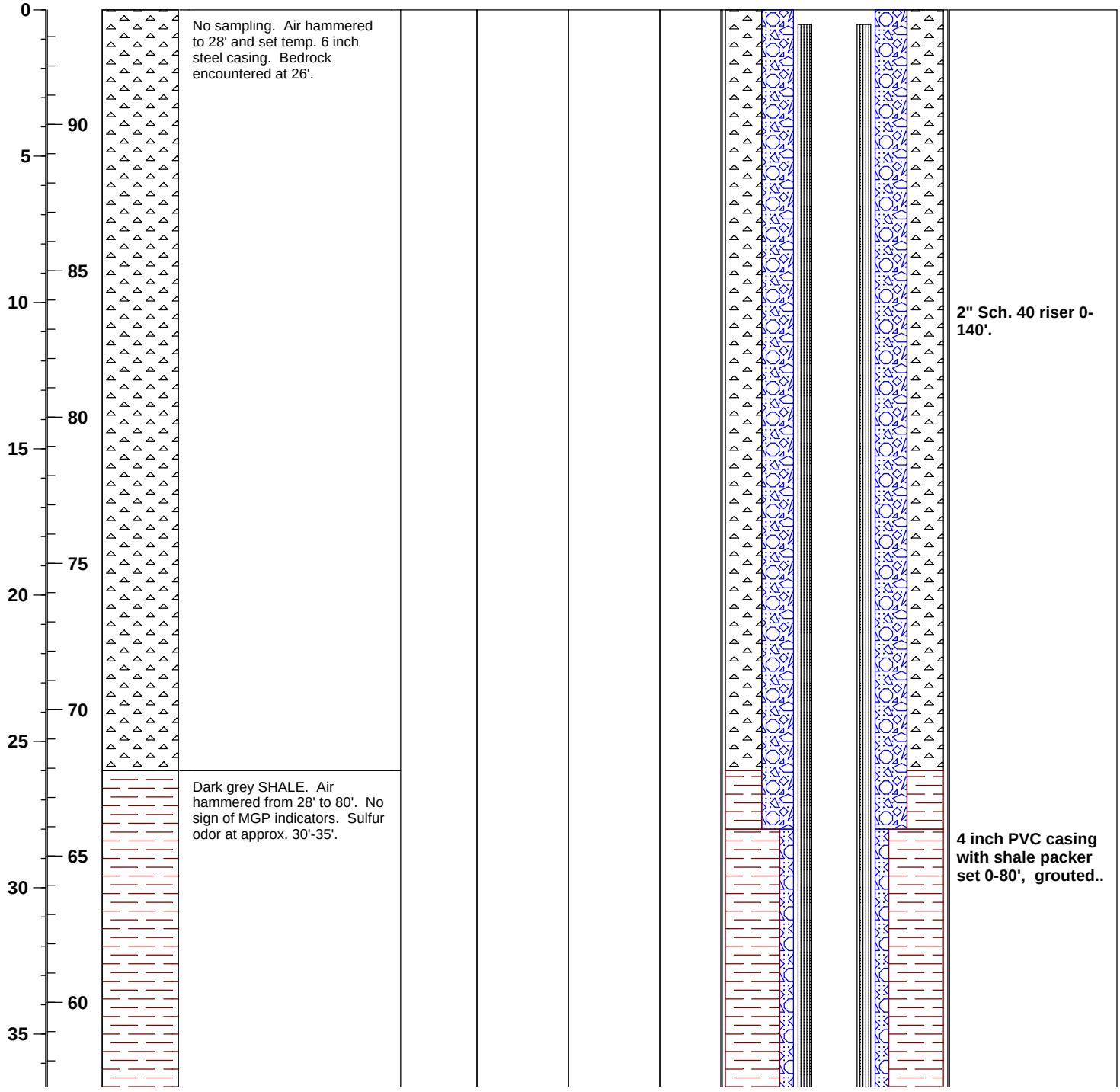
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.92 / GRD 94.18
BORING NO.:	MW-40D	**BORING LOCATION:**	N 1484689.48 / E 709662.89
DATE:	11/26/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		No sampling. Air hammered to 28' and set temp. 6 inch steel casing. Bedrock encountered at 26'.						
5 / 85								
10 / 80								
15 / 75								
20 / 70								
25 / 65		Dark grey SHALE. Air hammered from 28' to 80'. No sign of MGP indicators. Sulfur odor at approx. 30'-35'.						
30 / 60								
35								



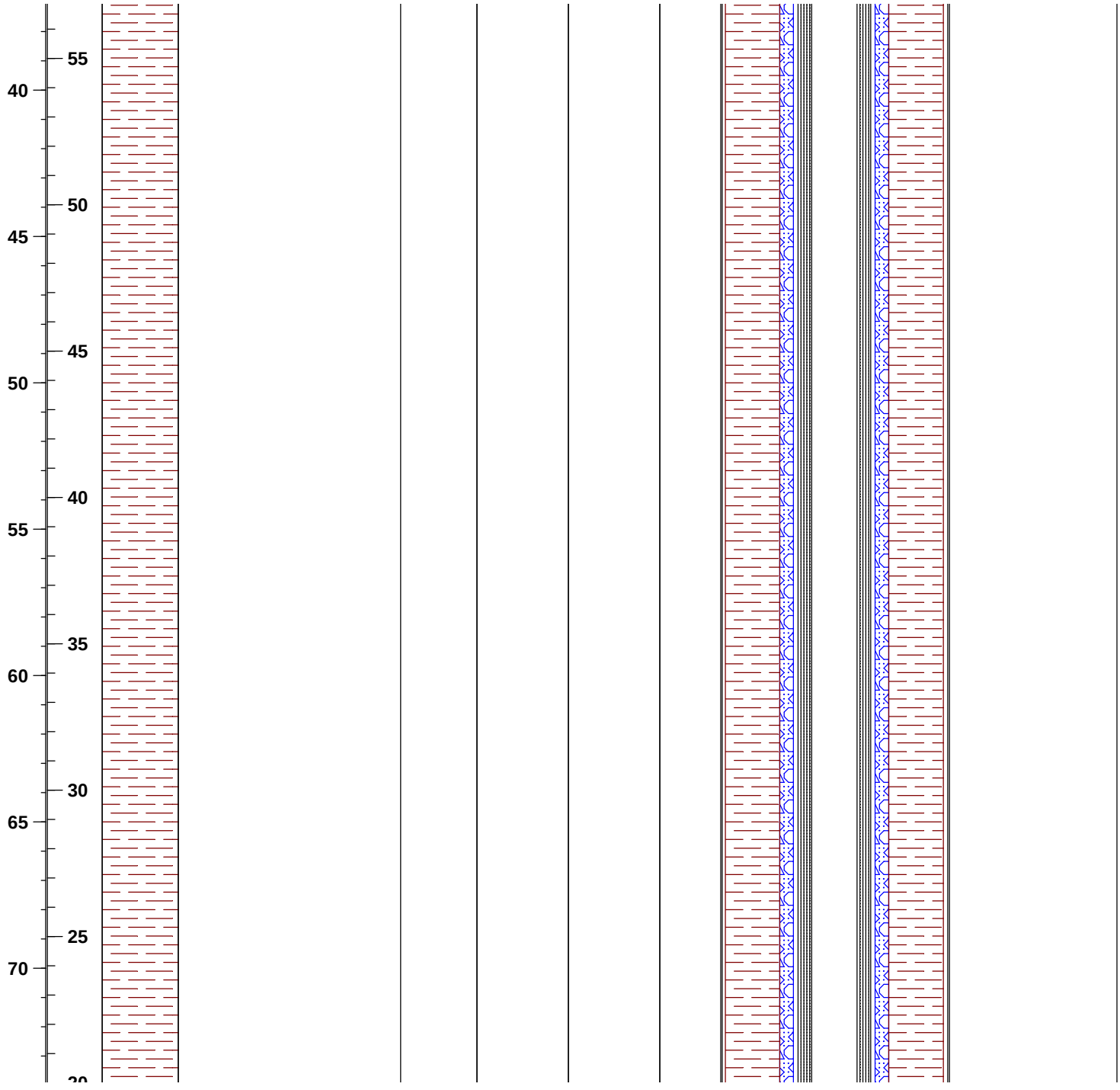
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.92 / GRD 94.18
BORING NO.:	MW-40D	**BORING LOCATION:**	N 1484689.48 / E 709662.89
DATE:	11/26/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

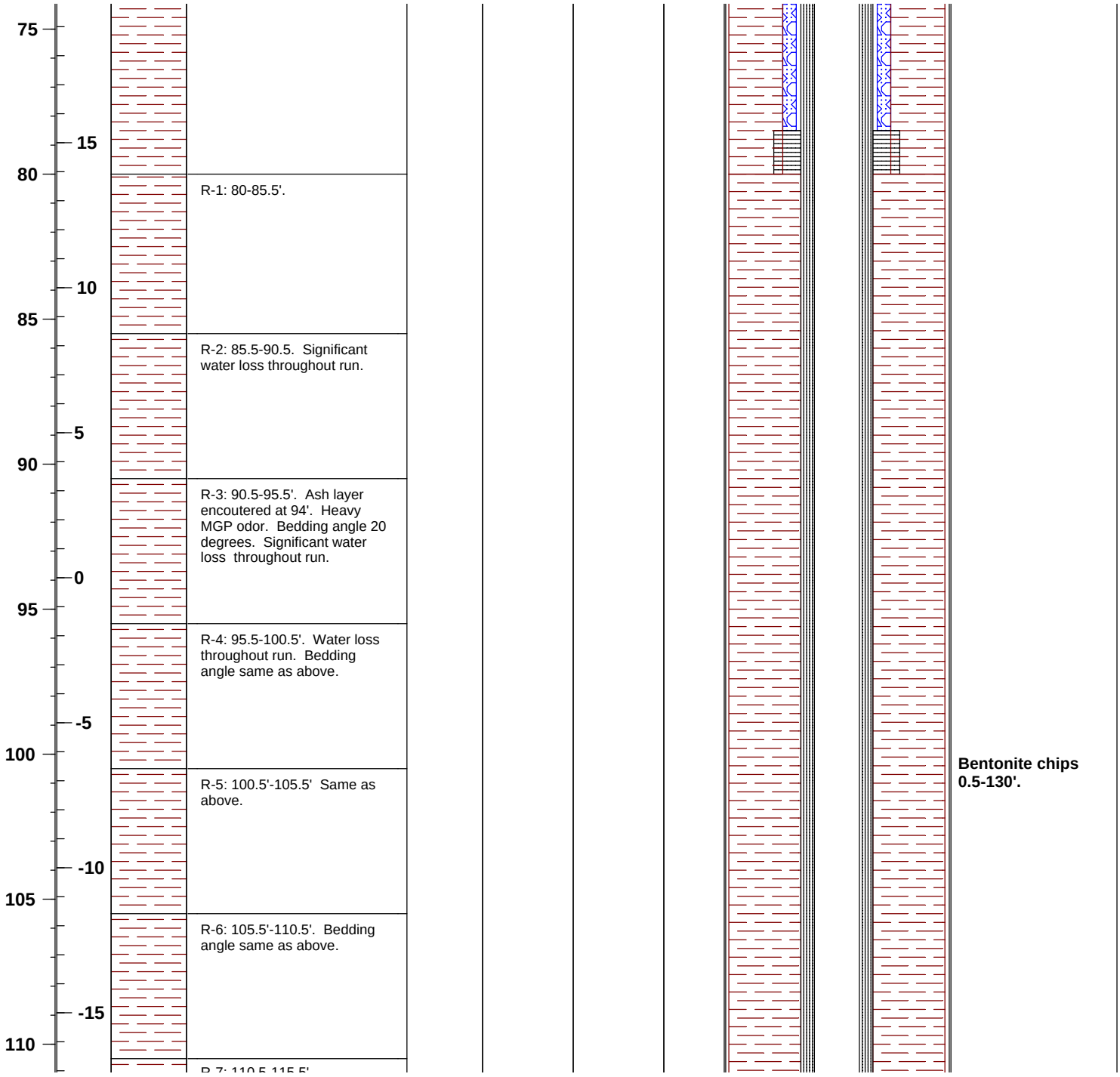
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.92 / GRD 94.18
BORING NO.:	MW-40D	**BORING LOCATION:**	N 1484689.48 / E 709662.89
DATE:	11/26/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



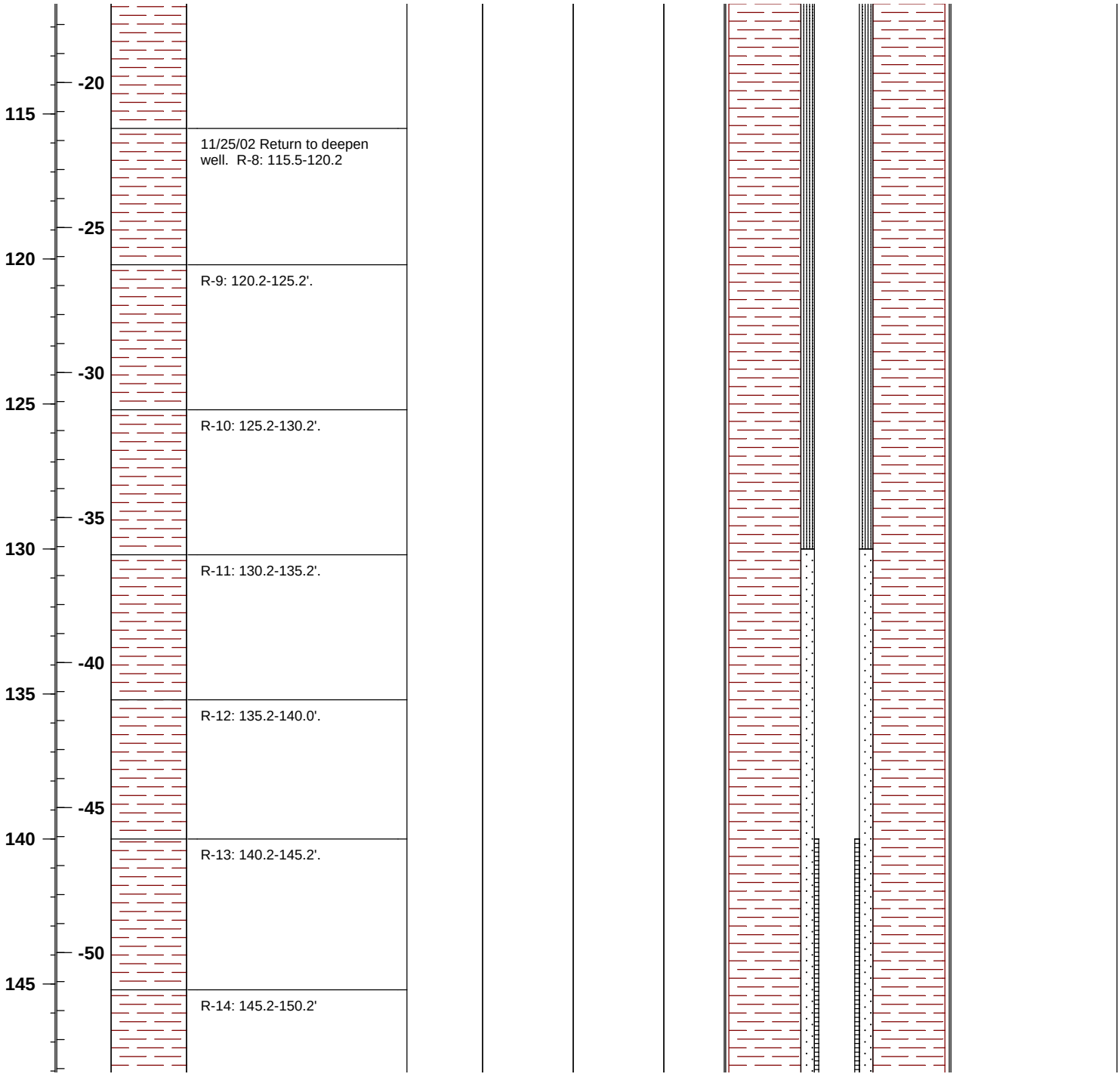
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.92 / GRD 94.18
BORING NO.:	MW-40D	**BORING LOCATION:**	N 1484689.48 / E 709662.89
DATE:	11/26/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



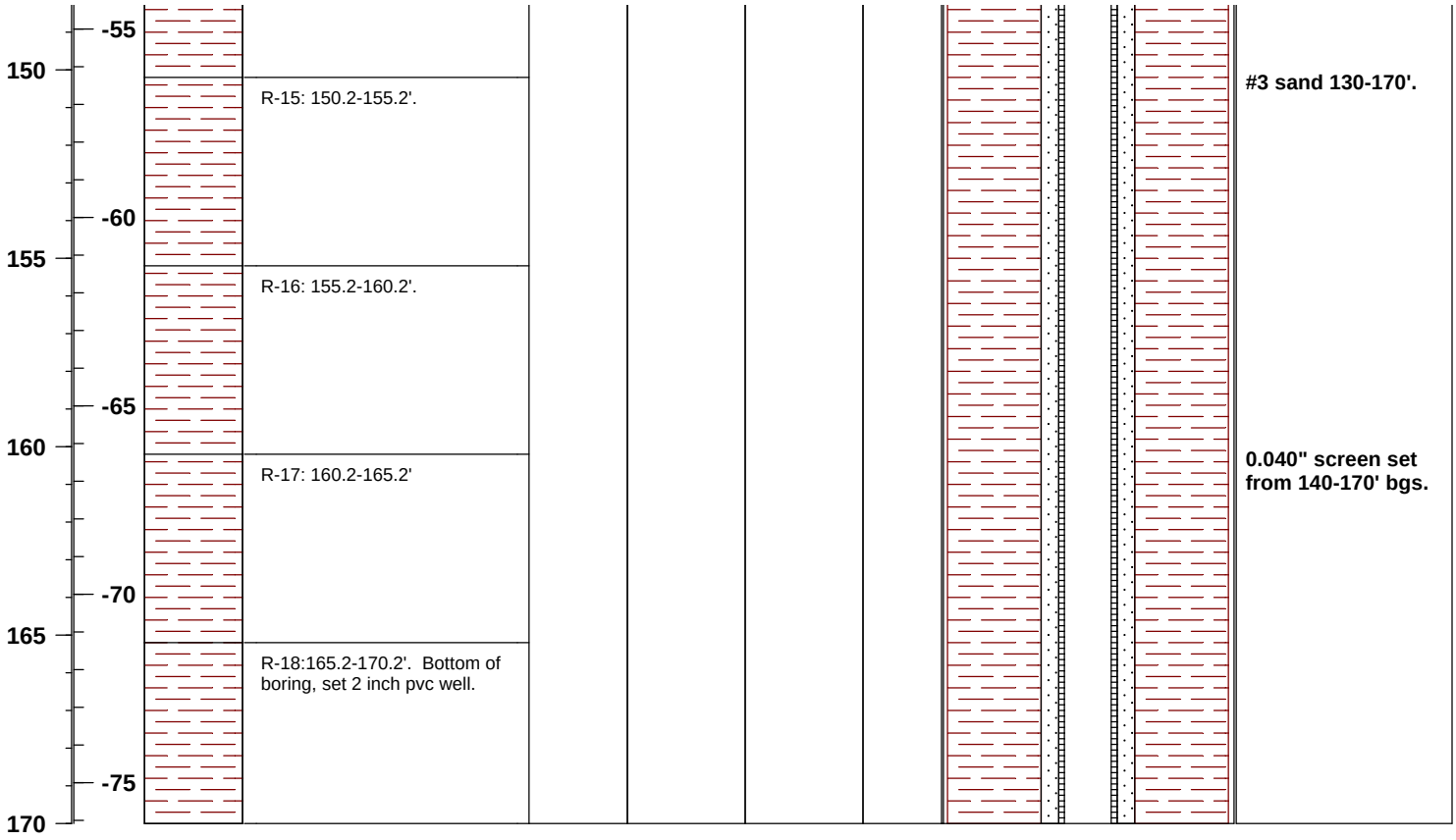
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.92 / GRD 94.18
BORING NO.:	MW-40D	**BORING LOCATION:**	N 1484689.48 / E 709662.89
DATE:	11/26/02	**METHOD OF DRILLING:**	7 7/8 inch Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	170 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
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PROJECT:	NYSEG	**ELEVATION:**	TOC 93.13 / GRD 93.56
BORING NO.:	MW-41D	**BORING LOCATION:**	N 1484971.33 / E 709968.22
DATE:	5/29/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7.8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 90		with base gravel material.						
		Brown medium SAND, little silt, moist.	0-2	24/12	NA	0		
5 / 85		Same as above. Rock in nose of spoon.	2-4	24/12	NA	0		
		No recovery.	4-6	24/10	NA	0		
		Grey SILT, some weathered shale fragments, dry.						
		Spoon nose filled with shale fragments. Refusal at 7'.	6-7	12/12	NA	0		
10 / 80		Dark grey SHALE. 7 inch air hammer to 18'. Set temp 6 inch steel casing.						
15 / 75								
20 / 70		R1: 19.2 - 24.2'.						
25 / 65		R-2: 24.2-29.6'.						
30 / 60		R-3: 29.6-34.6'.						
35		R-4: 34.6-39.6'.						
								4 inch PVC casing from 0 to 120'.

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.13 / GRD 93.56
BORING NO.:	MW-41D	**BORING LOCATION:**	N 1484971.33 / E 709968.22
DATE:	5/29/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7.8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
55 / 40		R-5: 39.6-44.6'. Packer test at 20-40'.						
50 / 45		R-6: 44.6-49.6'.						
45 / 50		R-7: 49.6-54.6'.						
40 / 55		R-8: 54.6-59.6. Packer test at 40-60'.						
35 / 60		R-9: 59.6-64.6'.						
30 / 65		R-10: 64.6-69.6'.						
25 / 70		R-11: 69.6-74.6'. Intense fractures and calcite intrusions between 73.3-74.4'.						
20								4 inch PVC casing from 0 to 120'.

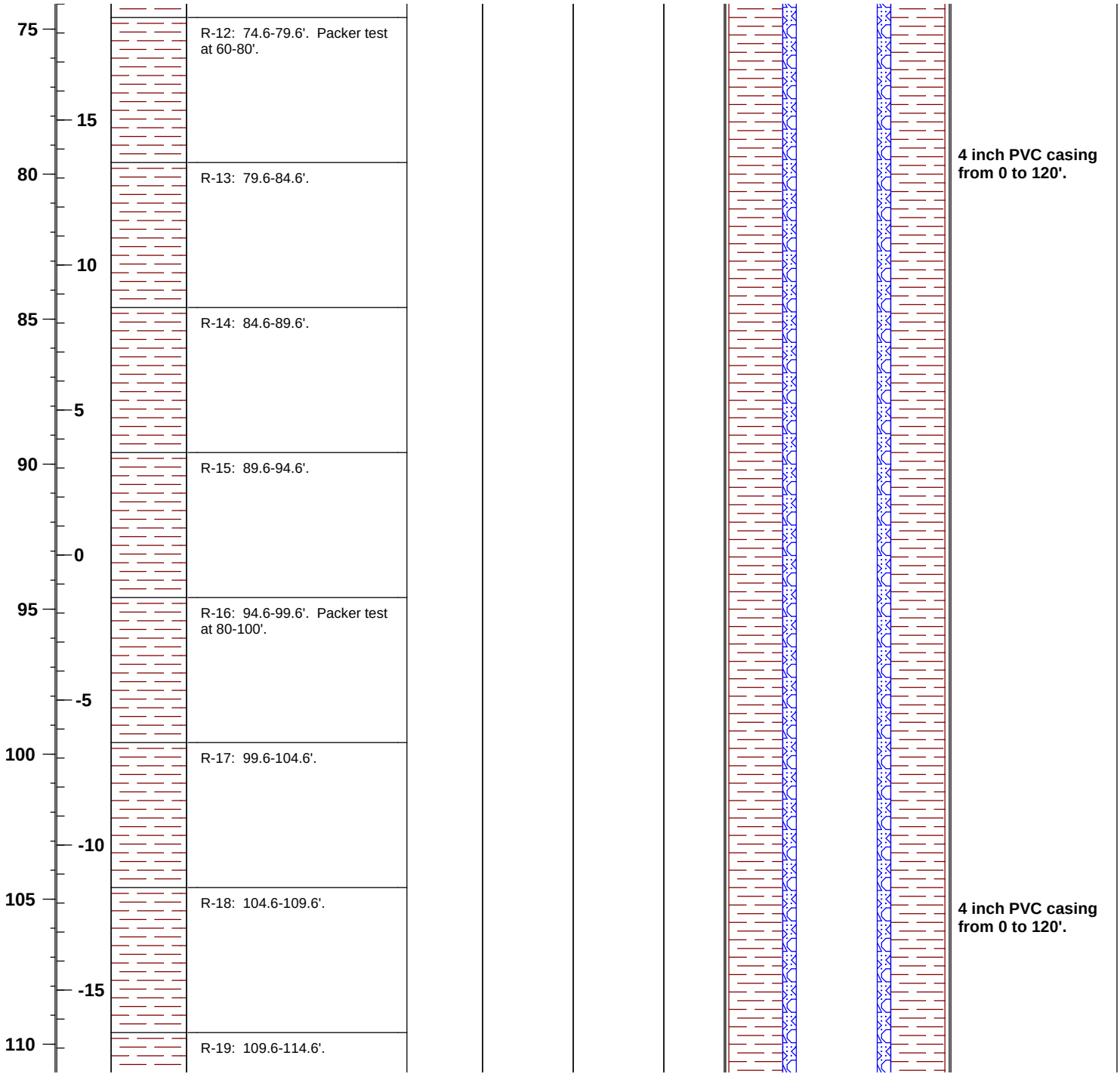
LOG OF BORING

URS
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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.13 / GRD 93.56
BORING NO.:	MW-41D	**BORING LOCATION:**	N 1484971.33 / E 709968.22
DATE:	5/29/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7.8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



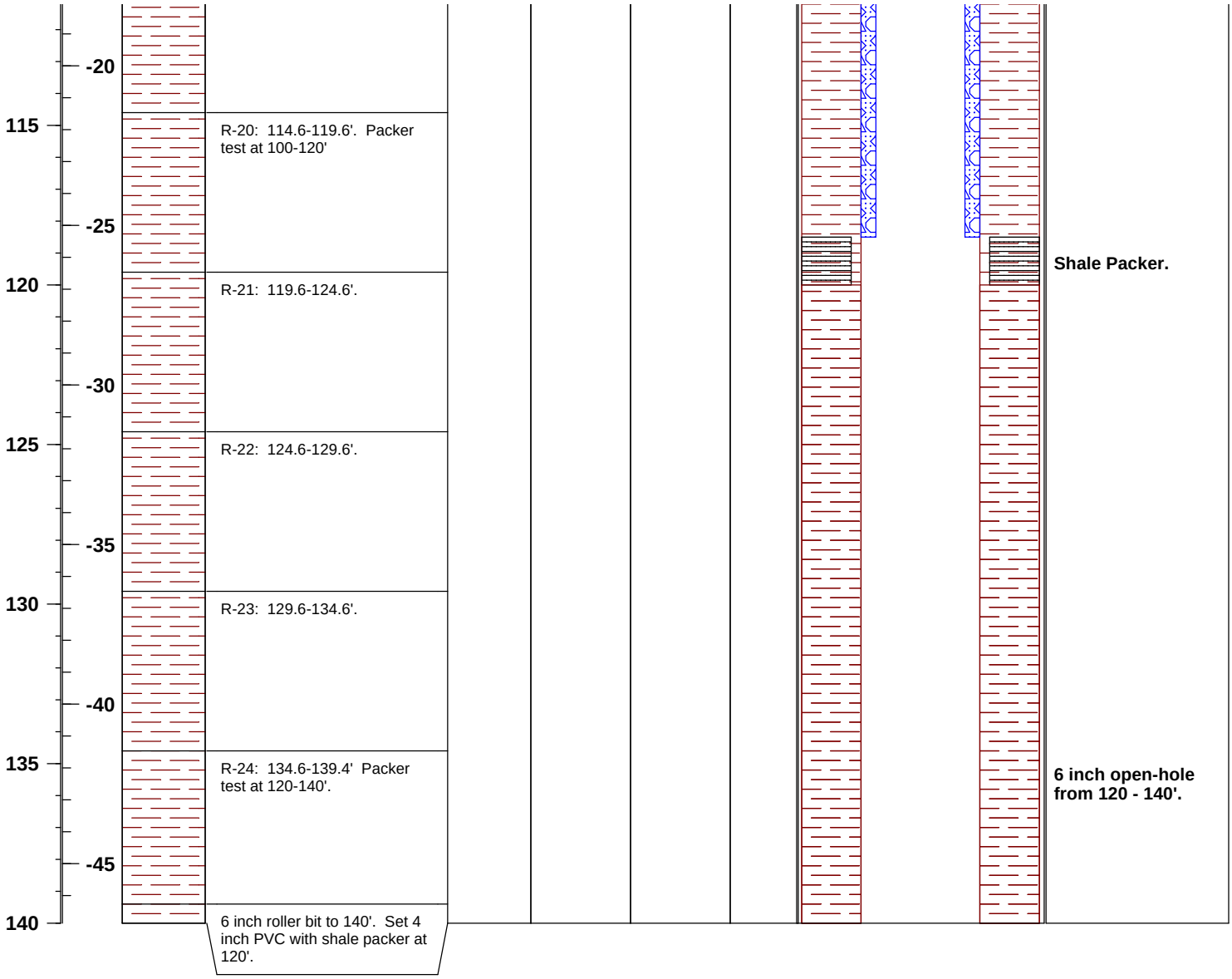
LOG OF BORING

URS
Clifton Park, New York

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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.13 / GRD 93.56
BORING NO.:	MW-41D	**BORING LOCATION:**	N 1484971.33 / E 709968.22
DATE:	5/29/02	**METHOD OF DRILLING:**	4 inch Spin Casing
BORING DIAMETER:	7.8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	140 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



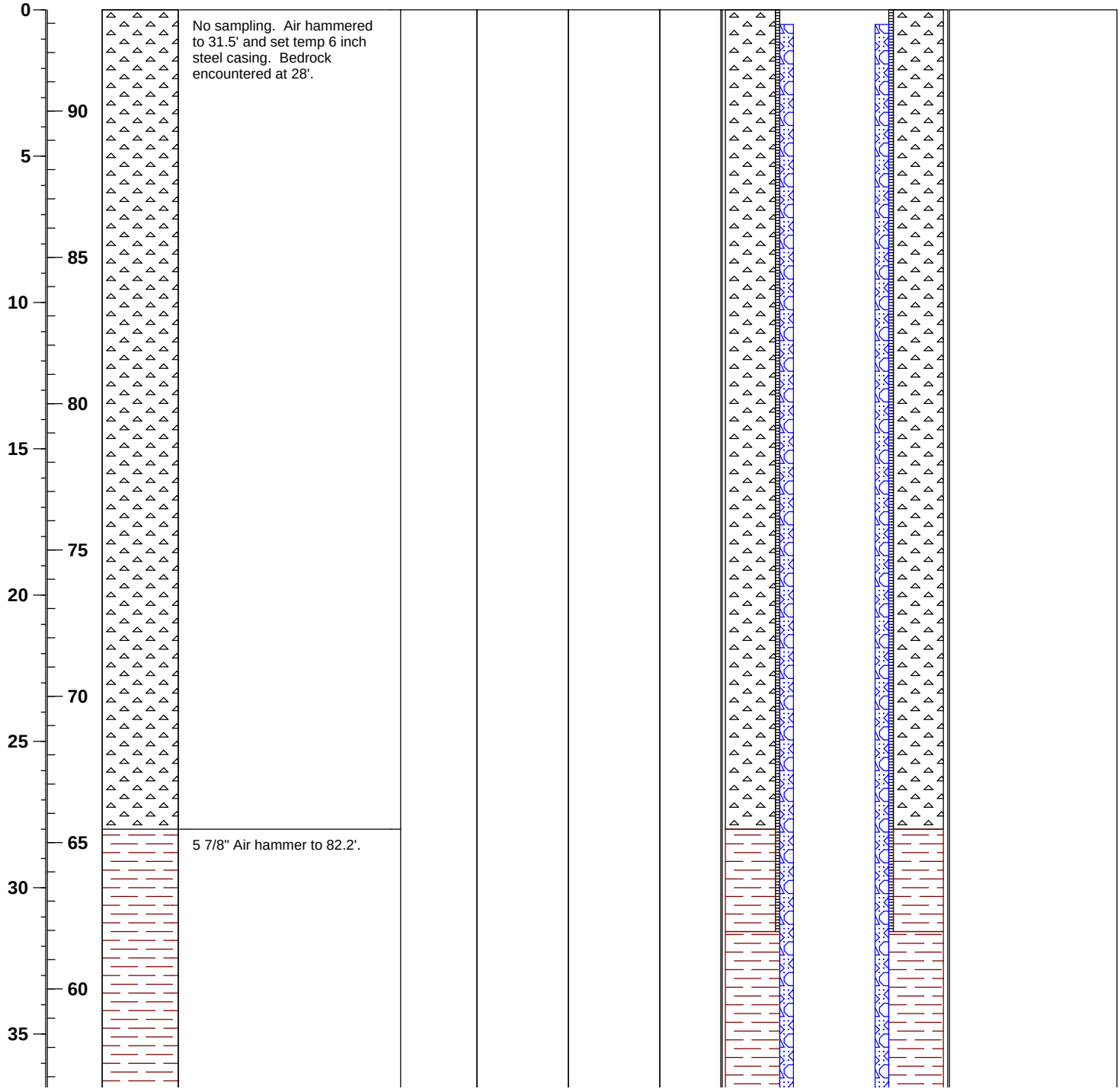
LOG OF BORING

URS
Clifton Park, New York

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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.46 / GRD 93.72
BORING NO.:	MW-42D	**BORING LOCATION:**	N 1484627.59 / E 709733.68
DATE:	11/18/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	175 Feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



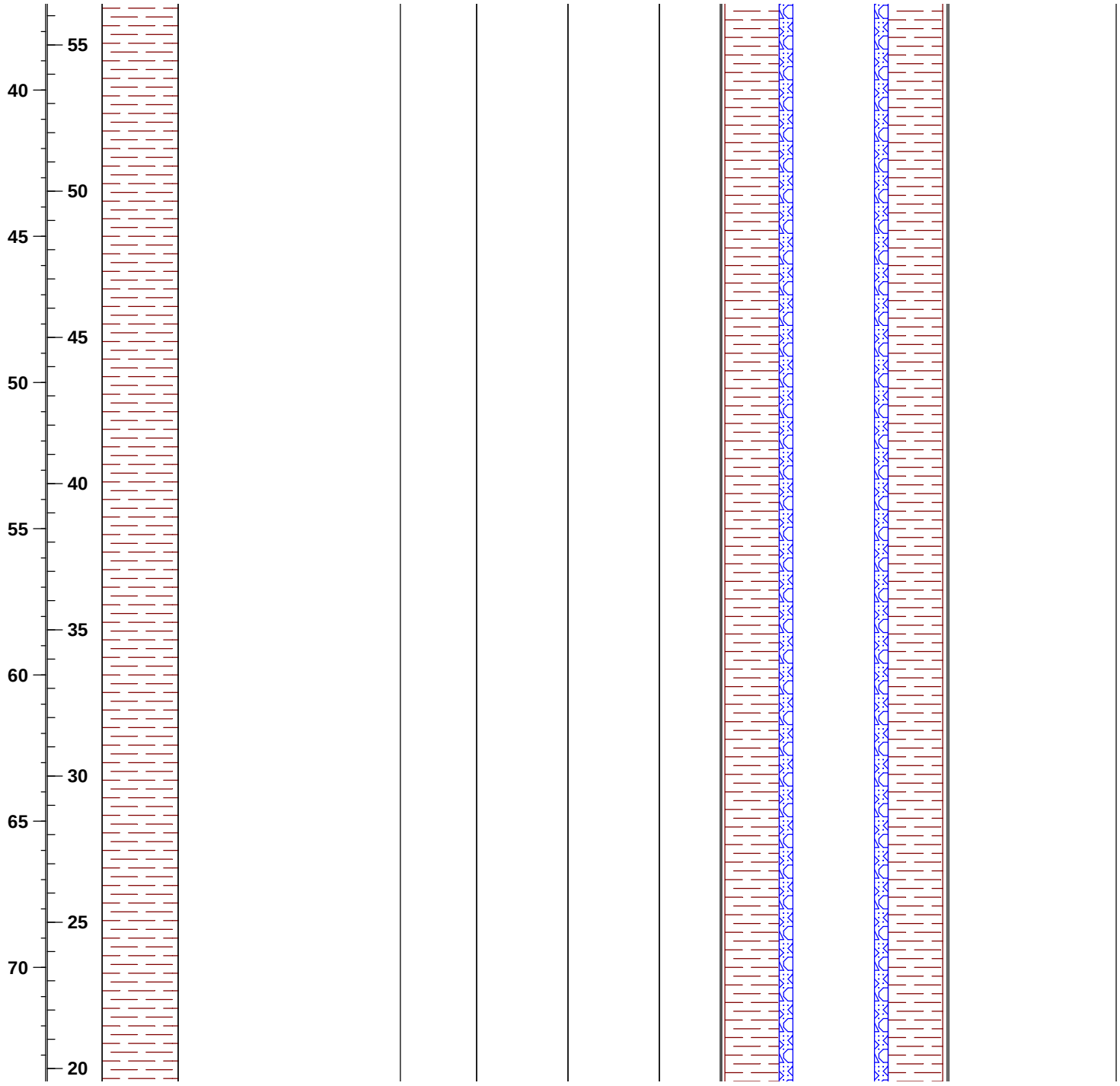
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.46 / GRD 93.72
BORING NO.:	MW-42D	**BORING LOCATION:**	N 1484627.59 / E 709733.68
DATE:	11/18/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	175 Feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

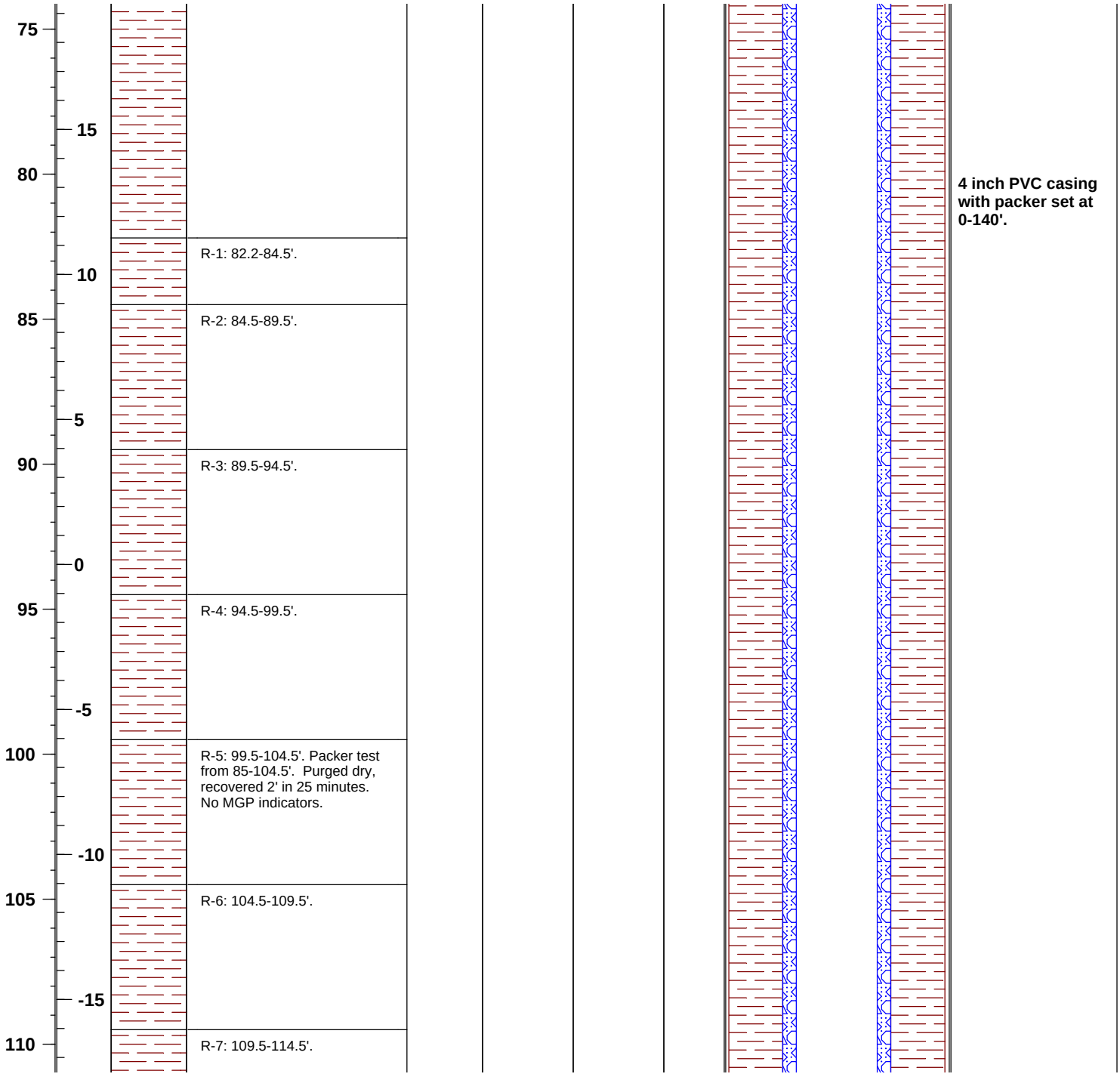
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.46 / GRD 93.72
BORING NO.:	MW-42D	**BORING LOCATION:**	N 1484627.59 / E 709733.68
DATE:	11/18/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
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Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



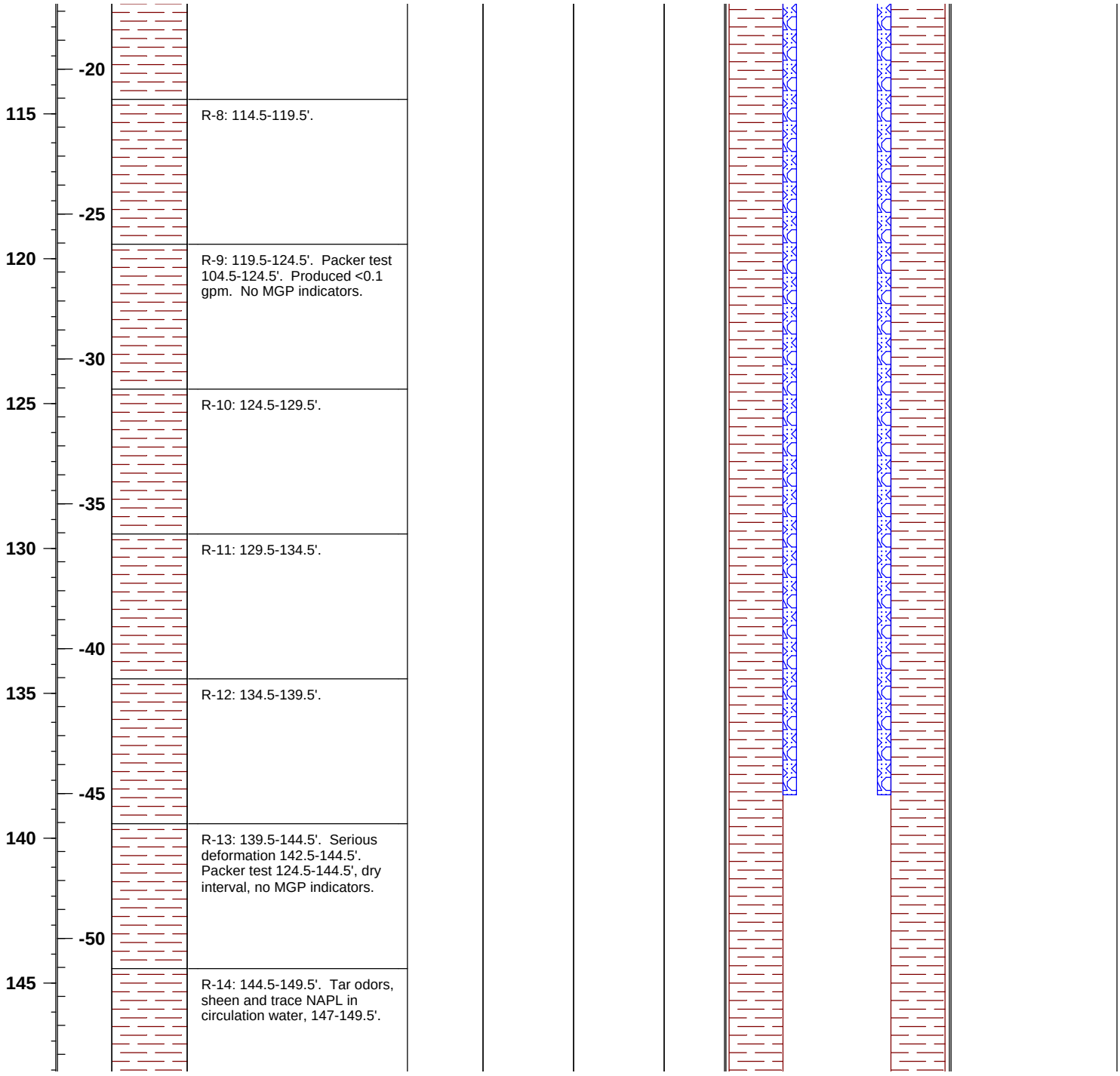
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.46 / GRD 93.72
BORING NO.:	MW-42D	**BORING LOCATION:**	N 1484627.59 / E 709733.68
DATE:	11/18/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
BORING DEPTH:	175 Feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



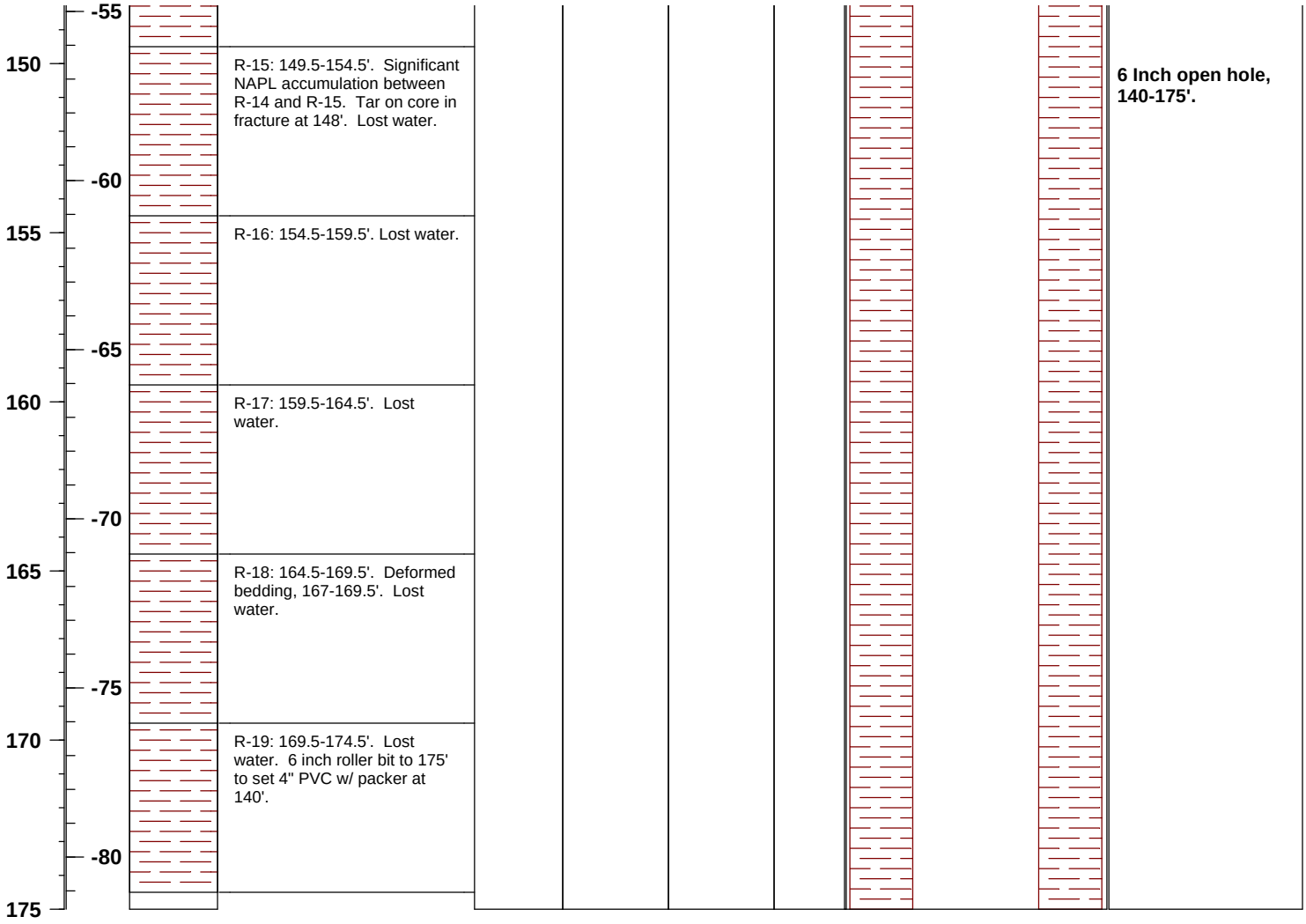
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 93.46 / GRD 93.72
BORING NO.:	MW-42D	**BORING LOCATION:**	N 1484627.59 / E 709733.68
DATE:	11/18/02	**METHOD OF DRILLING:**	7 7/8 Air Hammer
BORING DIAMETER:	7 7/8 inches	**SAMPLE TYPE:**	HQ Core
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Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



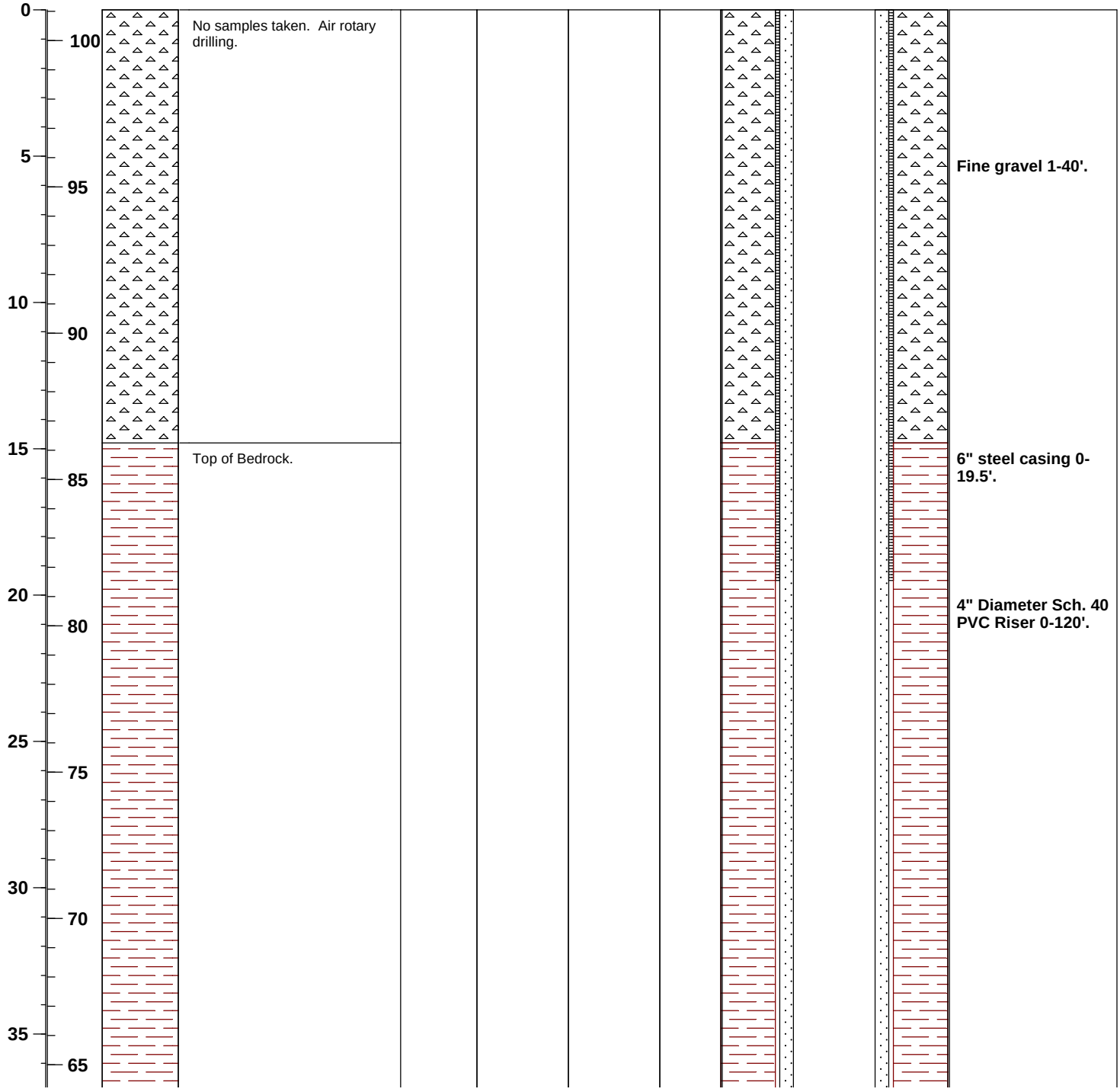
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	101.05 Feet
BORING NO.:	MW-43D	**BORING LOCATION:**	N 1484562.16 / E 709426.31
DATE:	11/13/02	**METHOD OF DRILLING:**	Air/wash rotary
BORING DIAMETER:	6 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



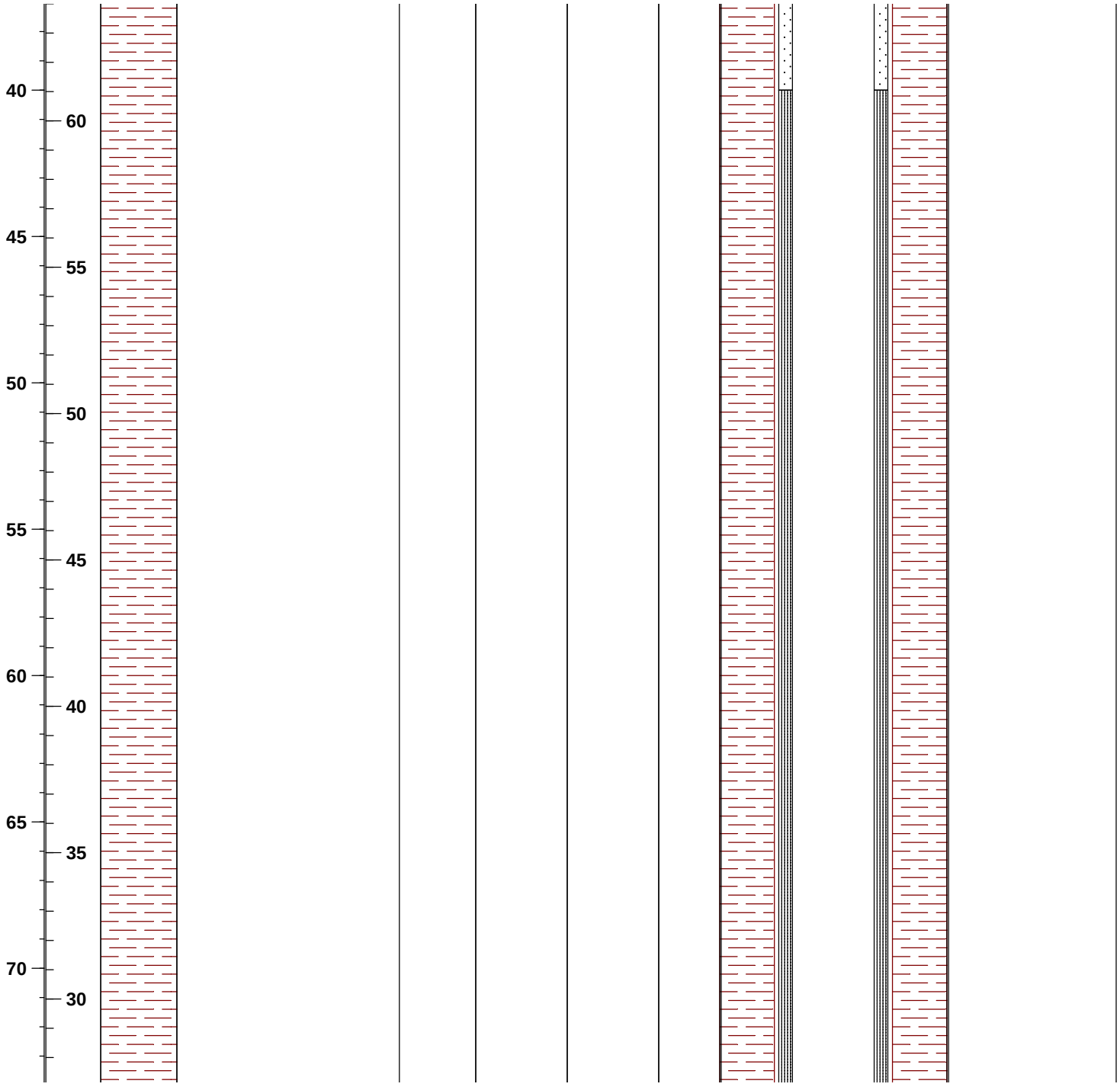
LOG OF BORING

URS
Clifton Park, New York

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Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	101.05 Feet
BORING NO.:	MW-43D	**BORING LOCATION:**	N 1484562.16 / E 709426.31
DATE:	11/13/02	**METHOD OF DRILLING:**	Air/wash rotary
BORING DIAMETER:	6 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



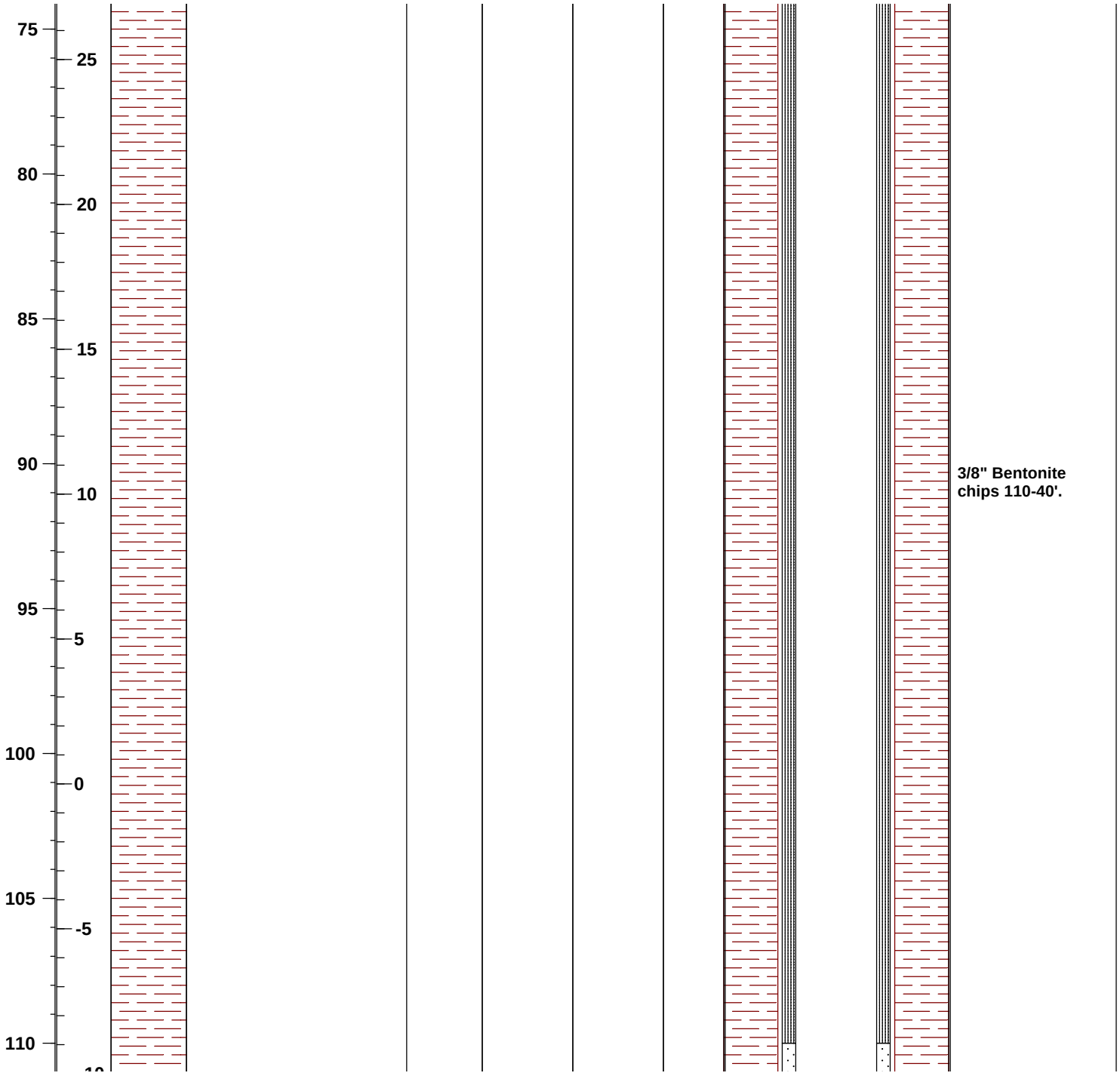
LOG OF BORING

URS
Clifton Park, New York

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Central Avenue
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PROJECT:	NYSEG	**ELEVATION:**	101.05 Feet
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DATE:	11/13/02	**METHOD OF DRILLING:**	Air/wash rotary
BORING DIAMETER:	6 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



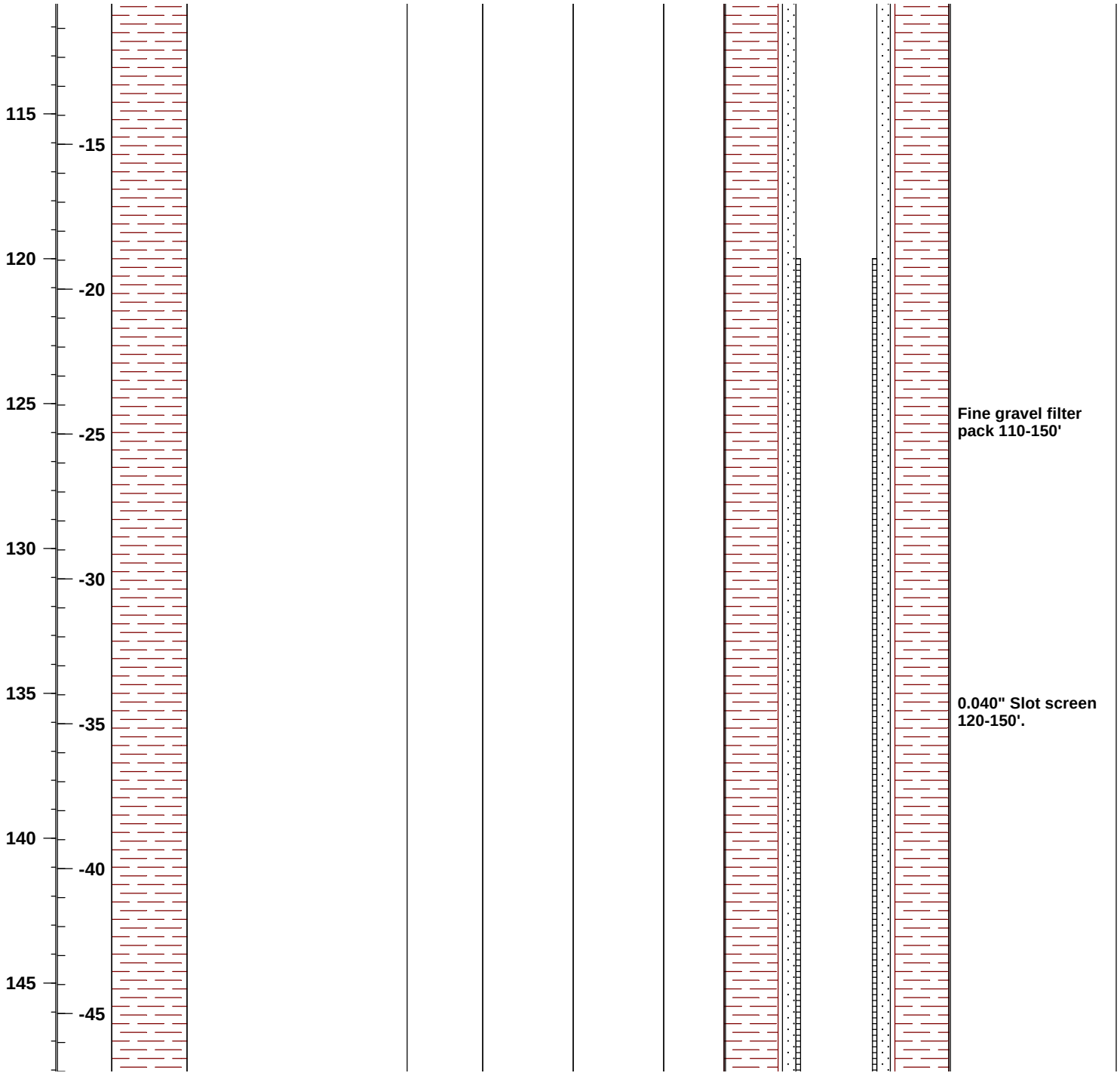
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	101.05 Feet
BORING NO.:	MW-43D	**BORING LOCATION:**	N 1484562.16 / E 709426.31
DATE:	11/13/02	**METHOD OF DRILLING:**	Air/wash rotary
BORING DIAMETER:	6 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	101.05 Feet
BORING NO.:	MW-43D	**BORING LOCATION:**	N 1484562.16 / E 709426.31
DATE:	11/13/02	**METHOD OF DRILLING:**	Air/wash rotary
BORING DIAMETER:	6 inches	**SAMPLE TYPE:**	No samples collected
BORING DEPTH:	150 feet	**SURFACE CONDITIONS:**	Asphalt

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
150								

LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 87.04 / GRD 87.56
BORING NO.:	RH-1S	**BORING LOCATION:**	N 1484825.12 / E 709583.65
DATE:	6/19/01	**METHOD OF DRILLING:**	4.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	4.5 inches	**SAMPLE TYPE:**	2 inch x 2 foot split spoon
BORING DEPTH:	17.8 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description
0 / 85		Brown medium SAND,some fine gravel, damp.	0-2	24/18	6,14,20,15	0		Cement/Bentonite Grout Bentonite Chips
			2-4	24/12	10,16,18,23	0		2" Sch. 40 PVC casing.
5 / 80		Dark brown fine SAND, some coarse sand, damp.	4-6	24/12	11,7,10,10	0		
		Brown medium SAND, some fine gravel, wet.	6-8	24/4	8,7,5,4	0		#3 Sand
10 / 75		Grey/brown GRAVEL, trace medium sand, wet. (ODOR-MGP).	8-10	24/8	3,6,8,6	0		4" Sch. 40 PVC 0.040" slot screen: 2.8'-17.3'.
		Brown medium SAND, some fine gravel, wet. (ODOR-MGP) Sheen at 10'.	10-12	24/1	5,3,2,2	3.7		
15 / 70		Loose material/low recovery. NAPL. Shale fragments in nose at 16.3'. Augered to 17.8'.	12-14	24/0	4,4,2,2	82		
			14-16	24/0	5,4,8,9	168		4" Sch. 40 PVC Riser (sump): 17.3' - 17.8'.
			16-16.3	4/0	50/4"	256		Bentonite

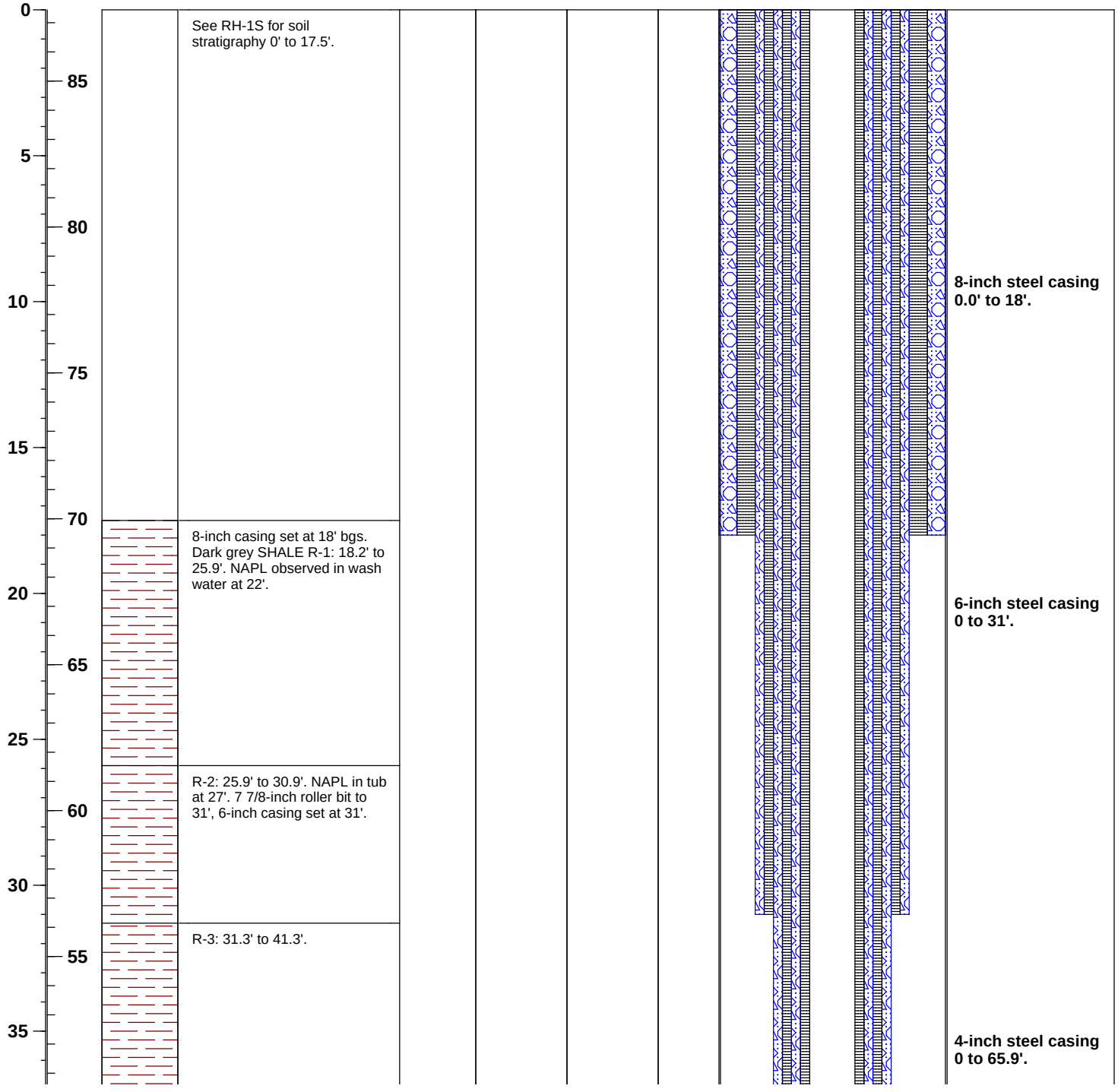
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 86.84 / GRD 87.44
BORING NO.:	RH-1D	**BORING LOCATION:**	N 1484821.93 / E 709587.47
DATE:	5/30/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	AX Core. HQ coring
BORING DEPTH:	107.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



LOG OF BORING

URS

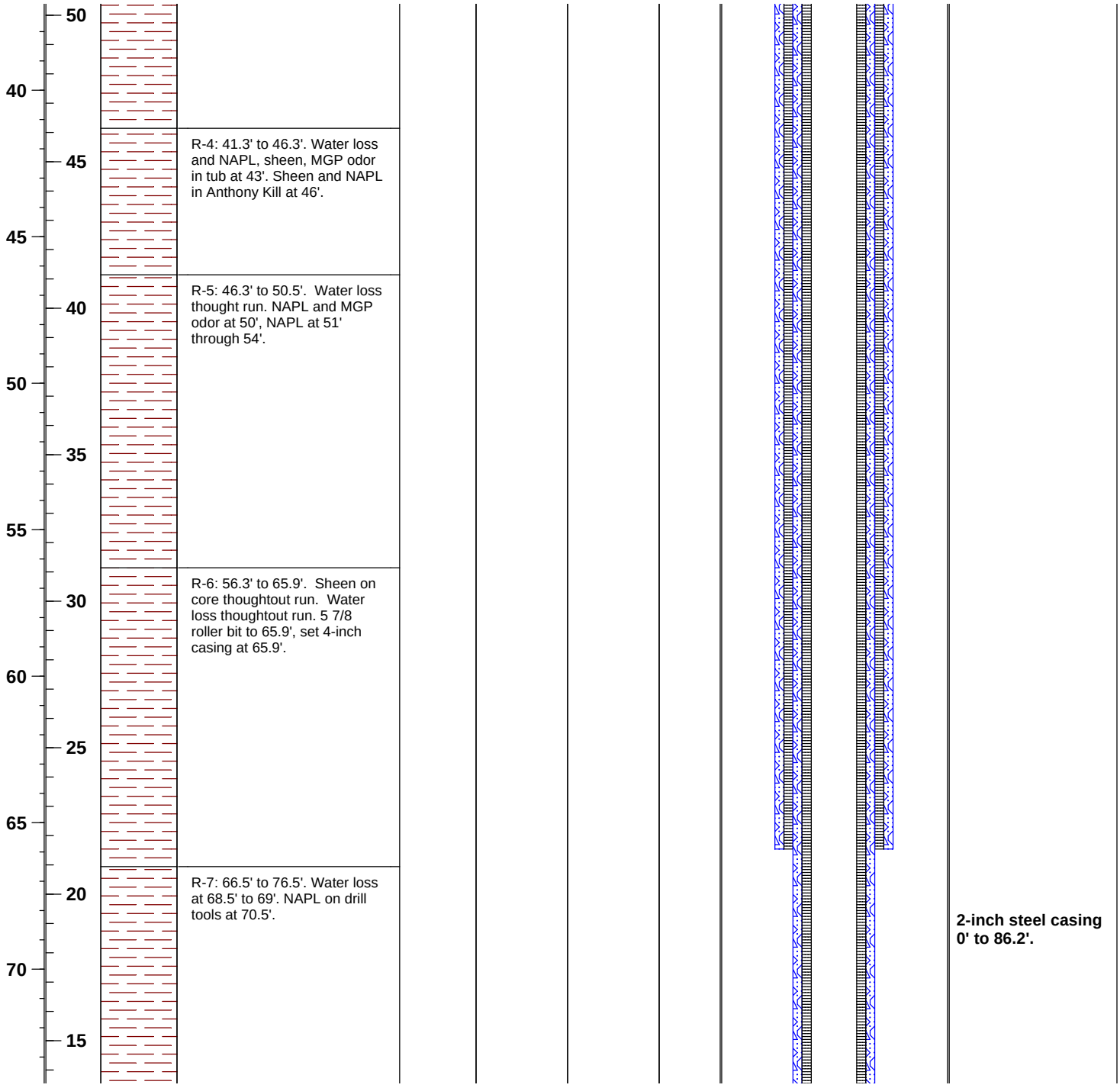
Clifton Park, New York

NYSEG

Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 86.84 / GRD 87.44
BORING NO.:	RH-1D	**BORING LOCATION:**	N 1484821.93 / E 709587.47
DATE:	5/30/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	AX Core. HQ coring
BORING DEPTH:	107.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



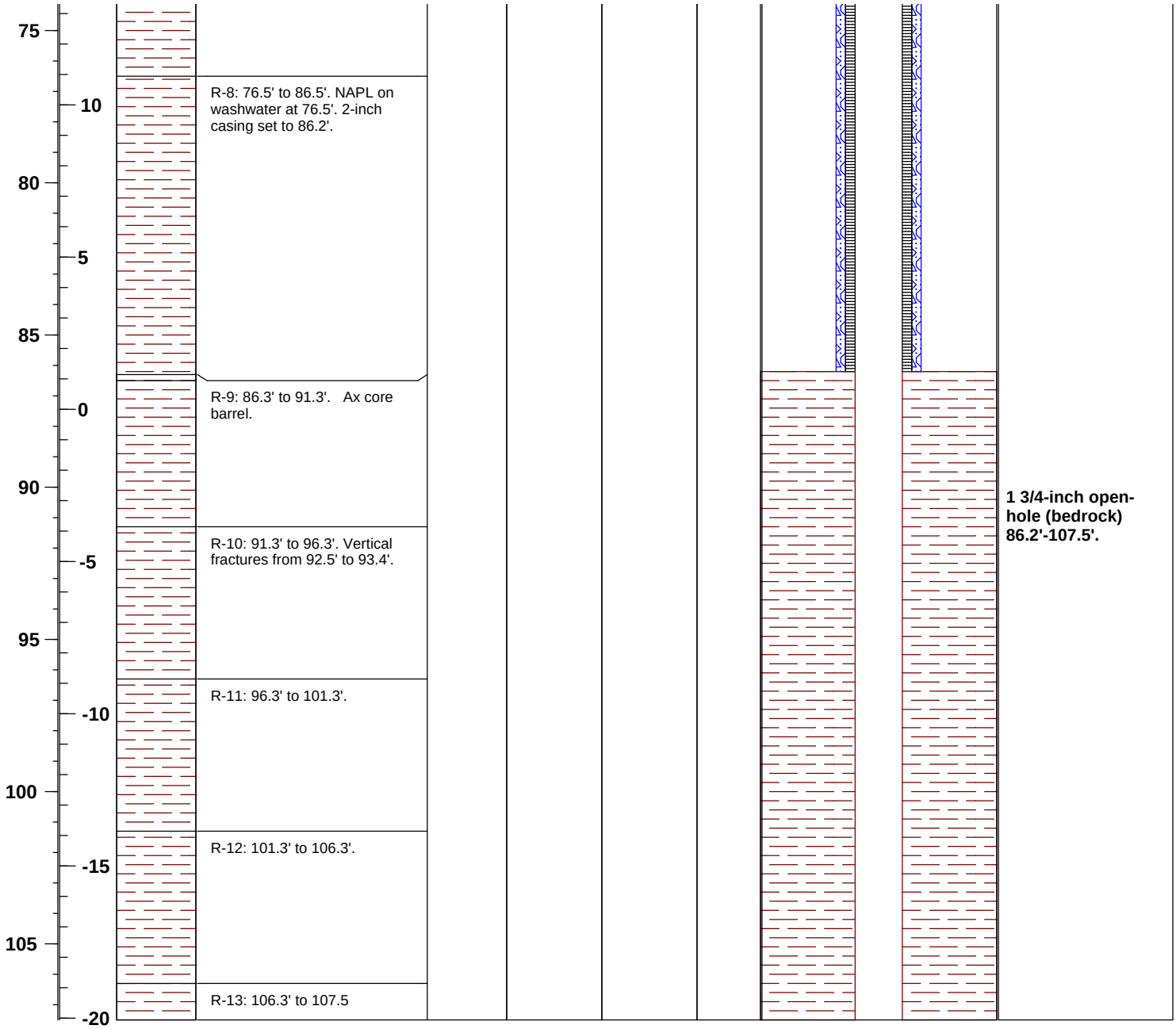
LOG OF BORING

URS
Clifton Park, New York

NYSEG
Central Avenue
Mechanicville, New York

PROJECT:	NYSEG	**ELEVATION:**	TOC 86.84 / GRD 87.44
BORING NO.:	RH-1D	**BORING LOCATION:**	N 1484821.93 / E 709587.47
DATE:	5/30/01	**METHOD OF DRILLING:**	10.25 inch I.D. Hollow Stem Auger
BORING DIAMETER:	14.25 inches	**SAMPLE TYPE:**	AX Core. HQ coring
BORING DEPTH:	107.5 feet	**SURFACE CONDITIONS:**	Gravel

Depth / Elevation	Soil Symbols	Soil Description	Sample Depth (ft bg)	Driven/ Recovery (in.)	Blows per/ (6 in.)	PID (ppm)	Well Construction	Well Description



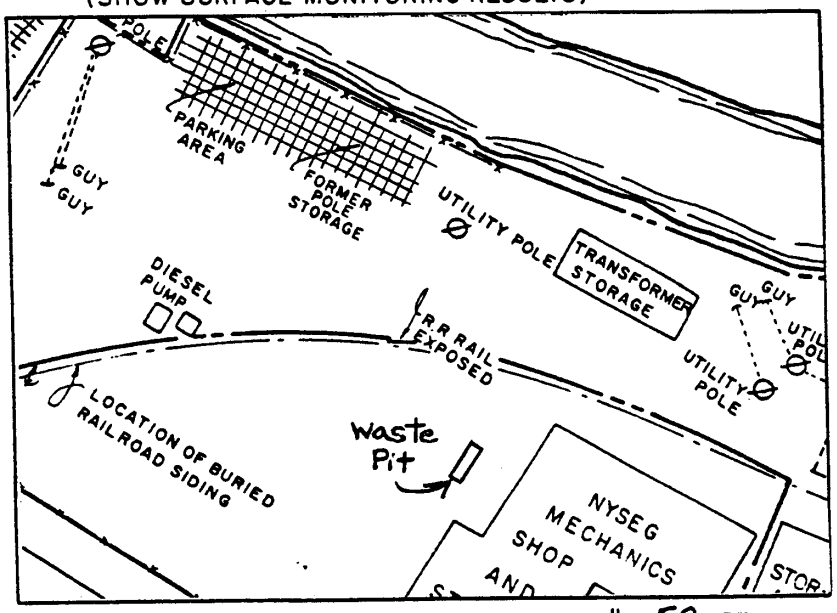
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT Waste Pit DATE 7/21/86 TIME ST. 1000 END 1030

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Wibby
2. C. Moore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE # 0

NOTES

0' – 0.3' Brown sandy fill with cobbles.

0.3' – 0.7' Asphalt

0.7' – 1.2' Brown sandy fill with cobbles

1.2' – 4.0' Brown to black sandy fill with clinkers, cobbles brick fragments, cobbles, and white/gray ash.

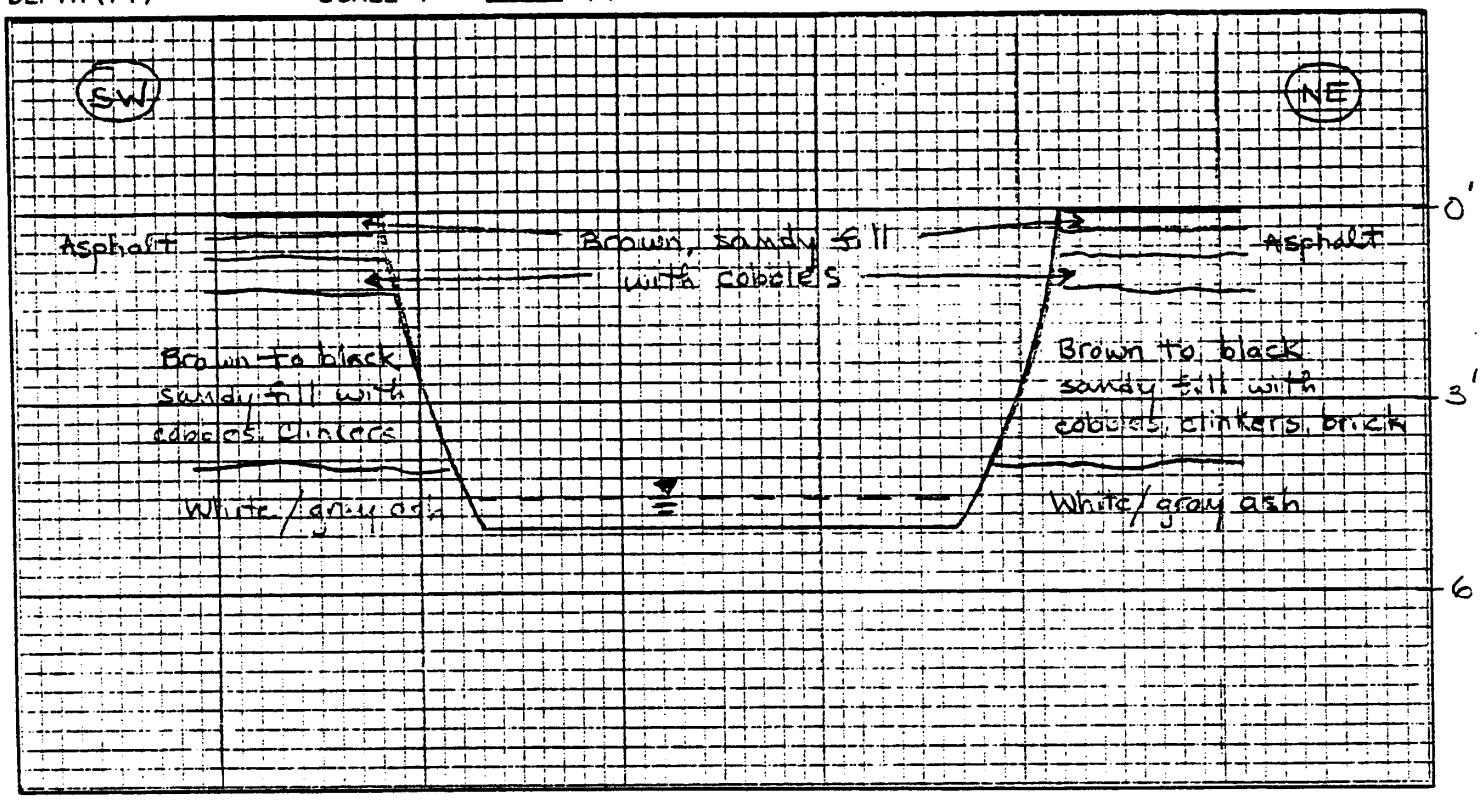
4.0' – 5.0' White/gray ash containing coke, clinkers, some wood, cobbles, and cinders grading back into cobbly brown fill.

$\bar{x}$ at 4.5'

TEST PIT RECORD
PROFILE ALONG TEST PIT– Waste Pit

SITE Mechanicsville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions: W x L x D, 2.5' x 10' x 5'

No visible coal tar but ash, coke and clinkers present.

PI readings at background level.

SAMPLES OBTAINED No Samples

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

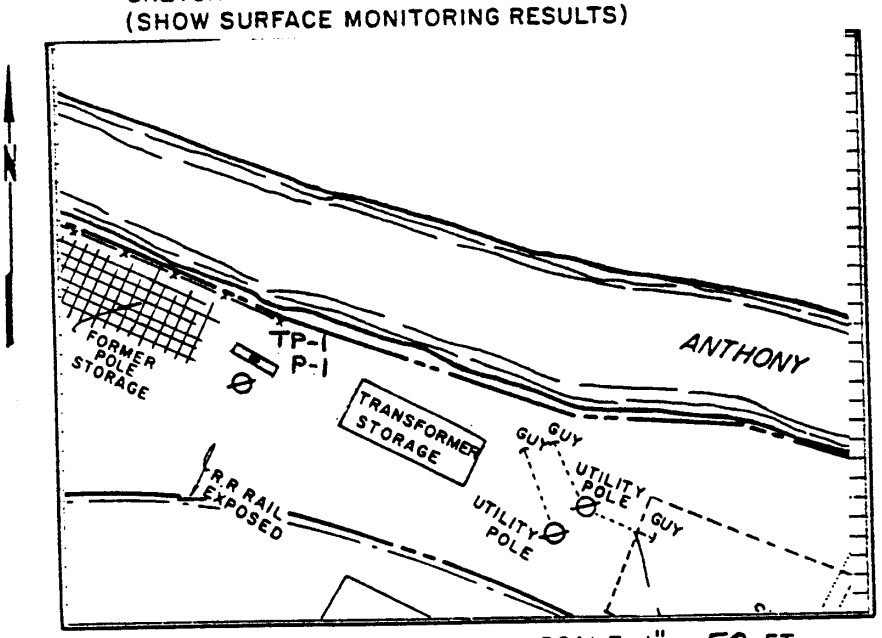
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-1 DATE 7/21/86 TIME ST. 10:50 END 11:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. S. Wibby
2. C. Moore
3. P. Tierney } Maloy (Empire)
4. R. Ciccateri }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL # 1

EXPOSURE 1

NOTES

FILL

0'-0.8' Brown sandy fill with cobbles loose, dry

0.8'-2.0' Black ash with clinkers and cinders oxidized, loose, dry. Slight odor.

2.0'-3.0' Reddish brown fine sandy silt with small cobbles, large rounded boulders, organic material (roots), bricks and clinkers

3.0'-6.0' Brown sandy silt with cobbles, clinkers glass, wood bricks. Dry and loose.

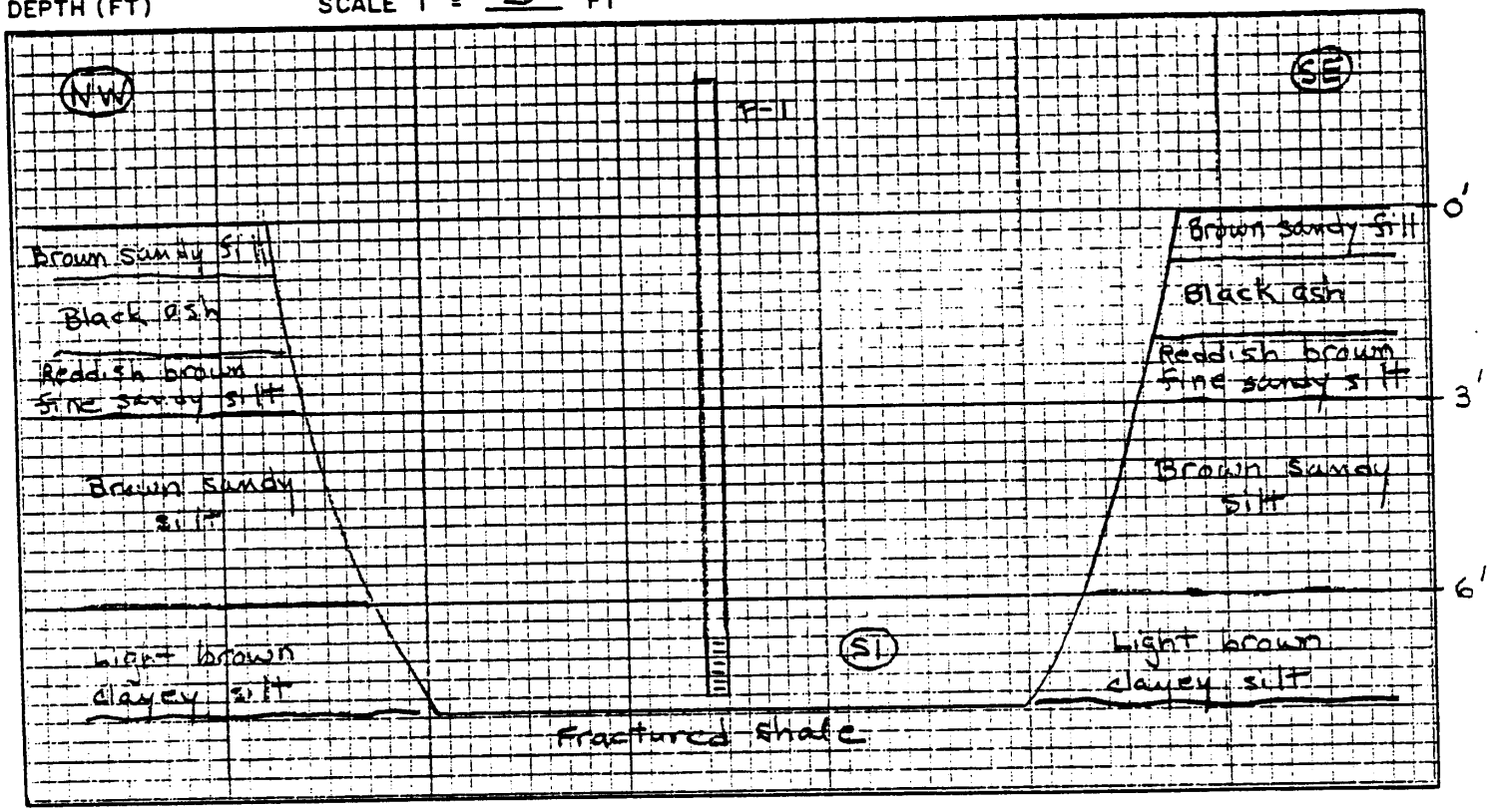
6.0'-7.7' Light brown clayey silt, cohesive, moist with mottling and slight odor. Dark stains in root channels.

7.7 Bedrock. Highly fractured shale, wet oily sheen. No groundwater seepage.

TEST PIT RECORD
PROFILE ALONG TEST PIT- 1

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD)
14' x 1.5' x 7.7'
No groundwater seepage.
PI readings at background level.
No visible coal tar but ash & clinkers present.
Piezometer (P-1) installed behind utility pole - screened from 6.5' to 7.5'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	6.5'-7.0'	MEEXTPXX01/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			
	Collected soil for		
	lab permeability test.		

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

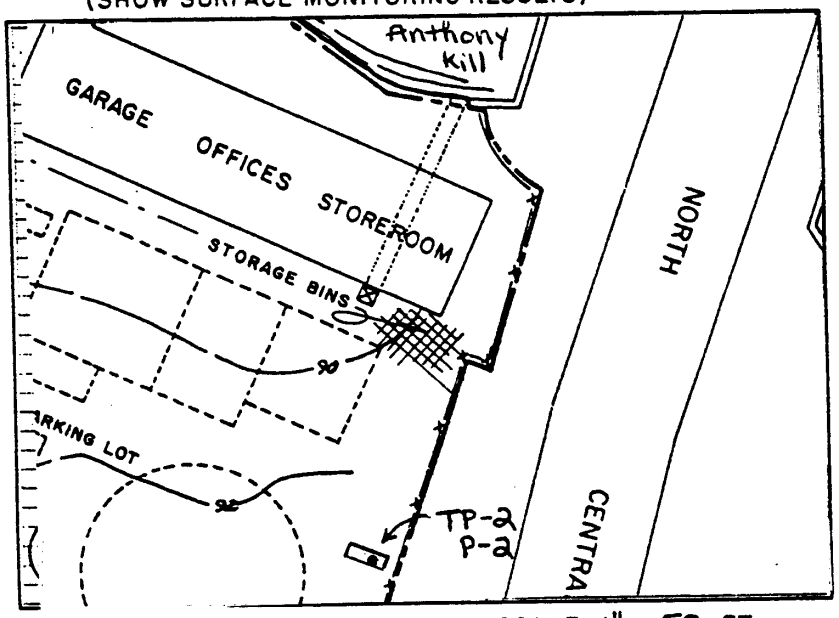
TEST PIT RECORD

SITE Mechanicville - NYSEG 4945-02

TEST PIT TP-2 DATE 7/21/86 TIME ST. 15:30 END 16:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C.Moore
2. S.Wibby
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #9, #10

NOTES 0'-1.3' Brown to dark brown silty sand with sharp angular cobbles (>50%)

1.3'-2.6' Brown sandy fill with bricks, oxidized

2.6'-5.5' Angular cobbles and boulders with some sandy fill. Highly weathered. (75% rock material)

5.5'-7.0' angular rocks, less weathered with sand matrix

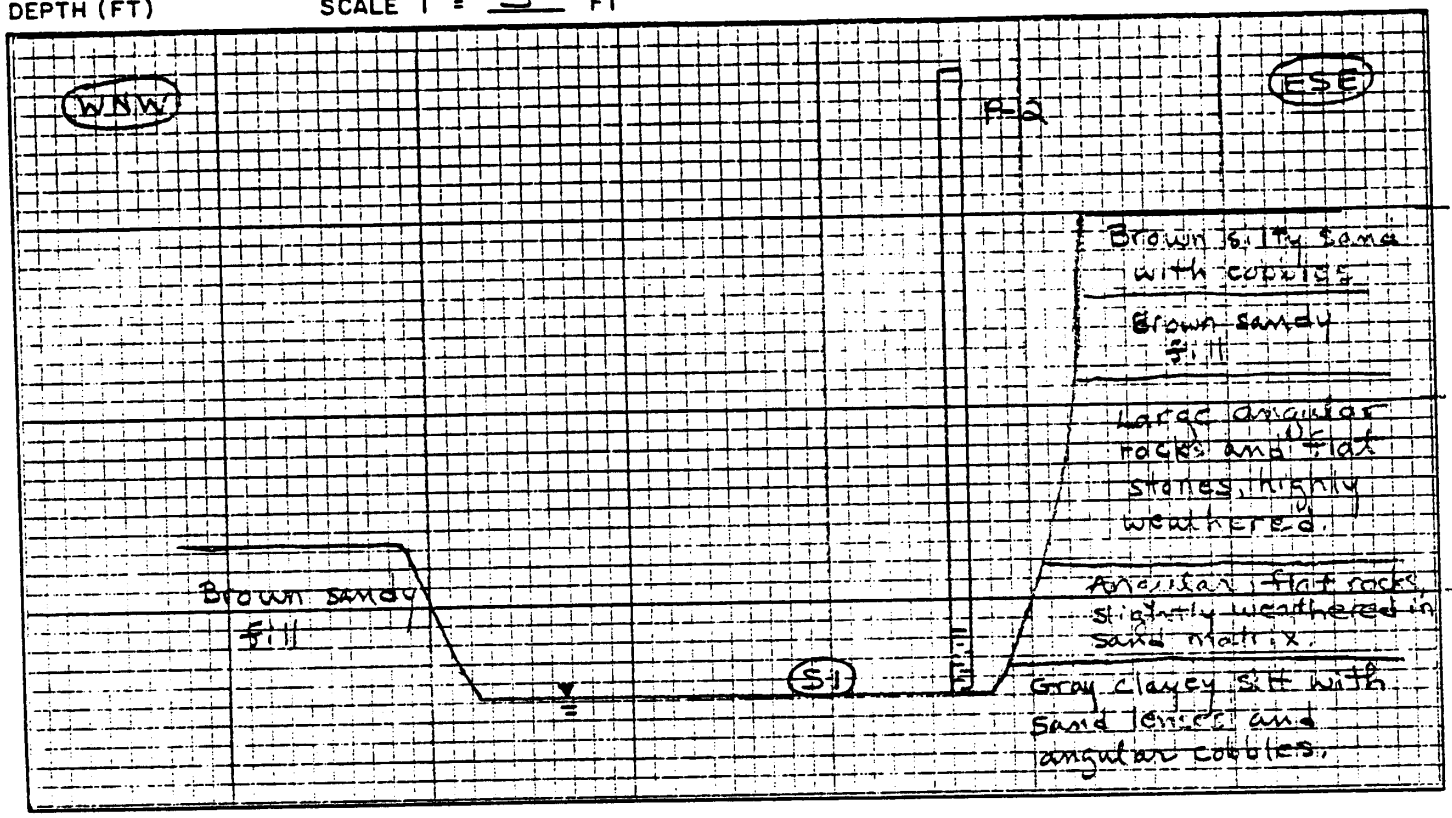
7.0'-7.5' S light gray clayey silt matrix with brown sandy silt lenses with angular cobbles (>50%). Mottling

▽ 7.5'

TEST PIT RECORD
PROFILE ALONG TEST PIT- 2

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD):
11' x 2' x 7.5'

PI readings at background level in ambient air - 10 ppm from sampled material.

No visible coal tar.

Piezometer (P-2) installed on bank - screened from 6.5'-7.5'.

Test pit was dug into the bank.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	7.0'-7.5'	MEEXTPXX02/11	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____
ATTACHMENTS _____

Christina Moore
SIGNATURE

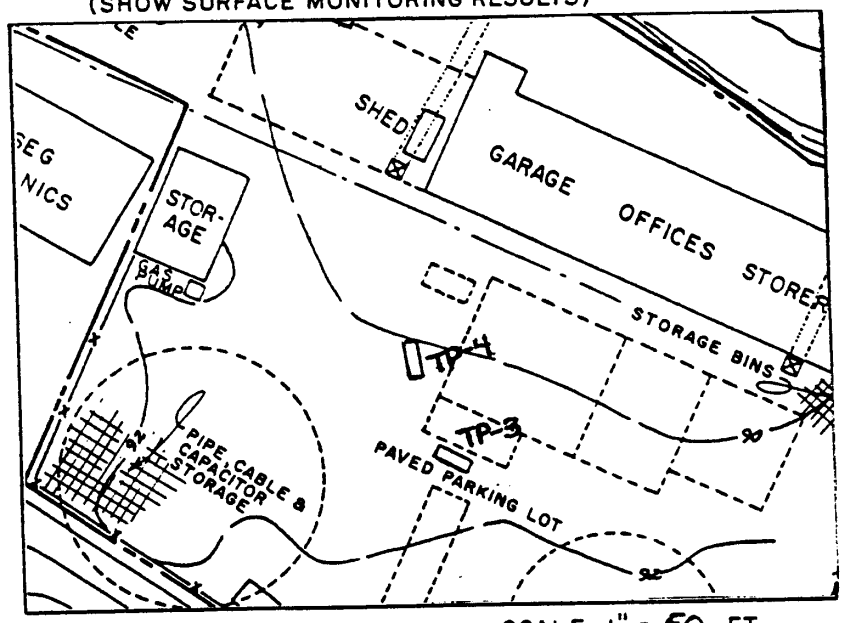
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-3 DATE 7/21 TIME ST. 14:15 END 14:30

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. C Moore
2. S Wibby
3. PT } Maloy
4. RC } (Empire)
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N Background
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL —

EXPOSURE —

NOTES 0.2'-1' Light brown sandy silt with cobbles loose, granular, dry.

1'-3' Dark brown silty fill with cobbles, bricks, and concrete. loose, dry and granular.

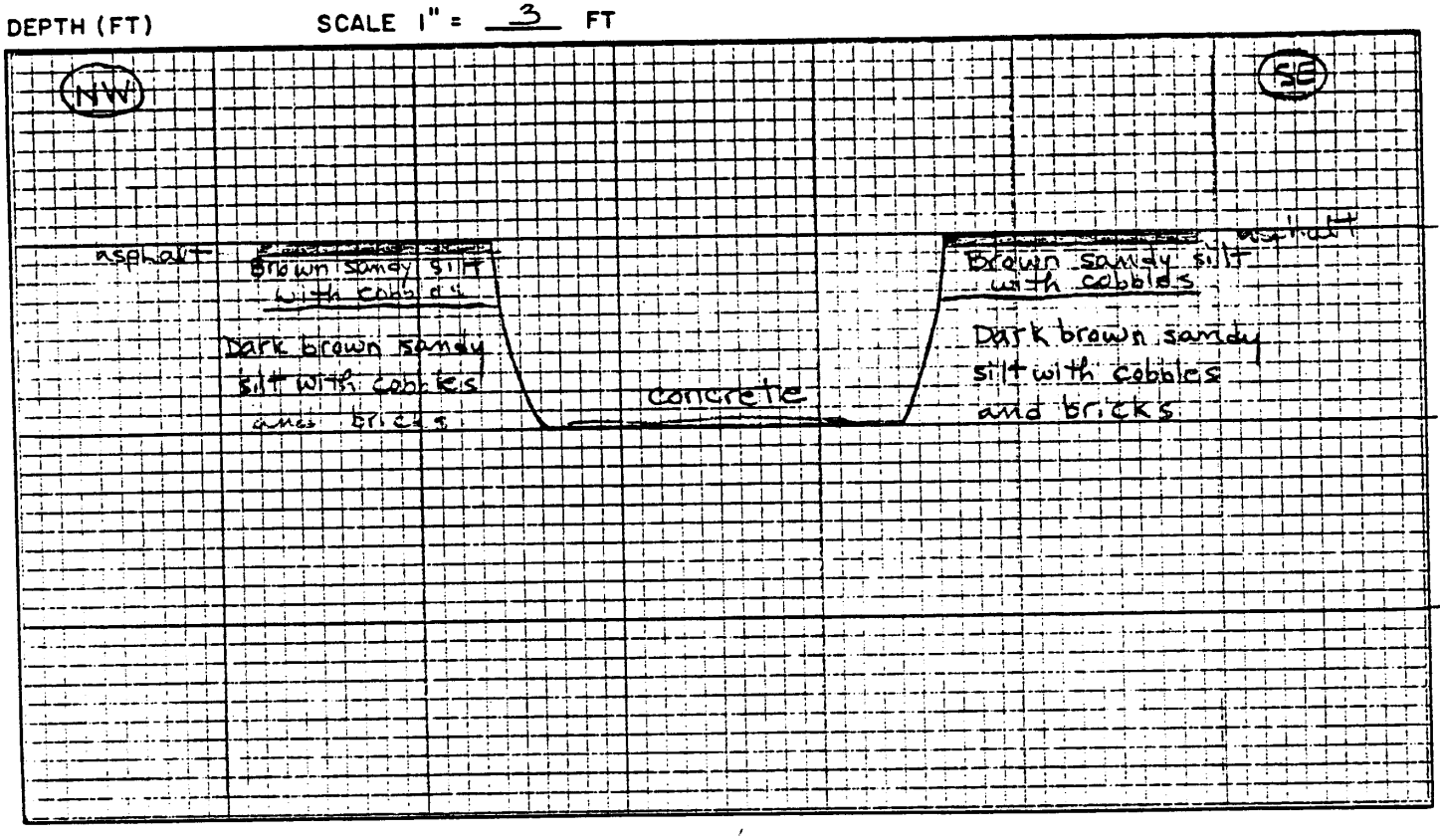
3' Concrete obstruction - refusal.

FILL

TEST PIT RECORD
PROFILE ALONG TEST PIT- 3

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (L x W x D): 7' x 2' x 3'

PI meter readings at background in ambient air and at soil.

No visible signs of coal tar or other contamination.

Test pit was abandoned after numerous attempts to break through a concrete obstruction encountered at 3.0'.

No groundwater seepage

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1			
S-2			
S-3			
S-4		No Samples	
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

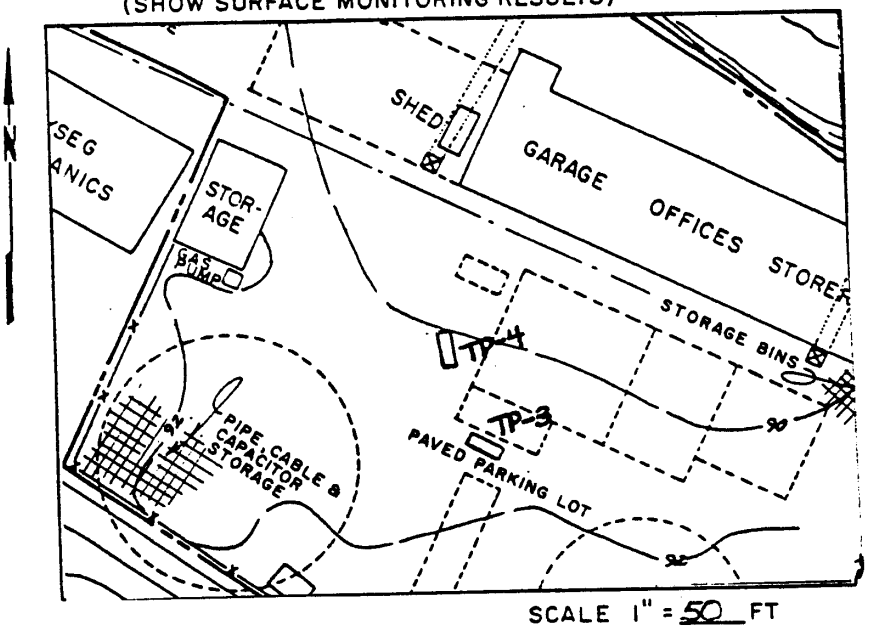
TEST PIT RECORD

SITE Mechanicville NYSEG

TEST PIT TP-4 DATE 7/21/86 TIME ST. 14:40 END 15:00

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC } Maloy (Empire)
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #6, 7, 8

NOTES 0.1' – 0.3' Light brown sandy silt w/ cobbles loose and dry.

0.3' - 1.0' Dark brown sandy silt w/ cobbles. Loose, dry.

1.0' - 1.5' Bricks

▽ 2.75' 1.5' - 3.0' Light brown sand, medium to fine

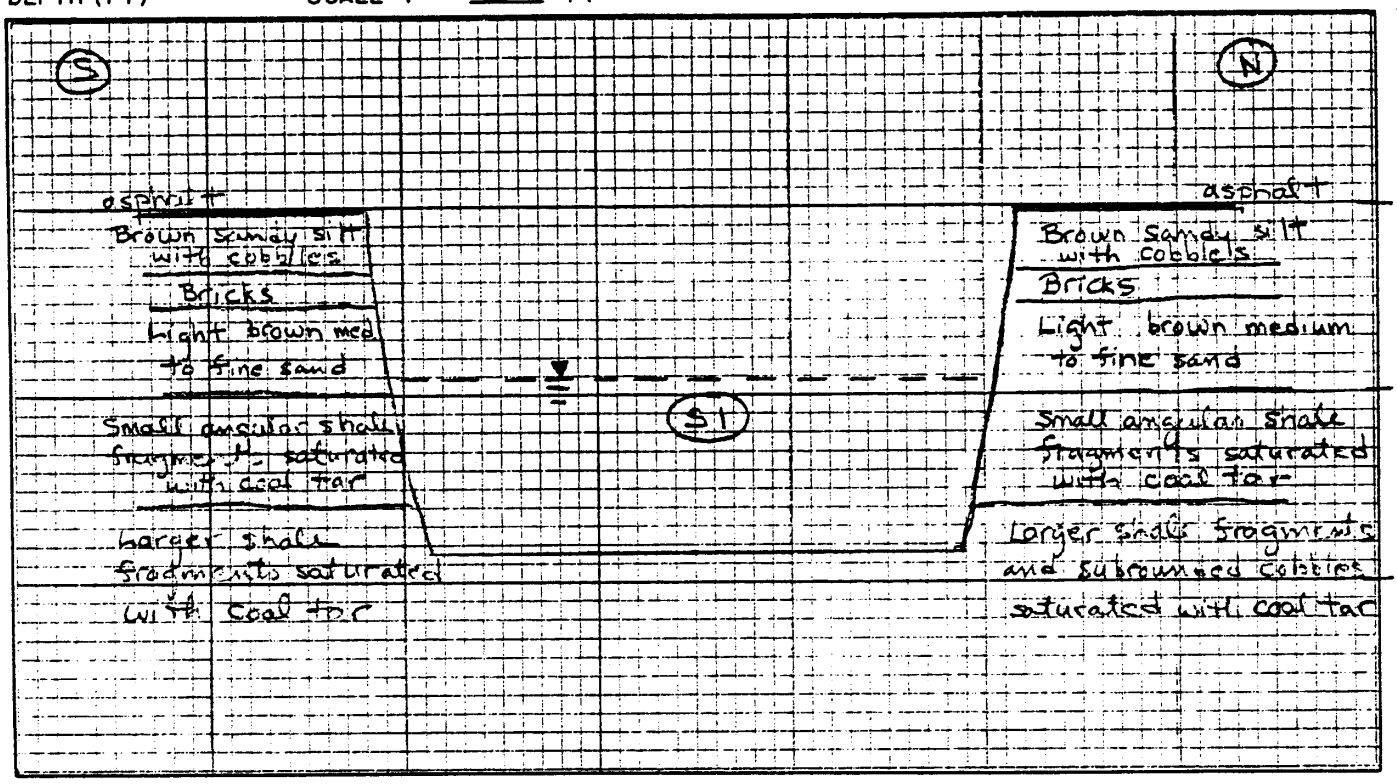
PI - 30 → 40ppm 3.0' - 4.75' angular shale rock fragments saturated with coal tar

4.75' - 5.6' Larger angular shale fragments and subrounded cobbles within clayey silt matrix. Saturated with coal tar

TEST PIT RECORD
PROFILE ALONG TEST PIT- 4

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 10' x 2' x 5.5'

PI meter readings of 30-40 ppm near sampled soil.

Coal tar observed from 3' to bottom of pit.

Water flowed rapidly into the pit from the SE corner

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEITPXX04/1	
S-2			
S-3			
S-4			
S-5			
S-6			
S-7			
S-8			

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

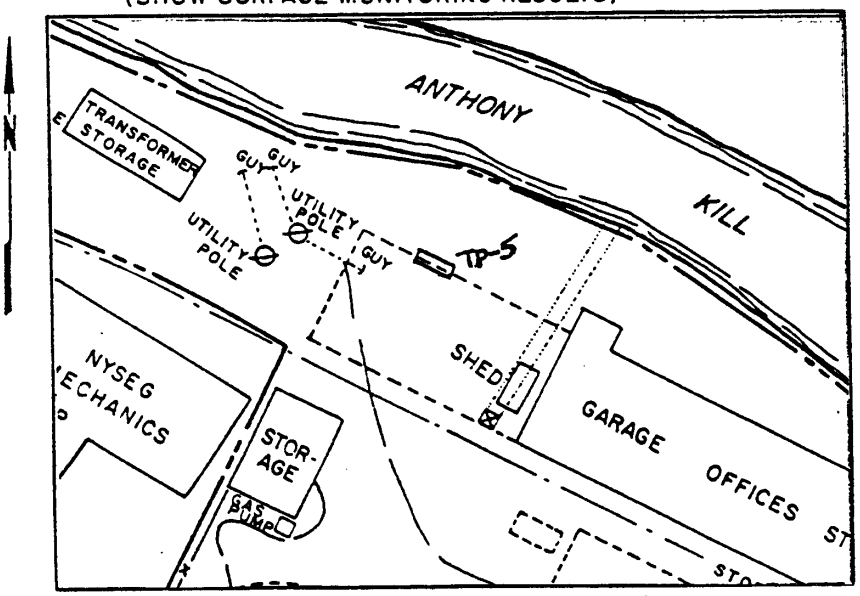
TEST PIT RECORD

SITE Mechanicville NYSEG 4945-02

TEST PIT TP-5 DATE 7/21/86 TIME ST. 12:50 END 13:45

COORDINATES N/A GRID ELEMENT N/A

SKETCH MAP OF TEST PIT SITE
(SHOW SURFACE MONITORING RESULTS)



SCALE 1" = 50 FT

CREW MEMBERS

1. SWibby
2. CMoore
3. PT } Maloy (Empire)
4. RC }
5.
6.

MONITOR EQUIPMENT

PI METER	(Y)	N
EXPLOSIVE GAS	(Y)	N
AVAIL. OXYGEN	(Y)	N
OVA	Y	(N)

OTHER Radiation meter

PHOTOGRAPHS, ROLL #1

EXPOSURE #2,3,4,5

NOTES 0'-1.3' Light brown sandy silt with cobbles

1.3'-3.0' Dark brown sandy silt with angular cobbles (Exposed tile drain at approx. 2')

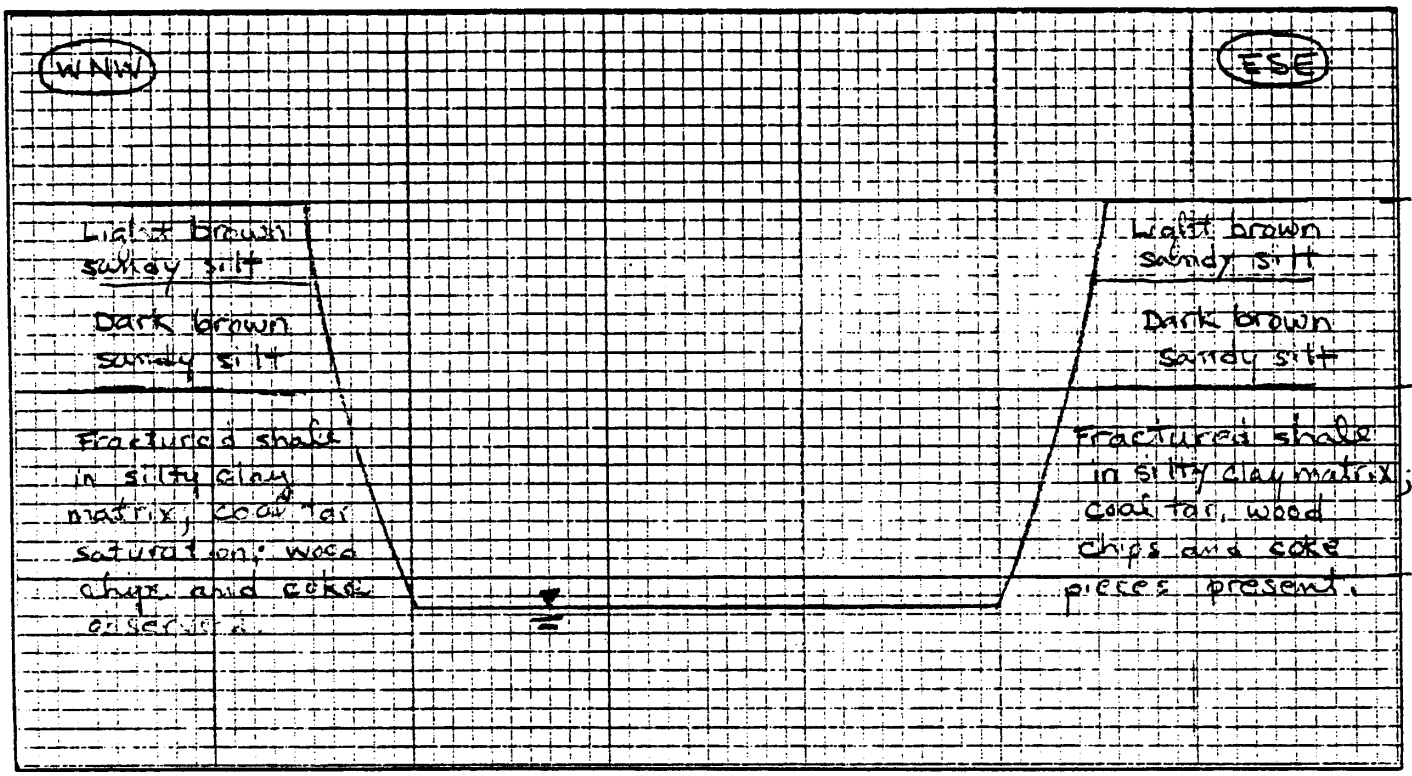
3.0-6.5' Highly fractured shale, weathered with silt and clay soil, loose. Wood chips and coke fragments present, saturated with coal tar.

▽ 6.5' Fractured bedrock surface; coal tar saturation; groundwater seepage.

TEST PIT RECORD
PROFILE ALONG TEST PIT- 5

SITE NYSEG Mechanicville

DEPTH (FT) SCALE 1" = 3 FT



NOTES:

Test pit dimensions (LxWxD): 12.5' x 2' x 6.5'

Coal tar saturation from 3' to bottom of pit.

PI meter reading of 50 ppm over saturated soil.

Groundwater seepage observed at bottom of pit.

Tile drain uncovered at approx 2'.

SAMPLES OBTAINED

NO.	DEPTH (FT)	INIT. SER. NO.	HD. SP. VOA PPM
S-1	3.0'-4.0'	MEEXTPXX05/11	
S-2	4.0'-6.0'	MEEITPXX05/21	
S-3		(GC/MS)	
S-4			
S-5			
S-6			
S-7			
S-8			
Dup of S1	3.0'-4.0'	MEEXTPXXDU/11	

REFERENCE: FIELD BOOK, PG. _____

ATTACHMENTS _____

Christina Moore

SIGNATURE

BORING NO. B-1

MECHANICVILLE BORING LOG

PROJECT NO. 4945-02

CLIENT NYSEG

CONTRACTOR EMPIRE SOILS | DATE STARTED 7/23/86 | COMPLETED 7/24/86

METHOD HSA/NX CORE | CASING SIZE 4.25 I.D. | HNU (1.7) 10.2 | PROTECTION LEVEL D

GROUND EL. 96' MSL | SOIL DRILLED 11.0' | ROCK DRILLED 9.2' | TOTAL DEPTH 20.2'

LOGGED BY L. ESPY | CHECKED BY CM | DATE 9/22/86 | ▽ BELOW GROUND 8.65' 7-25-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
0	Bkgd.	D.J. S-1					Bkgd.	0-2.0' Light brown sandy FILL with trace clay, loose, dry. Some glass, moderate amount of roots, and organics. Iron staining on surface. Recovery: .5/2.0	FILL	3 6 7 10	
2.5	Bkgd	D.J. S-2					Bkgd	2-3.5' Brown FILL same as above. 3.5-4.0' Black coke ASH, up to 3mm diameter, loose, dry. Highly oxidized from 3.75' to 3.8'. .7/2.0	FILL	7 4 3 3	
5.0	Bkgd.	D.J. S-3					Bkgd.	4-6.0' Dark brown to black silty FILL with up to 1" diameter gravel, some organics, brick fragments and glass, dense, moist, some iron staining. .6/2.0	FILL	4 3 2 3	
7.5	Bkgd.	D.J. S-4					Bkgd.	6-8.0' Brown, silty FILL grading upwards to dark brown silty FILL, some gravel and glass, loose, very moist. .2/2.0	FILL	5 5 3 3	
10	Bkgd.	ANYL S-1 D.J. S-5					Bkgd.	8-10.0' Brown, gravelly SAND, up to 4 mm diameter, somewhat dense, dry. 9.4-9.6' - Black, organic matter with grass 1.0/2.0	SAND	5 5 4 4	
12.5	Bkgd.	R-1					Bkgd.	10-11.9' Brown, gravelly SAND with dry shale fragments up to 1 inch throughout, dense to very dense, dry. 11-11.9' - weathered shale with some silt, little oxidation. Refusal at 11.9' 1.5/2.0	SAND	12 32 77 100/.4	
								BEDROCK AT 12.2'			
								R-1 12.2-13.6' 30B 12.2'. SPIN CASING TO 12.6'. Recovery = 0"/1.4' = 0%	SHALE		
15.0	Bkgd.	R-2					Bkgd.	R-2 13.6-17.2' Dark grey SHALE, laminated (1/5" bedding units), hard, very broken, weathering (staining) along bedding planes only. Bedding dips 30°. Primary fractures along bedding planes, secondary, hairline, fractures perpendicular to primary fractures and 1/2" in length. Recovery = 85% RQD = .7'/3.6' = 19%	SHALE	19%	
17.5	Bkgd.	R-3					Bkgd.	R-3 17.0-20.2' (1.1 FT. CAVE-IN) Dark grey SHALE, same as above. Recovery = 95% RQD = 23%	SHALE	23%	CAVE-IN
20.0											

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

BORING NO. B-1

MECHANICVILLE BORING LOG

PROJECT NO. 4945-~~78~~

CLIENT NYSEG

CONTRACTOR EMPIRE SOILS	DATE STARTED 7/23/86	COMPLETED 7/24/86	
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL. 96' MSL	SOIL DRILLED 11.0'	ROCK DRILLED 9.2'	TOTAL DEPTH 20.2'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 8.65' 7-25 86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLA	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % 20 40 60 80 100	WELL DATA
20.0		R-3					R-3 Cont.	SHALE		CAVE-IN
							BOB 20.2 FT. CAVE-IN TO 18.9			
22.5										

X = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

CONVENTIONAL ROCK DRILLING

PROJECT NO. 4945-02
BORING NO. B-1 (M)
PAGE 1 OF 1
LOGGED BY L. ESPY — DATE 7/23/86 /7/24/86
CHECKED BY JWP — DATE 9/22/86

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT IN.	RECOVERY FT IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
	R-1	12.2'	1.4'	0	0	0	0	U	-	NA	1.4 FEET OF Granular material caved in. washed out of R-2. Redrilled 12.2 - 13.6'.
	R-2	13.6'	3.6'	3.06'	85%	.7'	19%	U	Approx 6 min/ft	NA	Return water muddy brown color.
			ROD FOR R-2 - 2				PIECES				
	R-3	17.2	3.0'	2.9'	95%	.7'	23%	U	6-7 min/ft	NA	1.1 FT. CAVE-IN BEFORE STARTING 17.2.
			ROD FOR R-3 - 1				PIECE				
	EOS	20.2									

MECHANICVILLE BORING LOG

BORING NO. B-2

CLIENT NYSEG			PROJECT NO. 1945-03
CONTRACTOR EMPIRE SOILS	DATE STARTED 8/1/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25 I.D.	HNU (ILT) 10.2	PROTECTION LEVEL D
GROUND EL. 90' MSL	SOIL DRILLED 9.5'	ROCK DRILLED 6.7'	TOTAL DEPTH 16.2
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 5.94' 8-1-86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLR	SAMPLE GC	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)
0	Bkgd.	D.J. S-1			Bkgd.	0.5-2.0' Black, sandy to gravelly FILL, with rounded pebbles, Loose, dry.	FILL	12 | 14 | 8
2.5	Bkgd.	D.J. S-2			Bkgd.	2-4' FILL, with 3 discrete layers: 2-3.4' Calcite, blocky (2" dia.) dry, angular chunks 3.4-3.9' Brown silty SAND, loose, dry 3.9-4.0' - Dark grey SHALE fragments in moist silty matrix. Very Wet at 3.8'. REC. 55%	FILL	6 | 10 | 3 | 4
5.0	Bkgd.	D.J. S-3			13 ppm	4-6' Sandy to gravelly FILL with 2" pebbles, subrounded to 5.7'. 5.7-6.0' - Greenish-grey SILT to clayey SILT with some iron staining, trace organics, dense, moist. RECOVERY 35%	FILL / SILT	3 | 3 | 1 | 2
7.5'	Bkgd.	D.J. S-4			Bkgd.	6-8' Orangish-grey clayey SILT with subrounded pebbles, dense, moist grading downwards to orangish grey silty coarse SAND with angular SHALE fragments, dense, damp. REC. 50%	SILT	3 | 12 | 6 | 14
		D.J S-5 ANYL S-1			Bkgd.	8-9.5' Dark grey silty coarse SAND, angular to 9.4' At 9.4' - Dark grey angular SHALE fragments, very thinly bedded, dry. REC. 45%	SAND	12 | 40 | 100/.5
10.0						Weathered BEDROCK AT 9.4' SET CASING AT 10.6 WASH OUT HOLE. BEGIN CORING		
12.5	Bkgd.	R-1			Bkgd.	R-1 9.5-13.5' Dark grey SHALE with 25% calcite in top 3/10 ft., V. thinly bedded (1/4-1"), hard, V. broken to broken, some weathering along bedding fractures (staining), calcite veins along bedding planes, bedding dips 30°. Recovery = 4.5/4.0' (CAVE-IN) RQD = 54%	SHALE	
15.0	Bkgd.	R-2			Bkgd.	R-2 13.5-16.2' Dark grey SHALE, massive, hard, unweathered, only 2 mechanical breaks which are along bedding planes. Recovery = 100% RQD = 100%	SHALE	
17.5						BOB 16.2'		
20.0'								

WELL DIA

T = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

NYSEG Mechanicville, NY

PROJECT NO. 4945-02
BORING NO. B-2
PAGE 1 OF 1
LOGGED BY L. ESPY DATE 8/1/86
CHECKED BY JVP DATE 9/22/86

BIT USE
N - NEW
R - RESET
U - USED

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT. IN.	LGTH. FT. IN.	RECOVERY FT. IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
9.5	R-1	9.5'	4'	4.5'	100+	NA	54%	U	6/FT	NA	4' RUN.
	R-2	13.5'	2.7'	2.5	93%	NA	100%	U	6/FT	NA	2.7' Run
		16.2									

MECHANICVILLE BORING LOG

BORING NO. B-3

CLIENT NYSEG — PROJECT NO. 4995-02

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/5/86 — COMPLETED 8/6/86

METHOD H.S. AUGER — CASING SIZE 4.25' ID — HNU (11.7)/10.2 — PROTECTION LEVEL C

GROUND EL. ~89' MSL — SOIL DRILLED 9.2' — ROCK DRILLED N/A — TOTAL DEPTH 9.2'

LOGGED BY JNW — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 2.5' 8/14/86

PI METER MALFUNCTIONING
INSPECT AMBIENT AIR DATA

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA	ELEV. (FT)
0								0.5' Asphalt				
		D.J. S-1						0.5'-2.0' Black, fn-cs sand, some gravel and angular shale chips, grading to Sandy silt and shale chips; Dry; med. dense (.75'/1.5)	Fill	5 4 3		
		D.J. S-2						2.0'-4.0' Tan to gray silty Sand w/ angular shale chips; some black stained wood chips. loose; moist. 50% shale chips. Recovery (.8Z'/2.0')	Fill	5 4 3 3		
5		Anly. S-1					270 (8/11)	4.0'-6.0' Black silt (75%) w/ little angular shale chips grading to silt w/ some shale chips; trace coal tar stained org., wood and fly ash; loose; wet. (1.8'/2.0')	Fill	1 1 1 1		
		Anly S-2					250 (8/11)	6.0'-8.0' Black Sandy silt w/ shale chips and wood fragments; loose; wet; friable; Coal tar stained; dry very fractured shale in the end of the sample; iron stained; horiz. and vertical fractures (Rec. 1.3'/2.0')	Fill & WX BdK			
								8.0-9.2' Weathered bedrock w/ little silt and fine sand; Horiz. and vert. fractures; platy and angular rock fragments; Coal tar stains, loose and wet at 8.0-8.3'; Tan, dry and dense at 8.3'-9.2'	WX BdK	15 72 100/.2		
10								Bottom of boring at 9.2'				
								Weathered bedrock at 8.0'-9.2'				
								Bedrock at 9.2'				
15												
20												

* U = THIN WALL TUBE S = SPLIT SPOON R = ROCK

MECHANICVILLE BORING LOG

BORING NO. B-4

CLIENT NYSEG — PROJECT NO. 4045-02

CONTRACTOR EMPIRE SOILS — DATE STARTED 7/29/86 — COMPLETED 7/30/86

METHOD HSA/NX CORE — CASING SIZE 4.25 I.D. — HNU 11.3/10.2 — PROTECTION LEVEL D/C

GROUND EL. 92' MSL — SOIL DRILLED 16.8 — ROCK DRILLED NONE — TOTAL DEPTH 16.8

LOGGED BY SNW — CHECKED BY CM — DATE 9/22/86 — ▽ BELOW GROUND 3.2' (7-29-86)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO. SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	Bkgd						Auger through Pavement to .5			
	Bkgd	D.J. S-1				Bkgd	.5-2.0' Light Brown Sand Fill w/ angular to sub-rounded gravel. Ash, brick chips, Black staining at 1-2' below G.S. Loose and dry. .7/1.5	Fill	13 9 6	
2.5	Bkgd	N.R.				Bkgd.	2.0-4.0' No Recovery Boulder was dug out by hand. 0/2.0	Fill	13 12 7 3	▽
5.0	Bkgd	D.J. S-2				10	4.0-6.0' Black to Dark Gray Sandy Silt Fill w/ sub rounded Fine gravel and brick chips. Coal tar odor. Loose and Friable. Dry. 1.5/2.0	Fill	2 4 2 2	
7.5	10ppm	D.J. S-3 Analy GC Conf/ms				70+	6.0-8.0' Black to Brown Sandy Fill w/ small sub rounded to angular gravel, brick chips, loose - wet. grades into - Silty weathered bedrock w/ shale fragments, heavily coal tar stained and moderately oxidized. 1.5/2.0	Fill	4 8 11 14	
10.0	2	D.J. S-4				20+	8.0-10.0' Black to Brown Silty Weathered Bedrock (50% silt), angular gravel (shale). grading into less Silty Clay weathered bedrock, coal tar present throughout - 85% Rock Material 2.0/2.0	Fill	14 19 21 31	
		D.J. S-5				70+	10-12' Clayey Silt weathered Bedrock, 75% angular gravel (shale), Coal tar stained loose, wet. 1.5/2.0	Fill	11 12 12 3	
12.5	Bkgd.	D.J. S-6				Bkgd.	12'-14' Gray Broken Shale Fragments w/ Silt, heavily stained w/ Coal tar. Loose, wet. 1.0/2.0	Fill	1 1 30 47	
15.0	Bkgd.	D.J. S-7				Bkgd.	14-16' Black Silt w/ angular shale chips gravel size. Loose. Wet 50% silt 50% Rck .2/2.0	Fill	2 1 0 2	
17.5	Bkgd.	D.J. S-8				Bkgd.	16-16.8 Tan to Lgt Gray Silt Clay Till w/ small sub rounded pebbles & Fine gravel in the till matrix. Organics w/ Coal tar staining in root canals. Dry. Dessicated. Tight .6/1.1	Till	2 1 100/.1	
20.0							Refusal @ 16.8' EOB - 16.8'			

* U = THIN WALL TUBE S = SPLIT SPOON = = ROCK

MECHANICVILLE BORING LOG

BORING NO. B-5

CLIENT NYSEG | PROJECT NO. 4945-02

CONTRACTOR EMPIRE SOILS | DATE STARTED 8/4/86 | COMPLETED 8/5/86

METHOD HSA/NX CORE | CASING SIZE 4.25 I.D. /NX40 | HNU 11.7/10.2 | PROTECTION LEVEL D/C

GROUND EL. 89' MSL | SOIL DRILLED 11.5' | ROCK DRILLED 7.9' | TOTAL DEPTH 19.4

LOGGED BY SNW | CHECKED BY CM | DATE 9/22/86 | BELOW GROUND 10.0' 8/5/86

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO. SAMPLE	CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
	BKGd.	D.J. S-1				Bkgd	0-2.0 Dk. Brown Silty Sand Fill w/angular gravel, organics, loose, moist. Rec. 1.6/2.0	Fill	3 6 6 4	
2.5	Bkgd.	D.J. S-2				Bkgd	2.0-4.0 Lgt. Brown angular gravel Fill w/ Sand and silt interbedded, oxidation staining on shale chips. Loose. Dry. 80% Rock Material. 1.0/2.0	Fill	3 3 3 2	
5.0	Bkgd	D.J. S-3				Bkgd	4.0-6.0 Dk. Brown to Brown Silty Gravel Fill w/ Fine Sand w/some Black Stained lenses. Loose. moist. 65% angular shale gravel. 1.2/2.0	Fill	4 2 2 3	
7.5	P.I. MALFUNCTIONING	D.J. S-4					6.0-8.0' Fill - Brick, Coal Clinkers, Brown Sandy Silt, fly ash, shale chips. Mostly Brick (75%) 1.0/2.0	Fill	4 7 11 7	
		D.J S-5					8-9.6' Dk. Brown to Brown Sand Silt Fill w/ gravel, organics, coal clinkers, wood chips. predominately Sand + gravel. 9/1.6	Fill	7 12 19 100/1.1	
10.0							Auger to 10'			
		Any S-1				22	10.0-10.9' Dk. Brown Silt w/ Rock (shale) chips-gravel size organics, Mod. Loose, wet .5/.9	SILT	15 100/.4	
		Any S-2				175	10.5-11.5 Dk. Brown Silt w/angular shale chips (gravel) Coal tar sheen, loose, wet .9/1.0	SILT	21 52 100/0	
							Bedrock at 11.5			
12.5							R-1 10.6-11.6 Metasedimentary Erratic Boulder 11.6-12.9 - Void Space - Sediment, wood chips shale fragments 12.9-15.3 - Gray shale, thin dolier laminations (1-2 mm thick spaced every 1/2" to 1", Hard, Massive Calcite inclusions. Unweathered to trace weathering, 30-40° Bedding planes. Fractures occur at 60° across bedding planes. Rec. 4.95/5.0 = 99%	SHALE		
15.0							R-2 15.34-16.1 Gray Shale same as above No Natural Fractures Rec-76%	SHALE	Not Determinable Due to Coring Problems	
17.5							R-3 16.1-19.5 Gray shale same as above, No Natural Fractures. Rec. = 100% RQD = 86%	SHALE		
							BOB - 19.4			
20.0										

T = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

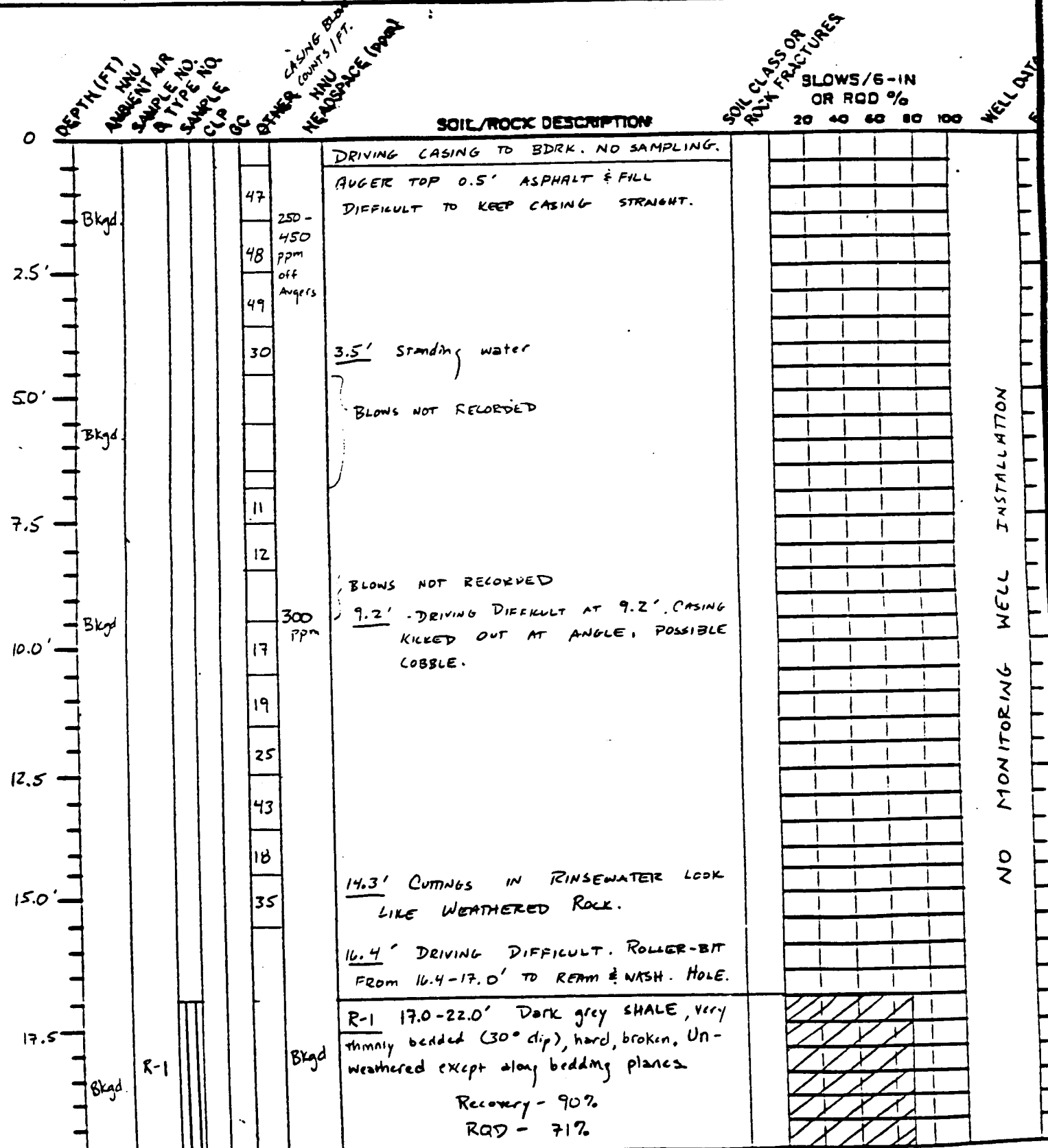
PROJECT NO. 4945-02
BORING NO. B-5
PAGE 1 OF 1
LOGGED BY SNW DATE 8/4/86 - 8/5/86
CHECKED BY TWD DATE 9/22/86

DEPTH	FOR EACH RUN							DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	RQD IN.	RQD %	BIT USE	TIME MIN./FT.		
	R-1	10.	6	5.0	4.45	89%		89%	U	9/ft		
	R-2	15.	34	1.3	1.0	76%		NA*	U	*		* Due to mechanical problems RQD cannot be accurately interpreted
	R-3	16.	1	3.4	3.5	100%		86%	U	9/ft		

BORING NO. B-6

MECHANICVILLE BORING LOG

CLIENT NYSEG			PROJECT NO. 4945-02
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (1.7) 10.2	PROTECTION LEVEL C/D
GROUND EL. 92' MSL	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND Unknown



* = THIN WALL TUBE S = SPLIT SPOON R = ROCK

MECHANICVILLE BORING LOG

BORING NO. B-6

CLIENT NYSEG			PROJECT NO. 4945-72
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/24/86		COMPLETED 7/29/86
METHOD HSA/NX CORE	CASING SIZE 4.25" I.D.	HNU (LT) 10.2	PROTECTION LEVEL C/D
GROUND EL 92' MSL	SOIL DRILLED 17'	ROCK DRILLED 15'	TOTAL DEPTH 32.0'
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	BELOW GROUND Unknown

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DATA
20.0		R-1 (con't)					R-1 (con't) See page 1 for description.	SHALE BDRK		
22.5	Bkgd	R-2				Bkgd.	R-2 22.0-27.0' Dark grey SHALE, thinly laminated (.03-.1"), hard, broken, unweathered. Iron oxidation staining in upper (17-18) fractures. Bedding laminae offset by vertical, discontinuous fractures and foldmy. Fractures occur along calcite (30-40°) inclusions. Minor amount of inclusions, concoidal in shape. Recovery - 102% RQD - 80%	SHALE 24.7		
25.0										
30.0	Bkgd.	R-3				Bkgd.	R-3 27.0-32.0' Dark grey SHALE, same as above except fewer inclusions than in R-2. Fractures perpendicular to bedding at 45-90°. Some evidence of deformation. Recovery = 100% RQD = 83%	SHALE		
35.0							BOB 32.0'			

* = THIN WALL TUBE S = SPLIT SPOON R = ROCK

FIELD LOG FOR BORING IN ROCK - A.

BIT USE
N - NEW
R - RESET
U - USED

PROJECT NO. 4995-02
BORING NO. B-6
PAGE 1 OF 1
LOGGED BY SNW/L.ESPY DATE 7/28/86-7/29/86
CHECKED BY JWP DATE 9/22/86

DEPTH	FOR EACH RUN								DRILLING		DRILL WATER RETURN %	COMMENTS ON DRILLING AND SAMPLING
	SAMPLE TYPE AND NO.	TOP DEPTH FT.	TOP DEPTH IN.	LGTH. IN.	RECOVERY IN.	RECOVERY %	ROD IN.	ROD %	BIT USE	TIME MIN./FT.		
17.0'	R-1	17.	0	5'	4.5'	90%	NA	71%	U	NA	NA	MANY MECHANICAL Breaks in Rock, Few Natural
22.0	R-2	22.	0	5'	5.0	102%	NA	80%	U	9/ft	NA	Mechanical breaks, fractures along calcite inclusions
32.0	R-3	32.	0	5'	5.0	100%	NA	83%	U	8/ft.	NA	Vertical to Near Vertical discontinuous fractures present.

BORING NO. B-7

MECHANICVILLE BORING LOG

PROJECT NO. 1945-02

CLIENT NYSEG			
CONTRACTOR EMPIRE SOILS	DATE STARTED 7/31/86		COMPLETED 8/1/86
METHOD HSA/NX CORE	CASING SIZE 4.25" ID	HNU (LT) 10.2	PROTECTION LEVEL D
GROUND EL 92' MSL	SOIL DRILLED 8.8'	ROCK DRILLED NONE	TOTAL DEPTH 9.0
LOGGED BY L. ESPY	CHECKED BY CM	DATE 9/22/86	▽ BELOW GROUND 3.9

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	SAMPLE GC	OTHER - WATER LEVEL HNU HEADSPACE (PPM)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR ROD % (20 40 60 80 100)	WELL DIAGRAM
0						SPIN CASING THRU. CONCRETE PAD.	ASPHALT		
						0-.3 - ASPHALT	CONCRETE		
						.3-1.2 CONCRETE PAD	VOID		
						1.2-2.1 VOID	FILL		
2.5					3.0 ▽	2.1-3.0 BOULDER FILL			
						3-5' Pound spoon. 0% Recovery	3.9 ▽	2 2 2 2	
5.0		NO RECOVERY				5-7' Pound spoon. Recovery 5% - all wash		8 5 3 3	
7.5		ANYL. S-1				7-9' Dark grey coarse sandy FILL with some 1-2" pebbles, trace clay. Trace wood (may have fallen into hole), calcite piece (1" diam), weathered shale fragments at 8.8-9' - Dark grey, thinly bedded 1" long.	FILL	7 15 53 85	CAVE-IN
		DJ S-1				BOB 9.0'	Bdrk		
10.0									
15.0									
20.0									

T = TUBE S = SPLIT SPOON R = ROCK

BORING NO. B-8

MECHANICVILLE BORING LOG

CLIENT NYSEG — PROJECT NO. 1945-.2

CONTRACTOR EMPIRE SOILS — DATE STARTED 8/6/86 — COMPLETED 8/6/86

METHOD HSA/NX CORE — CASING SIZE 4.25" I.D. — HNU (LT/10.2) TIP-11.7 HNU-10.7 — PROTECTION LEVEL D/C

GROUND EL 92' MSL — SOIL DRILLED 17.4' — ROCK DRILLED NONE — TOTAL DEPTH / 17.4'

LOGGED BY SNW — CHECKED BY CM — DATE 9/22/86 — BELOW GROUND 7.5-13.5' (APPROX)

DEPTH (FT)	HNU AMBIENT AIR	SAMPLE NO. & TYPE NO.	SAMPLE CLP	GC	OTHER	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN OR RQD % (20 40 60 80 100)	WELL DIAGRAM
0							AUGER THRU ASPHALT TO 0.5'			NO MONITORING WELL INSTALLATION
.5	Bkgd	D.J. S-1				Bkgd.	.5-2' Lgt. brown to brown Sandy FILL with cobbles and pebbles, platey to rounded, loose, dry, oxidized sediments. Broken rock Rec. 1.0/1.5	FILL	10 12 8	
2.5	Bkgd	D.J. S-2				Bkgd.	2-4' Lgt. brown to brown sandy SILT FILL w/ coal clinkers (oxidized) and trace subrounded brick and cobbles. Platey shale chips, loose to compact, dry. REC. 1.3/2.0	FILL	12 29 13 14	
5.0	1-2 ppm	D.J. S-3				1-2 ppm	4-5.2' Brown sandy FILL grading to silt Fill with depth, with concrete chips, dry, oxidized shale fragments, subrounded boulder pebbles at 4.7'. Trace organics. Compact, moist. Slight coal tar odor throout. .9/1.2	FILL	10 20 100/.2	
	Bkgd.	DJ S-4				20 ppm (shoe)	5.2-6.3' Brown silt FILL w/ rounded cobbles, platey shale fragments, and brick shards. Coal tar odor and black stains. Loose and moist. Obstruction from 5.2-7.2. Augered thru. .3/.3	FILL	100/.3	
7.5	Bkgd.	D.J. S-5 NO REC.				30 ppm (shoe)	7.5-9.5' Brown silt on outside of spoon. No Recovery. 30 ppm off spoon, no staining. Rec. 0/2.0	UNK.	3 2 3 3	
10.0	Bkgd	ANYL. S-1 DJ. S-6				Bkgd	9.5-11.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Slight coal tar odor, some coal tar present. REC. 2.0/2.0	SILT FILL	4 6 7 9	
12.5		D.J. S-7 (wood) S-8 (soil)				Bkgd.	11.5-13.5' Brown silt w/ pebbles and cobbles, very loose, saturated. Coal tar present at 13.3-13.5'. Wood fibers at 13.0' Rec. .9/2.0	SILT FILL	9 12 32 8	
15.0		ANYL. S-2				Bkgd.	13.5-15.5' - Silty FILL w/ shale fragments and subrounded cobbles, loose, saturated. Extensive COAL TAR. REC. 1.2/2.0	FILL	6 2 2 3	
	Bkgd.	GC/MS ANYL. S-3				50-100 ppm	15.5-17.4' Black stained silty SAND with subrounded cobbles, pebbles and shale chips, loose, saturated. REFUSAL AT 17.4'. REC. 1.3/2.0	SILT-SAND	3 3 2 100/.4	
17.5							BOB 17.4'			
20.0										

T = TUBE S = SPLIT SPOON R = ROCK

MECHANICVILLE	TASK 3		BORING NO. B-9
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-11-87	COMPLTD. 11-11-87
METHOD H.S.A.	CASING SIZE 4.25" ID	PID TIP #1	PROTECTION LEVEL D
GROUND EL 88.5 Rel.	SOIL DRILLED 5.5'	ROCK DRILLED NA	TOTAL DEPTH 5.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN NA (FT)	RISER NA (FT)	MATERIAL NA PVC SS TF	ID NA

PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD%	WELL DATA	EL. (FT)
0	Bg.						AUGERED TO 4'					
							COAL TAR OBVIOUS AT 2.7'					
1							VERY GRAVELLY & COBBLY; SHAKES RIG					
							CUTTINGS ARE WET W/ COAL TAR.					
2							SURFACE IS 1½" OF BITUMINOUS OVER COBBLY SILTY SAND - FILL					
3												
4		S-1		1.3	Y	65	BLACK SILTY SAND(?) W/ SLUDGE & COAL TAR, SATURATED OVER VARVED WEATHERED ROCK, OLIVE GRAY TO BLACK W/ UNWEATHERED ROCK FRAGMENTS & SILT	SM-GW		23 56 40		
5							B.O.B. @ 5.5'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	**TASK 3**	**BORING NO. B-10**
CLIENT **NYSEG**		PROJECT NO. 4945-03
CONTRACTOR **NORTH STAR DRILLING CO.**	DATE STARTED 11-12-87	COMPLTD. 11-12-87
METHOD H.S.A.	CASING SIZE 6" I.D.	PID TIP # 1
GROUND EL 96.7 Rel.	SOIL DRILLED 19.2'	ROCK DRILLED .5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87
SCREEN 10.8 (FT)	RISER 8.7 (FT)	MATERIAL PVC (SS) TF
		ID 2"
		PROTECTION LEVEL D
		TOTAL DEPTH 19.7'
		▽ BELOW GROUND 10.2' 11-20-87
		PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
	BKG	S-1		1.1		BKG	FILL BR TO BLK MOIST SANDY SILT W/ CINDERS for 1', OVER BLK TO Br ASH FILL W/ CINDERS, COAL PIECES, DRY TO MOIST		ML	10 16 26 16		
		S-2		1.2			4'			7 6 5 7		
5		S-3		.5			SILTY SAND (FILL) TAN TO Br TO DARK Br, SAND IS F TO M, TR TO LITTLE GRAVEL, MOIST W/ SOME ASH FILL; SAND IS SUGARY IN APPEARANCE.		SM	3 2 3 3		
		S-4		.7						2 1 2 1		
		S-5		1.0			4' SANDY SILT Br, F. SAND, TR. CLAY, MOIST, W/ BRIGHT ORANGE MOTTLES 10		ML	2 2 4 2		
10		S-6		.7		100	SILTY SAND Bl TO RUSTY SILT & F TO M. Sand, LITTLE GRAVEL, SATURATED, CONTAMINATED			2 1 8 6		
		S-7		.7		99	Br TO DK. GRAY TO Bl. F. TO M. SAND, TR. GRAVEL, WEATHERED Shale FRAGS. below 15'		SM	3 6 8 5		
15		S-8		1.0		26				2 3 5 5		
		S-9		1.8	Y*	6	TAN TO YELLOW Br. V.F.S., WELL SORTED			6 2 5 3		
		S-10		1.3		6	WEATHERED ROCK 19' TO 19.3' 19.3' TOP OF ROCK AT 19.3'		GW/SM	WOR 50/0.0		
20							B.O.B. 19.7'					

* DUPLICATE SAMPLE

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND
WOR = WEIGHT OF RODS

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE TASK 3			BORING NO. B-11
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-12-87 COMPLTD. 11-13-87	
METHOD H.S.A. & CORING	CASING SIZE 4 1/4" ID.	PID TIP #1	PROTECTION LEVEL D
GROUND EL 92.1 Rel.	SOIL DRILLED 5.5'	ROCK DRILLED* 12.5	TOTAL DEPTH 18'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 4.17 (11-20-87)
SCREEN (FT)	RISER (FT)	MATERIAL PVC SS TF	ID PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
0	Bkg.	S-1		1.2		Bkg	SILTY SAND (FILL) BROWN TO BLACK, TR. GRAVEL W/ COAL FRAGS, GLASS, CINDERS		SM	4 4 2 4		
							SANDY SILT OLIVE BR TO ORANGE BR, LITTLE GRAVEL, MOIST		ML	4 3 6 10		
		S-2		1.3		Bkg	WEATHERED ROCK BR & BLK, LAYERED, FISSILE, HARD, DRY, LITTLE CLAY,					
5		S-3		1.2		Bkg	6.0 BEDROCK SHALE FRAGS, COMMON ONWARD		GW	12 36 40		
							SHALE					
10		R-1		86 %						0 %		
15		R-2		80 %								
							B.O.B. @ 18'					
20												

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

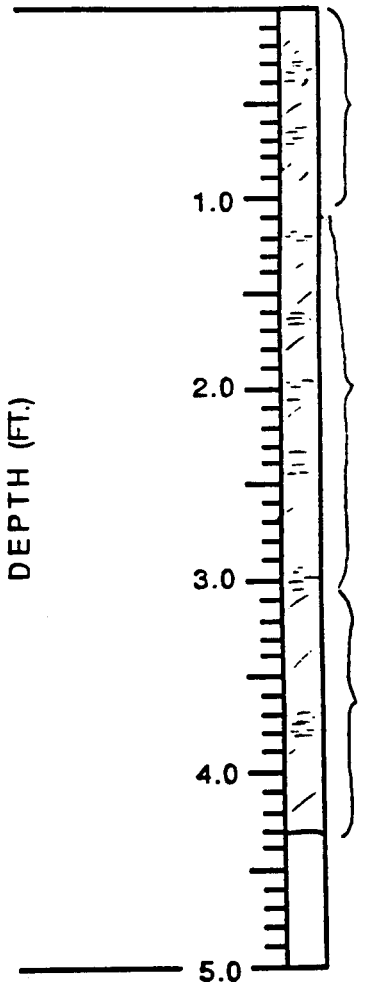
E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 2

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-12-87	CHK'D BY: CM 12/29/87
BORING NO.: B-11	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 8 TO 13
CORE LENGTH (FT.): 5	CORE RECOVERY : 4.3 (FT.) 86 (%)	RQD: 0 (%)	ROCK QUALITY : V. POOR

ROCK DESCRIPTION AND IDENTIFICATION

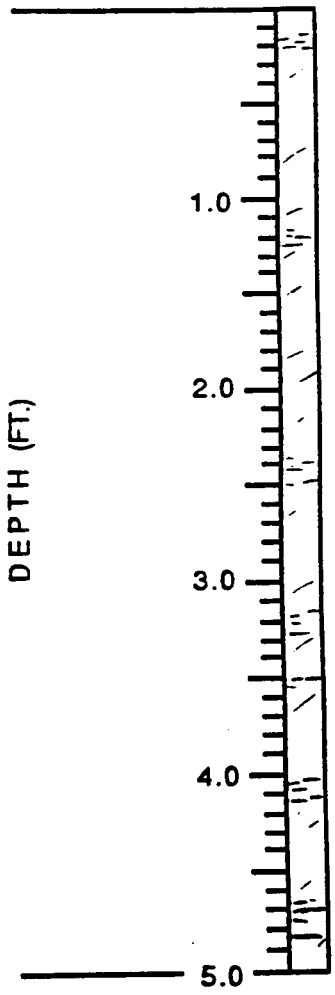


SHALE — DARK GRAY TO BLACK, THINLY BEDDED, W/ BEDS @ 35° TO 45° FROM HORIZONTAL. TOP 1' IS MODERATELY WEATHERED W/ MnO_2 & O_2 STAINING PROMINENT, BECOMES FRESH AT NEAR 11'. FRACTURE FACES AFTER 11' ARE FRESH & SHOW SLICKENSIDE FEATURES. BEDDING IS PARALLEL TO FRACTURES. NO PIECE IS AS LONG AS 3".

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 2

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-12-87	CHK'D BY: CN 12/29/87
BORING NO.: B-11	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 13 TO 18
CORE LENGTH (FT.): 5	CORE RECOVERY: 4 (FT.) 80 (%)	RQD: 80 (%)	ROCK QUALITY: V. GOOD



ROCK DESCRIPTION AND IDENTIFICATION

SHALE UNWEATHERED COMPETENT, FRESH, W/ BEDDING 15° TO 20° FROM HORIZONTAL

15.'-15.4' NATURAL JOINT - NO WEATHERING

17' HEALED V. THIN FRACTURE W/ CALCITE FILLING

MECHANICVILLE	TASK 3		BORING NO. B-12
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-18-87	COMPLTD. 11-18-87
METHOD H.S.A.	CASING SIZE 6" ID	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 98.3 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED NA	TOTAL DEPTH 25.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 13.45' (11-20-87)
SCREEN 11 (FT)	RISER 14.5 (FT)	MATERIAL PVC (SS) TF	ID 2" PAGE 1 OF 1

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA
	BKG	S-1		1.6		BKG	SILTY SAND: BLACK, MOIST, FIRM IN PLACE w/ ASH FILL & CLINKERS over Br. SILTYS., TR. GRAVEL, SLIGHTLY PLASTIC		SM	5 6 5 5	
		S-2		1.2			2.5' SAND: YELLOW BROWN, FINE SAND, TR. TO LITTLE GRAVEL, MOIST		SP	3 3 3 3	
5		S-3		.2						3 2 3 3	
		S-4		.3			6' SILTY SAND: BROWN, MOIST, LITTLE GRAVEL, SLIGHTLY PLASTIC OVER BROWN WELL SORTED MED. SAND, LITTLE FINE SAND, TR. GRAVEL		SM	7 8 10 10	
		S-5		.6						27 10 17 20	
10		S-6		.9			10' SILTY FINE SAND: BROWN TO DULL YELLOW, TR. TO LITTLE GRAVEL, FIRM IN PLACE, MOIST; SATURATED w/ OBSERVABLE CONTAMINATION AFTER 15.5'			9 11 24 15	
		S-7		1.0						11 10 7 9	
		S-8		.6		45				7 7 7 5	
15		S-9		1.1		10	16' SANDY SILT: BROWN TO OLIVE BROWN, TR. GRAVEL - GRADES TO WELL SORTED SAND & SILT		ML	3 4 2 3	
		S-10		.9		13	18' SILTY SAND & GRAVEL: BLACK, OLIVE BROWN & BROWN w/ ANGULAR COARSE FRAGMENTS (AS IN A TILL), SATURATED; CONTAMINATION DESTROYS LITHOLOGY			4 5 3 4	
20		S-11		.6		54			SM	3 3 3 3	
		S-12		1.3	Y	12	22' SILTY FINE SAND: GRAY, BROWN, V. WELL SORTED, PERMEABLE, LOOSE			5 4 3 3	
25		S-13		0.4		9				2 5 10 50/0.0	
							B.O.B. @ 25.5'				

PROPORTION
trace (tr)
little (li)
some (so)
and

(-)AMOUNT(+)
0-10%
10-20%
20-35%
35-50%

ABBREVIATION
f-fine gr-gray
m-medium br-brown
c-coarse blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	**TASK 3**	**BORING NO.** B-13
CLIENT **NYSEG**		PROJECT NO. 4945-03
CONTRACTOR **NORTH STAR DRILLING CO.**	DATE STARTED 11-10-87	COMPLTD. 11-18-87
METHOD H.S.A., CASING, CORING	CASING SIZE 4" I.D.	PID TIP #1
GROUND EL 98.6 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED 30'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87
SCREEN 10.8 (FT)	RISER 44.7 (FT)	MATERIAL PVC/SS TF

PROTECTION LEVEL D
TOTAL DEPTH 55.5'
▽ BELOW GROUND 15.67' (11-20-87)
ID 2"
PAGE 1 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % (20 40 60 80 100)	WELL DATA	EL. (FT)
0	BKG											
5												
10												
15		S-1		.6		10	GRAVELLY SILTY SAND (FILL) BROWN, WET, WITH VISIBLE COAL TAR SHEEN & ODOR		SM	27 30 50/.3		
20		S-2		1.2		50	SILTY SAND TAN, WET, TR. GRAVEL, W/ OBVIOUS COAL TAR CONTAMINATION			3 3 3 4		
25		S-3		2.0		22	23' GRAVELLY SILTY SAND BRN. TO GRAY BRN C. SAND TR. GRAVEL & SILT OVER WELL SORTED F. SAND, OVER WEATHERED ROCK,		SM/GM	2 2 2 5		
		S-4		1.0		10	25.5' BEDROCK LITTLE SLT, SAT., CONTAM.			4 50/.2		
30		R-1		97 %			SHALE BLACK, UNWEATHERED, HARD, THINLY LAMINATED					
35												

PROPORTION
trace (tr)
little (li)
some (so)
and

(-)AMOUNT(+)
0-10%
10-20%
20-35%
35-50%

ABBREVIATION
f-fine gr-gray
m-medium br-brown
c-coarse blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	TASK 3		BORING NO. B-13
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-10-87	COMPLTD. 11-18-87
METHOD H.S.A., CASING, CORING	CASING SIZE 4" I.D.	PID TIP #1	PROTECTION LEVEL D
GROUND EL 98.6 Rel.	SOIL DRILLED 25.5'	ROCK DRILLED 30'	TOTAL DEPTH 55.5'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN 10.8 (FT)	RISER 44.7 (FT)	MATERIAL PVC (SS) TF	ID 2" PAGE 2 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD % 20 40 60 80 100	WELL DATA	EL (FT)
35							SHALE BLACK, FRESH UNWEATHERED					
							BEDDING ON MM SCALE					
40		R-2		100 %								
45												
50		R-3		100 %								
							FRACTURE AT 55' PRODUCED COLORS ON RETURN WATER - CORE SHOWED VISIBLE COAL TAR CONTAMINATION					
55							B.O.B. @ 55.5'					
60												

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

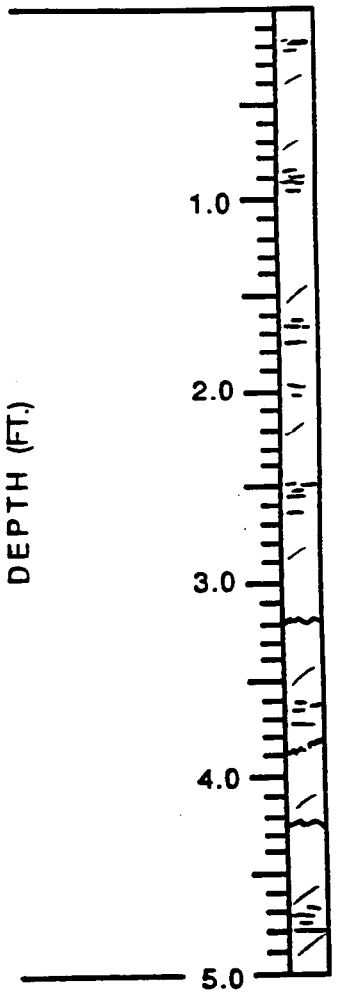
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-17-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 25 TO 35.5
CORE LENGTH (FT.): 10	CORE RECOVERY: 9.7 (FT.) 97 (%)	RQD: 95 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK, UNWEATHERED, HARD, THINLY LAMINATED,

BEDDING ∠'S FROM HORIZONTAL

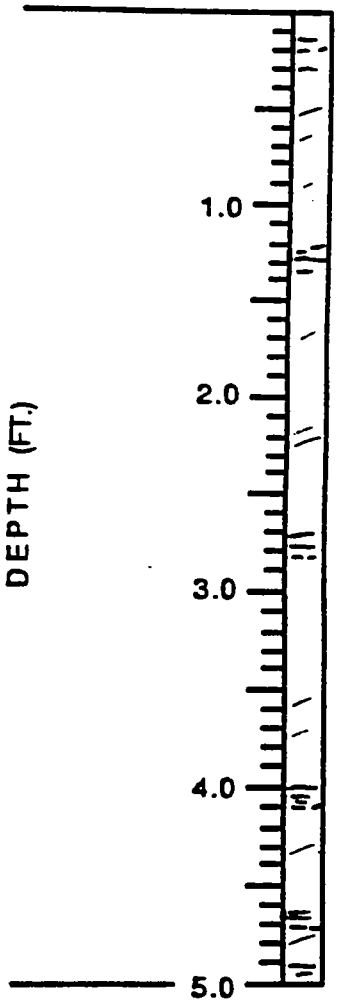
DEPTH	∠
26'	45-50°
28'	10°
30'	15°
32'	15°
34'	15°

AT : 33.4', 34', 31.7' HAVE V. SMALL JOINTING, HEALED.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-17-87	CHK'D BY: CML 12/29/87
BORING NO.: B-13	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 35 TO 45
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE
NO UNUSUAL FEATURES

BEDDING AT 15° TO HORIZONTAL

VISUAL IDENTIFICATION
ROCK CORES

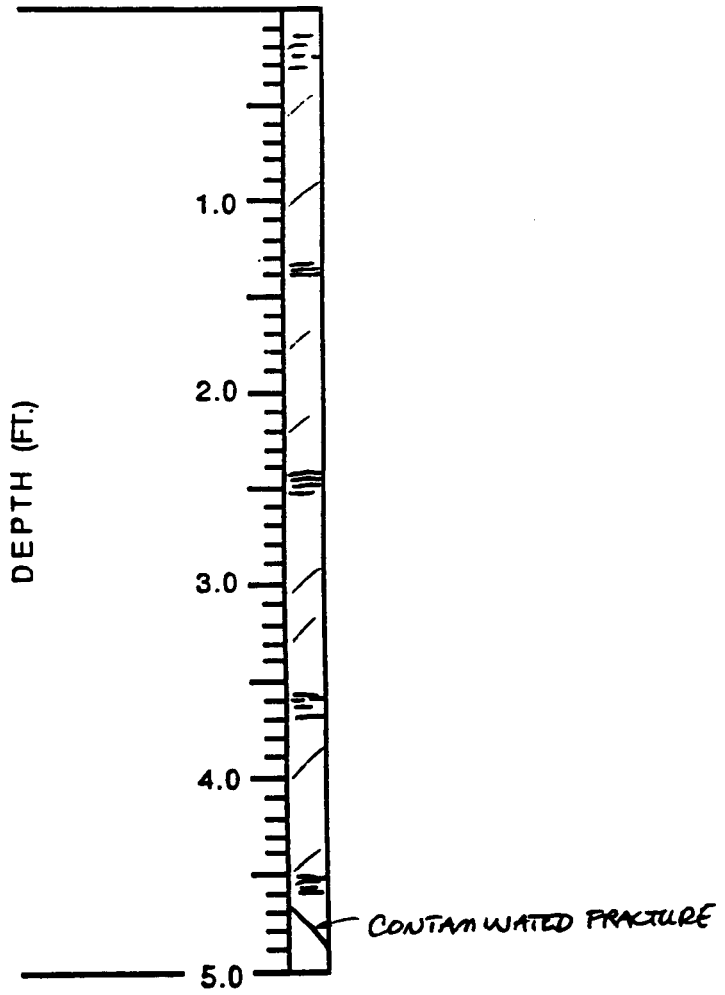
SHEET 3 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-18-87	CHK'D BY: CM 12/29/87
BORING NO.: B-13	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 45 TO 55.5
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.) 100(%)	RQD: 98 (%)	ROCK QUALITY : EXCELLENT

ROCK DESCRIPTION AND IDENTIFICATION

SHALE FRESH, UNWEATHERED, BLACK TO BLACKISH GRAY W/ THIN BEDDING ON MM SCALE

BEDDING AT 20° TO 25° FROM HORIZONTAL



55' - FRACTURE (ZONE) W/ GRAVEL SIZE SHALE FRAGMENTS & CALCITE FRAGMENTS HAS VISIBLE COAL TAR SMELL & SHEEN ON FRACTURE FACES (& RETURN WATER ALS.

55.3' - 2 HEALED FRACTURES @ 62°

55.5' - BEDDING OF 20° TO HORIZONTAL W/ FRACTURE @ 62° FROM HORIZONTAL

MECHANICVILLE TASK 3			BORING NO. B-14
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-9-87	COMPLTD. 11-19-87
METHOD H.S.A. & CORING	CASING SIZE 4" ID	PID TIP# 1	PROTECTION LEVEL D
GROUND EL 98.7 Rel.	SOIL DRILLED 23.5'	ROCK DRILLED 31.5'	TOTAL DEPTH 55'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 16.45' (11-20-87)
SCREEN 11 (FT)	RISER 30 (FT)	MATERIAL PVC (SS) TF	ID 2"

PAGE 1 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD %	WELL DATA	EL. (FT)
0	BKG	S-1		.8		BKG	SAND — BROWN, TRACE GRAVEL, DRY		SP	1 1 1 1		
		S-2		.4						1 1 1 1		
5		S-3		1.6			4.5' V. FINE SAND — BRIGHT ORANGE TO BRN, VARIED, LITTLE SILT, BLACK & DK. BRN. LENSES, BL. CINDER MAT'L. @ 7.5'			2 3 3 2		
		S-4		1.6			8'		SM	3 5 5 6		
		S-5		.5			GRAVELLY SANDY SILT — BROWN, ORANGE, DK. GRAY, SLIGHTLY PLASTIC, FIRM IN PLACES, MOIST			4 6 7 9		
10		S-6		1.1					ML	5 12 10 13		
		S-7		.6			14'			12 19 12 10		
15		S-8		1.2			V. FINE SAND 16' — OLIVE BRN, LITTLE SILT, TR. GRAVEL, MOIST, PROM. MOTTLES		SP	8 6 2 3		
		S-9		1.8			SILTY FINE SAND — BRIGHT ORANGE, OLIVE BROWN, TR. GRAVEL, V. WELL SORTED, MOIST W/ DK. BRN. MOTTLES; WET AFTER 18'; GRAY SHALE FRAGS. @ 20' - FIRM & WELL GRADED HERE			– 2 3 3		
20		S-10		1.0	Y				SM	6 11 12 13		
		S-11		.2						18 12 11 8		
		S-12		.2			22' WEATHERED ROCK - DK. GRAY TO BLACK FRESH SHALE FRAGS. W/ BR. MOTTLED SANDY SILT		GM	6 7 10 50/.1		
							23.5 BEDROCK					
25							SHALE — BLACK, THINLY LAMINATED, HARD, FRESH, UNWEATHERED					
30		R-1		95 %			AT 34.8', SET OF JOINTS - RETURN WATER SHOWED SOME COLORS OF CONTAMINATION					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

MECHANICVILLE	TASK 3		BORING NO. B-14
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-9-87	COMPLTD. 11-19-87
METHOD H.S.A. & CORING	CASING SIZE 4"ID	PID TIP #1	PROTECTION LEVEL D
GROUND EL 98.7 Rel.	SOIL DRILLED 23.5'	ROCK DRILLED 31.5'	TOTAL DEPTH 55'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND
SCREEN 11 (FT)	RISER 30 (FT)	MATERIAL PVC/SS/TF	ID 2" PAGE 2 OF 2

DEPTH (FT)	HNU AMB. AIR	SAMP. NO. & TYPE	SAMPLE	RECOVERY	ANALYTICAL	HNU HEADSPACE (ppm)	SOIL/ROCK DESCRIPTION	LITHOLOGIC SYMBOL	SOIL CLASS OR ROCK FRACTURES	BLOWS/6-IN RQD% 20 40 60 80 100	WELL DATA	EL. (FT)
35	BKG						SHALE					
		R-2		97 %			SOME DRILLERS BREAKS IN AN OTHERWISE FRESH, UNWEATHERED BLACK, THINLY LAMINATED BLACK SHALE					
40												
		R-3		100 %								
45												
		R-4		100 %							CUTTINGS & SAND	
50												
55							BOB @ 55'					

PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

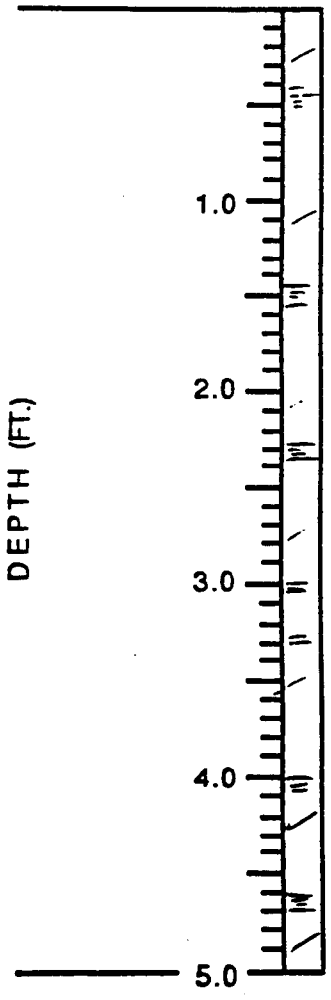
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 25 TO 35
CORE LENGTH (FT.): 10	CORE RECOVERY: 9.5 (FT.) 95 (%)	RQD: 83 (%)	ROCK QUALITY: GOOD



ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK THINLY LAMINATED, HARD, FRESH, UNWEATHERED

27.7' - 28.4' } MICRO FRACTURES THAT
31.4' - 32.4' } RETAIN WATER AS CORE DRIES

FROM 28' TO 35', NUMEROUS BREAKS - MOSTLY PARALLEL TO BEDDING

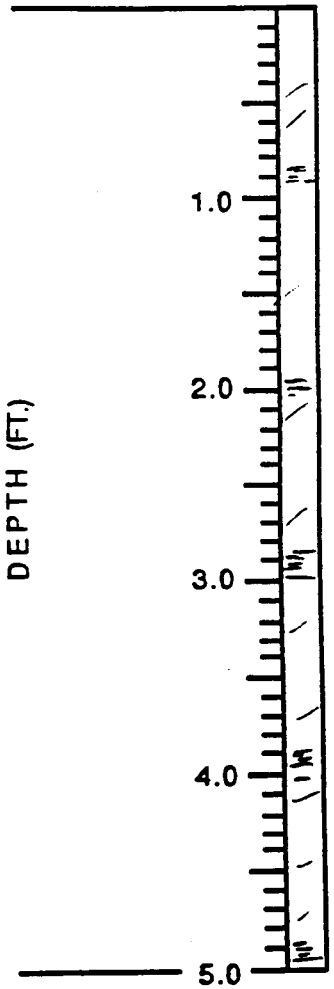
AT 33.8', HAVE A SET OF RANDOMLY ORIENTATED JOINTS; DURING DRILLING, THE RETURN WATER FROM THIS ZONE SHOWED A SHEEN; CORE GIVE NO TIP READINGS

BEDDING	DEPTHS	ANGLES
	26'	25°
	31'	35°
	34'	20°

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 35 TO 42
CORE LENGTH (FT.): 7	CORE RECOVERY: 6.8 (FT.) 97 (%)	RQD: 91 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

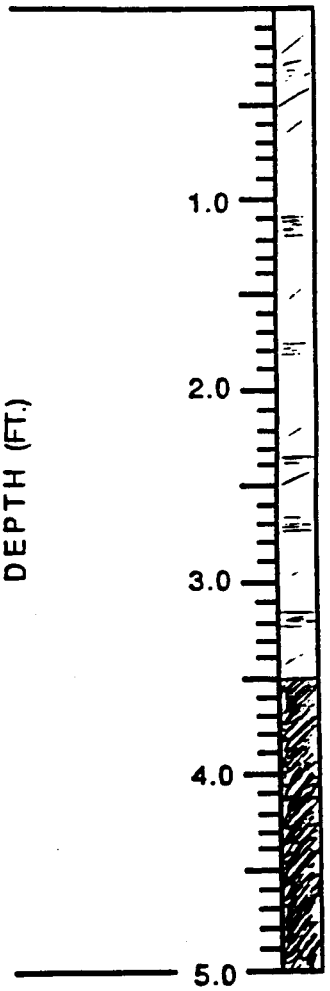
SHALE AS ABOVE

38.7' to 41' HIGH ANGLE FRACTURES 80° FROM HORIZONTAL - REHEALED & LINED W/ CALCITE - NO APPARENT WEATHERING - BROKE DUE TO DRILLING ACTION

VISUAL IDENTIFICATION
ROCK CORES

SHEET 3 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 42 TO 45
CORE LENGTH (FT.): 3	CORE RECOVERY: 3 (FT.)/100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE

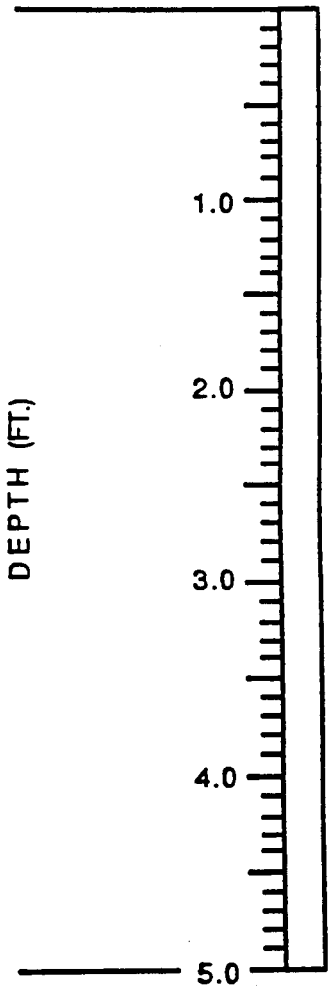
BEDDING	DEPTHS	ANGLES
	36'	20°
	40'	15°
	42'	15°

VISUAL IDENTIFICATION
ROCK CORES

SHEET 4 OF 4

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-19-87	CHK'D BY: CM 12/29/87
BORING NO.: B-14	SAMPLE: R-4	CORE DIA. (IN.): 2	DEPTH (FT.): 45 TO 55
CORE LENGTH (FT.): 10	CORE RECOVERY : 10 (FT.) 100 (%)	RQD: 98 (%)	ROCK QUALITY : EXCELLENT

ROCK DESCRIPTION AND IDENTIFICATION

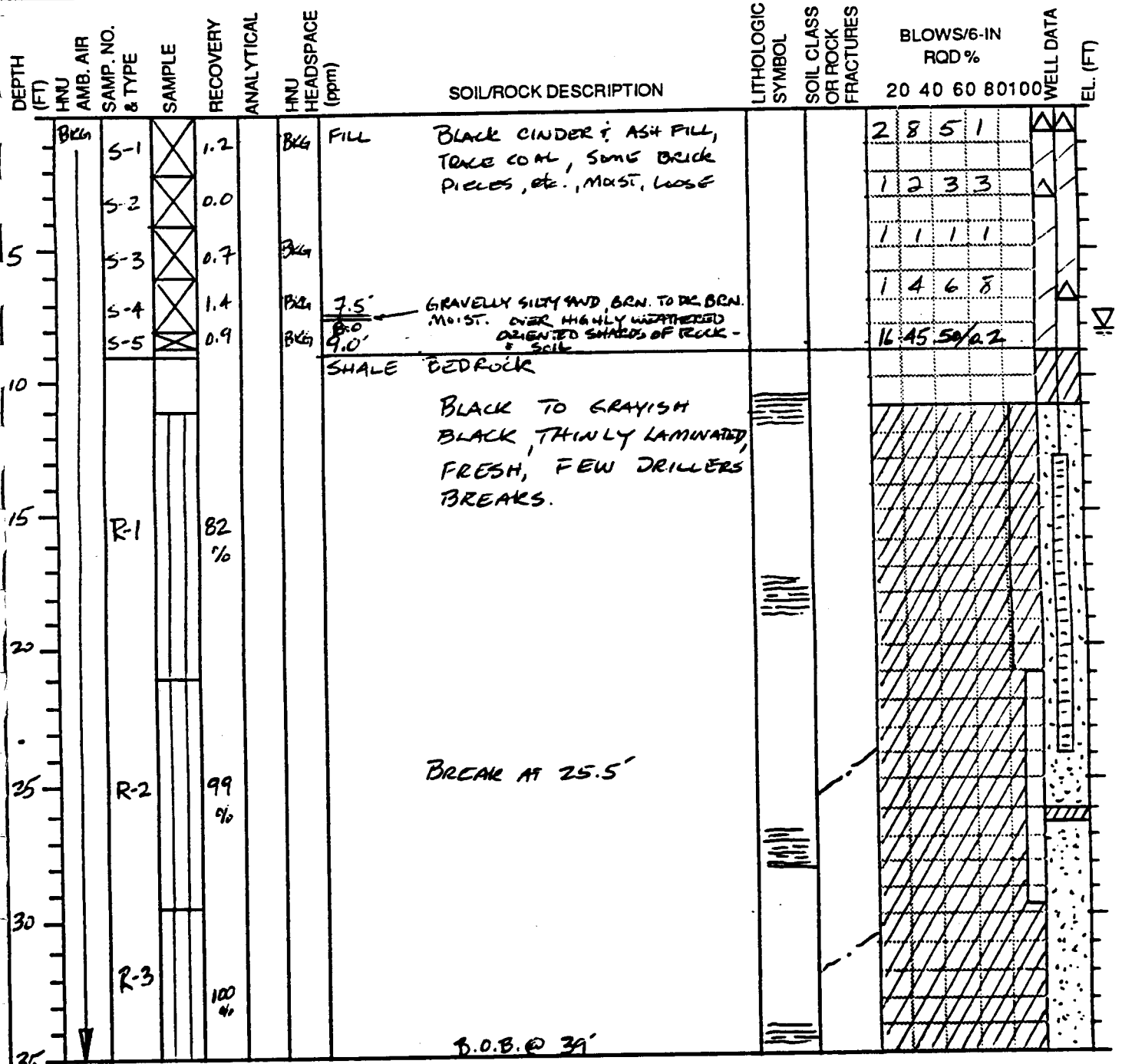


SHALE AS ABOVE
COMPETENT, FRESH, NO WEATHERING
HARD

SOME DRILLERS BREAKS

MECHANICVILLE	TASK 3		BORING NO. B-15
CLIENT NYSEG			PROJECT NO. 4945-03
CONTRACTOR NORTH STAR DRILLING CO.		DATE STARTED 11-13-87	COMPLTD. 11-17-87
METHOD H.S.A. & CORING	CASING SIZE 4" I.D.	PID TIP # 1	PROTECTION LEVEL D
GROUND EL 88.5 Rel.	SOIL DRILLED 8.7'	ROCK DRILLED 30.3'	TOTAL DEPTH 39'
LOGGED BY T. LONGLEY	CHECKED BY CM	DATE 12/29/87	▽ BELOW GROUND 8.19' (11-20-87)
SCREEN 11 (FT)	RISER 13 (FT)	MATERIAL PVC (SS) TF	ID 2"

PAGE 1 OF 1



PROPORTION	(-)AMOUNT(+)
trace (tr)	0-10%
little (li)	10-20%
some (so)	20-35%
and	35-50%

ABBREVIATION	
f-fine	gr-gray
m-medium	br-brown
c-coarse	blk-black

BKG = BACKGROUND

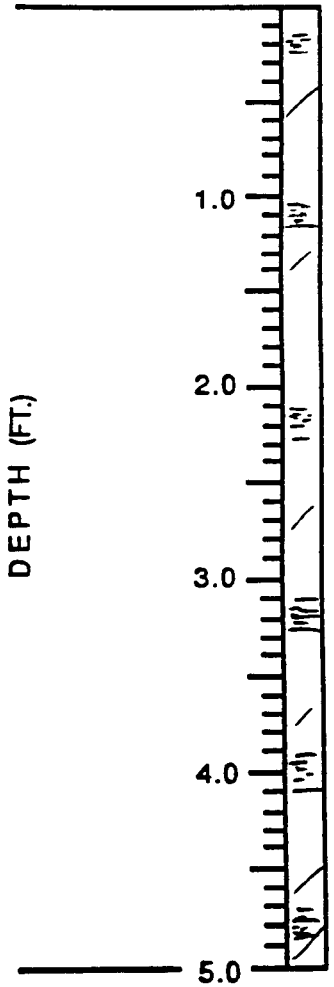
* U= THIN WALL S= SPLIT SPOON R= ROCK

E.C. JORDAN CO.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 1 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CM 12/29/87
BORING NO.: B-15	SAMPLE: R-1	CORE DIA. (IN.): 2	DEPTH (FT.): 11 TO 21
CORE LENGTH (FT.): 10	CORE RECOVERY: 10 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



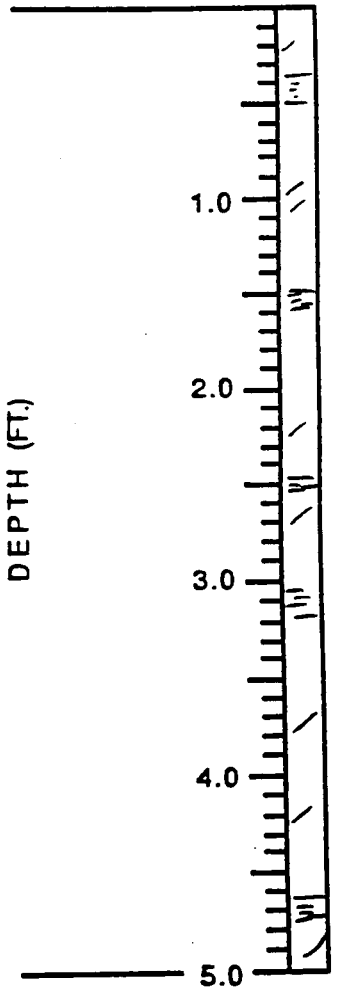
ROCK DESCRIPTION AND IDENTIFICATION

SHALE BLACK TO GRAYISH BLACK, THINLY LAMINATED, FRESH, BEDDING AT 50° TO HORIZONTAL, HARD CALCITE LAYERS IN MM SCALE PARALLEL TO BEDDING. A FEW DRILLERS BREAKS.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 2 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CN 12/29/87
BORING NO.: B-15	SAMPLE: R-2	CORE DIA. (IN.): 2	DEPTH (FT.): 21 TO 29.5
CORE LENGTH (FT.): 8.5	CORE RECOVERY : 8.4 (FT.) 99 (%)	RQD: 94 (%)	ROCK QUALITY : EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

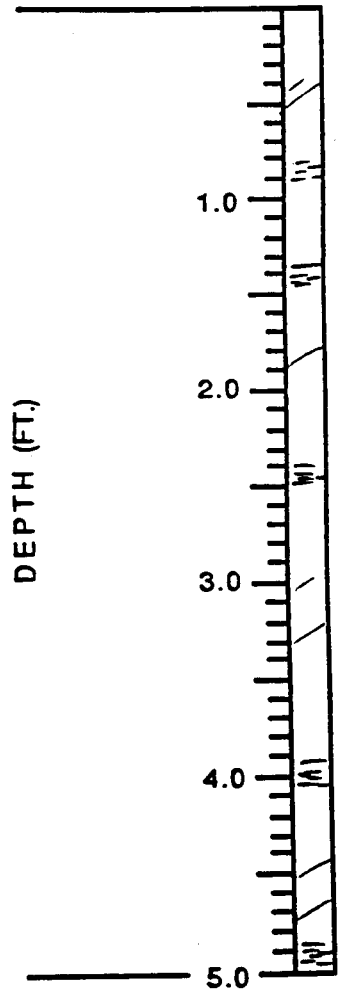
SHALE AS ABOVE; SOME DISSEMINATED PYRITE PRODUCED H_2S SMELL WHILE DRILLING

25.5' - NATURAL BREAK @ 40° FROM HORIZONTAL - IN REHEALED FRACTURE ZONE - SOME SERICITE HERE.

VISUAL IDENTIFICATION
ROCK CORES

SHEET 3 OF 3

JOB NO.: 4945-03	BY: NORTH STAR	DATE: 11-16-87	CHK'D BY: CM 12/29/87
BORING NO.: B-15	SAMPLE: R-3	CORE DIA. (IN.): 2	DEPTH (FT.): 29.5 TO 39
CORE LENGTH (FT.): 9.5	CORE RECOVERY: 9.5 (FT.) 100 (%)	RQD: 100 (%)	ROCK QUALITY: EXCELLENT



ROCK DESCRIPTION AND IDENTIFICATION

SHALE AS ABOVE

BEDDING DEPTHS	∠ FROM HORIZ.
30'	45°
34'	40°
37'	35°
39.5'	25°

AT 31.8', 35.6, & 36.4' HAVE FRACTURES BUT THEY ARE FRESH & UNWEATHERED

FIELD BORING LOG

BORING NO.: B-16 (MW-16)

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/17/93	Date Completed: 5/17/93
Method: HSA	Casing Size: 4.25" ID	PID: TE 508 B	Protection Level: mod B D
Ground Elev.: 9528 ft MSL	Soil Drilled: 16'	Total Depth: 16'	Ground Water Depth (BGS): ≈ 8
Logged by: NJG		Checked by: NJG	Date: 6/16/93

Page

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	0.0	S-1 0-2'			2.0/2.0	0.0	DARK BROWN SAND & SILT SOME ORGANICS, TRACE BROKEN GLASS, TRACE BRICK, MOD. DENSE, PR GRADED, MOIST	FILL	5-5-3-7		0
2	0.0	S-2 2-4'			1.2/2.0	0.0	DARK BROWN F. SAND AND GRAVEL, PR GRADED, DENSE, MOIST, (GRAVEL CONSIST OF SHALE FRAGMENTS)	FILL	5-6-2-7		2
4	0.0	S-3 4-6'			2.0/2.0	0.0	DARK BROWN TO BLACK SHALE FRAGMENTS IN F. SAND AND SILT MATRIX, PR GRADED, DENSE, MOIST AT 5.2' BGS. WEATHERED ROCK IN TIP OF SPOON	GP	10-15-25-45		4
6	0.0	S-4 4-8'	✓		1.6/1.6	0.0	DARK BROWN TO GREY F. SAND AND WEATHERED SHALE, TR. SILT, DENSE PR. GRADED, DRY	GP	22-55-80-100/0.1		6
8	0.0	S-5 8-10'			0.8/2.0	0.0	GREY WEATHERED SHALE, SOME SILT, PR GRADED, DRY. (WEATHERED BEDROCK)		55-100/0.3		8
10											10
12	0.0	S-6 11.5-13.5			0.0/0.1	0.0	NO RECOVERY		100/0.1		12
14	0.0	S-7 13.5-			0/0	0.0	NO RECOVERY.		100/0.0		14
16							B03 16' BGS				16
18											18

FIELD BORING LOG

BORING NO.: B-17 (MW-17)

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/18/93	Date Completed: 5/18/93
Method: HSA	Casing Size: 4.25" ID	PID: TE 508 B	Protection Level: mod D
Ground Elev.: 98.18 ft MSL	Soil Drilled: 20'	Total Depth: 22.5' BGS	Ground Water Depth (BGS): 19.4'
Logged by: NSG		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	0.0	S-1 0-2'			1.2/2.0	0.0	DARK BROWN F. SAND & SILT, TR F. GRAVEL (TOP 3" IS ASPHALT AND GRAVEL) COBBLE IN TIP OF SPOON, FR GRADED, MOIST.	FILL	5-6-6-27		0
2	0.0	S-2 2'-4'			1.2/2.0	0.0	DARK BROWN F. SAND, SOME SILT, 2" GRAVEL LAYER AT @ 3.5' BGS. BELOW GRAVEL, SOIL CONTAINS SOME TO LITTLE GRAVEL	FILL	20-25-20-12		2
4	0.0	S-3 4-6'			0.6/2.0	0.0	BROWN SILT & F. SAND, LITTLE F GRAVEL, SLIGHT COAL ODOR, PIECE OF COAL (< 0.05') WITH BLACK STAINING VERY DENSE, MOIST	FILL	14-8-6-5		4
6	0.0	S-4 6-8'			0.2/2.0	0.0	BROWN GRAVEL IN SILT & F. SAND MATRIX, TR COAL FRAGMENTS, PR GRADED, MOIST	FILL	5-3-3-3		6
8	0.0	S-5 8-10'			1.3/2.0	0.0	BROWN TO BLACK F. SAND & SILT, SOME TO LITTLE GRAVEL, SLIGHT ODOR (POSSIBLY PEAT) TR GLASS, TR PEAT, TR BRICK, PR GRADED LOOSE, MOIST.	FILL	7-5-4-4		8
10	0.0	S-6 10-12'			0.4/2.0	0.0	BROWN GRAVEL IN F. SAND MATRIX, SOME SILT, PR GRADED, LOOSE, DAMP TO MOIST.	FILL	4-6-7-8		10
12	0.0	S-7 12-14'			1.4/2.0	0.0	TOP 0.2' AS S-6 (FILL) 12.7-14.0' BROWN F. SAND AND SILT, SOME SHALE FRAGMENTS, WELL GRADED, MOIST	FILL GW-SW	15-8-7-7		12
14	0.0	S-8 14-16			0/2.0	0.0	NO RECOVERY, ROCK IN TIP		14 16-21-22		14
16	0.0	S-9 16-18			0.4/2.0	0.0	BROWN ROUNDED GRAVEL IN SILT AND F. SAND MATRIX, LOOSE, PR GRADED, MOIST	GP/SP	6-11-19-12		16
18											18

FIELD BORING LOG

BORING NO.: B-17 (MW-17)

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/18/93	Date Completed: 5/19/93
Method: HSA	Casing Size: 4.25" ID	PID: TE 508 B	Protection Level: mod D
Ground Elev.: 518.18 ft MSL	Soil Drilled: 20'	Total Depth: 22.5' BGS	Ground Water Depth (BGS): 19.4'
Logged by: NSG		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
18											
	0.0	S-10 18-20	V (PID)		2.0 / 2.0	0.0	BROWN TO GREY F. SAND AND SILT FIRM, DENSE, PR GRADED, SATURATED	SP/SP	7-6-6-5		
20											
	0.0	S-11 20-22'			2.0 / 2.0	0.0	GREY TO BROWN F. SAND, LITTLE SILT, SOME FE STAINING, 0.1' LAYER OF SHALE AT 21.7' BGS LOOSE TO FIRM, PR GRADED, SATURATED	SP	7-10-11-14		
22											
	0.0	S-12 22-24'			0.8 / 0.8	0.0	GREY TO BROWN F. SAND, LITTLE SILT, SOME FE STAINING, LOOSE, PR GRADED, SATURATED	SP	63 - 100/0.3		
24							BEDROCK AT 22.5' BGS				
							BOT = 22.5' BGS				
26											

▽ 19.4

FIELD BORING LOG

BORING NO.: B-18/MW-18

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/18/93	Date Completed: 5/18/93
Method: 4¼ ID / CORE	Casing Size: 4" ID	PID: TE 508 B	Protection Level: MOD D.
Ground Elev.: 98.10 ft MSL	Soil Drilled: 23	Total Depth: 38	Ground Water Depth (BGS): 18
Logged by: NSG		Checked by: WJC	Date: 6/16/93

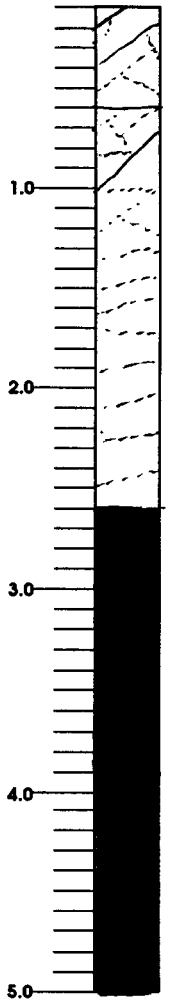
Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
							CASING ADVANCE TO 23' BGS. SEE BORING LOG FROM B-17/MW-17 FOR SOIL DESCRIPTIONS.				0
							– BEDROCK AT 23' BGS SEE VISUAL IDENTIFICATION ROCK CORES FOR DESCRIPTION				20
							BOR = 38' BGS				40

VISUAL IDENTIFICATION ROCK CORES

B-18/MW-18

Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-1	Core Recovery: 2.6'
	Date 5/19/93	Core Diameter(in): NX = 3"	Required 92 %
Drilling Co.: Empire Soils, Inc.	Boring No.: B-18/MW-18	Depth (ft): 23-27'	Rock Quality: EXCELLENT
Logged by: MJC	Checked by: MJC	Core Length: 4.0'	Sheet 1 of 4

CORE RECOVERY (FT.)



TOTAL 2.6 FT.

65 (%)

0.3 FT CORE RECOVERY

0.7

1.7

TOTAL 2.4 FT.

92 (%)

ROCK DESCRIPTION AND IDENTIFICATION

DARK BLUE-GREY SHALE, VARIES AT APPROXIMATELY 30°

SILT AND ROCK FLOUR PRESENT ON MECHANICAL AND NATURAL FRACTURES.

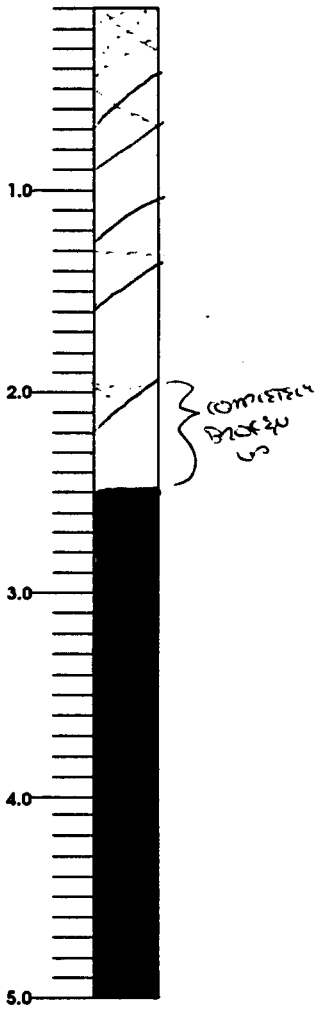
APPROXIMATELY 1.5' LOST TO ROCK FLOUR. MOST MECHANICAL FRACTURES ARE ROUNDED SUGGESTING "ROLLING" IN THE CORE BARREL.

VISUAL IDENTIFICATION ROCK CORES

B-18/MW-18

Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-2	Core Recovery: 2.0
	Date 5/19/93	Core Diameter(in): NX (3")	Required 46 %
Drilling Co.: EMPIRE SOILS, INC.	Boring No.: B-18/MW-18	Depth (ft): 27.5 - 30	Rock Quality: FAIR/POOR
Logged by: NSG	Checked by: NSG	Core Length: 2.5'	Sheet 2 of 4

CORE RECOVERY (FT.)



TOTAL 2.5 FT.

100 (%)

0.3 FT CORE RECOVERY

0.35

0.3

0.5

TOTAL 1.15 FT.

46 (%)

ROCK DESCRIPTION AND IDENTIFICATION

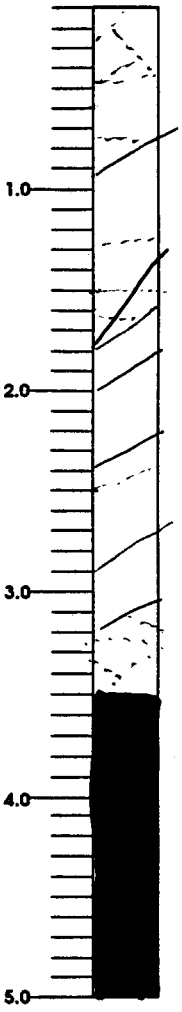
DARK BLUE-GREY SHALE

SOME CALCITE INTRUSIONS

ALL MECHANICAL FRACTURE ARE VERY "WEATHERED" BY THE CORE BARREL

VISUAL IDENTIFICATION ROCK CORES			B-18 / MW-18
Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-3	Core Recovery: 35
	Date 5/19/93	Core Diameter(in): NX (3")	Required 66 %
Drilling Co.: Empire Soils, Inc.	Boring No.: B-18 / MW-18	Depth (ft): 30'-34'	Rock Quality: FAIR
Logged by: NSC	Checked by: NSC	Core Length: 4.0	Sheet 3 of 4

CORE RECOVERY (FT.)



0.3 FT CORE RECOVERY

0.8

0.7

0.4

0.4

ROCK DESCRIPTION AND IDENTIFICATION

DARK BLUE-GREY SHALE, SOME CALCITE INTRUSIONS

DARK GREY TO BLACK VARVES AT 30° AT A 1" INTERVALS

TOTAL 3.5 FT.

88 (%)

TOTAL 2.3 FT.

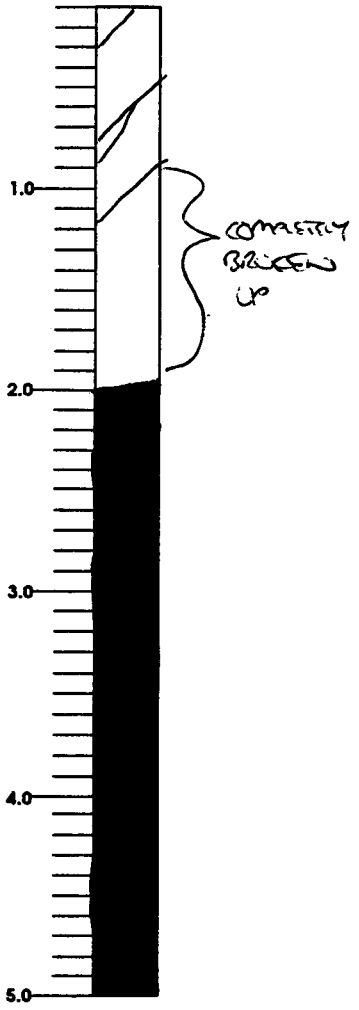
66 (%)

VISUAL IDENTIFICATION ROCK CORES

B-18 / MW-18

Client: **NYSEG - Mechanicville Site**	Project No.: 4945-10	Sample: S-4	Core Recovery: 2'
	Date	Core Diameter(in): NX (3")	Required 38 %
Drilling Co.: Empire Soils, Inc.	Boring No.: B-18 / MW-18	Depth (ft): 34-38	Rock Quality: POOR
Logged by: NSG	Checked by: NSG	Core Length: 4'	Sheet 4 of 4

CORE RECOVERY (FT.)



TOTAL 2.0 FT.

50 (%)

0.3 FT CORE RECOVERY

0.45

0.3

TOTAL 0.75 FT.

38 (%)

ROCK DESCRIPTION AND IDENTIFICATION

DARK BLUE-GREY SHALE, SOME CALCITE INTRUSIONS, DARK-GREY VEINS AT APPROX 30°, 1" APART.

FIELD BORING LOG

BORING NO.: B-20

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: Drive Split Spoon	Casing Size: 2" ID	PID: TE 508 B	Protection Level: MOD. D
Ground Elev.: 892 ft MSL	Soil Drilled: 12'	Total Depth: 12'	Ground Water Depth (BGS):
Logged by: NSG, DBD		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	0.0	S-1 0'-2'			1.1/2.0	0.0	GRAY F. SAND AND SOME SILT, LITTLE GRAVEL, LITTLE COARSE SAND, WELL GRADED LOOSE, DRY	~~SW~~ FILL	26 20-10-5		0
2	0.0	S-2 2'-4'				4.8	GRAY, ROOTS SAND AND GRAVEL STRONG HYDROCARBON ODOR, LOOSE, SATURATED	FILL	4-5-4-3		2
4	NA	S-3 4'-6'				NA*	NO RECOVERY		4-3-1-1		4
6	NA	S-4 6'-8'				NA	NO RECOVERY, SHEEN ON SPOON		1-1-1-1		6
8	0.0	S-5 8'-10'				6	BLACK COAL TAR AND CS. SAND. INTENSE HYDROCARBON ODOR * DRILLER INDICATED A "TILE" LIKE STRUCTURE AT 2.9' BGS	FILL	7-20-55-31		8
10		S-6 10'-12'					10-10.2 BLACK CS SAND AND COAL TAR INTENSE HYDROCARBON ODOR 10.2-10.9 WEATHERED BEDROCK REFUSAL AT 10.9' BGS	FILL	34-100/0.1		10
12							BOB ~~10~~ = 12' BGS				12
14											14
16							* PID IS NOT ACCURATE DUE TO RAIN AND HUMIDITY				16

FIELD BORING LOG

BORING NO.: B-21

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: DRIVE SPLIT SPOON	Casing Size:	PID: TE 5083	Protection Level: MOD. D
Ground Elev.: ~~887~~ ft MSL	Soil Drilled: 10'	Total Depth: 10	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NJG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	+	S-1 0-2			1.0/2.0	*	DARK BROWN SILT AND F SAND, LITTLE TO SOME CS SAND, POORLY GRADED, MOIST, STRONG HYDROCARBON ODOR	SW	12-6-6-7		0
2		S-2 2-4			1.0/2.0		DARK BROWN TO BLACK SILT AND F SAND, COAL TAR PRESENT, STRONG ODOR, MOIST, POORLY GRADED, LOOSE	SP	2-3-2-3		2
4		S-3 4-6			1.5/2.0		4-5' BLACK F TO MED SAND POORLY GRADE, LOOSE SATURATED, VISIBLE CONTAMINATION, STRONG ODOR 5'-5.5' BLACK CS SAND, VISIBLE CONTAMINATION STRONG ODOR, POORLY GRADED, LOOSE, SATURATED	SP	2-2-1-1		4
6		S-4 6-8			0.5/2.0		BROWN F SAND, SOME SILT LOOSE, PR GRADED STRONG HYDROCARBON ODOR SATURATED	SP	1-1-1-1		6
8		S-5 8-10			0.4/0.4		BLACK F SAND AND SILT, LARGE LOSS, PIECE OF WOOD VISIBLE CONTAMINATION, STRONG HYDROCARBON ODOR SATURATED	SP	100/0.4		8
10							B63 = 10' BGS				10
12							* PID IS NOT LOOKING DUE TO RAIN AND HUMIDITY				12
14											14

FIELD BORING LOG

BORING NO.: B-22

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: Drive Split Spoon	Casing Size: 3" ID	PID: TE 508 B	Protection Level: mod B
Ground Elev.: 871.2 ft MSL	Soil Drilled: 8	Total Depth: 8' BGS	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Reid UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	*	S-1 0-2'			1.5/2.0	*	0-0.7' BROWN F SAND, SOME SILT 0.7-1.1' BLACK F COAL 1.1-1.5 BROWN SHALE FRAGMENTS IN F SAND MATRIX, STRONG ODOR.	FILL	11-11-7-7		0
2		S-2 2-4'			0.5/2.0		GREY CS SAND, AND F SAND W/ PIECES OF WOOD, SLIGHT SHEEN, HYDROCARBON ODOR, WELL-GRADED LOOSE, MOIST.	FILL	4-4-4-4		2
4		S-3 4'-6'			1.5/2.0		BROWN CS SAND AND F SAND GRADING TO F SAND AND SILT AT ≈ 4.3' BGS 5.0'-5.5' WEATHERED SHALE. STRONG HYDROCARBON ODOR.	FILL	1-3 11-20		4
6		S-4 6-8'			1.8/1.9		BROWN-GRAY WEATHERED SHALE. SATURATED, STRONG HYDROCARBON ODOR	FILL/BEDROCK			6
8							B03 - 8' * PID IS NOT WORKING DUE TO HUMIDITY AND RAIN				8
10											10
12											12
14											14

FIELD BORING LOG

BORING NO.: B 23

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: DRIVE SPLIT SPOON	Casing Size: 2" ID	PID: TE 5088 B	Protection Level: MOD D
Ground Elev.: 893 ft MSL	Soil Drilled: 6	Total Depth: 6	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NJG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	*	S-1 0'-2'			06/20	*	DARK BROWN CS SAND, TR F. SAND, TR MED SAND, LOOSE GRAVEL NO HYDROCARBON ODOR, DRY	SW	7-7-5-5		0
2		S-2 2'-4'			0.4/20		DARK BROWN CS SAND, TR F SAND, TR MED SAND, TR GRAVEL, LOOSE GRAVEL, SLIGHT HYDROCARBON ODOR, SLIGHT SHEEN, MOIST.	SW	3-10-5-3		2
4		S-3 4'-6			1.2/2.0		BROWN WEATHERED SHALE	BEDROCK FILL	3-10-12-80		4
6							BOB = 6' BGS				6
8							* PID NOT LOOKING OUT TO HUMIDITY AND RAIN.				8
10											10
12											12
14											14
16											16

FIELD BORING LOG

BORING NO.: B-24

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: D2in split spoon	Casing Size: 2" ID	PID: TE 508 B	Protection Level: mod D
Ground Elev.: 889 ft MSL	Soil Drilled: 6'	Total Depth: 6'	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NSG	Date: 6/16/93

Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0	1	S-1 0'-2'			0.8/2.0	1	DARK BROWN CS SAND, F. SAND SOME GRAVEL, WELL GRADED, DENSE NO ODOR, DRY	FILL	5-7-60-5		0
2		S-2 2'-4'			0.6/2.0		BLACK SILT, SOME CS SAND, STEEN ON OUTSIDE OF SPOON, DRY, DENSE	FILL	3-2-3-5		2
4		S-3 4'-6'			1.4/2.0		BLACK CS. SAND, VISIBLE CONTAMINATION (COAL TAR), STRONG HYDROCARBON ODOR, WEATHERED SHALE IN BOTTOM OF SAMPLE, DRY	FILL / BED. ROCK	10 12-25-100/0.3		4
6							BOB = 6' PID NOT WORKING DUE TO RAIN AND HUMIDITY				6
8											8
10											10
12											12

FIELD BORING LOG

BORING NO.: B 25

Client: **NYSEG-MECHANICVILLE SITE**			Project No.: **4945-10**
Contractor: **Empire Soils, Inc.**		Date Started: 5/20/93	Date Completed: 5/20/93
Method: DRIVE SPLIT SPOON	Casing Size: 2" ID	PID: TE 580 B	Protection Level: MOD D
Ground Elev.: ft MSL	Soil Drilled: 8'	Total Depth: 8	Ground Water Depth (BGS):
Logged by: DBD		Checked by: NSL	Date: 6/16/93

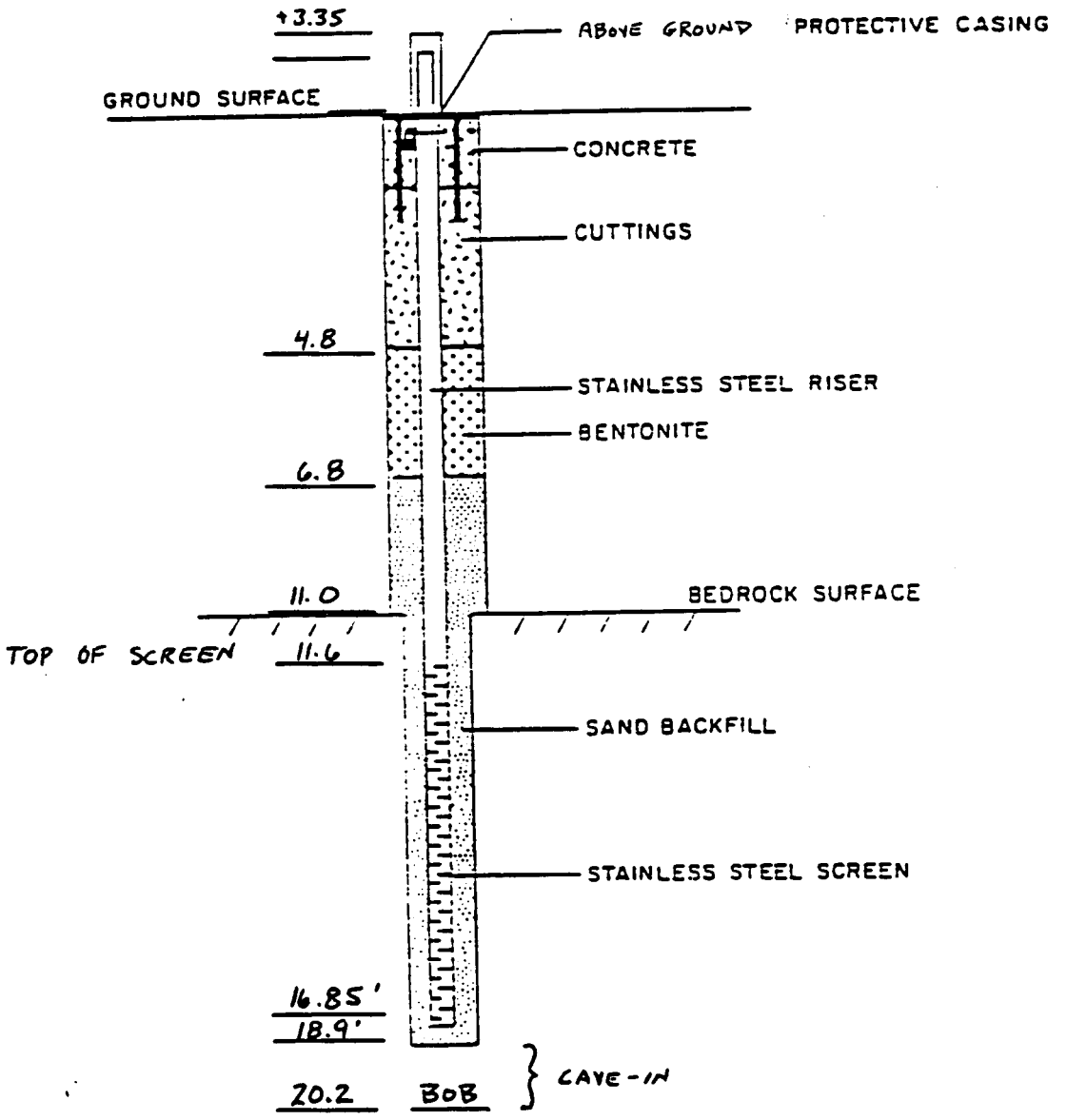
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Depth (FT)	PID AIR (PPM)	Sample Number and Depth	LAB Analysis	Field UV/IR	Recovery/ Penetration	PID Sample (PPM)	Soil/Rock Description	Soil Class	Blows/6 inches	Well Data	Depth (FT)
0											
	0.0	S-1 0-2'			0.6/2.0	0.0	DARK BROWN CS. SAND, TR. F-MED SAND, M GRAVEL WELL GRADED, DRY	FILL	10-9-5-9		
2	0.0	S-2 2'-4'			0.5/2.0	15	GRAY TO BLACK CS SAND, TR. F-MED SAND, M GRAVEL, VISIBLE PRODUCT, STRONG ODOR, SATURATED	FILL	6 5-2-2		
4	0.0	S-3 4-6			1.0/2.0	0.0	BLACK CS SAND, SOME WOOD CHIPS, VISIBLE PRODUCT, VERY STRONG HYDROCARBON ODOR, SATURATED	FILL	7-9-7-0*		
6	0.0	S-4 6-8'			0.6/0.6	0.0	SIMILAR TO S-3	FILL	7-100/0.1		
8							BOB = 8'				
10							* AT THIS POINT, SPLIT SPOON ADVANCED TO 8' BGS.				

MONITORING WELL INSTALLATION DIAGRAM

ROJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-1
ILLED BY L. ESPY S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
E . DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

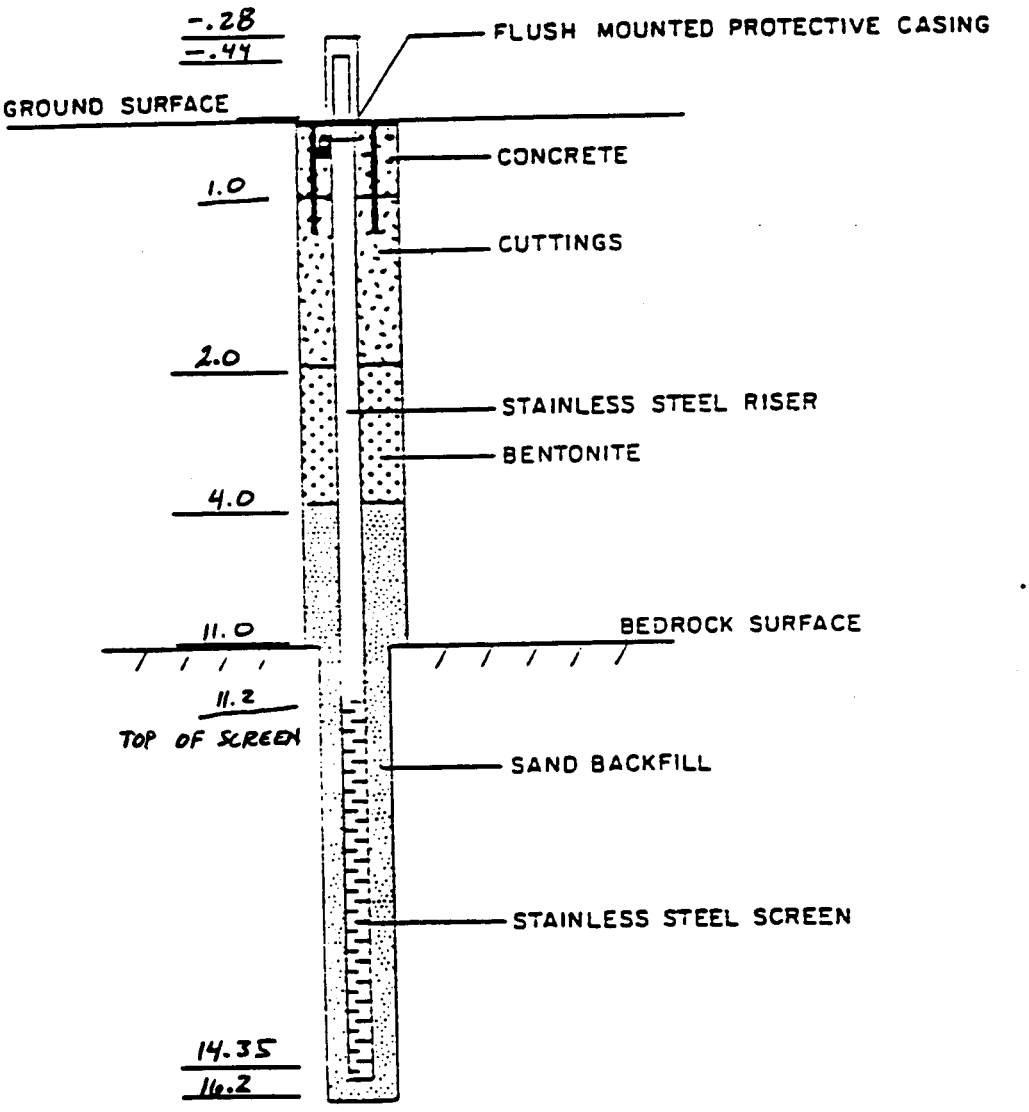
L , FT. DEPTH, FT.



MONITORING WELL INSTALLATION DIAGRAM

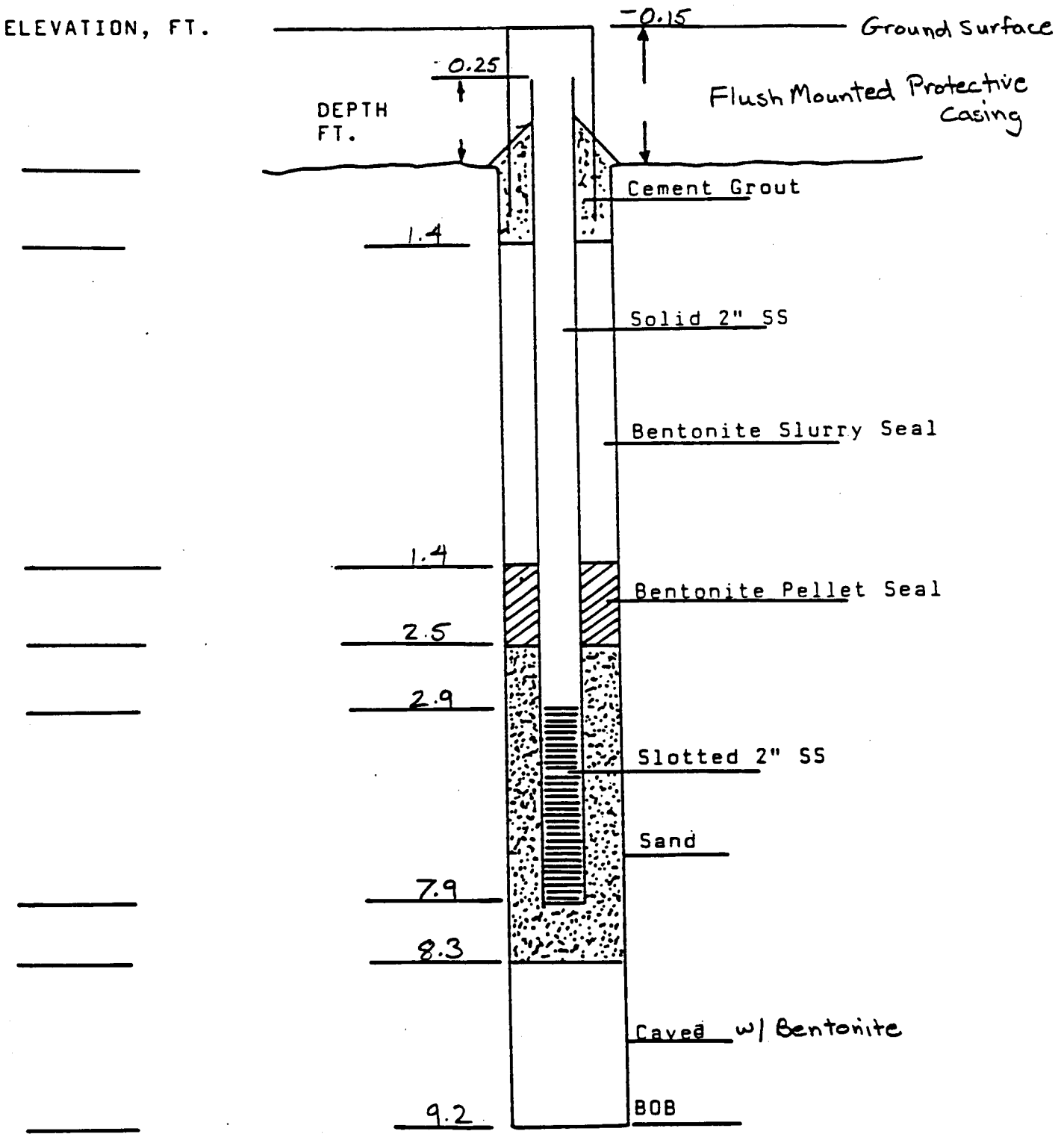
OJECT NO. 4945-02	PROJECT NAME NYSEG MECHANICVILLE	WELL NO. MW-2
STALLED BY L. ESPY S. WIBBY	DATE INSTALLED 8/1/86	BORING DIAMETER 8.75"
WELL DIAMETER 2.0"	WELL MATERIAL SS	BACKFILL MATERIAL #3 JERSEY SAND

EV., FT. DEPTH, FT.



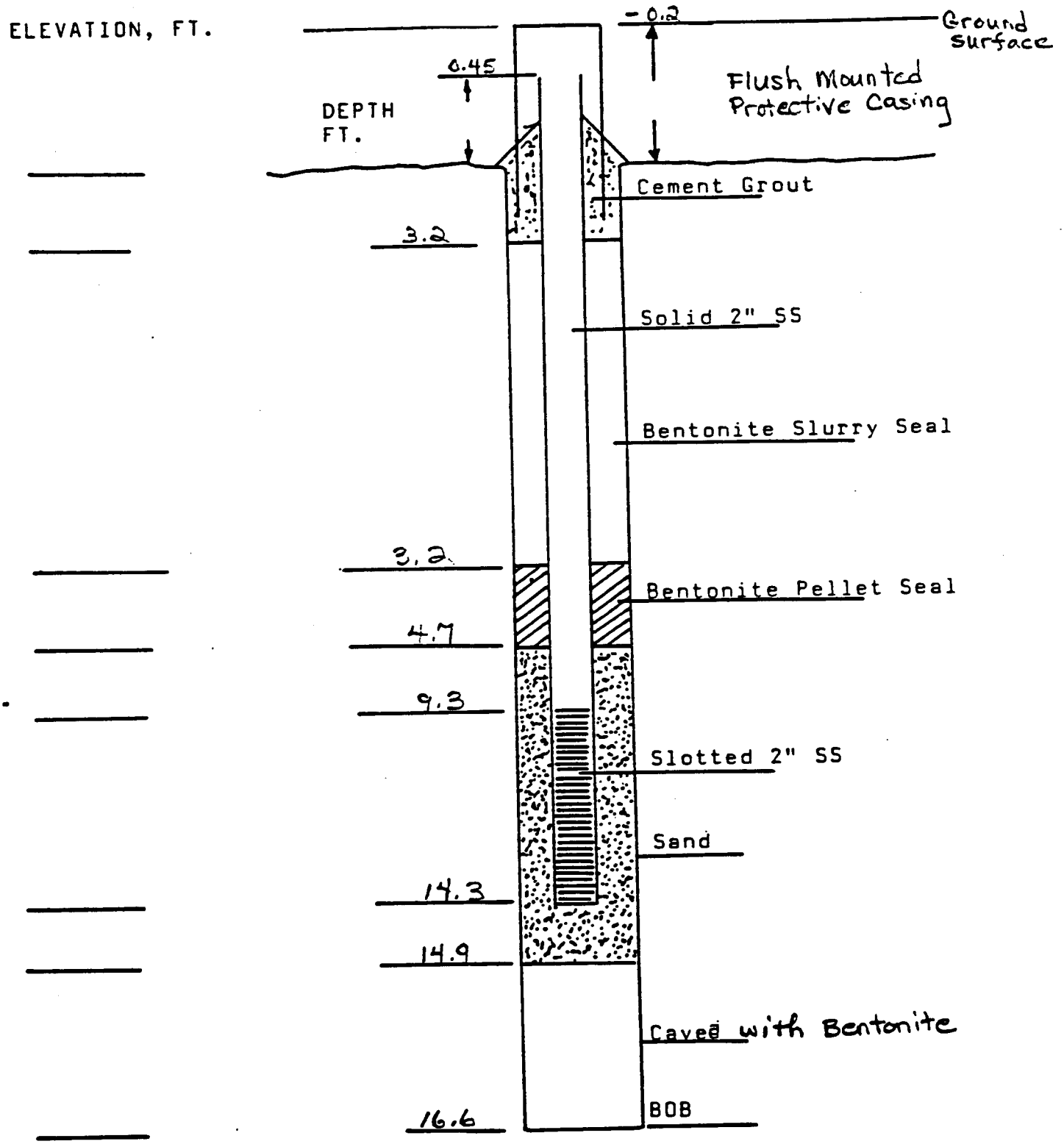
WELL INSTALLATION DETAILS

Project No. 4945-02	Project Name NYSEG MECHANICVILLE	Well No. MW-3
Installed By SNW/JWP	Date Installed 8/6/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material SS	Backfill Material #3 Jersey Sand



WELL INSTALLATION DETAILS

Project No. 4945-02	Project Name NYSEG Mechanicville	Well No. MW-4
Installed By SNW, LWE, ICM	Date Installed 7/30/86	Boring Diameter 8.75"
Well Diameter 2"	Well Material Stainless Steel	Backfill Material #3 Jersey sand

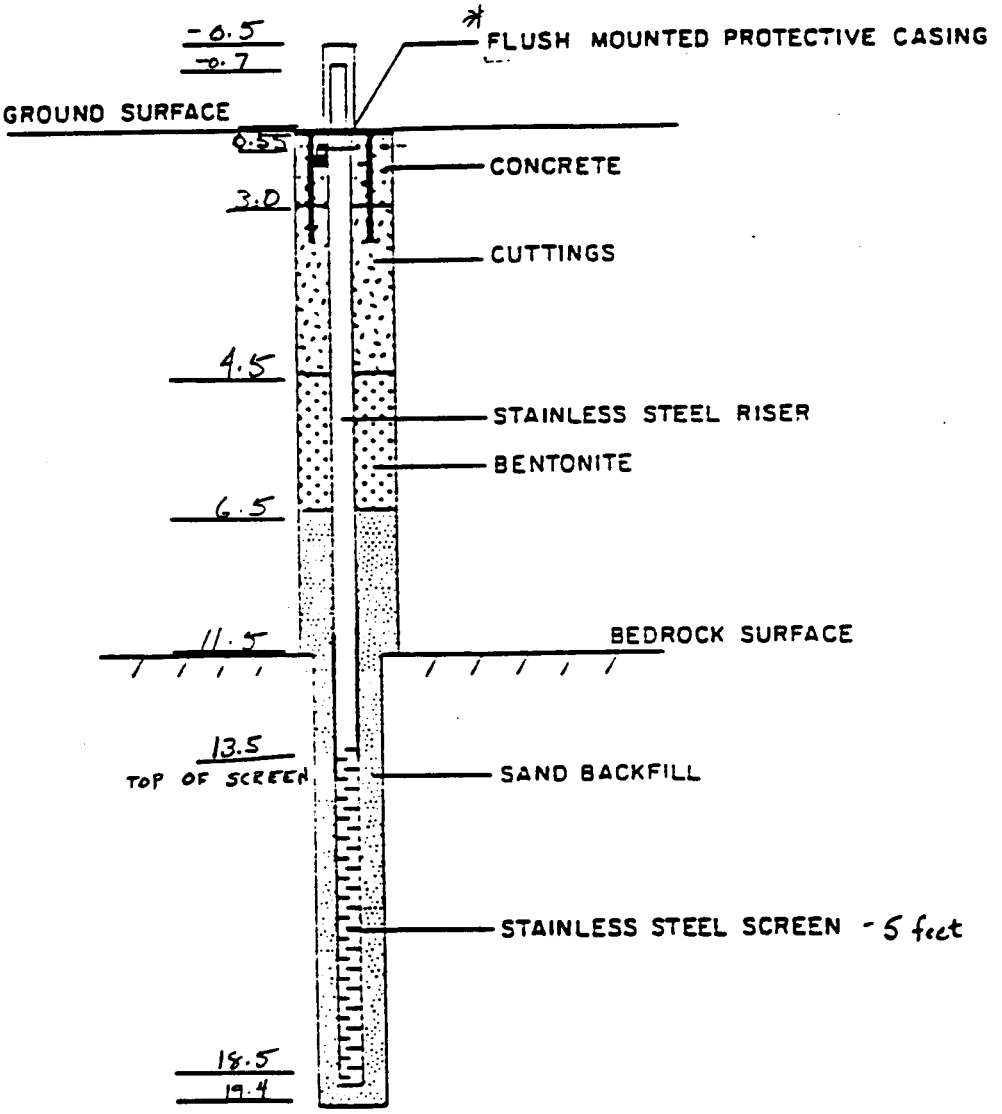


MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-5
INSTALLED BY	**DATE INSTALLED**	**BORING DIAMETER**
SNW; JWP	8/5/86	8.75"
WELL DIAMETER	**WELL MATERIAL**	**BACKFILL MATERIAL**
2.0"	SS	#3 Jersey Sand

ELEV., FT.

DEPTH, FT.



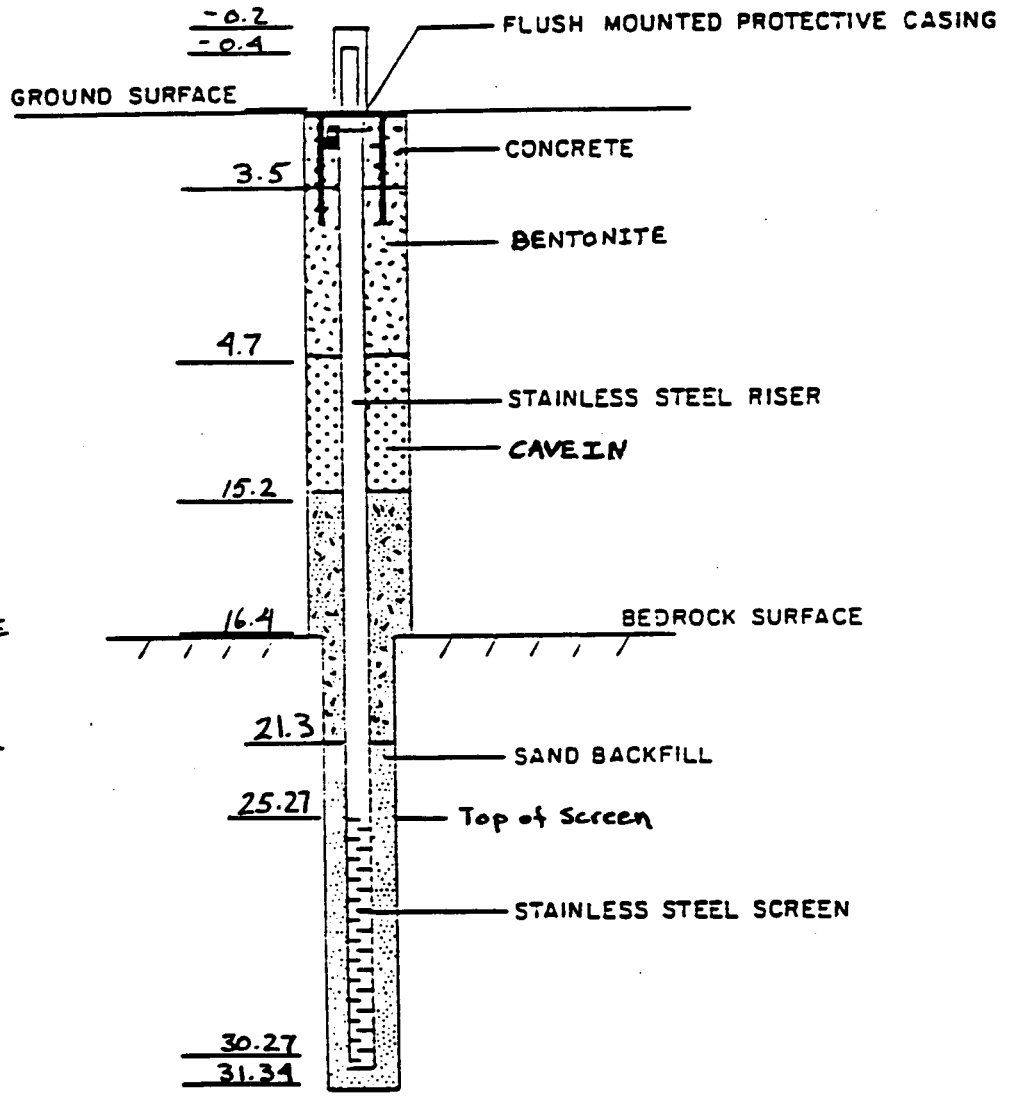
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MONITORING WELL INSTALLATION DIAGRAM

PROJECT NO.	PROJECT NAME	WELL NO.
4945-02	NYSEG MECHANICVILLE	MW-6
INSTALLED BY	**DATE INSTALLED**	**BORING DIAMETER**
SNW	7-29-86	4.0"
WELL DIAMETER	**WELL MATERIAL**	**BACKFILL MATERIAL**
2.0"	SS	#3 JERSEY SAND

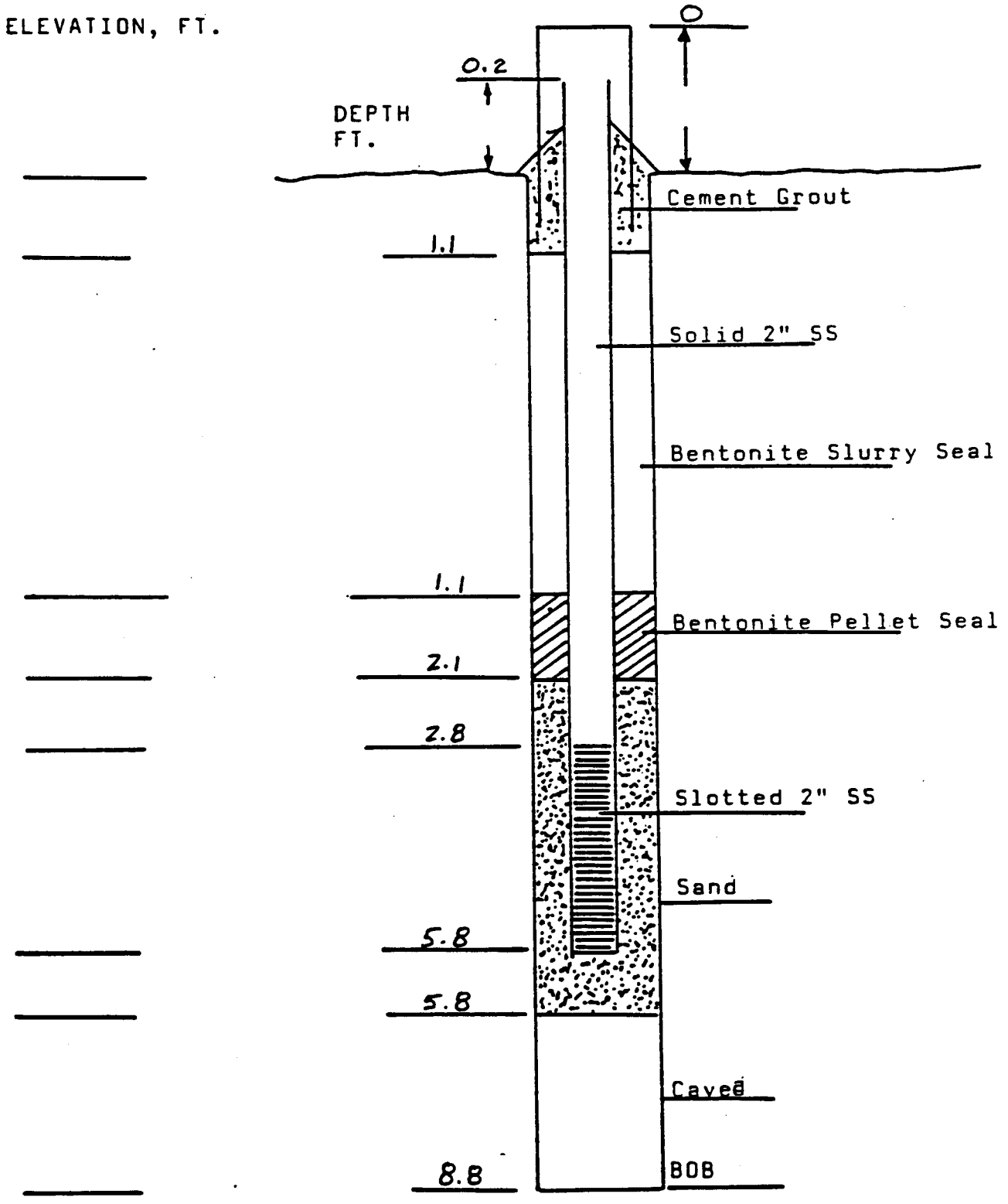
ELEV., FT.

DEPTH, FT.



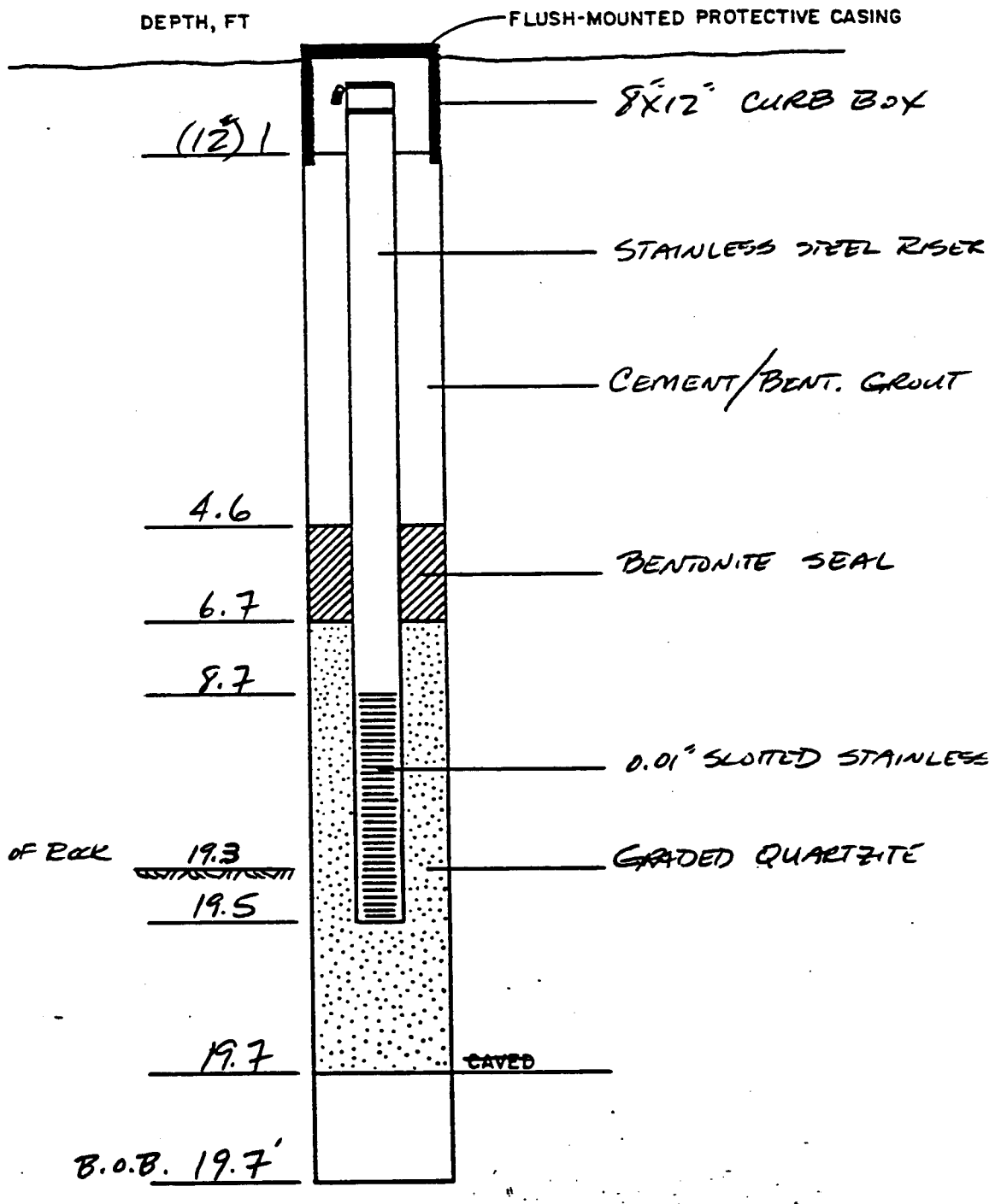
WELL INSTALLATION DETAILS

Project No. 4945 - 02	Project Name NYSEG MECHANICVILLE	Well No. Piezometer P-7
Installed By S. Wibby L. Espy	Date Installed 7-31-86	Boring Diameter 8.75"
Well Diameter 2.0"	Well Material PVC	Backfill Material #3 JERSEY SAND



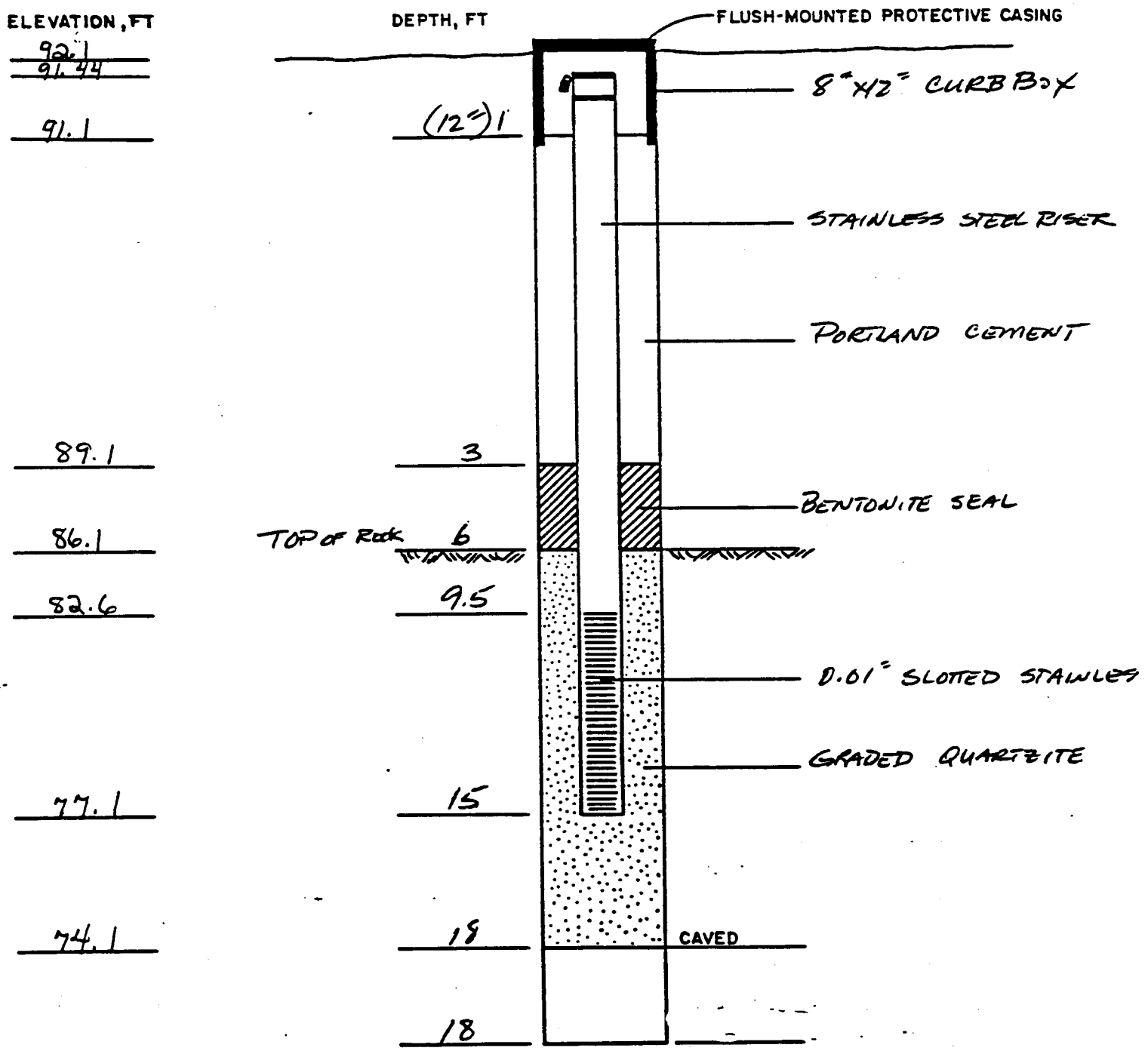
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-10
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-12-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCHEDULE 40 304 STAINLESS STEEL	BACKFILL MATERIAL #4 Q-Rok GRADED QUARTZITE



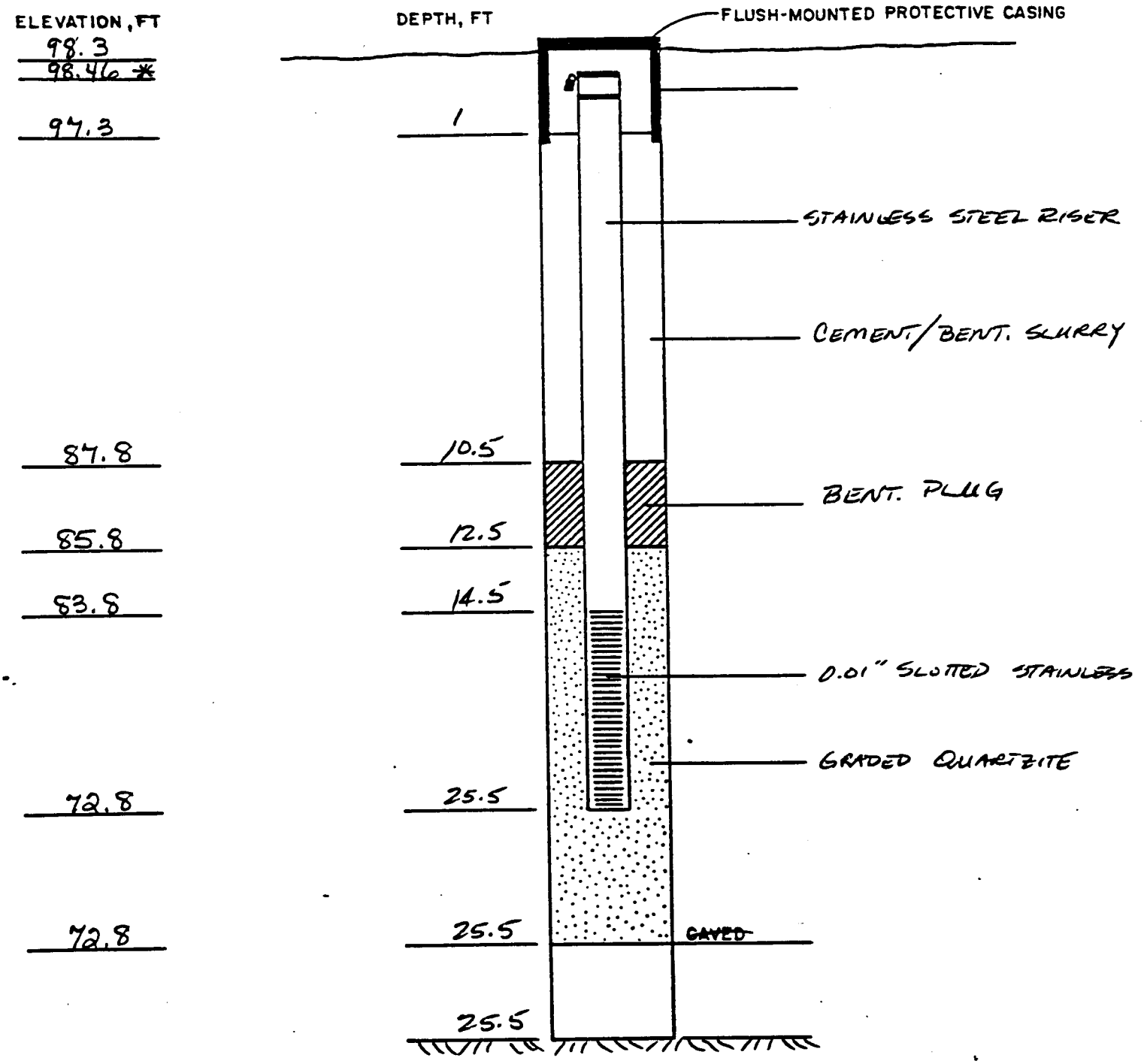
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-11
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-13-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCH. 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



WELL INSTALLATION DETAILS

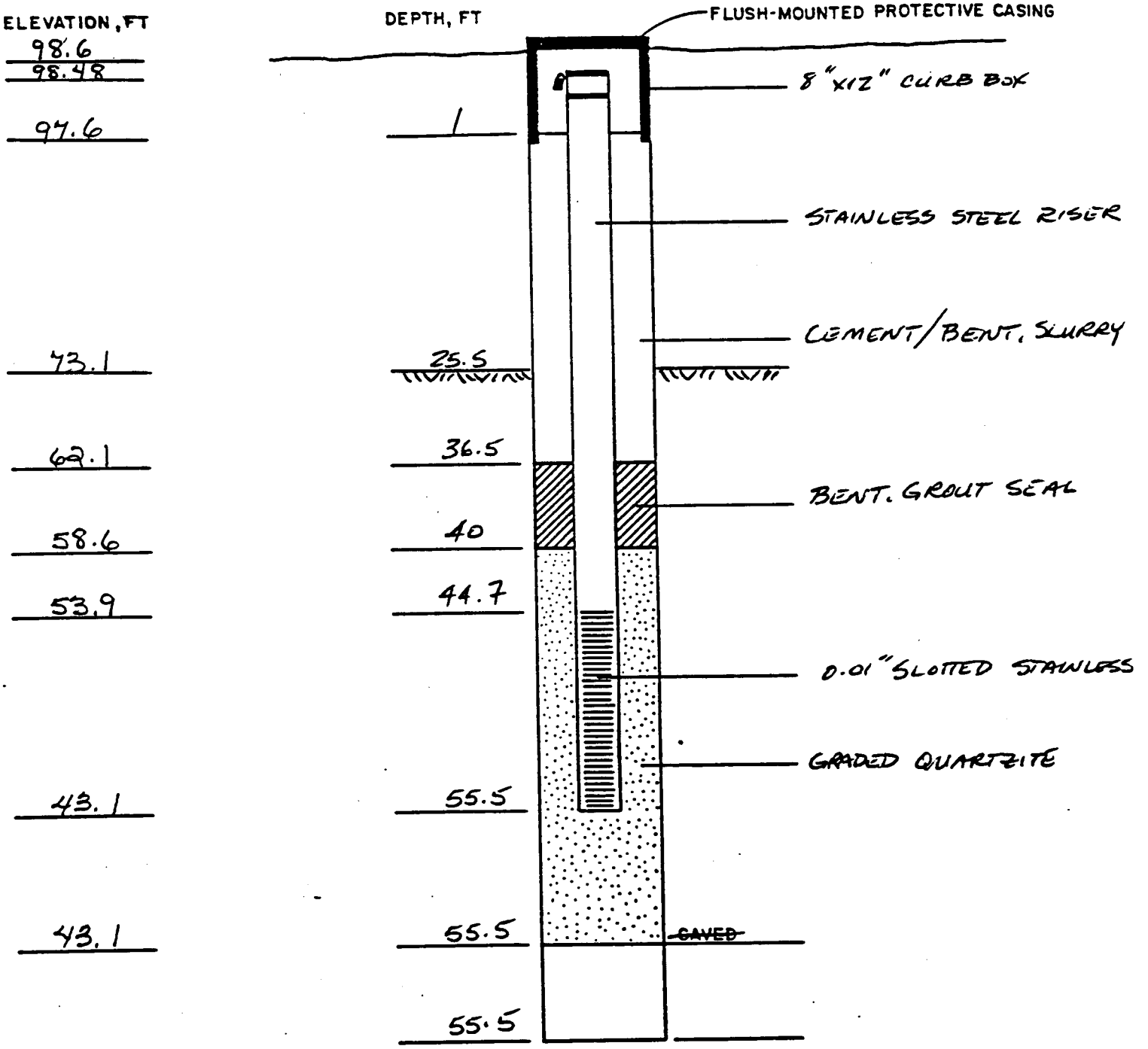
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-12
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-18-87	BORING DIAMETER 6"
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



* Riser is slightly above the ground surface

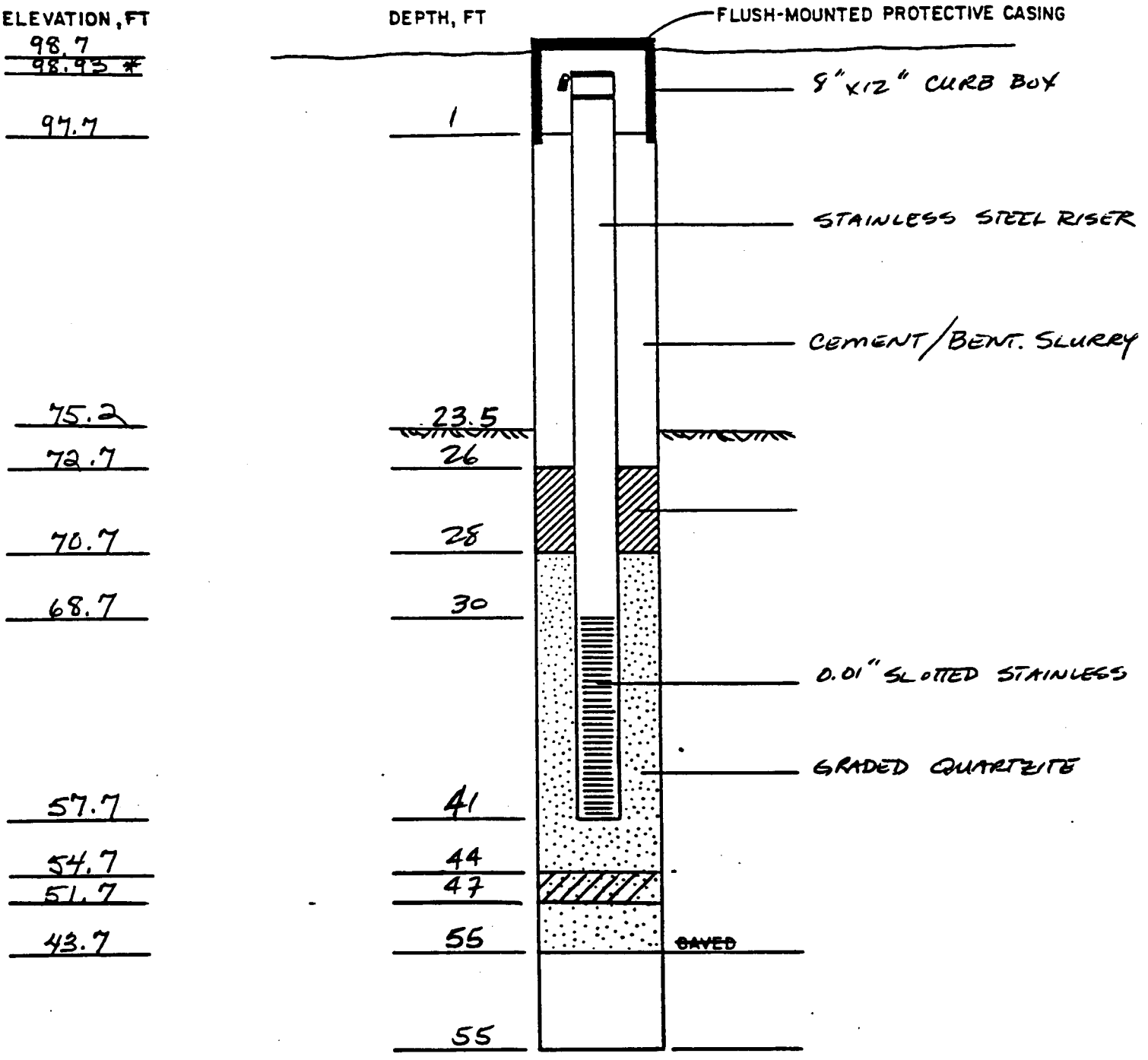
WELL INSTALLATION DETAILS

PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-13
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-18-87	BORING DIAMETER 10" Soil 4" & 3" IN Rock
WELL DIAMETER 2"	WELL MATERIAL Sch. 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



WELL INSTALLATION DETAILS

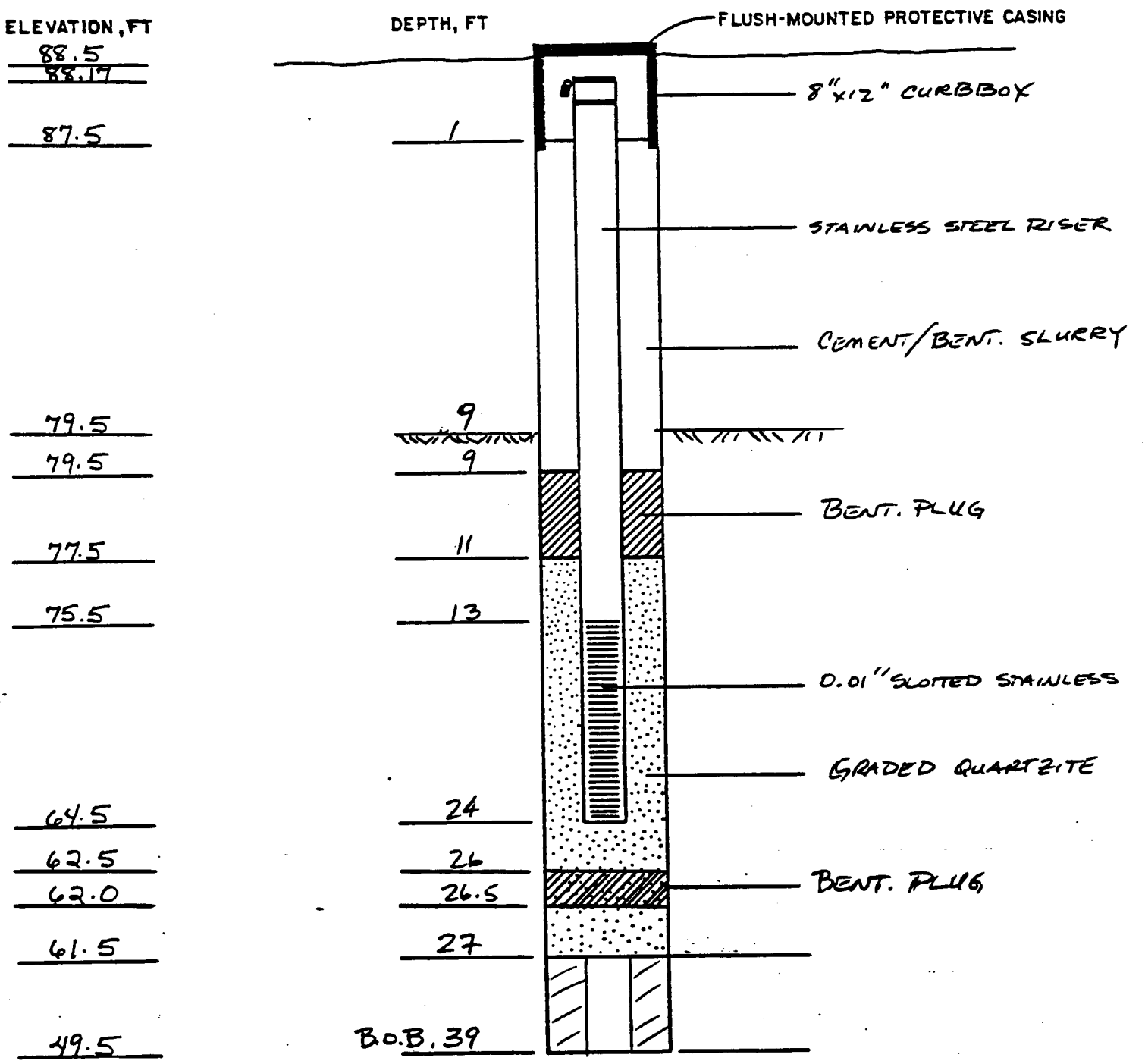
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK3	WELL NO. MW-14
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-19-87	BORING DIAMETER 11" SOIL 4" & 3" IN ROCK
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



* Riser is slightly higher than the ground surface.

WELL INSTALLATION DETAILS

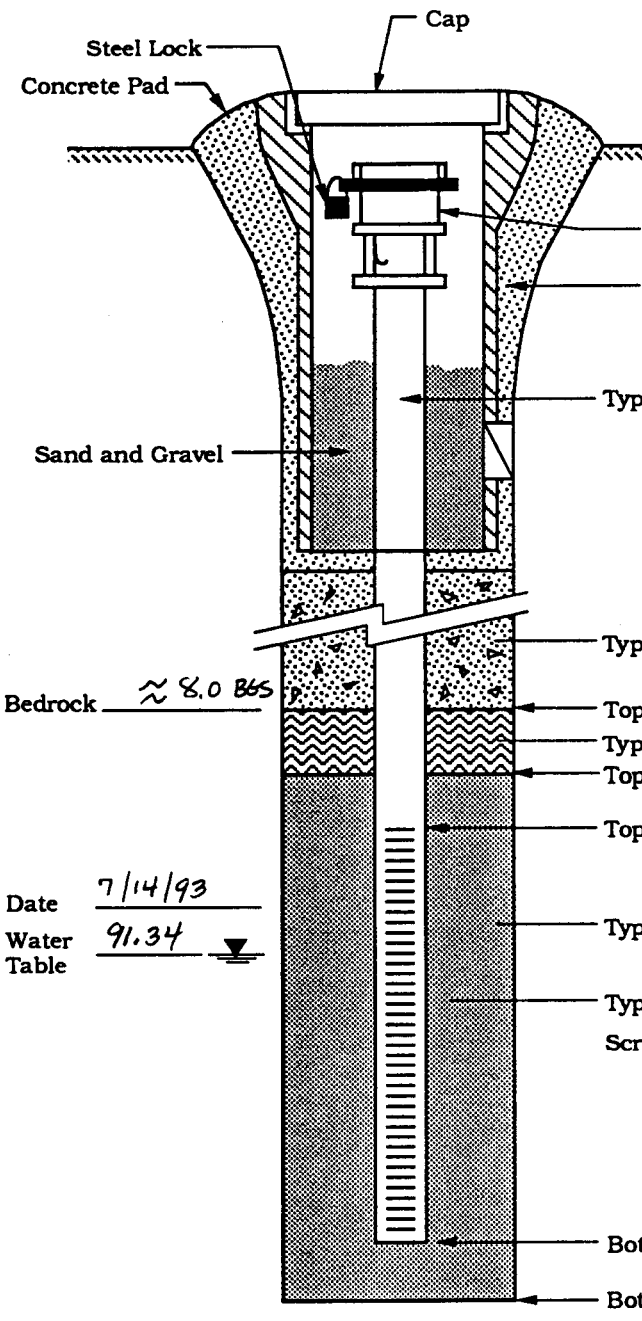
PROJECT NO. 4945-03	PROJECT NAME NYSEG MECHANICVILLE TASK 3	WELL NO. MW-15
INSTALLED BY NORTH STAR DRILLING	DATE INSTALLED 11-17-87	BORING DIAMETER 10" Soil 4" & 3" in Rock
WELL DIAMETER 2"	WELL MATERIAL SCH 40, 304 STAINLESS STEEL	BACKFILL MATERIAL GRADED QUARTZITE



FLUSH MOUNT MONITORING WELL INSTALLATION DIAGRAM

WELL I.D.: MW-16 (B-16)

Client: **NYSEG - Mechanicville Site**	Boring Diameter: ≈ 1'	Project No.: 4945-10
	Well Inside Diameter: 2"	Date Installed: 5/17/93
Drilling Co.: **Empire Soils, Inc.**	Well Material: Stainless Steel	Drilling Method: HSA
Field Scientist: NSG	Top of Well Elevation: 95.28	Development Method: Pump & Surge



Elevation (feet, Relative)

Depth (feet, bgs)

Top of Riser: 95.28

Portland Cement Minimum 2 Foot Thick

Type of Riser: 2" ID Stainless Steel

Type of Grout: Bentonite/Cement

Bedrock: ≈ 8.0 BGS

	Depth (feet, bgs)	Elevation (feet, Relative)
Top of Seal	2	93.3
Type of Seal: Bentonite Pellets		
Top of Sand Pack	4	91.3
Top of Screen	6	89.3

Date: 7/14/93

Water Table: 91.34

Type of Sand Pack: Morie O #9947 Silica Sand

Type of Screen: 2" ID Stainless Steel

Screen Slot Size: 0.010

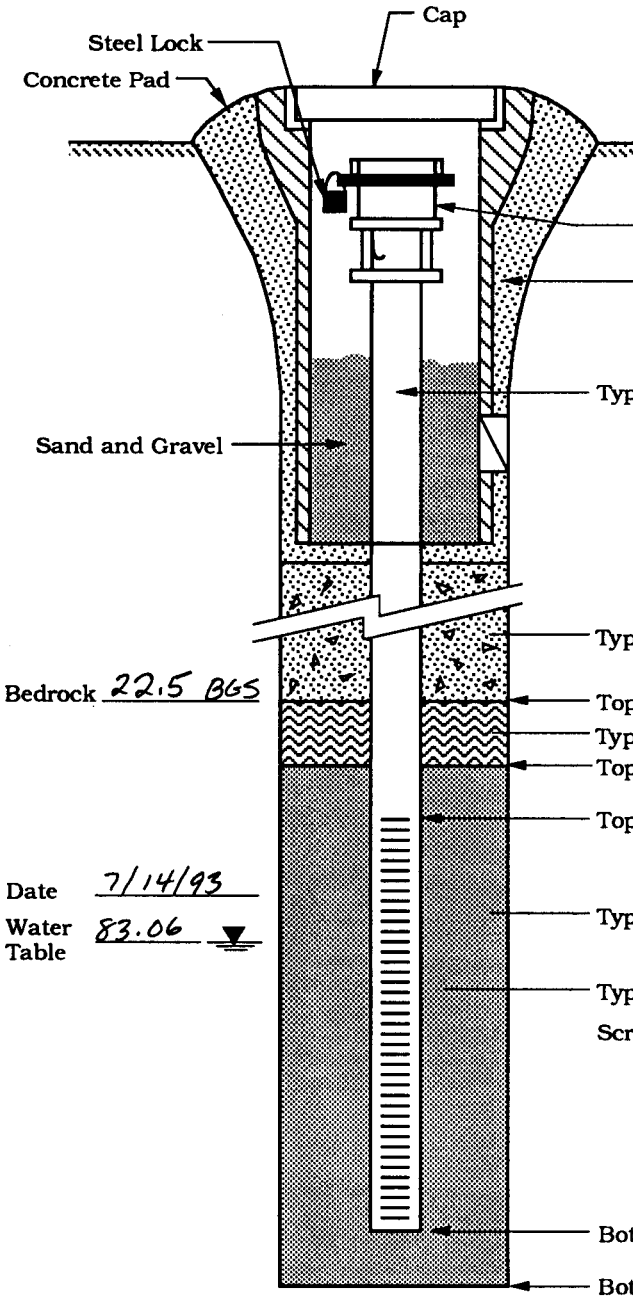
	Depth (feet, bgs)	Elevation (feet, Relative)
Bottom of Screen	16	79.3
Bottom of Borehole	16	79.3

NOT TO SCALE

FLUSH MOUNT MONITORING WELL INSTALLATION DIAGRAM

WELL I.D.: MW-17 (B-17)

Client: **NYSEG - Mechanicville Site**	Boring Diameter: ≈ 1'	Project No.: 4945-10
	Well Inside Diameter: 2"	Date Installed: 5/18/93
Drilling Co.: **Empire Soils, Inc.**	Well Material: Stainless Steel	Drilling Method: HSA
Field Scientist: NSG	Top of Well Elevation: 98.18	Development Method: Pump & Surge



	Depth (feet, bgs)	Elevation (feet, Relative)
Top of Riser		98.18
Type of Riser 2" ID Stainless Steel		
Type of Grout Bentonite/Cement		
Top of Seal	8.5	89.7
Type of Seal Bentonite Pellets		
Top of Sand Pack	10.5	87.7
Top of Screen	12.5	85.7
Type of Sand Pack Morie #0 Silica Sand		
Type of Screen 2" ID Stainless Steel		
Screen Slot Size 0.010		
Bottom of Screen	22.5	75.7
Bottom of Borehole	22.5	75.7

NOT TO SCALE

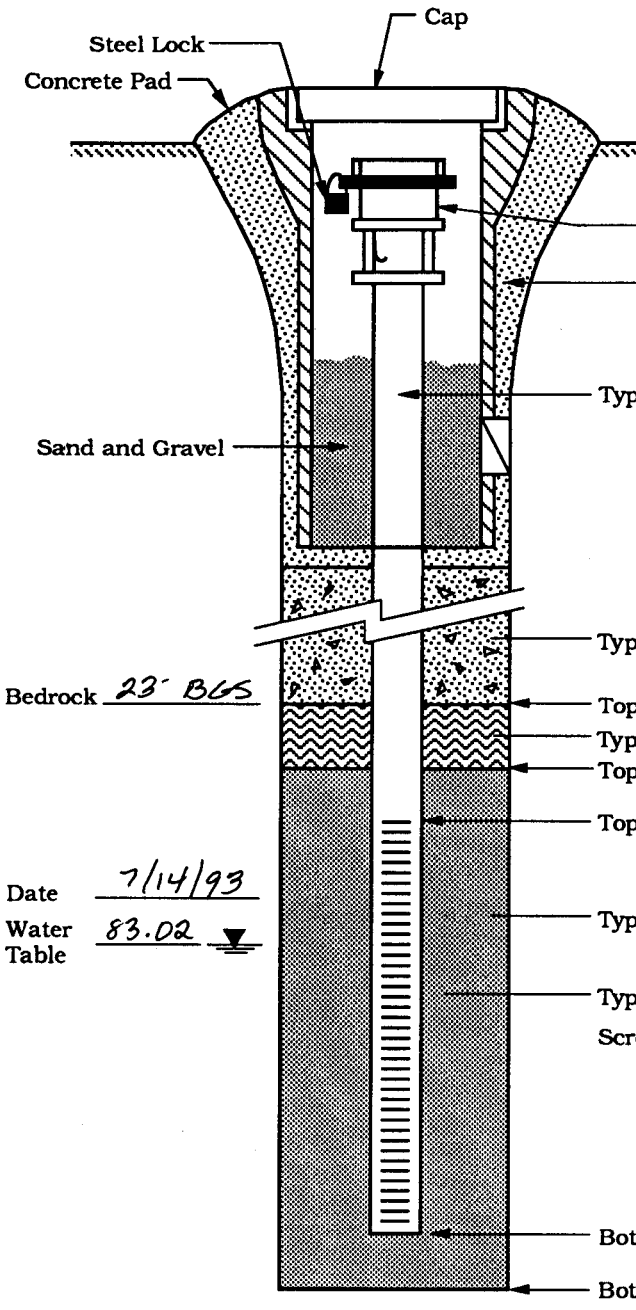
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ABB Environmental Services, Inc.

FLUSH MOUNT MONITORING WELL INSTALLATION DIAGRAM

WELL I.D.: MW-18 (B-18)

Client: **NYSEG - Mechanicville Site**	Boring Diameter: ≈ 1'	Project No.: 4945-10
	Well Inside Diameter: 2" ID	Date Installed: 5/19/93
Drilling Co.: **Empire Soils, Inc.**	Well Material: Stainless Steel	Drilling Method: HSA
Field Scientist: NSG	Top of Well Elevation: 98.12	Development Method: Pump & Surge



	Depth (feet, bgs)	Elevation (feet, Relative)
Top of Riser		98.12
Portland Cement Minimum 2 Foot Thick		
Type of Riser 2" ID Stainless Steel		
Type of Grout Bentonite/Cement		
Top of Seal	24	74.1
Type of Seal Bentonite Pellets		
Top of Sand Pack	26	72.1
Top of Screen	28	70.1
Type of Sand Pack Morie Φ Silica Sand		
Type of Screen 2" ID Stainless Steel		
Screen Slot Size 0.010'		
Bottom of Screen	38	60.1
Bottom of Borehole	38	60.1

NOT TO SCALE

9307053D

ABB Environmental Services, Inc.

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	17.5-20.2	73.49-70.79												73.49-[43.01]	Run 1 REC=100% RQD=100%
	18.0	72.99				X	24	24							Iron deposits, weathered, parallel
															to bedding.
	19.1-19.2	71.89-71.79		X			50	24							Slightly weathered, perpendicular
															to bedding.
	20.0	70.99				X	10	20							Weathered, parallel to bedding.
2	20.2-25.2	70.79-65.79													Run 2 REC=100% RQD=94%
	22.6	68.39				X	20	20							Weathered, parallel to bedding.
	24.0	66.99		X			35	25							Parallel to bedding.
	24.9	66.09		X			45	25					66.09-65.79 LI		Weathered, oblique to bedding.
	25.2	65.79					45	25							Weathered, oblique to bedding
															0.05' offset.
3	25.2-30.2	65.79-60.79													Run 3 REC=100% RQD=100%
	26.3	64.69				X	28	28							Weathered, parallel to bedding.
	26.3-27.3	64.69-63.69													Series of offsets (0.05').
	27.7	63.29				X	10	25							Weathered, parallel to bedding.
4	30.2-35.2	60.79-55.79													Run 4 REC=100% RQD=96%
	30.2	60.79				X	25	25							Weathered, parallel to bedding.
	30.9	60.09				X	10	25							Weathered, parallel to bedding.
5	35.2-40.2	55.79-50.79													Run 5 REC=98% RQD=90%
	36.3	54.69				X	20	25							Weathered, parallel to bedding.
	38.5	52.49				X		25							Very weathered.

Eric Lovenduski
Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	39.9	51.09				X	0	25							Weathered.
6	40.2-45.2	50.79-45.79													Run 6 REC=100% RQD=92%
	42.1-42.5	48.89-48.49											48.89-48.49		Series of open fractures. Rock is
															broken into small pieces.
	44.9	46.09				X	25	25							Weathered, perpendicular to
															bedding.
7	45.2-50.2	45.79-40.79													Run 7 REC=100% RQD=90%
	46.6-47.1	44.39-43.89													Bedding is offset (0.01') and
															deformed, cc.
	47.1	43.89				X	25	30					43.89-43.79		Weathered, oblique to bedding, cc-
															coated.
	47.2	43.79			X		30	30							Bedding is slightly deformed, cc-
															filled fracture.
	47.2-49.1	43.79-41.89													Bedding is slightly deformed, very
															minor offsets.
	49.1-50.0	41.89-40.99											41.89-40.99		Core is broken into small rounded
															pieces.
8	50.2-55.2	40.79-35.79													Run 8 REC=100% RQD=82%
	50.4	40.59				X	15	15							Tight, slightly weathered, parallel to
															bedding.
	50.8	40.19											40.19		Core is broken into small,
															weathered pieces, cc. Bedding

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															deformation begins at 51.2' bgs,
															minor offsets (0.05'). NAPL
															observed in core water at 50.9'
															and 51.2'.
	52.5	38.49		X			45								Tight, deformed bedding.
	53.6	37.39				X	15						37.39-37.19 SI		Tight, slightly weathered, deformed
															bedding.
	53.8	37.19				X	15								Tight, deformed bedding.
	55.1	35.89		X			50								Deformed bedding.
9	55.2-60.2	35.79-30.79													Run 9 REC=100% RQD=100%
															Bedding is deformed throughout
															run with 0.01-0.08' offsets.
	56.8	34.19				X	5								Tight, slightly weathered, deformed
															bedding.
	59.0	31.99				X	10								Deformed bedding.
10	60.2-65.2	30.79-25.79													Run 10 REC=100% RQD=92%
															Deformed and offset bedding.
	61.0-62.1	29.99-28.89		X			80						29.99-28.89 SI		Smooth surface, perpendicular to
															deformed bedding planes.
	61.6-61.9	29.39-29.09		X			70								Weathered, oblique to deformed
															beds.
	63.1-63.9	27.89-27.09		X			70	70							Parallel to bedding. Beds are

Eric Lovenduski
Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															folded, trace cc.
	64.8-65.1	26.19-25.89											26.19-25.89		Core is broken and rounded,
															weathered edges.
11	65.2-70.2	25.79-20.79													Run 11 REC=100% RQD=92%
	65.4	25.59		X			45	65							Tight, trace pyrite.
	67.6	23.39		X			80	65							Oblique to bedding, cc, weathered.
	68.0-68.5	22.99-22.49													Bedding is deformed, 0.02' offsets.
12	70.2-75.2	20.79-15.79													Run 12 REC=96% RQD=92%
	72.1	18.89			X		35	60					18.89-17.99 LI		Parallel to bedding, cc-filled, minor
															offset (0.01').
	72.4	18.59		X			60	60							Tight, parallel to bedding.
	72.5-73.0	18.49-17.99		X			75	60							Oblique to bedding, weathered, cc.
	74.6	16.39		X			60	60							Parallel to bedding, weathered, cc
13	75.2-80.2	15.79-10.79													Run 13 REC=98% RQD=88%
	77.0	13.99						60							
	78.6	12.39				X	20	60							Tight, perpendicular to bedding.
	79.5-79.9	11.49-11.09											11.49-10.79		Core is broken into small pieces,
															rounded edges.
	80.2	10.79				X	0	60							Parallel to bedding, weathered,
															LNAPL tar during packer test.
14	80.2-83.8	10.79-7.19													Run 14 REC=100% RQD=100%
	81.5	9.49				X	20	60							Weathered, perpendicular to

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Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															bedding.
	82.4	8.59				X	30	60							Tight, oblique to bedding, sharp
															edges.
	83.3	7.69				X	30	60							Tight, oblique to bedding, sharp
															edges.
15	83.8-85.2	7.19-5.79													Run 15 REC=100% RQD=71%
	83.8-84.2	7.19-6.79											7.19-6.79		Extremely weathered core,
															fractured with rounded edges.
	84.2-85.3	6.79-5.69													Very soft olive green ash layer.
16	85.2-90.2	5.79-0.79													Run 16 REC=100% RQD=100%
	85.3-86.2	5.69-4.79											5.69-4.79		Series of cc-filled fractures,
															perpendicular to bedding.
	88.0	2.99						75							
17	90.2-95.2	0.79-[4.21]													Run 17 REC=100% RQD=100%
	90.2	0.79				X		75							Weathered fracture, rounded
															edges.
	95.2	[4.21]				X		75							Weathered fracture, rounded
															edges.
18	95.2-100.2	[4.21]-[9.21]													Run 18 REC=98% RQD=90%
	96.7	[5.71]				X	10	75							Weathered, perpendicular to
															bedding.
	99.6-100.2	[8.61]-[9.21]											[8.61]-[9.21]		Core is broken into small, rounded

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Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:		5/14/2003				GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															pieces.
	100.2	[9.21]													LNAPL tar during packer test.
19	100.2-105.2	[9.21]-[14.21]													Run 19 REC=100% RQD=92%
	103.1	[12.11]				X	5	70							Tight, perpendicular to bedding.
	103.9-104.3	[12.91]-[13.31]											[12.91]-[13.31]		Core is broken into small, rounded
															pieces.
20	105.2-110.2	[14.21]-[19.21]													Run 20 REC=100% RQD=100%
	109.0	[18.01]						70							
21	110.2-114.0	[19.21]-[23.01]													Run 21 REC=97% RQD=89%
	111.3	[20.31]				X	25	70							Tight, perpendicular to bedding,
															trace cc.
	113.9	[22.91]													Open fracture with rounded
															edges.
22	114.0-118.8	[23.01]-[27.81]													Run 22 REC=100% RQD=100%
	115.0	[24.01]						70							
	116.6	[25.61]	X				70	70							Parallel to bedding, 0.03' cc.
	118.2	[27.21]				X	10	70							Perpendicular to bedding,
															weathered.
23	118.8-120.2	[27.81]-[29.21]													Run 23 REC=100% RQD=100%
	119.9	[28.91]				X	5	70							Perpendicular to bedding,
															weathered.
	119.5-119.7	[28.51]-[28.71]											[28.51]-[28.71]		Series of 10^{o} cc-filled fractures.

Eric Lovenduski
Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
24	121.3-125.2	[30.31]-[34.21]													Run 24 REC=100% RQD=100%
	123.0-123.5	[32.01]-[32.51]		X			80	65							Tight, parallel to bedding.
25	125.2-130.2	[34.21]-[39.21]													Run 25 REC=100% RQD=100%
	126.1	[35.11]		X			45	60							Weathered, open, parallel to
															bedding.
26	130.2-135.2	[39.21]-[44.21]													Run 26 REC=100% RQD=100%
	131.5	[40.51]													Slightly deformed bedding, cc-filled
															fracture.
	133.4	[42.41]		X			50	70							Parallel to bedding, weathered,
															tight.
	133.2-135.2	[42.21]-[44.21]											[42.21]-[44.21]	[43.01]-[63.01] M	Bedding is deformed with many
															offsets (up to 0.2'), cc-filled and
															open fractures.
27	135.2-140.2	[44.21]-[49.21]													Run 27 REC=100% RQD=83%
															Bedding is deformed throughout
															run.
	135.2-135.7	[44.21]-[44.71]													Core is broken into small pieces
															with sharp edges.
	137.7	[46.71]			X										Deformed bedding and fracture,
															cc.
	138.8	[47.81]				X	20						[47.81]-[48.21] LI		Deformed bedding, slightly
															weathered.

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-1D						DATE LOGGED:	5/14/2003					GRADE = 90.99' TD = 155.2'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	139.2	[48.21]				X	20								Deformed bedding, weathered.
	140.0-140.2	[49.01]-[49.21]											[49.01]-[50.21] LI		Open cavity, rounded edges,
															weathered.
28	140.2-141.2	[49.21]-[50.21]													Run 28 REC=90% RQD=70%
	140.2-141.0	[49.21]-[50.01]		X			70	70							Oblique to bedding, cc.
	141.0	[50.01]				X	0	70							Slightly weathered.
	141.2	[50.21]				X	0	70							Weathered.
29	141.2-145.2	[50.21]-[54.21]													Run 29 REC=100% RQD=100%
								70							Bedding is slightly deformed
															throughout run.
30	145.2-150.2	[54.21]-[59.21]													Run 30 REC=100% RQD=100%
															Bedding is deformed.
	145.2-146.0	[54.21]-[55.01]		X			90	90					[54.21]-[55.01] V		Tight, parallel to bedding, vertical.
	149.8	[58.81]				X	20	90							Weathered, rounded, open cavity.
31	150.2-155.2	[59.21]-[64.21]													Run 31 REC=88% RQD=88%
															Bedding is deformed.
	153.1	[62.11]			X		0	80							Perpendicular to bedding, cc.
	153.8-154.1	[62.81]-[63.11]				X	0								0.3' open fracture, deformed
															bedding.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOGGING

WELL NO.:	MW-2I	DATE LOGGED:	7/30/2001	GRADE = 88.60' TD = 32.2'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	12.2-18.2	76.4-70.4												76.4-62.4	Run 1 REC=100% RQD=68%
	13.5	75.1						30					75.0-72.6		
	13.0-13.5	75.6-75.1		X			65								Semi-polished surface, py specks.
	13.6-14.8	75.0-73.8					64								Several high-angle open fractures,
															ss, striations, cc, semi-polished
															glassy surfaces.
	15.4	73.2			X		25	25	?						Marker bed? 1/4 in. thick calcite
												X			layer, some bc.
	15.4-15.8	73.2-72.8		X			90								Bedding offset with a high-angle
															v thin open fracture.
	18.2-18.5	70.4-70.1	X				65	48					70.9-70.0		1/16 in. cc, striations/ss?,
															some deformation and offsets.
2	18.2-26.2	70.4-62.4													Run 2 REC=100% RQD=94%
	19.0	69.6						44							
	23.5	65.1	X				42	42	?		X?		64.3-64.0		v thin cc with ss and striations.
													63.1-62.4		
3	26.2-32.2	62.4-56.4												62.4-56.4 M	Run 3 REC=88% RQD=88%
	29.0	59.6						30							
	29.0-30.8	59.6-57.8													Bedding deformation and offsets.
	29.7-30.1	58.9-58.5	X				58		?						Thin cc fracture, bedding dip
															increases below this fracture.
	30.2-30.5	58.4-58.1	X				52		?			X			1/8 in. cc fracture.

John Hawley
Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-10D						DATE LOGGED:	7/30/2001					GRADE = 92.88' TD = 114.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	23.1-30.1	69.78-62.78											67.28-66.58 SI	69.08-27.78 VM	Run 1 REC=100% RQD=95%
	24.0	68.88						18							
	29.5-30.1	63.38-62.78		X			88	18					63.38-62.18		Perpendicular to bedding, open,
													62.18-54.08 SI		discontinued at 30.1'.
2	30.1-40.1	62.78-52.78													Run 2 REC=100% RQD=95%
	34.2	58.68			X		16	16							Parallel to bedding, striations.
	37.0-38.0	55.88-54.88					70								v. thin open fractures.
	37.3-38.0	55.58-54.88													Bedding offset.
	37.9	54.98			X		18	18			X	X			UFP-like feature.
	38.0-39.0	54.88-53.88													v. thin open fractures, some cc,
															offsets and deformation.
	39.0	53.88		X			70								Polished surface, py.
3	40.1-50.1	52.78-42.78													Run 3 REC=100% RQD=71%
	40.0	52.88						32							
	46.0	46.88						30					48.98-46.98 SI		
	47.0-~50.0	45.88-~42.88											45.98-41.48		Zone of deformation and offsets
															with high angle open and filled
															fractures. Some core chewed up
															and missing.
4	50.1-54.3	42.78-38.58											39.88-38.18		Run 4 REC=81% RQD=57%
	51.0	41.88						45							
	53.3-54.0	39.58-38.88													Most of core washed out and

John Hawley
Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-10D	DATE LOGGED:	7/30/2001	GRADE = 92.88' TD = 114.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															chewed up.
5	54.3-60.1	38.58-32.78											33.48-27.78		Run 5 REC=97% RQD=95%
	55.0	37.88		X			46	46							Polished (GR) surface.
	59.5	33.38						36							
6	61.7-67.7	31.18-25.18													Run 6 REC=85% RQD=31%
	62.6-64.4	30.28-28.48											27.78-26.18 SI	27.78-22.98	Many core pieces, low RQD.
	66.0-67.0	26.88-25.88											26.18-25.18		Many pieces.
7	67.7-71.7	25.18-21.18											23.18-22.98	22.98-8.48 (M)	Run 7 REC=100% RQD=85%
															At ~67' NAPL in water, lost
															circulation.
	70.0	22.88						17							
8	71.7-81.0	21.18-11.88													Run 8 REC=91% RQD=89%
9	83.8-93.4	9.08-[0.52]												8.48-[22.82]	Run 9 REC=100% RQD=95%
	87.0	5.88						18					5.78-5.38 SI		
	90.0	2.88		X			60	18							Partially filled cc fracture perpendic-
															ular to bedding, polished surface.
10	93.4-103.4	[0.52]-[10.52]													Run 10 REC=100% RQD=94%
	96.4	[3.52]		X			40	25			X				Almost parallel with bedding,
															polished surface, no cc, some ss.
	99.0-99.5	[6.12]-[6.62]				X	20	20					[6.82]-[7.32]		Very smooth, glassy surface.
11	103.4-110.8	[10.52]-[17.92]													Run 11 REC=100% RQD=100%
	106.0	[13.12]						20							

John Hawley
Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-10D						DATE LOGGED:	7/30/2001					GRADE = 92.88' TD = 114.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
12	110.8-115.0	[17.92]-[22.12]													Run 12 REC=74% RQD=100%

John Hawley
Staff Geologist

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MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-14D						DATE LOGGED:	7/2/2001					GRADE = 94.46' TD = 121.7'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	27.0-32.9	67.46-61.56											64.36-56.36	67.46-29.46	Run 1 REC=100% RQD=61%
	29.5	64.96						14							
	30.1-~38.0	64.36-~56.46		X			70	14							Low RQD zone, frequent high
															angle open fractures.
2	32.9-37.0	61.56-57.46													Run 2 REC=62% RQD=33%
3	37.0-46.0	57.46-48.46													Run 3 REC=100% RQD=88%
	38.0-40.0	56.46-54.46					73	14					56.26-54.36		Six-seven high angle cc fractures.
4	46.0-51.0	48.46-43.46													Run 4 REC=100% RQD=100%
5	51.0-61.0	43.43-33.46													Run 5 REC=100% RQD=100%
	50.8-52.1	43.66-42.36	X				84	13							v. thin, cc filled.
	51.0	43.46													Slight odor on core.
6	61.0-66.0	33.46-28.46													Run 6 REC=100% RQD=94%
	51.0-66.0	43.46-28.46												29.46-2.96 VM	Small water loss during coring.
7	66.0-75.5	28.46-18.96													Run 7 REC=100% RQD=92%
	69.0-~71.0	25.46-~23.46		X			76-90						25.26-23.46		Offsetting in the bedding, polished
															surface, high angle open fracture.
	71.0	23.46											20.16-18.66		NAPL encountered (may have
															followed fractures from 69').
8	75.5-85.3	28.46-9.16													Run 8 REC=100% RQD=95%
	77.0	17.46						18					17.36-16.36		
													15.66-15.46		
													11.46-10.96		

John Hawley
Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-14D	DATE LOGGED:	7/2/2001	GRADE = 94.46' TD = 121.7'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
9	85.3-90.2	9.16-4.26													Run 9 REC=100% RQD=96%
10	91.0-95.0	3.46-[0.54]													Run 10 REC=100% RQD=97%
11	95.0-104.7	[0.54]-[10.24]													Run 11 REC=100% RQD=97%
	97.0	[2.54]						16					[5.04]-[5.54]	2.96-[27.04] M	
12	104.7-114.7	[10.24]-[20.24]													Run 12 REC=100% RQD=99%
13	114.7-121.7	[20.24]-[27.24]													Run 13 REC=97% RQD=95%
	117.8	[23.34]			X				cc						1/8" cc, parallel with bedding.
	118.1	[23.64]			X			16	cc?						1/16" cc.
	118.7	[24.24]			X		25	25	cc?						1/4" cc.
	120.0	[25.54]						30							
	121.0	[26.54]			X		30	30	cc?						1/16" cc.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-15I						DATE LOGGED:	5/23/2001					GRADE = 85.26' TD = 25.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	12.7-22.7	72.56-62.56											72.56-68.26 SI	72.56-59.96	Run 1 REC=96% RQD=89%
	13.0	72.26					35	35							Deformation and offsets.
	13.0-13.5	72.26-71.76		X			90	v thin							Odor and sheen (oil?).
	14.4-19.6	70.86-65.66						35					66.56-64.76 SI		Numerous fractures, semi-
													63.26-62.56		polished, no cc.
2	22.7-25.3	62.56-59.96													Run 2 REC=100% RQD=100%
	23.3	61.96					35	35			X?		61.86-61.26 SI		Semi-polished.
	23.8	61.46					35	35			X?				Semi-polished.
	24.0	61.26					35	35			X?				Semi-polished.

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-15D						DATE LOGGED:	7/30/2001					GRADE = 86.34' TD = 105.8'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	12.3-22.3	74.04-64.04											74.04-72.74	74.04-8.54	Run 1 REC=100% RQD=83%
	13.3	73.04													NAPL in tub, orange/rust staining
															on core, odor.
	13.3-13.7	73.04-72.64		X			60-90	25							Vertical fracture.
	14.8	71.54			X	X	28	28					71.74-71.34		Partially filled, sheen on core,
															naphthalene odor at 18.0 ft.? Core
															chewed up 17.9 - 18.1 ft.
	18.3-19.6	68.04-66.74	X	X			55	14			X		68.44-66.34		Fracture perpendicular to bedding.
															Vertical fracture.
2	22.5-29.2	63.84-57.14											62.24-62.14		Run 2 REC=100% RQD=90%
													61.34-60.64		
	27.0	59.34						16							
	30.0	56.34						18							
3	29.2-34.5	57.14-51.84													Run 3 REC=100% RQD=96%
4	34.5-39.5	51.84-46.84											48.44-48.24		Run 4 REC=100% RQD=94%
	37.0	49.34		X			70	18					47.64-46.54		Fracture perpendicular to bedding.
5	39.5-49.3	46.84-37.04											44.44-43.94		Run 5 REC=100% RQD=94%
	48.1	38.24					22	22							Partially filled with cc, step
															fractures.
	48.9	37.44					22	22							
6	49.3-59.5	37.04-26.84													Run 6 REC=100% RQD=94%
	49.9	36.44					22	22					35.14-34.34 SI		Partially filled with cc, step

John Hawley
Staff Geologist

BEDROCK CORE LOGGING

WELL NO.:	MW-15D						DATE LOGGED:		7/30/2001				GRADE = 86.34' TD = 105.8'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															fractures.
	51.6	34.74							?			X	33.24-32.94		cc 1/4 in. thick offsetting at 52 ft.
	56.0	30.34						25							
	59.0	27.34	X				60	25					26.94-25.74		Perpendicular to bedding, fracture
															offsets bedding.
7	59.5-69.5	26.84-16.84													Run 7 REC=100% RQD=98%
	60.0-61.0	26.34-25.34		X			55-60	25							Fracture perpendicular to bedding.
	63.0-64.0	23.34-22.34									X		23.94-22.94		Deformation and offsets, polished
													22.14-21.34		surfaces.
	68.0	18.34						11							
8	69.5-79.5	16.84-6.84													Run 8 REC=97% RQD=73%
	73.2	13.14			X		15		cc		X				Marker Bed? 1/8 in., v. thin open
															fractures below marker bed.
	74.5-74.7	11.84-11.64			X		28	50	?	?					Marker Bed? cc fractures
															perpendicular to bedding, calcite
															crystals. Below 74.7 ft. bedding
															increases drastically.
	74.7-~77.0	11.64-~9.34													Bedding deformation and offsets.
	75.6-~78.0	10.74-~8.34		X			58-60	58-60					9.64-1.14	8.54-[11.16] M	Very polished/smooth surfaces on
															open fractures.
	78.0-78.6	8.34-7.74													0% RQD zone, NAPL observed in
															tub during coring.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-15D						DATE LOGGED:	7/30/2001					GRADE = 86.34' TD = 105.8'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	84.0	2.34						46							
9	79.2-85.2	7.14-1.14											1.14-[11.26] Ll		Run 9 REC=100% RQD=13%
10	85.2-95.2	1.14-[8.86]													Run 10 REC=82% RQD=78%
	90.0	[3.66]						51							
11	96.0-106.0	[9.66]-[19.66]													Run 11 REC=98% RQD=87%
	104.0	[17.66]						50						[11.16]-[19.46]	Numerous fractures parallel to
	90.0-105.0	[3.66]-[18.66]											[11.26]-[12.06] Sl		bedding.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001					GRADE = 93.55' TD = 142.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	25.1-31.0	68.45-62.55											68.45-61.55	68.45-[8.95]	Run 1 REC=81% RQD=36%
	25.6	67.95		X			55	48							
	26.3	67.25		X			55								
	26.5	67.05	X				58								cc.
	26.0-27.2	67.55-66.35													Zone of bedding offsets and
															deformation.
	27.2-30.0	66.35-63.55													Low recovery/low RQD zone.
	30.5	63.05						42							
2	31.0-40.4	62.55-53.15													Run 2 REC=100% RQD=80%
	31.2	62.35		X			42								cc.
	31.6	61.95		X			64								1/4 in. cc.
	34.1	59.45						38							
	35.6-36.3	57.95-57.25											58.25-57.15		Intense fractures, some bedding
															deformation and offsets, stepping.
	38.5	55.05		X			42								
	38.8	54.75						41							
	39.6	53.95		X											Curving vertical.
	40.8	52.75						43							1/8 in. cc.
3	40.4-50.6	53.15-42.95													Run 3 REC=97% RQD=91%
	44.0	49.55						38							
	45.1	48.45					51								
	46.2-46.5	47.35-47.05													Bedding deformation.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001			GRADE = 93.55' TD = 142.5'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	47.7	45.85						41							
	48.2-48.9	45.35-44.65		X			88								Vertical fracture.
	49.6	43.95		X											Curving vertical.
	50.5	43.05						37							Fracture perpendicular to bedding.
4	50.6-60.6	42.95-32.95													Run 4 =100% RQD=94%
	50.8	42.75					39								
	51.0-51.4	42.55-42.15													Many cc fractures.
	51.6	41.95	X				31	41							cc.
	53.5-54.2	40.05-39.35			X			53							Bedding deformation and offsets.
	54.6	38.95					49								Cuts across bedding.
	54.7	38.85					20	51							Cuts across bedding.
	55.7-55.8	37.85-37.75													Bedding deformation and offsets.
	56.7-56.9	36.85-36.65					49								Core is broken.
	57.8-58.2	35.75-35.35					44								Core is broken.
5	60.6-71.0	32.95-22.55					40								Run 5 REC=92% RQD=88%
	61.4	32.15		X			40								
	62.6	30.95		X			41	40							
	64.1	29.45		X			40								
	64.5	29.05						40							
	65.6	27.95		X			43								
	66.6	26.95						41							
	68.8	24.75		X			40								

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Staff Geologist

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001					GRADE = 93.55' TD = 142.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	68.9	24.65	X					43							
	70.0	23.55		X			31						23.55-22.55		Core chewed
	70.2	23.35	X												cc, cuts across bedding,
															slightly curving.
6	71.0-81.0	22.55-12.55													Run 6 REC=99% RQD=99%
	71.7	21.85		X			41	41							
	72.1	21.45		X			41								
	73.1	20.45		X			40								
	73.4	20.15		X			41	40							
	74.5	19.05		X			40								
	75.4	18.15		X			38								
	76.4-76.5	17.15-17.05													Core chewed and missing.
	76.6	16.95		X			41								
	76.8	16.75		X			41	40							
	78.7	14.85		X			34								
	79.3	14.25		X			39	40							
	79.9	13.65		X			40								
	80.9	12.65													Core chewed and missing.
7	81.0-91.0	12.55-2.55													Run 7 REC=100% RQD=100%
	81.6-81.8	11.95-11.75													cc fractures (minor) offset by
															small vertical fractures.
	81.8	11.75						33							

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Staff Geologist

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001					GRADE = 93.55' TD = 142.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	83.1	10.45		X			40								
	84.2	9.35		X			42								
	84.8	8.75		X			41								
	85.3	8.25						40							
	85.9	7.65		X			39								
	86.6	6.95		X			39								
	87.0	6.55		X			41								
	87.2	6.35		X			25	40							
	88.0	5.55		X			38								
	88.8	4.75		X			37								
	89.9	3.65		X			41								
	90.3	3.25						39							
	90.7	2.85		X			39								
8	91.0-101.0	2.55-[7.45]													Run 8 REC=100% RQD=98%
	91.1	2.45		X			38	39							
	91.6	1.95		X			39								
	92.1	1.45		X			41								
	92.2	1.35		X			41								
	92.6	0.95		X			39								
	93.2	0.35		X			39								
	93.7	[0.15]		X			39	39							
	94.0	[0.45]		X			37								

John Hawley
Staff Geologist

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001					GRADE = 93.55' TD = 142.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	94.5	[0.95]		X			39								
	94.7	[1.15]		X			52								Jagged.
	94.8	[1.25]		X			39								
	95.4	[1.85]		X			37								
	96.0	[2.45]	X				32	36							1/8 in. cc, NAPL.
	97.7	[4.15]		X			42								
	100.0	[6.45]				X									Horizontal break (mechanical?).
	100.4	[6.85]		X			40								
9	101.0-106.9	[7.45]-[13.35]													Run 9 REC=93% RQD=88%
	101.4	[7.85]		X			34	41							
	101.5	[7.95]		X			40							[8.95]-[48.65] M	
	105.6	[12.05]		X			25	43							
	105.7-106.0	[12.15]-[12.45]													Core chewed and broken.
10	106.9-111.5	[13.35]-[17.95]													Run 10 REC=100% RQD=100%
															Possible NAPL at 106.9 ft.
	107.2	[13.65]		X			41								
	108.4-108.5	[14.85]-[14.95]						38							1/2 in. cc, deformed bedding.
	111.3	[17.75]		X			37								
11	111.5-121.0	[17.95]-[27.45]													Run 11 REC=90% RQD=90%
	112	[18.45]		X			38								
	112.2	[18.65]						39							1/4 in. cc, undulating bedding.
	113.0	[19.45]		X			39								

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001			GRADE = 93.55' TD = 142.5'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	114.6	[21.05]		X			37								
	115.9	[22.35]		X			38	38							
	117.0	[23.45]						39							1/4 in. cc bedding .
	117.4	[23.85]		X			30								Cuts across bedding.
	118.0	[24.45]		X			38								
	119.2	[25.65]		X			36	37							
12	122.4-132.4	[28.85]-[38.85]													Run 12 REC=100% RQD=72%
	122.6	[29.05]						37							
	122.8-122.9	[29.25]-29.35]		X			30								Core chewed.
	123.2	[29.65]				X									Horizontal break in core.
	123.8-125.7	[30.25]-[32.15]											[30.25]-[32.05]		Core chewed and broken.
	126.4	[32.85]		X			36								
	126.8	[33.25]		X			38								
	127.3	[33.75]		X			35								
	127.5	[33.95]		X			33								
	127.9	[34.35]					33								
	128.3	[34.75]													Core chewed.
	128.4	[34.85]		X			33								
	128.8	[35.25]		X			32	32							
	129.6	[36.05]		X			31								
	130.4	[36.85]		X			37								
	130.5	[36.95]		X			35								

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001			GRADE = 93.55' TD = 142.5'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	131.0	[37.45]													Horizontal break in core.
	131.1	[37.55]		X			51								Cuts across bedding.
	131.7-132.5	[38.15]-[38.95]		X				40							Vertical fractures curving into
															bedding, graphite, steep bedding
															change.
13	132.4-142.2	[38.85]-[48.65]													Run 13 REC=99% RQD=99%
	132.5	[38.95]						73							
	132.8	[39.25]		X				78							Vertical fracture, minor offset,
															graphite, fault (thrust?), bedding
															changes from vertical back to
															normal.
	133	[39.45]						90							
	133.1	[39.55]													
	133.5	[39.95]						51							
	134.3	[40.75]						45							
	135.1	[41.55]		X			51								
	136.1	[42.55]		X			43								
	138.2	[44.65]		X			41	39							
	138.5	[44.95]		X			42								
	139.2-139.5	[45.65]-[45.95]					~59								Fault (thrust).
	139.5	[45.95]						43							Bedding offset & deformation.
	139.5-140.8	[45.95]-[47.25]													Minor offsets.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-17D						DATE LOGGED:	8/27/2001-8/28/2001			GRADE = 93.55' TD = 142.5'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	140.8-142.5	[47.25]-[48.95]													Fault, severe changes in bedding
															dip, bedding offsets and
															deformation.
	140.8	[47.25]						31							
	141.2	[47.65]						~15							
	141.7	[48.15]						~0							
	141.9	[48.35]						~37							

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-19I						DATE LOGGED:	7/30/2001					GRADE = 99.20' TD = 38.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	18.5-26.0	80.70-73.20											80.70-60.70 SI	80.70-64.20	Run 1 REC=100% RQD=84%
	21.0	78.20						38							
	19.5	79.70	X				38								Parallel to bedding, cc, some ss
															and striations.
	21.2	78.00	X				38								Parallel to bedding, cc, some ss
															and striations.
	21.7	77.50	X				38								Parallel to bedding, cc, some ss
															and striations.
	23.1	76.10	X				38								Parallel to bedding, cc, some ss
															and striations.
	23.5	75.70	X				38								Parallel to bedding, cc, some ss
															and striations.
	24.9	74.30	X				37	37	?						1/16 in. cc.
2	26.0-31.0	73.20-68.20													Run 2 REC=100% RQD=64%
	26.6	72.60					41	41	?						1/16 in. cc.
	26.9	72.30					40	40							1/16 in. cc.
3	31.0-35.1	68.20-64.10													Run 3 REC=100% RQD=59%
	28.0-32.0	71.20-67.20										X			Highly deformed zone, thick (up to
															3/4 in.) cc, vertical to nearly
															vertical. Brecciation, bedding
															offsets, bedding nearly vertical.
	30.5-31.1	68.70-68.10													Core chewed.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-19I						DATE LOGGED:	7/30/2001					GRADE = 99.20' TD = 38.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	31.1-31.3	68.10-67.90													Iron staining on core, highly
															brecciated (cc), cavity in core?
	33.0-35.0	66.20-64.20					85	85						64.20-60.70 M	Bedding offsets and deformation.
4	35.1-38.5	64.10-60.70													Run 4 REC=82% RQD=88%
	36.0-36.5	63.20-62.70		X			45	45							Glassy, polished surface, bedding
															offsets and deformation.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-20D						DATE LOGGED:	8/27/2001					GRADE = 94.87' TD = 110.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	23.5-24.4	71.37-70.47											71.37-34.17	71.37-34.17	Run 1 REC=83% RQD=34%
															Core chewed and missing.
	24.2	70.67						32							
	25.1	69.77		X			41								
	26.2	68.67	X				30	28							Some cc, striations.
	26.7	68.17	X				29								
	28.0	66.87		X			36	34							
	28.5	66.37		X			43								
	28.9	65.97		X			44	35							
	29.1	65.77		X			35								
	29.3	65.57		X			33								
2	29.4-36.4	65.47-58.47													Run 2 REC=70% RQD=57%
															Core chewed and missing thru
															35.3 ft.
	29.7	65.17		X			34								
	30.0	64.87						36							
	30.5	64.37		X			43	43							
	31.0	63.87	X				39								Little cc, little py.
	32.1	62.77		X			43	43							Some small vertical fractures along
															top of fracture plane, many vertical
															fractures below plane, graphite.
	32.4	62.47	X				44								

John Hawley
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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-20D						DATE LOGGED:	8/27/2001					GRADE = 94.87' TD = 110.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	32.4	62.47													Core chewed and missing.
	35.0	59.87		X			42								Graphite, striations.
	35.4	59.47					30	41							Fracture looks mechanical, pyrite
															on light gray beds.
	35.7	59.17		X			48								
	36.2	58.67		X			45								
3	36.4-45.8	58.47-49.07													Run 3 REC=97% RQD=59%
	36.7	58.17		X			44	39							
	36.8	58.07		X			~40								Bedding offsets and deformation.
	36.9	57.97						43							
	37.2	57.67		X			42								
	37.4	57.47		X			49								
	37.7	57.17	X				40								Some cc, little py.
	38.4	56.47		X			~36								
	38.8	56.07	X				38								Little py.
	38.7	56.17					~70								Bedding offset, cc.
	39.1	55.77	X				36	39							
	39.6	55.27		X			37								
	39.9	54.97		X			39								
	40.1	54.77		X			48								Vertical cc fractures.
	40.5	54.37		X			49								Vertical cc fractures.
	40.9	53.97		X			37	40							

John Hawley
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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-20D						DATE LOGGED:	8/27/2001			GRADE = 94.87' TD = 110.1'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	41.3	53.57		X			38								
	41.5	53.37		X			71	43							Bedding offset.
	42.3	52.57		X			48								Bedding deformation.
	42.7	52.17		X			53								
	42.9	51.97		X			55								
				X			41	43							Bedding offset.
	43.3	51.57		X			51								
	43.4	51.47		X			43	48							
	43.5	51.37		X			46								
	43.6	51.27	X				51								cc.
	44.0	50.87				X	22								Significant water loss.
	44.4	50.47		X			38								
	44.5	50.37		X			36								
	44.8	50.07		X			51								
	45.1-45.7	49.77-49.17		X			~50								Several HO fractures.
4	45.8-51.4	49.07-43.47													Run 4 REC=59% RQD=34%
	45.8-46.7	49.07-48.17		X			~45	~40							Several HO fractures.
	47.2	47.67		X			46	42							
	47.4	47.47		X			50								
	47.7	47.17	X				49								cc, bedding offsets.
					X		11								
	48.1	46.77		X			35	36							

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-20D						DATE LOGGED:	8/27/2001					GRADE = 94.87' TD = 110.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	48.3	46.57	X				46								Little cc.
	48.6	46.27		X			42								
	48.8	46.07		X			~40								Curving.
	48.8-50.3	46.07-44.57													Several fractures, microfractures,
															bedding offsets & deformation.
															Could not manage water loss.
5	52.0-55.0	42.87-39.87					34	38							Run 5 REC=100% RQD=77%
															Same as 48.8-50.3 for all of Run 5.
	52.4	42.47		X			53								
	53.2	41.67		X			44								
	54.5	40.37		X											
6	55.0-60.7	39.87-34.17													Run 6 REC=100% RQD=26%
															Same as 48.8-50.3 for all of Run 6.
	56.4	38.47						42							
	58.4	36.47						45							
	59.7	35.17						47							
7	60.7-65.0	34.17-29.87											34.17-[15.23] LI	34.17-[15.23]	Run 7 REC=100% RQD=86%
															Same as 48.8-50.3 for all of Run 7,
															rock is more cohesive.
	61.4	33.47						42							
	63.9	30.97		X				45							Core breaks easily along bedding
															planes as it is handled.

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-20D						DATE LOGGED:	8/27/2001					GRADE = 94.87' TD = 110.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	64.5	30.37		X				47							
8	65.0-75.0	29.87-19.87													Run 8 REC=100% RQD=94%
															Same as Run 7 for all of Run 8.
	65.9	28.97						41							Bedding offsets.
	70.6	24.27						53							
	74.6	20.27						49							
9	75.0-85.0	19.87-9.87													Run 9 REC=100% RQD=93%
															Same as Run 7, less fracturing.
	76.5	18.37						42							
	79.3	15.57						46							
	81.0	13.87						47							
	83.8	11.07		X			38								
	84.8	10.07	X				66								cc.
	85.0	9.87						39							
10	85.0-90.0	9.87-4.87													Run 10 REC=100% RQD=90%
															Same as Run 9.
	87.0	7.87					68	56							gra.
	88.9	5.97		X			43								Stepping.
11	90.1-100.1	4.77-[5.23]													Run 11 REC=100% RQD=82%
	90.1-90.6	4.77-4.27													Low RQD, core chewed & missing,
															less fractures & offsets.
	92.0	2.87						36							

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-20D						DATE LOGGED:	8/27/2001					GRADE = 94.87' TD = 110.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	95.2	[0.33]	X				49								cc.
	96.4-96.7	[1.53]-[1.83]													Low RQD zone.
	98.4	[3.53]						46							
12	100.1-110.1	[5.23]-[15.23]													Run 12 REC=91% RQD=67%
															Same as Run 11.
	100.8	[5.93]						38							
	104.5	[9.63]						36							
	108.5	[13.63]						40							

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-21D						DATE LOGGED:	7/30/2001					GRADE = 86.45' TD = 59.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	11.6-20.5	74.85-65.95											73.95-73.55	74.85-27.05	Run 1 REC=100% RQD=96%
	12.6-~14.0	73.85-~72.45		X			85	12					72.45-72.25		Vertical fracture, open.
	18.6	67.85			X			12							cc parallel to bedding.
2	21.2-30.0	65.25-56.45													Run 2 REC=100% RQD=88%
	18.6	67.85			X			12							cc.
	~23.5	~62.95		X			62						63.25-63.05		Started to lose water during
															coring.
	25.7	60.75			X		12	12					61.95-61.65		Partially filled, NAPL in core water,
													60.85-60.45		staining, odor, and sheen.
	29.6	56.85					13	13							Partially filled, step offset, py
															flakes, NAPL in core water.
3	30.0-40.0	56.45-46.45											55.05-54.95		Run 3 REC=100% RQD=90%
	32.6	53.85		X			62	13					52.85-52.25		
	38.5	47.95						16					49.15-49.05		
4	40.0-48.7	46.45-37.75											45.35-44.85		Run 4 REC=95% RQD=79%
	41.5-~43.7	44.95-~42.75		X			65								v. thin fractures which stayed wet
															after core dried.
	47.0-48.0	39.45-38.45		X			60-65	20					39.75-37.75		
5	49.4-59.4	37.05-27.05													Run 5 REC=92% RQD=71%
	50.0-58.0	36.45-28.45													Significant water loss during
															coring.
	51.7	34.75				X	20	20							

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-21D						DATE LOGGED:	7/30/2001					GRADE = 86.45' TD = 59.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	53.0	33.45		X			65						33.85-32.95		
	53.1	33.35				X	14	14							v. thin open fractures.
	53.6	32.85			X		18	18							cc.
	54.4-55.0	32.05-31.45		X			60-65						32.05-31.45		RQD=0%
	55.5	30.95						20					30.45-30.25		
	57.3	29.15			X		2	1			X		29.35-28.45		Step faulting present, significant
															water gain during coring.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-22I						DATE LOGGED:	5/24/2001					GRADE = 85.29' TD = 36.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	8.0-13.4	77.29-71.89											77.29-73.59	77.29-49.19 M	Run 1 REC=80% RQD=16%
	8.0-11.0	77.29-74.29													RQD=0%, vertical fractures, core
															chewed up. NAPL in core water
															at 10.0 ft.
	11.0	74.29	X				65	65							
	12.6-13.2	72.69-72.09	X	X			75	75					72.79-72.19 V		cc, py flakes.
	14.0	71.29						86							
2	13.4-21.0	71.89-64.29													Run 2 REC=100% RQD=26%
															Lost water through Runs 1 and 2,
															oil in Anthony Kill.
	15.8-21.8	69.49-63.49		X			85-90	85-90			X		69.99-64.29 V		6 ft. vertical fracture, polished
															surface, some mineral coating
															(py flakes).
3	21.0-26.0	64.29-59.29													Run 3 REC=80% RQD=44%
	22.3	62.99		X			58	85			X				Partially filled, striations.
	23.6	61.69	X	X			36	84					61.69-59.79 V		NAPL in water during coring,
															partially filled cc.
	24.0	61.29		X			36	84							
	24.4-25.5	60.89-59.79		X			82	82			X				Sheen and odor on core, polished
															with gra surface.
4	26.0-31.0	59.29-54.29													Run 4 REC=98% RQD=78%
	26.0-27.0	59.29-58.29	X				70	80				X			Deformation and offsets, cc,

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-22I	DATE LOGGED:	5/24/2001	GRADE = 85.29' TD = 36.1'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															closed.
	28.4-29.8	56.89-55.49		X			83	84			X		56.79-55.39 V		cc (v thin closed) perpendicular to
															fracture at 7 to 8 locations.
5	31.0-36.1	54.29-49.19		X			86	86			X		54.29-49.69 V		Run 5 REC=96% RQD=47%
															Vertical fractures through entire
															run, step marking.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-23D						DATE LOGGED:	5/21/2001-7/5/2001					GRADE = 84.46' TD = 80.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	17.1-21.1	67.36-63.36											67.36-59.36 SI	67.36-24.46	Run 1 REC=100% RQD=90%
	18.5	65.96						13							
	18.7	65.76			X										Along bedding 0.01 ft. thick.
	18.7-18.8	65.76-65.66		X											cc.
	19.8	64.66			X										Along bedding, cc.
2	21.1-31.1	63.36-53.36													Run 2 REC=100% RQD=97%
	20.0-23.5	64.46-60.96	X												v. thin.
	22.6	61.86				X									open.
	25.2	59.26			X										Along bedding, cc.
	25.7	58.76			X										v. thin.
	25.6-25.7	58.86-58.76				X									open.
	30.4	54.06						22					50.86-49.06 SI		
	35.5	48.96		X			50						48.96-48.46		
3	31.1-40.1	53.36-44.36													Run 3 REC=100% RQD=93%
	39.5	44.96						20					44.46-44.26		
4	40.1-50.0	44.36-34.46													Run 4 REC=100% RQD=58%
	41.0-45.0	43.46-39.46	X	X			80-85						43.46-36.26 V		High angle fractures.
	42.5	41.96						25							
	46.0-47.0	38.46-37.46													Microfaulting and offsets.
	46.5	37.96						42							
	46.8	37.66					62								gra.
	47.4	37.06		X			50								

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-23D						DATE LOGGED:	5/21/2001-7/5/2001					GRADE = 84.46' TD = 80.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	48.0-48.4	36.46-36.06		X			72								gra.
	48.1-48.5	36.36-35.96		X			88								Nearly vertical.
	49.0	35.46						42							
	50.0	34.46													Oil during coring, rust color.
5	50.0-56.0	34.46-28.46						42					29.66-29.26		Run 5 REC=100% RQD=97%
	55.5	28.96						53							
	55.8	28.66	X				53	53	?						1/8 in. calcite marker bed? Parallel
															to bedding.
6	56.5-65.0	27.96-19.46													Run 6 REC=100% RQD = 96%
	58.2	26.26												24.46-9.16 M	Recumbent fold in bedding.
	62.0	22.46						40							
	63-63.5	21.46-20.96										X	21.66-21.46		Deformation and offsets.
	63.4	21.06		X		X	0 - 78								v. thin.
	64.3-66.0	20.16-18.46					75-80								Deformation and offsets with
															several high angle open fractures.
	67.4	17.06	X					50							v. thin cc parallel to bedding.
	77.5	6.96						60					10.36-10.16	9.16-5.16	

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-25I						DATE LOGGED:	7/30/2001					GRADE = 94.17' TD = 47.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	27.0-31.0	67.17-63.17												67.17-47.17	Run 1 REC=100% RQD=90%
	28.0	66.17						18							
	30.7	63.47				X	18	18							Partially filled cc, py specks,
															striations? Semi-polished surface.
2	31.0-41.0	63.17-53.17													Run 2 REC=100% RQD=95%
	34.0	60.17						18					58.77-57.97 SI		
	39.3-40.3	54.87-53.87											55.37-53.37 SI		Deformation and offsets.
	39.8	54.37													Fracture face polished.
	40.0-40.3	54.17-53.87										X			bc, deformation and offsets.
3	41.0-47.0	53.17-47.17													Run 3 REC=87% RQD=80%
	43.4-43.8	50.77-50.37											50.77-50.47		Core chewed up, significant water
															loss during coring.
	44.0	50.17						14							
	45.5-46.2	48.67-47.97		X			82	14							

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-26I	DATE LOGGED:	7/30/2001	GRADE = 91.88' TD = 45.5'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	25.5-30.5	66.38-61.38											66.38-64.38	66.38-52.48	Run 1 REC=100% RQD=74%
	28.0	63.88						33					63.08-61.88		
	28.9	62.98	X				33	33	?						1/16 in. cc.
2	30.5-40.5	61.38-51.38													Run 2 REC=100% RQD=72%
	31.0	60.88						31							
													57.98-57.88		
	35.2-36.8	56.68-55.08		X			70-80	31					56.88-54.88	52.48-46.38 M	Partially filled cc.
													53.58-53.38		
3	40.5-45.5	51.38-46.38											52.48-52.38		Run 3 REC=97% RQD=78%
	41.0	50.88						28							
	42.7-43.1	49.18-48.78		X			85-90	29					49.18-48.18		Partially filled.
	44.7	47.18					31	31					48.18-46.88 SI		1/16 to 1/4 in. cc.
	44.8	47.08					40-45	31							v thin, striations, partially filled cc.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-28I	DATE LOGGED:	7/5/2001	GRADE = 85.35' TD = 25.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	14.0-16.0	71.35-69.35											71.35-60.35 V	71.35-60.35	Run 1 REC=100% RQD=83%
	14.2-14.4	71.15-70.95										X			UFP - deformed zone, shale bc.
2	16.0-18.2	79.35-67.15													Run 2 REC=86% RQD=71%
3	18.2-20.5	67.15-64.85													Run 3 REC=70% RQD=59%
	15.0-~20.0	70.35-~65.35		X			85	85-90							Vertical fractures.
4	20.5-25.0	64.85-60.35													Run 4 REC=100 RQD=89%
	22.4-23.3	62.95-62.05	X				74	74			X	X			Semi-polished, marbelized cc, ss
															v thin cc perpendicular to fracture,
															deformation, bc shale.
	~24.0	~61.35		X			90								gra (smooth).
	24.5	60.85													Microfracture, open.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-29I						DATE LOGGED:	7/5/2001					GRADE = 84.89' TD = 26.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	12.0-21.0	72.89-63.89												72.89-58.89	Run 1 REC=100% RQD=93%
	13.0	71.89						23							
	13.5	71.39		X			56	13					71.49-71.09		
	16.4	68.49		X			50-60								NAPL in tub, with series of v. thin
															microfractures.
	18.0	66.89	X				45					X			cc, with deformation and offsets.
	18.8	66.09			X		15	20							cc.
	20.3	64.59			X		20	35							cc, offset closed.
2	21.0-26.0	63.89-58.89													Run 2 REC=90% RQD=36%
	21.0-22.3	63.89-62.59		X			85	50			X?				Polished vertical fracture.
	22.5-23.0	62.39-61.89		X			70	75			X?				Polished vertical fracture.
	23.5-23.8	61.39-61.09					67	65			X?		61.19-58.89		Fractures from 21.0-23.8 ft. perp-
															endicular to bedding, py flakes.
	24.0-26.0	60.89-58.89													RQD = 0%, NAPL encountered in
															tub and Anthony Kill, water loss.
	24.0	60.89		X			60-70								Polished, NAPL.

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-29D						DATE LOGGED:	8/28/2001					GRADE = 84.27' TD = 111.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	25.9-35.9	58.37-48.37												58.37-[12.73]	Run 1 REC=100% RQD=89%
	26.6	57.67						34							
	27.1	57.17		X			43								
	28.5	55.77		X			33								
	30.2	54.07				X	12	34							Oblique to bedding.
	30.6	53.67				X	15								Oblique to bedding.
	31.2	53.07				X	17								Oblique to bedding.
	32.0	52.27		X			31						52.27-51.57		
	32.1-32.6	52.17-51.67		X			70	38							
	32.6	51.67		X			31								
	33.8	50.47				X	21								
	34.4-35	49.87-49.27											49.77-49.27		Core chewed and broken.
	35.0	49.27				X	29								
2	35.9-45.9	48.37-38.37													Run 2 REC=100% RQD=96%
	36.7	47.57				X	14	34							Oblique to bedding.
	37.0	47.27	X				31								cc.
	37.6	46.67		X			34								
	37.8-38.4	46.47-45.87		X			74	28							Bedding offsets.
	40.0	44.27						31							
	40.7	43.57													Horizontal breaks.
	41.6	42.67						49							
	41.9	42.37		X			38								

John Hawley
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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-29D						DATE LOGGED:	8/28/2001					GRADE = 84.27' TD = 111.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	42.9	41.37		X			36								
	45.1	39.17						36							
	45.6	38.67				X	19								Oblique to bedding.
3	45.9-55.9	38.37-28.37													Run 3 REC=100% RQD=100%
	47.3	36.97				X	22								Jagged.
	48.0	36.27				X	8	41							Jagged.
	52.2	32.07				X	27								Jagged.
	55.7	28.57													Horizontal break.
4	55.9-65.9	28.37-18.37													Run 4 REC=100% RQD=99%
	57.0	27.27						62							Minor cc perpendicular to bedding.
	58.3	25.97				X	19								
	58.6	25.67						59							
	62.0	22.27						58							
	62.5	21.77		X			61								
	65.2	19.07						64							1/2 in. cc.
	65.7	18.57						70							Horizontal break.
5	65.9-75.9	18.37-8.37													Run 5 REC=100% RQD=99%
	65.8-66.4	18.47-17.87													Several minor cc perpendicular
	67.2	17.07													to bedding.
	67.5	16.77					38	65							Set of cc, oblique to bedding.
	68.6	15.67													Jagged horizontal break, core is
															breaking easily along bedding

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-29D						DATE LOGGED:	8/28/2001					GRADE = 84.27' TD = 111.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															planes due to handling.
	69.5	14.77						72							1/2 in cc.
	70.6	13.67													Start of minor cc fractures
															perpendicular to bedding.
	71.0	13.27						84							
	71.6	12.67						69							
	71.9	12.37						80							
	72.5	11.77						59							
	72.8	11.47	X				52								cc, oblique to bedding.
	73.4	10.87						57							
	73.8	10.47						90							
	74.6	9.67						59							
6	75.9-85.9	8.37-[1.63]													Run 6 REC=100% RQD=95%
	75.9	8.37		X			57						8.37-7.57		Oblique to bedding.
	76.2	8.07		X			40								Oblique to bedding.
	76.7	7.57						73							
	77.0	7.27						62							
	78.0	6.27						85							
	78.2	6.07					34								cc, jagged, offsets.
	79.0	5.27						68							
	81.6	2.67						61							
	83.3	0.97						55							

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-29D						DATE LOGGED:	8/28/2001					GRADE = 84.27' TD = 111.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	85.5-85.6	[1.23]-[1.33]						58							cc perpendicular to bedding.
7	85.9-90.0	[1.63]-[5.73]													Run 7 REC=95% RQD=95%
	87.0	[2.73]						55							
8	90.0-100.0	[5.73]-[15.73]													Run 8 REC=100% RQD=98%
	90.1-91	[5.83]-[6.73]	X				84						[5.73]-[10.13] SI		Vertical fracture, cc.
	90.6	[6.33]				X	21	62							
	91.3	[7.03]													Horizontal breaks, jagged.
	91.7	[7.43]													Horizontal breaks, jagged.
	92.6	[8.33]						68							
	94.1-94.4	[9.83]-[10.13]					~30								Core chewed and broken.
	94.4	[10.13]						70							3/4 in. cc.
	96.3	[12.03]			X		30	71					[12.03]-[15.43] SI		cc.
	96.7	[12.43]	X				56	69				X		[12.73]-[25.33] M	cc, opposite dip of bedding,
															bedding is offset 0.1 in, little bc .
	97.3	[13.03]			X		30	64				X			Bedding is offset, little bc.
	99.5	[15.23]													Jagged break.
9	100.0-109.7	[15.73]-[25.43]													Run 9 REC=99% RQD=99%
	101.0	[16.73]						68							
	102.3	[18.03]		X			46								
	104.6	[20.33]						68							
	105.3	[21.03]	X				68								cc.
	105.9	[21.63]		X				72							

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-29D						DATE LOGGED:	8/28/2001					GRADE = 84.27' TD = 111.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	106.5-107.2	[22.23]-[22.93]		X			88	67							
	108.7	[24.43]													Jagged horizontal break.
	109.2	[24.93]	X					63							
	109.4	[25.13]		X				81							

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-30D						DATE LOGGED:	7/5/2001					GRADE = 93.19' TD = 121.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	28.5-34.5	64.69-58.69											63.79-63.29	64.69-23.19	Run 1 REC=100% RQD=78%
													62.19-61.89		Run 1 to Run 3: Water loss during
															coring.
	32.0	61.19						12							
2	34.5-39.5	58.69-53.69											57.19-55.19		Run 2 REC=100% RQD = 74%
															0 - 10% RQD 36.0-38.0 ft.,
															deformation and offsets with
															numerous hairline, open fractures.
3	39.5-49.3	53.69-43.89													Run 3 REC=100% RQD=95%
	47.0	46.19						12					43.89-42.19		
4	49.3-51.0	43.89-42.19													Run 4 REC=9% RQD=99%
5	51.0-59.0	42.19-34.19													Run 5 REC=100% RQD=89%
6	59.0-69.3	34.19-23.89													Run 6 REC=100% RQD=92%
	60.0	33.19						15					31.29-30.89		
	63.4	29.79			X		15	15	?			X	30.19-29.79		1/4in. cc, some bc, marker bed?
	67.0	26.19						15					27.79-26.69		
													24.99-24.19		
7	69.3-79.5	23.89-13.69													Run 7 REC=100% RQD=96%
	70.5	22.69					14	14					24.19-22.69 SI	23.19-[24.51] M	NAPL observed during coring. No
															apparent or unusual fracture at
															70.5 ft.
	75.0	18.19						12					16.49-15.59 SI		

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-30D	DATE LOGGED:	7/5/2001	GRADE = 93.19' TD = 121.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
													14.39-14.09		
8	79.5-89.7	13.69-3.49													Run 8 REC=94% RQD=94%
	88.0	5.19						12					5.79-5.09		
	69.0-88.0	24.19-5.19													Nothing unusual.
9	91.1-101.1	2.09-[7.91]													Run 9 REC=100% RQD=100%
	95.5-~99.0	[2.31]-~[5.81]						82					[4.91]-[5.81]		95.5ft. - Sharp increase in bedding
															with deformation, offsets, and high
															angle open fractures.
	101.0	[7.81]						12							
10	101.1-106.0	[7.91]-[12.81]													Run 10 REC=100% RQD=94%
11	106.0-116.0	[12.81]-[22.81]													Run 11 REC=100% RQD=100%
	110.0	[16.81]						12							
12	116.0-121.0	[22.81]-[27.81]													Run 12 REC=34% RQD=34%
	117.0	[23.81]						12							

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-32D						DATE LOGGED:	7/26/2001					GRADE = 87.23' TD = 111.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	11.95-16.45	75.28-70.78												75.28-61.23	Run 1 REC=100% RQD=92%
	14.0	73.23						47							
	12.0-19.0	75.23-68.23													Several open fractures parallel to
															bedding.
2	16.45-22.1	70.78-65.13											68.23-67.33		Run 2 REC=100% RQD=82%
	21.2-25.0	66.03-62.23									X?	X	66.13-49.03		cc, offsets and breccia, striations.
															Several vertical open fractures.
3	22.1-27.9	65.13-59.33													Run 3 REC=79% RQD=26%
	26.0-33.5	61.23-53.73												61.23-31.03 M	Low RQD zone with missing core.
4	27.9-34.0	59.33-53.23													Run 4 REC=51% RQD=18%
	28.0	59.23						52							
	33.5-34.2	53.73-53.03	X				78	45			X				cc up to 1/2 in. thick with
															striations, ss extension veins,
															fractures extending perpendicular
															to 78^{o} cc fracture, filled.
															Water blockage at 34 ft.
5	34.0-37.6	53.23-49.63													Run 5 REC=64% RQD=31%
	35.3-37.5	51.93-49.73													Low RQD zone, missing core.
6	37.6-46.0	49.63-41.23													Run 6 REC=96% RQD=90%
	39.4	47.83						32					43.03-42.83		
													42.23-41.73		
7	46.0-52.7	41.23-34.53													Run 7 REC=85% RQD=73%

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-32D						DATE LOGGED:	7/26/2001					GRADE = 87.23' TD = 111.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	48.4-49.0	38.83-38.23											39.73-37.23		Core chewed (0% RQD).
8	52.7-56.0	34.53-31.23													Run 8 REC=100% RQD=94%
	53.0-72.0	34.23-15.23											36.23-34.73		Nothing unusual, >90% RQD.
	54.0	33.23						40					34.73-31.53 SI	31.03-[23.82]	
9	56.0-66.0	31.23-21.23													Run 9 REC=100% RQD=98%
													27.53-27.33		
	63.0	24.23						40							
10	66.0-71.0	21.23-16.23													Run 10 REC=98% RQD=90%
11	71.0-81.0	16.23-6.23													Run 11 REC=100% RQD=95%
	72.0	15.23						43							
	75.0	12.23						45					11.03-10.83		
	80.0	7.23						50							
12	81.0-85.7	6.23-1.53													Run 12 REC=100% RQD=98%
13	85.7-91.0	1.53-[3.77]													Run 13 REC=92% RQD=92%
	89.7-90.0	[2.47]-[2.77]													Bedding offsets and deformation,
															no break in core, bedding angle
															increase.
14	91.3-101.3	[4.07]-[14.07]													Run 14 REC=100% RQD=85%
	91.6	[4.37]						55							Several high and low angle cc
															fractures.
	93.0	[5.77]						56					[7.17]-[12.77] SI		
	98.5-100.0	[11.27]-[12.77]													Low RQD.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-32D						DATE LOGGED:	7/26/2001			GRADE = 87.23' TD = 111.5'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	99.6	[12.37]													Glasy, polished surface on rock
															face, bedding angle decrease.
	101.0	[13.77]						30							
15	101.3-111.2	[14.07]-[23.97]													Run 15 REC=98% RQD=98%
	103.0-111.0	[15.77]-[23.77]											[16.37]-[18.18] SI		Bedding deformation/faulting?
															Several high angle v. thin filled
															fractures.
	110.0-111.0	[22.77]-[23.77]						90							Bedding sharply vertical.
	110.7	[23.47]													Vertical fracture, polished and
															glassy.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-33D						DATE LOGGED:	8/29/2001					GRADE = 94.34' TD = 141.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	26.4-24.6	67.94-69.74											67.94-65.14	67.94-[45.76]	Run 1 REC=53% RQD=44%
															Chewed and missing core.
2	29.6-36.0	64.74-58.34													Run 2 REC=97% RQD=88%
															Water loss.
	30.0	64.34						30							
	33.2-33.5	61.14-60.84													On one side of core zone of slight
															core offset with random cc
															fractures, v. thin to 1/10 in. thick.
	34.0	60.34						34							
	35.0-36.2	59.34-58.14					80-85	34					59.54-58.34		
3	36.0-46.0	58.34-48.34													Run 3 REC=99% RQD=99%
															Water loss.
	37.6	56.74					35	35							Very smooth, polished surface.
	45.0	49.34						35							
4	46.0-55.2	48.34-39.14													Run 4 REC=100% RQD=95%
	49.0	45.34					46	46							cc with striations.
	55.0	39.34						35							
5	55.2-65.1	39.14-29.24											37.14-36.74		Run 5 REC=100% RQD=90%
	64.7-65.0	29.64-29.34											29.84-28.84		v. thin, horizontal and vertical.
6	65.1-75.4	29.24-18.94													Run 6 REC=100% RQD=99%
	66.0	28.34						41							
7	75.4-85.5	18.94-8.84													Run 7 REC=100% RQD=96%

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-33D						DATE LOGGED:	8/29/2001					GRADE = 94.34' TD = 141.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	76.0	18.34					46								
	83.4	10.94	X				51								cc.
	83.5	10.84	X			X	49	53							cc.
			X				60								cc, oblique to bedding.
	84.8	9.54		X			49	46							
8	85.5-95.8	8.84-[1.46]											5.34-[4.66]		Run 8 REC=100% RQD=95%
	91.2	3.14		X			51								
	91.3-92.0	3.04-2.34		X			74								Little cc, oblique to bedding.
	92.4	1.94				X	33								NAPL in fracture, adjacent curving
															fractures also contain NAPL
															traces.
	93.4-93.6	0.94-0.74					53	53					0.94-0.04		Vertical fractures.
	93.6	0.74	X												
	93.6-94.0	0.74-0.34													Core chewed and broken.
	94.3	0.04		X			51								
9	95.8-106.0	[1.46]-[11.66]													Run 9 REC=100% RQD=100%
	96.3	[1.96]		X			53								
	97.1	[2.76]		X			~66								Uneven surface.
	97.8	[3.46]		X			53	52							
	98.2	[3.86]		X			66								Oblique to bedding.
	98.9	[4.56]				X	24								
	99.9	[5.56]					54								

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-33D						DATE LOGGED:	8/29/2001					GRADE = 94.34' TD = 141.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	100.2	[5.86]		X			39								Jagged.
	101.7	[7.36]	X				54								
	103.3	[8.96]		X			52								
	104.7	[10.36]		X			54	51							
	105.9	[11.56]		X			51								
10	106.0-111.2	[11.66]-[16.86]													Run 10 REC=100% RQD=100%
	106.3	[11.96]		X			53								
	107.1	[12.76]	X				49								cc.
	107.4	[13.06]	X				50								cc.
	107.9	[13.56]		X			46								
	110.0	[15.66]		X			52	52							
	110.3	[15.96]		X			52								
	110.9	[16.56]		X			48								
11	111.2-120.0	[16.86]-[25.66]													Run 11 REC=91% RQD=85%
	111.8	[17.46]		X			49	49							
	112.4	[18.06]		X			49								
	112.7	[18.36]				X	24								Oblique to bedding.
	114.7	[20.36]		X			49								
	116.1	[21.76]		X			46						[21.66]-[25.66] SI		Jagged.
	116.2	[21.86]		X			47								
	116.3	[21.96]		X			44								Oblique to bedding.
	117.2	[22.86]		X			42								Curving vertical.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-33D						DATE LOGGED:	8/29/2001					GRADE = 94.34' TD = 141.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	118.0	[23.66]		X			49	47							Minor cc.
	118.6	[24.26]		X			53								Set ot two fractures.
	118.7	[24.36]	X				52								cc.
	119.2	[24.86]											[25.66]-[36.06]		End of run, several vertical
															fractures (probably mechanical).
12	120.4-130.4	[26.06]-[36.06]													Run 12 REC=54% RQD=15%
															Core chewed and missing
															throughout Run 12.
	121.2	[26.86]						49							
	124.0	[29.66]						47							
	129.1	[34.76]	X				62	47							cc, oblique to bedding.
	129.7	[35.36]	X				61								cc, oblique to bedding.
	130.0	[35.66]	X				61/51								cc, oblique to bedding.
	130.2	[35.86]	X												Thick cc, no measureable surface.
13	130.4-135.4	[36.06]-[41.06]											[36.06]-[43.16] SI		Run 13 REC=100% RQD=78%
	131.0	[36.66]						43							
	131.5	[37.16]		X			45								
	131.9	[37.56]		X			46								
	132.0	[37.66]		X			37								Stepping, oblique to bedding.
	132.3	[37.96]		X			49	47							
	132.4	[38.06]		X			46								
	133.4	[39.06]		X			41								Some cc.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-33D						DATE LOGGED:	8/29/2001					GRADE = 94.34' TD = 141.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	133.8	[39.46]	X				42								cc, bedding deformation, striations.
	134.1	[39.76]		X			36								Jagged, deformed bedding.
	134.6	[40.26]					35								Jagged, deformed bedding.
	134.9	[40.56]					41								Jagged, deformed bedding.
	135.0	[40.66]					38	~40							Jagged, deformed bedding.
	135.3	[40.96]					34								Jagged, deformed bedding.
14	135.4-140.5	[41.06]-[46.16]													Run 14 REC=90% RQD=90%
	135.8	[41.46]		X			42	39							
	136.0	[41.66]		X			39								
	136.4	[42.06]		X			41								
	137.4	[43.06]		X			41	40							
	138.5	[44.16]			X		14								cc.
	138.9	[44.56]	X				41	41							Cross-cutting cc microfractures.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-34D						DATE LOGGED:	9/12/2001					GRADE = 94.26' TD = 120.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	27.0-36.0	67.26-58.26												67.26-23.26	Run 1 REC=100% RQD=87%
	28.1	66.16						24							
	29.4	64.86				X	25								1/4 in. cc
	29.9	64.36				X	21								
	30.0	64.26				X	20								
	30.5	63.76				X	19	23					63.76-63.16		
	30.8	63.46				X	20								
	30.9	63.36				X	24								
	31.0	63.26				X	21								
	32.0	62.26		X			42	22					62.26-61.96		
	32.2	62.06				X	23								
	33.5	60.76				X	24						60.76-60.56		
	33.6	60.66				X	25								
	34.8	59.46				X	22						59.46-59.16		
	35.0	59.26				X	25								Set of two fractures.
2	36.0-46.0	58.26-48.26											58.46-58.26		Run 2 REC=100% RQD=85%
	36.8	57.46				X	14								Set of two fractures.
	37.0	57.26				X	22								
	37.7	56.56				X	21						56.56-55.96		
	37.9	56.36				X	33								
	38.3	55.96		X			61								Also a jagged break, almost
															perpendicular to bedding.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-34D						DATE LOGGED:	9/12/2001			GRADE = 94.26' TD = 120.5'			
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	39.4	54.86						18					54.86-52.46		Bedding offsets and deformation
	39.6	54.66				X	38								
	39.8	54.46				X	20								
	40.0	54.26		X			51								Perpendicular to bedding.
	40.0	54.26		X			35								Parallel to bedding.
	40.4	53.86				X	21								
	40.8	53.46				X	39								
	41.5	52.76				X	18								
	41.7	52.56				X	22								
	42.1	52.16						25							
	42.7	51.56				X	32								
	43.4	50.86				X	39						50.86-48.26 SI		Intense, jagged fractures.
	43.6	50.66				X	37								Intense, jagged fractures.
	44.1	50.16				X	25								
	44.6	49.66				X	40								
	45.0	49.26				X	32								
	45.4-45.5	48.86-48.76				X	22								Set of 2 Fractures.
	45.9	48.36					15								Jagged.
3	46.0-56.0	48.26-38.26													Run 3 REC=100% RQD=92%
	46.9	47.36				X	20								
	48.2	46.06		X			44								1/2 in. bedding offsets.
	48.7	45.56				X	25								Jagged.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-34D						DATE LOGGED:	9/12/2001					GRADE = 94.26' TD = 120.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	49.5	44.76				X	22								Jagged.
	50.2-50.4	44.06-43.86				X	14/38						43.96-43.66		Set of three fractures.
	50.5	43.76				X	20	14							
	51.7	42.56				X	22						42.56-41.76 SI		
	52.0	42.26				X	30								Oblique to bedding.
	52.3	41.96				X	16								
	52.5	41.76				X	18								
	53.3	40.96				X	22								Jagged.
	54.2	40.06				X	18								
	54.7-55.4	39.56-38.86					21	23					39.56-38.36		Vertical fracture.
	55.4-55.9	38.86-38.36													Vertical fracture.
	55.9	38.36				X	21								
4	56.0-66.0	38.26-28.26													Run 4 REC=100% RQD=96%
	56.1	38.16						14							1/2 in. cc.
	56.9	37.36				X	17								
	58.3-58.6	35.96-35.66	X				55						35.86-35.26		1/4-1/2 in. cc fault.
	58.8	35.46				X	18								Vertical fracture also.
	59.1	35.16				X	19								
	60.8-60.9	33.46-33.36											33.46-33.36		Horizontal fractures, core
															spinning?
	63.5-63.7	30.76-30.56		X			52						30.76-30.56		Several fractures.
	64.6	29.66				X	18						29.66-29.56		

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-34D						DATE LOGGED:	9/12/2001					GRADE = 94.26' TD = 120.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	65.7	28.56				X	15								
5	66.0-70.0	28.26-24.26													Run 5 REC=95% RQD=95%
	66.5	27.76				X	11	14							
	67.3	26.96			X		13								Little cc.
	67.8	26.46				X	12								
	68.2	26.06				X	13								Jagged.
	68.8	25.46				X	17								Jagged.
6	70.9-81.0	23.36-13.26												23.26-[14.74] M	Run 6 REC=100% RQD=98%
	72.0-72.3	22.26-21.96											22.06-21.96		Low RQD zone, several fractures.
	75.4	18.86				X	14								
	75.6	18.66				X	17								
	77.8	16.46				X	13	12							
7	81.0-91.0	13.26-3.26													Run 7 REC=100% RQD=100%
	85.0	9.26					16	14							Jagged.
	87.1	7.16			X		24								cc, bedding offsets and
															deformation.
	87.5	6.76				X	~15								cc, bedding offsets and
															deformation.
	88.3	5.96					19								
	88.2	6.06					18								
	90.3-90.7	3.96-3.56													
8	91.0-100.0	3.26-[5.74]													Run 8 REC=52% RQD=50%

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-34D						DATE LOGGED:	9/12/2001					GRADE = 94.26' TD = 120.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	94.0	0.26						11							
	95.5-100.4	[1.24]-[6.14]													0% RQD.
9	100.4-110.5	[6.14]-[16.24]													Run 9 REC=100% RQD=99%
	105.0	[10.74]						19							
	109.0	[14.74]						19						[14.74]-[26.24]	
	110.0-111.2	[15.74]-[16.94]											[15.44]-[15.94]		Vertical fractures.
10	110.5-120.5	[16.24]-[26.24]													Run 10 REC=100% RQD=100%

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-35I	DATE LOGGED:	10/22/2001	GRADE = 80.94' TD = 34.5'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	13.3-17.3	67.64-63.64												67.64-46.44	Run 1 REC=100% RQD=73%
															v. thin cc fractures, minor offsets,
															perpendicular to bedding.
	13.8	67.14						54							
	14.0	66.94													Horizontal break in core, 1/2 in. cc.
	14.8	66.14				X	21								
	14.9	66.04		X			42								
	15.6	65.34					58	58							
	16.7	64.24					57						64.24-63.54		
	16.7-17.4	64.24-63.54													Low RQD zone, intense fracturing.
2	17.3-24.3	63.64-56.64													Run 2 REC=100% RQD=94%
	18.7	62.24					54	58							
	19.0	61.94													Horizontal break in core.
	20.8	60.14					56								
	21.5	59.44					66								
	22.6	58.34						59							
	23.5	57.44					62	61							1/2 in. cc bedding.
3	24.3-34.3	56.64-46.64													Run 3 REC=97% RQD=97%
	26.7	54.24						59							
	28.7	52.24					63	61							
	30.1	50.84						60							
	31.0	49.94						73							py in mechanical breaks.

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-35I						DATE LOGGED:	10/22/2001					GRADE = 80.94' TD = 34.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	32.0	48.94						73							py in mechanical breaks.
	31.5-33.2	49.44-47.74													Set of four faults, vertical bedding.
	34.0	46.94						54							

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-36D						DATE LOGGED:	5/19/2003					GRADE = 94.58' TD = 161.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	18.9-20.8	75.68-73.78												75.68-20.68	Run 1 REC=100% RQD=100%
	19.0	75.58		X			55	55					75.58-75.08 SI		Slightly weathered, parallel to
															bedding.
	19.5	75.08				X	0	55							Slightly weathered.
2	20.8-24.9	73.78-69.68													Run 2 REC=100% RQD=100%
	21.0	73.58				X	20	55							Weathered.
	24.9	69.68				X		55							Weathered, rounded edges.
3	24.9-30.2	69.68-64.38													Run 3 REC=100% RQD=100%
	27.3	67.28	X				35	55							Thin, oblique to bedding, cc.
	28.1	66.48	X				10	55							Thin, oblique to bedding, cc.
4	30.2-35.3	64.38-59.28													Run 4 REC=100% RQD=96%
	31.7-31.9	62.88-62.68		X			55	55					62.88-62.68 LI		Two open fractures, oblique to
															bedding, trace cc.
5	35.3-40.6	59.28-53.98													Run 5 REC=100% RQD=92%
	38.1	56.48				X	10	55					56.48-55.88 LI		Tight, slightly weathered edges.
	38.5	56.08				X	10	55							Tight, slightly weathered edges.
	38.7	55.88		X		X	10, 80	55							Two fractures, tight.
	40.6	53.98													Core is broken.
6	40.6-45.9	53.98-48.68													Run 6 REC=96% RQD=94%
	41.1	53.48				X	0	55							Weathered.
7	45.9-50.9	48.68-43.68													Run 7 REC=100% RQD=98%
	49.2	45.38				X	5	50							Rounded, weathered.

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-36D						DATE LOGGED:	5/19/2003					GRADE = 94.58' TD = 161.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
8	50.9-55.9	43.68-38.68													Run 8 REC=100% RQD=100%
	53.0	41.58						50							
9	55.9-60.9	38.68-33.68													Run 9 REC=94% RQD=74%
	59.2	35.38											35.38-34.58		Smashed and broken core.
	60.0	34.58													Smashed and broken core.
10	60.9-65.9	33.68-28.68													Run 10 REC=100% RQD=98%
	63.0	31.58						60							
11	65.9-70.9	28.68-23.68													Run 11 REC=100% RQD=100%
	66.7	27.88				X	5	60							Slightly weathered.
	68.9	25.68				X	20	60							Oblique to bedding, tight.
12	70.9-75.9	23.68-18.68												20.68-[50.42] M	Run 12 REC=100% RQD=100%
	73.0	21.58		X			45	60							Perpendicular to bedding, slightly
															deformed beds (73.0-73.3').
13	75.9-80.9	18.68-13.68													Run 13 REC=100% RQD=98%
	79.0	15.58		X			45						15.58-15.08 SI		Slightly deformed beds, oblique to
															bedding.
	79.5	15.08		X			45	60							Oblique to bedding.
14	80.9-85.9	13.68-8.68													Run 14 REC=100% RQD=100%
	83.5	11.08						~60							Slightly deformed beds.
	84.8	9.78						~60							Slightly deformed beds.
15	85.9-90.9	8.68-3.68													Run 15 REC=100% RQD=100%
	89.3	5.28				X	20	60					5.28		Two 20^{o} fractures oblique to

Eric Lovenduski
Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-36D						DATE LOGGED:	5/19/2003					GRADE = 94.58' TD = 161.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															bedding.
	90.5	4.08				X	10	60							Weathered.
16	90.9-95.9	3.68-[1.32]													Run 16 REC=100% RQD=94%
	93.0	1.58						60							
17	95.9-100.9	[1.32]-[6.32]													Run 17 REC=100% RQD=100%
	100.5	[5.92]			X		12						[5.92]		Thin, cc-filled fractures.
18	100.9-105.9	[6.32]-[11.32]													Run 18 REC=100% RQD=100%
	102.2	[7.62]		X			60	60							Thin, cc-filled, perpendicular to
															bedding.
19	105.9-110.9	[11.32]-[16.32]													Run 19 REC=100% RQD=100%
	107.0	[12.42]						60							
20	110.9-115.5	[16.32]-[20.92]													Run 20 REC=100% RQD=100%
	113.0	[18.42]						60							
21	115.5-120.5	[20.92]-[25.92]													Run 21 REC=100% RQD=100%
	116.1	[21.52]				X	0	60							Sharp edges.
	118.0	[23.42]						60							
22	120.5-125.5	[25.92]-[30.92]													Run 22 REC=100% RQD=100%
	123.0	[28.42]						60							
23	125.5-130.9	[30.92]-[36.32]													Run 23 REC=100% RQD=100%
	128.5	[33.92]				X	10	60							Tight, sharp edges, perpendicular
															to bedding.
24	130.9-135.9	[36.32]-[41.32]													Run 24 REC=100% RQD=100%

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BEDROCK CORE LOG

WELL NO.:	MW-36D						DATE LOGGED:	5/19/2003					GRADE = 94.58' TD = 161.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	133.0	[38.42]						60							
25	135.9-140.9	[41.32]-[46.32]													Run 25 REC=100% RQD=100%
	140.1	[45.52]	X				45	60							Parallel to bedding, cc-filled.
26	140.9-145.9	[46.32]-[51.32]												[50.42]-[59.42]	Run 26 REC=100% RQD=100%
	143.0	[48.42]						60							
27	145.9-150.9	[51.32]-[56.32]													Run 27 REC= 94% RQD= 52%
															Lost water.
	145.9-147.6	[51.32]-[53.02]											[51.32]-[53.02]		Core is broken into pieces.
	149.5	[54.92]		X			45	60							Perpendicular to bedding, tight,
															sharp edges.
	150.3	[55.72]		X			60	60							Weathered parallel open fracture,
															slight deformation zone begins.
28	150.9-155.9	[56.32]-[61.32]													Run 28 REC= 94% RQD= 80%
	152.0	[57.42]				X	30								Tight fracture, deformed bedding.
	153.5	[58.92]		X			45								Weathered cc-filled fracture,
															deformed bedding.
	153.5-154.1	[58.92]-[59.52]	X				90						[58.92]-[59.52] V	[59.42]-[66.32] M	Offset, vertical filled fracture,
															deformed bedding.
	155.0-156.0	[60.42]-[61.42]											[60.42]-[61.42]		Broken core with 0.05" thick cc-
															filled fractures.
29	155.9-160.9	[61.32]-[66.32]													Run 29 REC=100% RQD= 92%
	156.0-158.0	[61.42]-[63.42]						90							Vertical bedding.

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RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	157.5	[62.92]	X				80	90					[62.92]-[63.42] LI		Offset, cc.
	158.0	[63.42]		X			80	90							Significant offsets, sharp bedding
															angle change.
	159.0-160.0	[64.42]-[65.42]	X				90	85							Oblique to bedding, filled.
	160.5	[65.92]		X			45	65							Oblique to bedding.

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BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	20.2-23.0	78.39-75.59													Run 1 REC=100% RQD=46%
	20.4	78.19		X			60	58							Perpendicular to bedding.
	21.2	77.39				X	20						77.39-75.59 SI		
	21.6	76.99				X	0								
	22.0	76.59		X		X	0	85							Extremely deformed bedding 22.0'-
															22.7'.
	22.7-23.0	75.89-75.59				X									Broken core with jagged edges.
	23.0	75.59													Core blockage during drilling.
2	23.0-25.2	75.59-73.39													Run 2 REC=100% RQD=100%
	23.6-24.2	74.99-74.39		X			72	78							Slightly deformed bedding.
3	25.2-30.2	73.39-68.39													Run 3 REC=96% RQD=74%
	24.0-26.0	74.59-72.59		X	X		0	84					74.59-72.59		Many small cc, horizontal.
	26.1-26.8	72.49-71.79		X				84							Deformed bedding, jagged edges.
	27.2	71.39				X	28						71.39-70.39 LI		
	27.8	70.79				X	20	85							
	28.2	70.39		X			60	85							
	29.3	69.29				X	18	89							cc in fracture.
4	30.2-35.2	68.39-63.39													Run 4 REC=100% RQD=100%
	31.9	66.69				X	24	84					66.69-66.19 LI		Oblique to bedding.
	32.4	66.19		X			56	85							Oblique to bedding.
	33.5	65.09		X			55	85							Perpendicular to bedding, minor
															offset (0.01').

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BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	34.6	63.99				X	16	85					63.99-63.39 SI		Oblique to bedding.
	35.2	63.39				X	0	88							Perpendicular to bedding, core is
															broken.
5	35.2-40.2	63.39-58.39													Run 5 REC=100% RQD=98%
	36.0	62.59						89							
	37.4	61.19			X		20	89							v. thin, perpendicular to bedding,
															cc.
	38.5	60.09				X	12	88							Oblique to bedding, cc-coated.
	39.8	58.79					58	80							Oblique to bedding.
	39.8-40.2	58.79-58.39			X		20	78							Network of cc bedding, offset at
															40.1', fault plane filled with cc.
6	40.2-45.2	58.39-53.39													Run 5 REC=100% RQD=52%
	40.4	58.19			X		15	76					58.19-57.19		v. thin cc, perpendicular to
															bedding.
	40.6-41.3	57.99-57.29				X	20	77							Four fractures, perpendicular to
															bedding.
	40.8-41.4	57.79-57.19		X			77	77							Parallel to bedding.
	41.4	57.19			X		8	77					57.19-56.29 LI		Two fractures, cc.
	41.7-42.3	56.89-56.29		X			72	72							Parallel to bedding.
	41.9	56.69			X		11	72							Discontinuous cc, 0.01' thick.
	42.3	56.29			X		22	75					56.29-55.59		Minor cc parallel to fracture 0.01'
															thick, small crystals visible,

BEDROCK CORE LOG

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RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															perpendicular to bedding.
	42.5-43.0	56.09-55.59			X		~20	75					55.59-54.49 LI		Six v. thin cc, perpendicular to
															bedding.
	42.6	55.99				X	0	75							Perpendicular to bedding.
	42.8	55.79				X	0	75							Perpendicular to bedding.
	42.8-43.2	55.79-55.39		X			90	75							Perpendicular to bedding.
	43.2	55.39				X	10	75							Perpendicular to bedding.
	43.2-43.6	55.39-54.99		X			75	75							Parallel to bedding.
	43.6-43.8	54.99-54.79				X							54.49-53.39		Core is broken.
	44.0	54.59				X	0	70							Oblique to bedding.
	44.1-44.9	54.49-53.69			X		0-35	76							Series of cc fractures with minor
															offsets.
	44.9	53.69				X	0	76							Calcite crystals formed on bottom
															edge of fracture.
7	45.2-50.2	53.39-48.39											53.39-51.39 LI		Run 7 REC=100% RQD=36%
	44.9-45.7	53.69-52.89			X		0-40	79							Network of cc fractures, 0.01'
															thick, visible calcite crystals.
	45.2	53.39				X	0	79							Core is broken into small pieces.
	45.7	52.89				X	8	70							Oblique to bedding.
	46.0	52.59		X			70	70							Parallel to bedding.
	46.4	52.19		X			48	50							Perpendicular to bedding, minor
															offset, slightly deformed bedding.

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Staff Geologist

BEDROCK CORE LOG

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RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	46.6	51.99				X	21	70							Oblique to bedding.
	46.8	51.79		X			36	70							Perpendicular to bedding.
	47.2-47.8	51.39-50.79											51.39-50.79		Core is chewed and broken.
	47.8-48.7	50.79-49.89		X			90	68					50.79-49.89 V		Perpendicular to bedding, py.
	48.2	50.39				X	20	68					49.89-48.49		Oblique to bedding.
	48.7-49.2	49.89-49.39		X			80	70							Perpendicular to bedding, py.
	49.0-49.9	49.59-48.69	X		X										Series of cc-filled fractures,
															offset, deformed bedding.
															Deformation ends sharply at 49.9'.
	49.9-50.1	48.69-48.49		X			68	76							Parallel to bedding, weathered
															surface.
	50.1	48.49	X				36	76					48.49-46.69 LI		Perpendicular to bedding, v. thin.
8	50.2-55.2	48.39-43.39													Run 8 REC=100% RQD=98%
	50.7-50.8	47.89-47.79		X			57	76							Perpendicular to bedding, clean
															break.
	51.4	47.19		X			50	78							Perpendicular to bedding.
	51.6-51.9	46.99-46.69		X			78	78							Tight with 0.05' offset, v. thin cc-
															filled fractures.
	52.7-53.2	45.89-45.39		X			68	90							Perpendicular to bedding.
	53.6	44.99				X	28	90							Perpendicular to bedding.
	54.7	43.89		X			40	55							Perpendicular to bedding.
	55.5	43.09		X			35	52							Perpendicular to bedding.

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BEDROCK CORE LOG

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RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
9	55.2-60.2	43.39-38.39													Run 9 REC=100% RQD=88%
	56.2	42.39		X			45	32					42.39-41.29 SI		Parallel to bedding.
	56.8	41.79		X			65	32							Perpendicular with slightly
															deformed bedding and offsets at
															edges of fracture.
	57.3	41.29		X			56	56							Deformed bedding 57.0'-58.0'.
	58.1	40.49		X			35								Highly deformed bedding.
	59.0	39.59						84							
	59.9	38.69		X			40	84					38.69-37.49 LI		Oblique to bedding.
	61.1	37.49				X	30	89							Oblique to bedding.
10	60.2-65.2	38.39-33.39													Run 10 REC=100% RQD=86%
	62.0	36.59		X			60	65					36.59-36.39 LI		Perpendicular to bedding.
	62.2	36.39					60	65						35.69-[57.41]	Perpendicular to bedding.
	63.2-63.6	35.39-34.99		X			60	78							Perpendicular to bedding.
	64.6	33.99		X			~35	76					33.99-31.29 LI		Tight, with 0.03' offset.
	64.8	33.79				X	28	76							
	65.2	33.39		X			38	76							
11	65.2-70.2	33.39-28.39													Run 11 REC=98% RQD=60%
	65.4-65.9	33.19-32.69		X			69								Very deformed bedding on either
															side of fracture.
	66.2	32.39		X			74	42							Perpendicular to bedding.
	66.0-66.8	32.59-31.79													Series of deformed bedding planes

BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															with minor offsets.
	67.3-68.0	31.29-30.59											31.29-28.89		Core chewed and broken.
	68.0-69.3	30.59-29.29						70							Very broken with small (4")
															sections. Many cc-sealed
															fractures and deformed bedding
															planes.
	69.2-69.3	29.39-29.29													1.5" ash layer with cc and py
															crystals.
	69.3-69.7	29.29-28.89			X		32	32					28.89-27.39 LI		Series of cc parallel to bedding,
															minor offsets at 69.5'.
	70.1	28.49				X	31	31							Open with cc on edges.
12	70.2-75.2	28.39-23.39													Run 12 REC=100% RQD=96%
	70.2-70.5	28.39-28.09		X			45	25							Tight with 0.01' offset,
															perpendicular to bedding.
	70.5	28.09				X	25	25							Parallel to bedding.
	70.6	27.99				X	25	25							Parallel to bedding.
	71.1	27.49		X			90	20					27.49 V		Vertical, tight, 0.02' offset.
	71.2-71.5	27.39-27.09													Deformed and offset bedding.
	71.7	26.89				X	17	17					26.89-26.19 LI		Parallel to bedding.
	71.9	26.69				X	17	17							Parallel to bedding.
	72.4	26.19				X	22	22							Parallel to bedding, deformed
															bedding 72.4'-73.4'.

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RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	73.5	25.09				X	27	45					25.09-24.09 LI		Small py crystals.
	74.0	24.59				X	30	45							~0.02' offset.
	74.0-74.5	24.59-24.09													Zone of offsets and deformation.
	74.5	24.09				X	31	45							Perpendicular to bedding.
13	75.2-80.2	23.39-18.39													Run 13 REC=100% RQD=84%
	75.3	23.29				X	0	45							Likely from core run termination.
	75.3-77.6	23.29-20.99													Zone of offsets (0.01'-0.10') and
															slightly deformed bedding.
	76.5	22.09				X	24	50					22.09-21.69 LI		Parallel to bedding.
	76.6	21.99				X	24	50							Parallel to bedding.
	76.9	21.69				X	24	50							
	77.6	20.99		X			36								Deformed bedding.
	77.6-78.0	20.99-20.59		X			35	~20					20.99-20.59		Four fractures, all parallel to
															bedding, slight offset.
	78.3	20.29		X			60	22					20.59-19.59 LI		Tight, deformed bedding, offset.
	78.6	19.99				X	27	27							Parallel to bedding.
	79.0	19.59				X	27	27							Parallel to bedding.
	80.1	18.49		X			35	30							Likely from core run termination.
14	80.2-85.2	18.39-13.39													Run 14 REC=100% RQD=100%
	81.0	17.59						30							
	81.9	16.69				X	30	30					16.69-16.19 LI		Parallel to bedding.
	82.4	16.19		X			55	34							Oblique to bedding.

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Staff Geologist

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			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	83.2	15.39	X				52	30							v. thin.
	84.0	14.59				X	28	28							Parallel to bedding.
	85.1	13.49				X	10	54							Likely from core run termination.
15	85.2-90.2	13.39-8.39													Run 15 REC=100% RQD=88%
	86.0	12.59	X				62	28							cc with ~0.2' offset.
	86.9	11.69				X	10	26							Parallel to bedding.
	88.2	10.39				X	33	33							Parallel to bedding with py.
	89.2	9.39		X			55	32					9.39-8.49 LI		Perpendicular to bedding.
	89.3	9.29		X			56	40							Parallel to bedding.
	89.7	8.89		X			50	40							Broken rock from end of run.
	90.1	8.49				X	10	40							Broken rock from end of run.
16	90.2-95.2	8.39-3.39													Run 16 REC=100% RQD=100%
	91.0	7.59						28							cc oblique to bedding.
	92.1	6.49				X	0	33							
	93.1	5.49				X	30	35							Trace fine py, parallel to bedding.
	94.5	4.09				X	30	30							Trace cc, parallel to bedding.
17	95.2-100.2	3.39-[1.61]													Run 17 REC=100% RQD=96%
	96.0	2.59						30							
	97.1	1.49				X	30	30							Trace cc and py, parallel to
															bedding.
	98.1-98.3	0.49-0.29		X			65	30					0.49-[0.41] LI		Tight, perpendicular to bedding.
	98.3-99.0	0.29-[0.41]		X			74	30							Tight, perpendicular to bedding.

Eric Lovenduski
Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	100.0	[1.41]				X	30	30							Trace cc and py, parallel to
															bedding.
18	100.2-105.2	[1.61]-[6.61]													Run 18 REC=100% RQD=100%
	100.7	[2.11]				X	20	34					[2.11]-[2.71] SI		Tight, oblique to bedding.
	101.3	[2.71]				X	25	34							Tight, oblique to bedding.
	103.0	[4.41]						30							
	104.2	[5.61]				X	30	30					[5.61]-[6.11] LI		Parallel to bedding, cc.
	104.7	[6.11]			X		30	30							Parallel to bedding, cc.
19	105.2-110.2	[6.61]-[11.61]													Run 19 REC=100% RQD=96%
	105.7	[7.11]			X		25	30							0.05' offset, cc.
	107.6	[9.01]				X	10	30							Tight, weathered, parallel to
															bedding.
	108.1-108.7	[9.51]-[10.11]													Deformed bedding and many minor
															(0.01') offsets with cc.
	109.0	[10.41]		X			80	30					[10.41]-[12.11] LI		Tight, weathered, parallel to
															bedding.
	109.1	[10.51]				X	20	20							Trace cc, weathered, parallel to
															bedding.
	109.5-110.0	[10.91]-[11.41]													Deformed bedding with multiple cc-
															filled fractures, minor offsets.
	110.0	[11.41]		X			40	40							Trace py.
20	110.2-115.2	[11.61]-[16.61]													Run 20 REC=100% RQD=100%

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BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	110.2-110.7	[11.61]-[12.11]													Deformed bedding with minor
															offsets, trace cc-annealed
															fractures.
	110.7	[12.11]				X	25	25							Tight, parallel to bedding.
	111.4	[12.81]				X	25	25							Tight, parallel to bedding.
	113.3	[14.71]				X	26	20							Tight, parallel to bedding.
	113.7-114.1	[15.11]-[15.51]		X			75	20							Tight, perpendicular to bedding.
	115.0	[16.41]				X	20	20							Trace py, parallel to bedding.
21	115.2-120.2	[16.61]-[21.61]													Run 21 REC=100% RQD=100%
	116.5	[17.91]				X	20	20							Tight, parallel to bedding.
	117.5-118.7	[18.91]-[20.11]		X			85	20							Tight, perpendicular to bedding.
	118.7-119.3	[20.11]-[20.71]													Deformed bedding with minor
															(~0.01') offsets, trace cc-annealed
															fractures.
	119.8-120.2	[21.21]-[21.61]		X			70	20							Tight, slightly weathered, oblique to
															bedding.
22	120.2-125.2	[21.61]-[26.61]													Run 22 REC=96% RQD=88%
	121.4	[22.81]			X		20	20							Parallel to bedding, cc-filled.
	122.6	[24.01]				X	20	20					[24.01]-[24.51] LI		Tight, parallel to bedding.
	123.1	[24.51]				X	18	20							Tight, slightly weathered, oblique to
															bedding.
	124.2	[25.61]			X		20	20					[25.61]-[27.31] LI		Parallel to bedding, cc.

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Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-37D	DATE LOGGED:	8/8/2002	GRADE = 98.59' TD = 185.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	124.6-125.2	[26.01]-[26.61]													Core broken into rounded pieces.
23	125.2-130.2	[26.61]-[31.61]													Run 23 REC=100% RQD=86%
	125.5	[26.91]				X	20	20							Tight, parallel to bedding.
	125.8	[27.21]		X			60	20							Tight, perpendicular to bedding.
	125.9	[27.31]			X		25	20							Oblique to bedding, cc.
	128.3	[29.71]				X	20	20							Tight, parallel to bedding.
	129.9-130.1	[31.31]-[31.51]				X	10	20					[31.31]-[31.51]		Tight, slightly weathered fractures.
24	130.2-135.2	[31.61]-[36.61]													Run 24 REC=100% RQD=100%
	131.7	[33.11]				X	10	20							Weathered, parallel to bedding.
	132.5	[33.91]				X	20	20							Tight, parallel to bedding.
	133.5	[34.91]				X	20	20							Tight, parallel to bedding.
	134.9	[36.31]											[36.31]		Core is broken into sharp edged
															pieces.
25	135.2-140.2	[36.61]-[41.61]													Run 25 REC=100% RQD=100%
	135.2	[36.61]				X	18	18							Parallel to bedding, cc-coated.
	136.0	[37.41]	X				40	18							Parallel to bedding, cc-filled.
	138.5	[39.91]				X	18	18							cc and py coated.
26	140.2-145.2	[41.61]-[46.61]													Run 26 REC=100% RQD=88%
	141.0	[42.41]						15							
	142.2	[43.61]						53							Abrupt bedding angle change.
	142.2-142.5	[43.61]-[43.91]	X				50	53					[43.61]-[44.41]		Perpendicular to bedding, cc.
	142.5-143.0	[43.91]-[44.41]		X			53	53							Smooth, glassy surfaces on a

BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															series of fractures, minor offsets
															(0.01').
	144.1	[45.51]			X		0	55					[45.51]-[46.91] LI		cc.
	144.7	[46.11]					55	55							Smooth, glassy surface.
	145.0	[46.41]		X			50	50							Open, weathered fractures.
27	145.2-150.2	[46.61]-[51.61]													Run 27 REC=98% RQD=86%
	145.2-145.5	[46.61]-[46.91]						50							Deformed bedding and cc-filled
															fractures.
	145.5	[46.91]						20							Abrupt bedding angle change.
	146.4	[47.81]	X				45	20				X			0.05' offset.
	147.3	[48.71]		X			40	40					[48.71]-[50.21]		Parallel to bedding, cc.
	147.6-147.8	[49.01]-[49.21]			X		30	35							Parallel to bedding, network of cc-
															filled fractures.
	147.9	[49.31]			X		30	30							cc.
	148.3-148.8	[49.71]-[50.21]		X			45	30							Smooth, glassy surfaces on three
															fractures, oblique to bedding.
28	150.2-155.2	[51.61]-[56.61]													Run 28 REC=100% RQD=96%
	150.5	[51.91]						35							
	151.5-152.0	[52.91]-[53.41]													Deformed bedding and minor
															offsets.
	152.5	[53.91]			X		0						[53.91]-[54.31] LI		Deformed bedding 0.1' on each
															side of filled fracture.

Eric Lovenduski
Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	152.9	[54.31]										X			0.02' offset.
	154.0-155.2	[55.41]-[56.61]											[55.41]-[56.61]		Deformed bedding, cc-filled
															fractures, minor offset.
29	155.2-160.2	[56.61]-[61.61]													Run 29 REC=100% RQD=100%
	155.2-155.5	[56.61]-[56.91]													Minor offsets (0.01')
	156.0-157.0	[57.41]-[58.41]												[57.41]-[86.31] M	Deformed bedding and major cc-
															filled fracture.
	157.5	[58.91]						33							
	157.9	[59.31]			X		0	33							cc-filled.
	158.7	[60.11]			X		30	33							Parallel to bedding, cc-filled.
30	160.2-165.2	[61.61]-[66.61]													Run 30 REC=100% RQD=96%
	160.8-160.9	[62.21]-[62.31]				X	0	40					[62.21]-[63.01]		Weathered.
	161.0-161.6	[62.41]-[63.01]													Deformed bedding and cc-filled
															fractures.
	163.0	[64.41]						30							
31	165.2-170.2	[66.61]-[71.61]													Run 30 REC=100% RQD=100%
	166.0	[67.41]			X		30	30							Parallel to bedding, cc.
32	170.2-175.2	[71.61]-[76.61]													Run 32 REC=98% RQD=82%
	170.5-171.9	[71.91]-[73.31]											[71.91]-[73.31]		Series of parallel and
															perpendicular fractures, rock
															broken into 1-3" pieces.
33	175.2-180.2	[76.61]-[81.61]													Run 33 REC=100% RQD=94%

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Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-37D						DATE LOGGED:	8/8/2002					GRADE = 98.59' TD = 185.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	175.8	[77.21]				X	5	35							Weathered.
	178.0	[79.41]						35							
	180.0	[81.41]				X	30	30							Weathered.
34	180.2-185.2	[81.61]-[86.61]													Run 34 REC=94% RQD=90%
	182.0	[83.41]						35							

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-38D	DATE LOGGED:	5/16/2003	GRADE = 78.96' TD = 170.1'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	18.6-20.3	60.36-58.66												60.36-24.96	Run 1 REC=35% RQD=0%
															Core is broken and weathered.
2	20.3-25.3	58.66-53.66											58.66-52.36		Run 2 REC=90% RQD=60%
															Beds are deformed with offsets,
															cc-filled fractures and open,
															weathered fractures.
3	25.3-30.3	53.66-48.66													Run 3 REC=100% RQD=94%
	25.3-26.6	53.66-52.36													Beds are deformed with minor
															offsets, cc-filled fractures.
	30.1-30.2	48.86-48.76											48.86-48.76		Weathered, open fractures.
4	30.3-35.3	48.66-43.66													Run 4 REC=100% RQD=94%
	31.9	47.06				x	20	8							Weathered, open, parallel to
															bedding.
	34.3	44.66		x			50	15							Oblique to bedding, tight, slightly
															weathered.
	35.3	43.66		x			35	15							Oblique to bedding, tight.
5	35.3-40.3	43.66-38.66													Run 5 REC=98% RQD=88%
	35.5-36.0	43.46-42.96		x			65	15					43.46-42.86 LI		Offset, tight, sharp edged fracture,
															oblique to bedding.
	36.1	42.86				x	10	15							Weathered, tight, oblique to
															bedding.
	37.2	41.76				x	10	10							Weathered.

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	37.2-40.3	41.76-38.66													Deformed beds, minor offsets.
	38.5	40.46		x			75								Deformed, perpendicular to
															bedding, tight.
	39.9-40.2	39.06-38.76											39.06-37.16		Broken core, rounded.
6	40.3-45.3	38.66-33.66													Run 6 REC=96% RQD=86%
	40.3-41.0	38.66-37.96													Deformed beds, oblique to
															bedding, cc-filled fractures.
	41.0-41.3	37.96-37.66													Weathered, broken core.
	41.8	37.16				x	15	15							Weathered, parallel to bedding.
	42.5-43.5	36.46-35.46	x				85	15					36.46-35.46 V		Thin, cc-filled, 0.05' offset, slightly
													35.46-32.56 LI		deformed bedding.
	43.9	35.06				x	15	15							Parallel to bedding, 0.05' cc.
	44.0-45.0	34.96-33.96	x				80	15							cc-filled with 0.05' offset.
7	45.3-50.3	33.66-28.66													Run 7 REC=96% RQD=92%
	45.6-46.0	33.36-32.96		x			80	30							Weathered, perpendicular to
															bedding, cc.
	46.4	32.56		x			45	30							Weathered, cc, py, oblique to
															bedding.
	47.7	31.26				x	20	25							Slightly weathered, sharp edged,
															cc, py, parallel to bedding.
8	50.3-55.3	28.66-23.66													Run 8 REC=100% RQD=98%
	52.1	26.86		X			45						26.86-26.46 LI		Deformed beds, weathered, trace

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BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															cc, parallel to bedding.
	52.5	26.46		X			65	~30							Tight, sharp edge, oblique to
															bedding.
	54.1	24.86		X			80	50						24.96-14.96 M	Weathered, cc, parallel to bedding.
	55.3	23.66		X			60								Deformed beds, weathered, clean.
9	55.3-60.3	23.66-18.66													Run 9 REC=96% RQD=78%
	55.8	23.16				X	20						23.16-22.56 SI		Deformed beds, weathered, cc.
	56.4	22.56				X	25								Deformed beds, weathered, trace
															cc.
	56.4-58.8	22.56-20.16											22.56-13.96		Deformed beds, cc-filled thin
															fractures with offsets.
	58.8-59.4	20.16-19.56													Crumbled core into small fine
															rounded gravel pieces.
	59.4-60.2	19.56-18.76													Deformed beds with thin cc-filled
															fractures, offset beds.
	60.2	18.76				X	25								Deformed beds, weathered, trace
															cc.
10	60.3-65.3	18.66-13.66													Run 10 REC=100% RQD=100%
	60.3-65.0	18.66-13.96												14.96-10.96	Deformed beds with cc-filled
															fractures, few offsets.
11	65.3-70.3	13.66-8.66													Run 11 REC=100% RQD=100%
	68.0-69.0	10.96-9.96	X											10.96-[58.04] M	S-shaped thin filled fracture, cc,

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															py, 0.05' offset.
	69.8	9.16		X			45	75							Weathered, parallel to bedding.
12	70.3-75.3	8.66-3.66													Run 12 REC=96% RQD=76%
	70.6	8.36		X			35	75							Weathered, oblique to bedding,
															clean.
	70.3-75.3	8.66-3.66													Entire run - bedding is slightly
															deformed, occassional filled
															fractures with offsets.
	71.9-73.0	7.06-5.96		X			80	80							Deformed beds, fracture parallel to
															bedding, smooth shiny surface.
	74.6-75.3	4.36-3.66											4.36-3.66		Core is broken into small angular
															pieces, ~0.2' in length.
13	75.3-80.3	3.66-[1.34]													Run 13 REC=100% RQD=100%
	75.3-76.2	3.66-2.76		X			85	85					3.66-2.76 V		Oblique to bedding, clean.
	76.2	2.76				X	15	85					2.76-1.96 LI		Clean, rounded edge.
	76.6-77.0	2.36-1.96		X			80	80							Parallel to bedding, weathered,
															offset 0.1'.
	78.1	0.86				X	25	80							Oblique to bedding, trace cc.
	79.6	[0.64]				X	25	80							Sharp edged, oblique to bedding,
															clean.
14	80.3-85.3	[1.34]-[6.34]													Run 14 REC=100% RQD=100%
	80.3-80.5	[1.34]-[1.54]											[1.34]-[1.54]		Broken core.

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Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	81.3	[2.34]				X	20	75							Weathered, trace cc.
	83.9	[4.94]		X			40	40							Weathered, parallel to bedding.
	84.7	[5.74]		X			40	40							Weathered, parallel to bedding.
15	85.3-90.3	[6.34]-[11.34]													Run 15 REC=100% RQD=54%
	86.7	[7.74]				X	30	30							Weathered, parallel to bedding, cc-
															coated.
	87.5-89.3	[8.54]-[10.34]						15					[8.54]-[10.34]		Many open fractures spaced ~0.1',
															some with offsets.
	89.5	[10.54]						85							Abrupt bedding change, V-shaped
															fracture, cc, open.
	89.5-90.6	[10.54]-[11.64]													Arc-shaped bed.
16	90.3-95.3	[11.34]-[16.34]													Run 16 REC=96% RQD=84%
	90.6-91.2	[11.64]-[12.24]											[11.64]-[12.24]		Core is broken into small, flat,
															angular edged pieces.
	91.7	[12.74]		X			75						[12.74]-[13.04] LI		Deformed bedding, smooth shiny
															surface.
	92.0	[13.04]		X			70								Deformed bedding, weathered.
	93.0	[14.04]		X			80	60							Oblique to bedding, weathered.
	94.0-94.4	[15.04]-[15.44]											[15.04]-[22.04]		Core is broken with weathered
															edges.
	95.0-95.3	[16.04]-[16.34]													Core is broken with weathered
															edges.

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-38D	DATE LOGGED:	5/16/2003	GRADE = 78.96' TD = 170.1'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
17	95.3-100.3	[16.34]-[21.34]													Run 17 REC=96% RQD=42%
															Bedding planes are deformed,
															several with thin cc-filled fractures
															and weatherd open fractures.
															Tar observed on core at 98.1',
															98.5', and 99.3'.
18	100.3-105.3	[21.34]-[26.34]													Run 18 REC=100% RQD=98%
															Bedding planes are severely
															deformed with offsets, thin cc-
															filled fractures with few offsets.
	101.0-101.7	[22.04]-[22.74]		X			80								Deformed beds, weathered,
															uneven.
	103.2	[24.24]				X	20								Deformed beds, tight, slightly
															weathered.
19	105.3-110.3	[26.34]-[31.34]													Run 19 REC=100% RQD=100%
	105.8-106.2	[26.84]-[27.24]				X	15								Clean, cc-filled fracture
	106.9	[27.94]													End of intensely deformed beds.
	108.5	[29.54]				X	20	70							Weathered, clean.
	109.7	[30.74]			X		25	70							Thin, cc, 0.02' offset.
20	110.3-115.3	[31.34]-[36.34]													Run 20 REC=96% RQD=96%
	112.0	[33.04]						70							
	115.0-115.3	[36.04]-[36.34]													No recovery.

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
21	115.3-120.3	[36.34]-[41.34]													Run 21 REC=98% RQD=98%
	116.9	[37.94]				X	10	70							Tight, clean, tar observed on core.
	118.7	[39.74]				X	20	60					[39.74]-[40.54] LI		Tight, slightly weathered.
	118.9	[39.94]			X		30	60							Thin cc, significant offset.
	119.5	[40.54]				X	20	60							Weathered, clean.
22	120.3-124.8	[41.34]-[45.84]													Run 22 REC=100% RQD=87%
	121.0	[42.04]	X				70	70							Oblique to bedding, cc-filled.
	121.8	[42.84]				X	10	70					[42.84]-[44.04] LI		Weathered, clean, oblique to
															bedding.
	122.0-123.0	[43.04]-[44.04]		X			70	70							Weathered, cc, parallel to bedding.
	124.5	[45.54]				X	10	70							Weathered, cc.
23	124.8-130.1	[45.84]-[51.14]													Run 23 REC=94% RQD=89%
	127.5-128.1	[48.54]-[49.14]		X			70	70							Parallel to bedding, cc, sharp
															edges.
	129.0	[50.04]		X			45	70					[50.04]-[50.44] LI		Perpendicular to bedding, clean,
															sharp edges.
	129.4	[50.44]				X	10	70							Clean, weathered.
24	130.1-134.9	[51.14]-[55.94]													Run 24 REC=100% RQD=100%
	131.0	[52.04]						70							
	133.9	[54.94]				X	~15	70							Weathered, clean.
25	134.9-140.2	[55.94]-[61.24]													Run 25 REC=100% RQD=100%
	134.9	[55.94]				X	5	60							Weathered, clean.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	136.4-137.1	[57.44]-[58.14]											[57.44]-[58.14]		Deformed bedding, cc-filled
															fractures.
	136.7	[57.74]				X	20							[58.04]-[89.14]	
26	140.2-145.2	[61.24]-[66.24]													Run 26 REC=100% RQD=100%
	140.6	[61.64]	X				35	60							Some deformation and offsets to
															141.0', cc.
	144.1	[65.14]		X			75	50							Smooth, shiny surface, sharp
															edges.
27	150.0-155.1	[71.04]-[76.14]													Run 27 REC=100% RQD=94%
	150.2	[71.24]		X			45	45							Clean, parallel to bedding, broken
															edges.
	152.1	[73.14]		X			45	45							Smooth, clean surface, trace cc,
															parallel to bedding.
	153.1	[74.14]		X			70	45							Oblique to bedding, weathered.
	154.5	[75.54]		X			60	45							Parallel to bedding, clean.
28	155.1-160.1	[76.14]-[81.14]													Run 28 REC=100% RQD=82%
	155.5-155.9	[76.54]-[76.94]											[76.54]-[76.94]		Broken core with rounded edges.
	157.5	[78.54]		X			45	45							Parallel to bedding, slightly
															weathered.
	158.6	[79.64]		X			45	45							Parallel to bedding, cc.
	159.0-160.1	[80.04]-[81.14]											[80.04]-[81.14]		Many cc-filled fractures with
															offsets. Open fractures at 159.1'

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-38D						DATE LOGGED:	5/16/2003					GRADE = 78.96' TD = 170.1'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															and 160.0'.
29	160.1-165.1	[81.14]-[86.14]													Run 29 REC=100% RQD=66%
	160.6	[81.64]		X			45	45							Weathered, rounded edges.
	161.7-162.2	[82.74]-[83.24]											[82.74]-[86.14]		Series of cc-filled fractures,
															minor offsets.
	162.5-165.1	[83.54]-[86.14]													Many breaks along bedding planes.
30	165.1-170.1	[86.14]-[91.14]													Run 30 REC=60% RQD=40%
	165.7	[86.74]		X				45	45						Slightly weathered, parallel to
															bedding.
	167.0	[88.04]		X				60	45						Oblique to beding, weathered.
	167.3-168.1	[88.34]-[89.14]											[88.34]-[89.14]		Core is broken into sub-angular
															pieces.

Beth Guidetti
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	33.1-35.4	59.12-56.82													Run 1 REC=100% RQD=91%.
	33.3	58.92						30							
	34.0	58.22			X		35				X				1/4 in. cc.
	34.7	57.52				X	19	52							
	34.9	57.32				X	33								Undulating.
	35.0	57.22			X		16								1/8 in. cc oblique to bedding.
2	35.4-40.4	56.82-51.82													Run 2 REC=98% RQD=66%.
	35.4	56.82				X	41								Same as bedding.
	35.8	56.42				X	39								Same as bedding.
	36.0	56.22				X	39								Same as bedding.
	36.7	55.52				X	28								
	37.0	55.22				X	39								Same as bedding.
	37.4	54.82				X	29								
	37.6	54.62		X			61						54.62-52.82	54.62-53.22	Pencil cleavage visible only on
															broken faces of core.
	38.0	54.22		X			59								Little py.
	38.1-39.4	54.12-52.82		X			45/77	29							Little py, two sets of fractures
															oriented 30^{o} to one another.
	39.4-40.4	52.82-51.82													Zone of intense deformation,
															bedding offsets, v. thin cc.
	39.9	52.32													Jagged break (mechanical?).
3	40.4-45.4	51.82-46.82													Run 3 REC=100% RQD=94%.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	41.0	51.22		X			53	55							Oblique to bedding.
	41.4	50.82		X			52								Same as bedding.
	41.8	50.42		X			49								Same as bedding.
	41.4-41.8	50.82-50.42		X											Jagged vertical fracture.
	42.8	49.42				X	29/47	47							47° fracture same as bedding.
	43.0	49.22				X	48								Same as bedding.
	44.1	48.12				X	30				X				
4	45.4-50.4	46.82-41.82													Run 4 REC=98% RQD=90%.
	46.0	46.22				X	46								Same as bedding.
	46.3	45.92				X	46								Same as bedding.
	46.7	45.52				X	47								Same as bedding.
	47.3	44.92				X	47								Same as bedding.
	47.9	44.32				X	46								Same as bedding.
	48.1	44.12				X	47								Same as bedding.
	48.4	43.82				X	48								Same as bedding.
	48.6	43.62				X	49								Same as bedding.
	49.2	43.02				X	47								Same as bedding.
	49.6	42.62				X	47								Same as bedding.
5	50.4-55.4	41.82-36.82													Run 5 REC=94% RQD=74%.
	50.7	41.52				X	45								Oblique to bedding.
	51.3	40.92				X	46								Same as bedding.
	51.9	40.32				X	47								Same as bedding.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	52.1	40.12			X		46							42.22-32.12	Same as bedding, little cc.
	52.2	40.02				X	49								Same as bedding, slight bedding
															deformation.
	52.3	39.92				X	44								Same as bedding.
	52.7	39.52				X	43								Same as bedding, bedding offsets.
	53.5	38.72				X	42								Same as bedding.
	54.5	37.72				X	39						37.72-37.22		Same as bedding.
	54.6	37.62													Small cc fractures.
	54.6	37.62				X	47								Same as bedding.
	54.9	37.32		X			70								Curving vertical.
6	55.4-60.4	36.82-31.82													Run 6 REC=100% RQD=90%.
	56.6	35.62				X	59								Same as bedding.
	56.9	35.32				X	59								Same as bedding.
	57.5	34.72				X	54								Same as bedding.
	57.9	34.32				X	52								Same as bedding.
	57.5-57.9	34.72-34.32					49	49							v. thin cc perpendicular to bedding.
	58.3	33.92				X	32	48							
	58.4	33.82				X	36								Bedding offset (fault).
	58.8	33.42				X	49						33.42-33.22		Same as bedding.
	59.0	33.22		X			68								
	59.6	32.62				X	46								Same as bedding.
7	60.4-65.4	31.82-26.82													Run 7 REC=100% RQD=78%

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	60.4	31.82					55	40							1/4 in. cc, offset 1/4in. (thrust).
	60.7	31.52					47								Same as bedding.
	61.3	30.92				X	43								Same as bedding.
	61.5	30.72				X	43								Same as bedding.
	60.7-64.0	31.52-28.22		X			88						31.52-28.22		Vertical fractures parallel to
															bedding every 1-2 inches.
	64.2	28.02				X	44								Oblique to bedding.
	64.6	27.62				X	36								Oblique to bedding.
	64.7	27.52				X	42								Same as bedding.
	64.9	27.32				X	43								Same as bedding.
8	65.4-70.4	26.82-21.82													Run 8 REC=100% RQD=92%.
	66.5	25.72				X	40								
	66.6	25.62				X	37								
	66.5-66.6	25.72-25.62													Deformed bedding, py.
	66.9	25.32				X	38								Same as bedding.
	67.4	24.82				X	39								Same as bedding.
	68.0	24.22				X	42								Same as bedding.
	68.3	23.92				X	41								Same as bedding.
	68.8	23.42				X	43								Same as bedding.
	69.3	22.92				X	41								Same as bedding.
9	70.4-75.4	21.82-16.82													Run 9 REC=98% RQD=88%.
	70.9	21.32				X	27								Oblique to bedding.

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	71.5	20.72				X	44								Same as bedding.
	72.5	19.72				X	41								Same as bedding.
	73.0	19.22													1/2 in. cc inclusion.
	73.4	18.82				X	44								Same as bedding.
	73.7	18.52				X	45								Same as bedding.
	73.9	18.32				X	41								Same as bedding.
	74.4	17.82				X	43								Same as bedding.
	74.7	17.52				X	41								Same as bedding.
	74.7-75.1	17.52-17.12													Bedding deformation.
10	75.4-80.4	16.82-11.82												16.22-[16.78] M	Run 10 REC=98% RQD=98%.
	76.0	16.22				X	44								Same as bedding.
	76.4	15.82				X	42								Same as bedding.
	77.0	15.22				X	38								Same as bedding.
	77.3	14.92				X	46								Same as bedding.
	77.0-77.3	15.22-14.92													Bedding deformation.
	78.2	14.02				X	39				X				Oblique to bedding.
	78.3	13.92				X	49								Same as bedding.
	78.7	13.52				X	37								Same as bedding.
	79.0	13.22													Wavy cc, bedding offsets.
	79.3	12.92				X	40								Same as bedding.
	79.5	12.72				X	12								py.
11	80.4-85.4	11.82-6.82													Run 11 REC=100% RQD = 92%.

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	80.5	11.72				X	41								Same as bedding.
	80.6	11.62				X	39								Same as bedding.
	80.9	11.32				X	38								Same as bedding.
	81.6	10.62				X	41								Same as bedding.
	81.7	10.52				X	40								Same as bedding.
	81.8	10.42				X	39								Same as bedding.
	82.4	9.82				X	38								Same as bedding.
	82.7	9.52				X	39								Same as bedding.
	82.9	9.32				X	38								Same as bedding, little cc, bedding
															deformation.
	83.8	8.42				X	39								Same as bedding.
	84.0	8.22				X	38								Same as bedding.
	84.9	7.32				X	38								Same as bedding.
12	85.4-90.4	6.82-1.82													Run 12 REC=100% RQD=84%.
	86.8	5.42				X	38								Same as bedding.
	87.2	5.02				X	40								Same as bedding.
	88.0	4.22				X	38								Same as bedding.
	88.3	3.92				X	38								Same as bedding.
	88.6	3.62				X	38								Same as bedding.
	88.8	3.42				X	38								Same as bedding.
	89.6	2.62				X	39								Same as bedding.
13	90.4-95.4	1.82-[3.18]													Run 13 REC=98% RQD=90%.

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Staff Geologist

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MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	91.2	1.02				X	39								Same as bedding.
	91.8	0.42				X	38								Same as bedding.
	92.2	0.02			X		45								cc, oblique to bedding.
	92.5	[0.28]				X	38								Same as bedding.
	92.9	[0.68]				X	37								Same as bedding.
	93.4	[1.18]				X	37								Same as bedding.
	93.8	[1.58]				X	36								Same as bedding.
	94.6	[2.38]				X	39								Same as bedding.
14	95.4-100.4	[3.18]-[8.18]													Run 14 REC=98% RQD=86%
	96.0	[3.78]				X	39								Same as bedding.
	96.3	[4.08]				X	37								Same as bedding.
	96.4	[4.18]				X	39								Same as bedding.
	96.5	[4.28]				X	38								Same as bedding.
	96.8	[4.58]				X	38								Same as bedding.
	97.9	[5.68]				X	34								Same as bedding.
	98.2	[5.98]				X	38								Same as bedding.
	98.6	[6.38]				X	38								Same as bedding.
	99.0	[6.78]				X	37								Same as bedding.
	99.5	[7.28]				X	44								Oblique to bedding.
	99.5-100.3	[7.28]-[8.08]		X			87								Vertical fracture with several
															along bedding planes.
15	100.4-105.4	[8.18]-[13.18]													Run 15 REC=100% RQD=92%.

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Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	101.2	[8.98]				X	38								Same as bedding.
	102.1	[9.88]				X	39								Same as bedding.
	102.3	[10.08]				X	38								Same as bedding.
	103.1	[10.88]				X	39								Same as bedding.
	103.4	[11.18]				X	41								Same as bedding.
	103.9	[11.68]				X	41								Same as bedding.
	104.2	[11.98]				X	37								
	104.4	[12.18]													Bedding deformation and offsets.
	105.0	[12.78]				X	41								
	105.4	[13.18]													1/4 in. cc.
16	105.4-110.4	[13.18]-[18.18]													Run 16 REC=100% RQD=94%.
	106.0	[13.78]													1/4 in. cc.
	107.0	[14.78]				X	40								Same as bedding.
	107.5	[15.28]				X	43								Same as bedding.
	108.0	[15.78]		X			59								Oblique to bedding.
	108.5	[16.28]				X	42								Same as bedding.
	108.8	[16.58]				X	43								Same as bedding.
	109.0	[16.78]													Set of jagged breaks (mechanical?).
	109.5	[17.28]				X	42								Same as bedding.
	109.6	[17.38]			X		40								Oblique to bedding, cc.
	110.1	[17.88]				X	41								Same as bedding.
	110.3	[18.08]													Bedding deformation.

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:		5/22/2002				GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
17	110.4-115.4	[18.18]-[23.18]													Run 17 REC=100% RQD=88%.
	111.2	[18.98]													1/8 in. cc.
	111.6	[19.38]				X	52								Same as bedding.
	112.0-113.1	[19.78]-[20.88]													Bedding offsets and deformation.
															several v. thin cc, py.
	113.1-115.6	[20.88]-[23.38]			X		43								Thick cc layers (~1/2 in.) with two
															sets of v. thin cc (~1 in.) between.
	113.7	[21.48]		X			~60								Oblique to bedding, two separate
															sets.
	114.5	[22.28]		X			~65								Oblique to bedding, two separate
															sets.
	114.9	[22.68]			X		36								cc.
18	115.4-120.4	[23.18]-[28.18]													Run 18 REC=100% RQD=94%.
	116.5-117.0	[24.28]-[24.78]					50/85/46/56								Set of four fractures, 50^{o} is same
															as bedding.
	117.6	[25.38]				X	49/68								Set of two fractures, 49^{o} is same
															as bedding.
	118.4	[26.18]				X	42								Same as bedding.
	119.4	[27.18]			X	X	41/59								Set of two fractures, 41^{o} is same
															as bedding, 59^{o} is cc.
19	120.4-125.4	[28.18]-[33.18]													Run 19 REC=100% RQD=94%.
	120.7	[28.48]				X	45								Same as bedding.

BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	121.3	[29.08]				X	45								Same as bedding.
	121.6	[29.38]				X	49								Same as bedding.
	121.7	[29.48]				X	46								Same as bedding.
	122.0	[29.78]				X	43								Same as bedding.
	124.0	[31.78]				X	42/41								Set of two fractures, 41° is same
															as bedding.
	124.4	[32.18]				X	41								Same as bedding.
	124.8	[32.58]				X	41								Same as bedding.
20	125.4-130.4	[33.18]-[38.18]													Run 20 REC=96% RQD=88%.
	126.3	[34.08]				X	~48								Jagged break.
	126.9	[34.68]				X	40/~36								Set of two fractures, 40° is same
															as bedding.
	127.2	[34.98]				X	50								Same as bedding.
	128.6	[36.38]				X	39								Same as bedding.
	129.6	[37.38]				X	39								Same as bedding.
	129.9-130.4	[37.68]-[38.18]													Core chewed and broken.
21	130.4-135.4	[38.18]-[43.18]													Run 21 REC=100% RQD=96%.
	131.4	[39.18]			X		39				X				Same as bedding, cc.
	131.6	[39.38]				X	42								Same as bedding.
	132.0-133.4	[39.78]-[41.18]													Bedding offsets and deformation.
	133.2	[40.98]				X	41								
	133.0-134.9	[40.78]-[42.68]			X		55								cc veins, perpendicular to bedding.

Beth Guidetti
Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-39D						DATE LOGGED:	5/22/2002					GRADE = 92.22 TD = 150.4'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	134.3	[42.08]					47								Oblique to bedding.
	135.2	[42.98]					59								Oblique to bedding.
22	135.4-140.4	[43.18]-[48.18]													Run 22 REC=100% RQD = 94%.
	135.7	[43.48]				X	34								Same as bedding.
	137.0	[44.78]				X	38								Same as bedding.
	137.6	[45.38]			X		47								cc, perpendicular to bedding.
	137.8	[45.58]				X	35								Same as bedding.
	138.5	[46.28]				X	37								Same as bedding.
23	140.4-145.4	[48.18]-[53.18]													Run 23 REC=98% RQD = 94%.
	141.1	[48.88]				X	38								Same as bedding.
	141.3	[49.08]				X	37								Same as bedding.
	141.7	[49.48]				X	34								Same as bedding.
	143.0	[50.78]				X	40								Same as bedding.
	143.2	[50.98]			X		19								cc.
	143.4	[51.18]				X	38								Same as bedding.
	143.6	[51.38]			X		22								cc.
	144.4	[52.18]			X		31								cc veins, deformation.
24	145.4-150.4	[53.18]-[58.18]													Run 24 REC=94% RQD = 94%.
	147.0	[54.78]			X		35								Same as bedding.
	147.3-147.8	[55.08]-[55.58]				X									Several fractures, most same as
															bedding, two perpendicular to
															bedding.

Beth Guidetti
Staff Geologist

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BEDROCK CORE LOGGING

WELL NO.:	MW-39D	DATE LOGGED:	5/22/2002	GRADE = 92.22 TD = 150.4'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	148.7	[56.48]				X	37								Same as bedding.
	149.2	[56.98]				X	37								Same as bedding.

Eric Lovenduski
Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-40D						DATE LOGGED:	5/16/2003					GRADE = 94.18' TD = 170.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	80.0-85.5	14.18-8.68												14.18-[21.82]	Run 1 REC=95% RQD=33%
	80.0-81.5	14.18-12.68											14.18-12.68		Core is broken into small round
															pieces.
	81.5	12.68		X			60	50							Weathered, parallel to bedding.
	82.5	11.68		X			60	50							Weathered, parallel to bedding.
	83.0-85.5	11.18-8.68											11.18-5.18 LI		Beds are deformed with cc-filled,
															fractures, minor offsets, open ~45^{o}
															fractures parallel to bedding,
															spaced ~0.3'.
2	85.5-90.5	8.68-3.68													Run 2 REC=100% RQD=34%
															Significant water loss.
	85.5-89.0	8.68-5.18													Deformed beds with cc-filled
															fractures, minor offsets, open
															~20^{o}-40^{o} fractures, parallel to
															bedding, spaced ~0.2'-0.5'.
	89.0-90.3	5.18-3.88											5.18-3.88		Core is broken into small sub-
															angular pieces.
3	90.5-95.5	3.68-[1.32]													Run 3 REC=92% RQD=42%
															Significant water loss.
	90.5-91.2	3.68-2.98													Deformed beds with offsets.
	91.2-93.8	2.98-0.38											2.98-0.38		Intensely fractured core with thick

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-40D	DATE LOGGED:	5/16/2003	GRADE = 94.18' TD = 170.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															cc veins and cavities with cc
															crystals, deformed beds, offsets.
	93.8-94.0	0.38-0.18													Ash layer - greyish white/light
															green, soft.
	94.0	0.18													Sharp change in bedding from
															deformed beds to 15^{o} even beds.
4	95.5-100.5	[1.32]-[6.32]													Run 4 REC=100% RQD=92%
															Significant water loss.
	96.2	[2.02]				X	15	15							Weathered, tight.
	97.3-97.8	[3.12]-[3.62]		X			80	15							Perpendicular to bedding, sharp
															edges, and occasional breaks in
															core at bedding planes (15^{o}).
5	100.5-105.5	[6.32]-[11.32]													Run 5 REC=100% RQD=100%
															Significant water loss.
	100.5-102.1	[6.32]-[7.92]		X			80	15							Oblique to bedding, cc, sharp
															edges.
6	105.5-110.5	[11.32]-[16.32]													Run 6 REC=100% RQD=86%
	105.9	[11.72]				X	15	15							Open, weathered, parallel to
															bedding.
	107.9-108.5	[13.72]-[14.32]				X	15	15					[13.72]-[14.32]		Three weathered, open fractures,
															parallel to bedding.
	109.8	[15.62]	X				80	15							Thin cc-filled, oblique to bedding.

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-40D	DATE LOGGED:	5/16/2003	GRADE = 94.18' TD = 170.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
7	110.5-115.5	[16.32]-[21.32]													Run 7 REC=98% RQD=92%
	113.0	[18.82]						15							
	114.7	[20.52]				X	15	15							Weathered.
8	115.5-120.2	[21.32]-[26.02]													Run 8 REC=100% RQD=100%
	116.0	[21.82]						15						[21.82]-[75.82] VM	
9	120.2-125.2	[26.02]-[31.02]													Run 9 REC=100% RQD=98%
	122.6	[28.42]				X	15	15					[28.42]		Three thin fractures, parallel to
															bedding.
10	125.2-130.2	[31.02]-[36.02]													Run 10 REC=100% RQD=100%
	126.6	[32.42]													Offset beds (0.03'), oblique to
															bedding.
	127.4	[33.22]				X	15	15							cc, deformed beds, slightly parallel
															to bedding.
	128.7	[34.52]				X	25	15							cc crystals, weathered.
	129.2-130.2	[35.02]-[36.02]													Deformed beds, minor offsets.
11	130.2-135.2	[36.02]-[41.02]													Run 11 REC=96% RQD=94%
	130.2	[36.02]				X	15	15			X				cc, parallel to bedding, trace
															slickensides.
	134.1-135.2	[39.92]-[41.02]											[39.92]-[41.02] V		Near vertical fractures, weathered
															edges.
12	135.2-140.0	[41.02]-[45.82]													Run 12 REC=96% RQD=94%
															15^{o} beds throughout run -

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-40D						DATE LOGGED:	5/16/2003					GRADE = 94.18' TD = 170.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															occasional breaks on bedding
															planes.
13	140.0-145.2	[45.82]-[51.02]													Run 13 REC=100% RQD=100%
	143.5	[49.32]	X				40	15							Thin cc, 0.02' offset, oblique to
															bedding.
14	145.2-150.2	[51.02]-[56.02]													Run 14 REC=100% RQD=100%
															15^{o} beds throughout run -
															occasional breaks on bedding
															planes.
15	150.2-155.2	[56.02]-[61.02]													Run 15 REC=100% RQD=100%
	153.0	[58.82]						15							
	154.5-155.2	[60.32]-[61.02]											[60.32]-[64.32]		Slightly deformed beds with minor
															offset, cc-filled fractures.
16	155.2-160.2	[61.02]-[66.02]													Run 16 REC=100% RQD=100%
	155.2-156.3	[61.02]-[62.12]	X				85	15							Arc-shaped cc-filled fractures, at
															least 0.5' offset.
	156.6	[62.42]				X	25	15							Tight, sharp edges, perpendicular
															to bedding.
	156.8-158.5	[62.62]-[64.32]													Deformed beds with offsets, cc-
															filled fractures, open high angle
															fractures, weathered.
17	160.2-165.2	[66.02]-[71.02]													Run 17 REC=100% RQD=100%

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-40D						DATE LOGGED:	5/16/2003					GRADE = 94.18' TD = 170.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	162.7	[68.52]				X	20	15							Oblique, weathered.
18	165.2-170.2	[71.02]-[76.02]													Run 18 REC=94% RQD=94%
	168.0	[73.82]						15							

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-41D	DATE LOGGED:	5/16/2003	GRADE = 93.56' TD = 140.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	19.2-24.2	74.36-69.36											74.36-66.56	74.36-34.06 M	Run 1 REC=72% RQD=0%
															Entire run is broken into small
															angular pieces.
2	24.2-29.6	69.36-63.96													Run 2 REC=77% RQD=48%
	24.2-27.0	69.36-66.56													Core is broken, significant cc
															crystals.
	27.3	66.26		x			45	45					66.26-65.46 LI		0.05" cc parallel to bedding.
	27.6	65.96		x			45	45							Perpendicular to bedding,
															weathered, cc.
	28.1	65.46		x			45	45							Parallel to bedding.
	29.1	64.46		x			60	45							Weathered.
3	29.6-34.6	63.96-58.96													Run 3 REC=100% RQD=90%
															Deformed beds entire run.
	29.7	63.86		x			60								Deformed beds surrounding
															fracture.
	32.1	61.46		x			45	45							Oblique to bedding, weathered.
	32.9	60.66		x			45						60.66-60.06 LI		Deformed, oblique to bedding.
	33.3-33.5	60.26-60.06		x			50								Weathered, open.
4	34.6-39.6	58.96-53.96													Run 4 REC=100% RQD=96%
															Beds deformed entire run.
	35.0	58.56		x			65								Deformed beds.
	36.1	57.46		x			50						57.46-56.96 LI		Deformed beds.

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BEDROCK CORE LOG

WELL NO.:	MW-41D						DATE LOGGED:	5/16/2003					GRADE = 93.56' TD = 140.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	36.6	56.96				x	20								Deformed beds.
	37.5	56.06				x	10						56.06-55.46 LI		Deformed beds.
	38.0	55.56				x	10								Deformed beds.
	38.1-40.0	55.46-53.56											55.46-53.56		Dozens of thin cc-filled fractures,
															open at 38.5', 39.5'. Thick cc at
															38.5' and 39.5'.
5	39.6-44.6	53.96-48.96													Run 5 REC=100% RQD=88%
															Deformed beds throughout run,
															offsets.
	41.5	52.06				x	20						52.06-51.76 LI		Deformed beds.
	41.8	51.76				x	20								Deformed beds.
	43.6	49.96				x	20								Deformed beds.
6	44.6-49.6	48.96-43.96													Run 6 REC=100% RQD=88%
	44.6-47.5	48.96-46.06						60							Even beds.
	45.5	48.06		x			80	60							Parallel to bedding, tight.
	47.5	46.06		x			60								Deformed beds, weathered.
	47.5-48.5	46.06-45.06											46.06-45.06		Deformed beds, cc-coated
															fractures with offsets.
7	49.6-54.6	43.96-38.96													Run 7 REC=94% RQD=76%
	50.5	43.06			x		30	50					43.06		Perpendicular to bedding, three thin
															cc-filled fractures with offsets
															(~0.03').

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-41D						DATE LOGGED:	5/16/2003					GRADE = 93.56' TD = 140.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	51.4-51.7	42.16-41.86		x			60	50							Oblique to bedding, trace cc.
	52.0	41.56				x	20	60							Tight.
	53.0	40.56									X		40.56-32.66 LI		0.1' open with slickensides.
	53.3-54.0	40.26-39.56													Fractured, broken, sharp edges.
8	54.6-59.6	38.96-33.96													Run 8 REC=100% RQD=84%
															Deformed beds with cc-coated
															fractures and offsets entire run.
															Open fractures every ~0.4'.
9	59.6-64.6	33.96-28.96												34.06-30.06 VM	Run 9 REC=100% RQD=96%
	60.9-61.7	32.66-31.86			x		30	70					32.66-31.86		Perpendicular to bedding with
															offsets, ~10 cc-filled fractures.
	63.5	30.06			x		30	70						30.06-[45.94] M	Offsets, oblique to bedding, cc.
10	64.6-69.6	28.96-23.96													Run 10 REC=100% RQD=80%
	65.9	27.66			x		30	70							Oblique to bedding, thin, cc.
	67.9	25.66		x			70	70							Parallel to bedding, cc.
11	69.6-74.6	23.96-18.96													Run 11 REC=100% RQD=78%
	72.6	20.96		x			30	70							Offset, cc.
	73.5-74.6	20.06-18.96											20.06-18.96		Core is broken with many cc-filled
															and open fractures.
12	74.6-79.6	18.96-13.96													Run 12 REC=100% RQD=86%
	75.3	18.26				x	25	70			X		18.26-17.66 SI		Slickensides.
	75.9	17.66			x		20	70							Thin, offset, cc.

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-41D						DATE LOGGED:	5/16/2003					GRADE = 93.56' TD = 140.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	77.3	16.26			x		10	70							Thin, offset, cc.
13	79.6-84.6	13.96-8.96													Run 13 REC=96% RQD=90%
	80.1	13.46		x			45	50							Weathered, parallel to bedding.
	81.5	12.06		x			65	50							Weathered, parallel to bedding, cc.
14	84.6-89.6	8.96-3.96													Run 14 REC=98% RQD=82%
	85.5-87.5	8.06-6.06											8.06-6.06		Deformed bedding, offsets, cc-
															filled fractures, open at 87.0'.
	88.0-87.5	5.56-6.06													Core broken into large angular
															pieces.
15	89.6-94.6	3.96-[1.04]													Run 15 REC=100% RQD=96%
	90.1	3.46				x	30	30							Parallel to bedding, at least 0.3'
															offset.
	90.8	2.76				x	30	30							Oblique to bedding, slightly
															weathered.
	91.2-91.4	2.36													Deformed beds with sharp
															edges.
	92.7	0.86		x			45	45							Parallel, open, weathered.
	93.2	0.36													Minor offset beds.
	93.6	[0.04]													Offset at least 0.3'.
	94.1	[0.54]		x			45	45							Parallel with cc.
16	94.6-99.6	[1.04]-[[6.04]													Run 16 REC=96% RQD=76%
															Bedding angle ~45^{o} with offsets

Eric Lovenduski
Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-41D	DATE LOGGED:	5/16/2003	GRADE = 93.56' TD = 140.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															and slight deformation throughout
															run, open fractures at 95.2', 96.2',
															98.0', and 99.5'.
17	99.6-104.6	[6.04]-[11.04]													Run 17 REC=96 RQD=84%
															Bedding angle ~45°-50° with slight
															deformation, cc-filled fractures and
															minor offsets.
	102.5	[8.94]		x			60	45			X				Trace slickensides, parallel to
															bedding.
18	104.6-109.6	[11.04]-[16.04]													Run 18 REC=100% RQD=92%
	105.6	[12.04]		x			45	45							Parallel to bedding, broken edges.
	106.5	[12.94]		x			60	45							Parallel to bedding, weathered,
															deformed beds at edges.
	107.8	[14.24]		x			80	45							Offset, parallel to bedding, sharp
															edges.
	108.7	[15.14]			x								[15.14]		cc-filled fractures, slightly oblique
															to bedding.
19	109.6-114.6	[16.04]-[21.04]													Run 19 REC=100% RQD=82%
	109.6-109.9	[16.04]-[16.34]											[16.04]-[16.34]		Core is broken into small pieces.
	111.9	[18.34]		x				45							Weathered, rounded fracture.
	112.5	[18.94]	x				65	45							0.05'-thick filled fracture with
															offset, parallel to bedding.

Eric Lovenduski
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-41D	DATE LOGGED:	5/16/2003	GRADE = 93.56' TD = 140.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	113.5-114.0	[19.94]-[20.44]													Deformed bedding planes.
	114.5	[20.94]	x												Oblique to bedding, offset, cc.
20	114.6-119.6	[21.04]-[26.04]													Run 20 REC=100% RQD=94%
	117.7-118.0	[24.14]-[24.44]		x			65	45					[24.14]-[26.04]		Sharp edges, cc.
	118.5-119.6	[24.94]-[26.04]													Deformed beds, cc-filled fractures
															with offsets.
21	119.6-124.6	[26.04]-[31.04]													Run 21 REC=100% RQD=86%
	119.8	[26.24]	x				40	45							Parallel to bedding, cc.
	120.9	[27.34]													Core is broken. Large open
															fracture with cc edges.
	123.0-124.6	[29.44]-[31.04]											[29.44]-[31.04]		Slightly deformed beds with cc-
															filled fractures and offsets, open
															at 124.5'.
22	124.6-129.6	[31.04]-[36.04]													Run 22 REC=100% RQD=98%
	125.3	[31.74]											[31.74]		Deformed beds with cc-filled
															fractures, offsets.
	125.8	[32.24]	X				45	45							Oblique to bedding, offset.
	128.2-129.0	[34.64]-[35.44]											[34.64]-[35.44]		Deformed beds, offset, filled
															fractures.
23	129.6-134.6	[36.04]-[41.04]													Run 23 REC=100% RQD=74%
	130.5	[36.94]		x			80	45							Oblique to bedding, sharp edges,
															cc.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-41D						DATE LOGGED:	5/16/2003					GRADE = 93.56' TD = 140.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	132.5-133.5	[38.94]-[39.94]											[38.94]-[39.94]		Intense fractures with very minor
															deformed beds, 0.08' offset at
															132.6'.
	133.5-133.7	[39.94]-[40.14]													Ash layer.
24	134.6-139.6	[41.04]-[46.04]											[41.04]-[46.04]		Run 24 REC=93% RQD=35%
															Entire run is broken with offsets,
															vertical cc, open fractures, cc-
															filled fractures.

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-42D						DATE LOGGED:	5/15/2003					GRADE = 93.72' TD = 175.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	82.2-84.5	11.52-9.22												11.52-[80.58]	Run 1 REC=100% RQD=57%
	82.2-82.6	11.52-11.12											11.52-11.12		Core is broken into small rounded
															pieces.
	83.5	10.22						40							
	84.1-84.5	9.62-9.22													Weathered, open, rounded edges.
2	84.5-89.5	9.22-4.22													Run 2 REC=100% RQD=98%
	84.5	9.22		X			40	40							Parallel to bedding, 0.01' cc.
	86.2	7.52		X			40	40							Parallel to bedding, weathered,
															rounded.
	89.3	4.42		X			40	40							Parallel to bedding, open 0.02'.
3	89.5-94.5	4.22-[0.78]													Run 3 REC=100% RQD=100%
	90.0	3.72						40							
	93.6	0.12		X			45	40							Parallel to bedding, slightly
															weathered, tight.
4	94.5-99.5	[0.78]-[5.78]													Run 4 REC=92% RQD=76%
	95.0	[1.28]						40							
	98.5	[4.78]		X			40	40							Parallel to bedding, weathered.
	98.7-99.5	[4.98]-[5.78]													Core is broken, little recovery.
5	99.5-104.5	[5.78]-[10.78]													Run 5 REC=94% RQD=68%
	102.9	[9.18]		X			55	40					[9.18]-[10.78]		Parallel to bedding, smooth
															polished surface.
	103.3-104.5	[9.58]-[10.78]									X				Core is broken, slickensides on

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Staff Geologist

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BEDROCK CORE LOG

WELL NO.:	MW-42D	DATE LOGGED:	5/15/2003	GRADE = 93.72' TD = 175.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															core fragments.
6	104.5-109.5	[10.78]-[15.78]													Run 6 REC=100% RQD=98%
	105.7	[11.98]		X			40	40							Parallel to bedding, weathered.
	109.2	[15.48]		X			40	40							Parallel to bedding, weathered.
7	109.5-114.5	[15.78]-[20.78]													Run 7 REC=100% RQD=84%
	114.0	[20.28]		X			40	40					[20.28]-[20.48] LI		Parallel to bedding, extremely
															weathered.
	114.2	[20.48]		X				40							Parallel to bedding, extremely
															weathered.
8	114.5-119.5	[20.78]-[25.78]													Run 8 REC=96% RQD=74%
	115.1-115.5	[21.38]-[21.78]											[21.38]-[21.78]		Core is broken into small pieces.
	116.4	[22.68]		X			70	40							Oblique to bedding, sharp edges,
															cc.
	117.0-118.0	[23.28]-[24.28]		X			75	40							Perpendicular to bedding, sharp
															edges, cc.
	119.0	[25.28]		X			65	40							Parallel to bedding, weathered.
9	119.5-124.5	[25.78]-[30.78]													Run 9 REC=100% RQD=94%
	119.5	[25.78]		X			40	40							Parallel to bedding, weathered.
	124.5	[30.78]		X			40	40							Parallel to bedding, weathered.
10	124.5-129.5	[30.78]-[35.78]													Run 10 REC=100% RQD=94%
	124.5	[30.78]		X			40	40							Parallel to bedding, weathered.
	129.2	[35.48]				X									Weathered, open, rounded

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Staff Geologist

BEDROCK CORE LOG

WELL NO.:	MW-42D						DATE LOGGED:	5/15/2003					GRADE = 93.72' TD = 175.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															fracture.
11	129.5-134.5	[35.78]-[40.78]													Run 11 REC=100% RQD=96%
	132.9	[39.18]		X			35	35							Parallel to bedding, smooth, slightly
															weathered.
	134.3	[40.58]		X			35	35							Parallel to bedding, weathered.
12	134.5-139.5	[40.78]-[45.78]													Run 12 REC=100% RQD=90%
	134.5-135.0	[40.78]-[41.28]	X				45	35					[40.78]-[41.58] LI		Perpendicular to bedding, at least
															0.5' offset.
	135.3	[41.58]				X	28	28							Parallel to bedding, significant py
															coating.
	136.2	[42.48]			X		15	28							Parallel to bedding, cc.
	137.0	[43.28]			X	X							[43.28]		Filled and open fractures, parallel
															to bedding, ~0.05' offset.
	137.8	[44.08]	X				45	30							Slightly deformed beds,
															perpendicular to bedding, ~0.12'
															offset.
	138.9	[45.18]	X				45	30							Perpendicular to bedding, cc.
13	139.5-144.5	[45.78]-[50.78]													Run 13 REC=100% RQD=72%
	139.5-141.2	[45.78]-[47.48]			X		35	35					[45.78]-[51.78]		Perpendicular to bedding, series of
															thin cc- filled fractures.
	141.2-144.5	[47.48]-[50.78]													Bedding is severely deformed,
															many cc-filled fractures, offsets.

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NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOG

WELL NO.:	MW-42D	DATE LOGGED:	5/15/2003	GRADE = 93.72' TD = 175.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	141.5	[47.78]		X			60								Smooth polished surface,
															deformed beds, weathered.
	142.5-143.5	[48.78]-[49.78]		X											Arc-shaped open fracture, cc,
															core is broken into angular pieces,
															filled fractures, deformed beds.
	143.5-144.1	[49.78]-[50.38]													Very fragile core, intense filled
															fractures.
14	144.5-149.5	[50.78]-[55.78]													Run 14 REC=100% RQD=76%
	144.5-145.5	[50.78]-[51.78]													Deformed beds, broken core.
	146.1	[52.38]		X			45	45					[52.38]-[52.98]		Open, perpendicular to bedding.
	146.5	[52.78]	X				45	45							Parallel to bedding, cc, thin.
	146.7	[52.98]		X			50	45							Perpendicular to bedding, 0.2'
															open, weathered.
	147.0-149.5	[53.28]-[55.78]													Tar odor, sheen, trace product in
															circulation water.
	148.0	[54.28]		X			60	45							Perpendicular to bedding,
															weathered, minor offset, tar on
															core in fracture, lost water.
15	149.5-154.5	[55.78]-[60.78]													Run 15 REC=100% RQD=90%
															Lost water.
	149.5	[55.78]	X				60	45							Thin, oblique to bedding, cc-filled,
															0.07' offset.

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOG

WELL NO.:	MW-42D						DATE LOGGED:	5/15/2003					GRADE = 93.72' TD = 175.0'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
	151.5-151.8	[57.78]-[58.08]											[57.78]-[58.08]		Series of thick cc-filled fractures,
															0.05' offset, open fracture at
															151.7, cc and py.
	153.5	[59.78]	X				40	45							Perpendicular to bedding, thin, cc-
															filled.
	154.2-154.5	[60.48]-[60.78]		X			85	45					[60.48]-[61.98] V		Near vertical, open.
16	154.5-159.5	[60.78]-[65.78]													Run 16 REC=100% RQD=98%
															Lost water.
	154.5-155.7	[60.78]-[61.98]		X			90	45							Vertical, tight.
	157.0	[63.28]						35							
17	159.5-164.5	[65.78]-[70.78]													Run 17 REC=100% RQD=98%
															Lost water.
	161.0	[67.28]						35							
	161.5	[67.78]											[67.78]		Deformed bedding with filled
															fractures.
18	164.5-169.5	[70.78]-[75.78]													Run 18 REC=100% RQD=76%
	166.1	[72.38]		X			35	35					[72.38]-[80.58] LI		Parallel to bedding, weathered.
	166.5	[72.78]		X			35	35							Parallel to bedding, weathered.
	166.8	[73.08]		X											Core is broken, open fractures.
	167.0-169.5	[73.28]-[75.78]													Deformed beds, cc-filled fractures,
															open 65^{o} fractures every 0.3'.
19	169.5-174.5	[75.78]-[80.78]													Run 19 REC=98% RQD=64%

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Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG

WELL NO.:	MW-42D	DATE LOGGED:	5/15/2003	GRADE = 93.72' TD = 175.0'

RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															Lost water.
	169.5-171.5	[75.78]-[77.78]													Deformed beds, offsets, filled
															fractures, open fractures,
															weathered.
	171.5-172.6	[77.78]-[78.88]													Deformed beds, offsets, filled
															fractures.
	172.6	[78.88]		X			80								Weathered, open.
	172.6-174.3	[78.88]-[80.58]													Deformed beds, offsets, filled
															fractures.

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	RH-1D						DATE LOGGED:	5/23/2001 - 7/5/2001					GRADE = 87.44' TD = 107.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
1	~19.0-25.9	~68.44-61.54												68.44-20.44	Run 1 REC=91% RQD = 76%
	20.0	67.44						27					66.44-57.74		GB
	22.4	65.04				X	27	27							~22.4 ft. oil appeared in coring
															water.
	22.4-23.7	65.04-63.74		X			85								Start of high angle open fractures.
	24.4	63.04													Bedding deformation and offset
															with v. thin open fractures.
	24.7-25.1	62.74-62.34													Core chewed up.
	25.0-~26.5	62.44-~60.94		X			85								25.0 ft. start of low angle deform-
															ation and offset. Polished surface,
															no ss, some core chewed up
															during coring.
2	25.9-30.9	61.54-56.54													Run 2 REC=100% RQD = 86%
	~26.5-27.0	~60.94-60.44													Deformation and offset, v. thin low
															angle open and closed fractures,
															cc.
	26.8	60.64					38				X				Semi-polished, step. Oil in coring
															water at ~26.8 ft.
	27.0-29.6	60.44-57.84													Deformation and offset continue.
3	31.3-41.3	56.14-46.14													Run 3 REC=100% RQD = 90%
	32.9-35.0	54.54-52.44		X			90					X			Offset and deformation start at
															85^{o}-90^{o}, open fractures. NAPL

John Hawley
Staff Geologist

NEW YORK STATE ELECTRIC & GAS
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BEDROCK CORE LOGGING

WELL NO.:	RH-1D						DATE LOGGED:	5/23/2001 - 7/5/2001					GRADE = 87.44' TD = 107.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
															on the core at ~33.0 ft.
	35.0	52.44	X				45	45							End of offsets.
	38.6	48.84											49.44-44.44 V		Offset.
	38.6-39.8	48.84-47.64		X			70-85	25							Partially filled. Oil at ~39.0 ft.
	40.5	46.94						40							
4	41.3-46.3	46.14-41.14													Run 4 REC=100% RQD 67%
	41.5-43.0	45.94-44.44		X			80	20							Partially filled cc, step, deformation
															and offsets. Oil at 43ft., staining.
	43.5	43.94						43							
	44.4	43.04		X			45								Oil on core at 44.4-45.0 ft.
5	46.3-56.3	41.14-31.14											42.94-39.74 SI		Run 5 REC=100% RQD = 94%
	46.0-46.5	41.44-40.94		X			64	22							Oil on core (tar).
	51.0-55.0	36.44-32.44													Oil in core water.
	51.2	36.24					35	35							Core washed out at 51.2 ft.
	55.5	31.94					30	30							Tar staining, open v. thin fractures
															above 55.5 ft. fracture.
6	56.3-65.9	31.14-21.54													Run 6 REC=102% RQD=86%
															Losing water from 54.0 ft. through
															Run 6. Run 6 core had sheen.
	59.0	28.44						35							
	61.4-62.7	26.04-24.74		X			90						25.44-24.74		
	65.0	22.44						45							

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NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOGGING

WELL NO.:	RH-1D						DATE LOGGED:	5/23/2001 - 7/5/2001					GRADE = 87.44' TD = 107.5'		
RUN #	DEPTH (ft. bgs)	ELEVATION (ft. msl)	FRACTURES				ANGLE OF		MARKER		FAULTS		HIF (ft. msl)	IPC (ft. msl)	COMMENTS AND DESCRIPTION
			HF	HO	LF	LO	Fracture	Bedding	Type	Form	SS	BC			
7	66.5-76.5	20.94-10.94												20.44-[20.06] M	Run 7 REC=100% RQD=97%
	69.0	18.44													NAPL on core, losing water.
	74.0	13.44	X				62	62							Partially filled.
8	76.5-86.5	10.94-0.94													Run 8 REC=97% RQD=95%
	77.5	9.94	X				52	52			X				Semi-polished.
	84.0	3.44						60							
															86.3-107.0 ft. AX (1") core.
9	86.3-91.3	1.14-[3.86]													Run 9 REC=100% RQD=98%
	90.0	[2.60]						50							
10	91.3-96.3	[3.86]-[8.86]													Run 10 REC=100% RQD=82%
	91.3	[3.86]	X				45	45	?						1/16 in. cc with offsets.
	92.2	[4.76]	X				45	45	?				[4.56]-[6.06]		1/4 in. cc.
	92.7	[5.26]			X		0	65	?						1/8 in. cc.
	93.0	[5.56]						65							
11	96.3-101.3	[8.86]-[13.86]													Run 11 REC=100% RQD=96%
	97.0	[9.56]						60							
	99.0	[11.56]	X				65	65				X			1/16 in. cc with bc.
12	101.3-106.3	[13.86]-[18.86]													Run 12 REC=100% RQD=98%
	104.5	[17.06]						66							
13	106.3-107.5	[18.86]-[20.06]													Run 13 REC=100% RQD=75%

NEW YORK STATE ELECTRIC & GAS
MECHANICVILLE FORMER MGP SITE

BEDROCK CORE LOG NOTES

Well No.	Identifies a bedrock well at the Mechanicville Fomer MGP Site.
Elevation	Surface elevation in feet relative to mean sea level.
TD	Total depth of well boring in feet below grade.
Run #	Identifies the portion of rock core that was retrieved from a given core barrel.
Depth	Depth or depth interval of a stratigraphic marker or fracture in feet below grade.
Elevation	Depth or depth interval of a stratigraphic marker or fracture in feet relative to mean sea level.
	[ ] Elevation below sea level.
Fractures	Identifies fractures, if present:
	HF High angle filled fracture (>30^{o} inclination); the fracture is annealed, typically with calcite.
	HO High angle open fracture (>30^{o} inclination); the fracture may be mineral-coated or -stained.
	LF Low angle filled fracture (<30^{o} inclination); the fracture is annealed, typically with calcite.
	LO Low angle open fracture (<30^{o} inclination); the fracture may be mineral-coated or -stained.
Angle	Approximate or average inclination of fracture or bedding from horizontal.
Marker Type	Identifies the lithology or mineralogy of a stratigraphic marker:
	cc Calcite band or vein.
	py Pyrite band or pyrite layer, consisting of finely to densely disseminated pyrite.
Marker Form	Identifies the thickness of a given stratigraphic marker (in inches).
Faults	Identifies features of brittle deformation, if present:
	SS Polished slickenside surfaces, frequently with slickenfibers or striations.
	BC Breccia, ranging in thickness from less than 0.1 inches to several feet; typically annealed with calcite or an anastomosing set of thin calcite veins.
HIF	Depth of High Intensity Fractures in feet relative to mean sea level (> 1 fracture/inch).
	LI Fracture intensity is less intense (1 fracture/1-6 inches).
	SI Fracture intensity is semi-intense (1 fracture/6-8 inches).
	V Vertical fractures.
IPC	Depth of Intense Pencil Cleavage in feet relative to mean sea level.
	M Minor pencil cleavage .
	VM Very minor pencil cleavage.
Comments	Describes the characteristics of a stratigraphic marker or a fracture:
	REC Percent recovery of core.
	RQD Rock quality designation.
	cc Calcite annealed fracture.
	gra Graphite annealed or coated fracture.
	tight Fracture is not annealed, and does not appear as open fracture.
	v. thin Very thin hairline fracture, typically less than 0.02 inch thick.
	GB General bedding.

NYSEG

New York State Electric & Gas Corporation

Mechanicville Central Avenue
Former Manufactured Gas Plant
Mechanicville, New York

SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
APPENDIX F
SEPTEMBER 2004

VOL. III OF V



Prepared For:
New York State Electric & Gas Corporation
Kirkwood Industrial Park
Binghamton, New York

URS

URS Corporation - New York
28 Corporate Drive, Suite 200
Clifton Park, New York 12065

APPENDIX F
LABORATORY ANALYTICAL DATA

2001
SOIL

Adirondack Environmental Services Inc.
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RECEIVED
APR 23 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/18/01
Number of samples analyzed: 12
AES Project ID: 010403AE
Invoice #: 226191

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040101
AES sample #: 010403AE01 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.5	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/13/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040101
AES sample #: 010403AE01 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene	EPA-8270	2400	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene	EPA-8270	33 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040101
AES sample #: 010403AE01 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	100 J	ug/kg	MT-BZ-44	04/09/01
Fluorene	EPA-8270	76 J	ug/kg	MT-BZ-44	04/09/01
Phenanthrene	EPA-8270	1900	ug/kg	MT-BZ-44	04/09/01
Anthracene	EPA-8270	250 J	ug/kg	MT-BZ-44	04/09/01
Fluoranthene	EPA-8270	1700	ug/kg	MT-BZ-44	04/09/01
Pyrene	EPA-8270	3800	ug/kg	MT-BZ-44	04/09/01
Chrysene	EPA-8270	1600	ug/kg	MT-BZ-44	04/09/01
Benzo(b)fluoranthene	EPA-8270	2500	ug/kg	MT-BZ-44	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)pyrene	EPA-8270	730	ug/kg	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	730	ug/kg	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	120 J	ug/kg	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene	EPA-8270	800	ug/kg	MT-BZ-44	04/09/01
Benzo(a)anthracene	EPA-8270	1400	ug/kg	MT-BZ-44	04/09/01
2-Methylnaphthalene	EPA-8270	1500	ug/kg	MT-BZ-44	04/09/01
Dibenzofuran	EPA-8270	430	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020102
AES sample #: 010403AE02
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.6	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/13/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020102
AES sample #: 010403AE02 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene		EPA-8270	1100	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene		EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020102
AES sample #: 010403AE02 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	63 J	ug/kg	MT-BZ-44	04/09/01
Fluorene	EPA-8270	47 J	ug/kg	MT-BZ-44	04/09/01
Phenanthrene	EPA-8270	1100	ug/kg	MT-BZ-44	04/09/01
Anthracene	EPA-8270	180 J	ug/kg	MT-BZ-44	04/09/01
Fluoranthene	EPA-8270	1000	ug/kg	MT-BZ-44	04/09/01
Pyrene	EPA-8270	1800	ug/kg	MT-BZ-44	04/09/01
Chrysene	EPA-8270	800	ug/kg	MT-BZ-44	04/09/01
Benzo(b)fluoranthene	EPA-8270	1700	ug/kg	MT-BZ-44	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)pyrene	EPA-8270	570	ug/kg	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	630	ug/kg	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	240 J	ug/kg	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene	EPA-8270	730	ug/kg	MT-BZ-44	04/09/01
Benzo(a)anthracene	EPA-8270	760	ug/kg	MT-BZ-44	04/09/01
2-Methylnaphthalene	EPA-8270	600	ug/kg	MT-BZ-44	04/09/01
Dibenzofuran	EPA-8270	160 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020103
AES sample #: 010403AE03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	fPA-9012	<1	ug/g	MC-G	04/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/13/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
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AES sample #: 010403AE03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene	EPA-8270	1200	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020103
AES sample #: 010403AE03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Phenanthrene	EPA-8270	290 J	ug/kg	MT-BZ-44	04/09/01
Anthracene	EPA-8270	47 J	ug/kg	MT-BZ-44	04/09/01
Fluoranthene	EPA-8270	300 J	ug/kg	MT-BZ-44	04/09/01
Pyrene	EPA-8270	670	ug/kg	MT-BZ-44	04/09/01
Chrysene	EPA-8270	400	ug/kg	MT-BZ-44	04/09/01
Benzo(b)fluoranthene	EPA-8270	930	ug/kg	MT-BZ-44	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)pyrene	EPA-8270	230 J	ug/kg	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	310 J	ug/kg	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	140 J	ug/kg	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene	EPA-8270	330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)anthracene	EPA-8270	300 J	ug/kg	MT-BZ-44	04/09/01
2-Methylnaphthalene	EPA-8270	930	ug/kg	MT-BZ-44	04/09/01
Dibenzofuran	EPA-8270	60 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore — Date Sampled: 04/02/01
CLIENT'S SAMPLE ID: MESB04060104 — Date sample received: 04/03/01
AES sample #: 010403AE04 — Samples taken by: E.L./A.W. — Location: NYSEG M-Ville
MATRIX: Soil — grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	1.9	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	9.5	ug/g	MC-G	04/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	2.2	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060104
AES sample #: 010403AE04 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Benzene	EPA-8260	50	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Toluene	EPA-8260	140	ug/kg	JF-BX-32	04/05/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Ethylbenzene	EPA-8260	80	ug/kg	JF-BX-32	04/05/01
Styrene	EPA-8260	100	ug/kg	JF-BX-32	04/05/01
Xylenes,Total	EPA-8260	620	ug/kg	JF-BX-32	04/05/01
Naphthalene	EPA-8270	460	ug/g	MT-BZ-45	04/11/01
Acenaphthylene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060104
AES sample #: 010403AE04 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	6.0 J	ug/g	MT-BZ-45	04/11/01
Fluorene	EPA-8270	11 J	ug/g	MT-BZ-45	04/11/01
Phenanthrene	EPA-8270	40	ug/g	MT-BZ-45	04/11/01
Anthracene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01
Fluoranthene	EPA-8270	13 J	ug/g	MT-BZ-45	04/11/01
Pyrene	EPA-8270	24 J	ug/g	MT-BZ-45	04/11/01
Chrysene	EPA-8270	5.3 J	ug/g	MT-BZ-45	04/11/01
Benzo(b)fluoranthene	EPA-8270	5.3 J	ug/g	MT-BZ-45	04/11/01
Benzo(k)fluoranthene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01
Benzo(a)pyrene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01
Benzo(g,h,i)perylene	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01
Benzo(a)anthracene	EPA-8270	5.3 J	ug/g	MT-BZ-45	04/11/01
2-Methylnaphthalene	EPA-8270	300	ug/g	MT-BZ-45	04/11/01
Dibenzofuran	EPA-8270	<33	ug/g	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040104A
AES sample #: 010403AE05 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/13/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-EX-32	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040104A
AES sample #: 010403AE05
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
trans-1,3-Dichloropropene		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Trichloroethene		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Dibromochloromethane		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
1,1,2-Trichloroethane		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Benzene		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
cis-1,3-Dichloropropene		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
2-Chloroethylvinylether		EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Bromoform		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
4-Methyl-2-pentanone		EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
2-Hexanone		EPA-8260	<100	ug/kg	JF-BX-32	04/13/01
Tetrachloroethene		EPA-8260	84	ug/kg	JF-BX-32	04/13/01
1,1,2,2-Tetrachloroethane		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Toluene		EPA-8260	160	ug/kg	JF-BX-32	04/13/01
Chlorobenzene		EPA-8260	<50	ug/kg	JF-BX-32	04/13/01
Ethylbenzene		EPA-8260	58	ug/kg	JF-BX-32	04/13/01
Styrene		EPA-8260	100	ug/kg	JF-BX-32	04/13/01
Xylenes,Total		EPA-8260	400	ug/kg	JF-BX-32	04/13/01
Naphthalene		EPA-8270	2200	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene		EPA-8270	67 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040104A
AES sample #: 010403AE05 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/g	MT-BZ-44	04/09/01
Fluorene	EPA-8270	<330	ug/g	MT-BZ-44	04/09/01
Phenanthrene	EPA-8270	250 J	ug/g	MT-BZ-44	04/09/01
Anthracene	EPA-8270	50 J	ug/g	MT-BZ-44	04/09/01
Fluoranthene	EPA-8270	270 J	ug/g	MT-BZ-44	04/09/01
Pyrene	EPA-8270	930	ug/g	MT-BZ-44	04/09/01
Chrysene	EPA-8270	670	ug/g	MT-BZ-44	04/09/01
Benzo(b)fluoranthene	EPA-8270	1600	ug/g	MT-BZ-44	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/g	MT-BZ-44	04/09/01
Benzo(a)pyrene	EPA-8270	290 J	ug/g	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	670	ug/g	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	470	ug/g	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene	EPA-8270	900	ug/g	MT-BZ-44	04/09/01
Benzo(a)anthracene	EPA-8270	430	ug/g	MT-BZ-44	04/09/01
2-Methylnaphthalene	EPA-8270	970	ug/g	MT-BZ-44	04/09/01
Dibenzofuran	EPA-8270	<330	ug/g	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020105
AES sample #: 010403AE06 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/13/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020105
AES sample #: 010403AE06 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene	EPA-8270	930	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020105
AES sample #: 010403AE06 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Phenanthrene	EPA-8270	520	ug/kg	MT-BZ-44	04/09/01
Anthracene	EPA-8270	110 J	ug/kg	MT-BZ-44	04/09/01
Fluoranthene	EPA-8270	600	ug/kg	MT-BZ-44	04/09/01
Pyrene	EPA-8270	1300	ug/kg	MT-BZ-44	04/09/01
Chrysene	EPA-8270	600	ug/kg	MT-BZ-44	04/09/01
Benzo(b)fluoranthene	EPA-8270	1100	ug/kg	MT-BZ-44	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)pyrene	EPA-8270	250 J	ug/kg	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	310 J	ug/kg	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	120 J	ug/kg	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene	EPA-8270	370	ug/kg	MT-BZ-44	04/09/01
Benzo(a)anthracene	EPA-8270	500	ug/kg	MT-BZ-44	04/09/01
2-Methylnaphthalene	EPA-8270	470	ug/kg	MT-BZ-44	04/09/01
Dibenzofuran	EPA-8270	90 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020106
AES sample #: 010403AE07 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.4	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020106
AES sample #: 010403AE07 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
trans-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Trichloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Dibromochloromethane		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
1,1,2-Trichloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Benzene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
cis-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
2-Chloroethylvinylether		EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Bromoform		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
4-Methyl-2-pentanone		EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
2-Hexanone		EPA-8260	<10	ug/kg	JF-BX-32	04/13/01
Tetrachloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
1,1,2,2-Tetrachloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Toluene		EPA-8260	1.1 J	ug/kg	JF-BX-32	04/13/01
Chlorobenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Ethylbenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Styrene		EPA-8260	<5	ug/kg	JF-BX-32	04/13/01
Xylenes,Total		EPA-8260	3.2 J	ug/kg	JF-BX-32	04/13/01
Naphthalene		EPA-8270	130 J	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene		EPA-8270	110 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020106
AES sample #: 010403AE07 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	53 J	ug/kg	MT-BZ-44	04/09/01
Fluorene	EPA-8270	130 J	ug/kg	MT-BZ-44	04/09/01
Phenanthrene	EPA-8270	2000	ug/kg	MT-BZ-44	04/09/01
Anthracene	EPA-8270	330	ug/kg	MT-BZ-44	04/09/01
Fluoranthene	EPA-8270	1400	ug/kg	MT-BZ-44	04/09/01
Pyrene	EPA-8270	4200	ug/kg	MT-BZ-44	04/09/01
Chrysene	EPA-8270	1100	ug/kg	MT-BZ-44	04/09/01
Benzo(b)fluoranthene	EPA-8270	2000	ug/kg	MT-BZ-44	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)pyrene	EPA-8270	1000	ug/kg	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1100	ug/kg	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	110 J	ug/kg	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene	EPA-8270	970	ug/kg	MT-BZ-44	04/09/01
Benzo(a)anthracene	EPA-8270	1000	ug/kg	MT-BZ-44	04/09/01
2-Methylnaphthalene	EPA-8270	130 J	ug/kg	MT-BZ-44	04/09/01
Dibenzofuran	EPA-8270	47 J	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040107
AES sample #: 010403AE08 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore — Date Sampled: 04/02/01
CLIENT'S SAMPLE ID: MESB02040107 — Date sample received: 04/03/01
AES sample #: 010403AE08 — Samples taken by: E.L./A.W. — Location: NYSEG M-Ville
MATRIX: Soil — grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene	EPA-8270	83 J	ug/kg	MT-BZ-44	04/09/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040107
AES sample #: 010403AE08 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene		EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Fluorene		EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Phenanthrene		EPA-8270	400	ug/kg	MT-BZ-44	04/09/01
Anthracene		EPA-8270	47 J	ug/kg	MT-BZ-44	04/09/01
Fluoranthene		EPA-8270	330	ug/kg	MT-BZ-44	04/09/01
Pyrene		EPA-8270	970	ug/kg	MT-BZ-44	04/09/01
Chrysene		EPA-8270	400	ug/kg	MT-BZ-44	04/09/01
Benzo(b)fluoranthene		EPA-8270	730	ug/kg	MT-BZ-44	04/09/01
Benzo(k)fluoranthene		EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(a)pyrene		EPA-8270	230 J	ug/kg	MT-BZ-44	04/09/01
Indeno(1,2,3-cd)pyrene		EPA-8270	200 J	ug/kg	MT-BZ-44	04/09/01
Dibenzo(a,h)anthracene		EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01
Benzo(g,h,i)perylene		EPA-8270	240 J	ug/kg	MT-BZ-44	04/09/01
Benzo(a)anthracene		EPA-8270	250 J	ug/kg	MT-BZ-44	04/09/01
2-Methylnaphthalene		EPA-8270	120 J	ug/kg	MT-BZ-44	04/09/01
Dibenzofuran		EPA-8270	<330	ug/kg	MT-BZ-44	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04070108
AES sample #: 010403AE09 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04070108
AES sample #: 010403AE09
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene		EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Acenaphthylene		EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04070108
AES sample #: 010403AE09
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Pyrene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Chrysene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-45	04/09/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020109
AES sample #: 010403AE10 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020109
AES sample #: 010403AE10 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone		EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chlorobenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total		EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Naphthalene		EPA-8270	19	ug/g	MT-BZ-45	04/11/01
Acenaphthylene		EPA-8270	5.3	ug/g	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020109
AES sample #: 010403AE10 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	16	ug/g	MT-BZ-45	04/11/01
Fluorene	EPA-8270	25	ug/g	MT-BZ-45	04/11/01
Phenanthrene	EPA-8270	51	ug/g	MT-BZ-45	04/11/01
Anthracene	EPA-8270	14	ug/g	MT-BZ-45	04/11/01
Fluoranthene	EPA-8270	27	ug/g	MT-BZ-45	04/11/01
Pyrene	EPA-8270	22	ug/g	MT-BZ-45	04/11/01
Chrysene	EPA-8270	8.0	ug/g	MT-BZ-45	04/11/01
Benzo(b)fluoranthene	EPA-8270	9.7	ug/g	MT-BZ-45	04/11/01
Benzo(k)fluoranthene	EPA-8270	<3.3	ug/g	MT-BZ-45	04/11/01
Benzo(a)pyrene	EPA-8270	5.0	ug/g	MT-BZ-45	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	2.3 J	ug/g	MT-BZ-45	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	1.2 J	ug/g	MT-BZ-45	04/11/01
Benzo(g,h,i)perylene	EPA-8270	2.3 J	ug/g	MT-BZ-45	04/11/01
Benzo(a)anthracene	EPA-8270	9.7	ug/g	MT-BZ-45	04/11/01
2-Methylnaphthalene	EPA-8270	16	ug/g	MT-BZ-45	04/11/01
Dibenzofuran	EPA-8270	19	ug/g	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060126
AES sample #: 010403AE11 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060126
AES sample #: 010403AE11 Samples taken by: E.L./A.W.
MATRIX: Soil

Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Trichloroethene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Benzene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether		EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Bromoform		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone		EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
2-Hexanone		EPA-8260	<100	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Toluene		EPA-8260	30 J	ug/kg	JF-BX-32	04/05/01
Chlorobenzene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Ethylbenzene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Styrene		EPA-8260	<50	ug/kg	JF-BX-32	04/05/01
Xylenes,Total		EPA-8260	16 J	ug/kg	JF-BX-32	04/05/01
Naphthalene		EPA-8270	260 J	ug/kg	MT-BZ-45	04/11/01
Acenaphthylene		EPA-8270	43 J	ug/kg	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060126
AES sample #: 010403AE11
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene		EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Fluorene		EPA-8270	90 J	ug/kg	MT-BZ-45	04/11/01
Phenanthrene		EPA-8270	1100	ug/kg	MT-BZ-45	04/11/01
Anthracene		EPA-8270	130 J	ug/kg	MT-BZ-45	04/11/01
Fluoranthene		EPA-8270	1700	ug/kg	MT-BZ-45	04/11/01
Pyrene		EPA-8270	2500	ug/kg	MT-BZ-45	04/11/01
Chrysene		EPA-8270	1300	ug/kg	MT-BZ-45	04/11/01
Benzo(b)fluoranthene		EPA-8270	2000	ug/kg	MT-BZ-45	04/11/01
Benzo(k)fluoranthene		EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Benzo(a)pyrene		EPA-8270	1000	ug/kg	MT-BZ-45	04/11/01
Indeno(1,2,3-cd)pyrene		EPA-8270	770	ug/kg	MT-BZ-45	04/11/01
Dibenzo(a,h)anthracene		EPA-8270	290 J	ug/kg	MT-BZ-45	04/11/01
Benzo(g,h,i)perylene		EPA-8270	930	ug/kg	MT-BZ-45	04/11/01
Benzo(a)anthracene		EPA-8270	1000	ug/kg	MT-BZ-45	04/11/01
2-Methylnaphthalene		EPA-8270	310 J	ug/kg	MT-BZ-45	04/11/01
Dibenzofuran		EPA-8270	83 J	ug/kg	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040127
AES sample #: 010403AE12 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab

Date Sampled: 04/02/01
Date sample received: 04/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040127
AES sample #: 010403AE12
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/02/01
Date sample received: 04/03/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-32	04/05/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Toluene	EPA-8260	6	ug/kg	JF-BX-32	04/05/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-32	04/05/01
Xylenes,Total	EPA-8260	4 J	ug/kg	JF-BX-32	04/05/01
Naphthalene	EPA-8270	37 J	ug/kg	MT-BZ-45	04/11/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040127
AES sample #: 010403AE12 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab

Date Sampled: 04/02/01
Date sample received: 04/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Phenanthrene	EPA-8270	240 J	ug/kg	MT-BZ-45	04/11/01
Anthracene	EPA-8270	40 J	ug/kg	MT-BZ-45	04/11/01
Fluoranthene	EPA-8270	370	ug/kg	MT-BZ-45	04/11/01
Pyrene	EPA-8270	430	ug/kg	MT-BZ-45	04/11/01
Chrysene	EPA-8270	230 J	ug/kg	MT-BZ-45	04/11/01
Benzo(b)fluoranthene	EPA-8270	370 (J)	ug/kg	MT-BZ-45	04/11/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Benzo(a)pyrene	EPA-8270	170 J	ug/kg	MT-BZ-45	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	100 J	ug/kg	MT-BZ-45	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Benzo(g,h,i)perylene	EPA-8270	120 J	ug/kg	MT-BZ-45	04/11/01
Benzo(a)anthracene	EPA-8270	180 J	ug/kg	MT-BZ-45	04/11/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-45	04/11/01

(J)-detection limit is 330 Don't need J'

APPROVED BY:
Report date: 04/18/01

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314 North Pearl Street
Albany, New York 12207
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CHAIN OF CUSTODY RECORD

1 of 3

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - M-Ville	Samplers: (Names) E. Lovenduski / Amy Wesley
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010403 AE01	MESB02040101	4/2/01	1325 (A) P	SOIL		X	1	VOCs 8260
AE02	MESB00020102	4/2/01	0940 (A) P	SOIL		X	1	
AE03	MESB00020103	4/2/01	1115 (A) P	SOIL		X	1	
AE04	MESB00 MESB04060104	4/2/01	1259 (A) P	SOIL		X	1	
AE05	MESB02040104A	4/2/01	1443 (A) P	SOIL		X	1	
AE06	MESB00020105	4/2/01	1135 (A) P	SOIL		X	1	
AE07	MESB00020106	4/2/01	1235 (A) P	SOIL		X	1	
AE08	MESB02040107	4/2/01	1200 (A) P	SOIL		X	1	
AE09	MESB04070108	4/2/01	1412 (A) P	SOIL		X	1	
AE10	MESB00020109	4/2/01	1400 (A) P	SOIL		X	1	
AE11	MESB04060126	4/2/01	1058 (A) P	SOIL		X	1	
AE12	MESB02040127	4/2/01	1000 (A) P	SOIL		X	1	
			A P					
			A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

Special Instructions/Remarks

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski		4/3/01
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
		4/3/01 1:16

TEMPERATURE: Ambient or (Chilled)

Notes:

PROPERLY PRESERVED: (Y) N

Notes:

RECEIVED WITHIN HOLDING TIMES: (Y) N

Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

2 of 3

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - Mechanicville	Samplers: (Names) E. Lovenduski / A Wesley
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010403AE01	MESB02040101	4/2/01	1325	A (P)	SOIL		X	1	SVOCs (PAH & Total Phenols) EPA 8270; 9065/420.1
AE02	MESB00020102	4/2/01	0740	A P	SOIL		X	1	
AE03	MESB00020103	4/2/01	1115	A P	SOIL		X	1	
AE04	MESB04060104	4/2/01	1259	A P	SOIL		X	1	
AE05	MESB02040104A	4/2/01	1445	A P	SOIL		X	1	
AE06	MESB00020105	4/2/01	1135	A P	SOIL		X	1	
AE07	MESB00020106	4/2/01	1235	A P	SOIL		X	1	
AE08	MESB02040107	4/2/01	1200	A P	SOIL		X	1	
AE09	MESB04070108	4/2/01	1412	A P	SOIL		X	1	
AE10	MESB00020109	4/2/01	1400	A P	SOIL		X	1	
AE11	MESB04060126	4/2/01	1058	A P	SOIL		X	1	
AE12	MESB02040127	4/2/01	1000	A P	SOIL		X	1	
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

Relinquished by: (Signature) EA Lovenduski	Received by: (Signature)	Date/Time 4/3/01
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 4/3/01 1:16

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

3 of 3

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - M-Ville	Samplers: (Names) EJL AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJL
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
0104103 AE01	MESB02040101	4/2/01	1325	A (P)	SOIL		X	1	Cyanide TOTAL and weakacid dissocible
AE02	MESB00020102	4/2/01	0940	A P			X	1	
AE03	MESB00020103	4/2/01	1115	A P			X	1	
AE04	MESB04060104	4/2/01	1257	A P			X	1	
AE05	MESB02040104A	4/2/01	1145	A P			X	1	
AE06	MESB00020105	4/2/01	1135	A P			X	1	
AE07	MESB00020106	4/2/01	1235	A P			X	1	
AE08	~~MESB-000~~ MESB02040107	4/2/01	1200	A P			X	1	
AE09	MESB04070108	4/2/01	1412	A P			X	1	
AE10	MESB00020109	4/2/01	1400	A P			X	1	
AE11	MESB04060126	4/2/01	1058	A P			X	1	
AE12	MESB02040127	4/2/01	1000	A P			X	1	
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
All samples on this page analyzed for total and weak acid dissocible

Relinquished by: (Signature) EJ Lombardo	Received by: (Signature)	Date/Time 4/3/01
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 4/3/01 1:16

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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APR 23 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/19/01
Number of samples analyzed: 7
AES Project ID: 010404AY
Invoice #: 226259

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040114
AES sample #: 010404AY01 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	3700	ug/kg	MT-BZ-42	04/11/01
Acenaphthylene	EPA-8270	1500	ug/kg	MT-BZ-42	04/11/01
Acenaphthene	EPA-8270	1900	ug/kg	MT-BZ-42	04/11/01
Fluorene	EPA-8270	1900	ug/kg	MT-BZ-42	04/11/01
Phenanthrene	EPA-8270	3300	ug/kg	MT-BZ-42	04/11/01
Anthracene	EPA-8270	1100	ug/kg	MT-BZ-42	04/11/01
Fluoranthene	EPA-8270	2100	ug/kg	MT-BZ-42	04/11/01
Pyrene	EPA-8270	3900	ug/kg	MT-BZ-42	04/11/01
Chrysene	EPA-8270	2100	ug/kg	MT-BZ-42	04/11/01
Benzo(b)fluoranthene	EPA-8270	4200	ug/kg	MT-BZ-42	04/11/01
Benzo(k)fluoranthene	EPA-8270	1300	ug/kg	MT-BZ-42	04/11/01
Benzo(a)pyrene	EPA-8270	5300	ug/kg	MT-BZ-42	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	7100	ug/kg	MT-BZ-42	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	930	ug/kg	MT-BZ-42	04/11/01
Benzo(g,h,i)perylene	EPA-8270	7100	ug/kg	MT-BZ-42	04/11/01
Benzo(a)anthracene	EPA-8270	1600	ug/kg	MT-BZ-42	04/11/01
2-Methylnaphthalene	EPA-8270	1400	ug/kg	MT-BZ-42	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040114
AES sample #: 010404AY01 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	400 J	ug/kg	MT-BZ-42	04/11/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040114
AES sample #: 010404AY01 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Toluene	EPA-8260	1.6 J	ug/kg	JF-BX-34	04/17/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060125
AES sample #: 010404AY02 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab

Date Sampled: 04/03/01
Date sample received: 04/04/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	<1600	ug/kg	MT-BZ-42	04/11/01
Acenaphthylene	EPA-8270	500 J	ug/kg	MT-BZ-42	04/11/01
Acenaphthene	EPA-8270	4700	ug/kg	MT-BZ-42	04/11/01
Fluorene	EPA-8270	4300	ug/kg	MT-BZ-42	04/11/01
Phenanthrene	EPA-8270	23000	ug/kg	MT-BZ-42	04/11/01
Anthracene	EPA-8270	7800	ug/kg	MT-BZ-42	04/11/01
Fluoranthene	EPA-8270	5700	ug/kg	MT-BZ-42	04/11/01
Pyrene	EPA-8270	11000	ug/kg	MT-BZ-42	04/11/01
Chrysene	EPA-8270	2200	ug/kg	MT-BZ-42	04/11/01
Benzo(b)fluoranthene	EPA-8270	1400 J	ug/kg	MT-BZ-42	04/11/01
Benzo(k)fluoranthene	EPA-8270	470 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)pyrene	EPA-8270	2200	ug/kg	MT-BZ-42	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1100 J	ug/kg	MT-BZ-42	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	180 J	ug/kg	MT-BZ-42	04/11/01
Benzo(g,h,i)perylene	EPA-8270	900 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)anthracene	EPA-8270	2700	ug/kg	MT-BZ-42	04/11/01
2-Methylnaphthalene	EPA-8270	1000 J	ug/kg	MT-BZ-42	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060125
AES sample #: 010404AY02 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	1200 J	ug/kg	MT-BZ-42	04/11/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060125
AES sample #: 010404AY02
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Barium	EPA-6010	71	ug/g	KH-I-4B-7	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Chromium	EPA-6010	21	ug/g	KH-I-4B-7	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060125
AES sample #: 010404AY02 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	46	ug/g	KH-I-4B-7	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-119	04/10/01
Selenium	EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Silver	EPA-6010	<1	ug/g	KH-I-4B-7	04/16/01
Aluminum	EPA-6010	8060	ug/g	KH-I-4B-7	04/16/01
Antimony	EPA-6010	<3	ug/g	KH-I-4B-7	04/16/01
Copper	EPA-6010	37	ug/g	KH-I-4B-7	04/16/01
Iron	EPA-6010	17340	ug/g	KH-I-4B-7	04/16/01
Nickel	EPA-6010	<2.5	ug/g	KH-I-4B-7	04/16/01
Manganese	EPA-6010	280	ug/g	KH-I-4B-7	04/16/01
Vanadium	EPA-6010	9.4	ug/g	KH-I-4B-7	04/16/01
Zinc	EPA-6010	82	ug/g	KH-I-4B-7	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060124
AES sample #: 010404AY03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	1200	ug/kg	MT-BZ-42	04/11/01
Acenaphthylene	EPA-8270	86 J	ug/kg	MT-BZ-42	04/11/01
Acenaphthene	EPA-8270	530	ug/kg	MT-BZ-42	04/11/01
Fluorene	EPA-8270	120 J	ug/kg	MT-BZ-42	04/11/01
Phenanthrene	EPA-8270	1100	ug/kg	MT-BZ-42	04/11/01
Anthracene	EPA-8270	280 J	ug/kg	MT-BZ-42	04/11/01
Fluoranthene	EPA-8270	400	ug/kg	MT-BZ-42	04/11/01
Pyrene	EPA-8270	500	ug/kg	MT-BZ-42	04/11/01
Chrysene	EPA-8270	190 J	ug/kg	MT-BZ-42	04/11/01
Benzo(b)fluoranthene	EPA-8270	150 J	ug/kg	MT-BZ-42	04/11/01
Benzo(k)fluoranthene	EPA-8270	66 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)pyrene	EPA-8270	190 J	ug/kg	MT-BZ-42	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	130 J	ug/kg	MT-BZ-42	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Benzo(g,h,i)perylene	EPA-8270	190 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)anthracene	EPA-8270	200 J	ug/kg	MT-BZ-42	04/11/01
2-Methylnaphthalene	EPA-8270	370	ug/kg	MT-BZ-42	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060124
AES sample #: 010404AY03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT		UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	86	J	ug/kg	MT-BZ-42	04/11/01
Chloromethane	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Bromomethane	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Vinyl Chloride	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Chloroethane	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Methylene Chloride	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Acetone	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Carbon Disulfide	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethene	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Chloroform	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,2 Dichloroethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
2-Butanone	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Carbon Tetrachloride	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Vinyl Acetate	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Bromodichloromethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,2-Dichloropropane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060124
AES sample #: 010404AY03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Barium	EPA-6010	45	ug/g	KH-I-4B-7	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Chromium	EPA-6010	30	ug/g	KH-I-4B-7	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060124
AES sample #: 010404AY03 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	11	ug/g	KH-I-4B-7	04/16/01
Mercury	EPA-7471	0.03	ug/g	WB-PSQ-119	04/10/01
Selenium	EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Silver	EPA-6010	<1	ug/g	KH-I-4B-7	04/16/01
Aluminum	EPA-6010	13610	ug/g	KH-I-4B-7	04/16/01
Antimony	EPA-6010	<3	ug/g	KH-I-4B-7	04/16/01
Copper	EPA-6010	38	ug/g	KH-I-4B-7	04/16/01
Iron	EPA-6010	31925	ug/g	KH-I-4B-7	04/16/01
Nickel	EPA-6010	<2.5	ug/g	KH-I-4B-7	04/16/01
Manganese	EPA-6010	543	ug/g	KH-I-4B-7	04/16/01
Vanadium	EPA-6010	11	ug/g	KH-I-4B-7	04/16/01
Zinc	EPA-6010	82	ug/g	KH-I-4B-7	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060123
AES sample #: 010404AY04 Samples taken by: E.L./A.W.
MATRIX: Soil

Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	4100	ug/kg	MT-BZ-42	04/11/01
Acenaphthylene	EPA-8270	900	ug/kg	MT-BZ-42	04/11/01
Acenaphthene	EPA-8270	1800	ug/kg	MT-BZ-42	04/11/01
Fluorene	EPA-8270	630	ug/kg	MT-BZ-42	04/11/01
Phenanthrene	EPA-8270	770	ug/kg	MT-BZ-42	04/11/01
Anthracene	EPA-8270	370	ug/kg	MT-BZ-42	04/11/01
Fluoranthene	EPA-8270	630	ug/kg	MT-BZ-42	04/11/01
Pyrene	EPA-8270	1400	ug/kg	MT-BZ-42	04/11/01
Chrysene	EPA-8270	730	ug/kg	MT-BZ-42	04/11/01
Benzo(b)fluoranthene	EPA-8270	730	ug/kg	MT-BZ-42	04/11/01
Benzo(k)fluoranthene	EPA-8270	670	ug/kg	MT-BZ-42	04/11/01
Benzo(a)pyrene	EPA-8270	1300	ug/kg	MT-BZ-42	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1600	ug/kg	MT-BZ-42	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	260 J	ug/kg	MT-BZ-42	04/11/01
Benzo(g,h,i)perylene	EPA-8270	3800	ug/kg	MT-BZ-42	04/11/01
Benzo(a)anthracene	EPA-8270	500	ug/kg	MT-BZ-42	04/11/01
2-Methylnaphthalene	EPA-8270	100 J	ug/kg	MT-BZ-42	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060123
AES sample #: 010404AY04 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT		UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	93	J	ug/kg	MT-BZ-42	04/11/01
Chloromethane	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Bromomethane	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Vinyl Chloride	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Chloroethane	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Methylene Chloride	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Acetone	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Carbon Disulfide	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethene	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Chloroform	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,2 Dichloroethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
2-Butanone	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Carbon Tetrachloride	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
Vinyl Acetate	EPA-8260	<10		ug/kg	JF-BX-34	04/17/01
Bromodichloromethane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
1,2-Dichloropropane	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5		ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060123
AES sample #: 010404AY04 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Benzene	EPA-8260	1.9 J	ug/kg	JF-BX-34	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Toluene	EPA-8260	3.0 J	ug/kg	JF-BX-34	04/17/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Ethylbenzene	EPA-8260	14	ug/kg	JF-BX-34	04/17/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Xylenes,Total	EPA-8260	9	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060116
AES sample #: 010404AY05 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	120 J	ug/kg	MT-BZ-42	04/11/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Phenanthrene	EPA-8270	57 J	ug/kg	MT-BZ-42	04/11/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Fluoranthene	EPA-8270	93 J	ug/kg	MT-BZ-42	04/11/01
Pyrene	EPA-8270	130 J	ug/kg	MT-BZ-42	04/11/01
Chrysene	EPA-8270	93 J	ug/kg	MT-BZ-42	04/11/01
Benzo(b)fluoranthene	EPA-8270	140 J	ug/kg	MT-BZ-42	04/11/01
Benzo(k)fluoranthene	EPA-8270	37 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)pyrene	EPA-8270	120 J	ug/kg	MT-BZ-42	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	130 J	ug/kg	MT-BZ-42	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Benzo(g,h,i)perylene	EPA-8270	160 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)anthracene	EPA-8270	80 J	ug/kg	MT-BZ-42	04/11/01
2-Methylnaphthalene	EPA-8270	50 J	ug/kg	MT-BZ-42	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060116
AES sample #: 010404AY05
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-42	04/11/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060116
AES sample #: 010404AY05 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Xylenes,Total	EPA-8260	2.8 J	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060115
AES sample #: 010404AY06
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-Q-39	04/18/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-Q-39	04/18/01
Naphthalene	EPA-8270	1000	ug/kg	MT-BZ-42	04/11/01
Acenaphthylene	EPA-8270	430	ug/kg	MT-BZ-42	04/11/01
Acenaphthene	EPA-8270	600	ug/kg	MT-BZ-42	04/11/01
Fluorene	EPA-8270	500	ug/kg	MT-BZ-42	04/11/01
Phenanthrene	EPA-8270	1500	ug/kg	MT-BZ-42	04/11/01
Anthracene	EPA-8270	400	ug/kg	MT-BZ-42	04/11/01
Fluoranthene	EPA-8270	600	ug/kg	MT-BZ-42	04/11/01
Pyrene	EPA-8270	1100	ug/kg	MT-BZ-42	04/11/01
Chrysene	EPA-8270	300 J	ug/kg	MT-BZ-42	04/11/01
Benzo(b)fluoranthene	EPA-8270	330	ug/kg	MT-BZ-42	04/11/01
Benzo(k)fluoranthene	EPA-8270	110 J	ug/kg	MT-BZ-42	04/11/01
Benzo(a)pyrene	EPA-8270	400	ug/kg	MT-BZ-42	04/11/01
Indeno(1,2,3-cd)pyrene	EPA-8270	570	ug/kg	MT-BZ-42	04/11/01
Dibenzo(a,h)anthracene	EPA-8270	60 J	ug/kg	MT-BZ-42	04/11/01
Benzo(g,h,i)perylene	EPA-8270	1100	ug/kg	MT-BZ-42	04/11/01
Benzo(a)anthracene	EPA-8270	300 J	ug/kg	MT-BZ-42	04/11/01
2-Methylnaphthalene	EPA-8270	1800	ug/kg	MT-BZ-42	04/11/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060115
AES sample #: 010404AY06 Samples taken by: E.L./A.W. Location: NYSEG M-Ville
MATRIX: Soil grab
Date Sampled: 04/03/01
Date sample received: 04/04/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	63 J	ug/kg	MT-EZ-42	04/11/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-34	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060115
AES sample #: 010404AY06
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Dibromochloromethane		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2-Trichloroethane		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Benzene		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
cis-1,3-Dichloropropene		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
2-Chloroethylvinylether		EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Bromoform		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
4-Methyl-2-pentanone		EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
2-Hexanone		EPA-8260	<10	ug/kg	JF-BX-34	04/17/01
Tetrachloroethene		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
1,1,2,2-Tetrachloroethane		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Toluene		EPA-8260	1.0 J	ug/kg	JF-BX-34	04/17/01
Chlorobenzene		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Ethylbenzene		EPA-8260	1.9 J	ug/kg	JF-BX-34	04/17/01
Styrene		EPA-8260	<5	ug/kg	JF-BX-34	04/17/01
Xylenes,Total		EPA-8260	5.0 J	ug/kg	JF-BX-34	04/17/01
Arsenic		EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Barium		EPA-6010	39	ug/g	KH-I-4B-7	04/16/01
Cadmium		EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Chromium		EPA-6010	17	ug/g	KH-I-4B-7	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060115
AES sample #: 010404AY06
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead		EPA-6010	11	ug/g	KH-I-4B-7	04/16/01
Mercury		EPA-7471	0.04	ug/g	WB-PSQ-119	04/10/01
Selenium		EPA-6010	<0.25	ug/g	KH-I-4B-7	04/16/01
Silver		EPA-6010	<1	ug/g	KH-I-4B-7	04/16/01
Aluminum		EPA-6010	8665	ug/g	KH-I-4B-7	04/16/01
Antimony		EPA-6010	<3	ug/g	KH-I-4B-7	04/16/01
Copper		EPA-6010	23	ug/g	KH-I-4B-7	04/16/01
Iron		EPA-6010	17820	ug/g	KH-I-4B-7	04/16/01
Nickel		EPA-6010	<2.5	ug/g	KH-I-4B-7	04/16/01
Manganese		EPA-6010	258	ug/g	KH-I-4B-7	04/16/01
Vanadium		EPA-6010	7.6	ug/g	KH-I-4B-7	04/16/01
Zinc		EPA-6010	49	ug/g	KH-I-4B-7	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08120116
AES sample #: 010404AY07
Samples taken by: E.L./A.W.
MATRIX: Soil
Date Sampled: 04/03/01
Date sample received: 04/04/01
Location: NYSEG M-Ville
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value		ASTM D240-76	<1000	btu/lb	PL-R	04/12/01

APPROVED BY:
Report date: 04/19/01

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CHAIN OF CUSTODY RECORD

1 of 4

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - M-VILLE	Samplers: (Names) E. Lovendushi / A.W.
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010404 AY01	MESB02040114	4/3/01	1000	(A) P	Soil		X	1	SEE BELOW
AY02	MESB04060125	4/3/01	0930	(A) P	Soil		X	1	
AY03	MESB04060124	4/3/01	1125	(A) P	Soil		X	1	
AY04	MESB04060123	4/3/01	1151	(A) P	Soil		X	1	
AY05	MESB04060116	4/3/01	1300	A (P)	Soil		X	1	
AY06	MESB04060115	4/3/01	1415	A (P)	Soil		X	1	
				A P					REMARKS
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
SVOCs
EPA 8270 (PAHs)
EPA 9065/420.1 (Phenols)

Relinquished by: (Signature) EJS	Received by: (Signature)	Date/Time 4/4/01
Relinquished by: (Signature)	Received for Laboratory by: M. L	Date/Time 4/4/01 1485

TEMPERATURE: Ambient or (Chilled)
Notes:

PROPERLY PRESERVED: (Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES: (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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CHAIN OF CUSTODY RECORD

2 of 4

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - Mullie	Samplers: (Names) EC/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJF
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010404 AY01	MESB02040114	4/3/01	1030 A/P	Soil		X	1	SEE
AY02	MESB04050125	4/3/01	0930 A/P	Soil		X	1	Remarks
AY03	MESB04060124	4/3/01	1125 A/P	Soil		X	1	Below
AY04	MESB04060123	4/3/01	1151 A/P	Soil		X	1	
AY05	MESB04060116 Sample	4/3/01	1320 A/P	Soil		X	1	Also send
AY06	MESB04060X15 Dup	4/3/01	1415 A/P	Soil	P	X	1	TCL DW
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
Cyanide
Total 9012/335.3
Weak acid dissociable 4500I

CC Report To:

Relinquished by: (Signature) EJ Sondrini	Received by: (Signature)	Date/Time 4/4/01
Relinquished by: (Signature)	Received for Laboratory by: M. L	Date/Time 4/4/01 14:2

Temperature Ambient or (Chilled)
Notes:

Properly Preserved (Y) N
Notes:

Received Within Holding Times (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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CHAIN-OF-CUSTODY RECORD

3 of 4

Client Name: URS	Address: 646 Plank Road #202 Clifton Park, NY 12065	
Send Report To: ERIKO FUJITA	Project Name (Location) NYSEG	Samplers: (Names) EG/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010404 AY01	~~MESB0406~~ MESB02040114	4/3/01	1000 (A) P	Soil		X	1	VOCs 8260
AY02	MESB04060125	4/3/01	0930 (A) P	Soil		X	1	VOCs 8260
AY03	MESB04060124	4/3/01	1125 (A) P	Soil		X	1	VOCs 8260
AY04	MESB04060123	4/3/01	1154 (A) P	Soil		X	1	VOCs 8260
AY05	MESB04060116	4/3/01	1300 A (P)	Soil		X	1	VOCs 8260
AY06	MESB04060115	4/3/01	1415 A (P)	Soil		X	1	VOCs 8260
010404 AY07	MESB08120116	4/3/01	1306 A (P)	Soil		X	1	BTU ASTM D240
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

Special Instructions/Remarks

CC Report To:

Relinquished by: (Signature) EG Sovinski	Received by: (Signature)	Date/Time 4/4/01
Relinquished by: (Signature)	Received for Laboratory by: M.	Date/Time 4/4/01 1450

Temperature: Ambient or (Chilled)

Notes:

Properly Preserved: (Y) N

Notes:

Received Within Holding Times: (Y) N

Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

4 of 4

CHAIN OF CUSTODY RECORD

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* HOLD TCLP SAMPLES *

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Client Name: URS	Address: 646 Plank Road #202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG M-VILLE	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010404 AY02	MESB04060125	4/3/01	0930 A	Soil		X	1	METALS *
	MESB04060125	4/3/01	0930 A	Soil		X	1	TCLP ** HOLD
AY03	MESB04060124	4/3/01	1125 A	Soil		X	1	METALS *
	MESB04060124	4/3/01	1125 A	Soil		X	1	TCLP ** HOLD
AY06	MESB04060115	4/3/01	1415 A	Soil		X	1	METALS *
	MESB04060115	4/3/01	1415 A	Soil		X	1	TCLP ** HOLD
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
* Metals: Al, Sb, As, Ba, Cd, Chromium, Cu, Fe, Pb, Ni, Mn, EPA 6010 Hg, Se, Ag, Vanadium, Zn

** TCLP VOCs, SVOCs, and Metals (8 RCRA Metals)
1311/8260 | 1311/8270 | 1311 6010

Relinquished by: (Signature) EJ Fujita	Received by: (Signature)	Date/Time 4/4/01
Relinquished by: (Signature)	Received for Laboratory by: M.	Date/Time 4/4/01 1148

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

RECEIVED
APR 24 2001

Purchase Order #: 30309T194 (#5)

Report date: 04/23/01
Number of samples analyzed: 9
AES Project ID: 010405 X
Invoice #: 226318

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	190 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	2700	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	110	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	320	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	100	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	930	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	1400	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	280 J	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	220 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	270 J	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	86 J	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	100 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	370	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	3900	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	400	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Benzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Toluene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Ethylbenzene	EPA-8260	90	ug/kg	JF-BX-33	04/12/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Xylenes,Total	EPA-8260	90	ug/kg	JF-BX-33	04/12/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Barium	EPA-6010	42	ug/g	SM-I-3E-76	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Chromium	EPA-6010	20.8	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	14.5	ug/g	SM-I-3E-76	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-118	04/09/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-76	04/16/01
Aluminum	EPA-6010	17300	ug/g	SM-I-3E-76	04/16/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-76	04/16/01
Copper	EPA-6010	38	ug/g	SM-I-3E-76	04/16/01
Iron	EPA-6010	33200	ug/g	SM-I-3E-76	04/16/01
Nickel	EPA-6010	28.7	ug/g	SM-I-3E-76	04/16/01
Manganese	EPA-6010	343	ug/g	SM-I-3E-76	04/16/01
Vanadium	EPA-6010	14.0	ug/g	SM-I-3E-76	04/16/01
Zinc	EPA-6010	55.8	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.4	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	110	ug/g	MT-BZ-46	04/17/01
Acenaphthylene	EPA-8270	4.3	ug/g	MT-BZ-46	04/17/01
Acenaphthene	EPA-8270	56	ug/g	MT-BZ-46	04/17/01
Fluorene	EPA-8270	27	ug/g	MT-BZ-46	04/17/01
Phenanthrene	EPA-8270	91	ug/g	MT-BZ-46	04/17/01
Anthracene	EPA-8270	26	ug/g	MT-BZ-46	04/17/01
Fluoranthene	EPA-8270	38	ug/g	MT-BZ-46	04/17/01
Pyrene	EPA-8270	55	ug/g	MT-BZ-46	04/17/01
Chrysene	EPA-8270	16	ug/g	MT-BZ-46	04/17/01
Benzo(b)fluoranthene	EPA-8270	<3.3	ug/g	MT-BZ-46	04/17/01
Benzo(k)fluoranthene	EPA-8270	12	ug/g	MT-BZ-46	04/17/01
Benzo(a)pyrene	EPA-8270	18	ug/g	MT-BZ-46	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	5.3	ug/g	MT-BZ-46	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	2.3 J	ug/g	MT-BZ-46	04/17/01
Benzo(g,h,i)perylene	EPA-8270	6.3	ug/g	MT-BZ-46	04/17/01
Benzo(a)anthracene	EPA-8270	19	ug/g	MT-BZ-46	04/17/01
2-Methylnaphthalene	EPA-8270	48	ug/g	MT-BZ-46	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	4.0	ug/g	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Benzene	EPA-8260	44 J	ug/kg	JF-BX-33	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Toluene	EPA-8260	120	ug/kg	JF-BX-33	04/12/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Ethylbenzene	EPA-8260	7300	ug/kg	JF-BX-33	04/12/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Xylenes,Total	EPA-8260	6200	ug/kg	JF-BX-33	04/12/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Barium	EPA-6010	27.8	ug/g	SM-I-3E-76	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Chromium	EPA-6010	20.1	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	18.5	ug/g	SM-I-3E-76	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-118	04/09/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-76	04/16/01
Aluminum	EPA-6010	12900	ug/g	SM-I-3E-76	04/16/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-76	04/16/01
Copper	EPA-6010	41.7	ug/g	SM-I-3E-76	04/16/01
Iron	EPA-6010	21800	ug/g	SM-I-3E-76	04/16/01
Nickel	EPA-6010	23.8	ug/g	SM-I-3E-76	04/16/01
Manganese	EPA-6010	294	ug/g	SM-I-3E-76	04/16/01
Vanadium	EPA-6010	14.0	ug/g	SM-I-3E-76	04/16/01
Zinc	EPA-6010	60.0	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	3.5	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	19	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	2.2	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	540	ug/g	MT-BZ-46	04/17/01
Acenaphthylene	EPA-8270	8.0 J	ug/g	MT-BZ-46	04/17/01
Acenaphthene	EPA-8270	26 J	ug/g	MT-BZ-46	04/17/01
Fluorene	EPA-8270	100	ug/g	MT-BZ-46	04/17/01
Phenanthrene	EPA-8270	330	ug/g	MT-BZ-46	04/17/01
Anthracene	EPA-8270	97	ug/g	MT-BZ-46	04/17/01
Fluoranthene	EPA-8270	120	ug/g	MT-BZ-46	04/17/01
Pyrene	EPA-8270	210	ug/g	MT-BZ-46	04/17/01
Chrysene	EPA-8270	60	ug/g	MT-BZ-46	04/17/01
Benzo(b)fluoranthene	EPA-8270	<33	ug/g	MT-BZ-46	04/17/01
Benzo(k)fluoranthene	EPA-8270	33	ug/g	MT-BZ-46	04/17/01
Benzo(a)pyrene	EPA-8270	40	ug/g	MT-BZ-46	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	24 J	ug/g	MT-BZ-46	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	<33	ug/g	MT-BZ-46	04/17/01
Benzo(g,h,i)perylene	EPA-8270	15 J	ug/g	MT-BZ-46	04/17/01
Benzo(a)anthracene	EPA-8270	40	ug/g	MT-BZ-46	04/17/01
2-Methylnaphthalene	EPA-8270	290	ug/g	MT-BZ-46	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	10 J	ug/g	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Bromomethane	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Vinyl Chloride	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Chloroethane	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Methylene Chloride	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Acetone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Carbon Disulfide	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,2-Dichloroethene Total	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Chloroform	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,2 Dichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
2-Butanone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
1,1,1-Trichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Carbon Tetrachloride	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Vinyl Acetate	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Bromodichloromethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,2-Dichloropropane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Dibromochloromethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1,2-Trichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Benzene	EPA-8260	8100	ug/kg	JF-BX-33	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
2-Chloroethylvinylether	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Bromoform	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
4-Methyl-2-pentanone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
2-Hexanone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Tetrachloroethene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Toluene	EPA-8260	1400	ug/kg	JF-BX-33	04/13/01
Chlorobenzene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Ethylbenzene	EPA-8260	22000	ug/kg	JF-BX-33	04/13/01
Styrene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Xylenes,Total	EPA-8260	36000	ug/kg	JF-BX-33	04/13/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Barium	EPA-6010	53.0	ug/g	SM-I-3E-76	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Chromium	EPA-6010	30.8	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	2680	ug/g	SM-I-3E-76	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-118	04/09/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-76	04/16/01
Aluminum	EPA-6010	8350	ug/g	SM-I-3E-76	04/16/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-76	04/16/01
Copper	EPA-6010	49.2	ug/g	SM-I-3E-76	04/16/01
Iron	EPA-6010	21000	ug/g	SM-I-3E-76	04/16/01
Nickel	EPA-6010	16.1	ug/g	SM-I-3E-76	04/16/01
Manganese	EPA-6010	233	ug/g	SM-I-3E-76	04/16/01
Vanadium	EPA-6010	20.1	ug/g	SM-I-3E-76	04/16/01
Zinc	EPA-6010	86.5	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020113
AES sample #: 010405 X04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	93 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	73 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	60 J	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	280 J	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	630	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	330	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	730	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	470	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	470	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	170 J	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	670	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	330	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	53 J	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020113
AES sample #: 010405 X04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020113
AES sample #: 010405 X04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Toluene	EPA-8260	1.3 J	ug/kg	JF-BX-33	04/16/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Xylenes,Total	EPA-8260	1.9 J	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08110121
AES sample #: 010405 X05 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	3500	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	160 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	1300	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	4400	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	1500	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	2500	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	770	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	670	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	670	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	220 J	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	60 J	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	290 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	870	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	2900	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08110121
AES sample #: 010405 X05
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	130 J	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08110121
AES sample #: 010405 X05 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Benzene	EPA-8260	22 J	ug/kg	JF-BX-33	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Toluene	EPA-8260	30 J	ug/kg	JF-BX-33	04/13/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Ethylbenzene	EPA-8260	830	ug/kg	JF-BX-33	04/13/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Xylenes,Total	EPA-8260	720	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080119
AES sample #: 010405 X06 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	230 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	47 J	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	63 J	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080119
AES sample #: 010405 X06 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	63 J	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080119
AES sample #: 010405 X06
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100118
AES sample #: 010405 X07 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	190 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	400	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	110 J	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	800	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	140 J	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	1200	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	2900	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	1300	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	2800	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	2500	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	3200	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	1200	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	5000	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	2100	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	230 J	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100118
AES sample #: 010405 X07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100118
AES sample #: 010405 X07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-04/04/01
AES sample #: 010405 X08 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.030	ug/g	LS-Z-33	04/11/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	7900	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	260 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	4400	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	2800	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	10000	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	2900	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	4100	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	6300	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	2100	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<660	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	1000	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	1600	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	610 J	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	210 J	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	430 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	6100	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-04/04/01
AES sample #: 010405 X08 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	250 J	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-04/04/01
AES sample #: 010405 X08
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Benzene	EPA-8260	430	ug/kg	JF-BX-33	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Toluene	EPA-8260	210	ug/kg	JF-BX-33	04/12/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Ethylbenzene	EPA-8260	1400	ug/kg	JF-BX-33	04/12/01
Styrene	EPA-8260	89	ug/kg	JF-BX-33	04/12/01
Xylenes,Total	EPA-8260	250 J	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB12160118
AES sample #: 010405 X09
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	PL-R	04/13/01

APPROVED BY:
Report date: 04/23/01

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Albany, New York 12207
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1 of 2

CHAIN OF CUSTODY RECORD

* HOLD TCLP METALS SAMPLES *

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - M-Ville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EL
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010405 X01	MESB08100110	4/4/01	842	(A) P	SOIL		X	5	SEE BELOW
X02	MESB04050122	4/4/01	1010	(A) P	SOIL		X	5	↓ ↓
X03	MESB02040117	4/4/01	1042	(A) P	SOIL		X	5	
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

Special Instructions/Remarks

VOCs - 8260

SVOCs (PAH's 8270)(PHENOLS 9065/420.1)

Cyanide-(TOTAL 9012/335.3)(WEAK ACID DISSOCIABLE 4500I)

Metals - Al, Sb, As, Ba, Cd, Chromium, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Vanadium, Zn

HOLD → TCLP - 1311 (VOCs 8260)(SVOCs 8270)(Metals 6010 8RCRA METALS

CC Report To: EPA 6010

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EL/Saverdeki		4/5/01
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Eriko Fujita	NYSEG-M-VILLE	EL/AW
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T194 (#5)	EFS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010405 X04	MESB00020113	4/4/01	0915	A (P)	SOIL		X	3	SEE BELOW
X05	MESB08110121	4/4/01	1220	A (P)	SOIL		X	3	SEE BELOW
X06	MESB06080119	4/4/01	1260	A (P)	SOIL		X	3	SEE BELOW
X07	MESB08100118	4/4/01	1335	A P	SOIL		X	3	SEE BELOW
X08	DUP-04/04/01	4/4/01	/	A P	SOIL		X	3	SEE BELOW
X09	MESB12160118	4/4/01	1340	A (P)	SOIL		X	10	BTUs ASTM D240
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

VOCs 8260

SVOCs - (PAH's 8270) (PHENOLS 9065/420.1)

Cyanide - (TOTAL 9012/335.3)

(WEAK ACID DISSOCIABLE 4500I)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EFSondrales		4/4/01
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Report date: 05/01/01
Number of samples analyzed: 9
AES Project ID: 010405 X
Invoice #: 226318

Additional Parameters 4/24

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	190 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	2700	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	110	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	320	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	100	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	930	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	1400	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	280 J	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	220 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	270 J	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	86 J	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	100 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	370	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	3900	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	400	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Benzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Toluene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Ethylbenzene	EPA-8260	90	ug/kg	JF-BX-33	04/12/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Xylenes,Total	EPA-8260	90	ug/kg	JF-BX-33	04/12/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Barium	EPA-6010	42	ug/g	SM-I-3E-76	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Chromium	EPA-6010	20.8	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100110
AES sample #: 010405 X01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	14.5	ug/g	SM-I-3E-76	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-118	04/09/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-76	04/16/01
Aluminum	EPA-6010	17300	ug/g	SM-I-3E-76	04/16/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-76	04/16/01
Copper	EPA-6010	38	ug/g	SM-I-3E-76	04/16/01
Iron	EPA-6010	33200	ug/g	SM-I-3E-76	04/16/01
Nickel	EPA-6010	28.7	ug/g	SM-I-3E-76	04/16/01
Manganese	EPA-6010	343	ug/g	SM-I-3E-76	04/16/01
Vanadium	EPA-6010	14.0	ug/g	SM-I-3E-76	04/16/01
Zinc	EPA-6010	55.8	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.4	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	110	ug/g	MT-BZ-46	04/17/01
Acenaphthylene	EPA-8270	4.3	ug/g	MT-BZ-46	04/17/01
Acenaphthene	EPA-8270	56	ug/g	MT-BZ-46	04/17/01
Fluorene	EPA-8270	27	ug/g	MT-BZ-46	04/17/01
Phenanthrene	EPA-8270	91	ug/g	MT-BZ-46	04/17/01
Anthracene	EPA-8270	26	ug/g	MT-BZ-46	04/17/01
Fluoranthene	EPA-8270	38	ug/g	MT-BZ-46	04/17/01
Pyrene	EPA-8270	55	ug/g	MT-BZ-46	04/17/01
Chrysene	EPA-8270	16	ug/g	MT-BZ-46	04/17/01
Benzo(b)fluoranthene	EPA-8270	<3.3	ug/g	MT-BZ-46	04/17/01
Benzo(k)fluoranthene	EPA-8270	12	ug/g	MT-BZ-46	04/17/01
Benzo(a)pyrene	EPA-8270	18	ug/g	MT-BZ-46	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	5.3	ug/g	MT-BZ-46	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	2.3 J	ug/g	MT-BZ-46	04/17/01
Benzo(g,h,i)perylene	EPA-8270	6.3	ug/g	MT-BZ-46	04/17/01
Benzo(a)anthracene	EPA-8270	19	ug/g	MT-BZ-46	04/17/01
2-Methylnaphthalene	EPA-8270	48	ug/g	MT-BZ-46	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	4.0	ug/g	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Benzene	EPA-8260	44 J	ug/kg	JF-BX-33	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Toluene	EPA-8260	120	ug/kg	JF-BX-33	04/12/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Ethylbenzene	EPA-8260	7300	ug/kg	JF-BX-33	04/12/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Xylenes,Total	EPA-8260	6200	ug/kg	JF-BX-33	04/12/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Barium	EPA-6010	27.8	ug/g	SM-I-3E-76	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Chromium	EPA-6010	20.1	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB04060122
AES sample #: 010405 X02
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	18.5	ug/g	SM-I-3E-76	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-118	04/09/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-76	04/16/01
Aluminum	EPA-6010	12900	ug/g	SM-I-3E-76	04/16/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-76	04/16/01
Copper	EPA-6010	41.7	ug/g	SM-I-3E-76	04/16/01
Iron	EPA-6010	21800	ug/g	SM-I-3E-76	04/16/01
Nickel	EPA-6010	23.8	ug/g	SM-I-3E-76	04/16/01
Manganese	EPA-6010	294	ug/g	SM-I-3E-76	04/16/01
Vanadium	EPA-6010	14.0	ug/g	SM-I-3E-76	04/16/01
Zinc	EPA-6010	60.0	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	3.5	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	19	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	2.2	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	540	ug/g	MT-BZ-46	04/17/01
Acenaphthylene	EPA-8270	8.0 J	ug/g	MT-BZ-46	04/17/01
Acenaphthene	EPA-8270	26 J	ug/g	MT-BZ-46	04/17/01
Fluorene	EPA-8270	100	ug/g	MT-BZ-46	04/17/01
Phenanthrene	EPA-8270	330	ug/g	MT-BZ-46	04/17/01
Anthracene	EPA-8270	97	ug/g	MT-BZ-46	04/17/01
Fluoranthene	EPA-8270	120	ug/g	MT-BZ-46	04/17/01
Pyrene	EPA-8270	210	ug/g	MT-BZ-46	04/17/01
Chrysene	EPA-8270	60	ug/g	MT-BZ-46	04/17/01
Benzo(b)fluoranthene	EPA-8270	<33	ug/g	MT-BZ-46	04/17/01
Benzo(k)fluoranthene	EPA-8270	33	ug/g	MT-BZ-46	04/17/01
Benzo(a)pyrene	EPA-8270	40	ug/g	MT-BZ-46	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	24 J	ug/g	MT-BZ-46	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	<33	ug/g	MT-BZ-46	04/17/01
Benzo(g,h,i)perylene	EPA-8270	15 J	ug/g	MT-BZ-46	04/17/01
Benzo(a)anthracene	EPA-8270	40	ug/g	MT-BZ-46	04/17/01
2-Methylnaphthalene	EPA-8270	290	ug/g	MT-BZ-46	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	10 J	ug/g	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Bromomethane	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Vinyl Chloride	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Chloroethane	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Methylene Chloride	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Acetone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Carbon Disulfide	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,2-Dichloroethene Total	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Chloroform	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,2 Dichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
2-Butanone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
1,1,1-Trichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Carbon Tetrachloride	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Vinyl Acetate	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Bromodichloromethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,2-Dichloropropane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Dibromochloromethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1,2-Trichloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Benzene	EPA-8260	8100	ug/kg	JF-BX-33	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
2-Chloroethylvinylether	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Bromoform	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
4-Methyl-2-pentanone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
2-Hexanone	EPA-8260	<1000	ug/kg	JF-BX-33	04/13/01
Tetrachloroethene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Toluene	EPA-8260	1400	ug/kg	JF-BX-33	04/13/01
Chlorobenzene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Ethylbenzene	EPA-8260	22000	ug/kg	JF-BX-33	04/13/01
Styrene	EPA-8260	<500	ug/kg	JF-BX-33	04/13/01
Xylenes,Total	EPA-8260	36000	ug/kg	JF-BX-33	04/13/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Barium	EPA-6010	53.0	ug/g	SM-I-3E-76	04/16/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Chromium	EPA-6010	30.8	ug/g	SM-I-3E-76	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	2680	ug/g	SM-I-3E-76	04/16/01
Mercury	EPA-7471	0.04	ug/g	WB-PSQ-118	04/09/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-76	04/16/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-76	04/16/01
Aluminum	EPA-6010	8350	ug/g	SM-I-3E-76	04/16/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-76	04/16/01
Copper	EPA-6010	49.2	ug/g	SM-I-3E-76	04/16/01
Iron	EPA-6010	21000	ug/g	SM-I-3E-76	04/16/01
Nickel	EPA-6010	16.1	ug/g	SM-I-3E-76	04/16/01
Manganese	EPA-6010	233	ug/g	SM-I-3E-76	04/16/01
Vanadium	EPA-6010	20.1	ug/g	SM-I-3E-76	04/16/01
Zinc	EPA-6010	86.5	ug/g	SM-I-3E-76	04/16/01
TCLP Extraction (ZHE)	EPA-1311	Complete		JF-BX-38	04/24/01
Benzene - TCLP Extract	EPA-8260	320	ug/l	JF-BX-38	04/27/01
Carbon Tetrachloride-TCLP Ext.	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
Chlorobenzene-TCLP Extract	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
Chloroform-TCLP Extract	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
1,2-Dichloroethane-TCLP Ext.	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
1,1-Dichloroethene-TCLP Ext.	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
Methyl Ethyl Ketone-TCLP Ext.	EPA-8260	<170	ug/l	JF-BX-38	04/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Tetrachlorethylene-TCLP Ext.	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
Trichloroethylene-TCLP Extract	EPA-8260	<85	ug/l	JF-BX-38	04/27/01
Vinyl Chloride-TCLP Extraction	EPA-8260	<170	ug/l	JF-BX-38	04/27/01
TCLP Extraction	EPA-1311	Complete		MT-CA-6	04/27/01
Nitrobenzene-TCLP Extract	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Pyridine-TCLP Extract	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Cresols (Total) TCLP Extract.	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
1,4-Dichlorobenzene-TCLP Ext.	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
2,4-Dinitrotoluene-TCLP Ext.	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Hexachlorobenzene-TCLP Extract	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Hexachlorobutadiene-TCLP Ext.	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Hexachloroethane-TCLP Extract	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Pentachlorophenol-TCLP Extract	EPA-8270	<500	ug/l	MT-CA-6	04/27/01
2,4,5-Trichlorophenol-TCLP Ext	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
2,4,6-Trichlorophenol-TCLP Ext	EPA-8270	<100	ug/l	MT-CA-6	04/27/01
Arsenic-TCLP Extraction	EPA-6010	<0.5	mg/l	WB-I4B-12	04/26/01
Barium-TCLP Extraction	EPA-6010	0.62	mg/l	WB-I4B-12	04/26/01
Cadmium-TCLP Extraction	EPA-6010	<0.01	mg/l	WB-I4B-12	04/26/01
Chromium-TCLP Extraction	EPA-6010	<0.05	mg/l	WB-I4B-12	04/26/01
Lead-TCLP Extraction	EPA-6010	<0.5	mg/l	WB-I4B-12	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040117
AES sample #: 010405 X03
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Mercury-TCLP Extraction	EPA-7470	<0.02	mg/l	WB-PSR-1	04/27/01
Selenium-TCLP Extraction	EPA-6010	<0.1	mg/l	WB-I4B-12	04/26/01
Silver-TCLP Extraction	EPA-6010	<0.02	mg/l	WB-I4B-12	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020113
AES sample #: 010405 X04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	93 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	73 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	60 J	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	280 J	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	630	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	330	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	730	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	470	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	470	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	170 J	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	670	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	330	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	53 J	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020113
AES sample #: 010405 X04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020113
AES sample #: 010405 X04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Toluene	EPA-8260	1.3 J	ug/kg	JF-BX-33	04/16/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Xylenes,Total	EPA-8260	1.9 J	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08110121
AES sample #: 010405 X05 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	3500	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	160 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	1300	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	4400	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	1500	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	2500	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	770	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	670	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	670	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	220 J	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	60 J	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	290 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	870	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	2900	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08110121
AES sample #: 010405 X05 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	130 J	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08110121
AES sample #: 010405 X05 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Benzene	EPA-8260	22 J	ug/kg	JF-BX-33	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/13/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Toluene	EPA-8260	30 J	ug/kg	JF-BX-33	04/13/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Ethylbenzene	EPA-8260	830	ug/kg	JF-BX-33	04/13/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-33	04/13/01
Xylenes,Total	EPA-8260	720	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080119
AES sample #: 010405 X06 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	230 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	47 J	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	63 J	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080119
AES sample #: 010405 X06 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	63 J	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080119
AES sample #: 010405 X06 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-33	04/16/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-33	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100118
AES sample #: 010405 X07 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	190 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	400	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	110 J	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	800	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	140 J	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	1200	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	2900	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	1300	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	2800	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	2500	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	3200	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	1200	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	5000	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	2100	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	230 J	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100118
AES sample #: 010405 X07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100118
AES sample #: 010405 X07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-33	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-33	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-04/04/01
AES sample #: 010405 X08 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.030	ug/g	LS-Z-33	04/11/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	7900	ug/kg	MT-BZ-46	04/16/01
Acenaphthylene	EPA-8270	260 J	ug/kg	MT-BZ-46	04/16/01
Acenaphthene	EPA-8270	4400	ug/kg	MT-BZ-46	04/16/01
Fluorene	EPA-8270	2800	ug/kg	MT-BZ-46	04/16/01
Phenanthrene	EPA-8270	10000	ug/kg	MT-BZ-46	04/16/01
Anthracene	EPA-8270	2900	ug/kg	MT-BZ-46	04/16/01
Fluoranthene	EPA-8270	4100	ug/kg	MT-BZ-46	04/16/01
Pyrene	EPA-8270	6300	ug/kg	MT-BZ-46	04/16/01
Chrysene	EPA-8270	2100	ug/kg	MT-BZ-46	04/16/01
Benzo(b)fluoranthene	EPA-8270	<660	ug/kg	MT-BZ-46	04/16/01
Benzo(k)fluoranthene	EPA-8270	1000	ug/kg	MT-BZ-46	04/16/01
Benzo(a)pyrene	EPA-8270	1600	ug/kg	MT-BZ-46	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	610 J	ug/kg	MT-BZ-46	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	210 J	ug/kg	MT-BZ-46	04/16/01
Benzo(g,h,i)perylene	EPA-8270	430 J	ug/kg	MT-BZ-46	04/16/01
Benzo(a)anthracene	EPA-8270	1900	ug/kg	MT-BZ-46	04/16/01
2-Methylnaphthalene	EPA-8270	6100	ug/kg	MT-BZ-46	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-04/04/01
AES sample #: 010405 X08 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	250 J	ug/kg	MT-BZ-46	04/16/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-04/04/01
AES sample #: 010405 X08 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Benzene	EPA-8260	430	ug/kg	JF-BX-33	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-33	04/12/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Toluene	EPA-8260	210	ug/kg	JF-BX-33	04/12/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-33	04/12/01
Ethylbenzene	EPA-8260	1400	ug/kg	JF-BX-33	04/12/01
Styrene	EPA-8260	89	ug/kg	JF-BX-33	04/12/01
Xylenes,Total	EPA-8260	250 (J)	ug/kg	JF-BX-33	04/12/01

detection limit 50

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB12160118
AES sample #: 010405 X09 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/04/01
Date sample received: 04/05/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	PL-R	04/13/01

APPROVED BY: _____
Report date: 05/01/01

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1 of 2

CHAIN OF CUSTODY RECORD

★ HOLD TCLP ~~METALS~~ SAMPLES ★

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - M-Ville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010405 X01	MESB08100110	4/4/01	842	(A) P	SOIL		X	5	SEE BELOW
X02	MESB04060122	4/4/01	1010	(A) P	SOIL		X	5	↓ ↓
X03	MESB02040117	4/4/01	1042	(A) P	SOIL		X	5	
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
VOCs - 8260
SVOCs (PAH's 8270)(PHENOLS 9065/420.1)
Cyanide-(TOTAL 9012/335.3)(WEAK ACID DISSOCIABLE 4500I)
Metals - Al, Sb, As, Ba, Cd, Chromium, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Vanadium, Zn
HOLD → TCLP - 1311 (VOCs 8260)(SVOCs 8270)(Metals 6010 8RCRA METALS

CC Report To: EPA 6010

Relinquished by: (Signature) EJ Esmond	Received by: (Signature)	Date/Time 4/5/01
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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22638 B

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2 of 2

CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 207 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	NYSEG-M-VILLE	EL/AW
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309T194 (#5)	EF

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010405 X04	MESB00020113	4/4/01	0715	(A) P	SOIL		X	3	SEE BELOW
X05	MESB08110121	4/4/01	1220	A (P)	SOIL		X	3	SEE BELOW
X06	MESB06080119	4/4/01	1250	A (P)	SOIL		X	3	SEE BELOW
X07	MESB08100118	4/4/01	1335	A P	SOIL		X	3	SEE BELOW
X08	DUP-04/04/01	4/4/01	/	A P	SOIL		X	3	SEE BELOW
X09	MESB12160118	4/4/01	1340	A (P)	SOIL		X	1	BTU - ASTM D240
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

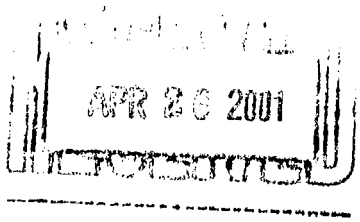
VOCs 8260
SVOCs - (PAH's 8270) (PHENOLS 9065/420.1)
Cyanide - (TOTAL 9012/335.3)
(WEAK ACID DISSOCIABLE 4500I)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EF		4/5/01
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/25/01
Number of samples analyzed: 7
AES Project ID: 010406 K
Invoice #: 226362

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06070111
AES sample #: 010406 K01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chrysene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06070111
AES sample #: 010406 K01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06070111
AES sample #: 010406 K01 Samples taken by: EL/AW MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Benzene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-35	04/13/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Toluene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Ethylbenzene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Xylenes,Total	EPA-8260	<50	ug/kg	JF-BX-35	04/13/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I-3E-77	04/17/01
Barium	EPA-6010	103	ug/g	KH-I-3E-77	04/17/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I-3E-77	04/17/01
Chromium	EPA-6010	25.3	ug/g	KH-I-3E-77	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06070111
AES sample #: 010406 K01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	17.9	ug/g	KH-I-3E-77	04/17/01
Mercury	EPA-7471	0.03	ug/g	WB-PSQ-119	04/10/01
Selenium	EPA-6010	<0.25	ug/g	H-I-3E-77	04/17/01
Silver	EPA-6010	<1	ug/g	H-I-3E-77	04/17/01
Aluminum	EPA-6010	14,590	ug/g	H-I-3E-77	04/17/01
Antimony	EPA-6010	<3	ug/g	H-I-3E-77	04/17/01
Copper	EPA-6010	46	ug/g	H-I-3E-77	04/17/01
Iron	EPA-6010	30,880	ug/g	H-I-3E-77	04/17/01
Nickel	EPA-6010	46	ug/g	H-I-3E-77	04/17/01
Manganese	EPA-6010	608	ug/g	H-I-3E-77	04/17/01
Vanadium	EPA-6010	15	ug/g	H-I-3E-77	04/17/01
Zinc	EPA-6010	96	ug/g	H-I-3E-77	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040112
AES sample #: 010406 K02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chrysene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040112
AES sample #: 010406 K02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040112
AES sample #: 010406 K02 Samples taken by: EL/AW MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I-3E-77	04/17/01
Barium	EPA-6010	39	ug/g	KH-I-3E-77	04/17/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I-3E-77	04/17/01
Chromium	EPA-6010	16.3	ug/g	KH-I-3E-77	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040112
AES sample #: 010406 K02 Samples taken by: EL/AW MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	13.8	ug/g	KH-I-3E-77	04/17/01
Mercury	EPA-7471	0.02	ug/g	WB-PSQ-119	04/10/01
Selenium	EPA-6010	<0.25	ug/g	KH-I-3E-77	04/17/01
Silver	EPA-6010	<1	ug/g	KH-I-3E-77	04/17/01
Aluminum	EPA-6010	8820	ug/g	KH-I-3E-77	04/17/01
Antimony	EPA-6010	<3	ug/g	KH-I-3E-77	04/17/01
Copper	EPA-6010	26	ug/g	KH-I-3E-77	04/17/01
Iron	EPA-6010	14,075	ug/g	KH-I-3E-77	04/17/01
Nickel	EPA-6010	19	ug/g	KH-I-3E-77	04/17/01
Manganese	EPA-6010	384	ug/g	KH-I-3E-77	04/17/01
Vanadium	EPA-6010	11	ug/g	KH-I-3E-77	04/17/01
Zinc	EPA-6010	52	ug/g	KH-I-3E-77	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100120
AES sample #: 010406 K03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Phenanthrene	EPA-8270	97 J	ug/kg	MT-BZ-47	04/12/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluoranthene	EPA-8270	170 J	ug/kg	MT-BZ-47	04/12/01
Pyrene	EPA-8270	120 J	ug/kg	MT-BZ-47	04/12/01
Chrysene	EPA-8270	67 J	ug/kg	MT-BZ-47	04/12/01
Benzo(b)fluoranthene	EPA-8270	40 J	ug/kg	MT-BZ-47	04/12/01
Benzo(k)fluoranthene	EPA-8270	53 J	ug/kg	MT-BZ-47	04/12/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)anthracene	EPA-8270	67 J	ug/kg	MT-BZ-47	04/12/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100120
AES sample #: 010406 K03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08100120
AES sample #: 010406 K03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040128
AES sample #: 010406 K04 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	1.72	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	7700	ug/kg	MT-BZ-47	04/17/01
Acenaphthylene	EPA-8270	800	ug/kg	MT-BZ-47	04/17/01
Acenaphthene	EPA-8270	6800	ug/kg	MT-BZ-47	04/17/01
Fluorene	EPA-8270	3500	ug/kg	MT-BZ-47	04/17/01
Phenanthrene	EPA-8270	12000	ug/kg	MT-BZ-47	04/17/01
Anthracene	EPA-8270	3500	ug/kg	MT-BZ-47	04/17/01
Fluoranthene	EPA-8270	5700	ug/kg	MT-BZ-47	04/17/01
Pyrene	EPA-8270	8400	ug/kg	MT-BZ-47	04/17/01
Chrysene	EPA-8270	2800	ug/kg	MT-BZ-47	04/17/01
Benzo(b)fluoranthene	EPA-8270	2800	ug/kg	MT-BZ-47	04/17/01
Benzo(k)fluoranthene	EPA-8270	<660	ug/kg	MT-BZ-47	04/17/01
Benzo(a)pyrene	EPA-8270	3100	ug/kg	MT-BZ-47	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1200	ug/kg	MT-BZ-47	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	460 J	ug/kg	MT-BZ-47	04/17/01
Benzo(g,h,i)perylene	EPA-8270	1700	ug/kg	MT-BZ-47	04/17/01
Benzo(a)anthracene	EPA-8270	3100	ug/kg	MT-BZ-47	04/17/01
2-Methylnaphthalene	EPA-8270	5500	ug/kg	MT-BZ-47	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040128
AES sample #: 010406 K04 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	450 J	ug/kg	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Bromomethane	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Vinyl Chloride	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Chloroethane	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Methylene Chloride	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Acetone	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Carbon Disulfide	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,2-Dichloroethene Total	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Chloroform	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,2 Dichloroethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
2-Butanone	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
1,1,1-Trichloroethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Carbon Tetrachloride	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Vinyl Acetate	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Bromodichloromethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,2-Dichloropropane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB02040128
AES sample #: 010406 K04 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Dibromochloromethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,1,2-Trichloroethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Benzene	EPA-8260	700	ug/kg	JF-BX-35	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
2-Chloroethylvinylether	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Bromoform	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
4-Methyl-2-pentanone	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
2-Hexanone	EPA-8260	<1000	ug/kg	JF-BX-35	04/13/01
Tetrachloroethene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Toluene	EPA-8260	1700	ug/kg	JF-BX-35	04/13/01
Chlorobenzene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Ethylbenzene	EPA-8260	11000	ug/kg	JF-BX-35	04/13/01
Styrene	EPA-8260	<500	ug/kg	JF-BX-35	04/13/01
Xylenes,Total	EPA-8260	21000	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020129
AES sample #: 010406 K05 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	2.2 J	ug/g	MT-BZ-47	04/16/01
Acenaphthylene	EPA-8270	2.5 J	ug/g	MT-BZ-47	04/16/01
Acenaphthene	EPA-8270	<3.3	ug/g	MT-BZ-47	04/16/01
Fluorene	EPA-8270	<3.3	ug/g	MT-BZ-47	04/16/01
Phenanthrene	EPA-8270	8.6	ug/g	MT-BZ-47	04/16/01
Anthracene	EPA-8270	1.7 J	ug/g	MT-BZ-47	04/16/01
Fluoranthene	EPA-8270	27	ug/g	MT-BZ-47	04/16/01
Pyrene	EPA-8270	73	ug/g	MT-BZ-47	04/16/01
Chrysene	EPA-8270	41	ug/g	MT-BZ-47	04/16/01
Benzo(b)fluoranthene	EPA-8270	53	ug/g	MT-BZ-47	04/16/01
Benzo(k)fluoranthene	EPA-8270	<2.2	ug/g	MT-BZ-47	04/16/01
Benzo(a)pyrene	EPA-8270	18	ug/g	MT-BZ-47	04/16/01
Indeno(1,2,3-cd)pyrene	EPA-8270	19	ug/g	MT-BZ-47	04/16/01
Dibenzo(a,h)anthracene	EPA-8270	13	ug/g	MT-BZ-47	04/16/01
Benzo(g,h,i)perylene	EPA-8270	27	ug/g	MT-BZ-47	04/16/01
Benzo(a)anthracene	EPA-8270	33	ug/g	MT-BZ-47	04/16/01
2-Methylnaphthalene	EPA-8270	1.4 J	ug/g	MT-BZ-47	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020129
AES sample #: 010406 K05 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<3.3	ug/g	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB00020129
AES sample #: 010406 K05 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-35	04/16/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-35	04/16/01
Xylenes,Total	EPA-8260	1.5 J	ug/kg	JF-BX-35	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08120130
AES sample #: 010406 K06 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthylene	EPA-8270	240 J	ug/kg	MT-BZ-47	04/12/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluoranthene	EPA-8270	100 J	ug/kg	MT-BZ-47	04/12/01
Pyrene	EPA-8270	310 J	ug/kg	MT-BZ-47	04/12/01
Chrysene	EPA-8270	320 J	ug/kg	MT-BZ-47	04/12/01
Benzo(b)fluoranthene	EPA-8270	1400	ug/kg	MT-BZ-47	04/12/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)pyrene	EPA-8270	1800	ug/kg	MT-BZ-47	04/12/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1700	ug/kg	MT-BZ-47	04/12/01
Dibenzo(a,h)anthracene	EPA-8270	310 J	ug/kg	MT-BZ-47	04/12/01
Benzo(g,h,i)perylene	EPA-8270	2700	ug/kg	MT-BZ-47	04/12/01
Benzo(a)anthracene	EPA-8270	220 J	ug/kg	MT-BZ-47	04/12/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08120130
AES sample #: 010406 K06 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB08120130
AES sample #: 010406 K06 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080131
AES sample #: 010406 K07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-34	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/17/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/19/01
Naphthalene	EPA-8270	86 J	ug/kg	MT-BZ-47	04/12/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Phenanthrene	EPA-8270	150 J	ug/kg	MT-BZ-47	04/12/01
Anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Fluoranthene	EPA-8270	96 J	ug/kg	MT-BZ-47	04/12/01
Pyrene	EPA-8270	96 J	ug/kg	MT-BZ-47	04/12/01
Chrysene	EPA-8270	60 J	ug/kg	MT-BZ-47	04/12/01
Benzo(b)fluoranthene	EPA-8270	73 J	ug/kg	MT-BZ-47	04/12/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Benzo(a)anthracene	EPA-8270	53 J	ug/kg	MT-BZ-47	04/12/01
2-Methylnaphthalene	EPA-8270	37 J	ug/kg	MT-BZ-47	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080131
AES sample #: 010406 K07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-47	04/12/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06080131
AES sample #: 010406 K07 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/05/01
Date sample received: 04/06/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-35	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Ethylbenzene	EPA-8260	1.1 J	ug/kg	JF-BX-35	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-35	04/13/01
Xylenes,Total	EPA-8260	1.4 J	ug/kg	JF-BX-35	04/13/01

APPROVED BY: Christopher Hess
Report date: 04/25/01

CHAIN OF CUSTODY RECORD

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

☆ HOLD TCLP SAMPLES ☆

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EL/S
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010406 K01	MESB060701111	4/5/01	848 (A) P	SOIL		X	3	VOCs/SVOCs (PAH & PHENOLS)/ Cyanide/METALS/TCL (Hold
K02	MESB02040112	4/5/01	700 (A) P	SOIL		X	3	↓ ↓
K03	MESB08100120	4/5/01	1057 (A) P	SOIL		X	2	VOCs/SVOCs (PAH & PHENOLS)/ CYANIDE
K04	MESB02040128	4/5/01	1040 (A) P	SOIL		X	2	↓ ↓
K05	MESB00020129	4/5/01	1130 (A) P	SOIL		X	2	
K06	MESB08120130	4/5/01	1243 A (P)	SOIL		X	2	
K07	MESB06080131	4/5/01	1427 A (P)	SOIL		X	2	
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC-Report-To: HOLD TCLP

Special Instructions/Remarks: VOCs 8260
SVOCs (PAH 8270) (PHENOLS 9065/420.1)
Cyanide (Total 9012/335.3) (Weak acid dissociable 4500 I)
METALS-EPA 6010 - Al, Sb, Ar, Ba, Cd, Chromium, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Z
TCLP-1311 (VOCs 8260) (SVOCs 8270) (Metals 6010 8 RCRA metals)

Relinquished by: (Signature) EL Sorenski	Received by: (Signature)	Date/Time 4/6/01
Relinquished by: (Signature)	Received for Laboratory by: M.L	Date/Time 4/6/01 8:45

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

RECEIVED
APR 24 2001

Purchase Order #: 30309T194 (#5)

Report date: 04/23/01
Number of samples analyzed: 3
AES Project ID: 010409 P
Invoice #: 226448

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB040801C1
AES sample #: 010409 P01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-35	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	120 J	ug/kg	MT-CA-1	04/17/01
Acenaphthylene	EPA-8270	100 J	ug/kg	MT-CA-1	04/17/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Phenanthrene	EPA-8270	1000	ug/kg	MT-CA-1	04/17/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Fluoranthene	EPA-8270	730	ug/kg	MT-CA-1	04/17/01
Pyrene	EPA-8270	600	ug/kg	MT-CA-1	04/17/01
Chrysene	EPA-8270	400	ug/kg	MT-CA-1	04/17/01
Benzo(b)fluoranthene	EPA-8270	470	ug/kg	MT-CA-1	04/17/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Benzo(a)pyrene	EPA-8270	170 J	ug/kg	MT-CA-1	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	220 J	ug/kg	MT-CA-1	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	93 J	ug/kg	MT-CA-1	04/17/01
Benzo(g,h,i)perylene	EPA-8270	250 J	ug/kg	MT-CA-1	04/17/01
Benzo(a)anthracene	EPA-8270	290 J	ug/kg	MT-CA-1	04/17/01
2-Methylnaphthalene	EPA-8270	160 J	ug/kg	MT-CA-1	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB040801C1
AES sample #: 010409 P01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB040801C1
AES sample #: 010409 P01
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESD121401C2
AES sample #: 010409 P02
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-35	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Pyrene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESD121401C2
AES sample #: 010409 P02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-1	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESD121401C2
AES sample #: 010409 P02
Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-36	04/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-36	04/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06081C3
AES sample #: 010409 P03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-35	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/17/01
Naphthalene	EPA-8270	150 J	ug/kg	MT-CA-1	04/17/01
Acenaphthylene	EPA-8270	<1300	ug/kg	MT-CA-1	04/17/01
Acenaphthene	EPA-8270	<1300	ug/kg	MT-CA-1	04/17/01
Fluorene	EPA-8270	550 J	ug/kg	MT-CA-1	04/17/01
Phenanthrene	EPA-8270	11000	ug/kg	MT-CA-1	04/17/01
Anthracene	EPA-8270	4300	ug/kg	MT-CA-1	04/17/01
Fluoranthene	EPA-8270	14000	ug/kg	MT-CA-1	04/17/01
Pyrene	EPA-8270	12000	ug/kg	MT-CA-1	04/17/01
Chrysene	EPA-8270	8900	ug/kg	MT-CA-1	04/17/01
Benzo(b)fluoranthene	EPA-8270	9500	ug/kg	MT-CA-1	04/17/01
Benzo(k)fluoranthene	EPA-8270	3600	ug/kg	MT-CA-1	04/17/01
Benzo(a)pyrene	EPA-8270	7700	ug/kg	MT-CA-1	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	4800	ug/kg	MT-CA-1	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	860 J	ug/kg	MT-CA-1	04/17/01
Benzo(g,h,i)perylene	EPA-8270	4400	ug/kg	MT-CA-1	04/17/01
Benzo(a)anthracene	EPA-8270	8000	ug/kg	MT-CA-1	04/17/01
2-Methylnaphthalene	EPA-8270	<1300	ug/kg	MT-CA-1	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06081C3
AES sample #: 010409 P03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	160 J	ug/kg	MT-CA-1	04/17/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB06081C3
AES sample #: 010409 P03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/06/01
Date sample received: 04/09/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-36	04/12/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-36	04/12/01

APPROVED BY: Sara M
Report date: 04/23/01

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CHAIN OF CUSTODY RECORD

PAGE 1 of 1

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-M-Ville	Samplers: (Names) ELIAW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010409 P01	MESB040801C1	4/6/01	1005 A	Soil		X	1	SEE BELOW
P02	MESD121401C2	4/6/01	P	Soil		X	1	↓ ↓
P03	MESB060801C3	4/6/01	P	Soil		X	1	
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs 8260
SVOCs - (PAH=8270)(Phenols 9065/420.1)
Cyanide - (Total 9012/335.3)(Weak Acid Dissociable 4500I)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Sowerbutts		4/6/01 1823
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
		4/6/01 18:30

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/26/01
Number of samples analyzed: 2
AES Project ID: 010410AD
Invoice #: 226520

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW24250114
AES sample #: 010410AD01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-35	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-Q-39	04/24/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-Q-39	04/24/01
Naphthalene	EPA-8270	330	ug/kg	MT-CA-2	04/17/01
Acenaphthylene	EPA-8270	470	ug/kg	MT-CA-2	04/17/01
Acenaphthene	EPA-8270	2000	ug/kg	MT-CA-2	04/17/01
Fluorene	EPA-8270	86 J	ug/kg	MT-CA-2	04/17/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Pyrene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
2-Methylnaphthalene	EPA-8270	270 J	ug/kg	MT-CA-2	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW24250114
AES sample #: 010410AD01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW24250114
AES sample #: 010410AD01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Benzene	EPA-8260	170	ug/kg	JF-BX-36	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Toluene	EPA-8260	15 J	ug/kg	JF-BX-36	04/16/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Ethylbenzene	EPA-8260	80	ug/kg	JF-BX-36	04/16/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Xylenes,Total	EPA-8260	41 J	ug/kg	JF-BX-36	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180125
AES sample #: 010410AD02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-35	04/17/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-Q-39	04/24/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-Q-39	04/24/01
Naphthalene	EPA-8270	160 J	ug/kg	MT-CA-2	04/17/01
Acenaphthylene	EPA-8270	2200	ug/kg	MT-CA-2	04/17/01
Acenaphthene	EPA-8270	1400	ug/kg	MT-CA-2	04/17/01
Fluorene	EPA-8270	2100	ug/kg	MT-CA-2	04/17/01
Phenanthrene	EPA-8270	5500	ug/kg	MT-CA-2	04/17/01
Anthracene	EPA-8270	1700	ug/kg	MT-CA-2	04/17/01
Fluoranthene	EPA-8270	1700	ug/kg	MT-CA-2	04/17/01
Pyrene	EPA-8270	3100	ug/kg	MT-CA-2	04/17/01
Chrysene	EPA-8270	670	ug/kg	MT-CA-2	04/17/01
Benzo(b)fluoranthene	EPA-8270	470	ug/kg	MT-CA-2	04/17/01
Benzo(k)fluoranthene	EPA-8270	250 J	ug/kg	MT-CA-2	04/17/01
Benzo(a)pyrene	EPA-8270	630	ug/kg	MT-CA-2	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	260 J	ug/kg	MT-CA-2	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/17/01
Benzo(g,h,i)perylene	EPA-8270	220 J	ug/kg	MT-CA-2	04/17/01
Benzo(a)anthracene	EPA-8270	770	ug/kg	MT-CA-2	04/17/01
2-Methylnaphthalene	EPA-8270	4500	ug/kg	MT-CA-2	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180125
AES sample #: 010410AD02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	300 J	ug/kg	MT-CA-2	04/17/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180125
AES sample #: 010410AD02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Benzene	EPA-8260	1.5 J	ug/kg	JF-BX-36	04/16/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-36	04/16/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Toluene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Ethylbenzene	EPA-8260	2.1 J	ug/kg	JF-BX-36	04/16/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-36	04/16/01
Xylenes,Total	EPA-8260	2.7 J	ug/kg	JF-BX-36	04/16/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-4B-8	04/18/01
Barium	EPA-6010	49.5	ug/g	SM-I-4B-8	04/18/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-4B-8	04/18/01
Chromium	EPA-6010	17.3	ug/g	SM-I-4B-8	04/18/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180125
AES sample #: 010410AD02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/09/01
Date sample received: 04/10/01
Location: NYSEG M-ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	7.25	ug/g	SM-I-4B-8	04/18/01
Mercury	EPA-7471	0.05	ug/g	KH-PSQ-123	04/13/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-4B-8	04/18/01
Silver	EPA-6010	<1	ug/g	SM-I-4B-8	04/18/01
Aluminum	EPA-6010	10,600	ug/g	SM-I-4B-8	04/18/01
Antimony	EPA-6010	<3	ug/g	SM-I-4B-8	04/18/01
Copper	EPA-6010	16.6	ug/g	SM-I-4B-8	04/18/01
Iron	EPA-6010	9900	ug/g	SM-I-4B-8	04/18/01
Nickel	EPA-6010	<2.5	ug/g	SM-I-4B-8	04/18/01
Manganese	EPA-6010	333	ug/g	SM-I-4B-8	04/18/01
Vanadium	EPA-6010	10.2	ug/g	SM-I-4B-8	04/18/01
Zinc	EPA-6010	48.7	ug/g	SM-I-4B-8	04/18/01

APPROVED BY: Lara D
Report date: 04/26/01

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* HOLD. * * TCLP *

CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - Mechanicville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010410 AD01	MEMW24250114	4/9/01	1142	(A) P	Soil		X	2	SVOCs, VOCs, Cyanide
AD02	MEMW16180125	4/9/01	1527	A (P)	Soil		X	3	SVOCs, VOCs, Cyanide, Metals, TCLP
		4/9/01		A P					TCLP - 1311 (VOCs/8260) SVOCs-8270
				A P					Metals 6010, 8 RCRA Metals
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

Metals - EPA 6010 - Al, Sb, Ar, Ba, Cd, Chromium, Cu Fe, Pb, Ni, Mn, Hg, Se, Ag, Zn, Vanadium

VOCs 8260

SVOCs (PAH-8270) (Phenols 9065/420.1)

Cyanide - Total 9012/335.3

Weak Acid dissociable 4500I

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 4/10/01
Relinquished by: (Signature)	Received for Laboratory by: M.L	Date/Time 4/10/01 → 144

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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APR 26 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/25/01
Number of samples analyzed: 1
AES Project ID: 010411AV
Invoice #: 226586

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW24260112
AES sample #: 010411AV01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 04/10/01
Date sample received: 04/11/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-Q-39	04/24/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-Q-39	04/24/01
Naphthalene	EPA-8270	1600	ug/kg	MT-CA-3	04/17/01
Acenaphthylene	EPA-8270	290 J	ug/kg	MT-CA-3	04/17/01
Acenaphthene	EPA-8270	2700	ug/kg	MT-CA-3	04/17/01
Fluorene	EPA-8270	1300	ug/kg	MT-CA-3	04/17/01
Phenanthrene	EPA-8270	3300	ug/kg	MT-CA-3	04/17/01
Anthracene	EPA-8270	700	ug/kg	MT-CA-3	04/17/01
Fluoranthene	EPA-8270	600	ug/kg	MT-CA-3	04/17/01
Pyrene	EPA-8270	970	ug/kg	MT-CA-3	04/17/01
Chrysene	EPA-8270	220 J	ug/kg	MT-CA-3	04/17/01
Benzo(b)fluoranthene	EPA-8270	170 J	ug/kg	MT-CA-3	04/17/01
Benzo(k)fluoranthene	EPA-8270	100 J	ug/kg	MT-CA-3	04/17/01
Benzo(a)pyrene	EPA-8270	240 J	ug/kg	MT-CA-3	04/17/01
Indeno(1,2,3-cd)pyrene	EPA-8270	110 J	ug/kg	MT-CA-3	04/17/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-3	04/17/01
Benzo(g,h,i)perylene	EPA-8270	90 J	ug/kg	MT-CA-3	04/17/01
Benzo(a)anthracene	EPA-8270	260 J	ug/kg	MT-CA-3	04/17/01
2-Methylnaphthalene	EPA-8270	280 J	ug/kg	MT-CA-3	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW24260112
AES sample #: 010411AV01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 04/10/01
Date sample received: 04/11/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	170 J	ug/kg	MT-CA-2	04/17/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01

Adirondack Environmental Services Inc.
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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW24260112
AES sample #: 010411AV01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 04/10/01
Date sample received: 04/11/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Benzene	EPA-8260	31 J	ug/kg	JF-BX-36	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-36	04/17/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Toluene	EPA-8260	15 J	ug/kg	JF-BX-36	04/17/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Ethylbenzene	EPA-8260	400	ug/kg	JF-BX-36	04/17/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-36	04/17/01
Xylenes,Total	EPA-8260	130	ug/kg	JF-BX-36	04/17/01

APPROVED BY: _____
Report date: 04/25/01

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546 / 434-0891 FAX

INDUSTRIAL HYGIENE AIR SAMPLING RECORD
FIELD DATA SHEET

AES PO# 30309T194 (#5)

PLEASE PRINT

CLIENT NAME URS
PROJECT LOCATION NYSEG - Mechanicville
SPECIFIC LOCATION Central Ave

PERSON PERFORMING SAMPLING	SHIPPING DATE	SAMPLING DATE	NIOSH SAMPLING METHOD
Eric Lavendusky	4/11/01	4/10/01	NA

MONITORED EMPLOYEE/AREA	S.S. #
TITLE	DEPARTMENT

TASK/OPERATION	PPE	ENG/WORK PRACTICES
01041 AV01		

~~ENVIRONMENTAL CONDITIONS AND NOTES~~
SAMPLE ID: MEMW24260112
DATE: 4/10/01
TIME 1322
MATRIX SOIL
GRAB

2 Bottles to be analyzed for
VOCs - 8260
SVOCs - PAH(8270) (Phenols 9065/420.1)
Cyanide - Total 9012/235.3
Weak Acid Dissociable 4500 I

PRE-CALIBRATION	CALCULATIONS	POST-CALIBRATION	CALCULATIONS
Pump Mfg.		Pump Mfg.	
Pump No.		Pump No.	
Location		Location	
Flow Rate (CIRCLE ONE) L/min cc/min	Name Method Date Time	FLow Rate (CIRCLE ONE) L/min cc/min	Name Method Date Time

PUMP NO.	SAMPLE INFORMATION: FIELD NO.	TYPE MEDIA	LOT NO.	CLOCK TIME: START	STOP	TOTAL TIME (MIN.)	SAMPLE VOLUME (LITER)	RESULT (DIRECT READ)
				Received By				
						4/11/01		

INTERFERENCES AND IH COMMENTS TO LAB: Normal TAT

Supporting Sample Field #
Blanks
Bulks
Other

AES Project # 30309T194 (#5)

DATE RECEIVED BY LAB
DATE ~~ANALYZED~~ RECEIVED
~~REVIEWED BY~~ Relinquished by: EJ Sowinski (PRINT) (SIGNATURE) 4/11/01

AES FORM IH #1 Rev. 3/93

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Report date: 04/26/01
Number of samples analyzed: 1
AES Project ID: 010412 N
Invoice #: 226633

ELAP ID#: 10709

AIHA ID#: 100307

Adirondack Environmental Services Inc.
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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW22230126
AES sample #: 010412 N01 Samples taken by: Client
MATRIX: Soil
Date Sampled: 04/11/01
Date sample received: 04/12/01
Location: NYSEG Mechanic.
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.02	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01

Adirondack Environmental Services, Inc.
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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW22230126
AES sample #: 010412 N01 Samples taken by: Client MATRIX: Soil
Date Sampled: 04/11/01
Date sample received: 04/12/01
Location: NYSEG Mechanic. grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Benzene	EPA-8260	6	ug/kg	JF-BX-36	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-36	04/17/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-36	04/17/01
Xylenes,Total	EPA-8260	1.1 J	ug/kg	JF-BX-36	04/17/01
Naphthalene	EPA-8270	400	ug/kg	MT-CA-2	04/23/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW22230126
AES sample #: 010412 N01 Samples taken by: Client
MATRIX: Soil
Date Sampled: 04/11/01
Date sample received: 04/12/01
Location: NYSEG Mechanic. grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	110 J	ug/kg	MT-CA-2	04/23/01
Fluorene	EPA-8270	37 J	ug/kg	MT-CA-2	04/23/01
Phenanthrene	EPA-8270	160 J	ug/kg	MT-CA-2	04/23/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Fluoranthene	EPA-8270	47 J	ug/kg	MT-CA-2	04/23/01
Pyrene	EPA-8270	93 J	ug/kg	MT-CA-2	04/23/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
2-Methylnaphthalene	EPA-8270	140 J	ug/kg	MT-CA-2	04/23/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-2	04/23/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I-3E-81	04/23/01
Barium	EPA-6010	27	ug/g	KH-I-3E-81	04/23/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I-3E-81	04/23/01
Chromium	EPA-6010	16.6	ug/g	KH-I-3E-81	04/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW22230126
AES sample #: 010412 N01 Samples taken by: Client
MATRIX: Soil
Date Sampled: 04/11/01
Date sample received: 04/12/01
Location: NYSEG Mechanic.
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	12.3	ug/g	KH-I-3E-81	04/23/01
Mercury	EPA-7471	0.03	ug/g	KH-PSQ-125	04/17/01
Selenium	EPA-6010	<0.25	ug/g	KH-I-3E-81	04/23/01
Silver	EPA-6010	<1	ug/g	KH-I-3E-81	04/23/01
Aluminum	EPA-6010	8910	ug/g	KH-I-3E-81	04/23/01
Antimony	EPA-6010	<3	ug/g	KH-I-3E-81	04/23/01
Copper	EPA-6010	35	ug/g	KH-I-3E-81	04/23/01
Iron	EPA-6010	23,430	ug/g	KH-I-3E-81	04/23/01
Nickel	EPA-6010	20	ug/g	KH-I-3E-81	04/23/01
Manganese	EPA-6010	365	ug/g	KH-I-3E-81	04/23/01
Vanadium	EPA-6010	6.3	ug/g	KH-I-3E-81	04/23/01
Zinc	EPA-6010	81	ug/g	KH-I-3E-81	04/23/01

APPROVED BY: Lara
Report date: 04/26/01

Job No. 30309T194 (#5)

CHAIN OF CUSTODY RECORD

GENERATOR INFORMATION

Facility NYSEG Mechanicville
URS Corporation
Address 646 Plank Road Suite 202
Clifton Park, NY 12065
Telephone (518) 688-0815
FAX 688-0022

COLLECTOR INFORMATION

Collected by
Address
Telephone ( )

SAMPLE INFORMATION

No.	DEPTH	TYPE	DATE	TIME
MEMW22230126		GRAB	4/11/01	1424
* SEE BELOW FOR ANALYSIS				
HOLD TCLP				

# of containers 3

01041/2
N01

Suspected Waste Constituents * VOCs 8260 // SVOCs (PAH 8270) (PHENOLS 9065/420.1)
Cyanide (Total 9012/335.3) // (WEAK acid dissociable 4500I) // Metals - EPA 6010 2

Field Conditions/Remarks Al, Sb, As, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Zn, Vanadium //
TCLP - 1311 (VOCs 8260) (SVOCs 8270) (Metals 6010, 8 RCRA Metals)

SAMPLE ALLOCATION

Name
Address

Telephone ( )

____ sample received intact

____ sample received damaged or missing (describe on back)

(Signature) (Date)

CHAIN OF POSSESSION

	Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
1.	[signature]	4/12	8:00	[signature]	4/12/01	8:01 AM
2.						
3.				Rec'd by Lab: M.L 4/12/01 → 1046		
4.						

Distribution

White-w/shipment-for consignee files
Blue-w/shipment-forward to Dames & Moore URS
Attn: Erika Cuyler

Pink-with report
Goldenrod-Dames & Moore - Job File

Dames & Moore

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/30/01
Number of samples analyzed: 2
AES Project ID: 010413 E
Invoice #: 226689

ELAP ID#: 10709

AIHA ID#: 100307

Adirondack Environmental Services, Inc.
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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160110
AES sample #: 010413 E01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.5	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	860	ug/kg	MT-CA-3	04/23/01
Acenaphthylene	EPA-8270	270 J	ug/kg	MT-CA-3	04/23/01
Acenaphthene	EPA-8270	500	ug/kg	MT-CA-3	04/23/01
Fluorene	EPA-8270	600	ug/kg	MT-CA-3	04/23/01
Phenanthrene	EPA-8270	4400	ug/kg	MT-CA-3	04/23/01
Anthracene	EPA-8270	1600	ug/kg	MT-CA-3	04/23/01
Fluoranthene	EPA-8270	3900	ug/kg	MT-CA-3	04/23/01
Pyrene	EPA-8270	9000	ug/kg	MT-CA-3	04/23/01
Chrysene	EPA-8270	3100	ug/kg	MT-CA-3	04/23/01
Benzo(b)fluoranthene	EPA-8270	3000	ug/kg	MT-CA-3	04/23/01
Benzo(k)fluoranthene	EPA-8270	1100	ug/kg	MT-CA-3	04/23/01
Benzo(a)pyrene	EPA-8270	1100	ug/kg	MT-CA-3	04/23/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1600	ug/kg	MT-CA-3	04/23/01
Dibenzo(a,h)anthracene	EPA-8270	300 J	ug/kg	MT-CA-3	04/23/01
Benzo(g,h,i)perylene	EPA-8270	1500	ug/kg	MT-CA-3	04/23/01
Benzo(a)anthracene	EPA-8270	2800	ug/kg	MT-CA-3	04/23/01
2-Methylnaphthalene	EPA-8270	570	ug/kg	MT-CA-3	04/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160110
AES sample #: 010413 E01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	100 J	ug/kg	MT-CA-3	04/23/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Methylene Chloride	EPA-8260	940	ug/kg	JF-BX-37	04/17/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160110
AES sample #: 010413 E01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Benzene	EPA-8260	30 J	ug/kg	JF-BX-37	04/17/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-37	04/17/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Toluene	EPA-8260	70	ug/kg	JF-BX-37	04/17/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Ethylbenzene	EPA-8260	35 J	ug/kg	JF-BX-37	04/17/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-37	04/17/01
Xylenes,Total	EPA-8260	73 (J)	ug/kg	JF-BX-37	04/17/01

Limit is 50. Don't need J.

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW08100123
AES sample #: 010413 E02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.3	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	230 J	ug/kg	MT-CA-3	04/23/01
Acenaphthylene	EPA-8270	930	ug/kg	MT-CA-3	04/23/01
Acenaphthene	EPA-8270	1200	ug/kg	MT-CA-3	04/23/01
Fluorene	EPA-8270	930	ug/kg	MT-CA-3	04/23/01
Phenanthrene	EPA-8270	600	ug/kg	MT-CA-3	04/23/01
Anthracene	EPA-8270	300 J	ug/kg	MT-CA-3	04/23/01
Fluoranthene	EPA-8270	1400	ug/kg	MT-CA-3	04/23/01
Pyrene	EPA-8270	2800	ug/kg	MT-CA-3	04/23/01
Chrysene	EPA-8270	1100	ug/kg	MT-CA-3	04/23/01
Benzo(b)fluoranthene	EPA-8270	1600	ug/kg	MT-CA-3	04/23/01
Benzo(k)fluoranthene	EPA-8270	830	ug/kg	MT-CA-3	04/23/01
Benzo(a)pyrene	EPA-8270	2000	ug/kg	MT-CA-3	04/23/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1500	ug/kg	MT-CA-3	04/23/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-3	04/23/01
Benzo(g,h,i)perylene	EPA-8270	2100	ug/kg	MT-CA-3	04/23/01
Benzo(a)anthracene	EPA-8270	820	ug/kg	MT-CA-3	04/23/01
2-Methylnaphthalene	EPA-8270	310 J	ug/kg	MT-CA-3	04/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW08100123
AES sample #: 010413 E02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-3	04/27/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Methylene Chloride	EPA-8260	9	ug/kg	JF-BX-37	04/27/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW08100123
AES sample #: 010413 E02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Benzene	EPA-8260	1.8 J	ug/kg	JF-BX-37	04/27/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-37	04/27/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Toluene	EPA-8260	0.5 J	ug/kg	JF-BX-37	04/27/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Ethylbenzene	EPA-8260	13	ug/kg	JF-BX-37	04/27/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-37	04/27/01
Xylenes,Total	EPA-8260	2.6 J	ug/kg	JF-BX-37	04/27/01

APPROVED BY:
Report date: 04/30/01

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A full service analytical research laboratory offering solutions to environmental concerns

CHAIN OF CUSTODY RECORD

1 of 1

Client Name:	Address:
VRS	646 Plank Road, Suite 202 Clifton Park, NY 12065
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	NYSEG Mechanicville	EL/AW
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309T1941(#5)	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010413 E01	~~AW~~ MEMW14160110	4/12/01	845	(A) P	SOIL		X	1	VOCs / SVOCs Cyanide
E02	MEMW08100123	4/12/01	1330	A (P)	SOIL		X	1	VOCs / SVOCs cyanide
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

VOCs 8260
SVOCs (PAHs-8270) (Phenols 9065/420.1)
Cyanide Total 9012/335.3
weak acid dissociable 4500I

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
[signature]	[signature]	4/13/01
Relinquished by: (Signature)	**Received ofr Laboratory by:**	**Date/Time**
	M.L	4/13/01 952

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 04/27/01
Number of samples analyzed: 3
AES Project ID: 010413AL
Invoice #: 226726

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080115
AES sample #: 010413AL01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.02	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	500	ug/kg	MT-BZ-49	04/19/01
Acenaphthylene	EPA-8270	80 J	ug/kg	MT-BZ-49	04/19/01
Acenaphthene	EPA-8270	160 J	ug/kg	MT-BZ-49	04/19/01
Fluorene	EPA-8270	80 J	ug/kg	MT-BZ-49	04/19/01
Phenanthrene	EPA-8270	430	ug/kg	MT-BZ-49	04/19/01
Anthracene	EPA-8270	140 J	ug/kg	MT-BZ-49	04/19/01
Fluoranthene	EPA-8270	270 J	ug/kg	MT-BZ-49	04/19/01
Pyrene	EPA-8270	470	ug/kg	MT-BZ-49	04/19/01
Chrysene	EPA-8270	170 J	ug/kg	MT-BZ-49	04/19/01
Benzo(b)fluoranthene	EPA-8270	320 J	ug/kg	MT-BZ-49	04/19/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Benzo(a)pyrene	EPA-8270	130 J	ug/kg	MT-BZ-49	04/19/01
Indeno(1,2,3-cd)pyrene	EPA-8270	130 J	ug/kg	MT-BZ-49	04/19/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Benzo(g,h,i)perylene	EPA-8270	170 J	ug/kg	MT-BZ-49	04/19/01
Benzo(a)anthracene	EPA-8270	130 J	ug/kg	MT-BZ-49	04/19/01
2-Methylnaphthalene	EPA-8270	470	ug/kg	MT-BZ-49	04/19/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080115
AES sample #: 010413AL01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080115
AES sample #: 010413AL01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-40	04/25/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-40	04/25/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I3E-84	04/26/01
Barium	EPA-6010	28	ug/g	KH-I3E-84	04/26/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I3E-84	04/26/01
Chromium	EPA-6010	7.44	ug/g	KH-I3E-84	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080115
AES sample #: 010413AL01 Samples taken by: EL/AW MATRIX: Soil

Date Sampled: 04/12/01
Date sample received: 04/13/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	17.7	ug/g	KH-I3E-84	04/26/01
Mercury	EPA-7471	<0.02	ug/g	KH-PSQ-125	04/17/01
Selenium	EPA-6010	<0.25	ug/g	KH-I3E-84	04/26/01
Silver	EPA-6010	<1.0	ug/g	KH-I3E-84	04/26/01
Aluminum	EPA-6010	4861	ug/g	KH-I3E-84	04/26/01
Antimony	EPA-6010	<3.0	ug/g	KH-I3E-84	04/26/01
Copper	EPA-6010	15	ug/g	KH-I3E-84	04/26/01
Iron	EPA-6010	5815	ug/g	KH-I3E-84	04/26/01
Nickel	EPA-6010	7.6	ug/g	KH-I3E-84	04/26/01
Manganese	EPA-6010	205	ug/g	KH-I3E-84	04/26/01
Vanadium	EPA-6010	4.0	ug/g	KH-I3E-84	04/26/01
Zinc	EPA-6010	29	ug/g	KH-I3E-84	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW02040122
AES sample #: 010413AL02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.02	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	130 J	ug/kg	MT-BZ-49	04/19/01
Acenaphthylene	EPA-8270	110 J	ug/kg	MT-BZ-49	04/19/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Fluorene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Phenanthrene	EPA-8270	330	ug/kg	MT-BZ-49	04/19/01
Anthracene	EPA-8270	63 J	ug/kg	MT-BZ-49	04/19/01
Fluoranthene	EPA-8270	670	ug/kg	MT-BZ-49	04/19/01
Pyrene	EPA-8270	1700	ug/kg	MT-BZ-49	04/19/01
Chrysene	EPA-8270	500	ug/kg	MT-BZ-49	04/19/01
Benzo(b)fluoranthene	EPA-8270	1300	ug/kg	MT-BZ-49	04/19/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Benzo(a)pyrene	EPA-8270	700	ug/kg	MT-BZ-49	04/19/01
Indeno(1,2,3-cd)pyrene	EPA-8270	530	ug/kg	MT-BZ-49	04/19/01
Dibenzo(a,h)anthracene	EPA-8270	190 J	ug/kg	MT-BZ-49	04/19/01
Benzo(g,h,i)perylene	EPA-8270	770	ug/kg	MT-BZ-49	04/19/01
Benzo(a)anthracene	EPA-8270	570	ug/kg	MT-BZ-49	04/19/01
2-Methylnaphthalene	EPA-8270	67 J	ug/kg	MT-BZ-49	04/19/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW02040122
AES sample #: 010413AL02 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW02040122
AES sample #: 010413AL02 Samples taken by: EL/AW MATRIX: Soil
Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-40	04/20/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Toluene	EPA-8260	1.9 J	ug/kg	JF-BX-40	04/20/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-40	04/20/01
Arsenic	EPA-6010	<0.25	ug/g	KH-I3E-84	04/26/01
Barium	EPA-6010	79	ug/g	KH-I3E-84	04/26/01
Cadmium	EPA-6010	<0.25	ug/g	KH-I3E-84	04/26/01
Chromium	EPA-6010	15.3	ug/g	KH-I3E-84	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW02040122
AES sample #: 010413AL02 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	14.5	ug/g	KH-I3E-84	04/26/01
Mercury	EPA-7471	0.11	ug/g	KH-PSQ-125	04/17/01
Selenium	EPA-6010	<0.25	ug/g	KH-I3E-84	04/26/01
Silver	EPA-6010	<1.0	ug/g	KH-I3E-84	04/26/01
Aluminum	EPA-6010	12920	ug/g	KH-I3E-84	04/26/01
Antimony	EPA-6010	<3.0	ug/g	KH-I3E-84	04/26/01
Copper	EPA-6010	21	ug/g	KH-I3E-84	04/26/01
Iron	EPA-6010	9885	ug/g	KH-I3E-84	04/26/01
Nickel	EPA-6010	19	ug/g	KH-I3E-84	04/26/01
Manganese	EPA-6010	512	ug/g	KH-I3E-84	04/26/01
Vanadium	EPA-6010	8.8	ug/g	KH-I3E-84	04/26/01
Zinc	EPA-6010	70	ug/g	KH-I3E-84	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MERH08100101
AES sample #: 010413AL03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.02	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	330	ug/kg	MT-BZ-49	04/19/01
Acenaphthylene	EPA-8270	170 J	ug/kg	MT-BZ-49	04/19/01
Acenaphthene	EPA-8270	160 J	ug/kg	MT-BZ-49	04/19/01
Fluorene	EPA-8270	150 J	ug/kg	MT-BZ-49	04/19/01
Phenanthrene	EPA-8270	800	ug/kg	MT-BZ-49	04/19/01
Anthracene	EPA-8270	250 J	ug/kg	MT-BZ-49	04/19/01
Fluoranthene	EPA-8270	320 J	ug/kg	MT-BZ-49	04/19/01
Pyrene	EPA-8270	600	ug/kg	MT-BZ-49	04/19/01
Chrysene	EPA-8270	100 J	ug/kg	MT-BZ-49	04/19/01
Benzo(b)fluoranthene	EPA-8270	170 J	ug/kg	MT-BZ-49	04/19/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Benzo(a)pyrene	EPA-8270	170 J	ug/kg	MT-BZ-49	04/19/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-BZ-49	04/19/01
Benzo(a)anthracene	EPA-8270	130 J	ug/kg	MT-BZ-49	04/19/01
2-Methylnaphthalene	EPA-8270	310 J	ug/kg	MT-BZ-49	04/19/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MERH08100101
AES sample #: 010413AL03 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	37 J	ug/kg	MT-BZ-49	04/19/01
Chloromethane	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Bromomethane	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Vinyl Chloride	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Chloroethane	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Methylene Chloride	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Acetone	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Carbon Disulfide	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,1-Dichloroethene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,1-Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,2-Dichloroethene Total	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Chloroform	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,2 Dichloroethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
2-Butanone	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
1,1,1-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Carbon Tetrachloride	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Vinyl Acetate	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Bromodichloromethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,2-Dichloropropane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
trans-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MERH08100101
AES sample #: 010413AL03 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/13/01
Date sample received: 04/13/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Dibromochloromethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,1,2-Trichloroethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Benzene	EPA-8260	1.8 J	ug/kg	JF-BX-40	04/20/01
cis-1,3-Dichloropropene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
2-Chloroethylvinylether	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Bromoform	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
4-Methyl-2-pentanone	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
2-Hexanone	EPA-8260	<100	ug/kg	JF-BX-40	04/20/01
Tetrachloroethene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
1,1,2,2-Tetrachloroethane	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Toluene	EPA-8260	0.8 J	ug/kg	JF-BX-40	04/20/01
Chlorobenzene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Ethylbenzene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Styrene	EPA-8260	<50	ug/kg	JF-BX-40	04/20/01
Xylenes,Total	EPA-8260	4.3 J	ug/kg	JF-BX-40	04/20/01

APPROVED BY:
Report date: 04/27/01

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

** HOLD TCLP SAMPLES **

A full service analytical research laboratory offering solutions to environmental concerns

7 jars

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) 30309T194 (#5)	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number:	Samplers: (Signature) EJS
Client Fax No: 688-0022	NYSEG - Mechanicville	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
D10413 AL01	MEMW06080115	4/12/01	1557	A (P)	SOIL		X	3	VOCs/SVOCs/Cyanide/ Metals/TCLP
AL02	~~MEMW02040122~~ MEMW02040122 (MK)	4/13/01	1232	A (P)	SOIL		X	3	VOCs/SVOCs/Cyanide/ Metals/TCLP
AL03	MERH08100101	4/13/01	1425	A (P)	SOIL		X	1	VOCs/SVOCs/ Cyanide
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

per FAX MK

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

Special Instructions/Remarks VOCs 8260 // SVOCs (PAH 8270)(PHENOLS 9065/4210.1) Cyanide (Total 9012/335.3)(Weak acid dissociable 4500I) Metals: 6010 - Al, An, Ar, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Vanadium, Zn

CC Report To: HOLD TCLP Samples → TCLP - 1311 (VOCs 8260)(SVOCs 8270)(Metals 6010, RCRA Metals)

Relinquished by: (Signature) EJ Sovinski	Received by: (Signature) TB	Date/Time 4/13/01 1608
Relinquished by: (Signature)	Received ofr Laboratory by:	Date/Time 4/13/01 5:00

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 05/01/01
Number of samples analyzed: 2
AES Project ID: 010417 N
Invoice #: 226773

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW00020129
AES sample #: 010417 N01 Samples taken by: EJL/AW
MATRIX: Soil
Date Sampled: 04/16/01
Date sample received: 04/17/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	MC-R	04/30/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060129
AES sample #: 010417 N02 Samples taken by: EJL/AW
MATRIX: Soil

Date Sampled: 04/16/01
Date sample received: 04/17/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	MC-R	04/30/01
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-36	04/24/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	60 J	ug/kg	MT-CA-4	04/26/01
Acenaphthylene	EPA-8270	240 J	ug/kg	MT-CA-4	04/26/01
Acenaphthene	EPA-8270	53 J	ug/kg	MT-CA-4	04/26/01
Fluorene	EPA-8270	250 J	ug/kg	MT-CA-4	04/26/01
Phenanthrene	EPA-8270	1300	ug/kg	MT-CA-4	04/26/01
Anthracene	EPA-8270	280 J	ug/kg	MT-CA-4	04/26/01
Fluoranthene	EPA-8270	500	ug/kg	MT-CA-4	04/26/01
Pyrene	EPA-8270	770	ug/kg	MT-CA-4	04/26/01
Chrysene	EPA-8270	180 J	ug/kg	MT-CA-4	04/26/01
Benzo(b)fluoranthene	EPA-8270	150 J	ug/kg	MT-CA-4	04/26/01
Benzo(k)fluoranthene	EPA-8270	70 J	ug/kg	MT-CA-4	04/26/01
Benzo(a)pyrene	EPA-8270	200 J	ug/kg	MT-CA-4	04/26/01
Indeno(1,2,3-cd)pyrene	EPA-8270	90 J	ug/kg	MT-CA-4	04/26/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(g,h,i)perylene	EPA-8270	110 J	ug/kg	MT-CA-4	04/26/01
Benzo(a)anthracene	EPA-8270	240 J	ug/kg	MT-CA-4	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060129
AES sample #: 010417 N02 Samples taken by: EJL/AW
MATRIX: Soil
Date Sampled: 04/16/01
Date sample received: 04/17/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
2-Methylnaphthalene	EPA-8270	70 J	ug/kg	MT-CA-4	04/26/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060129
AES sample #: 010417 N02 Samples taken by: EJL/AW
MATRIX: Soil
Date Sampled: 04/16/01
Date sample received: 04/17/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-37	04/18/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-37	04/18/01

APPROVED BY:
Report date: 05/01/01

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CHAIN OF CUSTODY RECORD

Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** NYSEG-Mechanicville	**Samplers: (Names)** EJL/AW
Client Phone No: 688-0015	**PO Number:** 30309T194 (#5)	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010417 N01	MEMW00020129	4/16/01	837	(A) P	soil		X	1	BTUs
N02	MEMW04060129	4/16/01	846	(A) P	soil		X	3	SVOCs/VOCs/Cyanide BTUs
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs 8260
SVOCs - (PAH - 8270) (Phenols 9065/420.1)
Cyanide - (Total 9012/335.3) (Weak acid dissociable 4500)
BTUs - ASTM D240

Relinquished by: (Signature)	**Received by: (Signature)**	**Date/Time** 4/17/01
Relinquished by: (Signature)	**Received ofr Laboratory by:** M.L	**Date/Time** 4/17/01 1209

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

RECEIVED
MAY 11 2001

Updated Report 5/9

Report date: 05/10/01
Number of samples analyzed: 1
AES Project ID: 010418 G
Invoice #: 226799

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	MC-R	04/30/01
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-38	05/01/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Arsenic	EPA-6010	<0.25	ug/g	SM-I-3E-94	05/10/01
Barium	EPA-6010	78.0	ug/g	SM-I-3E-94	05/10/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3E-94	05/10/01
Chromium	EPA-6010	15.1	ug/g	SM-I-3E-94	05/10/01
Lead	EPA-6010	9.50	ug/g	SM-I-3E-94	05/10/01
Mercury	EPA-7471	0.16	ug/g	WB-PSR-9	05/10/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3E-94	05/10/01
Silver	EPA-6010	<1	ug/g	SM-I-3E-94	05/10/01
Aluminum	EPA-6010	10,400	ug/g	SM-I-3E-94	05/10/01
Antimony	EPA-6010	<3	ug/g	SM-I-3E-94	05/10/01
Copper	EPA-6010	29.6	ug/g	SM-I-3E-94	05/10/01
Iron	EPA-6010	22,600	ug/g	SM-I-3E-94	05/10/01
Nickel	EPA-6010	16.6	ug/g	SM-I-3E-94	05/10/01
Manganese	EPA-6010	270	ug/g	SM-I-3E-94	05/10/01
Vanadium	EPA-6010	12.6	ug/g	SM-I-3E-94	05/10/01
Zinc	EPA-6010	39.4	ug/g	SM-I-3E-94	05/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Phenanthrene	EPA-8270	53 J	ug/kg	MT-CA-4	04/26/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Pyrene	EPA-8270	33 J	ug/kg	MT-CA-4	04/26/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW MATRIX: Soil
Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01

APPROVED BY:
Report date: 05/10/01

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CHAIN OF CUSTODY RECORD

** HOLD TCLP SAMPLES **

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG Mechanicville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 303097194	Samplers: (Signature) EJL
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010418 G01	MEMW07090102	4/17/01	837 (A) P	SOIL		X	4	SVOCs/Cyanide/Metals BTUs/TCLP/VOCs
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks VOCs - 8260 # / BTUs - ASTM D240
SVOCs: (PAH 8270)(Phenols 9065/420.1)
Cyanide: (Total 9012/335.3)(Weak acid dissociable 4500I)
Metals: 6010 (Al, An, Ar, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Vanadium, Zn
TCLP: 1311 ~~(VOCs 8260)~~ (SVOCs: 8270) (Metals 6010 - 8RCRA Metals)
HOLD TCLP

CC Report To:

Relinquished by: (Signature) EJL Sovendrodi	Received by: (Signature) RAPID AB	Date/Time 4/18/01 0822
Relinquished by: (Signature)	Received ofr Laboratory by: M.L	Date/Time 4/18/01 10:00

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

226-99B

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194

Report date: 05/02/01
Number of samples analyzed: 1
AES Project ID: 010418 G
Invoice #: 226799

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	MC-R	04/30/01
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-38	05/01/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	04/26/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	04/26/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Phenanthrene	EPA-8270	53 J	ug/kg	MT-CA-4	04/26/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Pyrene	EPA-8270	33 J	ug/kg	MT-CA-4	04/26/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW
MATRIX: Soil
Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-4	04/26/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW07090102
AES sample #: 010418 G01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/17/01
Date sample received: 04/18/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-37	04/20/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-37	04/20/01

APPROVED BY: _____
Report date: 05/02/01

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CHAIN OF CUSTODY RECORD

** HOLD TCLP SAMPLES *

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG Mechanicville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 303097194	Samplers: (Signature) EL
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010418 G01	MEMW07090102	4/17/01	837	(A) P	SOIL		X	4	SVOCs/Cyanide/Metals BTUs/TCLP/ VOCs
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks: VOCs - 8260 W/ BTUs - ASTM D240
SVOCs: (PAH 8270) (Phenols 9065 H20.1)
Cyanide: (Total 9012/335.3) (Weak acid dissociable 4500I)
Metals: 6010 (Al, An, Ar, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, Vanadium, Zn
TCLP: 1311 (~~VOCs 8260~~) (SVOCs 8270) (Metals 6010 - 8RCRA Metals)
HOLD TCLP

Relinquished by: (Signature) EL Sowerbutts	Received by: (Signature) AB	Date/Time 4/18/01 0822
Relinquished by: (Signature)	Received ofr Laboratory by: ML	Date/Time 4/18/01 10:00

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 05/04/01
Number of samples analyzed: 1
AES Project ID: 010420AP
Invoice #: 226959

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120128
AES sample #: 010420AP01 Samples taken by: EJL
MATRIX: Soil

Date Sampled: 04/20/01
Date sample received: 04/20/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<2	ug/g	LS-Z-39	05/03/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/03/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/03/01
Naphthalene	EPA-8270	330 J	ug/kg	MT-CA-5	04/27/01
Acenaphthylene	EPA-8270	400	ug/kg	MT-CA-5	04/27/01
Acenaphthene	EPA-8270	120 J	ug/kg	MT-CA-5	04/27/01
Fluorene	EPA-8270	93 J	ug/kg	MT-CA-5	04/27/01
Phenanthrene	EPA-8270	200 J	ug/kg	MT-CA-5	04/27/01
Anthracene	EPA-8270	90 J	ug/kg	MT-CA-5	04/27/01
Fluoranthene	EPA-8270	430	ug/kg	MT-CA-5	04/27/01
Pyrene	EPA-8270	830	ug/kg	MT-CA-5	04/27/01
Chrysene	EPA-8270	470	ug/kg	MT-CA-5	04/27/01
Benzo(b)fluoranthene	EPA-8270	1000	ug/kg	MT-CA-5	04/27/01
Benzo(k)fluoranthene	EPA-8270	500	ug/kg	MT-CA-5	04/27/01
Benzo(a)pyrene	EPA-8270	330	ug/kg	MT-CA-5	04/27/01
Indeno(1,2,3-cd)pyrene	EPA-8270	1300	ug/kg	MT-CA-5	04/27/01
Dibenzo(a,h)anthracene	EPA-8270	180 J	ug/kg	MT-CA-5	04/27/01
Benzo(g,h,i)perylene	EPA-8270	1500	ug/kg	MT-CA-5	04/27/01
Benzo(a)anthracene	EPA-8270	470	ug/kg	MT-CA-5	04/27/01
2-Methylnaphthalene	EPA-8270	90 J	ug/kg	MT-CA-5	04/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120128
AES sample #: 010420AP01 Samples taken by: EJL
MATRIX: Soil

Date Sampled: 04/20/01
Date sample received: 04/20/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	JF-BX-40	04/27/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120128
AES sample #: 010420AP01 Samples taken by: EJL
MATRIX: Soil

Date Sampled: 04/20/01
Date sample received: 04/20/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-40	04/27/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-40	04/27/01

APPROVED BY: Sara D
Report date: 05/04/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** NYSEG - Mechanicville	**Samplers: (Names)** EJL
Client Phone No: 688-0015	**PO Number:** 303097194 (#5)	**Samplers: (Signature)** EJ Sovenski
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010420 C-MW1	MEMW1012.0128	4/20/01	1205	A (P)	Soil		x	2	VOCs, SVOCs, Cyanide
AP01				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
VOCs - 8260
SVOCs - (PAH 8270) (PHENOLS 9065/420.1)
Cyanide - (Total 9012/335.3) (Weak acid dissociable 4500I)

CC Report To:

Relinquished by: (Signature) EJ Sovenski	**Received by: (Signature)** [signature]	**Date/Time** 4/20/01 1103
Relinquished by: (Signature)	**Received ofr Laboratory by:** [signature]	**Date/Time** 4/20/01 3:30

Temperature
Ambient or (Chilled)
Notes:

Properly Preserved
(Y) N
Notes:

Received Within Holding Times
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 (#5)

Report date: 05/08/01
Number of samples analyzed: 1
AES Project ID: 010424 I
Invoice #: 227011

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW20210117
AES sample #: 010424 I01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/23/01
Date sample received: 04/24/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<2	ug/g	LS-Z-39	05/03/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/03/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/03/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Pyrene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW20210117
AES sample #: 010424 I01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/23/01
Date sample received: 04/24/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-6	04/27/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW20210117
AES sample #: 010424 I01 Samples taken by: EL/AW
MATRIX: Soil

Date Sampled: 04/23/01
Date sample received: 04/24/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-40	05/01/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-40	05/01/01

APPROVED BY: Laura D. Mahl
Report date: 05/08/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - Mechanicville	Samplers: (Names) EL/AW
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EJF
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010424 I01	MEMW20210117	4/23/01 ~~5/01~~	1040 P	Soil		X	2	VOCs/SVOCs, Cyanide
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs - 8260
SVOCs - (PAH 8270)(Phenols 9065/420.1)
Cyanide - (Total 9012/335.3)
(Weak acid dissociable 4500I

Relinquished by: (Signature) EJF	Received by: (Signature)	Date/Time 4/24/01
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 4/24/01 9:30

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194(#5)

Report date: 05/09/01
Number of samples analyzed: 2
AES Project ID: 010425 F
Invoice #: 227054

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW00020119
AES sample #: 010425 F01
Samples taken by: EJL/AW
MATRIX: Soil
Date Sampled: 04/24/01
Date sample received: 04/25/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Heat Value	ASTM D240-76	<1000	btu/lb	MC-R	04/30/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060119
AES sample #: 010425 F02 Samples taken by: EJL/AW
MATRIX: Soil
Date Sampled: 04/24/01
Date sample received: 04/25/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<2	ug/l	LS-Z-39	05/03/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/03/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/03/01
Naphthalene	EPA-8270	130 J	ug/kg	MT-CA-11	05/02/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-11	05/02/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-11	05/02/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-11	05/02/01
Phenanthrene	EPA-8270	280 J	ug/kg	MT-CA-11	05/02/01
Anthracene	EPA-8270	110 J	ug/kg	MT-CA-11	05/02/01
Fluoranthene	EPA-8270	150 J	ug/kg	MT-CA-11	05/02/01
Pyrene	EPA-8270	160 J	ug/kg	MT-CA-11	05/02/01
Chrysene	EPA-8270	190 J	ug/kg	MT-CA-11	05/02/01
Benzo(b)fluoranthene	EPA-8270	180 J	ug/kg	MT-CA-11	05/02/01
Benzo(k)fluoranthene	EPA-8270	70 J	ug/kg	MT-CA-11	05/02/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-11	05/02/01
Indeno(1,2,3-cd)pyrene	EPA-8270	93 J	ug/kg	MT-CA-11	05/02/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-11	05/02/01
Benzo(g,h,i)perylene	EPA-8270	110 J	ug/kg	MT-CA-11	05/02/01
Benzo(a)anthracene	EPA-8270	110 J	ug/kg	MT-CA-11	05/02/01
2-Methylnaphthalene	EPA-8270	180 J	ug/kg	MT-CA-11	05/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060119
AES sample #: 010425 F02 Samples taken by: EJL/AW
MATRIX: Soil

Date Sampled: 04/24/01
Date sample received: 04/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	53 J	ug/kg	MT-CA-11	05/02/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Acetone	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Chloroform	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060119
AES sample #: 010425 F02 Samples taken by: EJL/AW
MATRIX: Soil
Date Sampled: 04/24/01
Date sample received: 04/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Benzene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Bromoform	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BX-40	04/30/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Toluene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Styrene	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BX-40	04/30/01

APPROVED BY: Christopher Kerr
Report date: 05/09/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** NYSEG-Mechanicville	**Samplers: (Names)** ESL/AW
Client Phone No: 688-0015	**PO Number:** 30309T194 (#5)	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010425 F01	MEMW0002O119	4/24/01	955	(A) P	SOIL		X	1	BTU ASTM D240
F02	MEMW04060119	4/24/01	1005	(A) P	SOIL		X	2	VOCs/SVOCs Cyanide
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☑ 2 Day ☐ 5 Day

Special Instructions/Remarks
VOCs 8260
SVOCs (PAH 8270)(Phenols 9065/420.1)
Cyanide (Total 9012/335.3)(Weak acid dissociable 4500 I)

CC Report To:

Relinquished by: (Signature) Amy F. Wesley	**Received by: (Signature)**	**Date/Time** 4/25/01
Relinquished by: (Signature)	**Received ofr Laboratory by:** M.L	**Date/Time** 4/25/01 1030

Temperature Ambient or (Chilled)
Notes:

Properly Preserved (Y) N
Notes:

Received Within Holding Times (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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JUN 06 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 (#5)
Disk

Report date: 06/05/01
Number of samples analyzed: 8
AES Project ID: 010518AB
Invoice #: 228025

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060101
AES sample #: 010518AB01 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	180 J	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	57 J	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	290 J	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	240 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	140 J	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	180 J	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	67 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	97 J	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	110 J	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	86 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	110 J	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060102
AES sample #: 010518AB02 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	83 J	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	120 J	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	180 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	120 J	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	170 J	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	53 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	93 J	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	97 J	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	97 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	110 J	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060103
AES sample #: 010518AB03 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	76 J	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	150 J	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	190 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	110 J	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	170 J	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	57 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	100 J	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	110 J	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	83 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	110 J	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060104
AES sample #: 010518AB04 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	50 J	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	53 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060105
AES sample #: 010518AB05 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	37 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060106
AES sample #: 010518AB06 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.7	ug/g	LS-Z-47	05/30/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Chloromethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromomethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Chloroethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Methylene Chloride	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Acetone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Chloroform	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
2-Butanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060106
AES sample #: 010518AB06 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Trichloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Benzene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromoform	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
2-Hexanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Toluene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Chlorobenzene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Ethylbenzene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Styrene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Xylenes,Total	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060106
AES sample #: 010518AB06 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	37 J	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	77 J	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	86 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	77 J	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	100 J	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	57 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	60 J	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	40 J	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	43 J	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	63 J	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Arsenic	EPA-6010	0.75	ug/g	SM-I-3F-5	05/25/01
Barium	EPA-6010	28	ug/g	SM-I-3F-5	05/25/01
Cadmium	EPA-6010	<0.25	ug/g	SM-I-3F-5	05/25/01
Chromium	EPA-6010	11.5	ug/g	SM-I-3F-5	05/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060106
AES sample #: 010518AB06 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	15.5	ug/g	SM-I-3F-5	05/25/01
Mercury	EPA-7471	0.05	ug/g	WB-PSR-18	05/22/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3F-5	05/25/01
Silver	EPA-6010	<1	ug/g	SM-I-3F-5	05/25/01
Aluminum	EPA-6010	6300	ug/g	SM-I-3F-5	05/25/01
Antimony	EPA-6010	<3	ug/g	SM-I-3F-5	05/25/01
Copper	EPA-6010	27	ug/g	SM-I-3F-5	05/25/01
Iron	EPA-6010	7100	ug/g	SM-I-3F-5	05/25/01
Nickel	EPA-6010	14	ug/g	SM-I-3F-5	05/25/01
Manganese	EPA-6010	308	ug/g	SM-I-3F-5	05/25/01
Vanadium	EPA-6010	9.5	ug/g	SM-I-3F-5	05/25/01
Zinc	EPA-6010	50	ug/g	SM-I-3F-5	05/25/01
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060107
AES sample #: 010518AB07 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-Z-47	05/30/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Chloromethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromomethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Chloroethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Methylene Chloride	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Acetone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Chloroform	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
2-Butanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060107
AES sample #: 010518AB07 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Trichloroethene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Benzene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-EX-50	05/25/01
Bromoform	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-EX-50	05/25/01
2-Hexanone	EPA-8260	<10	ug/kg	MG-EX-50	05/25/01
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Toluene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Chlorobenzene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Ethylbenzene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Styrene	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Xylenes,Total	EPA-8260	<5	ug/kg	MG-EX-50	05/25/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060107
AES sample #: 010518AB07 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	40 J	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	60 J	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	77 J	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	50 J	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	73 J	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	50	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	53	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	33	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	50	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Arsenic	EPA-6010	5.70	ug/g	SM-I-3F-5	05/25/01
Barium	EPA-6010	20.2	ug/g	SM-I-3F-5	05/25/01
Cadmium	EPA-6010	0.98	ug/g	SM-I-3F-5	05/25/01
Chromium	EPA-6010	6.70	ug/g	SM-I-3F-5	05/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060107
AES sample #: 010518AB07 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	21.0	ug/g	SM-I-3F-5	05/25/01
Mercury	EPA-7471	0.03	ug/g	WB-PSR-18	05/22/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3F-5	05/25/01
Silver	EPA-6010	<1	ug/g	SM-I-3F-5	05/25/01
Aluminum	EPA-6010	2850	ug/g	SM-I-3F-5	05/25/01
Antimony	EPA-6010	<3	ug/g	SM-I-3F-5	05/25/01
Copper	EPA-6010	18.5	ug/g	SM-I-3F-5	05/25/01
Iron	EPA-6010	4760	ug/g	SM-I-3F-5	05/25/01
Nickel	EPA-6010	7.15	ug/g	SM-I-3F-5	05/25/01
Manganese	EPA-6010	231	ug/g	SM-I-3F-5	05/25/01
Vanadium	EPA-6010	237	ug/g	SM-I-3F-5	05/25/01
Zinc	EPA-6010	61.5	ug/g	SM-I-3F-5	05/25/01
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060108
AES sample #: 010518AB08 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.6	ug/g	LS-Z-47	05/30/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	05/31/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	05/31/01
Chloromethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromomethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Chloroethane	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Methylene Chloride	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Acetone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Chloroform	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
2-Butanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060108
AES sample #: 010518AB08 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Trichloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Benzene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Bromoform	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
2-Hexanone	EPA-8260	<10	ug/kg	MG-BX-50	05/25/01
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Toluene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Chlorobenzene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Ethylbenzene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Styrene	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Xylenes,Total	EPA-8260	<5	ug/kg	MG-BX-50	05/25/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060108
AES sample #: 010518AB08 Samples taken by: EL
MATRIX: Soil
Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Fluoranthene	EPA-8270	47	ug/kg	MT-CA-24	05/29/01
Pyrene	EPA-8270	67	ug/kg	MT-CA-24	05/29/01
Chrysene	EPA-8270	43	ug/kg	MT-CA-24	05/29/01
Benzo(b)fluoranthene	EPA-8270	53	ug/kg	MT-CA-24	05/29/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)pyrene	EPA-8270	33	ug/kg	MT-CA-24	05/29/01
Indeno(1,2,3-cd)pyrene	EPA-8270	43	ug/kg	MT-CA-24	05/29/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Benzo(a)anthracene	EPA-8270	40	ug/kg	MT-CA-24	05/29/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-24	05/29/01
Arsenic	EPA-6010	4.57	ug/g	SM-I-3F-5	05/25/01
Barium	EPA-6010	15.9	ug/g	SM-I-3F-5	05/25/01
Cadmium	EPA-6010	0.76	ug/g	SM-I-3F-5	05/25/01
Chromium	EPA-6010	3.96	ug/g	SM-I-3F-5	05/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESS060108
AES sample #: 010518AB08 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/18/01
Date sample received: 05/18/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	10.8	ug/g	SM-I-3F-5	05/25/01
Mercury	EPA-7471	0.02	ug/g	WB-PSR-18	05/22/01
Selenium	EPA-6010	<0.25	ug/g	SM-I-3F-5	05/25/01
Silver	EPA-6010	<1	ug/g	SM-I-3F-5	05/25/01
Aluminum	EPA-6010	1340	ug/g	SM-I-3F-5	05/25/01
Antimony	EPA-6010	<3	ug/g	SM-I-3F-5	05/25/01
Copper	EPA-6010	13.2	ug/g	SM-I-3F-5	05/25/01
Iron	EPA-6010	3530	ug/g	SM-I-3F-5	05/25/01
Nickel	EPA-6010	4.52	ug/g	SM-I-3F-5	05/25/01
Manganese	EPA-6010	166	ug/g	SM-I-3F-5	05/25/01
Vanadium	EPA-6010	4.25	ug/g	SM-I-3F-5	05/25/01
Zinc	EPA-6010	63.5	ug/g	SM-I-3F-5	05/25/01
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAH50	05/21/01

APPROVED BY: _____
Report date: 06/04/01

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CHAIN OF CUSTODY RECORD

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) EL
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EL
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010518AB01	MESS060101	5/18/01	850	(A) P	Soil		X	1	PAHs 8270 Cyanide 9012/335.3
AB02	MESS060102	5/18/01	910	(A) P	Soil		X	1	PAHs 8270 Cyanide 9012/335.3
AB03	MESS060103	5/18/01	918	(A) P	Soil		X	1	PAHs 8270 Cyanide 9012/335.3
AB04	MESS060104	5/18/01	932	(A) P	Soil		X	1	PAHs 8270 Cyanide 9012/335.3
AB05	MESS060105	5/18/01	1024	(A) P	Soil		X	1	PAHs 8270 Cyanide 9012/335.3
AB06	MESS060106	5/18/01	1050	A P	Soil		X	1	SEE BELOW
AB07	MESS060107	5/18/01	1100	A P	Soil		X	1	SEE BELOW
AB08	MESS060108	5/18/01	1112	A P	Soil		X	1	SEE BELOW
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special-Instructions/Remarks: Analyses for last 2 samples
- PAH 8270
- Total Phenols 9065/2420.1
- Cyanide 9012/335.3
- Metals 6010 series
- PCBs 8082

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 5/18/01 1420
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 5/18/01 2:20

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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JUN 20 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 #5
Disk

Report date: 06/19/01
Number of samples analyzed: 1
AES Project ID: 010531AE
Invoice #: 228392

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW00020131
AES sample #: 010531AE01 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/30/01
Date sample received: 05/31/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.3	ug/g	LS-Z-49	06/07/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	06/06/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	06/06/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01
Phenanthrene	EPA-8270	260 J	ug/kg	MT-CA-31	06/18/01
Anthracene	EPA-8270	47 J	ug/kg	MT-CA-31	06/18/01
Fluoranthene	EPA-8270	470 J	ug/kg	MT-CA-31	06/18/01
Pyrene	EPA-8270	470 J	ug/kg	MT-CA-31	06/18/01
Chrysene	EPA-8270	170 J	ug/kg	MT-CA-31	06/18/01
Benzo(b)fluoranthene	EPA-8270	370	ug/kg	MT-CA-31	06/18/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01
Benzo(a)pyrene	EPA-8270	180 J	ug/kg	MT-CA-31	06/18/01
Indeno(1,2,3-cd)pyrene	EPA-8270	83 J	ug/kg	MT-CA-31	06/18/01
Dibenzo(a,h)anthracene	EPA-8270	67 J	ug/kg	MT-CA-31	06/18/01
Benzo(g,h,i)perylene	EPA-8270	93 J	ug/kg	MT-CA-31	06/18/01
Benzo(a)anthracene	EPA-8270	170 J	ug/kg	MT-CA-31	06/18/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW00020131
AES sample #: 010531AE01 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/30/01
Date sample received: 05/31/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-31	06/18/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Acetone	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Chloroform	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW00020131
AES sample #: 010531AE01 Samples taken by: EL
MATRIX: Soil

Date Sampled: 05/30/01
Date sample received: 05/31/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Benzene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Bromoform	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BY-3	06/05/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Toluene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Styrene	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BY-3	06/05/01

APPROVED BY:
Report date: 06/19/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Erika Fujita	**Project Name (Location)** NYSEG - Mechanicville	**Samplers: (Names)** EL
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309T194 #5	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010531 AE01	MEMW00020131	5/30/01	1120	A	Soil		X	2	See below
				P					
				A					
				P					
				A					
				P					
				A					
				P					
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				A					
				P					

Rec'd by Lab: M.L 5/31/01 10:36

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs 8260
SVOCs (PAH 8270) (Phenols 9065/420.1)
Cyanide: Total 9012/335.3
Weak acid dissociable 4500I

Relinquished by: (Signature)	**Received by: (Signature)**	**Date/Time**
Relinquished by: (Signature)	**Received at Laboratory by:** B. Mullins	**Date/Time** 5/31/01 915

Temperature Ambient or (Chilled)
Notes:

Properly Preserved (Y) N
Notes:

Received Within Holding Times (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 06/21/01
Number of samples analyzed: 2
AES Project ID: 010606AS
Invoice #: 228632

CC: Disk

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120130
AES sample #: 010606AS01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Soil grab

Date Sampled: 06/04/01
Date sample received: 06/06/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-A-2	06/18/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	06/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	06/13/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Pyrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120130
AES sample #: 010606AS01
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 06/04/01
Date sample received: 06/06/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Chloromethane	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Bromomethane	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Chloroethane	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Acetone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Chloroform	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
2-Butanone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120130
AES sample #: 010606AS01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Soil grab
Date Sampled: 06/04/01
Date sample received: 06/06/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Benzene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Bromoform	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
2-Hexanone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Toluene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Styrene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Arsenic	EPA-6010	<0.25	ug/g	WB-I-4B-44	06/14/01
Barium	EPA-6010	32	ug/g	WB-I-4B-44	06/14/01
Cadmium	EPA-6010	<0.25	ug/g	WB-I-4B-44	06/14/01
Chromium	EPA-6010	14.5	ug/g	WB-I-4B-44	06/14/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW10120130
AES sample #: 010606AS01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Soil grab
Date Sampled: 06/04/01
Date sample received: 06/06/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	6.48	ug/g	WB-I-4B-44	06/14/01
Mercury	EPA-7471	0.031	ug/g	WB-PSR-32	06/12/01
Selenium	EPA-6010	<0.25	ug/g	WB-I-4B-44	06/14/01
Silver	EPA-6010	<1	ug/g	WB-I-4B-44	06/14/01
Aluminum	EPA-6010	7260	ug/g	WB-I-4B-44	06/14/01
Antimony	EPA-6010	<3	ug/g	WB-I-4B-44	06/14/01
Copper	EPA-6010	18	ug/g	WB-I-4B-44	06/14/01
Iron	EPA-6010	9150	ug/g	WB-I-4B-44	06/14/01
Nickel	EPA-6010	9.2	ug/g	WB-I-4B-44	06/14/01
Manganese	EPA-6010	205	ug/g	WB-I-4B-44	06/14/01
Vanadium	EPA-6010	9.8	ug/g	WB-I-4B-44	06/14/01
Zinc	EPA-6010	39	ug/g	WB-I-4B-44	06/14/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080132
AES sample #: 010606AS02 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Soil grab
Date Sampled: 06/04/01
Date sample received: 06/06/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-A-2	06/18/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-G	06/13/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-G	06/13/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Fluorene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Anthracene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Pyrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Chrysene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080132
AES sample #: 010606AS02 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Soil grab
Date Sampled: 06/04/01
Date sample received: 06/06/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CA-30	06/20/01
Chloromethane	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Bromomethane	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Chloroethane	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Methylene Chloride	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Acetone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Chloroform	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-EY-6	06/13/01
2-Butanone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080132
AES sample #: 010606AS02
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 06/04/01
Date sample received: 06/06/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Benzene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Bromoform	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
2-Hexanone	EPA-8260	<10	ug/kg	MG-BY-6	06/13/01
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Toluene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Chlorobenzene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Ethylbenzene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Styrene	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01
Xylenes,Total	EPA-8260	<5	ug/kg	MG-BY-6	06/13/01

APPROVED BY:
Report date: 06/21/01

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CHAIN OF CUSTODY RECORD

** HOLD TCLP SAMPLE **

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - Mechicville	Samplers: (Names) Eric Lovendusk:
Client Phone No: 688-0015	PO Number: 303097 194#5	Samplers: (Signature) EJL
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010606 AS01	MEMW10120130	6/4/01	1145	(A) P	S		x	3	VOCs/SVOCs/Cyanide Metals/TCLP (HOLD)
AS02	MEMW06080132	6/4/01	910	(A) P	S		x	2	VOCs/SVOCs/Cyanid
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To: ** HOLD ** →

Special Instructions/Remarks
VOCs 8260
SVOCs - (PAH 8270) (Phenols 9065/420.1)
Cyanide - (Total 9012/335.3) (weak acid dissociable 4500I)
Metals - 6010 (Al, An, Ar, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Silver, Vanadium, Zn)
TCLP - 1311 VOCs 8260 / SVOCs 8270 / Metals 6010 inc. 8 RCRA Metals

Relinquished by: (Signature) EJL Lovendusk:	Received by: (Signature) APID AS	Date/Time 6-6-01
Relinquished by: (Signature)	Received ofr Laboratory by: M.L	Date/Time 6/6/01 3 YO

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 07/03/01
Number of samples analyzed: 1
AES Project ID: 010621AB
Invoice #: 229243

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MESB14180145
AES sample #: 010621AB01 Samples taken by: CM
MATRIX: Soil

Date Sampled: 06/20/01
Date sample received: 06/21/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Petroleum Hydrocarbons	EPA-1664	<10	ug/g	JK-G-12	06/25/01
Petroleum Identification	NYS-DOH 310.14	Gasoline		TN-MIS-H47	06/25/01
Benzene	EPA-8021	2900	ug/kg	SO-A	06/22/01
Toluene	EPA-8021	19,000	ug/kg	SO-A	06/22/01
Ethylbenzene	EPA-8021	65,000	ug/kg	SO-A	06/22/01
Xylenes, Total	EPA-8021	350,000	ug/kg	SO-A	06/25/01
Methyl-t-Butyl Ether	EPA-8021	<2000	ug/kg	SO-A	06/22/01

APPROVED BY:
~~Report date:~~ 07/03/01

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Client Name:	Address:
URS	646 Plank Road Suite 202 Clifton Park, NY 12065
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	30309T194 #5	CM
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	NYSEG-Mechanicville.	E

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010621 AB01	MESB141B0145	6/20/01	1545	A (P)	S		X	2	BTEX plus MTBE 8021 Petroleum ID + TPH 311.10
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☐ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/21/01 1106
Relinquished by: (Signature)	**Received ofr Laboratory by:**	**Date/Time**
	M.L	6/21/01 1151

TEMPERATURE
Ambient or (Chilled)
Notes:

PROPERLY PRESERVED
(Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES
(Y) N
Notes:

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Report date: 07/31/01
Number of samples analyzed: 2
AES Project ID: 010718 I
Invoice #: 230259

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore G1 Date Sampled: 07/17/01
CLIENT'S SAMPLE ID: MEDS--0161 Date sample received: 07/18/01
AES sample #: 010718 I01 Samples taken by: EL/CM Location: NYSEG/M-Ville
MATRIX: Soil grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Reactivity	SW-846 Sec.7.3	Non	Reactive	MC-H	07/26/01
Cyanide	EPA-9012	<1	ug/g	MC-H	07/27/01
Sulfide	EPA-9034	12	ug/g	MC-J-8	07/25/01
TCLP Extraction (ZHE)	EPA-1311	Complete		JF-BY-21	07/26/01
Benzene - TCLP Extract	EPA-8260	<5	ug/l	JF-BY-21	07/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEDS--0162
AES sample #: 010718 I02
Samples taken by: EL/CM
MATRIX: Soil
Date Sampled: 07/17/01
Date sample received: 07/18/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Reactivity	SW-846 Sec.7.3	Non	Reactive	MC-H	07/26/01
Cyanide	EPA-9012	<1	ug/g	MC-H	07/27/01
Sulfide	EPA-9034	<10	ug/g	MC-J-8	07/25/01
TCLP Extraction (ZHE)	EPA-1311	Complete		JF-BY-21	07/26/01
Benzene - TCLP Extract	EPA-8260	<5	ug/l	JF-BY-21	07/27/01

APPROVED BY:
Report date: 07/31/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 PLANK RD. SUITE 202 CLIFTON PARK, NY 12065	TCLP: BXT-V
Send Report To: ERIKO FUJITA	Project Name (Location)	Samplers: (Names) CM/EL
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010718 I01	MEDS--01G1	7/17/01	1400	A (P)	S		X	1	Reactivity Total Benzene
I02	MEDS--01G2	7/17/01	1430	A (P)	S		X	1	Reactivity Total Benzene
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day WILL CALL - Normal

Special Instructions/Remarks:
55 GALLON DRUM SAMPLES
-Benzene Should Be TCLP Benzene
Per Eriko 7/18/01

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 7/18/01 915
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 7/18/01 10:40

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes: 5°C	Notes:	Notes:

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 #5

Report date: 08/08/01
Number of samples analyzed: 1
AES Project ID: 010726A0
Invoice #: 230660

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160120
AES sample #: 010726A001 Samples taken by: EJL
MATRIX: Soil

Date Sampled: 07/25/01
Date sample received: 07/26/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-A-9	08/06/01
Cyanide,Total	EPA-9012	<1	ug/g	PL-H	08/02/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	PL-H	08/02/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Fluorene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Anthracene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Fluoranthene	EPA-8270	470	ug/kg	MT-CB-2	08/01/01
Pyrene	EPA-8270	430	ug/kg	MT-CB-2	08/01/01
Chrysene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Benzo(b)fluoranthene	EPA-8270	370	ug/kg	MT-CB-2	08/01/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160120
AES sample #: 010726A001 Samples taken by: EJL
MATRIX: Soil

Date Sampled: 07/25/01
Date sample received: 07/26/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CB-2	08/01/01
Chloromethane	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Bromomethane	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Vinyl Chloride	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Chloroethane	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Methylene Chloride	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Acetone	EPA-8260	19	ug/kg	JF-BY-22	07/31/01
Carbon Disulfide	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Chloroform	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
2-Butanone	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Vinyl Acetate	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Bromodichloromethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160120
AES sample #: 010726A001 Samples taken by: EJL
MATRIX: Soil

Date Sampled: 07/25/01
Date sample received: 07/26/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Dibromochloromethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Benzene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Bromoform	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
2-Hexanone	EPA-8260	<10	ug/kg	JF-BY-22	07/31/01
Tetrachloroethene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Toluene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Chlorobenzene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Ethylbenzene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Styrene	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01
Xylenes,Total	EPA-8260	<5	ug/kg	JF-BY-22	07/31/01

APPROVED BY: Sara Debp
Report date: 08/08/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Erjko Fujita	Project Name (Location): NYSEG-Mechanicville	Samplers: (Names): EJL
Client Phone No: 688-0015	PO Number: 30309T194 #5	Samplers: (Signature): EJ Sowerwine
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010726	MEMW14160120	7/25/01	1446	A (P)	S	X		2	See Below
A001				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks: VOCs 8260
SVOCs: PAHs 8270
Total Phenols 9065/420.1
Cyanide: Total 9012/335.3
Weak acid dissociable 45001

Relinquished by: (Signature) Julian Hawley	Received by: (Signature) T. [illegible]	Date/Time 7/26/01 16:46
Relinquished by: (Signature)	Received for Laboratory by: Rebecca Natale	Date/Time 7-26-01 13:50

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194(#5)

Report date: 09/05/01
Number of samples analyzed: 1
AES Project ID: 010821 P
Invoice #: 231641

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW12140134
AES sample #: 010821 P01 Samples taken by: EL
MATRIX: Soil

Date Sampled: 08/20/01
Date sample received: 08/21/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.02	ug/g	LS-A-18	08/27/01
Cyanide,Total	EPA-9012	<1	ug/g	MC-H	08/29/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-H	08/29/01
Naphthalene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Acenaphthene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Fluorene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Phenanthrene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Anthracene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Fluoranthene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Pyrene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Chrysene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW12140134
AES sample #: 010821 P01
Samples taken by: EL
MATRIX: Soil
Date Sampled: 08/20/01
Date sample received: 08/21/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CB-8	08/22/01
Chloromethane	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Bromomethane	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Chloroethane	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Methylene Chloride	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Acetone	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Chloroform	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
2-Butanone	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW12140134
AES sample #: 010821 P01 Samples taken by: EL
MATRIX: Soil

Date Sampled: 08/20/01
Date sample received: 08/21/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Benzene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Bromoform	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
2-Hexanone	EPA-8260	<10	ug/kg	MG-BY-35	08/31/01
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Toluene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Chlorobenzene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Ethylbenzene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Styrene	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01
Xylenes,Total	EPA-8260	<5	ug/kg	MG-BY-35	08/31/01

APPROVED BY:
Report date: 09/05/01

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CHAIN OF CUSTODY RECORD

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG- Mechanicville	Samplers: (Names) EL
Client Phone No: 688-0015	PO Number: 303097194 (#5)	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010821 P01	MEMW12140134	8/20/01	830 (A) P	Soil		X	2	See Below
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs: 8260 ✓
SVOCs: PAH 8270 ✓
~~Phenols~~ Phenols 9065/420.1 ✓
Cyanide: total 9012/335.3 ✓
Weak acid Dissociable 4500I ✓

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 8/21/01 914
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 8/21/01 11:30

TEMPERATURE
Ambient or Chilled
Notes: 1°C

PROPERLY PRESERVED
(Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

2002
SOIL

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

RECEIVED
JUN 4 2002

Purchase Order #: 30309T194#5

Report date: 05/30/02
Number of samples analyzed: 2
AES Project ID: 020516AQ
Invoice #: 242121

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW08100201
AES sample #: 020516AQ01
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 05/15/02
Date sample received: 05/16/02
Location: M'Ville MGPSite
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-B-45	05/29/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-J	05/29/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-J	05/29/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Acetone	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Chloroform	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW08100201
AES sample #: 020516AQ01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 05/15/02
Date sample received: 05/16/02
Location: M'Ville MGPSite
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Benzene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Bromoform	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CA-20	05/23/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Toluene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Styrene	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CA-20	05/23/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW08100201
AES sample #: 020516AQ01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 05/15/02
Date sample received: 05/16/02
Location: M'Ville MGPSite
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-21	05/22/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEDS--028B
AES sample #: 020516AQ02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/16/02
Date sample received: 05/16/02
Location: M'Ville MGPSite
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	<0.5	ug/l	SO-C	05/16/02

APPROVED BY:
Report date: 05/30/02

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CHAIN OF CUSTODY RECORD

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Client Name:	Address:
URS	646 Plank Road Suite 202 Clifton Park, NY 12065
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	M'VILLE MGP SITE	Eric Lavenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30307T194 #5	EF

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020516AB01	MEMW081002.01	5/15/02	1613	A (P)	S		X	2	See Below
				A P					
AB02	MEDS--0268	5/16/02	0900	(A) P	W		X	2	TOTAL BENZENE 2 DAY TAT
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☒ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

TCL VOCs: 8260 ✓
PAH: 8270 ✓
Phenols: 9065/420.1 ✓
Cyanide: TOTAL - 9012/335.3 ✓
Weak acid dissociable SM 4500I ✓

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	APID	5-16-02
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M	5/16/02 10:00

Temperature: Ambient or (Chilled)
Notes:

Properly Preserved: (Y) N
Notes:

Received Within Holding Times: (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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JUN 11 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 06/07/02
Number of samples analyzed: 1
AES Project ID: 020524AE
Invoice #: 242501

ELAP ID#: 10709

AIHA ID#: 100307

Adirondack Environmental Services Inc.
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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080238
AES sample #: 020524AE01 Samples taken by: E. Lovenduski Location: M'Ville MGPSite
MATRIX: Soil grab

Date Sampled: 05/23/02
Date sample received: 05/24/02

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-B-46	06/04/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-J	05/21/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-J	06/04/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080238
AES sample #: 020524AE01
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 05/23/02
Date sample received: 05/24/02
Location: M'Ville MGPSite
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CA-24	06/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CA-24	06/04/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW06080238
AES sample #: 020524AE01 Samples taken by: E. Lovenduski Location: M'Ville MGPSite
MATRIX: Soil grab
Date Sampled: 05/23/02
Date sample received: 05/24/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-29	06/07/02

APPROVED BY: Lara Dick
Report date: 06/07/02

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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** M'VILLE MGP SITE	**Samplers: (Names)** Eric Lovendusky
Client Phone No: 688-0015	**PO Number:** 30309T1744#5	**Samplers: (Signature)** EJ Lovendusky
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020524RE01	MEMW06080238	5/23/02	1643	(P)	S		x	2	See Below
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
TCL VOC : 8260
PAH : 8270
Phenols : 9065/420.1
Cyanide: Total - 9012/335.3
Weak acid dissociable SM4500I

Relinquished by: (Signature) EJ Lovendusky	**Received by: (Signature)** APIS (AES)	**Date/Time** 5-24-02
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time** 5/24/02 4:3

TEMPERATURE
Ambient or (Chilled)
Notes:

PROPERLY PRESERVED
(Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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JUN 18 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 06/17/02
Number of samples analyzed: 1
AES Project ID: 020603AG
Invoice #: 242803

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180239
AES sample #: 020603AG01 Samples taken by: E. Lovenduski Location: M'Ville MGPSite
MATRIX: Soil grab
Date Sampled: 05/30/02
Date sample received: 06/03/02

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-Y-49	06/12/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-J	06/11/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-J	06/11/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Acetone	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Chloroform	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180239
AES sample #: 020603AG01 Samples taken by: E. Lovenduski Location: M'Ville MGPSite
MATRIX: Soil grab
Date Sampled: 05/30/02
Date sample received: 06/03/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Benzene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Bromoform	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CA-30	06/10/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Toluene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Styrene	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CA-30	06/10/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW16180239
AES sample #: 020603AG01 Samples taken by: E. Lovenduski Location: M'Ville MGPSite
MATRIX: Soil grab
Date Sampled: 05/30/02
Date sample received: 06/03/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-33	06/16/02

APPROVED BY: _____
Report date: 06/17/02

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CHAIN OF CUSTODY RECORD

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	M'VILLE MGP SITE	Eric Lovenduski
Client Phone No:	**PO Number:**	**Samplers: (Signature)**
Client Fax No:	30307194 #5	EJL

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020603A601	MEMW1B180239	5/30/02	1938	(A) P	S		x	2	See Below
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs 8260
PAH- 8270
Phenols 9065/420.1
Cyanide Total 9012/335.3
Weak acid dissociable SM4500.I

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski	RAPID (AB)	6-3-02
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M. L	6/3/02 1251

TEMPERATURE Ambient or (Chilled)
Notes:

PROPERLY PRESERVED (Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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JUN 19 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 06/18/02
Number of samples analyzed: 3
AES Project ID: 020604AC
Invoice #: 242865

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060236
AES sample #: 020604AC01 Samples taken by: E. Lovenduski Location: M'Ville
MATRIX: Soil grab

Date Sampled: 06/03/02
Date sample received: 06/04/02

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-Y-49	06/12/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-J	06/11/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-J	06/11/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Acetone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Chloroform	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060236
AES sample #: 020604AC01 Samples taken by: E. Lovenduski Location: M'Ville
MATRIX: Soil grab

Date Sampled: 06/03/02
Date sample received: 06/04/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Benzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromoform	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Toluene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Styrene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060236
AES sample #: 020604AC01 Samples taken by: E. Lovenduski Location: M'Ville
MATRIX: Soil grab
Date Sampled: 06/03/02
Date sample received: 06/04/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP 06/03/02
AES sample #: 020604AC02 Samples taken by: E. Lovenduski Location: M'Ville
MATRIX: Soil grab

Date Sampled: 06/03/02
Date sample received: 06/04/02

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-Y-49	06/12/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-J	06/11/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-J	06/11/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Acetone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Chloroform	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP 06/03/02
AES sample #: 020604AC02
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 06/03/02
Date sample received: 06/04/02
Location: M'Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Benzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromoform	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Toluene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Styrene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP 06/03/02
AES sample #: 020604AC02
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 06/03/02
Date sample received: 06/04/02
Location: M'Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060241
AES sample #: 020604AC03
Samples taken by: E. Lovenduski
MATRIX: Soil
Date Sampled: 06/04/02
Date sample received: 06/04/02
Location: M'Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-Y-49	06/12/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-J	06/11/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-J	06/11/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Acetone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Chloroform	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060241
AES sample #: 020604AC03 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 06/04/02
Date sample received: 06/04/02
Location: M'Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Benzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Bromoform	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CA-33	06/07/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Toluene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Styrene	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CA-33	06/07/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW04060241
AES sample #: 020604AC03 Samples taken by: E. Lovenduski Location: M'Ville
MATRIX: Soil grab
Date Sampled: 06/04/02
Date sample received: 06/04/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-34	06/17/02

APPROVED BY:
Report date: 06/18/02

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	M'VILLE	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309T194 #5	EJF

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020604 AC01	MEMW040602 36	6/3/02	1406	(P)	S		X	2	See Below
AC02	DUP 06/03/02	6/3/02	/	P	S		X	2	See Below
AC03	MEMW040602 41	6/4/02	1040	P	S		X	2	See Below
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

VOCs - 8260

PAH - 8270

Phenols 9065/420.1

Cyanide: TOTAL 9012/335.3; Weak acid dissociable SM4500I

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJF	(RDS)	6/4/02 1405
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		6/4/02 2:5

Temperature

Ambient or (Chilled)

Notes: _____

Properly Preserved

(Y) N

Notes: _____

Received Within Holding Times

(Y) N

Notes: _____

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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JUN 26 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 06/24/02
Number of samples analyzed: 1
AES Project ID: 020610 S
Invoice #: 243117

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160237
AES sample #: 020610 S01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 06/07/02
Date sample received: 06/10/02
Location: M'Ville MGPSite
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.1	ug/g	LS-B-48	06/13/02
Cyanide,Total	EPA-9012	<1	ug/g	MC-K	06/24/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1	ug/g	MC-K	06/24/02
Chloromethane	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Bromomethane	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Vinyl Chloride	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Chloroethane	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Methylene Chloride	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Acetone	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Carbon Disulfide	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
1,1-Dichloroethene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
1,1-Dichloroethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
1,2-Dichloroethene Total	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Chloroform	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
1,2 Dichloroethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
2-Butanone	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
1,1,1-Trichloroethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Carbon Tetrachloride	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Vinyl Acetate	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Bromodichloromethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160237
AES sample #: 020610 S01 Samples taken by: E. Lovenduski Location: M'Ville MGPSite
MATRIX: Soil grab

Date Sampled: 06/07/02
Date sample received: 06/10/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
trans-1,3-Dichloropropene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Trichloroethene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Dibromochloromethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
1,1,2-Trichloroethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Benzene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
cis-1,3-Dichloropropene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
2-Chloroethylvinylether	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Bromoform	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
4-Methyl-2-pentanone	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
2-Hexanone	EPA-8260	<400	ug/kg	MG-CA-33	06/20/02
Tetrachloroethene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
1,1,2,2-Tetrachloroethane	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Toluene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Chlorobenzene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Ethylbenzene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Styrene	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Xylenes,Total	EPA-8260	<200	ug/kg	MG-CA-33	06/20/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEMW14160237
AES sample #: 020610 S01 Samples taken by: E. Lovenduski
MATRIX: Soil

Date Sampled: 06/07/02
Date sample received: 06/10/02
Location: M'Ville MGPSite
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Fluorene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Anthracene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Pyrene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Chrysene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CD-36	06/22/02

The results for Volatile Organics have an elevated reporting level due to a high amount of hydrocarbons present in the sample.

APPROVED BY: Natasha Ko
Report date: 06/24/02

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314 North Pearl Street
Albany, New York 12207
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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 646 Plank Road Suite 202, Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** M'VILLE MGP site	**Samplers: (Names)** Eric Lovendusk;
Client Phone No: 688-0015	**PO Number:** 30309T1947#5	**Samplers: (Signature)** EJF
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020610501	MEMW1141602.37	6/7/02	858	(A) P	S		X	2	See Below
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

VOCs: 8260

PAH: 8270

Phenols: 9065/420.1

Cyanide: Total 9012/335.3 // Weak acid dissociable SM 4500 I

Relinquished by: (Signature) EJF	**Received by: (Signature)**	**Date/Time** 6/10/02 12:30
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time** 6/10/02 4:00

Temperature Ambient or (Chilled)

Notes:

Properly Preserved (Y) N

Notes:

Received Within Holding Times (Y) N

Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 08/01/02
Number of samples analyzed: 1
AES Project ID: 020726 U
Invoice #: 245042

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AUG 2 2002

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore SANDBAG-1
CLIENT'S SAMPLE ID: MESS00000201
AES sample #: 020726 U01 Samples taken by: EL/CM MATRIX: Soil

Date Sampled: 07/26/02
Date sample received: 07/26/02
Location: M-Ville/MGP grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
TCLP Extraction	EPA-1311	Complete		SO-A	07/30/02
Benzene-TCLP Extraction	EPA-8021	<0.5	ug/l	SO-A	07/30/02

APPROVED BY: Deborah Hess
Report date: 08/01/02

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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** M'VILLE MGP SITE	**Samplers: (Names)** CG
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)** EL/CM
Client Fax No: 688-0022	30309T/94#5	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020726	MESS00000201	7/26/02	A	S		x	1	TCLP Benzene
001			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					
			A					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☐ Normal

☐ 2 Day ☒ 5 Day

CC Report To:

Special Instructions/Remarks

Relinquished by: (Signature)	**Received by: (Signature)**	**Date/Time** 7/26/02 0750
Relinquished by: (Signature)	**Received at Laboratory by:**	**Date/Time** 7/26/02 1040

Temperature Ambient or (Chilled)

Notes: _____

Properly Preserved (Y) N

Notes: _____

Received Within Holding Times (Y) N

Notes: _____

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

2001
GROUNDWATER

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 #5

Report date: 06/14/01
Number of samples analyzed: 1
AES Project ID: 010612 V
Invoice #: 228825

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH0131
AES sample #: 010612 V01 Samples taken by: EL/CM
MATRIX: Water

Date Sampled: 06/12/01
Date sample received: 06/12/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.003	mg/l	LS-Z-50	06/13/01
Chloromethane	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Bromomethane	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Vinyl Chloride	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Chloroethane	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Methylene Chloride	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Acetone	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Carbon Disulfide	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,1-Dichloroethene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,1-Dichloroethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Chloroform	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,2 Dichloroethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
2-Butanone	EPA-624	<10	ug/l	MG-BY-5	06/13/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Carbon Tetrachloride	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Vinyl Acetate	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Bromodichloromethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,2-Dichloropropane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	MG-BY-5	06/13/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH0131
AES sample #: 010612 V01 Samples taken by: EL/CM
MATRIX: Water

Date Sampled: 06/12/01
Date sample received: 06/12/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Dibromochloromethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Benzene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Bromoform	EPA-624	<5	ug/l	MG-BY-5	06/13/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	MG-BY-5	06/13/01
2-Hexanone	EPA-624	<10	ug/l	MG-BY-5	06/13/01
Tetrachloroethene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Toluene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Chlorobenzene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Ethylbenzene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Styrene	EPA-624	<5	ug/l	MG-BY-5	06/13/01
Xylenes,Total	EPA-624	<5	ug/l	MG-BY-5	06/13/01

APPROVED BY: _____
Report date: 06/14/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Erika Fujita	**Project Name (Location)** NYSEG-Mechanicville	**Samplers: (Names)** EL/CM
Client Phone No: 688-0015	**PO Number:** 30309T194 #5	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
~~010612 V01~~	MEGUSH0131	6/12/01	0850	(A) P	W		X	3	VOCs 8260 Total Phenols 9065/420.1
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☐ Normal

☒ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
E/ Somerville	B Hallbom	6/13/01 11:45
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		6/13/01 1:12

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujtia

Purchase Order #: 30309T194 #5

Report date: 06/18/01
Number of samples analyzed: 1
AES Project ID: 010614 Q
Invoice #: 228947

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH0131
AES sample #: 010614 Q01 Samples taken by: EL/CM
MATRIX: Water

Date Sampled: 06/13/01
Date sample received: 06/14/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Cyanide,Total	EPA-335.2	<0.01	mg/l	MC-G	06/18/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-G	06/18/01
Naphthalene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Acenaphthene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Fluorene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Phenanthrene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Anthracene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Fluoranthene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Pyrene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Chrysene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CA-30	06/15/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CA-30	06/15/01

APPROVED BY: Christopher Ho
Report date: 06/18/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) EL/CM
Client Phone No: 688-0015	PO Number: 30309T194#5	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010614 G01	~~MK~~ MEGUSH0131	6/13/01	0830 ~~0815~~	A P	W		X	2	PAH 8270 Cyanide *
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☐ Normal

☒ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

* Cyanide TOTAL 9012/335.3

WEAK ACID DISSOCIABLE 4500I

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	B. Mason	6/14/01 925
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	M.L	6/14/01 11:15

Temperature: Ambient or (Chilled)

Notes:

Properly Preserved: (Y) N

Notes:

Received Within Holding Times: (Y) N

Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 10/04/01
Number of samples analyzed: 7
AES Project ID: 010919BE
Invoice #: 232844

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8602
AES sample #: 010919BE01 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-27	10/01/01
Cyanide,Total	EPA-335.3	0.02	mg/l	MC-H	10/02/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/03/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8602
AES sample #: 010919BE01 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8602
AES sample #: 010919BE01 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluorene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Chrysene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium	EPA-200.7	0.17	mg/l	KH-I-3F-91	09/25/01
Cadmium	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Chromium	EPA-200.7	0.016	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8602
AES sample #: 010919BE01 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-3F-91	09/25/01
Aluminum	EPA-200.7	0.4	mg/l	KH-I-3F-91	09/25/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-3F-91	09/25/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Iron	EPA-200.7	1.13	mg/l	KH-I-3F-91	09/25/01
Nickel	EPA-200.7	0.17	mg/l	KH-I-3F-91	09/25/01
Manganese	EPA-200.7	4.31	mg/l	KH-I-3F-91	09/25/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Zinc	EPA-200.7	0.05	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0102
AES sample #: 010919BE02 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-27	10/01/01
Cyanide,Total	EPA-335.3	0.05	mg/l	MC-H	10/02/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/03/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0102
AES sample #: 010919BE02
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0102
AES sample #: 010919BE02 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluorene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Chrysene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium	EPA-200.7	0.16	mg/l	KH-I-3F-91	09/25/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0102
AES sample #: 010919BE02 Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-3F-91	09/25/01
Aluminum	EPA-200.7	0.2	mg/l	KH-I-3F-91	09/25/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-3F-91	09/25/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Iron	EPA-200.7	0.43	mg/l	KH-I-3F-91	09/25/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Manganese	EPA-200.7	0.40	mg/l	KH-I-3F-91	09/25/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Zinc	EPA-200.7	<0.01	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010917
AES sample #: 010919BE03 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010917
AES sample #: 010919BE03
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane		EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane		EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether		EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform		EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone		EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone		EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane		EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene		EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total		EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0119
AES sample #: 010919BE04 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.002	mg/l	LS-A-27	10/01/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	09/28/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/20/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0119
AES sample #: 010919BE04 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0119
AES sample #: 010919BE04 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluorene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Chrysene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium	EPA-200.7	0.03	mg/l	KH-I-3F-91	09/25/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUIM0119
AES sample #: 010919BE04
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-3F-91	09/25/01
Aluminum	EPA-200.7	0.1	mg/l	KH-I-3F-91	09/25/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-3F-91	09/25/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Iron	EPA-200.7	1.78	mg/l	KH-I-3F-91	09/25/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Manganese	EPA-200.7	0.05	mg/l	KH-I-3F-91	09/25/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Zinc	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8711
AES sample #: 010919BE05 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-27	10/01/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	09/28/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/20/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8711
AES sample #: 010919BE05 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8711
AES sample #: 010919BE05 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluorene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Chrysene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium	EPA-200.7	0.35	mg/l	SM-I-3F-91	09/25/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-91	09/25/01
Chromium	EPA-200.7	0.092	mg/l	SM-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8711
AES sample #: 010919BE05
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	SM-I-3F-91	09/25/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-91	09/25/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-91	09/25/01
Aluminum	EPA-200.7	0.3	mg/l	SM-I-3F-91	09/25/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-91	09/25/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-91	09/25/01
Iron	EPA-200.7	0.43	mg/l	SM-I-3F-91	09/25/01
Nickel	EPA-200.7	0.25	mg/l	SM-I-3F-91	09/25/01
Manganese	EPA-200.7	4.85	mg/l	SM-I-3F-91	09/25/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-91	09/25/01
Zinc	EPA-200.7	1.06	mg/l	SM-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: Dup-09/19/01
AES sample #: 010919BE06
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-27	10/01/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	09/28/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/20/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: Dup-09/19/01
AES sample #: 010919BE06
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: Dup-09/19/01
AES sample #: 010919BE06
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluorene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Chrysene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium	EPA-200.7	0.42	mg/l	KH-I-3F-91	09/25/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Chromium	EPA-200.7	0.092	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: Dup-09/19/01
AES sample #: 010919BE06
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-3F-91	09/25/01
Aluminum	EPA-200.7	0.4	mg/l	KH-I-3F-91	09/25/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-3F-91	09/25/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Iron	EPA-200.7	0.43	mg/l	KH-I-3F-91	09/25/01
Nickel	EPA-200.7	0.35	mg/l	KH-I-3F-91	09/25/01
Manganese	EPA-200.7	5.19	mg/l	KH-I-3F-91	09/25/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Zinc	EPA-200.7	1.50	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8701
AES sample #: 010919BE07 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-27	10/01/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/02/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/20/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8701
AES sample #: 010919BE07 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8701
AES sample #: 010919BE07 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 09/17/01
Date sample received: 09/19/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluorene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Chrysene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-18	09/25/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium	EPA-200.7	0.31	mg/l	KH-I-3F-91	09/25/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Chromium	EPA-200.7	4.83	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8701
AES sample #: 010919BE07 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-3F-91	09/25/01
Aluminum	EPA-200.7	0.1	mg/l	KH-I-3F-91	09/25/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-3F-91	09/25/01
Copper	EPA-200.7	0.18	mg/l	KH-I-3F-91	09/25/01
Iron	EPA-200.7	38	mg/l	KH-I-3F-91	09/25/01
Nickel	EPA-200.7	0.88	mg/l	KH-I-3F-91	09/25/01
Manganese	EPA-200.7	2.88	mg/l	KH-I-3F-91	09/25/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Zinc	EPA-200.7	0.04	mg/l	KH-I-3F-91	09/25/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	KH-I-3F-91	09/25/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	KH-I-3F-91	09/25/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Barium-Filtered	EPA-200.7	0.04	mg/l	KH-I-3F-91	09/25/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Chromium-Filtered	EPA-200.7	0.019	mg/l	KH-I-3F-91	09/25/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Iron-Filtered	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH8701
AES sample #: 010919BE07 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 09/17/01
Date sample received: 09/19/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Manganese-Filtered	EPA-200.7	0.08	mg/l	KH-I-3F-91	09/25/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-15	09/20/01
Nickel-Filtered	EPA-200.7	0.07	mg/l	KH-I-3F-91	09/25/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-3F-91	09/25/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I-3F-91	09/25/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	KH-I-3F-91	09/25/01
Zinc-Filtered	EPA-200.7	0.01	mg/l	KH-I-3F-91	09/25/01

APPROVED BY: Lara Wolf
Report date: 10/04/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
URS	646 Plank Rd. Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	NYSEG-Mechanicville	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309719495	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010919 BE01	MEGUSH8602	9/17/01	1420	(A) P	W		X	6	See Below
BE02	MEGUIM0102	9/18/01	1200	(A) P	W		X	6	See Below
BE03	TB 010917	9/17/01	—	A (P)	TB			1	VOCs 8260
BE04	MEGUIM0119	9/19/01	0935	(A) P	W		X	6	See Below
BE05	MEGUSH8711	9/19/01	1315	A (P)	W		X	6	See Below
~~BE05~~	~~MEGUSH8601~~			A P				~~7~~	
BE06	DUP-09/19/01	9/19/01	/	A P	W		X	6	See Below
BE07	MEGUSH8701	9/19/01	1428	A (P)	W		X	7	See Below + Filtered Metals
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks VOCs (TCL): 8260
PAH: 8270
PHENOLS: 9065/420.1
Cyanide: total (9012/335.3) Weak acid dissociable (SM4500 I)
Metals: 6010 series

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
E Lovenduski		9/19/01 1530
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		9/19/01 4:10

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes: 6 °C	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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OCT 04 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 10/03/01
Number of samples analyzed: 2
AES Project ID: 010921AM
Invoice #: 232966

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0129
AES sample #: 010921AM01 Samples taken by: E. Lovenduski Location: NYSEG M-Ville
MATRIX: Water grab

Date Sampled: 09/21/01
Date sample received: 09/21/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.006	mg/l	LS-A-28	10/01/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	09/28/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/28/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	10	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0129
AES sample #: 010921AM01 Samples taken by: E. Lovenduski Location: NYSEG M-Ville
MATRIX: Water grab
Date Sampled: 09/21/01
Date sample received: 09/21/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-17	09/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0129
AES sample #: 010921AM01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/21/01
Date sample received: 09/21/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Fluorene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Anthracene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Pyrene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Chrysene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-17	09/24/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-3F-92	09/26/01
Barium	EPA-200.7	0.26	mg/l	KH-I-3F-92	09/26/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-3F-92	09/26/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I-3F-92	09/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0129
AES sample #: 010921AM01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/21/01
Date sample received: 09/21/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-3F-92	09/26/01
Mercury	EPA-245.1	<0.0002	mg/l	SM-FAO-18	09/25/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-3F-92	09/26/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-3F-92	09/26/01
Aluminum	EPA-200.7	0.3	mg/l	KH-I-3F-92	09/26/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-3F-92	09/26/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-3F-92	09/26/01
Iron	EPA-200.7	11	mg/l	KH-I-3F-92	09/26/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I-3F-92	09/26/01
Manganese	EPA-200.7	0.09	mg/l	KH-I-3F-92	09/26/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-3F-92	09/26/01
Zinc	EPA-200.7	0.05	mg/l	KH-I-3F-92	09/26/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010921
AES sample #: 010921AM02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/21/01
Date sample received: 09/21/01
Location: NYSEG M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Acetone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chloroform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010921
AES sample #: 010921AM02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/21/01
Date sample received: 09/21/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Benzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Bromoform	EPA-624	<5	ug/l	JF-BY-44	09/25/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-44	09/25/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Toluene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Styrene	EPA-624	<5	ug/l	JF-BY-44	09/25/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-44	09/25/01

APPROVED BY: Laura Dell
Report date: 10/03/01

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Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road, Suite 202 Clifton Park, NY 12065	
Send Report To: Erika Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) Eric Lovendushi
Client Phone No: 688-0015	PO Number: 30309T194 #5	Samplers: (Signature) EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010921 AM01	MEGDD0129	9/21/01	754 (A) P	W		X	6	See Below
AM02	TB 010921	9/21/01	/ A P	TB		X	1	TCL VOCs 8260
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks TCL VOCs - 8260 ✓
PAH: 8270 ✓
Phenols: 9065/420.1 ✓
Cyanide: Total (9012/335.3) Weak acid dissociable (SM450CE)
Metals: 6010 Series ✓

Relinquished by: (Signature) E. Lovendushi	Received by: (Signature) E. Mullins	Date/Time 9/21/01 1230
Relinquished by: (Signature)	Received for Laboratory by: M. L	Date/Time 9/21/01 208

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled) 7°C	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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OCT 10 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 10/09/01
Number of samples analyzed: 4
AES Project ID: 010925AB
Invoice #: 233063

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore MW-32D 9/24/01 Date Sampled: 09/24/01
CLIENT'S SAMPLE ID: MEGDD0132 Date sample received: 09/25/01
AES sample #: 010925AB01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.016	mg/l	LS-A-30	10/04/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/28/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Acetone	EPA-624	21	ug/l	JF-BY-45	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chloroform	EPA-624	15	ug/l	JF-BY-45	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Butanone	EPA-624	46	ug/l	JF-BY-45	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0132
AES sample #: 010925AB01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/24/01
Date sample received: 09/25/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Benzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-45	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-20	10/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0132
AES sample #: 010925AB01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/24/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Fluorene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Chrysene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Barium	EPA-200.7	1.81	mg/l	SM-I-3F-95	10/01/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Chromium	EPA-200.7	0.008	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0132
AES sample #: 010925AB01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/24/01
Date sample received: 09/25/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-20	09/27/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-95	10/01/01
Aluminum	EPA-200.7	3.2	mg/l	SM-I-3F-95	10/01/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-95	10/01/01
Copper	EPA-200.7	0.07	mg/l	SM-I-3F-95	10/01/01
Iron	EPA-200.7	14.4	mg/l	SM-I-3F-95	10/01/01
Nickel	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Manganese	EPA-200.7	0.44	mg/l	SM-I-3F-95	10/01/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Zinc	EPA-200.7	0.03	mg/l	SM-I-3F-95	10/01/01
Aluminum-Filtered	EPA-200.7	1.2	mg/l	SM-I-3F-95	10/01/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	SM-I-3F-95	10/01/01
Arsenic-Filtered	EPA-200.7	<0.0005	mg/l	SM-I-3F-95	10/01/01
Barium-Filtered	EPA-200.7	1.27	mg/l	SM-I-3F-95	10/01/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Iron-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0132
AES sample #: 010925AB01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/24/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Manganese-Filtered	EPA-200.7	<0.02	mg/l	SM-I-3F-95	10/01/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-20	09/27/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	SM-I-3F-95	10/01/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Zinc-Filtered	EPA-200.7	0.04	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0121 MW-21D 9/25/01
AES sample #: 010925AB02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.005	mg/l	LS-A-30	10/04/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/28/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chloroform	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0121
AES sample #: 010925AB02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Benzene	EPA-624	67	ug/l	JF-BY-45	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-45	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chlorobenzene	EPA-624	15	ug/l	JF-BY-45	09/28/01
Ethylbenzene	EPA-624	14	ug/l	JF-BY-45	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Xylenes,Total	EPA-624	8.0	ug/l	JF-BY-45	09/28/01
Naphthalene	EPA-625	12	ug/l	MT-CB-20	10/02/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-20	10/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0121
AES sample #: 010925AB02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Fluorene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Chrysene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
2-Methylnaphthalene	EPA-625	1.0 J	ug/l	MT-CB-20	10/02/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Barium	EPA-200.7	0.27	mg/l	SM-I-3F-95	10/01/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Chromium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0121
AES sample #: 010925AB02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-20	09/27/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-95	10/01/01
Aluminum	EPA-200.7	0.1	mg/l	SM-I-3F-95	10/01/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-95	10/01/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Iron	EPA-200.7	9.61	mg/l	SM-I-3F-95	10/01/01
Nickel	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Manganese	EPA-200.7	0.15	mg/l	SM-I-3F-95	10/01/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Zinc	EPA-200.7	<0.01	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0121 MW-21S 9/25/01
AES sample #: 010925AB03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.024	mg/l	LS-A-30	10/04/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/28/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chloroform	EPA-624	11	ug/l	JF-BY-45	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0121
AES sample #: 010925AB03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Benzene	EPA-624	4.0 J	ug/l	JF-BY-45	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-45	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Toluene	EPA-624	5.0	ug/l	JF-BY-45	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Ethylbenzene	EPA-624	3.0 J	ug/l	JF-BY-45	09/28/01
Styrene	EPA-624	2.0 J	ug/l	JF-BY-45	09/28/01
Xylenes,Total	EPA-624	18	ug/l	JF-BY-45	09/28/01
Naphthalene	EPA-625	200	ug/l	MT-CB-20	10/02/01
Acenaphthylene	EPA-625	2.0 J	ug/l	MT-CB-20	10/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0121
AES sample #: 010925AB03 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	12	ug/l	MT-CB-20	10/02/01
Fluorene	EPA-625	1.7 J	ug/l	MT-CB-20	10/02/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Chrysene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-20	10/02/01
2-Methylnaphthalene	EPA-625	50	ug/l	MT-CB-20	10/02/01
Dibenzofuran	EPA-625	1.2 J	ug/l	MT-CB-20	10/02/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Barium	EPA-200.7	0.09	mg/l	SM-I-3F-95	10/01/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Chromium	EPA-200.7	0.006	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0121
AES sample #: 010925AB03 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/25/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-20	09/27/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-95	10/01/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-95	10/01/01
Aluminum	EPA-200.7	0.4	mg/l	SM-I-3F-95	10/01/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-95	10/01/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Iron	EPA-200.7	0.22	mg/l	SM-I-3F-95	10/01/01
Nickel	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Manganese	EPA-200.7	0.85	mg/l	SM-I-3F-95	10/01/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-95	10/01/01
Zinc	EPA-200.7	0.07	mg/l	SM-I-3F-95	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010925
AES sample #: 010925AB04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/21/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chloroform	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010925
AES sample #: 010925AB04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/21/01
Date sample received: 09/25/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Benzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-45	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-45	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-45	09/28/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-45	09/28/01

APPROVED BY: Laura Dunk
Report date: 10/09/01

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CHAIN OF CUSTODY RECORD

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erica Fujita	NYSEG - Mechanicville	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:** 303097194 #5	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010925 AB01	MEGDD0132	9/24/01	1000	(A) P	W		X	7	See Below plus Filtered Metals
AB02	MEGDD0121	9/25/01	729	(A) P	W		X	6	See Below
AB03	MEGDSH0121	9/25/01	800	(A) P	W		X	6	See Below
AB04	TB 010925	9/25/01	-	A P	TB			1	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

TCL VOCs - 8260
PAH - 8270
PHENOLS - 9065/420.1
Cyanide - Total (9012/335.3) Weak acid dissociable (SM4500I)
Metals - 6010 series

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9/25/01 1300
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M. L	9/25/01 1500

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled) 6°C	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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OCT 11 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 10/10/01
Number of samples analyzed: 2
AES Project ID: 010926BE
Invoice #: 233145

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore MW-14D 9/26/01 Date Sampled: 09/26/01
CLIENT'S SAMPLE ID: MEGDD0114 Date sample received: 09/26/01
AES sample #: 010926BE01 Samples taken by: E. Lovenduski Location: NYSEG M-Ville
MATRIX: Water grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	0.004	mg/l	LS-A-31	10/09/01
Cyanide,Total	EPA-9012	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	09/28/01
Chloromethane	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Bromomethane	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Vinyl Chloride	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Chloroethane	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Methylene Chloride	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Acetone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Carbon Disulfide	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1-Dichloroethene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1-Dichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Chloroform	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,2 Dichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
2-Butanone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Carbon Tetrachloride	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Vinyl Acetate	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Bromodichloromethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0114
AES sample #: 010926BE01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/26/01
Date sample received: 09/26/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Trichloroethene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Dibromochloromethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Benzene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
2-Chloroethylvinylether	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Bromoform	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
2-Hexanone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Tetrachloroethene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Toluene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Chlorobenzene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Ethylbenzene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Styrene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Xylenes,Total	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Naphthalene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Acenaphthylene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0114
AES sample #: 010926BE01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/26/01
Date sample received: 09/26/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Fluorene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Phenanthrene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Anthracene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Fluoranthene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Pyrene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Chrysene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Benzo(b)fluoranthene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Benzo(k)fluoranthene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Benzo(a)pyrene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Indeno(1,2,3-cd)pyrene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Dibenzo(a,h)anthracene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Benzo(g,h,i)perylene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Benzo(a)anthracene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
2-Methylnaphthalene	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Dibenzofuran	EPA-8270	<10	ug/l	MT-CB-22	10/03/01
Arsenic	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Barium	EPA-6010	1.15	mg/l	SM-I-3F-96	10/02/01
Cadmium	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Chromium	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0114
AES sample #: 010926BE01 Samples taken by: E. Lovenduski Location: NYSEG M-Ville
MATRIX: Water grab
Date Sampled: 09/26/01
Date sample received: 09/26/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-6010	0.022	mg/l	SM-I-3F-96	10/02/01
Mercury	EPA-7471	<0.0004	mg/l	SM-FAO-20	09/27/01
Selenium	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Silver	EPA-6010	<0.02	mg/l	SM-I-3F-96	10/02/01
Aluminum	EPA-6010	2.3	mg/l	SM-I-3F-96	10/02/01
Antimony	EPA-6010	<0.06	mg/l	SM-I-3F-96	10/02/01
Copper	EPA-6010	0.08	mg/l	SM-I-3F-96	10/02/01
Iron	EPA-6010	11.6	mg/l	SM-I-3F-96	10/02/01
Nickel	EPA-6010	<0.05	mg/l	SM-I-3F-96	10/02/01
Manganese	EPA-6010	0.26	mg/l	SM-I-3F-96	10/02/01
Vanadium	EPA-6010	<0.05	mg/l	SM-I-3F-96	10/02/01
Zinc	EPA-6010	0.05	mg/l	SM-I-3F-96	10/02/01
Aluminum-Filtered	EPA-6010	<0.1 –	mg/l	SM-I-3F-96	10/02/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	SM-I-3F-96	10/02/01
Arsenic-Filtered	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Barium-Filtered	EPA-200.7	0.70	mg/l	SM-I-3F-96	10/02/01
Cadmium-Filtered	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Chromium-Filtered	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Copper-Filtered	EPA-6010	<0.05	mg/l	SM-I-3F-96	10/02/01
Iron-Filtered	EPA-6010	<0.05	mg/l	SM-I-3F-96	10/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0114
AES sample #: 010926BE01 Samples taken by: E. Lovenduski Location: NYSEG M-Ville
MATRIX: Water grab
Date Sampled: 09/26/01
Date sample received: 09/26/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-6010	<0.005	mg/l	SM-I-3F-96	10/02/01
Manganese-Filtered	EPA-200.7	0.03	mg/l	SM-I-3F-96	10/02/01
Mercury-Filtered	EPA-7470	<0.0004	mg/l	SM-FAO-20	09/27/01
Nickel-Filtered	EPA-6010	<0.05	mg/l	SM-I-3F-96	10/02/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-96	10/02/01
Silver-Filtered	EPA-6010	<0.02	mg/l	SM-I-3F-96	10/02/01
Vanadium-Filtered	EPA-6010	<0.05	mg/l	SM-I-3F-96	10/02/01
Zinc-Filtered	EPA-6010	0.01	mg/l	SM-I-3F-96	10/02/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010926
AES sample #: 010926BE02 Samples taken by: E. Lovenduski Location: NYSEG M-Ville
MATRIX: Water grab
Date Sampled: 09/26/01
Date sample received: 09/26/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Bromomethane	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Vinyl Chloride	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Chloroethane	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Methylene Chloride	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Acetone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Carbon Disulfide	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1-Dichloroethene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1-Dichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,2-Dichloroethene Total	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Chloroform	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,2 Dichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
2-Butanone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
1,1,1-Trichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Carbon Tetrachloride	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Vinyl Acetate	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Bromodichloromethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,2-Dichloropropane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
trans-1,3-Dichloropropene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Trichloroethene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010926
AES sample #: 010926BE02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/26/01
Date sample received: 09/26/01
Location: NYSEG M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1,2-Trichloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Benzene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
cis-1,3-Dichloropropene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
2-Chloroethylvinylether	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Bromoform	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
4-Methyl-2-pentanone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
2-Hexanone	EPA-8260	<10	ug/l	MG-BY-45	09/28/01
Tetrachloroethene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Toluene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Chlorobenzene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Ethylbenzene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Styrene	EPA-8260	<5	ug/l	MG-BY-45	09/28/01
Xylenes,Total	EPA-8260	<5	ug/l	MG-BY-45	09/28/01

APPROVED BY: Laura Dell
Report date: 10/10/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	NYSEG - Mechanicville	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	303097194 #5	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010926 BE01	MEGDD0114	9/26/01	1105	(A) P	W		X	7	See Below
BE02	TB 010926	9/26/01	—	A P	TB			1	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks TCL VOCs 8260
PAH: 8270
Phenols: 9065/420.1
Cyanide: Total (9012/335.3) Weak acid dissociable (SM4500I)
Metals: 6010 Series
Field ~~Meta~~ Filtered Metals: 6010 series

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9/26/01 1441
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M.L	9/26/01 1400

Temperature Ambient or Chilled
Notes: 5°

Properly Preserved Y N
Notes:

Received Within Holding Times Y N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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OCT 15 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 10/12/01
Number of samples analyzed: 3
AES Project ID: 010928AU
Invoice #: 233266

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0117
AES sample #: 010928AU01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab

Date Sampled: 09/28/01
Date sample received: 09/28/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.003	mg/l	LS-A-32	10/11/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/04/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Acetone	EPA-624	19	ug/l	JF-BY-46	10/01/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Chloroform	EPA-624	1.0 J	ug/l	JF-BY-46	10/01/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0117
AES sample #: 010928AU01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/28/01
Date sample received: 09/28/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Benzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	10/01/01
4-Methyl-2-pentanone	EPA-624	1.0 J	ug/l	JF-BY-46	10/01/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1,2,2-Tetrachloroethane	EPA-624	2.0 J	ug/l	JF-BY-46	10/01/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0117
AES sample #: 010928AU01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/28/01
Date sample received: 09/28/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluorene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Chrysene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Barium	EPA-200.7	0.35	mg/l	SM-I-3F-99	10/05/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Chromium	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0117
AES sample #: 010928AU01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/28/01
Date sample received: 09/28/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-22	10/02/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-99	10/05/01
Aluminum	EPA-200.7	0.3	mg/l	SM-I-3F-99	10/05/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-99	10/05/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Iron	EPA-200.7	5.48	mg/l	SM-I-3F-99	10/05/01
Nickel	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Manganese	EPA-200.7	5.66	mg/l	SM-I-3F-99	10/05/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Zinc	EPA-200.7	<0.01	mg/l	SM-I-3F-99	10/05/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	SM-I-3F-99	10/05/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	SM-I-3F-99	10/05/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Barium-Filtered	EPA-200.7	0.41	mg/l	SM-I-3F-99	10/05/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Iron-Filtered	EPA-200.7	2.05	mg/l	SM-I-3F-99	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0117
AES sample #: 010928AU01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/28/01
Date sample received: 09/28/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Manganese-Filtered	EPA-200.7	5.38	mg/l	SM-I-3F-99	10/05/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-22	10/02/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	SM-I-3F-99	10/05/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Zinc-Filtered	EPA-200.7	0.02	mg/l	SM-I-3F-99	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0123
AES sample #: 010928AU02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/27/01
Date sample received: 09/28/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.031	mg/l	LS-A-32	10/11/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/04/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Acetone	EPA-624	16	ug/l	JF-BY-46	10/01/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Chloroform	EPA-624	9.0	ug/l	JF-BY-46	10/01/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0123
AES sample #: 010928AU02 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/28/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Benzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	10/01/01
4-Methyl-2-pentanone	EPA-624	2.0 J	ug/l	JF-BY-46	10/01/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1,2,2-Tetrachloroethane	EPA-624	1.0 J	ug/l	JF-BY-46	10/01/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Zinc	EPA-200.7	0.06	mg/l	SM-I-3F-99	10/05/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0123
AES sample #: 010928AU02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/27/01
Date sample received: 09/28/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Arsenic		EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Barium		EPA-200.7	5.59	mg/l	SM-I-3F-99	10/05/01
Cadmium		EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Chromium		EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Lead		EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Mercury		EPA-245.1	<0.0004	mg/l	SM-FAO-22	10/02/01
Selenium		EPA-200.7	<0.005	mg/l	SM-I-3F-99	10/05/01
Silver		EPA-200.7	<0.02	mg/l	SM-I-3F-99	10/05/01
Aluminum		EPA-200.7	1.5	mg/l	SM-I-3F-99	10/05/01
Antimony		EPA-200.7	<0.06	mg/l	SM-I-3F-99	10/05/01
Copper		EPA-200.7	<0.05	mg/l	SM-I-3F-99	10/05/01
Iron		EPA-200.7	51.2	mg/l	SM-I-3F-99	10/05/01
Nickel		EPA-200.7	0.06	mg/l	SM-I-3F-99	10/05/01
Manganese		EPA-200.7	6.11	mg/l	SM-I-3F-99	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010928
AES sample #: 010928AU03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/28/01
Date sample received: 09/28/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Acetone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Chloroform	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010928
AES sample #: 010928AU03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/28/01
Date sample received: 09/28/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Benzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	10/01/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	10/01/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	10/01/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-46	10/01/01

APPROVED BY:
Report date: 10/12/01

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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) Eric Lovendusky
Client Phone No: 518-688-0015	PO Number: 30309T194 #5	Samplers: (Signature)
Client Fax No: 518-688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010928 AU01	MEGDIM0117	9/28/01	0930	(A) P	W		X	7	See Below
AU02	MEGDD0123	9/27/01	0830	A P	W		X	5	TCL VOCs 8260 Phenols 9065/420.1 Metals 6010 Cyanide: Total 9012/335.3 Weak Acid Diss. SM4500
AU03	TB 010928	9/26/01	/	A P	TB			1	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

TCL VOCs: 8260
PAH: 8270
Phenols: 9065/420.1
Cyanide: Total (9012/335.3) Weak acid dissociable (SM4500I)
Metals: 6010
Field Filtered Metals: 6010

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
E Lovendusky	T. [illegible]	9/28/01 1433
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	[illegible]	9/28/01 3:30

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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OCT 15 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 10/12/01
Number of samples analyzed: 4
AES Project ID: 010927BB
Invoice #: 233215

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0110
AES sample #: 010927BB01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-31	10/09/01
Cyanide,Total	EPA-335.3	0.13	mg/l	MC-H	10/11/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chloroform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0110
AES sample #: 010927BB01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Benzene	EPA-624	2.0 J	ug/l	JF-BY-46	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Ethylbenzene	EPA-624	2.0 J	ug/l	JF-BY-46	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Xylenes,Total	EPA-624	3.0 J	ug/l	JF-BY-46	09/28/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0110
AES sample #: 010927BB01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluorene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Chrysene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Barium	EPA-200.7	0.17	mg/l	SM-I-3F-97	10/03/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Chromium	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0110
AES sample #: 010927BB01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-22	10/01/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-97	10/03/01
Aluminum	EPA-200.7	<0.1	mg/l	SM-I-3F-97	10/03/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-97	10/03/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Iron	EPA-200.7	7.79	mg/l	SM-I-3F-97	10/03/01
Nickel	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Manganese	EPA-200.7	0.3	mg/l	SM-I-3F-97	10/03/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Zinc	EPA-200.7	<0.01	mg/l	SM-I-3F-97	10/03/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	SM-I-3F-97	10/03/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	SM-I-3F-97	10/03/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Barium-Filtered	EPA-200.7	0.18	mg/l	SM-I-3F-97	10/03/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Iron-Filtered	EPA-200.7	2.63	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0110
AES sample #: 010927BB01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Manganese-Filtered	EPA-200.7	0.36	mg/l	SM-I-3F-97	10/03/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-22	10/01/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	SM-I-3F-97	10/03/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Zinc-Filtered	EPA-200.7	<0.01	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH9317
AES sample #: 010927BB02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-31	10/09/01
Cyanide,Total	EPA-335.3	0.06	mg/l	MC-H	10/11/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chloroform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH9317
AES sample #: 010927BB02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Benzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH9317
AES sample #: 010927BB02 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluorene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Chrysene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Barium	EPA-200.7	0.16	mg/l	SM-I-3F-97	10/03/01
Cadmium	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Chromium	EPA-200.7	0.517	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH9317
AES sample #: 010927BB02 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	0.041	mg/l	SM-I-3F-97	10/03/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-22	10/01/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-97	10/03/01
Aluminum	EPA-200.7	1.4	mg/l	SM-I-3F-97	10/03/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-97	10/03/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Iron	EPA-200.7	8.55	mg/l	SM-I-3F-97	10/03/01
Nickel	EPA-200.7	0.07	mg/l	SM-I-3F-97	10/03/01
Manganese	EPA-200.7	0.28	mg/l	SM-I-3F-97	10/03/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Zinc	EPA-200.7	0.04	mg/l	SM-I-3F-97	10/03/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	SM-I-3F-97	10/03/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	SM-I-3F-97	10/03/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Barium-Filtered	EPA-200.7	0.09	mg/l	SM-I-3F-97	10/03/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Iron-Filtered	EPA-200.7	0.13	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH9317
AES sample #: 010927BB02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Manganese-Filtered	EPA-200.7	0.08	mg/l	SM-I-3F-97	10/03/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-22	10/01/01
Nickel-Filtered	EPA-200.7	<0.08	mg/l	SM-I-3F-97	10/03/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	SM-I-3F-97	10/03/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Zinc-Filtered	EPA-200.7	0.01	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD8318
AES sample #: 010927BB03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab

Date Sampled: 09/27/01
Date sample received: 09/27/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-31	10/09/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chloroform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD8318
AES sample #: 010927BB03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Benzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD8318
AES sample #: 010927BB03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluorene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Chrysene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-23	10/04/01
Arsenic	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Barium	EPA-200.7	0.40	mg/l	SM-I-3F-97	10/03/01
Cadmium	EPA-200.7	0.009	mg/l	SM-I-3F-97	10/03/01
Chromium	EPA-200.7	0.018	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD8318
AES sample #: 010927BB03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	0.018	mg/l	SM-I-3F-97	10/03/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-22	10/01/01
Selenium	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Silver	EPA-200.7	<0.02	mg/l	SM-I-3F-97	10/03/01
Aluminum	EPA-200.7	3.5	mg/l	SM-I-3F-97	10/03/01
Antimony	EPA-200.7	<0.06	mg/l	SM-I-3F-97	10/03/01
Copper	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Iron	EPA-200.7	4.80	mg/l	SM-I-3F-97	10/03/01
Nickel	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Manganese	EPA-200.7	0.76	mg/l	SM-I-3F-97	10/03/01
Vanadium	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Zinc	EPA-200.7	0.11	mg/l	SM-I-3F-97	10/03/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	SM-I-3F-97	10/03/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	SM-I-3F-97	10/03/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Barium-Filtered	EPA-200.7	0.27	mg/l	SM-I-3F-97	10/03/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Iron-Filtered	EPA-200.7	0.16	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD8318
AES sample #: 010927BB03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 09/27/01
Date sample received: 09/27/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Manganese-Filtered	EPA-200.7	0.45	mg/l	SM-I-3F-97	10/03/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-22	10/01/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	SM-I-3F-97	10/03/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	SM-I-3F-97	10/03/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	SM-I-3F-97	10/03/01
Zinc-Filtered	EPA-200.7	<0.01	mg/l	SM-I-3F-97	10/03/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010927
AES sample #: 010927BB04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Acetone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chloroform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 010927
AES sample #: 010927BB04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 09/27/01
Date sample received: 09/27/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Benzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Bromoform	EPA-624	<5	ug/l	JF-BY-46	09/28/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-46	09/28/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Toluene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Styrene	EPA-624	<5	ug/l	JF-BY-46	09/28/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-46	09/28/01

APPROVED BY: Sara
Report date: 10/12/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	**Address:** 646 Plank Rd Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** NYSEG - Mechanicville	**Samplers: (Names)** Erin Lovenduski
Client Phone No: 518-688-0022	**PO Number:** 303094 194 #5	**Samplers: (Signature)**
Client Fax No: 518-688-0015		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
010927 BB01	MEGDIM0110	9/27/01	1402	A P	W		X	7	See Below
BB02	MEGDSH9317	9/27/01	1435	A P	W		X	7	See Below
BB03	MEGDD8318	9/27/01	1445	A P	W		X	7	See Below
BB04	TB 010927	9/27/01	/	A P	TB			1	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks TCL VOCs 8260
PAH - 8270
Phenols - 9065/420.1
Cyanide - Total (9012/335.3) Weak acid dissociable (4500I)
Metals - 6010
Field Filtered Metals - 6010

Relinquished by: (Signature)	**Received by: (Signature)**	**Date/Time** 9/27/01 1600
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time** 9/27/01 4:52

Temperature Ambient or (Chilled)
Notes:

Properly Preserved (Y) N
Notes:

Received Within Holding Times (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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OCT 23 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 10/17/01
Number of samples analyzed: 5
AES Project ID: 011003BN
Invoice #: 233416

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0128
AES sample #: 011003BN01 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 10/03/01
Date sample received: 10/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.003	mg/l	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/04/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Acetone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Chloroform	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0128
AES sample #: 011003BN01
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Benzene	EPA-624	3.0 J	ug/l	JF-BY-47	10/04/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromoform	EPA-624	<5	ug/l	JF-BY-47	10/04/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Toluene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Styrene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Xylenes,Total	EPA-624	1.0 J	ug/l	JF-BY-47	10/04/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-24	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0128
AES sample #: 011003BN01 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 10/03/01
Date sample received: 10/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	1.3 J	ug/l	MT-CB-24	10/05/01
Fluorene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Anthracene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Pyrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Chrysene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Barium	EPA-200.7	1.43	mg/l	KH-I-4C-11	10/12/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDIM0128
AES sample #: 011003BN01 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: , 10/03/01
Date sample received: 10/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-23	10/05/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-4C-11	10/12/01
Aluminum	EPA-200.7	0.2	mg/l	KH-I-4C-11	10/12/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-4C-11	10/12/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Iron	EPA-200.7	0.48	mg/l	KH-I-4C-11	10/12/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Manganese	EPA-200.7	0.17	mg/l	KH-I-4C-11	10/12/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Zinc	EPA-200.7	0.03	mg/l	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0117
AES sample #: 011003BN02 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.008	mg/l	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/04/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Acetone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Chloroform	EPA-624	7.0	ug/l	JF-BY-47	10/04/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0117
AES sample #: 011003BN02 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 10/03/01
Date sample received: 10/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Benzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromoform	EPA-624	<5	ug/l	JF-BY-47	10/04/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Toluene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Styrene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-24	10/05/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0117
AES sample #: 011003BN02 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 10/03/01
Date sample received: 10/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Fluorene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Anthracene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Pyrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Chrysene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-24	10/05/01
Arsenic	EPA-200.9	0.021	mg/l	KH-PEH-61	10/16/01
Barium	EPA-200.7	0.16	mg/l	KH-I-4C-11	10/12/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Chromium	EPA-200.7	0.012	mg/l	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0117
AES sample #: 011003BN02 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-23	10/05/01
Selenium	EPA-200.9	<0.005	mg/l	KH-PEH-60	10/15/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-4C-11	10/12/01
Aluminum	EPA-200.7	8.1	mg/l	KH-I-4C-11	10/12/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-4C-11	10/12/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Iron	EPA-200.7	11	mg/l	KH-I-4C-11	10/12/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Manganese	EPA-200.7	0.56	mg/l	KH-I-4C-11	10/12/01
Vanadium	EPA-200.7	0.12	mg/l	KH-I-4C-11	10/12/01
Zinc	EPA-200.7	0.03	mg/l	KH-I-4C-11	10/12/01
Aluminum-Filtered	EPA-200.7	3.8	mg/l	KH-I-4C-11	10/12/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	KH-I-4C-11	10/12/01
Arsenic-Filtered	EPA-200.9	0.031	mg/l	KH-PEH-60	10/15/01
Barium-Filtered	EPA-200.7	0.01	mg/l	KH-I-4C-11	10/12/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Iron-Filtered	EPA-200.7	0.05	mg/l	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0117
AES sample #: 011003BN02 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-11	10/12/01
Manganese-Filtered	EPA-200.7	<0.01	mg/l	KH-I-4C-11	10/12/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-23	10/05/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	KH-I-4C-11	10/12/01
Selenium-Filtered	EPA-200.9	<0.005	mg/l	KH-PEH-60	10/15/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I-4C-11	10/12/01
Vanadium-Filtered	EPA-200.7	0.11	mg/l	KH-I-4C-11	10/12/01
Zinc-Filtered	EPA-200.7	<0.01	mg/l	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MS (Accuracy)
AES sample #: 011003BN03
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	102	%	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	108	%	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	108	%	MC-H	10/04/01
1,1-Dichloroethene	EPA-624	81	%	JF-BY-47	10/09/01
Trichloroethene	EPA-624	110	%	JF-BY-47	10/09/01
Benzene	EPA-624	121	%	JF-BY-47	10/09/01
Toluene	EPA-624	124	%	JF-BY-47	10/09/01
Chlorobenzene	EPA-624	121	%	JF-BY-47	10/09/01
Acenaphthene	EPA-625	92	%	MT-CB-24	10/11/01
Pyrene	EPA-625	87	%	MT-CB-24	10/11/01
Arsenic	EPA-200.7	102	%	KH-I-4C-11	10/12/01
Barium	EPA-200.7	98	%	KH-I-4C-11	10/12/01
Cadmium	EPA-200.7	103	%	KH-I-4C-11	10/12/01
Chromium	EPA-200.7	99	%	KH-I-4C-11	10/12/01
Lead	EPA-200.7	101	%	KH-I-4C-11	10/12/01
Mercury	EPA-245.1	89	%	SM-FAO-23	10/05/01
Selenium	EPA-200.7	102	%	KH-I-4C-11	10/12/01
Silver	EPA-200.7	104	%	KH-I-4C-11	10/12/01
Aluminum	EPA-200.7	92	%	KH-I-4C-11	10/12/01
Antimony	EPA-200.7	106	%	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MS (Accuracy)
AES sample #: 011003BN03
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Copper	EPA-200.7	96	%	KH-I-4C-11	10/12/01
Iron	EPA-200.7	94	%	KH-I-4C-11	10/12/01
Nickel	EPA-200.7	102	%	KH-I-4C-11	10/12/01
Manganese	EPA-200.7	101	%	KH-I-4C-11	10/12/01
Vanadium	EPA-200.7	107	%	KH-I-4C-11	10/12/01
Zinc	EPA-200.7	103	%	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MSD (Precision)
AES sample #: 011003BN04 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 10/03/01
Date sample received: 10/03/01

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	22	%	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	ND	%	MC-H	10/04/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	ND	%	MC-H	10/04/01
1,1-Dichloroethene	EPA-624	74	%	JF-BY-47	10/09/01
Trichloroethene	EPA-624	113	%	JF-BY-47	10/09/01
Benzene	EPA-624	120	%	JF-BY-47	10/09/01
Toluene	EPA-624	122	%	JF-BY-47	10/09/01
Chlorobenzene	EPA-624	115	%	JF-BY-47	10/09/01
Acenaphthene	EPA-625	85	%	MT-CB-24	10/11/01
Pyrene	EPA-625	99	%	MT-CB-24	10/11/01
Arsenic	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Barium	EPA-200.7	8.0	%	KH-I-4C-11	10/12/01
Cadmium	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Chromium	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Lead	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Mercury	EPA-245.1	ND	%	SM-FAO-23	10/05/01
Selenium	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Silver	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Aluminum	EPA-200.7	12	%	KH-I-4C-11	10/12/01
Antimony	EPA-200.7	ND	%	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MSD (Precision)
AES sample #: 011003BN04
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Copper	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Iron	EPA-200.7	9.0	%	KH-I-4C-11	10/12/01
Nickel	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Manganese	EPA-200.7	<1	%	KH-I-4C-11	10/12/01
Vanadium	EPA-200.7	ND	%	KH-I-4C-11	10/12/01
Zinc	EPA-200.7	<1	%	KH-I-4C-11	10/12/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011003
AES sample #: 011003BN05 Samples taken by: E.Lovenduski
MATRIX: Water

Date Sampled: 10/03/01
Date sample received: 10/03/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Acetone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Chloroform	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011003
AES sample #: 011003BN05 Samples taken by: E.Lovenduski Location: NYSEG-Mechanicv
MATRIX: Water grab
Date Sampled: 10/03/01
Date sample received: 10/03/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Benzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Bromoform	EPA-624	<5	ug/l	JF-BY-47	10/04/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-47	10/04/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Toluene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Styrene	EPA-624	<5	ug/l	JF-BY-47	10/04/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-47	10/04/01

APPROVED BY: Lara
Report date: 10/17/01

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CHAIN OF CUSTODY RECORD

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Client Name: URS	**Address:** 346 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	**Project Name (Location)** NYSEG- Mechanicville	**Samplers: (Names)** Eric Lovendusti
Client Phone No: 688-0015	**PO Number:** 30309T194 #5	**Samplers: (Signature)** EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
011003BN01	MEGDIM0128	10/03/01	0830	(A) P	W		X	6	See Below
BN02	MEGDD0117	10/03/01	0730	A P	W		X	7	See Below Fil metals
BN03	MS 011003 (MEGDIM0128)	10/03/01	0835	A P	W		X	6	See Below
BN04	MSD 011003 (MEGDIM0128)	10/03/01	0835	A P	W		X	6	See Below
BN05	TB 011003	10/3/01	/	A P	TB	✓		1	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

TCL VOCs: 8260 ✓
PAH: 8270 ✓
Phenols: 9065/420.1 ✓
Cyanide: Total (9012/335.3) Weak acid dissociable (SM4500I) ✓
Metals: 6010 Series ✓
Field Filtered Metals: 6010 Series

Relinquished by: (Signature)	**Received by: (Signature)**	**Date/Time**
Relinquished by: (Signature)	**Received for Laboratory by:** M. L	**Date/Time** 10/3/01 415

Temperature Ambient or (Chilled)
Notes:

Properly Preserved (Y) N
Notes:

Received Within Holding Times (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 10/19/01
Number of samples analyzed: 5
AES Project ID: 011005AD
Invoice #: 233526

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0115
AES sample #: 011005AD01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/11/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Methylene Chloride	EPA-624	5.0	ug/l	JF-BY-48	10/10/01
Acetone	EPA-624	15	ug/l	JF-BY-48	10/10/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Chloroform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0115
AES sample #: 011005AD01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Benzene	EPA-624	1.0 J	ug/l	JF-BY-48	10/10/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromoform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Toluene	EPA-624	2.0 J	ug/l	JF-BY-48	10/10/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Styrene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-25	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0115
AES sample #: 011005AD01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluorene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Chrysene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Barium	EPA-200.7	0.63	mg/l	KH-I3G-05	10/17/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0115
AES sample #: 011005AD01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Aluminum	EPA-200.7	0.2	mg/l	KH-I3G-05	10/17/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01
Copper	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron	EPA-200.7	5.48	mg/l	KH-I3G-05	10/17/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Manganese	EPA-200.7	0.07	mg/l	KH-I3G-05	10/17/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc	EPA-200.7	<0.01	mg/l	KH-I3G-05	10/17/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	KH-I3G-05	10/17/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Barium-Filtered	EPA-200.7	0.76	mg/l	KH-I3G-05	10/17/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0115
AES sample #: 011005AD01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Manganese-Filtered	EPA-200.7	0.04	mg/l	KH-I3G-05	10/17/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc-Filtered	EPA-200.7	0.01	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0134
AES sample #: 011005AD02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.002	mg/l	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/11/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Methylene Chloride	EPA-624	5.0	ug/l	JF-BY-48	10/10/01
Acetone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Chloroform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0134
AES sample #: 011005AD02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Benzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromoform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Toluene	EPA-624	13	ug/l	JF-BY-48	10/10/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Styrene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-25	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0134
AES sample #: 011005AD02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluorene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Chrysene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Barium	EPA-200.7	0.32	mg/l	KH-I3G-05	10/17/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium	EPA-200.7	0.007	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0134
AES sample #: 011005AD02 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Aluminum	EPA-200.7	0.6	mg/l	KH-I3G-05	10/17/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01
Copper	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron	EPA-200.7	15	mg/l	KH-I3G-05	10/17/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Manganese	EPA-200.7	0.21	mg/l	KH-I3G-05	10/17/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc	EPA-200.7	<0.01	mg/l	KH-I3G-05	10/17/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	KH-I3G-05	10/17/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Barium-Filtered	EPA-200.7	0.15	mg/l	KH-I3G-05	10/17/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0134
AES sample #: 011005AD02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Manganese-Filtered	EPA-200.7	0.04	mg/l	KH-I3G-05	10/17/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc-Filtered	EPA-200.7	0.01	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH9316
AES sample #: 011005AD03 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-34	10/16/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/11/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Methylene Chloride	EPA-624	5.0	ug/l	JF-BY-48	10/10/01
Acetone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Chloroform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH9316
AES sample #: 011005AD03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Benzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromoform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Toluene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Styrene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-25	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH9316
AES sample #: 011005AD03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluorene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Chrysene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-25	10/10/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Barium	EPA-200.7	0.41	mg/l	KH-I3G-05	10/17/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH9316
AES sample #: 011005AD03 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/04/01
Date sample received: 10/05/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Aluminum	EPA-200.7	<0.1	mg/l	KH-I3G-05	10/17/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01
Copper	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron	EPA-200.7	0.06	mg/l	KH-I3G-05	10/17/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Manganese	EPA-200.7	0.82	mg/l	KH-I3G-05	10/17/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc	EPA-200.7	<0.01	mg/l	KH-I3G-05	10/17/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	KH-I3G-05	10/17/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Barium-Filtered	EPA-200.7	0.39	mg/l	KH-I3G-05	10/17/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron-Filtered	EPA-200.7	0.06	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGUSH9316
AES sample #: 011005AD03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Manganese-Filtered	EPA-200.7	0.80	mg/l	KH-I3G-05	10/17/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc-Filtered	EPA-200.7	<0.01	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011004
AES sample #: 011005AD04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Methylene Chloride	EPA-624	4.0 J	ug/l	JF-BY-48	10/10/01
Acetone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Chloroform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011004
AES sample #: 011005AD04
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/04/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Benzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Bromoform	EPA-624	<5	ug/l	JF-BY-48	10/10/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-48	10/10/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Toluene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Styrene	EPA-624	<5	ug/l	JF-BY-48	10/10/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-48	10/10/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0123
AES sample #: 011005AD05 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/05/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Naphthalene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Acenaphthylene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Acenaphthene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluorene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Phenanthrene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Anthracene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Fluoranthene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Pyrene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Chrysene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(b)fluoranthene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(k)fluoranthene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)pyrene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Indeno(1,2,3-cd)pyrene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzo(a,h)anthracene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(g,h,i)perylene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Benzo(a)anthracene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
2-Methylnaphthalene		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Dibenzofuran		EPA-625	<10	ug/l	MT-CB-25	10/10/01
Aluminum-Filtered		EPA-200.7	<0.1	mg/l	KH-I3G-05	10/17/01
Antimony-Filtered		EPA-200.7	<0.06	mg/l	KH-I3G-05	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0123
AES sample #: 011005AD05
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/05/01
Date sample received: 10/05/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Arsenic-Filtered	EPA-200.7	0.008	mg/l	KH-I3G-05	10/17/01
Barium-Filtered	EPA-200.7	0.49	mg/l	KH-I3G-05	10/17/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Iron-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Manganese-Filtered	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-25	10/09/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	KH-I3G-05	10/17/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I3G-05	10/17/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	KH-I3G-05	10/17/01
Zinc-Filtered	EPA-200.7	0.01	mg/l	KH-I3G-05	10/17/01

APPROVED BY: Paul D. Rys
Report date: 10/19/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	NYSEG - Mechanicville	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	303097194 #5	E. Lovenduski

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
011005 AD01	MEGDD0115	10/4/01	900	(A) P	W		X	7	See Below
AD02	MEGDD0134	10/4/01	1240	A (P)	W		X	7	See Below
AD03	MEGUSH9316	10/4/01		A P	W		X	7	See Below
AD04	TB 011004	10/4/01	/	A P	TB			1	TCL VOCs 8260
AD05	MEGDD0123	10/5/01	920	(A) P	W		X	2	PAH: 8270 Field Filtered Metals: 6010
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

TCL VOCs: 8260
PAH: 8270
Phenols: 9065/420.1
Cyanide: Total (9012/335.3) Weak acid dissociable (SM 4500.I)
Metals: 6010 series
Field Filtered Metals: 6010 Series

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
E. Lovenduski	B. Hobson	10/5/01 1110
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		10/5/01 1:00

TEMPERATURE
Ambient or (Chilled)
Notes:

PROPERLY PRESERVED
(Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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RECEIVED
OCT 29 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 10/25/01
Number of samples analyzed: 2
AES Project ID: 011011 E
Invoice #: 233671

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0120
AES sample #: 011011 E01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<0.002	mg/l	LS-A-35	10/17/01
Cyanide,Total	EPA-335.3	<0.01	mg/l	MC-H	10/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/11/01
Chloromethane	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Acetone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Chloroform	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0120
AES sample #: 011011 E01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Benzene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Bromoform	EPA-624	<5	ug/l	JF-BY-50	10/15/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Toluene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Styrene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Naphthalene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Acenaphthylene	EPA-625	<10	ug/l	MT-CB-27	10/17/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0120
AES sample #: 011011 E01 Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Fluorene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Anthracene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Pyrene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Chrysene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
2-Methylnaphthalene	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Dibenzofuran	EPA-625	<10	ug/l	MT-CB-27	10/17/01
Arsenic	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Barium	EPA-200.7	0.50	mg/l	KH-I-4C-14	10/18/01
Cadmium	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Chromium	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0120
AES sample #: 011011 E01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-27	10/12/01
Selenium	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Silver	EPA-200.7	<0.02	mg/l	KH-I-4C-14	10/18/01
Aluminum	EPA-200.7	0.8	mg/l	KH-I-4C-14	10/18/01
Antimony	EPA-200.7	<0.06	mg/l	KH-I-4C-14	10/18/01
Copper	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01
Iron	EPA-200.7	15	mg/l	KH-I-4C-14	10/18/01
Nickel	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01
Manganese	EPA-200.7	0.24	mg/l	KH-I-4C-14	10/18/01
Vanadium	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01
Zinc	EPA-200.7	<0.01	mg/l	KH-I-4C-14	10/18/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	KH-I-4C-14	10/18/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	KH-I-4C-14	10/18/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Barium-Filtered	EPA-200.7	0.31	mg/l	KH-I-4C-14	10/18/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01
Iron-Filtered	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0120
AES sample #: 011011 E01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Manganese-Filtered	EPA-200.7	<0.02	mg/l	KH-I-4C-14	10/18/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-27	10/12/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	KH-I-4C-14	10/18/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	KH-I-4C-14	10/18/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	KH-I-4C-14	10/18/01
Zinc-Filtered	EPA-200.7	<0.01	mg/l	KH-I-4C-14	10/18/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011010
AES sample #: 011011 E02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Bromomethane	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Chloroethane	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Acetone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Chloroform	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
2-Butanone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Trichloroethene	EPA-624	<5	ug/l	JF-BY-50	10/15/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011010
AES sample #: 011011 E02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/10/01
Date sample received: 10/10/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Benzene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Bromoform	EPA-624	<5	ug/l	JF-BY-50	10/15/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
2-Hexanone	EPA-624	<10	ug/l	JF-BY-50	10/15/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Toluene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Styrene	EPA-624	<5	ug/l	JF-BY-50	10/15/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BY-50	10/15/01

APPROVED BY: Tara M. Q
Report date: 10/25/01

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG - Mechanicville	Samplers: (Names) Eric Lovenduski
Client Phone No: 688-0015	PO Number: 30309T194 #5	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
011011 E01	MEGDD0120	10/10/01	0730 A/P	W		X	7	See Below
E02	TB 011010	10/10/01	/ A/P	TB			1	TCL VOCs 8260
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
TCL VOCs: 8260
PAH: 8270
Phenols: 7065/420.1
Cyanide: Total (9012/335.3) Weak acid dissociable (SM4500I)
Metals: 6010 series
Field Filtered Metals: 6010 Series

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 10/10/01 1351
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 10/10/01 5:15

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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NOV 02 2001

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 10/30/01
Number of samples analyzed: 4
AES Project ID: 011016AD
Invoice #: 233869

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0114
AES sample #: 011016AD01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	0.005	mg/l	LS-A-36	10/23/01
Cyanide,Total	EPA-335.3	0.17	mg/l	MC-H	10/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	<0.01	mg/l	MC-H	10/25/01
Chloromethane	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Bromomethane	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Chloroethane	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Acetone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Chloroform	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
2-Butanone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0114
AES sample #: 011016AD01 Samples taken by: E. Lovenduski Location: NYSEG/M-Ville
MATRIX: Water grab
Date Sampled: 10/15/01
Date sample received: 10/16/01

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Trichloroethene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Dibromochloromethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Benzene	EPA-624	220	ug/l	JF-BZ-3	10/23/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Bromoform	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
2-Hexanone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Toluene	EPA-624	2.0 J	ug/l	JF-BZ-3	10/23/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Ethylbenzene	EPA-624	17	ug/l	JF-BZ-3	10/23/01
Styrene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Xylenes,Total	EPA-624	16	ug/l	JF-BZ-3	10/23/01
Naphthalene	EPA-625	30 J	ug/l	MT-CB-29	10/23/01
Acenaphthylene	EPA-625	17	ug/l	MT-CB-29	10/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0114
AES sample #: 011016AD01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthene	EPA-625	41	ug/l	MT-CB-29	10/23/01
Fluorene	EPA-625	7.2 J	ug/l	MT-CB-29	10/23/01
Phenanthrene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Anthracene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Fluoranthene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Pyrene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Chrysene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Benzo(b)fluoranthene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Benzo(k)fluoranthene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Benzo(a)pyrene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Indeno(1,2,3-cd)pyrene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Dibenzo(a,h)anthracene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Benzo(g,h,i)perylene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
Benzo(a)anthracene	EPA-625	<10	ug/l	MT-CB-29	10/23/01
2-Methylnaphthalene	EPA-625	24	ug/l	MT-CB-29	10/23/01
Dibenzofuran	EPA-625	1.0 J	ug/l	MT-CB-29	10/23/01
Arsenic	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Barium	EPA-200.7	2.02	mg/l	WB-I-4C-18	10/24/01
Cadmium	EPA-200.7	0.005	mg/l	WB-I-4C-18	10/24/01
Chromium	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0114
AES sample #: 011016AD01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Mercury	EPA-245.1	<0.0004	mg/l	SM-FAO-29	10/18/01
Selenium	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Silver	EPA-200.7	<0.02	mg/l	WB-I-4C-18	10/24/01
Aluminum	EPA-200.7	14	mg/l	WB-I-4C-18	10/24/01
Antimony	EPA-200.7	<0.06	mg/l	WB-I-4C-18	10/24/01
Copper	EPA-200.7	<0.05	mg/l	WB-I-4C-18	10/24/01
Iron	EPA-200.7	70	mg/l	WB-I-4C-18	10/24/01
Nickel	EPA-200.7	<0.05	mg/l	WB-I-4C-18	10/24/01
Manganese	EPA-200.7	14	mg/l	WB-I-4C-18	10/24/01
Vanadium	EPA-200.7	0.06	mg/l	WB-I-4C-18	10/24/01
Zinc	EPA-200.7	0.21	mg/l	WB-I-4C-18	10/24/01
Aluminum-Filtered	EPA-200.7	<0.1	mg/l	WB-I-4C-18	10/24/01
Antimony-Filtered	EPA-200.7	<0.06	mg/l	WB-I-4C-18	10/24/01
Arsenic-Filtered	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Barium-Filtered	EPA-200.7	0.23	mg/l	WB-I-4C-18	10/24/01
Cadmium-Filtered	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Chromium-Filtered	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Copper-Filtered	EPA-200.7	<0.05	mg/l	WB-I-4C-18	10/24/01
Iron-Filtered	EPA-200.7	4.93	mg/l	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDSH0114
AES sample #: 011016AD01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Lead-Filtered	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Manganese-Filtered	EPA-200.7	4.52	mg/l	WB-I-4C-18	10/24/01
Mercury-Filtered	EPA 245.1	<0.0004	mg/l	SM-FAO-29	10/18/01
Nickel-Filtered	EPA-200.7	<0.05	mg/l	WB-I-4C-18	10/24/01
Selenium-Filtered	EPA-200.7	<0.005	mg/l	WB-I-4C-18	10/24/01
Silver-Filtered	EPA-200.7	<0.02	mg/l	WB-I-4C-18	10/24/01
Vanadium-Filtered	EPA-200.7	<0.05	mg/l	WB-I-4C-18	10/24/01
Zinc-Filtered	EPA-200.7	<0.01	mg/l	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MS (Accuracy)
AES sample #: 011016AD02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	90	%	LS-A-36	10/23/01
Cyanide,Total	EPA-335.3	104	%	MC-H	10/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	101	%	MC-H	10/25/01
1,1-Dichloroethene	EPA-624	72	%	JF-BZ-3	10/23/01
Trichloroethene	EPA-624	108	%	JF-BZ-3	10/23/01
Benzene	EPA-624	97	%	JF-BZ-3	10/23/01
Toluene	EPA-624	122	%	JF-BZ-3	10/23/01
Chlorobenzene	EPA-624	120	%	JF-BZ-3	10/23/01
Acenaphthene	EPA-625	90	%	MT-CB-29	10/23/01
Pyrene	EPA-625	112	%	MT-CB-29	10/23/01
Arsenic	EPA-200.7	85	%	WB-I-4C-18	10/24/01
Barium	EPA-200.7	92	%	WB-I-4C-18	10/24/01
Cadmium	EPA-200.7	103	%	WB-I-4C-18	10/24/01
Chromium	EPA-200.7	102	%	WB-I-4C-18	10/24/01
Lead	EPA-200.7	104	%	WB-I-4C-18	10/24/01
Mercury	EPA-245.1	98	%	SM-FAO-29	10/18/01
Selenium	EPA-200.7	101	%	WB-I-4C-18	10/24/01
Silver	EPA-200.7	103	%	WB-I-4C-18	10/24/01
Aluminum	EPA-200.7	102	%	WB-I-4C-18	10/24/01
Antimony	EPA-200.7	104	%	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MS (Accuracy)
AES sample #: 011016AD02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Copper	EPA-200.7	98	%	WB-I-4C-18	10/24/01
Iron	EPA-200.7	102	%	WB-I-4C-18	10/24/01
Nickel	EPA-200.7	99	%	WB-I-4C-18	10/24/01
Manganese	EPA-200.7	103	%	WB-I-4C-18	10/24/01
Vanadium	EPA-200.7	102	%	WB-I-4C-18	10/24/01
Zinc	EPA-200.7	108	%	WB-I-4C-18	10/24/01
Aluminum-Filtered	EPA-200.7	105	%	WB-I-4C-18	10/24/01
Antimony-Filtered	EPA-200.7	102	%	WB-I-4C-18	10/24/01
Arsenic-Filtered	EPA-200.7	101	%	WB-I-4C-18	10/24/01
Barium-Filtered	EPA-200.7	98	%	WB-I-4C-18	10/24/01
Cadmium-Filtered	EPA-200.7	101	%	WB-I-4C-18	10/24/01
Chromium-Filtered	EPA-200.7	96	%	WB-I-4C-18	10/24/01
Copper-Filtered	EPA-200.7	102	%	WB-I-4C-18	10/24/01
Iron-Filtered	EPA-200.7	105	%	WB-I-4C-18	10/24/01
Lead-Filtered	EPA-200.7	101	%	WB-I-4C-18	10/24/01
Manganese-Filtered	EPA-200.7	97	%	WB-I-4C-18	10/24/01
Mercury-Filtered	EPA 245.1	102	%	SM-FAO-29	10/18/01
Nickel-Filtered	EPA-200.7	101	%	WB-I-4C-18	10/24/01
Selenium-Filtered	EPA-200.7	99	%	WB-I-4C-18	10/24/01
Silver-Filtered	EPA-200.7	102	%	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MS (Accuracy)
AES sample #: 011016AD02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Vanadium-Filtered	EPA-200.7	89	%	WB-I-4C-18	10/24/01
Zinc-Filtered	EPA-200.7	103	%	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MSD (Precision)
AES sample #: 011016AD03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-420.1	<1	%	LS-A-36	10/23/01
Cyanide,Total	EPA-335.3	<1	%	MC-H	10/19/01
Cyanide,Free (weak & dissoc.)	SM 4500 I	ND	%	MC-H	10/25/01
1,1-Dichloroethene	EPA-624	1	%	JF-BZ-3	10/24/01
Trichloroethene	EPA-624	3	%	JF-BZ-3	10/24/01
Benzene	EPA-624	12	%	JF-BZ-3	10/24/01
Toluene	EPA-624	2	%	JF-BZ-3	10/24/01
Chlorobenzene	EPA-624	<1	%	JF-BZ-3	10/24/01
Acenaphthene	EPA-625	4	%	MT-CB-29	10/23/01
Pyrene	EPA-625	11	%	MT-CB-29	10/23/01
Arsenic	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Barium	EPA-200.7	<1	%	WB-I-4C-18	10/24/01
Cadmium	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Chromium	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Lead	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Mercury	EPA-245.1	ND	%	SM-FAO-29	10/18/01
Selenium	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Silver	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Aluminum	EPA-200.7	2.0	%	WB-I-4C-18	10/24/01
Antimony	EPA-200.7	ND	%	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MSD (Precision)
AES sample #: 011016AD03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Copper	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Iron	EPA-200.7	2.0	%	WB-I-4C-18	10/24/01
Nickel	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Manganese	EPA-200.7	4.0	%	WB-I-4C-18	10/24/01
Vanadium	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Zinc	EPA-200.7	3.0	%	WB-I-4C-18	10/24/01
Aluminum-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Antimony-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Arsenic-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Barium-Filtered	EPA-200.7	<1	%	WB-I-4C-18	10/24/01
Cadmium-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Chromium-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Copper-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Iron-Filtered	EPA-200.7	3.0	%	WB-I-4C-18	10/24/01
Lead-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Manganese-Filtered	EPA-200.7	2.0	%	WB-I-4C-18	10/24/01
Mercury-Filtered	EPA 245.1	ND	%	SM-FAO-29	10/18/01
Nickel-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Selenium-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Silver-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MSD (Precision)
AES sample #: 011016AD03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Vanadium-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01
Zinc-Filtered	EPA-200.7	ND	%	WB-I-4C-18	10/24/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011015
AES sample #: 011016AD04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Chloromethane	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Bromomethane	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Vinyl Chloride	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Chloroethane	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Methylene Chloride	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Acetone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Carbon Disulfide	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1-Dichloroethene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1-Dichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,2-Dichloroethene Total	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Chloroform	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,2 Dichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
2-Butanone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
1,1,1-Trichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Carbon Tetrachloride	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Vinyl Acetate	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Bromodichloromethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,2-Dichloropropane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
trans-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Trichloroethene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB 011015
AES sample #: 011016AD04 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 10/15/01
Date sample received: 10/16/01
Location: NYSEG/M-Ville
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibromochloromethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1,2-Trichloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Benzene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
cis-1,3-Dichloropropene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
2-Chloroethylvinylether	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Bromoform	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
4-Methyl-2-pentanone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
2-Hexanone	EPA-624	<10	ug/l	JF-BZ-3	10/23/01
Tetrachloroethene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
1,1,2,2-Tetrachloroethane	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Toluene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Chlorobenzene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Ethylbenzene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Styrene	EPA-624	<5	ug/l	JF-BZ-3	10/23/01
Xylenes,Total	EPA-624	<5	ug/l	JF-BZ-3	10/23/01

APPROVED BY: Sara Nash
Report date: 10/30/01

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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	616 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	NYSEG-Mechanicville	Eric Lavenduski
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T194 #5	EJS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
011016 AD01	MEGDSH0114	10/15/01	1100 (A) P	W		X	7	See Below
AD02	MS 011015	10/15/01	1100 (A) P	W		X	7	See Below
AD03	MSD 011015	10/15/01	1100 (A) P	W		X	7	See Below
AD04	TB 011015	10/15/01	/ A P	TB			1	TCL VOCs 8260
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
TCL VOCs: 8260
PAH: 8270
Phenols:
Cyanide: Total & Weak acid Dissociable
Metals: 6010 Series
Field Filtered: 6010 Series

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Chris Miller/Bruce/RDS	10/16/01 1257
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	M.L 10/16/01 344	10/16/01 12:57

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

2002
GROUNDWATER

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APR 17 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 04/16/02
Number of samples analyzed: 1
AES Project ID: 020415 W
Invoice #: 240794

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-40D (80')
AES sample #: 020415 W01
Samples taken by: E.Lovenduski
MATRIX: Ground Water
Date Sampled: 04/15/02
Date sample received: 04/15/02
Location: NYSEG Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/15/02
Toluene	EPA-602	<1	ug/l	SO-A	04/15/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/15/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/15/02

APPROVED BY: Christopher Hess
Report date: 04/16/02

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	NYSEG-Mechanicville	Eric Lovendusky
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	303097194 (#5)	EJL

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020415 W01	MW-40D (80')	4/15/02	1350	(P)	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Sovendusky	T. Griffin	4/15/02 1550
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M. L	4/15/02 1550

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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RECEIVED
APR 23 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 (#5)

Report date: 04/22/02
Number of samples analyzed: 1
AES Project ID: 020419AS
Invoice #: 241046

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0201
AES sample #: 020419AS01 Samples taken by: E.Lovenduski Location: NYSEG Mechanicv
MATRIX: Water grab
Date Sampled: 04/19/02
Date sample received: 04/19/02

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	8	ug/l	SO-A	04/19/02
Toluene	EPA-602	3	ug/l	SO-A	04/19/02
Ethylbenzene	EPA-602	20	ug/l	SO-A	04/19/02
Xylenes, Total	EPA-602	19	ug/l	SO-A	04/19/02

APPROVED BY: _____
Report date: 04/22/02

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Client Name:	Address:
URS	646 Plank Road Suite 202 Clifton Park NY 12065
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	Mechanicville-MGP site	Eric Lovendusti
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309T194 (#5)	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020419 NS01	MEGDD0201	4/19/02	1030	(A) P	W		x	1	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	T. Mathis	4/19/02 1524
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		4/19/02 4:20

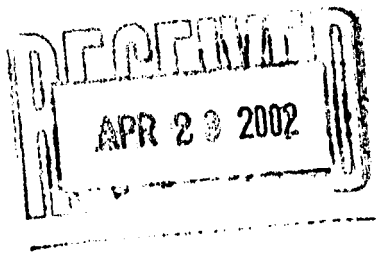
Temperature
Ambient or (Chilled)
Notes:

Properly Preserved
(Y) N
Notes:

Received Within Holding Times
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 04/25/02
Number of samples analyzed: 2
AES Project ID: 020424AQ
Invoice #: 241198

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0239
AES sample #: 020424AQ01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 04/24/02
Date sample received: 04/24/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/24/02
Toluene	EPA-602	<1	ug/l	SO-A	04/24/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/24/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/24/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0239A
AES sample #: 020424AQ02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 04/24/02
Date sample received: 04/24/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/24/02
Toluene	EPA-602	<1	ug/l	SO-A	04/24/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/24/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/24/02

APPROVED BY: _____
Report date: 04/25/02

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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Eritho Fujita	Mechanicville MGP site	Eric Lovenduski
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T1944.5	EJS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020424 AQ01	MEGPDO239	4/24/02	845	(A) P	W		X	2	BTEX
AQ02	MEGDDO239A	4/24/02	1400	A (P)	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
(X) 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
MEGPDO2~~39~~35 - Packer test MW-37D 35-50' bgs
MEGDDO239A Packer test MW-39D 70'-90' bgs

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski		4/24/02 14:30
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
		4/24/02 302

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 04/29/02
Number of samples analyzed: 3
AES Project ID: 020426 Q
Invoice #: 241277

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0239B
AES sample #: 020426 Q01 Samples taken by: EJL
MATRIX: Water

Date Sampled: 04/24/02
Date sample received: 04/26/02
Location: M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/26/02
Toluene	EPA-602	<1	ug/l	SO-A	04/26/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/26/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/26/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0239C
AES sample #: 020426 Q02
Samples taken by: EJL
MATRIX: Water
Date Sampled: 04/25/02
Date sample received: 04/26/02
Location: M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/26/02
Toluene	EPA-602	<1	ug/l	SO-A	04/26/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/26/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/26/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0239D
AES sample #: 020426 Q03 Samples taken by: EJL
MATRIX: Water

Date Sampled: 04/25/02
Date sample received: 04/26/02
Location: M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/26/02
Toluene	EPA-602	<1	ug/l	SO-A	04/26/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/26/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/26/02

APPROVED BY: Natasha Hess
Report date: 04/29/02

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park NY 12065	
Send Report To: E. Fujita	Project Name (Location) M'VILLE	Samplers: (Names) EJL
Client Phone No: 688-0015	PO Number: 30309T194 #5	Samplers: (Signature) EJF
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020426 Q01	MEGDD0239B	4/24/02	1710	(P)	W		X	2	BTEX
Q02	MEGDD0239C	4/25/02	1100	(A)	W		X	2	BTEX
Q03	MEGDD0239D	4/25/02	1300	(P)	W		X	2	BTEX
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
B - 90'-110'
C - 110'-130'
D - 130'-150'

Relinquished by: (Signature)	Received by: (Signature)	Date/Time 4/26/02 9:00
Relinquished by: (Signature)	Received ofr Laboratory by:	Date/Time 4/26/02 940

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 05/01/02
Number of samples analyzed: 2
AES Project ID: 020430AH
Invoice #: 241408

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0238
AES sample #: 020430AH01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 04/30/02
Date sample received: 04/30/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/30/02
Toluene	EPA-602	<1	ug/l	SO-A	04/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0238A
AES sample #: 020430AH02 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 04/30/02
Date sample received: 04/30/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	04/30/02
Toluene	EPA-602	<1	ug/l	SO-A	04/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	04/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	04/30/02

APPROVED BY: _____
Report date: 05/01/02

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CHAIN OF CUSTODY RECORD

Client Name:	Address:	
URS	646 Plank Rd. Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Eriko Fujita	M'VILLE MGP SITE	EJL
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30307T194 #5	EJS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
~~030430H01~~	MEGDD0238	4/30/02	0950	(A) P	W		X	2	BTEX
A1101	MEGDD0238A	4/30/02	1150	(A) P	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
38 - Pakker test 20'-40'
38A - Packertest 40'-60'

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		4/30/02 13:53
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
		4/31/01 4:37

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 05/08/02
Number of samples analyzed: 1
AES Project ID: 020507 T
Invoice #: 241656

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ELAP ID#: 10709

AIHA ID#: 100307

Albany, NY

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0238B
AES sample #: 020507 T01
Samples taken by: E.Lovenduski
MATRIX: Water
Date Sampled: 05/06/02
Date sample received: 05/07/02
Location: NYSEG Mech'vll.
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/07/02
Toluene	EPA-602	<1	ug/l	SO-A	05/07/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/07/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/07/02

APPROVED BY: _____
Report date: 05/08/02

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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) M'VILLE	Samplers: (Names) EL
Client Phone No: 688-0015	PO Number: 30307T199 #5	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020507	MEGDD0238B	5/6/02	1430 (P)	W		X	2	BTEX
TO1			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
(X) 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks: MW-38D 150-170'

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
[signature]	[signature]	5/7/02 9:00
Relinquished by: (Signature)	Received ofr Laboratory by: M.L	Date/Time 5/7/02 10:42

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

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MAY 10 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 05/09/02
Number of samples analyzed: 1
AES Project ID: 020508BF
Invoice #: 241749

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0236
AES sample #: 020508BF01 Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 05/07/02
Date sample received: 05/08/02
Location: M'VilleMGP Site
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	<0.5	ug/l	SO-A	05/08/02
Toluene		EPA-602	<1	ug/l	SO-A	05/08/02
Ethylbenzene		EPA-602	<1	ug/l	SO-A	05/08/02
Xylenes, Total		EPA-602	<1	ug/l	SO-A	05/08/02

APPROVED BY: Christopher Hess
Report date: 05/09/02

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CHAIN OF CUSTODY RECORD

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Erika Fujita	Project Name (Location) M'VILLE MGP SITE	Samplers: (Names) Eric Lovendusky
Client Phone No: 688-0015	PO Number: 30309T174 #5	Samplers: (Signature) EJL 595
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020508 BF01	MEGDD0236	5/7/02	1630	(P)	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks: MW-36D 18.9-40.6'

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovendusky	DAVID AZ	5-8-02
Relinquished by: (Signature)	Received for Laboratory by: ML	Date/Time 5/8/02 303

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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MAY 13 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T195 #4

Report date: 05/10/02
Number of samples analyzed: 2
AES Project ID: 020509 Y
Invoice #: 241808

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0236A
AES sample #: 020509 Y01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/08/02
Date sample received: 05/09/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/10/02
Toluene	EPA-602	<1	ug/l	SO-A	05/10/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/10/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0236B
AES sample #: 020509 Y02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/08/02
Date sample received: 05/09/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/10/02
Toluene	EPA-602	<1	ug/l	SO-A	05/10/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/10/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/10/02

APPROVED BY: _____
Report date: 05/10/02

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CHAIN OF CUSTODY RECORD

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	M'VILLE MGP SITE	Eric Lovenduski
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T1951#4	EJ Lovenduski

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020509 Y01	MEGDD0236A	5/8/02	1450	A P	W		x	2	BTEX
Y02	MEGDD0236B	5/8/02	1625	A P	W		x	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
36A - PACKER TEST 40'-60'
36B - PACKER TEST 60'-80'

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski	E. Hutchins	5/9/02 1155
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	[illegible]	5/9/02 1:52

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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MAY 17 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 05/16/02
Number of samples analyzed: 1
AES Project ID: 020515BB
Invoice #: 242052

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0236C
AES sample #: 020515BB01 Samples taken by: E.L.
MATRIX: Water

Date Sampled: 05/15/02
Date sample received: 05/15/02
Location: M'VilleMGP Site
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/15/02
Toluene	EPA-602	<1	ug/l	SO-A	05/15/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/15/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/15/02

APPROVED BY: _____
Report date: 05/16/02

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CHAIN OF CUSTODY RECORD

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) M'VILLE MGP SITE	Samplers: (Names) E.L
Client Phone No: 688-0015	PO Number: 30307T174#5	Samplers: (Signature) EJS
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020515 BB01	MEGDD0236C	5/15/02	1045	(A) P	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks: MW-36D PACKER TEST 140-160'

CC Report To:

Relinquished by: (Signature) EJ Sorrendino	Received by: (Signature) DAVID AP	Date/Time 5-15-02
Relinquished by: (Signature)	Received ofr Laboratory by: M. L	Date/Time 5/15/02 417

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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MAY 28 2002

LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 05/24/02
Number of samples analyzed: 4
AES Project ID: 020523 Y
Invoice #: 242419

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0241
AES sample #: 020523 Y01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/21/02
Date sample received: 05/23/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/23/02
Toluene	EPA-602	<1	ug/l	SO-A	05/23/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/23/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/23/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0241A
AES sample #: 020523 Y02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/22/02
Date sample received: 05/23/02
Location: M'Ville MGP
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	<0.5	ug/l	SO-A	05/23/02
Toluene		EPA-602	<1	ug/l	SO-A	05/23/02
Ethylbenzene		EPA-602	<1	ug/l	SO-A	05/23/02
Xylenes, Total		EPA-602	<1	ug/l	SO-A	05/23/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0241B
AES sample #: 020523 Y03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/22/02
Date sample received: 05/23/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/23/02
Toluene	EPA-602	<1	ug/l	SO-A	05/23/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/23/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/23/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0241C
AES sample #: 020523 Y04
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/22/02
Date sample received: 05/23/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/23/02
Toluene	EPA-602	<1	ug/l	SO-A	05/23/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/23/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/23/02

APPROVED BY:
Report date: 05/24/02

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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	M'VILLE MGP SITE	Eric Lovendusk
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30307T179#5	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020523 Y01	MEGDD0241	5/21/02	1550	(A) P	W		X	2	BTEX
Y02	MEGDD0241A	5/22/02	0845	(A) P	W		X	2	BTEX
Y03	MEGDD0241B	5/22/02	1100	(A) P	W		X	2	BTEX
Y04	MEGDD0241C	5/22/02	1550	A (P)	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
MEGDD0241 - MW-41 20-40
41A - 40-60
41B - 60-80
41C 80-100

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		5/23/02 1030
Relinquished by: (Signature)	**Received ofr Laboratory by:**	**Date/Time**
		5/23/02 12:55

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 05/28/02
Number of samples analyzed: 2
AES Project ID: 020524AF
Invoice #: 242502

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0241D
AES sample #: 020524AF01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/23/02
Date sample received: 05/24/02
Location: Mechanicville
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	<0.5	ug/l	SO-A	05/24/02
Toluene		EPA-602	<1	ug/l	SO-A	05/24/02
Ethylbenzene		EPA-602	<1	ug/l	SO-A	05/24/02
Xylenes, Total		EPA-602	<1	ug/l	SO-A	05/24/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0241E
AES sample #: 020524AF02
Samples taken by: E. Lovenduski
MATRIX: Water

Date Sampled: 05/23/02
Date sample received: 05/24/02
Location: Mechanicville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	05/24/02
Toluene	EPA-602	<1	ug/l	SO-A	05/24/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	05/24/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	05/24/02

APPROVED BY: _____
Report date: 05/28/02

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	MILLE MGP SITE	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	30309T194#5	EJS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020524AF01	MEGDD0241D	5/23/02	0730 (A) P	W		X	2	BTEX
AF02	MEGDD0241E	5/23/02	1300 A (P)	W		X	2	BTEX
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:

☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

MEGDD0241D → 100'-120'
MEGDD0241E → 120'-140'

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	DAPIS	5-24-02
Relinquished by: (Signature)	**Received at Laboratory by:**	**Date/Time**
		5/24/02 9:01

Temperature: Ambient or (Chilled)
Notes:

Properly Preserved: (Y) N
Notes:

Received Within Holding Times: (Y) N
Notes:

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 #5

Report date: 05/31/02
Number of samples analyzed: 3
AES Project ID: 020529AW
Invoice #: 242606

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEDS--027D
AES sample #: 020529AW01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/29/02
Date sample received: 05/29/02
Location: M'Ville MGPSite
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	0.6	ug/l	SO-A	05/29/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEDS--024D
AES sample #: 020529AW02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/29/02
Date sample received: 05/29/02
Location: M'Ville MGPSite
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	0.9	ug/l	SO-A	05/29/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEDS--022C
AES sample #: 020529AW03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 05/29/02
Date sample received: 05/29/02
Location: M'Ville MGPSite
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	110	ug/l	SO-A	05/29/02

APPROVED BY: _____
Report date: 05/31/02

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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	M'VILLE MGP Site	Eric Lovenduski
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T194 #5	EJS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020529 AW01	MEDS--027D	5/29/02	1130	(A) P	W		X	2	TOTAL Benzene
AW02	MEDS--024D	5/29/02	1140	(A) P	W		X	2	Total Benzene
AW03	MEDS--022C	5/29/02	1150	(A) P	W		X	2	Total Benzene
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☐ Normal

☒ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

#7 → 1500gal

#4 → 1500gal

#2 → White 1000gal

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski		5/29/02 14:30
Relinquished by: (Signature)	Received at Laboratory by:	Date/Time
		5/30/02 3:05

Temperature: Ambient or (Chilled)

Notes: _____

Properly Preserved: (Y) N

Notes: _____

Received Within Holding Times: (Y) N

Notes: _____

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

242606

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194#5

Report date: 06/13/02
Number of samples analyzed: 4
AES Project ID: 020612AH
Invoice #: 243234

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0237
AES sample #: 020612AH01
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 06/10/02
Date sample received: 06/12/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	06/12/02
Toluene	EPA-602	<1	ug/l	SO-A	06/12/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	06/12/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	06/12/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0237A
AES sample #: 020612AH02
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 06/10/02
Date sample received: 06/12/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	06/12/02
Toluene	EPA-602	<1	ug/l	SO-A	06/12/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	06/12/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	06/12/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0237B
AES sample #: 020612AH03
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 06/10/02
Date sample received: 06/12/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	06/12/02
Toluene	EPA-602	<1	ug/l	SO-A	06/12/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	06/12/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	06/12/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEGDD0237C
AES sample #: 020612AH04
Samples taken by: E. Lovenduski
MATRIX: Water
Date Sampled: 06/12/02
Date sample received: 06/12/02
Location: M'Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	06/12/02
Toluene	EPA-602	<1	ug/l	SO-A	06/12/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	06/12/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	06/12/02

APPROVED BY: _____
Report date: 06/13/02

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Client Name:	Address:	
URS	646 Plank Road suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	M'VILLE MGP Site	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	303097 19415	EJL

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
020612 AH01	MEGDD0237	6/10/02	1405	A (P)	W		X	2	BTEX
AH02	MEGDD0237A	6/10/02	1550	A (P)	W		X	2	BTEX
AH03	MEGDD0237B	6/10/02	1750	A (P)	W		X	2	BTEX
AH04	MEGDD0237 C	6/12/02	1245	A (P)	W		X	2	BTEX
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☒ 1 Day ☐ 3 Day ☐ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

MW-37 → 25'-45'
A → 45'-65'
B → 65'-85'
C → 145'-185'

Client delivered

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski		
Relinquished by: (Signature)	**Received ofr Laboratory by:**	**Date/Time**
	M	6/12/02 20[illegible]

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

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JAN 6 2003

Purchase Order #: 30309T194#5

Report date: 01/02/03
Number of samples analyzed: 9
AES Project ID: 021219AB
Invoice #: 250765

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-43D (43)
AES sample #: 021219AB01
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-43D (73)
AES sample #: 021219AE02
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-43D (103)
AES sample #: 021219AB03
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-43D (133)
AES sample #: 021219AB04
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-31D (45)
AES sample #: 021219AB05
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-31D (75)
AES sample #: 021219AB06 Samples taken by: JH/JG
MATRIX: Ground Water

Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-31D (105)
AES sample #: 021219AB07
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/30/02
Toluene	EPA-602	<1	ug/l	SO-A	12/30/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/30/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MW-31D (135)
AES sample #: 021219AB08
Samples taken by: JH/JG
MATRIX: Ground Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene		EPA-602	<0.5	ug/l	SO-A	12/31/02
Toluene		EPA-602	<1	ug/l	SO-A	12/31/02
Ethylbenzene		EPA-602	<1	ug/l	SO-A	12/31/02
Xylenes, Total		EPA-602	<1	ug/l	SO-A	12/31/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: TB021219
AES sample #: 021219AB09
Samples taken by: JH/JG
MATRIX: Water
Date Sampled: 12/19/02
Date sample received: 12/19/02
Location: NYSEG/M-Ville
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Benzene	EPA-602	<0.5	ug/l	SO-A	12/31/02
Toluene	EPA-602	<1	ug/l	SO-A	12/31/02
Ethylbenzene	EPA-602	<1	ug/l	SO-A	12/31/02
Xylenes, Total	EPA-602	<1	ug/l	SO-A	12/31/02

APPROVED BY:
Report date: 01/02/03

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Rd Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) John F Hawley / JennGillies
Client Phone No: 518-688-0015	PO Number: 30309T1947#5	Samplers: (Signature) John Hawley / Jennifer Gillies
Client Fax No: 518-688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp.	Grab	Number of Cont's	Analysis Required
021219 AB01	MW-43D (43)	12/19/02	10:04 A P	gw			2	BTEX
AB02	MW-43D (73)	12/19/02	10:07 A P	gw			2	
AB03	MW-43D (103)	12/19/02	10:20 A P	gw			2	
AB04	MW-43D (133)	12/19/02	10:23 A P	gw			2	
AB05	MW-31D (45)	12/19/02	10:35 A P	gw			2	
AB06	MW-31D (75)	12/19/02	10:39 A P	gw			2	
AB07	MW-31D (105)	12/19/02	10:46 A P	gw			2	
AB08	MW-31D (135)	12/19/02	10:43 A P	gw			2	
AB09	TB021219	12/19/02	— A P	TB			1	
			A P					
			A P					
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Jennifer M. Gillies		
Relinquished by: (Signature)	Received for Laboratory by: Patricia A. Lyons	Date/Time 12/19/02 1150

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

2003
GROUNDWATER

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X
AMK

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, New York 12065

Attention: Eriko Fujita

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TITLE PAGE

On February 7, 2003 five water samples were received by Adirondack Environmental Services, Inc. from URS Consultants, Inc. from the NYSEG Mechanicville site. On February 12, 2003 six water samples were received by Adirondack Environmental Services, Inc. from URS Consultants, Inc. from the NYSEG Mechanicville site. On 2/26/03 the samples were requested to have a NYSDEC ASP Category B data package supplied. These samples were analyzed for Volatile Organics, Semi-Volatile Organics, Metals and Conventionals as specified by the contract. The project was completed on April 9, 2003.

Laboratory Manager

Date: 4/9/03

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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Metals	*Other CN
MEGDD0241	030207J-01	X	X			X	X
MEGCIM0102	030207J-02	X	X			X	X
MEGDD0237	030207J-03	X	X			X	X
MEGDIM8618	030207J-04	X	X			X	X
TB030207	030207J-05	X	X			X	X
MEGDD0239	030212M-01	X	X			X	X
MEGDD0236	030212M-02	X	X			X	X
MEGGUSH8602	030212M-03	X	X			X	X
MEGDIM0236	030212M-04	X	X			X	X
MEGDD0117	030212M-05	X	X			X	X
TB030212	030212M-06	X	X			X	X

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
030207J-01	WATER	2/6/03	2/7/03	N/A	2/19/03
030207J-02	WATER	2/6/03	2/7/03	N/A	2/19/03
030207J-03	WATER	2/7/03	2/7/03	N/A	2/19/03
030207J-04	WATER	2/7/03	2/7/03	N/A	2/19/03
030207J-05	WATER	2/7/03	2/7/03	N/A	2/19/03
030212M-01	WATER	2/11/03	2/12/03	N/A	2/19/03
030212M-02	WATER	2/11/03	2/12/03	N/A	2/19/03
030212M-03	WATER	2/12/03	2/12/03	N/A	2/19/03
030212M-04	WATER	2/12/03	2/12/03	N/A	2/19/03
030212M-05	WATER	2/12/03	2/12/03	N/A	2/19/03
030212M-06	WATER	2/12/03	2/12/03	N/A	2/19/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
030207J-01	WATER	2/6/03	2/7/03	2/12/03	2/19/03
030207J-02	WATER	2/6/03	2/7/03	2/12/03	2/19/03
030207J-03	WATER	2/7/03	2/7/03	2/12/03	2/27/03
030207J-04	WATER	2/7/03	2/7/03	2/12/03	2/27/03
030212M-01	WATER	2/11/03	2/12/03	2/18/03	2/27/03
030212M-02	WATER	2/11/03	2/12/03	2/18/03	2/27/03
030212M-03	WATER	2/12/03	2/12/03	2/18/03	2/28/03
030212M-04	WATER	2/12/03	2/12/03	2/18/03	2/28/03
030212M-05	WATER	2/12/03	2/12/03	2/18/03	2/28/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030207J-01	WATER	ICP	2/7/03	2/20/03	2/20/03
		Mercury		2/11/03	2/11/03
		Total Cyanide		2/19/03	2/20/03
		Free Cyanide		2/19/03	2/20/03
		Total Phenols		2/19/03	2/19/03
030207J-02	WATER	ICP	2/7/03	2/20/03	2/20/03
		Mercury		2/11/03	2/11/03
		Total Cyanide		2/19/03	2/20/03
		Free Cyanide		2/19/03	2/20/03
		Total Phenols		2/19/03	2/19/03
030207J-03	WATER	ICP	2/7/03	2/20/03	2/20/03
		Mercury		2/11/03	2/11/03
		Total Cyanide		2/19/03	2/20/03
		Free Cyanide		2/19/03	2/20/03
		Total Phenols		2/19/03	2/19/03
030207J-04	WATER	ICP	2/7/03	2/20/03	2/20/03
		Mercury		2/11/03	2/11/03
		Total Cyanide		2/19/03	2/20/03
		Free Cyanide		2/19/03	2/20/03
		Total Phenols		2/19/03	2/19/03
030212M-01	WATER	ICP	2/12/03	2/26/03	2/28/03
		Mercury		2/13/03	2/13/03
		Total Cyanide		2/20/03	2/25/03
		Free Cyanide		2/20/03	2/25/03
		Total Phenols		2/20/03	2/24/03
030212M-02	WATER	ICP	2/12/03	2/26/03	2/28/03
		Mercury		2/13/03	2/13/03
		Total Cyanide		2/21/03	2/25/03
		Free Cyanide		2/21/03	2/25/03
		Total Phenols		2/20/03	2/24/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030212M-03	WATER	ICP	2/12/03	2/26/03	2/28/03
		Mercury		2/13/03	2/13/03
		Total Cyanide		2/21/03	2/25/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		2/20/03	2/24/03
030212M-04	WATER	ICP	2/12/03	2/26/03	2/28/03
		Mercury		2/13/03	2/13/03
		Total Cyanide		2/21/03	2/25/03
		Free Cyanide		2/21/03	2/25/03
		Total Phenols		2/20/03	2/24/03
030212M-05	WATER	ICP	2/12/03	2/26/03	2/28/03
		Mercury		2/13/03	2/13/03
		Total Cyanide		2/21/03	2/25/03
		Free Cyanide		2/21/03	2/25/03
		Total Phenols		2/20/03	2/24/03

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Case Narrative

Client: URS Consultants, Inc. – NYSEG Mechanicville

Case: URS 0305

SDG: MEGCIM0102

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MEGDD0241 MW-41D	030207J-01	02/07/03	15:06	Water
MEGCIM0102 MW-21	030207J-02	02/07/03	15:06	Water
MEGDD0237 MW-37D	030207J-03	02/07/03	15:06	Water
MEGDIM8618 MW-18	030207J-04	02/07/03	15:06	Water
TB030207	030207J-05	02/07/03	15:06	Water
MEGDD0239 MW-39D	030212M-01	02/12/03	14:15	Water
MEGDD0236 MW-36D	030212M-02	02/12/03	14:15	Water
MEGGUSH8602 MW-2	030212M-03	02/12/03	14:15	Water
MEGDIM0236 MW-36DI	030212M-04	02/12/03	14:15	Water
MEGDD0117 MW-17D	030212M-05	02/12/03	14:15	Water
TB030212	030212M-06	02/12/03	14:15	Water

Initially this project was received as a routine analysis. On 2/26/03 the samples were requested to have a NYSDEC ASP Category B data package supplied. At this time all analyses had been completed. This data package was generated as best as possible, but since it was received as a routine analysis some portions of the data package may not conform to the requirements for a NYSDEC ASP Category B data package.

Volatile Organics

1) The samples were analyzed using EPA Method 8260 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %D's for the compounds 1,1-Dichloroethene and 1,1,2,2-Tetrachloroethane in the continuing calibration analyzed on 2/19/03 were outside the criteria established by the method. The %D's for these compounds were 36.3 % and 25.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

3) A matrix spike and matrix spike duplicate analysis was not performed with this batch of samples. A Laboratory Control sample was analyzed with all compounds. The recoveries for 1,1-Dichloroethene and trans-1,2-Dichloroethene were just below the acceptable limits.

4) The internal standard recoveries for sample MEGDD0237 (AES sample number 030207J-03) were outside required limits. This sample was not re-analyzed.

5) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed for Polynuclear Aromatic Hydrocarbons only using EPA Method 8270 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The RRF for the compound N-Nitroso-di-n-propylamine in the initial calibration analyzed on 12/17/02 was outside the required limits. The RRF for this compound was 0.494. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Benzo(k)fluoranthene in the continuing calibration analyzed on 2/18/03 was outside the criteria established by the method. The %D for this compound was 32.8 %. The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 2/18/03 was outside the required limits. The RRF for this compound was 0.474. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

4) The %D for the compound 2,4-Dinitrotoluene in the continuing calibration analyzed on 2/27/03 was outside the criteria established by the method. The %D for this compound was 25.5 %. The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 2/27/03 was outside the required limits. The RRF for this compound was 0.497. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D for the compound Terphenyl-d14 in the continuing calibration analyzed on 2/28/03 was outside the criteria established by the method. The %D for this compound was 25.9 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

6) A matrix spike and the matrix spike duplicate analysis was not performed with this batch of samples. A matrix spike blank was analyzed and all recoveries were within required limits.

Inorganics – Total Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) A sample from another client was analyzed as the matrix spike and duplicate sample (AES sample number 030207F-01). All recoveries were within required limits.

3) A serial dilution was not analyzed with this set of data.

Conventionals

1) Samples MEGDD0239 and MEGUSH8602 (AES sample numbers 030212M-01 and 030212M-03) were used for the Cyanide matrix spike analysis. All recoveries were within required limits.

2) Samples MEGUSH8602 and another client's sample (AES sample numbers 030212M-03 and 030214028-006) were used for the Cyanide and Phenol duplicate samples respectively. All recoveries were within required limits

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 4/9/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGCIM0102

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGCIM0102
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0476
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 4/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0117

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0117
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0484
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0236

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0236
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0481
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0237
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0477
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0239
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0480
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	43.	
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0241
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0475
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

amk 6/26/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0236

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0236
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0483
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 4/23/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM8618
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0478
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8602

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8602
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0482
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 6/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB030207

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: TB030207
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0479
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 68303

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030212

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: TB030212
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0485
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

Amrs 6/23/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGCIM0102

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0403

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U UJ
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 6/23/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0117

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0476

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 6/26/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0236

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: B0470

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0237

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: B0467

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0239

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: B0469

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0241

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0402

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

AMK 6/23/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0236

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0236

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0475

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 6/23/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM8618

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM8618

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0468

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	1.	J
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	2.	J
129-00-0	Pyrene	1.	J
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	.9	J
205-99-2	Benzo(b)fluoranthene	.8	J
207-08-9	Benzo(k)fluoranthene	.8	J
50-32-8	Benzo(a)pyrene	.6	J
193-39-5	Indeno(1,2,3-cd)pyrene	.6	J
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8602

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0474

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGCIM0102_

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1650		J	P
7440-36-0	Antimony	3.1	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	458			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	56100			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	847			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	56.7			P
7440-42-8	Boron				NR

AMK 4/23/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

_____

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGCIM0102 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGCIM0102_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13.3	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	3.0	B		P
7440-39-3	Barium	294			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron	12.1	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	614			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	6.0		J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	6.2	B		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0117__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	520000			P
7440-36-0	Antimony	21.0	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	8280			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	1530			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1630			P
7439-89-6	Iron	1670000		J	P
7439-92-1	Lead	2.2	B	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	21900			P
7439-97-6	Mercury	0.94			AV
7440-02-0	Nickel	637			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	501			P
7440-66-6	Zinc	1990			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

_____

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0117_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	112	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.1	B		P
7440-39-3	Barium	466			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	315			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	9.3	B		P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

Amk 4/4/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0236__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	560			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1740			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1110			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	166			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.9	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	5	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0236_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.3	B		P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.7	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	46.9	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	155			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0237

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0237__

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8610		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	627			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.3			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	16800			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	172			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	14.6	B		P
7440-66-6	Zinc	46.2			P
7440-42-8	Boron				NR

Amk 6/3/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0237 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0237_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27.3	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.5	B		P
7440-39-3	Barium	436			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.1	B		P
7439-89-6	Iron	13.7	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	12.8	B		P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.58	B		P
7440-42-8	Boron				NR

AMK 62303

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0239__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	47000			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1790			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	67.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	68.3			P
7439-89-6	Iron	63300			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	732			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	61.4			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	5	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	65.8			P
7440-66-6	Zinc	126			P
7440-42-8	Boron				NR

Amk 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0239_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.6	B		P
7440-39-3	Barium	434			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	13.3	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	29.0			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.3	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0241__

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3660		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1890			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	6340			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	79.9			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	14.4	B		P
7440-42-8	Boron				NR

AMK 6/8/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0241_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.5	B		P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	5.0	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	38.8			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.9	B	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	6.2	B		P
7440-42-8	Boron				NR

Amk 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0236

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0236_

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21300			P
7440-36-0	Antimony	7.9	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1080			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	56.6		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	55.1			P
7439-89-6	Iron	30800			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	441			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	43.0			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	24.1	B		P
7440-66-6	Zinc	84.2			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0236 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0236_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	4.1	B		P
7440-38-2	Arsenic	7.9	B		P
7440-39-3	Barium	592			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.7	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	14.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	25.1			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	1.7	B		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM8618_

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	730		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	431			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	1310			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	177			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	86.8			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8602_

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	503			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	97.0	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	31.3		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.5	B		P
7439-89-6	Iron	1080			P
7439-92-1	Lead	1.7	B	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	2430			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	11.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8602_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.0	B		P
7440-39-3	Barium	87.8	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	25.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1920			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	5	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

amk 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

MEGCIM0102

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-02

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0117

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-05

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0236

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-02

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

_____

_____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-03

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0239

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-01

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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AMK 6/24/03

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0241

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-01

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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_____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0236

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-04

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8602

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-03

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	19			EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	VBLK01	92	94	108		0
2	MEGDD0241	96	94	86		0
3	MEGCIM0102	91	97	83		0
4	MEGDD0237	100	95	91		0
5	MEGDIM8618	89	89	104		0
6	TB030207	99	104	89		0
7	MEGDD0239	99	99	93		0
8	MEGDD0236	99	103	95		0
9	MEGUSH8602	95	97	82		0
10	MEGDIM0236	91	94	89		0
11	MEGDD0117	92	91	78		0
12	TB030212	101	99	112		0
13	LCS@20	94	97	87		0
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	TOT OUT
1	MEGDD0241	37	59	69	N/A	N/A	N/A	0
2	MEGCIM0102	38	44	61	N/A	N/A	N/A	0
3	MEGDD0237	64	76	80	N/A	N/A	N/A	0
4	MEGDIM8618	66	82	79	N/A	N/A	N/A	0
5	MEGDD0239	64	74	73	N/A	N/A	N/A	0
6	MEGDD0236	56	68	68	N/A	N/A	N/A	0
7	MEGUSH8602	53	64	64	N/A	N/A	N/A	0
8	MEGDIM0236	51	62	62	N/A	N/A	N/A	0
9	MEGDD0117	53	65	65	N/A	N/A	N/A	0
10	WBLK02	66	68	67	25	62	80	0
11	WMSB	59	65	64	24	52	74	0
12	WBLK01	46	47	52	15	41	46	0
13	WBLK03	60	59	77	18	52	66	0
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d5	(10-110)
S5 (2FP)	= 2-Fluorophenol	(21-110)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3B

WATER VOLATILE LABORATORY CONTROL SAMPLE RECOVERY

LAB NAME Adirondack Environmental Contract:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix Spike - EPA Sample No.: LCS @ 20 Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Concentration ug/L	LCS Concentration ug/L	LCS % REC. #	QC Limits REC.
Chloromethane	20	0.0	20	98	D-273
Bromomethane	20	0.0	19	95	78-120
Vinyl Chloride	20	0.0	15	77	62-122
Chloroethane	20	0.0	19	97	83-117
Methylene Chloride	20	0.0	18	91	58-136
Acetone	20	0.0	17	85	60-140
Carbon Disulfide	20	0.0	14	71	60-140
1,1-Dichloroethene	20	0.0	13	64	68-122
1,1-Dichloroethane	20	0.0	19	95	79-117
trans-1,2-Dichloroethene	20	0.0	13	65	76-120
cis-1,2-Dichloroethene	20	0.0	18	88	76-120
Chloroform	20	0.0	19	93	73-115
1,2-Dichloroethane	20	0.0	19	93	81-119
2-Butanone	20	0.0	19	95	60-140
1,1,1-Trichloroethane	20	0.0	23	117	74-122
Carbon Tetrachloride	20	0.0	22	112	88-128
Bromodichloromethane	20	0.0	21	106	86-114
1,2-Dichloropropane	20	0.0	22	109	78-114
cis-1,3-Dichloropropene	20	0.0	19	97	82-116
Trichloroethene	20	0.0	21	103	85-124
Dibromochloromethane	20	0.0	24	118	53-149
1,1,2-Trichloroethane	20	0.0	23	113	87-117
Benzene	20	0.0	19	96	80-118
trans-1,3-Dichloropropene	20	0.0	20	98	82-116
Bromoform	20	0.0	24	119	45-169
4-Methyl-2-Pentanone	20	0.0	22	112	60-140
2-Hexanone	20	0.0	20	102	60-140
Tetrachloroethene	20	0.0	20	99	81-111
1,1,2,2-Tetrachloroethane	20	0.0	25	123	64-136
Toluene	20	0.0	20	99	82-118
Chlorobenzene	20	0.0	21	106	74-108
Ethylbenzene	20	0.0	19	97	83-115
Styrene	20	0.0	19	93	39-153
m&p-Xylene	40	0.0	35	88	75-120
o-Xylene	20	0.0	19	93	75-120

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 2 out of 35 outside limits.

Comments: _____

3C

WATER SEMI-VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,4 Dichlorobenzene	25	0	14	55	36-97
N-Nitroso-di-n-propylamine	25	0	12	47	41-116
1,2,4 Trichlorobenzene	25	0	13	52	39-98
Acenaphthene	25	0	14	55	46-118
2,4 Dinitrotoluene	25	0	11	46	24-96
Pyrene	25	0	11	43	26-127

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 6 outside limits

Comments: _____

FORM III SV-1

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

030207F01 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0305 SAS No.:_____ SDG No.:MEGCIMI

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2504.1633		402.9606		2000.00	105.1		P
Antimony	75-125	449.6059		2.9314	B	500.00	89.3		P
Arsenic	75-125	31.8463		2.2000	U	40.00	79.6		P
Barium	75-125	2170.3467		12.1649	B	2000.00	107.9		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	222.4413		3.6000	U	200.00	111.2		P
Cobalt									NR
Copper	75-125	298.8573		13.8522	B	250.00	114.0		P
Iron	75-125	1325.9757		179.6667		1000.00	114.6		P
Lead	75-125	18.0477		1.3000	U	20.00	90.2		P
Magnesium									NR
Manganese	75-125	585.5978		40.5277		500.00	109.0		P
Mercury									NR
Nickel	75-125	534.5667		1.4622	B	500.00	106.6		P
Potassium									NR
Selenium	75-125	11.5581		2.5000	U	10.00	115.6		P
Silver	75-125	48.0405		1.8000	U	50.00	96.1		P
Sodium									NR
Thallium									NR
Vanadium	75-125	532.3768		3.1000	U	500.00	106.5		P
Zinc	75-125	597.7030		31.1683		500.00	113.3		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
030207G01 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0305 SAS No.:_____ SDG No.:MEGCIMI

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	2.5670		0.6568		2.00	95.5		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

030207F01 FS

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0305 SAS No.:_____ SDG No.:MEGCIMI

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2079.1699		48.8471	B	2000.00	101.5		P
Antimony	75-125	446.7770		2.5000	U	500.00	89.4		P
Arsenic	75-125	31.0583		2.2000	U	40.00	77.6		P
Barium	75-125	2126.3589		8.2171	B	2000.00	105.9		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	218.8756		3.6000	U	200.00	109.4		P
Cobalt									NR
Copper	75-125	277.8638		10.0134	B	250.00	107.1		P
Iron	75-125	1142.1397		44.2032	B	1000.00	109.8		P
Lead	75-125	16.7790		1.3000	U	20.00	83.9		P
Magnesium									NR
Manganese	75-125	532.7063		6.6483	B	500.00	105.2		P
Mercury									NR
Nickel	75-125	524.7900		3.0531	B	500.00	104.3		P
Potassium									NR
Selenium	75-125	11.1025		2.5000	U	10.00	111.0		P
Silver	75-125	41.6467		2.0931	B	50.00	79.1		P
Sodium									NR
Thallium									NR
Vanadium	75-125	521.3294		3.1000	U	500.00	104.3		P
Zinc	75-125	591.8845		46.0243		500.00	109.2		P
Boron									NR

Comments:

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDD0239

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	123		10	U	100	123		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGUSH8602

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	120		10	U	100	120		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO.

030207F01 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIMI01

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	402.9606		433.4130		7.3		P
Antimony	60.0	2.9314	B	2.7752	B	5.5		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	12.1649	B	18.2216	B	39.9		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	5.0783	B	200.0		P
Cobalt								NR
Copper	25.0	13.8522	B	25.5458		59.4		P
Iron	100.0	179.6667		202.1069		11.8		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese	15.0	40.5277		46.5266		13.8		P
Mercury								NR
Nickel	40.0	1.4622	B	2.3106	B	45.0		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	3.1000	U	3.1000	U			P
Zinc	20.0	31.1683		49.2849		45.0		P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

030207G01 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIMI01

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.6568		0.6169		6.3		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

030207F01 FD

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:

Lab Code: AES Case No.:URS_0305 SAS No.: SDG No.:MEGCIMI01

Matrix (soil/water): WATER Level (low/med):LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	48.8471	B	44.8682	B	8.5		P
Antimony	60.0	2.5000	U	2.5000	U			P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	8.2171	B	7.4741	B	9.5		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	3.6000	U			P
Cobalt								NR
Copper	25.0	10.0134	B	9.8598	B	1.5		P
Iron	100.0	44.2032	B	40.9526	B	7.6		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese	15.0	6.6483	B	6.0089	B	10.1		P
Mercury								NR
Nickel	40.0	3.0531	B	1.5696	B	64.2		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	2.0931	B	1.8000	U	200.0		P
Sodium								NR
Thallium								NR
Vanadium	50.0	3.1000	U	3.1000	U			P
Zinc	20.0	46.0243		42.9049		7.0		P
Boron								NR

U.S. EPA - CLP

6
DUPLICATES

MEGUSH8602

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols	20	2	U	2	U	NC		
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments Phenol duplicate performed on another AES sample number 030214028-006.

FORM VI - CONV

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: C0471 Lab Sample ID: VBLK01

Date Analyzed: 02/19/03 Time Analyzed: 14:00

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGDD0241	MEGDD0241	C0475	15:53
2	MEGCIM0102	MEGCIM0102	C0476	16:21
3	MEGDD0237	MEGDD0237	C0477	16:49
4	MEGDIM8618	MEGDIM8618	C0478	17:18
5	TB030207	TB030207	C0479	17:46
6	MEGDD0239	MEGDD0239	C0480	18:14
7	MEGDD0236	MEGDD0236	C0481	18:43
8	MEGUSH8602	MEGUSH8602	C0482	19:11
9	MEGDIM0236	MEGDIM0236	C0483	19:39
10	MEGDD0117	MEGDD0117	C0484	20:07
11	TB030212	TB030212	C0485	20:35
12	LCS@20	LCS@20	C0486	21:04
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COMMENTS:

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: VBLK01
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0471
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: B0508 Lab Sample ID: WBLK 2/12/03

Instrument ID: 5973 B Date Extracted: 02/12/03

Matrix: (soil/water) WATER Date Analyzed: 03/05/03

Level: (low/med) LOW Time Analyzed: 12:43

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDD0241	MEGDD0241	B0402	02/19/03
2	MEGCIM0102	MEGCIM0102	B0403	02/19/03
3	MEGDD0237	MEGDD0237	B0467	02/27/03
4	MEGDIM8618	MEGDIM8618	B0468	02/27/03
5				
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9				
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/12/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0508

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/05/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
120-82-1	1,2,4-Trichlorobenzene	5.	U
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: B0499 Lab Sample ID: WBLK 2/14/03

Instrument ID: 5973 B Date Extracted: 02/14/03

Matrix: (soil/water) WATER Date Analyzed: 03/04/03

Level: (low/med) LOW Time Analyzed: 14:30

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	WMSB	WMSB 2/14/03	B0500	03/04/03
2				
3				
4				
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6				
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/14/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0499

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/14/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/04/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	5.	U
621-64-7	n-Nitroso-di-n-propylamine	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
84-74-2	Di-n-butylphthalate	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: B0509 Lab Sample ID: WBLK 2/18/03

Instrument ID: 5973 B Date Extracted: 02/18/03

Matrix: (soil/water) WATER Date Analyzed: 03/05/03

Level:(low/med) LOW Time Analyzed: 13:51

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDD0239	MEGDD0239	B0469	02/27/03
2	MEGDD0236	MEGDD0236	B0470	02/27/03
3	MEGUSH8602	MEGUSH8602	B0474	02/28/03
4	MEGDIM0236	MEGDIM0236	B0475	02/28/03
5	MEGDD0117	MEGDD0117	B0476	02/28/03
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/18/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0509

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/05/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIMI

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	5.9	B	6.2	B	6.2	B	8.6	B	2.500	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	1.8	B	2.2	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	2.3	B	2.6	B	1.9	B	1.400	U	P
Iron	1.7	B	1.0	B	2.2	B	1.3	B	1.935	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury											
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	4.7	B	4.2	B	4.179	B	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIMI

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			13.0	B							P
Antimony			4.5	B							P
Arsenic			2.2	U							P
Barium			2.4	B							P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U							P
Cobalt											
Copper			2.7	B							P
Iron			3.0	B							P
Lead			1.3	U							P
Magnesium											
Manganese			0.3	U							P
Mercury											
Nickel			1.0	U							P
Potassium											
Selenium			3.0	B							P
Silver			1.8	U							P
Sodium											
Thallium											
Vanadium			3.1	U							P
Zinc			0.5	U							P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIM0

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	2.5	B	2.5	U	2.5	U	2.5	U	2.500	U	P
Arsenic	2.2	U	2.2	U	-3.0	B	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	1.6	B	4.0	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	9.0	B	4.2	B	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	3.405	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.0	U	0.0	U					0.070	B	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	1.067	B	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIM0

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U	12.8	U	12.8	U			P
Antimony			3.7	B	2.5	U	2.5	U			P
Arsenic			3.7	B	2.2	U	2.5	B			P
Barium			4.9	B	5.2	B	5.4	B			P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U	3.6	U	3.6	U			P
Cobalt											
Copper			1.4	U	1.4	U	1.4	U			P
Iron			1.0	U	1.0	U	1.0	U			P
Lead			2.0	B	1.3	U	1.3	U			P
Magnesium											
Manganese			0.3	U	0.3	U	0.3	U			P
Mercury	0.0	U	0.0	U					0.000	B	AV
Nickel			1.0	U	1.0	U	1.0	U			P
Potassium											
Selenium			2.5	U	2.5	U	2.5	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium											
Thallium											
Vanadium			3.1	U	3.1	U	3.1	U			P
Zinc			0.5	U	0.5	U	0.5	U			P
Boron											

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols									2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U			10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

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_____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols									2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U					EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols											EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols											EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

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_____

FORM III - CONV

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): CS071 Date Analyzed: 02/19/03
Instrument ID: H5970 C Time Analyzed: 09:32
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	6768.	8.37	70650.	9.82	72862.	15.23
	UPPER LIMIT	13536.	8.87	141300.	10.32	145724.	15.73
	LOWER LIMIT	3384.	7.87	35325.	9.32	36431.	14.73
	EPA SAMPLE NO.						
1	VBLK01	6070.	8.38	61812.	9.83	66356.	15.27
2	MEGDD0241	7516.	8.41	62658.	9.82	68217.	15.26
3	MEGCIM0102	7721.	8.37	61339.	9.82	66994.	15.26
4	MEGDD0237	3659.	8.37	29286.*	9.82	30152.*	15.26
5	MEGDIM8618	4451.	8.41	40414.	9.82	46288.	15.26
6	TB030207	7753.	8.37	63330.	9.82	66963.	15.26
7	MEGDD0239	5906.	8.41	53388.	9.82	55506.	15.26
8	MEGDD0236	7274.	8.41	62027.	9.82	66037.	15.26
9	MEGUSH8602	7546.	8.37	61874.	9.82	64734.	15.26
10	MEGDIM0236	7185.	8.41	61757.	9.82	67017.	15.26
11	MEGDD0117	8199.	8.44	62508.	9.82	69839.	15.26
12	TB030212	5922.	8.41	61459.	9.86	64868.	15.26
13	LCS@20	8201.	8.41	68592.	9.83	71580.	15.27
14							
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22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS040 Date Analyzed: 02/18/03
Instrument ID: 5973 B Time Analyzed: 18:04

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	95421.	10.48	222357.	14.77	137818.	20.40
	UPPER LIMIT	190842.	10.98	444714.	15.27	275636.	20.90
	LOWER LIMIT	47711.	9.98	111179.	14.27	68909.	19.90
	EPA SAMPLE NO.						
1	MEGDD0241	100394.	10.48	199139.	14.76	132358.	20.41
2	MEGCIM0102	119227.	10.47	237613.	14.76	163162.	20.41
3							
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS040 Date Analyzed: 02/18/03
Instrument ID: 5973 B Time Analyzed: 18:04

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	277641.	24.84	356053.	32.81	320771.	36.77
	UPPER LIMIT	555282.	25.34	712106.	33.31	641542.	37.27
	LOWER LIMIT	138821.	24.34	178027.	32.31	160386.	36.27
	EPA SAMPLE NO.						
1	MEGDD0241	296538.	24.86	357118.	32.81	331331.	36.78
2	MEGCIM0102	335727.	24.85	384888.	32.81	373485.	36.78
3							
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS046 Date Analyzed: 02/27/03
Instrument ID: 5973 B Time Analyzed: 12:20

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	93168.	10.17	213001.	14.47	134078.	20.12
	UPPER LIMIT	186336.	10.67	426002.	14.97	268156.	20.62
	LOWER LIMIT	46584.	9.67	106501.	13.97	67039.	19.62
	EPA SAMPLE NO.						
1	MEGDD0237	94432.	10.17	231184.	14.47	146930.	20.11
2	MEGDIM8618	104061.	10.16	255907.	14.46	158910.	20.11
3	MEGDD0239	144705.	10.17	352128.	14.47	220265.	20.11
4	MEGDD0236	113339.	10.17	268418.	14.47	163914.	20.11
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20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS046 Date Analyzed: 02/27/03
Instrument ID: 5973 B Time Analyzed: 12:20

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	271839.		24.56		299498.		32.52		354641.		36.47	
	UPPER LIMIT	543678.		25.06		598996.		33.02		709282.		36.97	
	LOWER LIMIT	135920.		24.06		149749.		32.02		177321.		35.97	
	EPA SAMPLE NO.												
1	MEGDD0237	284760.		24.55		298859.		32.51		348530.		36.47	
2	MEGDIM8618	321416.		24.56		382461.		32.52		432778.		36.48	
3	MEGDD0239	432790.		24.56		486257.		32.52		583152.		36.48	
4	MEGDD0236	294285.		24.56		293244.		32.51		360365.		36.48	
5													
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20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	100487.	10.11	239201.	14.42	158142.	20.07
	UPPER LIMIT	200974.	10.61	478402.	14.92	316284.	20.57
	LOWER LIMIT	50244.	9.61	119601.	13.92	79071.	19.57
	EPA SAMPLE NO.						
1	MEGUSH8602	118050.	10.08	277867.	14.39	167789.	20.03
2	MEGDIM0236	131116.	10.07	308404.	14.37	190255.	20.02
3	MEGDD0117	87529.	10.06	220093.	14.37	138160.	20.02
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	324856.	24.51	330846.	32.47	364804.	36.41
	UPPER LIMIT	649712.	25.01	661692.	32.97	729608.	36.91
	LOWER LIMIT	162428.	24.01	165423.	31.97	182402.	35.91
	EPA SAMPLE NO.						
1	MEGUSH8602	327388.	24.47	364694.	32.43	453751.	36.39
2	MEGDIM0236	390869.	24.46	437929.	32.41	526893.	36.37
3	MEGDD0117	288316.	24.46	327253.	32.41	399381.	36.37
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS049 Date Analyzed: 03/04/03
Instrument ID: 5973 B Time Analyzed: 11:51

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	118173.	10.08	307789.	14.57	220457.	20.52
	UPPER LIMIT	236346.	10.58	615578.	15.07	440914.	21.02
	LOWER LIMIT	59087.	9.58	153895.	14.07	110229.	20.02
	EPA SAMPLE NO.						
1	WBLK02	120886.	9.71	279883.	14.02	183189.	19.69
2	WMSB	77039.	9.70	176274.	14.02	118247.	19.68
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS049 Date Analyzed: 03/04/03
Instrument ID: 5973 B Time Analyzed: 11:51

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	424798.	25.11	464197.	33.15	527990.	37.16
	UPPER LIMIT	849596.	25.61	928394.	33.65	1055980.	37.66
	LOWER LIMIT	212399.	24.61	232099.	32.65	263995.	36.66
	EPA SAMPLE NO.						
1	WBLK02	366113.	24.12	447150.	32.07	548026.	36.01
2	WMSB	234548.	24.12	282124.	32.06	351448.	36.01
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS050 Date Analyzed: 03/05/03
Instrument ID: 5973 B Time Analyzed: 11:50

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	66258.	9.71	158617.	14.03	107533.	19.69
	UPPER LIMIT	132516.	10.21	317234.	14.53	215066.	20.19
	LOWER LIMIT	33129.	9.21	79309.	13.53	53767.	19.19
	EPA SAMPLE NO.						
1	WBLK01	131436.	9.71	305642.	14.02	198911.	19.69
2	WBLK03	67372.	9.71	158968.	14.03	108735.	19.69
3							
4							
5							
6							
7							
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11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS050 Date Analyzed: 03/05/03
Instrument ID: 5973 B Time Analyzed: 11:50

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	219978.		24.13		252530.		32.07		280305.		36.01	
	UPPER LIMIT	439956.		24.63		505060.		32.57		560610.		36.51	
	LOWER LIMIT	109989.		23.63		126265.		31.57		140153.		35.51	
	EPA SAMPLE NO.												
1	WBLK01	381174.		24.12		403768.		32.07		439355.		36.01	
2	WBLK03	223506.		24.12		255185.		32.06		312399.		36.01	
3													
4													
5													
6													
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8													
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17													
18													
19													
20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

PACKAGE

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Case Narrative

Client: URS Consultants, Inc. – NYSEG Mechanicville

Case: URS 0305

SDG: MEGCIM0102

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MEGDD0241	030207J-01	02/07/03	15:06	Water
MEGCIM0102	030207J-02	02/07/03	15:06	Water
MEGDD0237	030207J-03	02/07/03	15:06	Water
MEGDIM8618	030207J-04	02/07/03	15:06	Water
TB030207	030207J-05	02/07/03	15:06	Water
MEGDD0239	030212M-01	02/12/03	14:15	Water
MEGDD0236	030212M-02	02/12/03	14:15	Water
MEGGUSH8602	030212M-03	02/12/03	14:15	Water
MEGDIM0236	030212M-04	02/12/03	14:15	Water
MEGDD0117	030212M-05	02/12/03	14:15	Water
TB030212	030212M-06	02/12/03	14:15	Water

Initially this project was received as a routine analysis. On 2/26/03 the samples were requested to have a NYSDEC ASP Category B data package supplied. At this time all analyses had been completed. This data package was generated as best as possible, but since it was received as a routine analysis some portions of the data package may not conform to the requirements for a NYSDEC ASP Category B data package.

Volatile Organics

1) The samples were analyzed using EPA Method 8260 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %D's for the compounds 1,1-Dichloroethene and 1,1,2,2-Tetrachloroethane in the continuing calibration analyzed on 2/19/03 were outside the criteria established by the method. The %D's for these compounds were 36.3 % and 25.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

3) A matrix spike and matrix spike duplicate analysis was not performed with this batch of samples. A Laboratory Control sample was analyzed with all compounds. The recoveries for 1,1-Dichloroethene and trans-1,2-Dichloroethene were just below the acceptable limits.

4) The internal standard recoveries for sample MEGDD0237 (AES sample number 030207J-03) were outside required limits. This sample was not re-analyzed.

5) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed for Polynuclear Aromatic Hydrocarbons only using EPA Method 8270 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The RRF for the compound N-Nitroso-di-n-propylamine in the initial calibration analyzed on 12/17/02 was outside the required limits. The RRF for this compound was 0.494. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Benzo(k)fluoranthene in the continuing calibration analyzed on 2/18/03 was outside the criteria established by the method. The %D for this compound was 32.8 %. The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 2/18/03 was outside the required limits. The RRF for this compound was 0.474. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

4) The %D for the compound 2,4-Dinitrotoluene in the continuing calibration analyzed on 2/27/03 was outside the criteria established by the method. The %D for this compound was 25.5 %. The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 2/27/03 was outside the required limits. The RRF for this compound was 0.497. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D for the compound Terphenyl-d14 in the continuing calibration analyzed on 2/28/03 was outside the criteria established by the method. The %D for this compound was 25.9 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

6) A matrix spike and the matrix spike duplicate analysis was not performed with this batch of samples. A matrix spike blank was analyzed and all recoveries were within required limits.

Inorganics – Total Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) A sample from another client was analyzed as the matrix spike and duplicate sample (AES sample number 030207F-01). All recoveries were within required limits.

3) A serial dilution was not analyzed with this set of data.

Conventionals

1) Samples MEGDD0239 and MEGUSH8602 (AES sample numbers 030212M-01 and 030212M-03) were used for the Cyanide matrix spike analysis. All recoveries were within required limits.

2) Samples MEGUSH8602 and another client's sample (AES sample numbers 030212M-03 and 030214028-006) were used for the Cyanide and Phenol duplicate samples respectively. All recoveries were within required limits

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 4/9/03

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	Mechanicville MGP site	Eric Lovendusk
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T194 #5	EJS

AES Sample Number	Client Sample Identification & Location		Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp.	Grab	Number of Cont's	Analysis Required
	MEGDD0241	J01	2/6/03		A P	W		x	7	See Below
	MEGCIM0102	J02	2/6/03	0315	A P	W		x	7	See Below
	MEGDD0237	J03	2/7/03	1100	A P	W		x	7	See Below
	MEGDIM8618	J04	2/7/03	1115	A P	W		x	6	See Below (NO filtered metals)
	TB030207	J05	2/7/03	/	A P	TB		x	1	TCL VOCs
					A P					
	030207 J				A P					
					A P					
					A P					
					A P					
					A P					
					A P					
					A P					
					A P					
					A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAHs: 8270
Total Phenols: 9065/420.1
TCL VOCs: 8260
Cyanide: Total (9012/335.3); Weak acid dissociable (SM4500I)
Metals: 6010 - RCRA 8 metals / Field Filtered metals (6010)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJS		2/7/03 1215
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	ML	2/7/03 3:06

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Eriko Fujita	Mechanicville MGP site	ERIC LOUCKS-RI / Chris McMahon
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30307T194 #5	EJF

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
030212 M01	MEGDD02B9	2/11/03	0955	(A) P	W		x	7	See Below
M02	MEGDD0236	2/11/03	1025	(A) P	W		x	7	See Below
M03	MEGUSH8602	2/12/03	0940	(A) P	W		x	7	See Below
M04	MEGDIM0236	2/12/03	1125	(A) P	W		x	7	See Below
M05	MEGDD0117	2/12/03	1310	A (P)	W		x	7	See Below
M06	TB030212	2/12/03	/	A P	TB		x	2	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:	Special Instructions/Remarks:
☐ 1 Day ☐ 3 Day ☒ Normal ☐ 2 Day ☐ 5 Day	TCL VOCs - 8260 PAHs - 8270 TOTAL Phenols - 9065/420.1 Cyanide - Total - 9012/335.3; Weak acid dissociable - SM 4500I Metals - 6010 RCRA 8 metals Field Filtered samples for turbidity >50 NTUs
CC Report To:	
Relinquished by: (Signature)	Received by: (Signature) — Date/Time: 2/12/03 14:15
Relinquished by: (Signature)	Received for Laboratory by: — Date/Time

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030207 J

Sample # 030207 J01 Client Sample ID MEGDD0241 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	CJ	2/7/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	Mark Cook	2/19/03 1600	Mark Cook	ML	2/19/03 1800	CN -
4	ML	Shash	2/12/03 9:00	Shash	ML	2/13/03 11:00	Metals Hg
5	↓	↓	↓	↓	↓	↓	Filt Hg
6	ML	Bim	2/19/03 1000	Bim	ML	2/19/03 1030	Phenol
7	ML	S. Sojka	2/12/03 11:00				PAH
3	ML	Shash	2/20/03 9:00	Shash	ML	2/20/03 11:00	Metals Icp
4	↓	↓	↓	↓	↓	↓	Filt Metals

Sample # 030207 J02 Client Sample ID MEGCIM0102 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	CJ	2/7/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	Mark Cook	2/19/03 1600	Mark Cook	ML	2/19/03 1800	CN -
4	ML	Shash	2/12/03 9:00	Shash	ML	2/13/03 11:00	Metals Hg
5	↓	↓	↓	↓	↓	↓	↓
6	ML	Bim	2/19/03 1000	Bim	ML	2/19/03 1030	Phenol
7	ML	S. Sojka	2/12/03 11:00				PAH
4	ML	Shash	2/20/03 9:00	Shash	ML	2/20/03 11:00	Metals Icp
5	↓	↓	↓	↓	↓	↓	Filt Metals

Sample # 030207 J03 Client Sample ID MEGDD0237 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	CJ	2/7/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	Mark Cook	2/19/03 1600	Mark Cook	ML	2/19/03 1800	CN -
4	ML	Shash	2/12/03 9:00	Shash	ML	2/13/03 11:00	Hg
5	↓	↓	↓	↓	↓	↓	Filt Met.
6	ML	Bim	2/19/03 1000	Bim	ML	2/19/03 1030	Phenol
7	ML	S. Sojka	2/12/03 11:00				PAH
4	ML	Shash	2/20/03 9:00	Shash	ML	2/20/03 11:00	Metals Icp
5	↓	↓	↓	↓	↓	↓	Filt Metals

Sample # 030207 J04 Client Sample ID MEGDIM8618 # Bottles: 6

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	CJ	2/7/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	Mark Cook	2/19/03 1600	Mark Cook	ML	2/19/03 1800	CN -
4	ML	Shash	2/12/03 9:00	Shash	ML	2/13/03 11:00	Metals

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030207 J

Sample # **030207 J04** Client Sample ID **MEGDIM8618** # Bottles: 6

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
5	ML	[illegible]	2/12/03 9:00	[illegible]	ML	2/13/03 14:00	Metals 14
6	ML	[illegible]	2/11/03 11:00				pH
4	ML	[illegible]	2/12/03 9:00	[illegible]	ML	2/13/03 11:20	Metals
5	↓	↓	↓	↓	↓	↓	↓
7	ML	[illegible]	2/19/03 10:00	[illegible]	ML	2/19/03 10:30	Phenol

Sample # **030207 J05** Client Sample ID **TB030207** # Bottles: 1

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/7/03 16:00				VOA

***** End Chain of Custody Form *****

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030212 M

Sample # 030212 M01 Client Sample ID MEGDD0239 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/12/03 16:15				VOA
2	↓	[illegible]	2/20/03 1700	[illegible]	ML	2/20/03 1700	CN-
3	ML	[illegible]	2/13/03 9:00	[illegible]	ML	2/13/03 11:00	Metals Hg
4	ML	[illegible]	2/18/03 11:00	[illegible]	ML	2/20/03 8:00	Phenol
5	↓	↓	↓	↓	↓	↓	PAH
6	ML	[illegible]	2/20/03 7:30	[illegible]	ML	2/26/03 11:00	Metals Ag
7	ML	S. Sutton	2/18/03 11:00				
4	ML	[illegible]	2/26/03 9:00	[illegible]	ML	2/26/03 11:00	Metals Ag
5	↓	↓	↓	↓	↓	↓	↓

Sample # 030212 M02 Client Sample ID MEGDD0236 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/12/03 16:15				VOA
2	↓	[illegible]	2/20/03 1700	[illegible]	ML	2/21/03 1700	CN-
3	ML	[illegible]	2/13/03 9:00	[illegible]	ML	2/13/03 11:00	Metals Hg
4	ML	[illegible]	2/18/03 11:00	[illegible]	ML	2/20/03 8:00	Phenol
5	↓	↓	↓	↓	↓	↓	PAH
6	ML	[illegible]	2/20/03 7:30	[illegible]	ML	2/26/03 11:00	Metals Ag
7	ML	S. Sutton	2/18/03 11:00				
4		[illegible]	2/26/03 9:00	[illegible]	ML	2/26/03 11:00	Metals Ag
5		↓	↓	↓	↓	↓	↓

Sample # 030212 M03 Client Sample ID MEGUSH8602 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/12/03 16:15				VOA
2	↓	[illegible]	2/21/03 1700	[illegible]	ML	2/21/03 1700	CN-
3	ML	[illegible]	2/28/03 9:00	[illegible]	ML	2/13/03 11:00	Metals Hg
4	ML	[illegible]	2/20/03 15:00	[illegible]	ML	2/20/03 13:00	Phenol
5	↓	↓	↓	↓	↓	↓	PAH
6	ML	[illegible]	2/18/03 11:00	[illegible]	ML	2/26/03 11:00	Metals Ag
7	ML	S. Sutton	2/26/03 9:00				
4	ML	[illegible]	↓	[illegible]	ML	2/26/03 11:00	Metals Ag
5	↓	↓	↓	↓	↓	↓	↓

Sample # 030212 M04 Client Sample ID MEGDIM0236 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/13/03 9:00	[illegible]	ML	2/13/03 11:00	Metals Hg
2	↓	↓	↓	↓	↓	↓	Ag
3	ML	[illegible]	2/12/03 16:15				VOA
4	↓	↓	↓				↓

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030212 M

Sample # 030212 M04 Client Sample ID MEGDIM0236 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
5	ML	Mark Coul	2/21/03 1200	Mark Coul	ML	2/21/03 1700	CN
6	ML	Kim	2:20:03 1300	Kim	ML	2:20:03 1330	Phenol
7	ML	S Sabo	2/18/03 1100				PAH
1	ML	Smith	2/26/03 9:00	Smith	ML	2/26/03 1100	Metals: TC
2	↓	↓	↓	↓	↓	↓	↓

Sample # 030212 M05 Client Sample ID MEGDD0117 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	A Jamison	2/12/03 1115				VOA
2	↓	↓	↓				↓
3	ML	Smith	2/13/03 9:00	Smith	ML	2/13/03 11:00	Metals Hg
4	↓	↓	↓	↓	↓		Diff Cl
5	ML	Mark Coul	2/21/03 1200	Mark Coul	ML	2/21/03 1700	CN
6	ML	Kim	2:20:03 1300	Kim	ML	2:20:03 1330	Phenol
7	ML	S Sabo	2/18/03 1100				PAH
3	ML	Smith	2/26/03 9:00	Smith	ML	2/26/03 1100	Metals: TC
4	↓	↓	↓	↓	↓	↓	↓ Fe

Sample # 030212 M06 Client Sample ID TB030212 # Bottles: 1

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	A Jamison	2/12/03 1115				VOA

***** End Chain of Custody Form *****

VOLATILE ORGANICS

ANALYSIS

QC

SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	VBLK01	92	94	108		0
2	MEGDD0241	96	94	86		0
3	MEGCIM0102	91	97	83		0
4	MEGDD0237	100	95	91		0
5	MEGDIM8618	89	89	104		0
6	TB030207	99	104	89		0
7	MEGDD0239	99	99	93		0
8	MEGDD0236	99	103	95		0
9	MEGUSH8602	95	97	82		0
10	MEGDIM0236	91	94	89		0
11	MEGDD0117	92	91	78		0
12	TB030212	101	99	112		0
13	LCS@20	94	97	87		0
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	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

WATER VOLATILE LABORATORY CONTROL SAMPLE RECOVERY

LAB NAME Adirondack Environmental Contract:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix Spike - EPA Sample No.: LCS @ 20 Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Concentration ug/L	LCS Concentration ug/L	LCS % REC. #	QC Limits REC.
Chloromethane	20	0.0	20	98	D-273
Bromomethane	20	0.0	19	95	78-120
Vinyl Chloride	20	0.0	15	77	62-122
Chloroethane	20	0.0	19	97	83-117
Methylene Chloride	20	0.0	18	91	58-136
Acetone	20	0.0	17	85	60-140
Carbon Disulfide	20	0.0	14	71	60-140
1,1-Dichloroethene	20	0.0	13	64	68-122
1,1-Dichloroethane	20	0.0	19	95	79-117
trans-1,2-Dichloroethene	20	0.0	13	65	76-120
cis-1,2-Dichloroethene	20	0.0	18	88	76-120
Chloroform	20	0.0	19	93	73-115
1,2-Dichloroethane	20	0.0	19	93	81-119
2-Butanone	20	0.0	19	95	60-140
1,1,1-Trichloroethane	20	0.0	23	117	74-122
Carbon Tetrachloride	20	0.0	22	112	88-128
Bromodichloromethane	20	0.0	21	106	86-114
1,2-Dichloropropane	20	0.0	22	109	78-114
cis-1,3-Dichloropropene	20	0.0	19	97	82-116
Trichloroethene	20	0.0	21	103	85-124
Dibromochloromethane	20	0.0	24	118	53-149
1,1,2-Trichloroethane	20	0.0	23	113	87-117
Benzene	20	0.0	19	96	80-118
trans-1,3-Dichloropropene	20	0.0	20	98	82-116
Bromoform	20	0.0	24	119	45-169
4-Methyl-2-Pentanone	20	0.0	22	112	60-140
2-Hexanone	20	0.0	20	102	60-140
Tetrachloroethene	20	0.0	20	99	81-111
1,1,2,2-Tetrachloroethane	20	0.0	25	123	64-136
Toluene	20	0.0	20	99	82-118
Chlorobenzene	20	0.0	21	106	74-108
Ethylbenzene	20	0.0	19	97	83-115
Styrene	20	0.0	19	93	39-153
m&p-Xylene	40	0.0	35	88	75-120
o-Xylene	20	0.0	19	93	75-120

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 2 out of 35 outside limits.

Comments: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: C0471 Lab Sample ID: VBLK01

Date Analyzed: 02/19/03 Time Analyzed: 14:00

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGDD0241	MEGDD0241	C0475	15:53
2	MEGCIM0102	MEGCIM0102	C0476	16:21
3	MEGDD0237	MEGDD0237	C0477	16:49
4	MEGDIM8618	MEGDIM8618	C0478	17:18
5	TB030207	TB030207	C0479	17:46
6	MEGDD0239	MEGDD0239	C0480	18:14
7	MEGDD0236	MEGDD0236	C0481	18:43
8	MEGUSH8602	MEGUSH8602	C0482	19:11
9	MEGDIM0236	MEGDIM0236	C0483	19:39
10	MEGDD0117	MEGDD0117	C0484	20:07
11	TB030212	TB030212	C0485	20:35
12	LCS@20	LCS@20	C0486	21:04
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: CT045 BFB Injection Date: 02/04/03

Instrument ID.: H5970 C BFB Injection Time: 11:27

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.2
75	30.0 - 60.0% of mass 95	45.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.9
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	69.1
175	5.0 - 9.0 % of mass 174	5.4 (7.8)1
176	95.0 - 101.0% of mass 174	69.1 (100.0)1
177	5.0 - 9.0% of mass 176	3.5 (5.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD010	VSTD010	CS047	02/04/03	14:09
2	VSTD020	VSTD020	CS048	02/04/03	14:39
3	VSTD050	VSTD050	CS049	02/04/03	15:09
4	VSTD100	VSTD100	CS050	02/04/03	15:39
5	VSTD200	VSTD200	CS051	02/04/03	16:09
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: CT071 BFB Injection Date: 02/19/03

Instrument ID.: H5970 C BFB Injection Time: 09:12

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.7
75	30.0 - 60.0% of mass 95	48.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.0
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	59.6
175	5.0 - 9.0 % of mass 174	3.2 (5.4)1
176	95.0 - 101.0% of mass 174	57.1 (95.8)1
177	5.0 - 9.0% of mass 176	3.3 (5.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS071	02/19/03	09:32
2	VBLK01	VBLK01	C0471	02/19/03	14:00
3	MEGDD0241	MEGDD0241	C0475	02/19/03	15:53
4	MEGCIM0102	MEGCIM0102	C0476	02/19/03	16:21
5	MEGDD0237	MEGDD0237	C0477	02/19/03	16:49
6	MEGDIM8618	MEGDIM8618	C0478	02/19/03	17:18
7	TB030207	TB030207	C0479	02/19/03	17:46
8	MEGDD0239	MEGDD0239	C0480	02/19/03	18:14
9	MEGDD0236	MEGDD0236	C0481	02/19/03	18:43
10	MEGUSH8602	MEGUSH8602	C0482	02/19/03	19:11
11	MEGDIM0236	MEGDIM0236	C0483	02/19/03	19:39
12	MEGDD0117	MEGDD0117	C0484	02/19/03	20:07
13	TB030212	TB030212	C0485	02/19/03	20:35
14	LCS@20	LCS@20	C0486	02/19/03	21:04
15					
16					
17					
18					
19					
20					
21					
22					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): CS071 Date Analyzed: 02/19/03
Instrument ID: H5970 C Time Analyzed: 09:32
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	6768.	8.37	70650.	9.82	72862.	15.23
	UPPER LIMIT	13536.	8.87	141300.	10.32	145724.	15.73
	LOWER LIMIT	3384.	7.87	35325.	9.32	36431.	14.73
	EPA SAMPLE NO.						
1	VBLK01	6070.	8.38	61812.	9.83	66356.	15.27
2	MEGDD0241	7516.	8.41	62658.	9.82	68217.	15.26
3	MEGCIM0102	7721.	8.37	61339.	9.82	66994.	15.26
4	MEGDD0237	3659.	8.37	29286.*	9.82	30152.*	15.26
5	MEGDIM8618	4451.	8.41	40414.	9.82	46288.	15.26
6	TB030207	7753.	8.37	63330.	9.82	66963.	15.26
7	MEGDD0239	5906.	8.41	53388.	9.82	55506.	15.26
8	MEGDD0236	7274.	8.41	62027.	9.82	66037.	15.26
9	MEGUSH8602	7546.	8.37	61874.	9.82	64734.	15.26
10	MEGDIM0236	7185.	8.41	61757.	9.82	67017.	15.26
11	MEGDD0117	8199.	8.44	62508.	9.82	69839.	15.26
12	TB030212	5922.	8.41	61459.	9.86	64868.	15.26
13	LCS@20	8201.	8.41	68592.	9.83	71580.	15.27
14							
15							
16							
17							
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20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

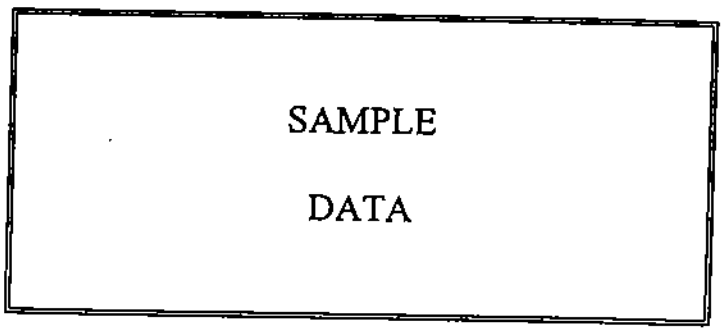
AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Volatile Organics IDL

Date Performed: 1/8/2003

Parameter	Conc 1 CIDL1	Conc 2 CIDL2	Conc 3 CIDL3	Conc 4 CIDL4	Conc 5 CIDL5	Conc 6 CIDL6	Conc 7 CIDL7	SD	IDL
Chloromethane	17.43	18.52	20.71	21.76	20.76	17.17	22.57	2.138	6.719
Bromomethane	19.27	22.02	18.72	18.16	21.84	22.81	22.14	1.914	6.016
Vinyl Chloride	17.24	17.13	18.58	19.39	20.25	20.13	19.69	1.303	4.096
Chloroethane	19.55	19.40	21.35	18.36	18.49	19.45	19.78	0.986	3.099
Methylene Chloride	21.78	20.77	21.45	21.47	21.19	20.91	21.78	0.398	1.250
Acetone	20.84	21.04	18.81	22.10	19.48	18.47	21.02	1.343	4.221
Trichlorofluoromethane	17.61	19.46	18.66	17.74	20.62	19.21	19.70	1.081	3.396
Carbon Disulfide	18.71	17.50	15.52	17.83	18.80	16.84	16.07	1.255	3.944
1.1-Dichloroethene	21.92	22.08		21.12	21.80	19.63	22.07	0.953	3.208
1.1-Dichloroethane	19.29	18.30	19.22	20.40	18.39	18.18	22.14	1.430	4.494
trans-1.2-Dichloroethene	17.67	14.01	16.44	15.95	18.00	17.42	14.71	1.524	4.790
cis-1.2-Dichloroethene	20.85	19.30	18.84	21.45	19.58	21.09	19.84	0.993	3.122
Chloroform	22.68	20.94	21.27	21.15	21.78	22.40	20.61	0.769	2.416
1.2 Dichloroethane	21.48	20.07	19.68	22.03	20.81	21.75	18.56	1.256	3.949
2-Butanone	23.52	19.32	23.50	19.84	21.16	17.61	22.01	2.210	6.946
1.1.1-Trichloroethane	21.30	20.60	19.88	19.85	20.91	19.67	21.55	0.754	2.368
Carbon Tetrachloride	20.09	20.94	20.13	20.21	20.56	20.61	20.79	0.336	1.057
Vinyl Acetate	18.99	19.55	18.54	19.36	17.16	19.28	19.14	0.815	2.563
Bromodichloromethane	21.20	21.47	19.38	19.74	21.25	18.53	20.89	1.133	3.561
1.2-Dichloropropane	20.33	20.70	19.76	19.87	20.16	18.61	19.49	0.674	2.118
cis-1.3-Dichloropropene	18.82	18.33	18.41	16.78	19.44	16.35	18.27	1.102	3.463
Trichloroethene	19.24	20.23	18.00	17.91	20.64	18.25	20.07	1.147	3.606
Dibromochloromethane	21.41	20.70	19.14	19.63	22.23	19.75	21.11	1.108	3.484
1,1.2-Trichloroethane	23.57	23.70	21.80	21.57	23.24	21.08	22.57	1.042	3.273
Benzene	19.54	19.38	19.16	18.63	20.47	18.26	19.82	0.736	2.313
trans-1.3-Dichloropropene	20.71	19.84	19.60	17.89	21.04	18.20	19.56	1.171	3.681
2-Chloroethyl vinyl ether	20.33	20.70	19.76	19.87	20.16	18.61	19.49	0.674	2.118
Bromoform	22.82	24.38	21.85	20.33	23.91	20.78	23.43	1.559	4.899
2-Hexanone	22.83	21.62	21.93	19.61	20.18	19.47	18.76	1.505	4.731
4-Methyl-2-pentanone	19.13	18.53	17.80	18.22	18.74	18.89	17.72	0.540	1.699
Tetrachloroethene	21.74	18.77	19.72	18.23	20.00	19.12	18.39	1.211	3.806
1,1.2,2-Tetrachloroethane	23.80	22.20	20.17	20.58	20.49	21.10		1.379	4.639
Toluene	18.29	18.46	17.66	18.23	19.95	18.00	18.20	0.730	2.293
Chlorobenzene	19.60	19.88	18.59	19.11	20.91	19.11	19.59	0.738	2.321
Ethylbenzene	19.57	17.19	18.09	17.33	19.07	17.28	17.23	0.985	3.097
Styrene	21.12	19.32	19.32	20.37	18.89	19.86	18.58	0.882	2.771
m&p-Xylene	39.79	37.89	40.31	40.88	38.08	40.43	38.78	1.199	3.767
o-Xylene	20.76	18.81	18.70	20.13	19.03	18.97	19.87	0.789	2.479
1.3-Dichlorobenzene	19.56	20.80	19.79	19.94	22.42	20.28	20.24	0.963	3.026
1.4-Dichlorobenzene	19.64	20.67	19.28	20.63	22.10	18.32	19.39	1.231	3.870
1.2-Dichlorobenzene	23.31	20.35	20.99	20.24	19.86	19.51	19.69	1.307	4.107
Dichlorodifluoromethane	19.77	17.31	18.82	19.98	18.43	20.92	17.80	1.284	4.036


SAMPLE
DATA

1A

EPA SAMPLE NO.

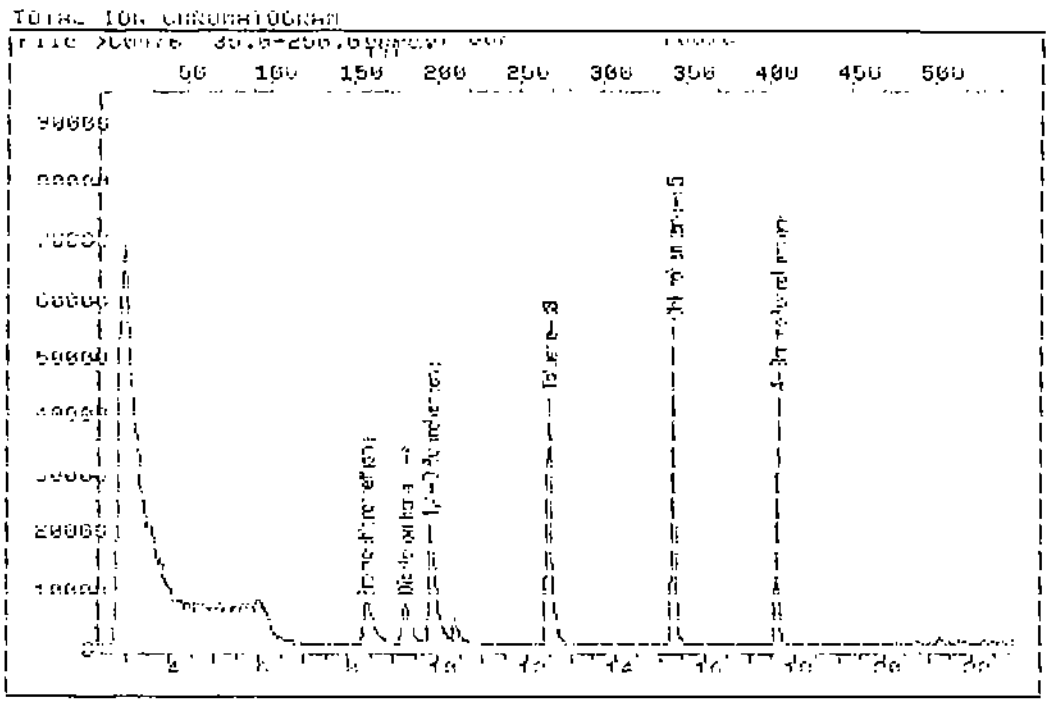
VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGCIM0102

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGCIM0102
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0476
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/26/03



Data File: >D:\0426::04
Name: 030207 .002
Mode: 2001C

Quant Output File: >D:\0426::Q1
Instrument ID: .001 L

Id File: 0591C:::1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:05

Last Anal Time: **0219 09:2

Operator ID: MGeIE
Quant Time : 030219 16:4>
Injection at: **0219 16:21

QUANT REPORT Page: 1

Operator ID: DAVIE Quant Rev: 2 Quant Time: 03/02/19 16:32
Output File: ^D0426::Q1 Injected at: **/02/19 16:21
Data File: ^D0426::D4 Dilution Factor: 1.0000
Name: 030207 302 Instrument ID: 7001 C
Misc: 7001C

ID File: 10541C::MT
Title: HP 5971 Continuing Calibration Standard
Last Calibration: 03/01/31 10:03 Last Quat Time: **/02/19 09:32

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	8.32	128.0	7771	50.00	ug	
20)	1,2-Dichloroethane-d4	9.26	65.0	31689	41.32	UG	2
29)	*1,4-Difluorobenzene	10.82	114.0	81999	50.00	ug	
37)	*Chlorobenzene-d5	15.26	117.0	66994	50.00	UG	9
43)	Toluene d-8	15.47	98.0	85016	45.61	ug	
49)	Bromofluorobenzene	17.61	95.0	35806	48.69	UG	2

* Compound is ISTD

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

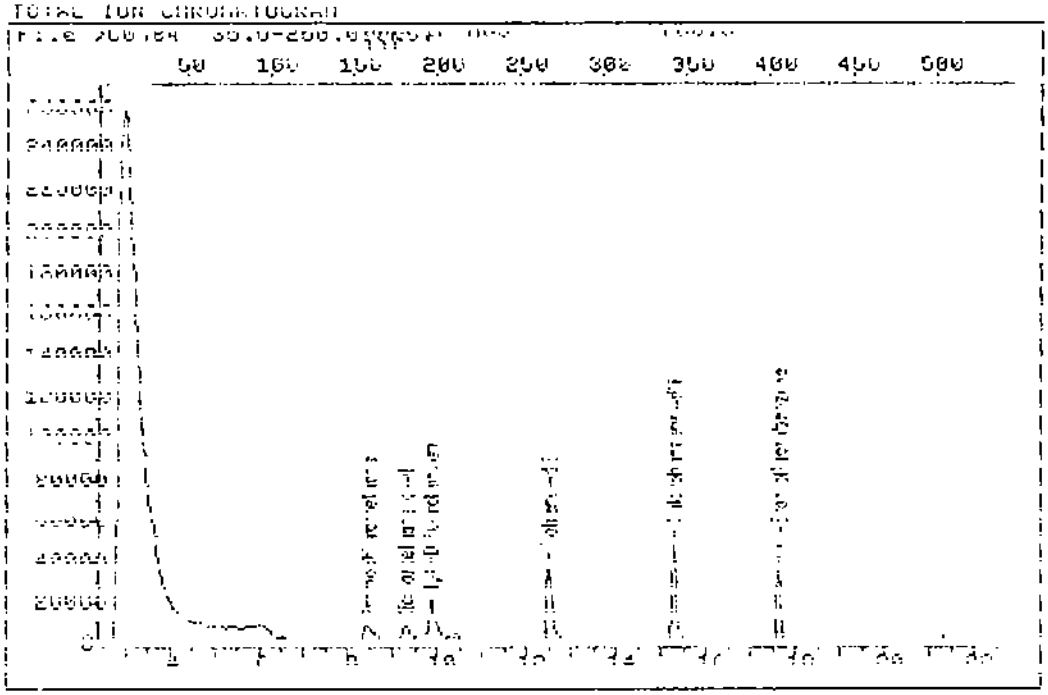
EPA SAMPLE NO.

MEGDD0117

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0117
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0484
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/3/03



Data File: >[illegible]
Name: [illegible]
Mask: 2[illegible]

Report Output File: >[illegible]
Last Command ID: [illegible]

Id File: [illegible]
Title: HP UNIX Continuing Calibration Standard
Last Calibration: [illegible] Last Acal Time: [illegible]

Operator ID: [illegible]
Sample Time : [illegible]
Injected at: [illegible]

Quant Report Page 1

Operation ID: MASTE Quant Rev: 2 Quant Time: 0..0219 20: 1
Output File: ^C:0484::(0) Injected at: **0219 20:07
Data File: >C:0484::04 Dilution Factor: 1.000 1
Name: 030212 MB5 Instrument ID: 7001 C
Misc: 7001C

ID File: IDA7C::MI
Title: HP 0A1 Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qnal Time: **0219 09:32

	Compound	R.T.	Q ion	Area	Conc	Units	I
1)	*Bromochloromethane	8.44	128.1	8 79	20.00	ug	
26)	1,2-Dichloroethane-d4	9.26	69.1	3m111	36.89	UG	2
29)	*1,4-Difluorobenzene	9.62	114.1	8 8	20.00	ug	
32)	*Chlorobenzene-d5	10.26	117.1	69439	20.00	UG	9
43)	Toluene-d8	12.47	98.1	9 7	40.89	ug	
45)	Bromofluorobenzene	12.61	95.1	34203	40.69	UG	2

* Compound is Isto

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

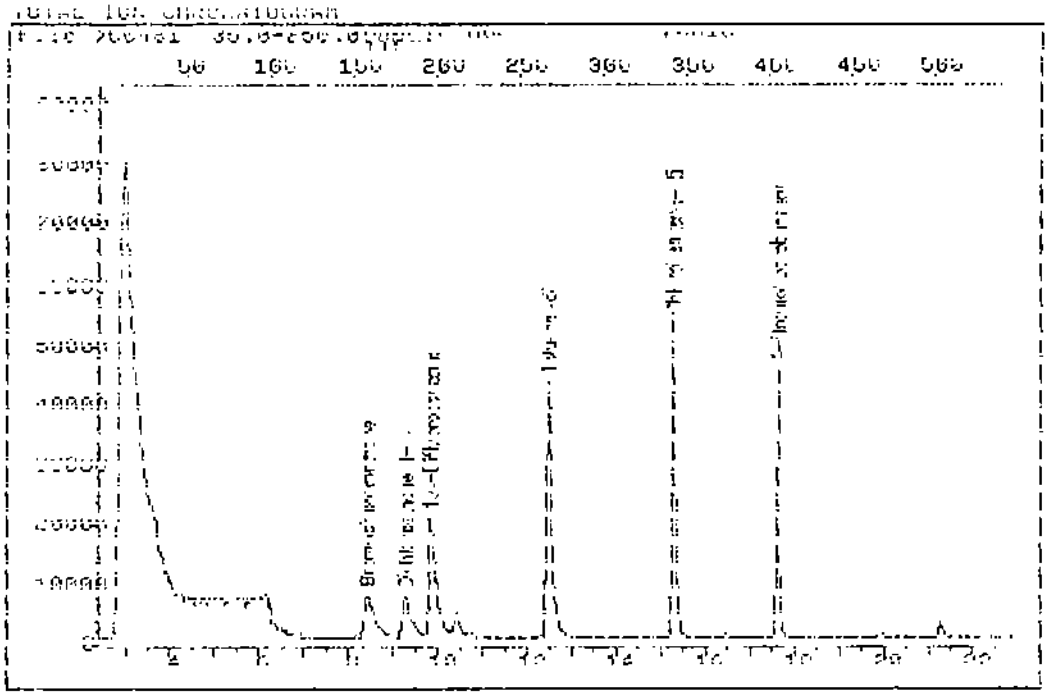
EPA SAMPLE NO.

MEGDD0236

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0236
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0481
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03



Data File: >C:\HPCHEM\1\DATA\030219\0002.D Quant Output File: ^C:\HPCHEM\1\DATA\030219\0002.RES
Name: 030219 0002 Instrument ID: 001
Misc: 200ng

Id File: C:\HPCHEM\1\METHODS\BP608.ID
Title: HP 608 Continuing Calibration Standard
Last Calibration: 030221 0103 Last Cal Time: 03/02/19 07:27

Operator ID: MARIE
Quant Time: 030219 19:00
Injected at: 03/02/19 18:49

Operator ID: HERTF Quant Pass: 2 Quant Time: 03:19 19:
Output File: ^DJ0481::DJ Injected at: **0219 18:42
Data File: ^DJ0481::D4 Dilution Factor: 1.00
Name: 030212 MB2 Instrument ID: Vist C
Misc: 2uliC

ID File: [DS91C.1::M]
Title: HP 5890 Continuous Calibration Standard
Last Calibration: 02:51 10:19 Last Qual Time: **0219 09:27

	Compound	R.T.	Q Lim	Area	Conc	Units	Q
1)	*Bromochloromethane	6.41	6.0	2? 5	2? 50	ng	
2)	1,4-Dichlorobutane-d4	9.22	6.0	3?047	42.??	Ug	?
3)	Fluorobenzene	7.82	6.0	6?07.7	2? 50	ng	
4)	*Dichloromethane-d2	10.26	12.0	6?097	2? 00	Ug	9?
5)	Toluene-d8	12.47	20.0	2?**2	4?.?0	ng	
6)	Bromofluorobenzene	12.61	9?.0	3?667	21.24	Ug	?

* Compound is valid

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

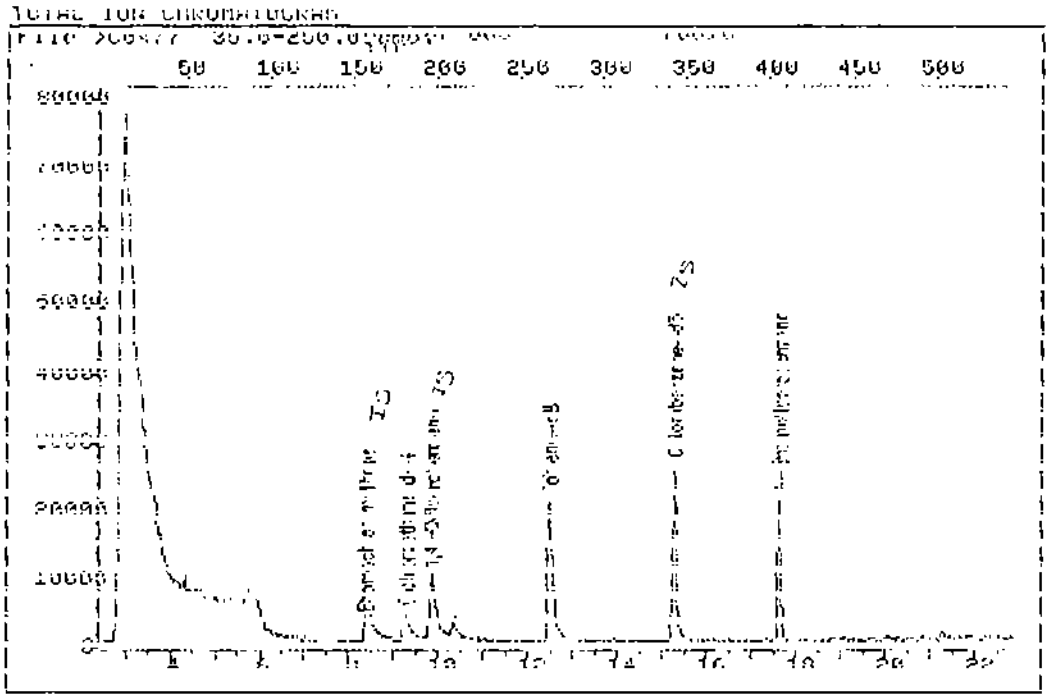
EPA SAMPLE NO.

MEGDD0237

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0237
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0477
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03



Data File: >L0427::04
Name: 030207 J03
Misc: 20010

Quant Output File: ^L0427::Q1
Instrument ID: 7001 L

Id File: L:591C::11
Title: HP 0DA Continuing Calibration Standard
Last Calibration: 030131 10:03

Last Cal Time: *:0219 09:.2

Operator ID: MGRIE
Event Time : 0?:0219 17:13
Injection at: **0219 16:49

QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 11/19/19 17:
Output File: ^C:\HP5972\DATA\111919\0303.D Injected at: **/11/19 16:49
Data File: ^C:\HP5972\DATA\111919\0303.D Dilution Factor: 1.000
Name: 031920 303 Instrument ID: 2001
Misc: 200ul

ID File: ID5971C.M
Title: HP VOA Continuing Calibration Standard
Last Calibration: 03/11/21 10:03 Last Quant Time: **/11/19 09:32

	Compound	R.T.	Q	Qm	Area	Conc	Units	Q
1)	*Bromochloromethane	7.32	128	1	2659	50.00	ug	
20)	1,2-Dichloroethane-d4	9.26	65	1	16051	49.67	ug	2
23)	*1,4-Difluorobenzene	9.82	114	1	2766	50.00	ug	
32)	*Chlorobenzene-d5	10.26	117	1	34192	50.00	ug	9
43)	Toluene n-8	12.47	98	1	44743	50.14	ug	
49)	Bromofluorobenzene	12.61	95	1	19394	47.52	ug	8

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

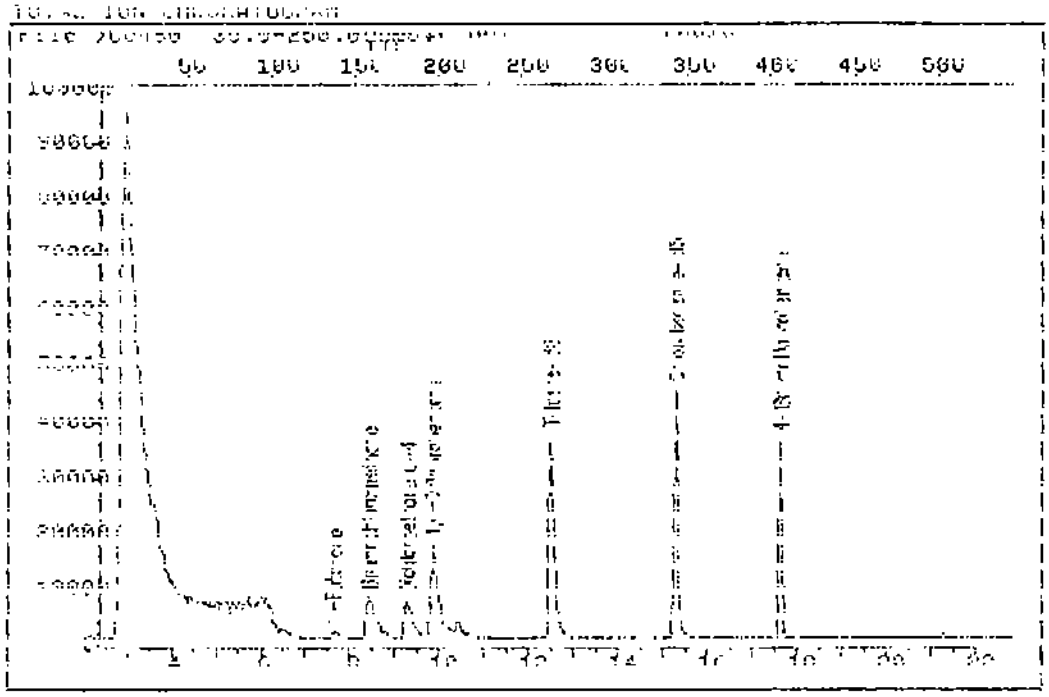
EPA SAMPLE NO.

MEGDD0239

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0239
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0480
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	43.	
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/3/03



Data File: [illegible]
Name: [illegible]
Misc: [illegible]

Quant Output File: [illegible]
Instrument ID: [illegible]

Id File: [illegible]
Title: HP VOA Continuing Calibration Standard
Last Calibration: [illegible]
Last Quad Time: [illegible]

Operator ID: [illegible]
Quant Time : [illegible]
Injected at: [illegible]

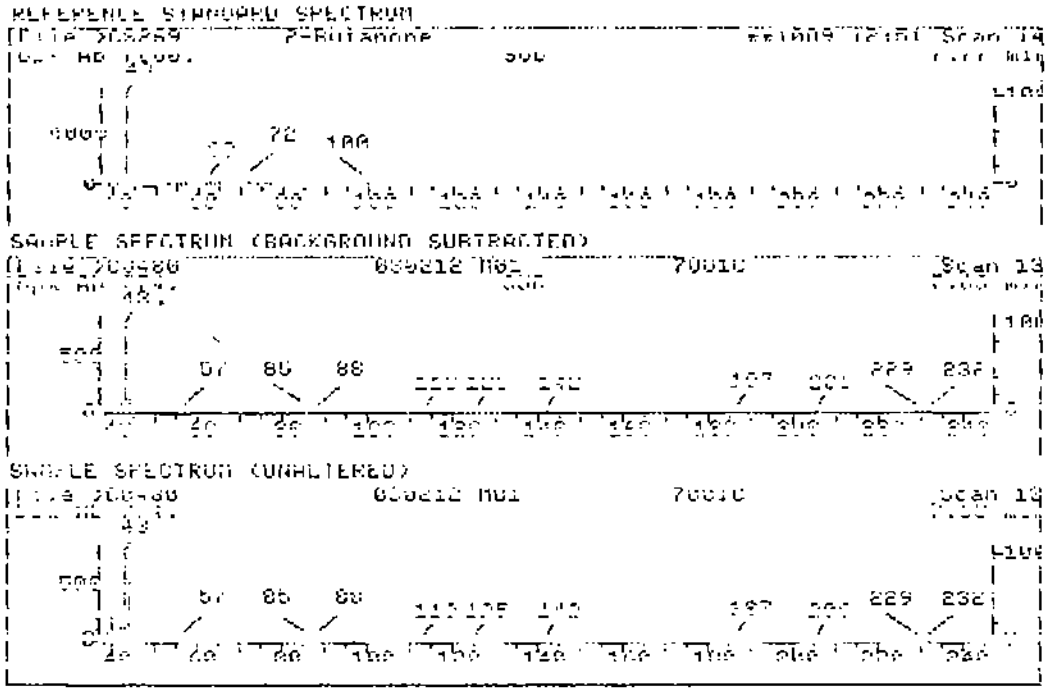
Quant Report Page 1

Operator ID: Merlin Quant Rest: Y Acquired Time: 10/19/99 9:4
Output File: D:\DATA\0\10\0401.M Injected at: 10/19/99 10:14
Data File: D:\DATA\0\10\0401.D Dilution Factor: 1.000
Name: 991019 MB1 Instrument ID: 7890T C
Misc: 7890T

Is File: D:\METHODS\8260.M
Title: HP 5890 Continuing Calibration Standard
Last Calibration: 99/10/31 10:03 Last Qcal Time: 10/19/99 09:22

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	Dichlorodifluoromethane	6.41	101.0	76116	20.000	ug	
20)	1,2-Dichloroethane-d4	9.26	67.0	26708	40.72	ug	8
22)	2-Butanone	7.63	43.0	15000	40.91	ug	
23)	*1,4-Difluorobenzene	9.87	114.0	99988	20.000	ug	8
32)	*Chlorobenzene-d5	11.26	117.0	90000	20.000	ug	
45)	Toluene-d8	12.47	98.0	80122	40.33	ug	9
49)	Bromofluorobenzene	12.61	95.0	77003	40.41	ug	

* Compound is ISTD



Data File: 21:04RH::DA
Name: 890212 RH1
Mass: 70010
Quant Time: 890219 18:36
Injected at: 890219 18:14
Last Qcal Time: 890219 09:32

Quant Output File: 21:04RH::QT
Instrument ID: RH1
Quant ID File: [DOCID::RH]

Compound No : 22
Compound Name : 2-Butanone
Scan Number : 138
Retention Time: 2.63 min.
Quantitation : 49.0
Area : 14988
Concentration : 47.91
q-value : 1000

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

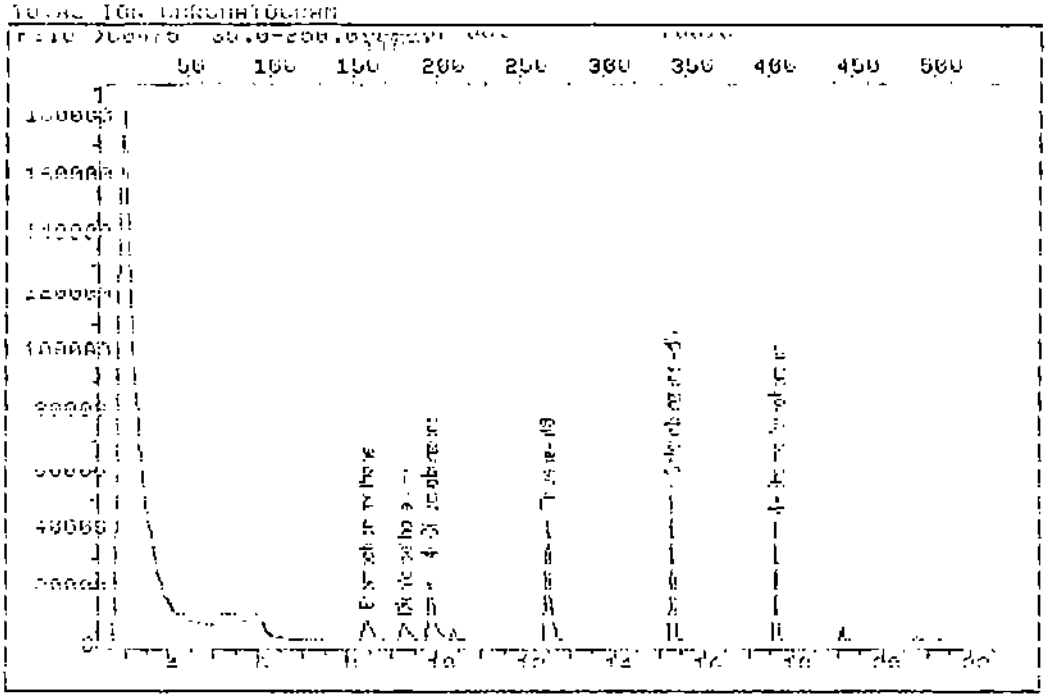
EPA SAMPLE NO.

MEGDD0241

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0241
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0475
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec. _____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMS 4/23/03



Data File: >CH429::D4 Quant Output File: ^CH429::Q1
Name: 030207 .001 Instrument ID: .001 f.
Misc: 20ul f.

ID File: 1059IC.:::M1
Title: HP VOA Confirming Calibration Standard
Last Calibration: 03/31 10:03 Last Qual Time: **/02/19 09:12

Operator ID: MARIE
Quant Time : 030219 16:12
Injected at: **0219 19:53

Operator ID: DAVIE Quant Rev: 2 Quant Time: 03/27/19 10:27
Output File: C:\DATA\032719\0301.D Injected at: 3/27/19 19:53
Data File: C:\DATA\032719\0301.D Dilution Factor: 1.00000
Name: 8310202 301 Instrument ID: 7890A G
Misc: 200UG/L

ID File: ID591C.M
Title: HP 5973 Continuing Calibration Standard
Last Calibration: 03/13/19 10:03 Last Qual Time: 3/27/19 09:32

	Compound	R.T.	Q ion	Area	Conc	units	q
1)	*Bromochloromethane	8.41	128.0	29316	50.000	ug/L	9
2)	1,2-Dichloroethane-d4	9.26	65.0	30922	47.85%	UG	87
3)	*1,4-Difluorobenzene	9.82	114.0	62038	50.000	ug/L	9
4)	*Chlorobenzene-d5	15.26	117.0	66217	50.000	UG	97
5)	Toluene d-8	11.47	98.0	96113	46.22	ug/L	
6)	Bromofluorobenzene	17.61	95.0	34464	47.02	UG	6

A compound is used

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

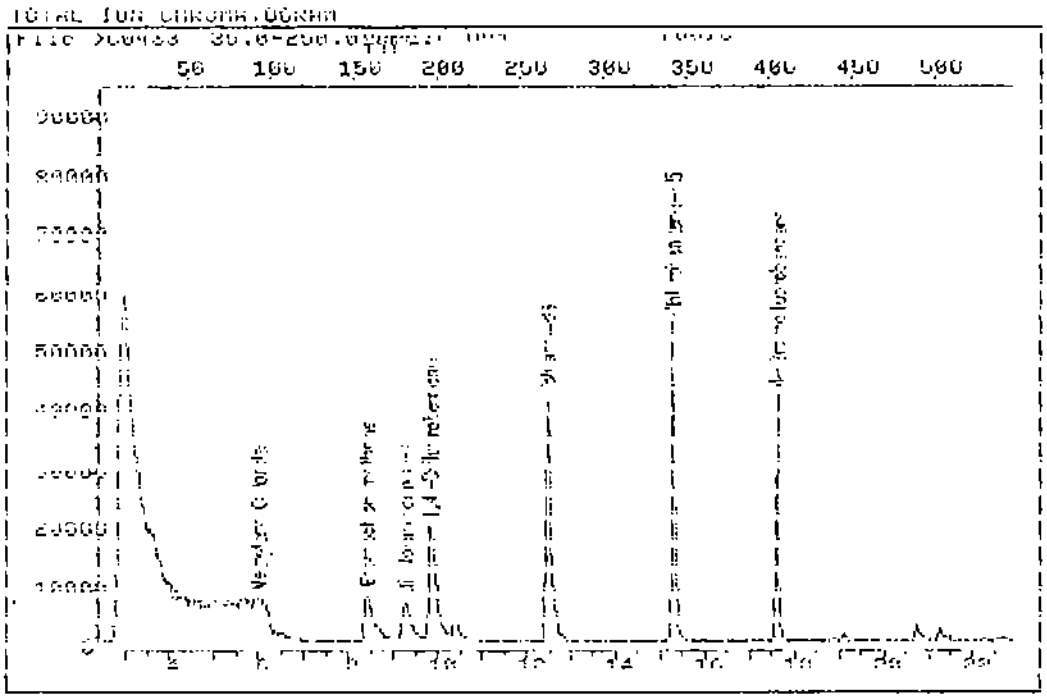
EPA SAMPLE NO.

MEGDIM0236

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0236
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0483
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

Amk 6/26/03



Data File: >C0483::04 Quant Output File: ^C0483::Q1
Name: 030212 004 Instrument ID: 801 1.
Misc: 20010

Id File: 030910::01
Title: HP 000 Continuing Calibration Standard
Last Calibration: 030131 10:10 Last Anal Time: **/**/19 09: 2

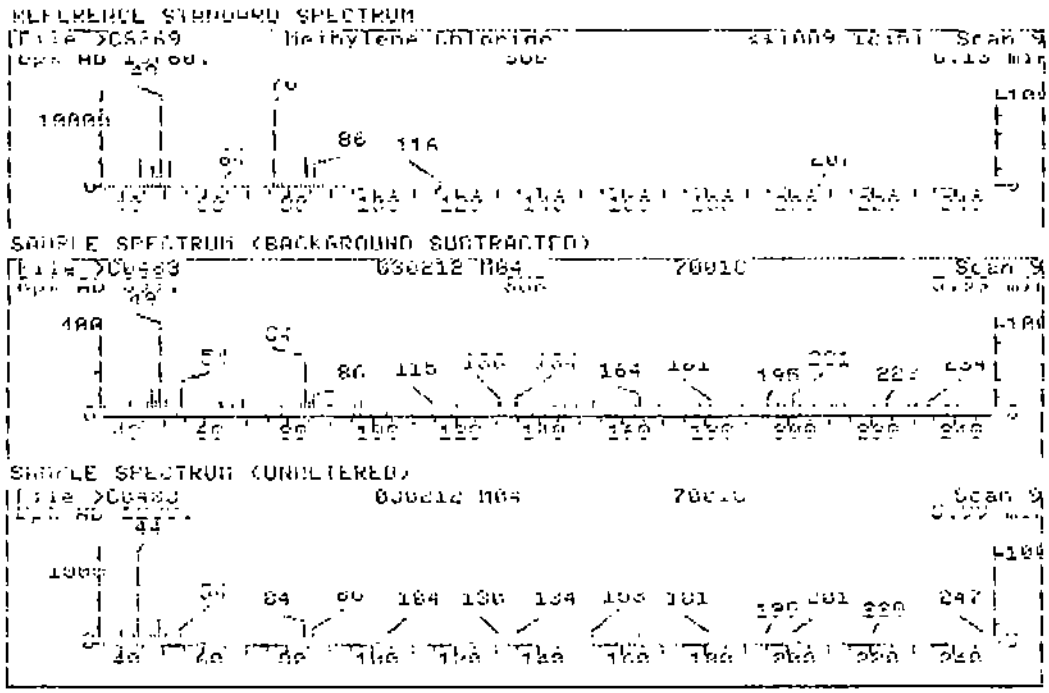
Operator ID: MARK
Acqmt Time : 03/07/19 21:13
Inverted at: **/**/19 19:59

Operator ID: [illegible] Quant Rev: 2 Quant Time: 0.0219 20:..3
Output File: ^C:\483::Q1 Injected at: **0219 19:39
Data File: ^:\483::D4 Dilution Factor: 1.0000
Name: 030212 M04 Instrument ID: 7001 C
Misc: 7001C

ID File: 10591C::MT
Title: HP 000 Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qual Time: **0219 09:32

	Compound	C.T.	Conc	Area	Time	Units	Q
1)	*Bromochloromethane	8.41	128.0	2.115	9.60	05	
6)	Methylene Chloride	5.99	84.0	3928	3.41	05	99
20)	1,2-Dichloroethane-d4	9.26	67.0	31.65	44.98	05	
24)	*1,4-Difluorobenzene	9.87	114.0	61752	50.00	05	89
37)	*Chlorobenzene-d5	19.26	117.0	n/a17	50.00	.05	
45)	Toluene d-8	12.47	98.0	89383	45.98	05	96
49)	Bromofluorobenzene	17.61	95.0	3 872	47.09	.05	

* Compound is ISTD



Data File: >C:\DATA\1:\04
Name: 930212 M04
Misc: 20010
Quant Time: 9/10/219 20:03
Injection #1: **/0/19 19:59
Last Qcal Time: **/0/19 09:39

Quant Output File: ^C:\DATA\1:\Q
Instrument ID: 20001 C
Quant ID File: C:\DATA\1:\M
Last Calibration: 9.../31 ..:..

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 94
Retention Time: 5.99 min.
Quant Ion : 84.0
Area : 3598
Concentration : 3.41 ug
q-Value : 59

1A

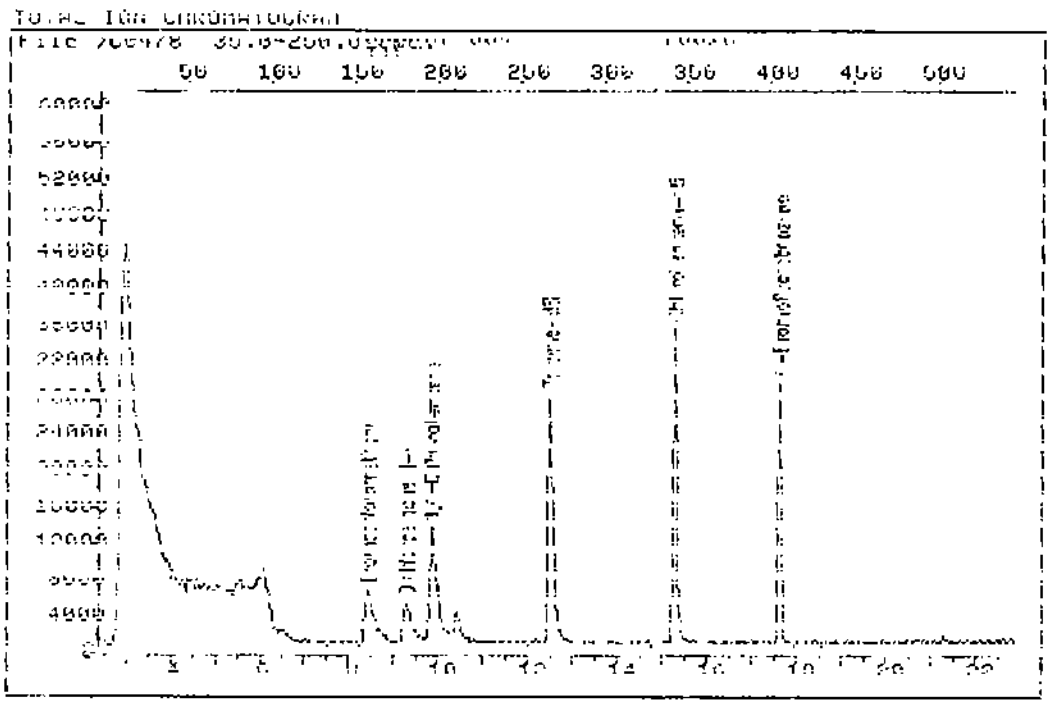
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM8618
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0478
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: 200428::104
Name: 020702 .004
Misc: 20010

Quant Output File: 200428::101
Instrument ID: .401 1.

Id File: 1.9.0.0::...
Title: HP VOA Continuing Calibration Standard
Last Calibration: 020131 10:10

Operator ID: MARIE
Quant Time : 020219 12:..
Injected at: *.0219 12:18

Operator ID: DAVIE Quant Rev: 2 Quant Time: 8 0219 [illegible]
Output File: ^C8478::01 Injected at: **8219 12:18
Data File: >8478::04 Dilution Factor: 1.000 0
Name: 030207 304 Instrument ID: 7661 C
Misc: 7661C

ID File: ID5910::MT
Title: HP 5988 Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qcal Time: **8219 09:32

	Compound	R.T.	Ion	Area	Conc	Units	Q
1)	*Bromochloromethane	6.41	128.0	4421	50.00	ug	
2)	1,2-Dichloroethane-d4	9.26	65.0	22126	51.29	UG	2
3)	*1,4-Difluorobenzene	.82	114.0	41114	50.00	ug	3
32)	*Chlorobenzene-d5	15.26	117.0	46188	50.00	UG	91
43)	Toluene d-8	12.42	98.0	68116	44.68	ug	1
49)	Bromofluorobenzene	17.61	95.0	22169	44.62	UG	2

* Compound is [illegible]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

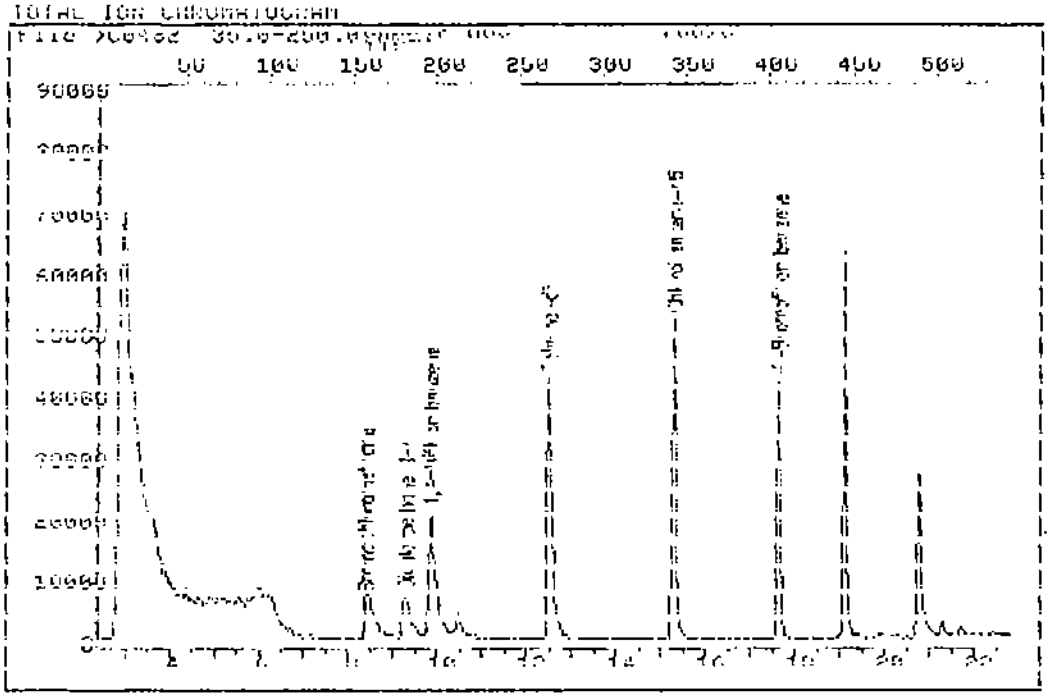
EPA SAMPLE NO.

MEGUSH8602

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8602
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0482
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03



Data File: >DI4R2::D4 Quant Output File: ^DI4R2::QT
Name: 930219 CH3 Instrument ID: 2001 L
Misc: 2001C

Id File: DISK1C::MT
Title: HP 5971 Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Goal Time: **0219 09:2

Operator ID: MARIE
Quant Time : 93**19 19:24
Injected at: **0219 19:11

QUANT REPORT

Operator ID: [illegible]
Output File: ^C:\...\...Q1
Data File: ^C:\...\...D4
Name: 030212 M03
Misc: 25ng/C

Quant Rev: 2 Quant Time: 03/02/19 09:34
Injected at: 3/02/19 19:11
Dilution Factor: 1.0000
Instrument ID: 7890 C

ID File: [illegible]
Title: HP 5973 Continuing Calibration Standard
Last Calibration: 03/01/31 10:03 Last Qual Time: 3/02/19 09:32

	Compound	R.T.	M/z	Area	Conc	Units	Q
1)	*Bromochloromethane	8.37	128.0	[illegible]	50.00	ug	[illegible]
20)	1,2-Dichloroethane-d4	9.22	65.0	29230	41.02	105	8[illegible]
23)	*1,4-Difluorobenzene	9.82	114.0	61[illegible]24	50.00	ug	[illegible]
32)	*Chlorobenzene-d5	15.26	117.0	64794	50.00	106	9[illegible]
43)	Toluene d-8	12.47	98.0	87[illegible]49	47.43	ug	[illegible]
49)	Bromofluorobenzene	17.61	95.0	35647	48.43	105	2[illegible]

* Compound is ISTD

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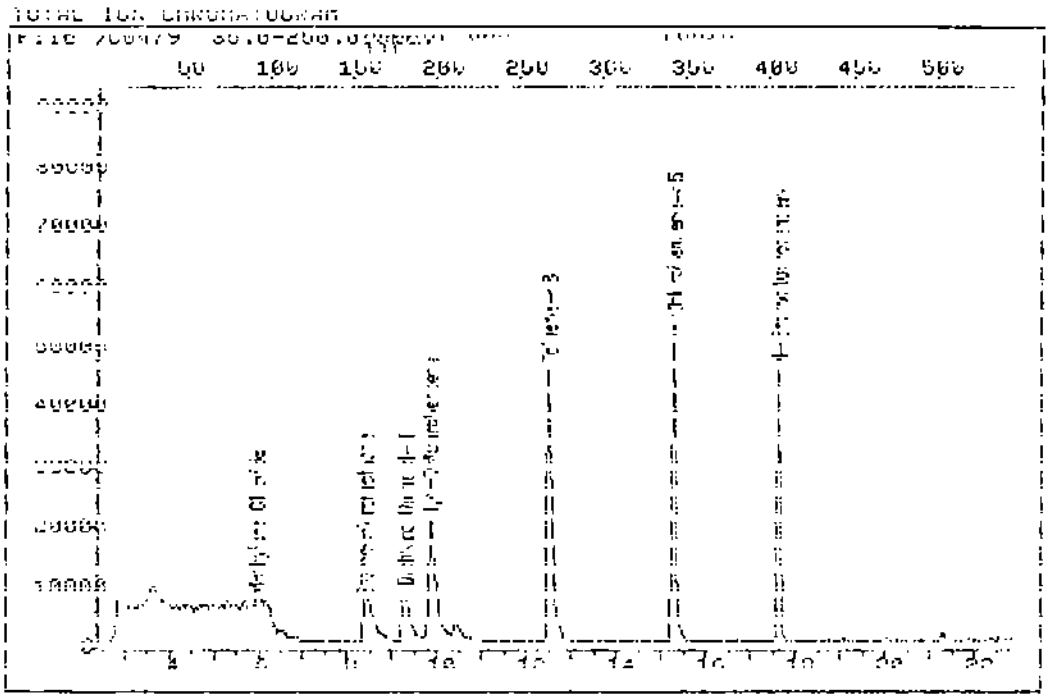
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. TB030207

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: TB030207
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0479
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	4.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

FORM I VOA 3/90



Data File: >C0429::04 Quant Output File: ^C0429::Q1
Name: 020202 .005 Instrument ID: 001
Misc: 20001

DA File: 0594IC:...
Title: HP 5988 Continuing Calibration Standard
Last Calibration: 0:0131 .0:03 Last Qual Time: 8801219 ..7:.2

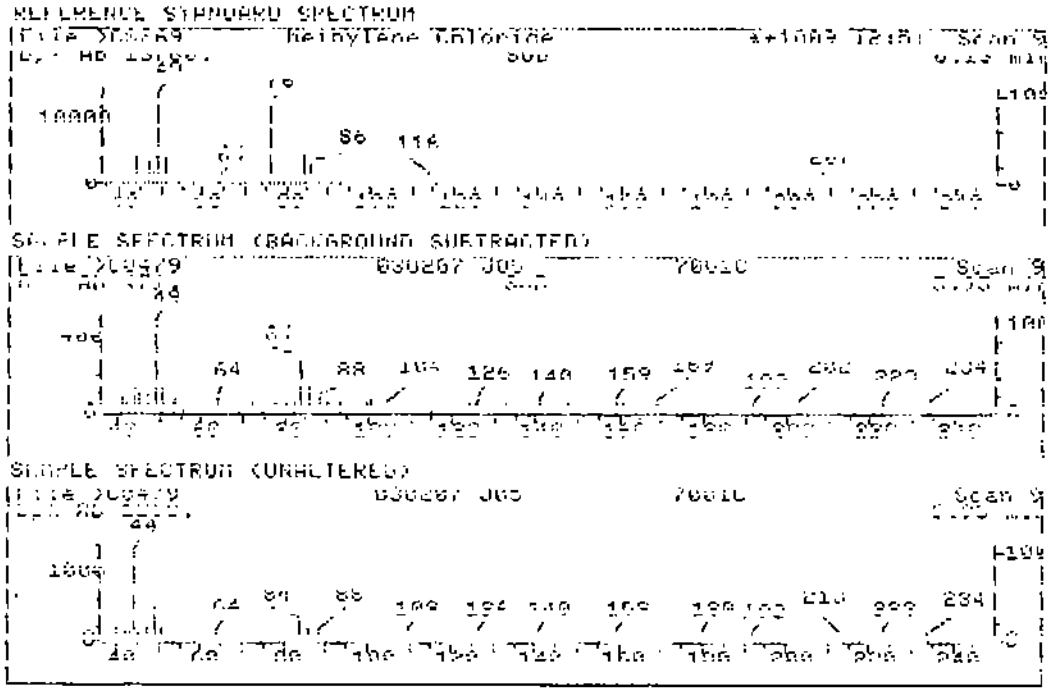
Operator ID: MARIE
Quant Time : 050219 18:..
Injected at: 8801219 17:46

Operator ID: UNKIE Quant Rev: 7 Quant Time: 0/0/219 16: 4
Output File: ^C0429::Q1 Injected at: **0219 17:4
Data File: ^C0429::04 Dilution Factor: 1.000
Name: 020202 305 Instrument ID: 2000 C
Misc: 2000C

ID File: D0501C::MT
Title: HP 000 continuing calibration Standard
Last Calibration: 020131 10:03 Last Qual Time: **0219 09:2

	Compound	R.T.	Q ion	Area	Amt	Units	
1)	ABromochloromethane	8.32	128.1	[illegible]	20.00	G	
6)	Methylene Chloride	9.95	84.1	4979	4.42	UG	6
10)	1,2-Dichloroethane-d4	9.76	65.1	[illegible]	44.25	%	
22)	1,4-Difluorobenzene	9.82	114.1	63290	50.00	UG	8
32)	Chlorobenzene-d5	[illegible]	[illegible]	[illegible]	20.00	[illegible]	
43)	Toluene d-8	12.42	98.1	96614	49.30	UG	9
49)	Bromofluorobenzene	[illegible]	95.1	[illegible]	92.26	%	

* Compound is ISTD



Data File: 21:0429::04
Name: 030217 .005
Misc: 7001C
Quant Time: 030219 18:10
Injected at: **0219 ::46
Last Qual Time: **0219 09:37

Quant Output File: 21:0429::01
Instrument ID: .001 1.
Quant ID File: 10597C:::0
Last Calibration: 0: :31 .01 /

Compound No : 6
Compound Name : Methylene Chloride
Scan Number : 99
Retention Time: 5.9% min.
Quant ion : 8..0
Area : 4929
Concentration : 4.47 .g
q-value : 66

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

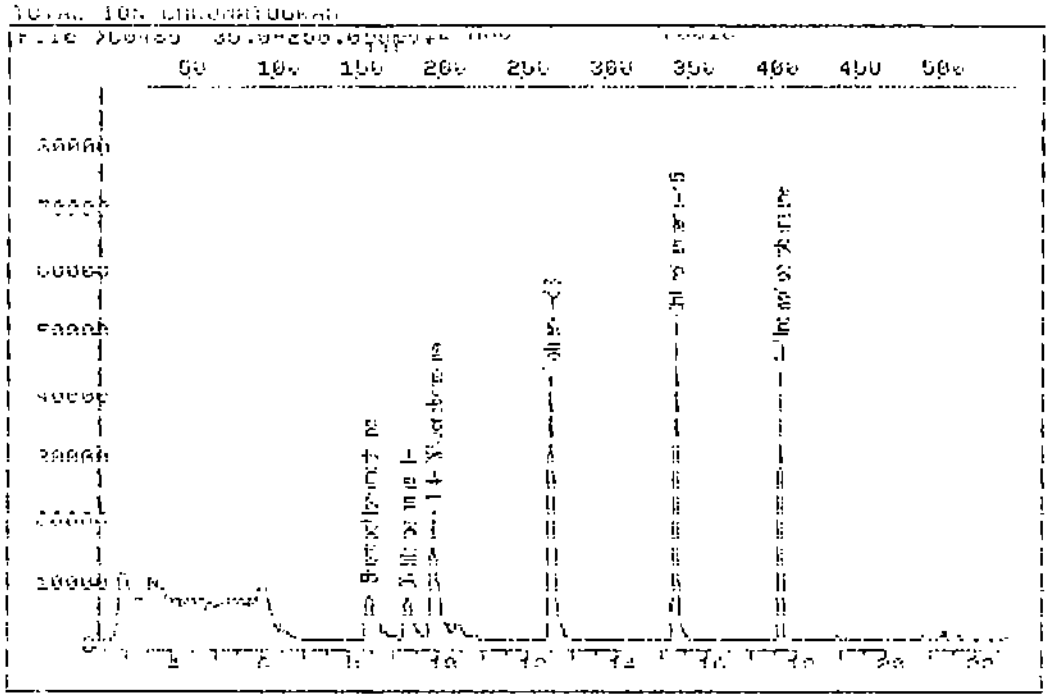
EPA SAMPLE NO.

TB030212

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: TB030212
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0485
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMK 6/3/03



Data File: [illegible]
Name: [illegible]
Mean: [illegible]

Quant Output File: [illegible]
Instrument ID: [illegible]

Id File: [illegible]
Title: HP 5973 Confirming Calibration Standard
Last Calibration: [illegible]
Last Qual Time: [illegible]

Operator ID: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Report

Operator ID: MERIE
Output File: ^C1485::Q1
Data File: 21:8485::D4
Name: 030212 MWA
Misc: 2ml/L

Quant Res: 2 Acquired at: 8:..219 ..:..
Injected at: **0219 20:55
Dilution Factor: 1.0000
Instrument ID: 2000 C

ID File: [DEFAULT]MWA.M
Title: HP 5890 Continuing Calibration Standard
Last Calibration: 02/12/91 10:04 Last Quant Time: **0219 09:52

	Compound	R.T.	Rel Con	Area	Conc	Units	Q
1)	*Bromochloromethane	7.41	100.0	5422	50.00	ug	
2)	1,4-Dichlorobutane-d4	9.22	69.0	21764	54.19	ug	2
3)	*1,4-Difluorobenzene	9.66	114.0	8179	50.00	ug	
4)	*Chlorobenzene-d5	15.26	112.0	64868	50.00	ug	9
5)	Toluene n-8	11.42	98.0	9[illegible]	50.51	ug	
6)	Bromofluorobenzene	17.61	95.0	24428	49.47	ug	2

* Compound is (50)

STANDARDS

DATA

6A

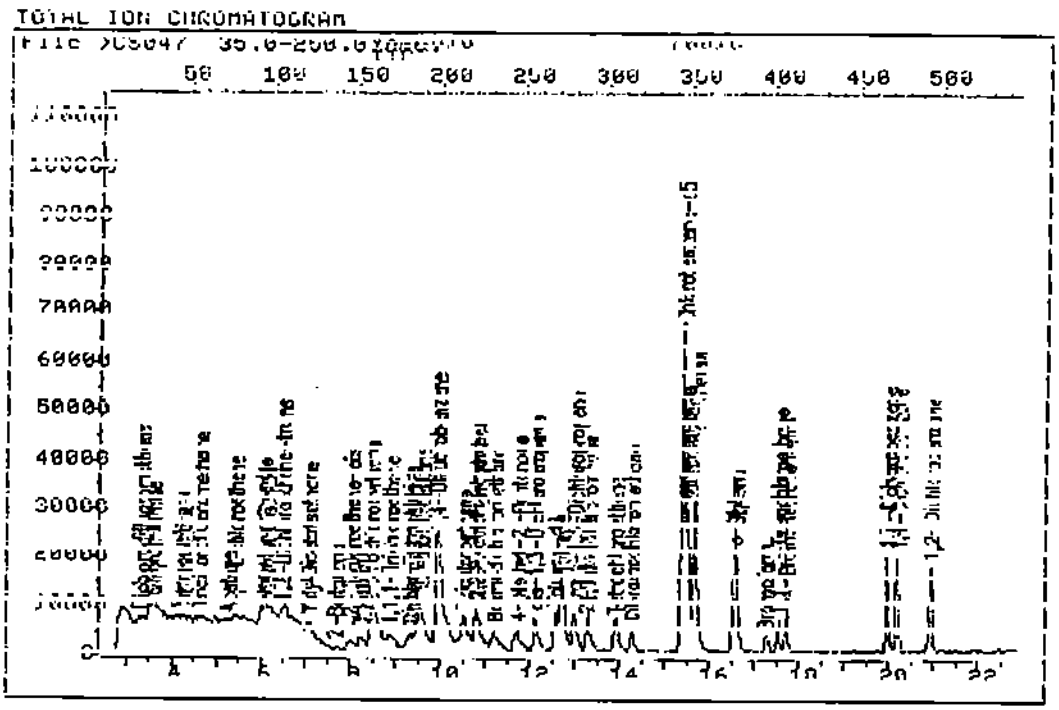
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Instrument ID: H5970 C Calibration Date(s): 02/04/03 02/04/03
Heated Purge: (Y/N) N Calibration Times: 14:09 16:09
GC Column: RTX502.2 ID: .32 (mm)

LAB FILE ID: RRF010= CS047 RRF020= CS048
RRF050= CS049 RRF100= CS050 RRF200= CS051

COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	7.739	5.757	4.714	4.662	3.100	5.195	32.9
Bromomethane *	2.999	2.564	3.089	2.999	1.971	2.724	17.2*
Vinyl Chloride *	7.788	8.300	7.679	6.847	4.851	7.093	19.1*
Chloroethane	2.824	2.753	2.804	3.013	1.948	2.668	15.5
Methylene Chloride	7.672	6.357	5.821	5.557	3.951	5.872	23.0
Acetone	3.868	4.153	4.193	2.931	2.169	3.462	25.6
Carbon Disulfide	17.019	14.606	13.657	14.773	10.079	14.027	18.0
1,1-Dichloroethene *	4.236	4.737	3.791	3.742	2.896	3.880	17.6*
1,1-Dichloroethane *	13.253	9.530	10.502	10.513	8.438	10.447	17.1*
1,2-Dichloroethene-trans	4.308	3.114	3.453	3.131	2.388	3.279	21.2
Chloroform *	6.981	7.592	7.860	8.111	6.480	7.405	9.0*
1,2-Dichloroethane *	8.905	8.381	8.568	9.861	8.141	8.771	7.6*
2-Butanone	2.988	2.883	3.595	3.648	3.326	3.288	10.5
1,1,1-Trichloroethane *	.585	.627	.553	.561	.460	.557	11.1*
Carbon Tetrachloride *	.445	.583	.517	.508	.453	.501	11.2*
Bromodichloromethane *	.701	.712	.664	.653	.579	.662	7.9*
1,2-Dichloropropane	.865	1.038	.918	1.026	.848	.939	9.4
cis-1,3-Dichloropropene *	1.005	1.067	1.050	1.189	1.038	1.070	6.6*
Trichloroethene *	.365	.409	.392	.425	.344	.387	8.4*
Dibromochloromethane *	.469	.517	.471	.504	.441	.480	6.3*
1,1,2-Trichloroethane *	.483	.477	.449	.469	.401	.456	7.2*
Benzene *	2.323	2.723	2.561	2.879	2.487	2.595	8.3*
trans-1,3-Dichloropropene *	.868	1.047	.982	1.145	1.009	1.010	10.0*
Bromoform *	.274	.254	.252	.262	.211	.251	9.5*
4-Methyl-2-Pentanone	.912	1.143	1.259	1.533	1.151	1.200	18.8
2-Hexanone	.325	.533	.542	.590	.538	.506	20.4
Tetrachloroethene *	.274	.285	.313	.359	.318	.310	10.8*
1,1,2,2-Tetrachloroethane *	.612	.695	.671	.676	.547	.640	9.5*
Toluene *	1.937	2.316	2.420	2.938	2.593	2.441	15.1*
Chlorobenzene *	1.192	1.410	1.338	1.490	1.263	1.339	8.8*
Ethylbenzene *	.599	.745	.691	.798	.730	.713	10.4*
Styrene *	1.106	1.391	1.409	1.700	1.429	1.407	15.0*
Toluene d-8	1.158	1.423	1.527	1.748	1.651	1.501	15.2
Bromofluorobenzene *	.503	.642	.660	.705	.659	.634	12.1*
1,2-Dichloroethane-d4	5.415	5.683	5.572	5.848	5.412	5.586	3.3
1,2-Dichloroethene-cis	8.918	9.882	9.921	10.645	8.705	9.614	8.3
m,p-Xylenes	.736	.811	.867	1.052	.920	.877	13.6
o-Xylene *	.612	.789	.775	.916	.713	.761	14.6*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.



Data File: >CS047::D4
Name: VSTD010
Misc: 7001C

Quant Output File: ^CS047::D1
Instrument ID: 7001 C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25

Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 030204 14:33
Injected at: **0204 14:09

QUANT REPORT

Operator ID: MARIE
Output File: ^CS047::01
Data File: >CS047::04
Name: VSTD010
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 14:53
Injected at: **0204 14:09
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.45	128.0	7020M	50.00	UG	85
2)	Chloromethane	3.59	50.0	10865	7.48	UG	78
3)	Bromomethane	4.19	94.0	4211	5.39	UG	82
4)	Vinyl Chloride	3.63	62.0	10934	6.20	UG	92
5)	Chloroethane	4.26	64.0	3965	6.18	UG	83
6)	Methylene Chloride	6.06	84.0	10771M	8.46	UG	80
8)	Acetone	5.27	43.0	5430	10.32	UG	93
12)	Trichlorofluoromethane	4.64	101.0	9323	5.34	UG	76
13)	Carbon Disulfide	6.13	76.0	23894	6.50	UG	100
14)	1,1-Dichloroethene	5.42	96.0	5948	7.79	UG	63
15)	1,1-Dichloroethane	7.07	63.0	18617M	7.83	UG	94
16)	1,2-Dichloroethene-trans	6.47	96.0	6049M	6.30	UG	77
18)	1,2-Dichloroethene-cis	8.00	61.0	12571	6.44	UG	94
19)	Chloroform	8.22	83.0	9802	6.14	UG	98
20)	1,2-Dichloroethane-d4	9.34	65.0	7603	5.89	UG	89
21)	1,2-Dichloroethane	9.56	62.0	12502	6.78	UG	77
22)	2-Butanone	7.66	43.0	4195M	5.32	UG	100
23)	*1,4-Difluorobenzene	9.90	114.0	66443	50.00	UG	91
24)	1,1,1-Trichloroethane	8.86	97.0	7771	8.88	UG	88
25)	Carbon Tetrachloride	9.30	117.0	5911	7.62	UG	73
26)	Vinyl Acetate	7.07	43.0	18400	9.30	UG	87
27)	Bromodichloromethane	11.20	83.0	9319	8.03	UG	86
28)	1,2-Dichloropropane	10.79	63.0	11497	7.04	UG	99
29)	cis-1,3-Dichloropropene	12.10	75.0	13354	7.20	UG	84
30)	Trichloroethene	10.50	130.0	4856	8.55	UG	84
31)	Dibromochloromethane	14.26	129.0	6238	7.62	UG	93
32)	1,1,2-Trichloroethane	13.29	97.0	6414	8.75	UG	88
33)	Benzene	9.53	78.0	30874	7.51	UG	95
34)	trans-1,3-Dichloropropene	12.99	75.0	11531	6.62	UG	91
35)	2-Chloroethylvinylether	10.79	63.0	11497	7.04	UG	96
36)	Bromoform	17.24	173.0	3645	8.45	UG	88
37)	*Chlorobenzene-d5	15.38	117.0	79439	50.00	UG	92
38)	2-Hexanone	13.25	43.0	5166	5.96	UG	91
39)	4-Methyl-2-Pentanone	11.73	43.0	14487	7.36	UG	93
40)	Tetrachloroethene	13.89	164.0	4349	10.14	UG	88
41)	1,1,2,2-Tetrachloroethane	17.54	83.0	9729	9.13	UG	97
42)	Toluene	12.69	91.0	30768	8.39	UG	91
43)	Toluene d-8	12.54	98.0	18405	7.54	UG	84
44)	Chlorobenzene	15.45	112.0	18945	9.29	UG	99
45)	Ethylbenzene	15.53	106.0	9522	8.99	UG	98

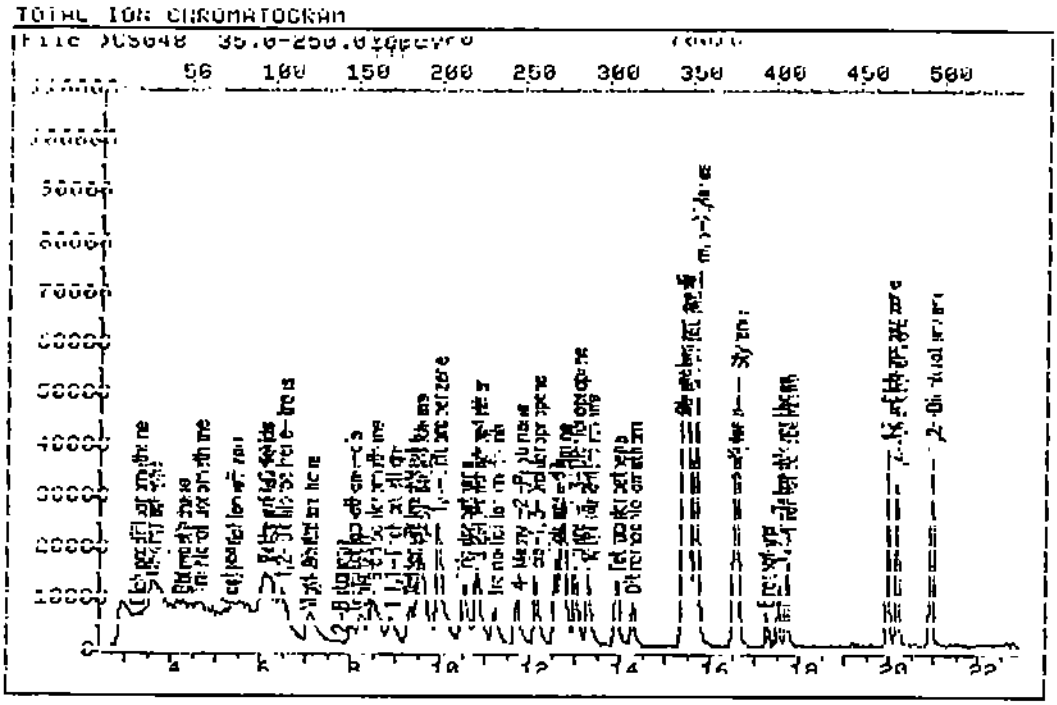
Operator ID: MARIE
Output File: >CS047::01
Data File: >CS047::04
Name: VSTD010
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 14:33
Injected at: **0204 14:39
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.57	104.0	17573	7.70	UG	98
47)	m,p-Xylenes	15.67	106.0	23377	17.52	UG	99
48)	o-Xylene	16.53	106.0	9723	8.18	UG	89
49)	Bromofluorobenzene	17.72	95.0	7993	7.45	UG	88
50)	1,3-Dichlorobenzene	19.96	146.0	13509	10.09	UG	91
51)	1,4-Dichlorobenzene	20.18	146.0	12910	9.33	UG	88
52)	1,2-Dichlorobenzene	20.93	146.0	12252	10.01	UG	93
53)	Dichlorodifluoromethane	3.33	85.0	2024M	4.77	UG	

* Compound is ISTD



Data File: >CS048::D4 Quant Output File: ^CS048::D1
Name: VSTD020 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::mT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 030204 15:03
Injected at: **0204 14:39

QUANT REPORT Page 1

Operator ID: MARIE
Output File: ^CS048::D1
Data File: >CS048::D4
Name: VSTD020
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 15:03
Injected at: **0204 14:39
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.49	128.0	7411M	50.00	UG	88
2)	Chloromethane	3.56	50.0	17067	11.13	UG	92
3)	Bromomethane	4.20	94.0	7602	9.22	UG	83
4)	Vinyl Chloride	3.64	62.0	24604	13.22	UG	96
5)	Chloroethane	4.24	64.0	8161	12.06	UG	80
6)	Methylene Chloride	6.07	84.0	18846	14.02	UG	92
8)	Acetone	5.28	43.0	12311M	22.16	UG	
12)	Trichlorofluoromethane	4.61	101.0	18167	9.86	UG	69
13)	Carbon Disulfide	6.11	76.0	43297	11.16	UG	100
14)	1,1-Dichloroethene	5.40	96.0	14041	17.42	UG	79
15)	1,1-Dichloroethane	7.08	63.0	28250	11.26	UG	88
16)	1,2-Dichloroethene-trans	6.48	96.0	9231	9.11	UG	87
18)	1,2-Dichloroethene-cis	8.01	61.0	29294	14.27	UG	96
19)	Chloroform	8.23	83.0	22506	13.36	UG	92
20)	1,2-Dichloroethane-d4	9.35	65.0	16846	12.36	UG	78
21)	1,2-Dichloroethane	9.50	62.0	24845	12.76	UG	89
22)	2-Butanone	7.75	43.0	8546M	10.28	UG	100
23)	*1,4-Difluorobenzene	9.91	114.0	62784	50.00	UG	93
24)	1,1,1-Trichloroethane	8.90	97.0	15755	19.05	UG	72
25)	Carbon Tetrachloride	9.31	117.0	14648	19.98	UG	74
26)	Vinyl Acetate	7.04	43.0	37113	19.86	UG	76
27)	Bromodichloromethane	11.21	83.0	17881	16.31	UG	89
28)	1,2-Dichloropropane	10.80	63.0	26057	16.89	UG	90
29)	cis-1,3-Dichloropropene	12.11	75.0	26808	15.30	UG	78
30)	Trichloroethene	10.50	130.0	10274	19.14	UG	91
31)	Dibromochloromethane	14.27	129.0	12987	16.78	UG	98
32)	1,1,2-Trichloroethane	13.30	97.0	11990	17.31	UG	99
33)	Benzene	9.54	78.0	68376	17.60	UG	96
34)	trans-1,3-Dichloropropene	13.00	75.0	26282	15.97	UG	89
35)	2-Chloroethylvinylether	10.80	63.0	26057	16.89	UG	87
36)	Bromoform	17.25	173.0	6383	15.66	UG	91
37)	*Chlorobenzene-d5	15.35	117.0	70347	50.00	UG	94
38)	2-Hexanone	19.26	43.0	14994	19.52	UG	98
39)	4-Methyl-2-Pentanone	11.73	43.0	32158	18.45	UG	91
40)	Tetrachloroethene	13.90	164.0	8007	21.08	UG	91
41)	1,1,2,2-Tetrachloroethane	17.55	83.0	19558	20.73	UG	99
42)	Toluene	12.70	91.0	65169	20.06	UG	96
43)	Toluene d-8	12.55	98.0	40035	18.51	UG	93
44)	Chlorobenzene	15.42	112.0	39686	21.97	UG	99
45)	Ethylbenzene	15.53	106.0	20964	22.36	UG	90

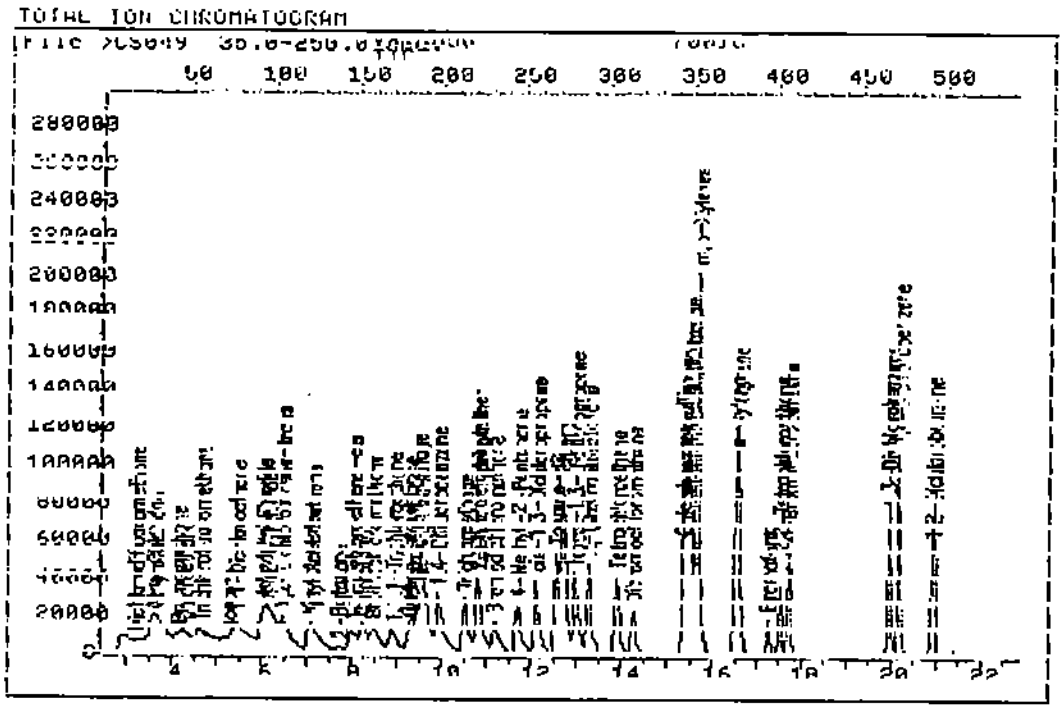
Operator ID: MARIE
Output File: >CS048::01
Data File: >CS048::D4
Name: VST0020
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 15:03
Injected at: *030204 14:39
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
46)	Styrene	16.58	104.0	39135	19.36	UG	99
47)	m,p-Xylenes	16.68	106.0	45663	38.64	UG	94
48)	o-Xylene	16.50	106.0	22205	21.09	UG	90
49)	Bromofluorobenzene	17.73	95.0	18066	19.00	UG	98
50)	1,3-Dichlorobenzene	19.97	146.0	26672	22.49	UG	93
51)	1,4-Dichlorobenzene	20.15	146.0	27999	22.29	UG	94
52)	1,2-Dichlorobenzene	20.94	146.0	25439	23.47	UG	89
53)	Dichlorodifluoromethane	3.26	85.0	3678	9.67	UG	71

* Compound is ISTD



Data File: >CS049::D4
Name: VSTD050
Misc: 7001C

Quant Output File: ^CS049::D1
Instrument ID: 7001 C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25

Last Qual Time: <none>

Operator ID: MARIE
Quant Time : 030204 15:33
Injected at: **0204 15:09

Operator ID: MARIE
Output File: ^CS049::D1
Data File: >CS049::D4
Name: VSTD050
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 15:33
Injected at: **0204 15:09
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.46	128.0	7797	50.00	UG	72
2)	Chloromethane	3.64	50.0	36758	22.78	UG	77
3)	Bromomethane	4.13	94.0	24088	27.78	UG	62
4)	Vinyl Chloride	3.61	62.0	59873	30.58	UG	99
5)	Chloroethane	4.28	64.0	21859	30.70	UG	86
6)	Methylene Chloride	6.04	84.0	45386	32.10	UG	81
8)	Acetone	5.25	43.0	32691M	55.94	UG	73
12)	Trichlorofluoromethane	4.65	101.0	56474	29.13	UG	82
13)	Carbon Disulfide	6.15	76.0	106481	26.09	UG	110
14)	1,1-Dichloroethene	5.44	96.0	29558	34.86	UG	87
15)	1,1-Dichloroethane	7.12	63.0	81883	31.03	UG	94
16)	1,2-Dichloroethene-trans	6.45	96.0	26921	25.26	UG	91
17)	Acetonitrile	6.07	41.0	2008	2.94	UG	87
18)	1,2-Dichloroethene-cis	8.01	61.0	77351	35.80	UG	92
19)	Chloroform	8.24	83.0	61284	34.58	UG	94
20)	1,2-Dichloroethane-d4	9.35	65.0	43444	30.29	UG	69
21)	1,2-Dichloroethane	9.47	62.0	66817	32.62	UG	92
22)	2-Butanone	7.71	43.0	28031	32.03	UG	100
23)	*1,4-Difluorobenzene	9.91	114.0	74040	50.00	UG	95
24)	1,1,1-Trichloroethane	8.91	97.0	40924	41.97	UG	91
25)	Carbon Tetrachloride	9.28	117.0	38292	44.28	UG	89
26)	Vinyl Acetate	7.08	43.0	97122	44.07	UG	78
27)	Bromodichloromethane	11.18	83.0	49174	38.04	UG	91
28)	1,2-Dichloropropane	10.81	63.0	67999	37.38	UG	94
29)	cis-1,3-Dichloropropene	12.11	75.0	77740	37.63	UG	96
30)	Trichloroethene	10.51	130.0	29009	45.82	UG	92
31)	Dibromochloromethane	14.27	129.0	34880	38.22	UG	95
32)	1,1,2-Trichloroethane	13.27	97.0	33210	40.66	UG	95
33)	Benzene	9.54	78.0	189585	41.39	UG	97
34)	trans-1,3-Dichloropropene	12.97	75.0	72683	37.45	UG	91
35)	2-Chloroethylvinylether	10.81	63.0	67999	37.38	UG	91
36)	Bromoform	17.26	173.0	18635	38.76	UG	94
37)	*Chlorobenzene-d5	15.36	117.0	76139	50.00	UG	96
38)	2-Hexanone	13.27	43.0	41285	49.67	UG	87
39)	4-Methyl-2-Pentanone	11.70	43.0	95881	50.81	UG	84
40)	Tetrachloroethene	13.90	164.0	23794	57.88	UG	93
41)	1,1,2,2-Tetrachloroethane	17.52	83.0	51199	50.05	UG	99
42)	Toluene	12.71	91.0	184268	52.43	UG	99
43)	Toluene d-8	12.56	98.0	116755	49.67	UG	91
44)	Chlorobenzene	15.43	112.0	101884	52.12	UG	98

Operator ID: MARIE
Output File: >CS049::D1
Data File: >CS049::D4
Name: VSTD050
Misc: 7001C

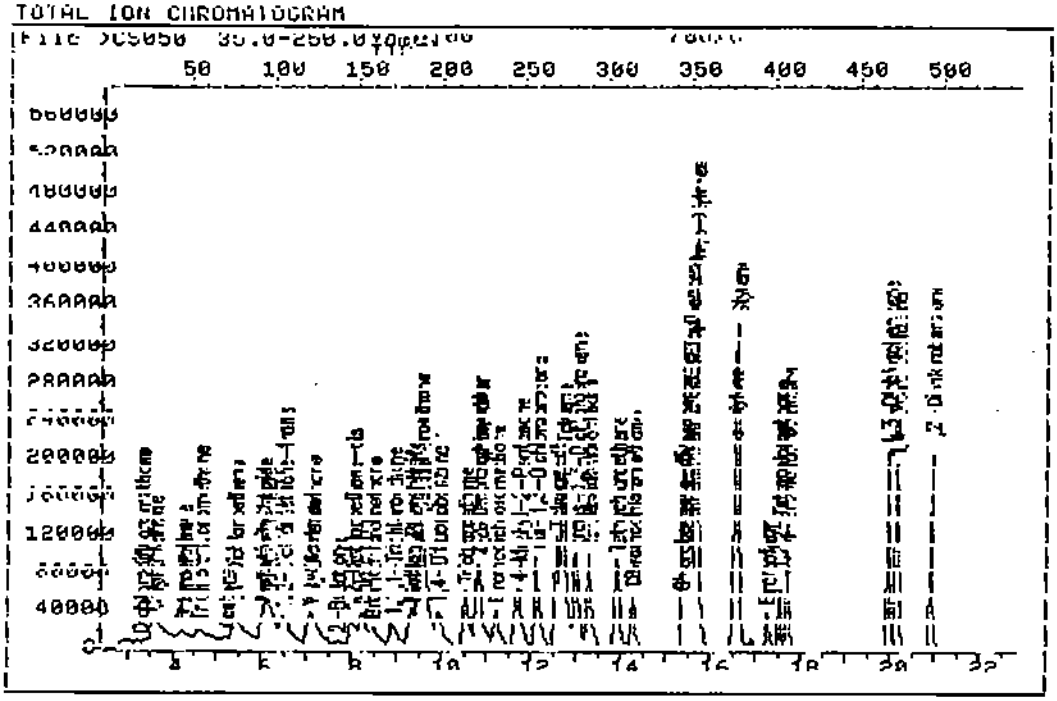
Quant Rev: 7 Quant Time: 030204 15:33
Injected at: *030204 15:09
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Ethylbenzene	15.50	106.0	52605	51.84	UG	93
46)	Styrene	16.58	104.0	107248	49.01	UG	93
47)	m,p-Xylenes	15.65	106.0	132093	103.27	UG	99
48)	o-Xylene	16.51	106.0	58983	51.77	UG	90
49)	Bromofluorobenzene	17.70	95.0	50252	48.84	UG	79
50)	1,3-Dichlorobenzene	19.94	146.0	69915	54.46	UG	97
51)	1,4-Dichlorobenzene	20.16	146.0	74347	56.09	UG	93
52)	1,2-Dichlorobenzene	20.91	146.0	66921	57.04	UG	93
53)	Dichlorodifluoromethane	3.20	85.0	7599	18.70	UG	72

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >CS050::D4 Quant Output File: ^CS050::D1
Name: VSTD100 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 030204 16:02
Injected at: **0204 15:39

QUANT REPORT Page 1

Operator ID: MARIE
Output File: ^CS050::D1
Data File: >CS050::D4
Name: VSTD100
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 16:02
Injected at: **0204 15:39
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

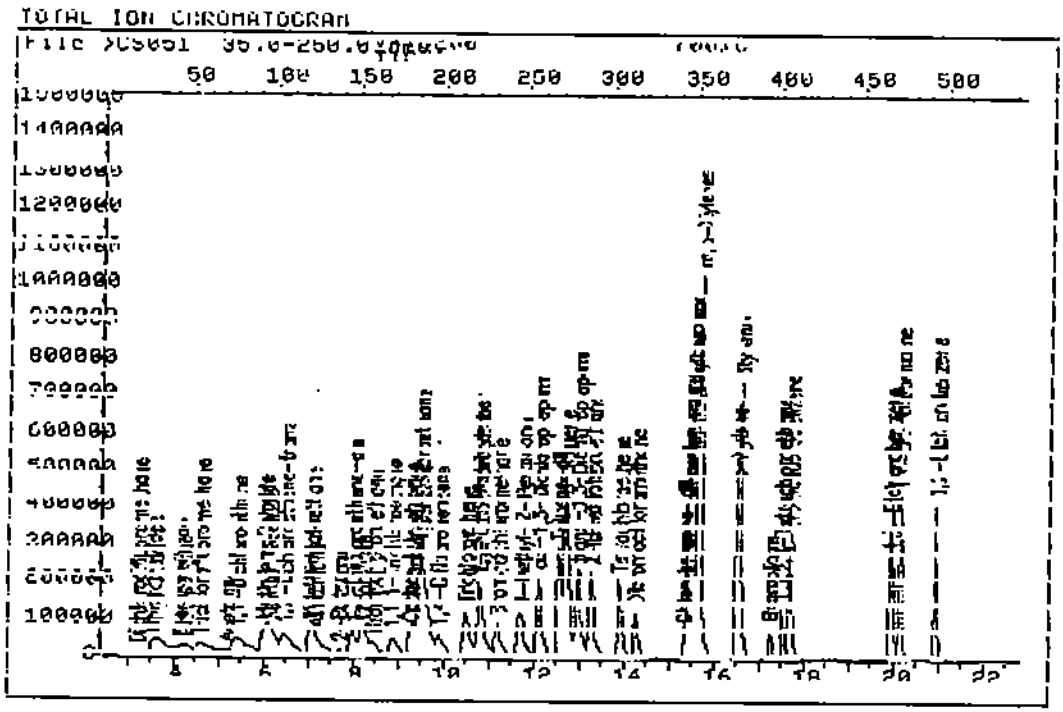
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.45	128.0	8563	50.00	UG	69
2)	Chloromethane	3.59	50.0	79844	45.06	UG	88
3)	Bromomethane	4.23	94.0	51354M	53.93	UG	99
4)	Vinyl Chloride	3.59	62.0	117263	54.54	UG	92
5)	Chloroethane	4.26	64.0	51596	65.98	UG	76
6)	Methylene Chloride	6.02	84.0	95165	61.29	UG	92
8)	Acetone	5.20	43.0	50118	78.08	UG	98
12)	Trichlorofluoromethane	4.60	101.0	122553	57.55	UG	88
13)	Carbon Disulfide	6.13	76.0	253009	56.45	UG	100
14)	1,1-Dichloroethene	5.39	96.0	64089	68.83	UG	87
15)	1,1-Dichloroethane	7.10	63.0	180045	62.13	UG	94
16)	1,2-Dichloroethene-trans	6.47	96.0	53627	45.82	UG	94
17)	Acetonitrile	6.02	41.0	1869	2.49	UG	94
18)	1,2-Dichloroethene-cis	8.00	61.0	182302	76.84	UG	52
19)	Chloroform	8.22	83.0	138915	71.38	UG	96
20)	1,2-Dichloroethane-d4	9.34	65.0	100161	63.59	UG	73
21)	1,2-Dichloroethane	9.49	62.0	168883	75.09	UG	95
22)	2-Butanone	7.66	43.0	62476	65.01	UG	100
23)	*1,4-Difluorobenzene	9.90	114.0	79493	50.00	UG	92
24)	1,1,1-Trichloroethane	8.89	97.0	89254	85.26	UG	86
25)	Carbon Tetrachloride	9.30	117.0	80707	86.93	UG	83
26)	Vinyl Acetate	7.07	43.0	223875	94.61	UG	75
27)	Bromodichloromethane	11.20	83.0	103749	74.76	UG	95
28)	1,2-Dichloropropane	10.79	63.0	163066	83.50	UG	92
29)	cis-1,3-Dichloropropene	12.10	75.0	189183	85.25	UG	97
30)	Trichloroethene	10.50	130.0	67533	99.35	UG	90
31)	Dibromochloromethane	14.26	129.0	80088	81.74	UG	96
32)	1,1,2-Trichloroethane	13.25	97.0	74568	85.02	UG	98
33)	Benzene	9.53	78.0	457794	93.09	UG	98
34)	trans-1,3-Dichloropropene	12.99	75.0	182111	87.39	UG	90
35)	2-Chloroethylvinylether	11.79	63.0	163166	83.50	UG	88
36)	Bromoform	17.24	173.0	41626	80.65	UG	95
37)	*Chlorobenzene-d5	15.34	117.0	78382	50.00	UG	95
38)	2-Hexanone	13.25	43.0	92426	108.01	UG	91
39)	4-Methyl-2-Pentanone	11.73	43.0	240361	123.74	UG	93
40)	Tetrachloroethene	13.89	164.0	56329	133.10	UG	94
41)	1,1,2,2-Tetrachloroethane	17.50	83.0	105903	100.77	UG	97
42)	Toluene	12.70	91.0	460537	127.28	UG	99
43)	Toluene d-8	12.65	98.0	274152	113.74	UG	88
44)	Chlorobenzene	15.42	112.0	233625	116.10	UG	98

Operator ID: MARIE Quant Rev: 7 Quant Time: 030204 16:02
Output File: ^CS050::D1 Injected at: **0204 15:39
Data File: >CS050::D4 Dilution Factor: 1.00000
Name: USTD100 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Ethylbenzene	15.53	106.0	125059	119.72	UG	88
46)	Styrene	16.57	104.0	266565	118.32	UG	93
47)	m,p-Xylenes	15.64	106.0	329783	250.45	UG	99
48)	o-Xylene	16.50	106.0	143560	122.39	UG	93
49)	Bromofluorobenzene	17.69	95.0	110563	104.38	UG	92
50)	1,3-Dichlorobenzene	19.96	146.0	156548	118.46	UG	98
51)	1,4-Dichlorobenzene	20.15	146.0	152804	111.98	UG	88
52)	1,2-Dichlorobenzene	20.93	146.0	140948	116.69	UG	93
53)	Dichlorodifluoromethane	3.29	85.0	16474	39.39	UG	94

* Compound is ISTD



Data File: >CS051::D4 Quant Output File: ^CS051::D1
Name: VSTD200 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 030204 16:32
Injected at: **0204 16:09

Operator ID: MARIE
Output File: ^CS051::D1
Data File: >CS051::D4
Name: USTD200
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 16:32
Injected at: **0204 16:09
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.45	128.0	11395	50.00	UG	71
2)	Chloromethane	3.55	50.0	141312M	59.93	UG	86
3)	Bromomethane	4.15	94.0	89819M	70.89	UG	73
4)	Vinyl Chloride	3.59	62.0	221091	77.27	UG	97
5)	Chloroethane	4.23	64.0	88802	85.33	UG	81
6)	Methylene Chloride	6.02	84.0	180101	87.17	UG	96
8)	Acetone	5.20	43.0	98869M	115.75	UG	82
12)	Trichlorofluoromethane	4.60	101.0	248087	87.55	UG	93
13)	Carbon Disulfide	6.13	76.0	459380	77.02	UG	110
14)	1,1-Dichloroethene	5.42	96.0	131998M	106.53	UG	92
15)	1,1-Dichloroethane	7.07	63.0	384609	99.74	UG	93
16)	1,2-Dichloroethene-trans	6.47	96.0	108824	69.87	UG	91
17)	Acetonitrile	7.18	41.0	11319	11.33	UG	42
18)	1,2-Dichloroethene-cis	8.00	61.0	396777	125.67	UG	54
19)	Chloroform	8.22	83.0	295379	114.05	UG	96
20)	1,2-Dichloroethane-d4	9.34	65.0	246680	117.69	UG	71
21)	1,2-Dichloroethane	9.49	62.0	371084	123.99	UG	94
22)	2-Butanone	7.70	43.0	151599	118.55	UG	100
23)	*1,4-Difluorobenzene	9.90	114.0	104375	50.00	UG	92
24)	1,1,1-Trichloroethane	8.86	97.0	192012	139.69	UG	92
25)	Carbon Tetrachloride	9.27	117.0	189237	155.24	UG	75
26)	Vinyl Acetate	7.07	43.0	498954	160.60	UG	75
27)	Bromodichloromethane	11.21	83.0	241683	132.63	UG	91
28)	1,2-Dichloropropane	10.80	63.0	354033	138.07	UG	95
29)	cis-1,3-Dichloropropene	12.10	75.0	433596	148.83	UG	98
30)	Trichloroethene	10.50	130.0	143612	160.91	UG	94
31)	Dibromochloromethane	14.26	129.0	184161	143.08	UG	98
32)	1,1,2-Trichloroethane	13.26	97.0	167618	145.56	UG	95
33)	Benzene	9.53	78.0	1038191	160.78	UG	99
34)	trans-1,3-Dichloropropene	12.96	75.0	421268	153.97	UG	91
35)	2-Chloroethylvinylether	10.80	63.0	354033	138.07	UG	92
36)	Bromoform	17.25	173.0	88022	129.88	UG	95
37)	*Chlorobenzene-d5	15.34	117.0	102718	50.00	UG	98
38)	2-Hexanone	13.26	43.0	219898	197.07	UG	88
39)	4-Methyl-2-Pentanone	11.73	43.0	470713	185.83	UG	81
40)	Tetrachloroethene	13.89	164.0	130050	235.66	UG	92
41)	1,1,2,2-Tetrachloroethane	17.51	83.0	223612	163.17	UG	98
42)	Toluene	12.70	91.0	1060208	224.70	UG	97
43)	Toluene d-8	12.55	98.0	674995	214.84	UG	90
44)	Chlorobenzene	15.42	112.0	516376	196.79	UG	99

Operator ID: MARIE
Output File: ^CS051::D1
Data File: >CS051::D4
Name: VSTD200
Misc: 7001C

Quant Rev: 7 Quant Time: 030204 16:32
Injected at: **0204 16:..
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030203 09:25 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Ethylbenzene	15.53	106.0	298470	219.11	UG	87
46)	Styrene	16.57	104.0	584746	198.88	UG	93
47)	m,p-Xylenes	15.68	106.0	752250	438.12	UG	91
48)	o-Xylene	16.50	106.0	291509	190.59	UG	88
49)	Bromofluorobenzene	17.69	95.0	269494	195.11	UG	86
50)	1,3-Dichlorobenzene	19.93	146.0	315188	182.91	UG	98
51)	1,4-Dichlorobenzene	20.15	146.0	331017	186.03	UG	90
52)	1,2-Dichlorobenzene	20.94	146.0	299606	190.22	UG	94
53)	Dichlorodifluoromethane	3.22	85.0	54480	99.90	UG	98

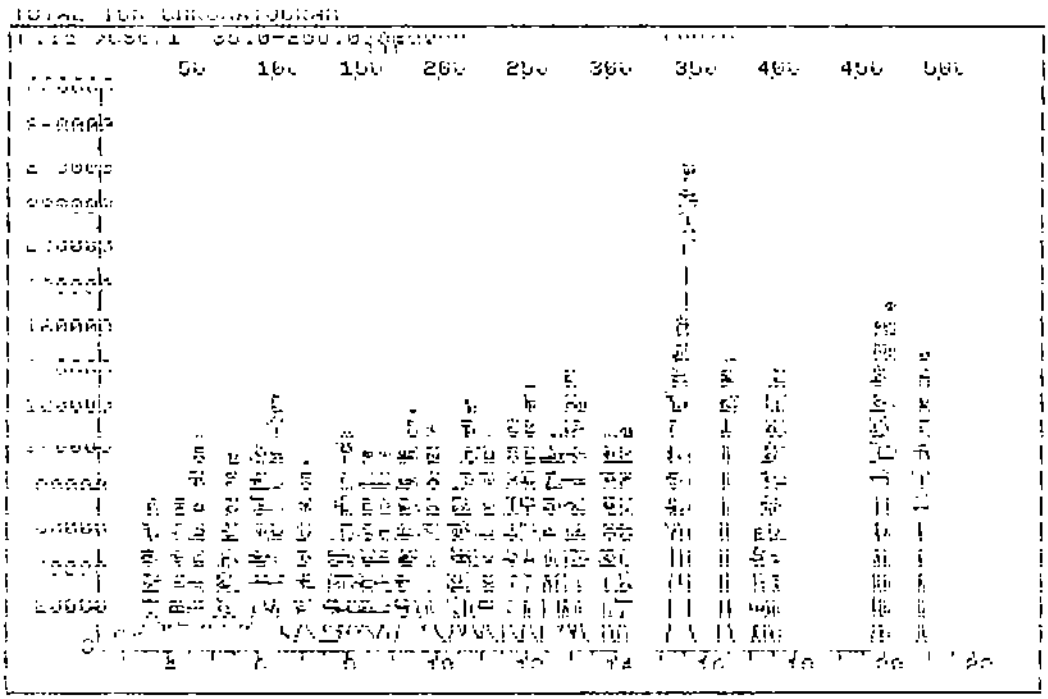
* Compound is ISTD

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Instrument ID: H5970 C Calibration Date: 02/19/03 Time: 09:32
Lab File ID: CS071 Init. Calib. Date(s): 02/04/03 02/04/03
Heated Purge: (Y/N) N Init. Calib. Times: 14:09 16:09
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	5.195	3.493		32.8	
Bromomethane	2.724	2.978	.100	-9.3	25.0
Vinyl Chloride	7.093	6.003	.100	15.4	25.0
Chloroethane	2.668	3.742		-40.3	
Methylene Chloride	5.872	7.196		-22.5	
Acetone	3.462	2.491		28.0	
Carbon Disulfide	14.027	19.412		-38.4	
1,1-Dichloroethene	3.880	5.289	.100	-36.3	25.0
1,1-Dichloroethane	10.447	9.510	.200	9.0	25.0
1,2-Dichloroethene-trans	3.279	3.018		8.0	
Chloroform	7.405	6.554	.200	11.5	25.0
1,2-Dichloroethane	8.771	7.113	.100	18.9	25.0
2-Butanone	3.288	2.838		13.7	
1,1,1-Trichloroethane	.557	.446	.100	19.9	25.0
Carbon Tetrachloride	.501	.447	.100	10.8	25.0
Bromodichloromethane	.662	.518	.200	21.8	25.0
1,2-Dichloropropane	.939	.731		22.2	
cis-1,3-Dichloropropene	1.070	.834	.200	22.1	25.0
Trichloroethene	.387	.352	.300	9.0	25.0
Dibromochloromethane	.480	.372	.100	22.5	25.0
1,1,2-Trichloroethane	.456	.355	.100	22.1	25.0
Benzene	2.595	2.190	.500	15.6	25.0
trans-1,3-Dichloropropene	1.010	.787	.100	22.1	25.0
Bromoform	.251	.191	.100	23.9	25.0
4-Methyl-2-Pentanone	1.200	.971		19.1	
2-Hexanone	.506	.424		16.2	
Tetrachloroethene	.310	.271	.200	12.6	25.0
1,1,2,2-Tetrachloroethane	.640	.475	.500	25.8	25.0
Toluene	2.441	2.134	.400	12.6	25.0
Chlorobenzene	1.339	1.248	.500	6.8	25.0
Ethylbenzene	.713	.647	.100	9.3	25.0
Styrene	1.407	1.474	.300	-4.8	25.0
Toluene d-8	1.501	1.463		2.5	
Bromofluorobenzene	.634	.537	.200	15.3	25.0
1,2-Dichloroethane-d4	5.586	4.803		14.0	
1,2-Dichloroethene-cis	9.614	9.024		6.1	
m,p-Xylenes	.877	.900		-2.6	
o-Xylene	.761	.788	.010	-3.5	25.0

All other compounds must meet a minimum RRF of .010.



Data File: [illegible]
Name: [illegible]
User: [illegible]

Quant Output File: [illegible]
Instrument ID: [illegible]

Id File: [illegible]
Title: HP UV-Vis Continuing Calibration Standard
Last Calibration: [illegible] Last Quant Time: [illegible]

Operator ID: MARIE
Quant Time: [illegible]
Injected at: [illegible]

Operator ID: DestE
Output File: ^C5012?::Qt
Data File: ?:\5012?::D4
Name: 05110698
Misc: 2001f.

Quant Meth: ?
Injected at: **/0?/19 09:??
Dilution Factor: 1.0000
Instrument ID: ?5mT C

ID File: ID:?11::MT
Title: HP 5?8 Continuing Calibration Standard
Last Calibration: 0?/0?/9? 06:?9
Last Qcal Time: <none>

	Compound	R.T.	R.Sum	Area	Conc	Units	Q
1)	Dichlorodifluoromethane	2.22	108.0	62?71	25.50	ug	
2)	Chloromethane	2.59	91.0	72642	32.67	UG	87
3)	Bromomethane	2.18	94.0	2?11??	24.24	ug	
4)	Vinyl Chloride	2.45	62.0	41?62?	42.31	UG	2?
5)	Chloroethane	2.18	64.0	2?222	?1.12	ug	
6)	Methylene Chloride	2.28	84.0	48?13	61.28	UG	?
8)	Acetone	2.16	43.0	1??6?1	59.22	ug	
9)	Trichlorofluoromethane	4.61	101.0	49881	24.91	UG	?
11)	1,1,2-Trichlorotrifluoroethane	4.89	?6.0	151??9	69.?1	ug	?
12)	1,1-Dichloroethene	5.24	96.0	32?99	66.16	UG	6?
13)	1,1-Dichloroethane	6.99	63.0	69?01	45.?1	ug	
14)	1,2-Dichloroethene-trans	6.39	96.0	21429	4?.13	UG	2?
15)	1,2-Dichloroethene-cis	?.38	61.0	6???6	??.?3	ug	?
17)	Chloroform	8.14	83.0	44?59	44.26	UG	9?
18)	1,2-Dichloroethane-d4	9.22	65.0	3?1?6	4?.?9	ug	
21)	1,2-Dichloroethane	9.32	62.0	48?28	41.24	UG	9?
22)	2-Butanone	?.62	??.0	1?2??	42.16	ug	?
23)	*1,4-Difluorobenzene	9.82	114.0	2??8?1	51.111	UG	9?
24)	1,1,1-Trichloroethane	8.?4	9?.?	3????1	4?.?6	ug	?
25)	Carbon Tetrachloride	9.19	117.0	31?91	44.61	UG	8?
26)	Vinyl Acetate	8.99	43.0	2?8??	4?.?2	ug	?
27)	Bromodichloromethane	11.09	83.0	36?28	39.12	UG	9?
28)	1,2-Dichloropropane	?.?8	63.0	51?94	38.9?	ug	
29)	cis-1,3-Dichloropropene	11.98	2?.0	58?12	3?.96	UG	8?
30)	Trichloroethene	10.38	130.0	2?.??	4?.?1	ug	?
31)	Dibromochloromethane	14.19	129.0	2?2?4	38.67	UG	9?
32)	1,1,2-Trichloroethane	13.14	97.0	2?2??	38.?1	UG	?
33)	Benzene	9.41	78.0	154?9?	41.21	UG	9?
34)	trans-1,3-Dichloropropene	13.68	2?.0	59?.?1	3?.9?	ug	?
35)	2-Chloroethylvinylether	16.68	63.0	?1694	38.9?	UG	9?
36)	Bromoform	12.13	173.0	13?.1	3?.??	ug	?
37)	*Chlorobenzene-d5	15.29	117.0	2?867	51.111	UG	9?
38)	2-Hexanone	13.14	43.0	3??21	41.?2	ug	?
39)	4-Methyl-2-Pentanone	11.61	43.0	2?1?1	41.48	UG	8?
40)	Tetrachloroethene	13.?2	164.0	19?.?	41.?1	ug	?
41)	1,1,2,2-Tetrachloroethane	12.39	83.0	34821	32.11	UG	9?
42)	Toluene	13.98	91.0	1?54??	43.?1	ug	?
43)	Toluene-d8	13.43	98.0	1186??	48.?2	UG	9?
44)	Chlorobenzene	15.??	112.0	3?3??	46.?1	ug	?
45)	Ethylbenzene	15.98	106.0	4?162	49.42	UG	9?

Operator ID: MARK
Output File: 950215.qlf
Data File: 950215.D4
Name: Version8
Misc: 20ML

Quant Rev: 2 Quant Time: 2/15/95 09:59
Injection at: 2/15/95 09:
Dilution Factor: 1.000000
Instrument ID: Cell 1

LO File: no.910.cal
Title: HP V06 Continuing Calibration Standard
Last Calibration: 9/02/05 08:59 Last Anal Time: 5/00/92

	Compound	R.T.	Q ion	Area	Conc	Units	q
40)	Styrene	16.46	104.0	112992	92.28	ug	9
42)	m,p-Xylenes	15.92	106.0	191016	187.99	ug	
46)	o-Xylene	16.28	106.0	92408	91.81	ug	9
49)	Bromofluorobenzene	12.92	95.0	95	4.22	ug	
50)	1,3-Dichlorobenzene	19.81	146.0	61149	46.22	ug	9
51)	1,4-Dichlorobenzene	20.03	146.0	60629	47.21	ug	
52)	1,2-Dichlorobenzene	20.28	146.0	53482	47.84	ug	9

* Compound is (50)

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): CS071 Date Analyzed: 02/19/03
Instrument ID: H5970 C Time Analyzed: 09:32
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	6768.	8.37	70650.	9.82	72862.	15.23
	UPPER LIMIT	13536.	8.87	141300.	10.32	145724.	15.73
	LOWER LIMIT	3384.	7.87	35325.	9.32	36431.	14.73
	EPA SAMPLE NO.						
1	VBLK01	6070.	8.38	61812.	9.83	66356.	15.27
2	MEGDD0241	7516.	8.41	62658.	9.82	68217.	15.26
3	MEGCIM0102	7721.	8.37	61339.	9.82	66994.	15.26
4	MEGDD0237	3659.	8.37	29286.*	9.82	30152.*	15.26
5	MEGDIM8618	4451.	8.41	40414.	9.82	46288.	15.26
6	TB030207	7753.	8.37	63330.	9.82	66963.	15.26
7	MEGDD0239	5906.	8.41	53388.	9.82	55506.	15.26
8	MEGDD0236	7274.	8.41	62027.	9.82	66037.	15.26
9	MEGUSH8602	7546.	8.37	61874.	9.82	64734.	15.26
10	MEGDIM0236	7185.	8.41	61757.	9.82	67017.	15.26
11	MEGDD0117	8199.	8.44	62508.	9.82	69839.	15.26
12	TB030212	5922.	8.41	61459.	9.86	64868.	15.26
13	LCS@20	8201.	8.41	68592.	9.83	71580.	15.27
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

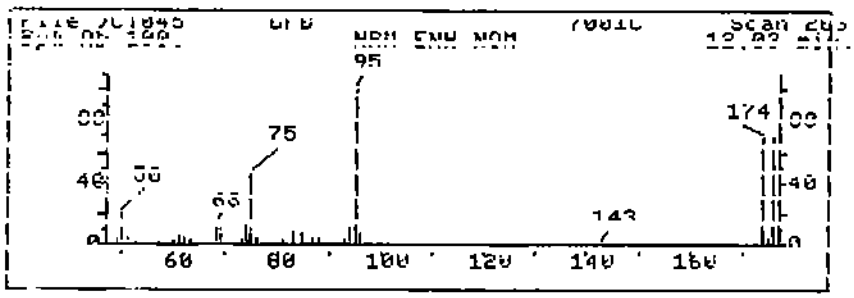
RAW QC

DATA

MS data file header from : >CT045::D4

Sample: nFB Operator: MHmIE MRG. nRP. 2/04/03 11:?7
Misc : 7001C
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7001 C
Method file: METHCT Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	?0.	?>0.	?50.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	.1	0.0	.2	0.0



>CT045 BFR 7001C
263 NRM ENH NOM

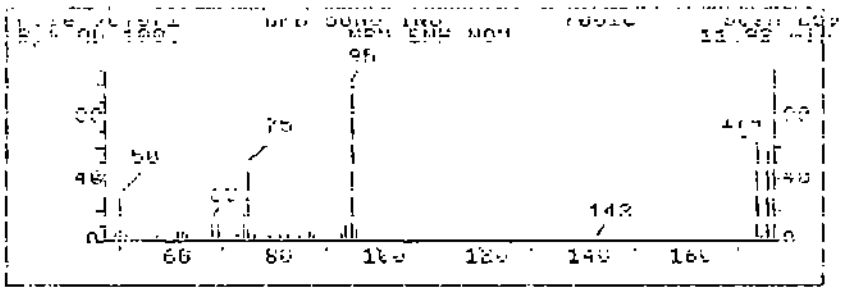
File: >CT045 Scan #: 263 Retn. time: 12.03

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
46.90	1.704	61.05	6.475	73.95	14.167	84.90	7.498	96.05	7.996
48.90	2.726	61.95	5.209	74.95	45.862	87.00	5.404	142.90	1.217
50.00	19.182	63.05	3.457	75.95	4.722	88.00	4.090	173.95	69.193
51.00	5.209	68.00	11.392	76.95	1.120	92.00	1.801	175.05	5.404
55.95	1.217	69.00	10.127	78.85	2.629	92.95	3.019	175.95	69.193
56.95	2.288	70.00	1.266	80.85	3.408	93.95	10.954	176.95	3.505
59.95	3.165	73.00	3.311	82.90	9.250	94.95	100.000		

MS data file header from : 21.D\Z1::D4

Sample: [illegible] Operator: [illegible] Acq. on: 2/1-03 v. 2
Misc : 2BUTT
Sys. #: 1 MS model: 70 SW/HW rev.: LF Acq #: 0 Comp ID: 70EQ C
  Method file: METHOD1 Tuning file: MASS03 No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	10.	200.	200.	0.	0.
Chromatographic times, min. :	3.0	39.0	39.0	0.0	0.0
Chromatographic rate, deg/min:	10	1	0.0	2	0



>[.[[2] BFB 5[[[[N[2[[[[,
 [.99 NBM -NB [[[

File: >[.[[2] Scan 4: 2?? Ret. time: [[.??

m/z	rel.	m/z	rel.	m/z	rel.	m/z	rel.	m/z	rel.
46.?[	?.[?[	6[.?5	6.?[2	?4.?5	46.[?[	84.6[	?.6?9	?6.??	?.?[4
47.?[	[.?85	61.?5	5.43?	?[.?5	4.?2[	86.?[	5.586	[4[.8[	[.?5?
48.?[	6.?26	6?.?5	4.4??	?8.85	?.64[	8?.8[	4.[?8	[4?.[[	[. [
5[.[[	22.?[6	6?.?[	12.?3[	79.8?	[.[4?	?2.[[	?.546	[?5.8?	59.5?3
5[.[[	8.[?6	68.?[	[[.[?4	8[.85	4.[4?	?[.85	4.[[6	[?4.65	?.[[
5?.??	[.?5?	69.8[	[.[[?	8[.8?	[.[?5	?[.??	[[.6??	[?5.8?	62.[?9
56.??	?. 84	??.?[	4.?[2	8?.[[	4.[4[	?4.?5	[[[.[[[	[?6.??	?.?[[
5?.??	?.444	?5.85	16.?[6						

1A

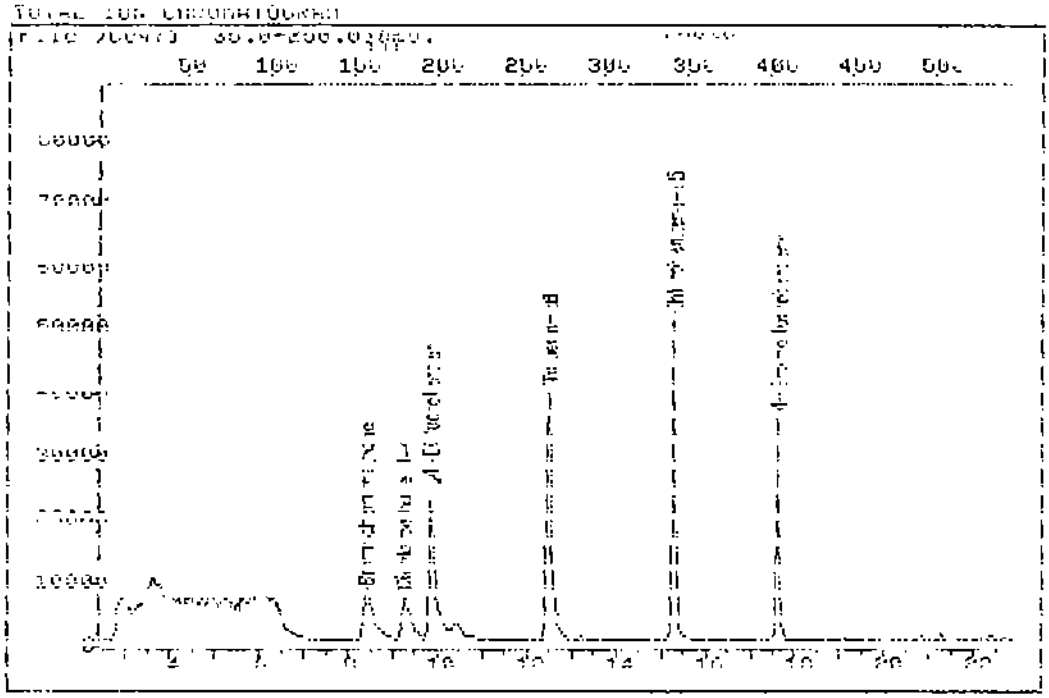
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: VBLK01
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0471
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: 210421::04 Quant Output File: 210421::04
Name: [illegible] Instrument ID: [illegible]
Misc: 210421

ID File: [illegible]
Title: HP 008 Continuing Calibration Standard
Last Calibration: 030121 10:10 Last Quant Time: [illegible]

Operator ID: MACIE
Quant Time : 030219 14:[illegible]
Injected at: 030219 14:10

Quant Report

Operator ID: DAVIE
Quant Rev: /
Quant Time:
Injected at:
Dilution Factor:
Instrument ID:
Data File:
Name: UHLK
Misc: 20ulC

ID File:
Title: HP 5988 Continuing Calibration Standard
Last Calibration:
Last Quant Time:

	Compound	R.T.	Resp	Area	Conc	Units	Q
1)	*Bromochloromethane	8.36	128.0	n.d.	50.00	ng	
2)	1,2-Dichloroethane-d4	9.23	69.0	31949	94.11	ng	7
3)	*1,4-Difluorobenzene	9.83	100.0	61812	50.00	ng	
4)	*Chlorobenzene-d5	15.27	112.0	66956	98.06	ng	9
5)	Toluene d-8	13.48	96.0	82.10	49.00	ng	
6)	Bromofluorobenzene	17.62	95.0	39998	47.88	ng	6

* Compound is ISTD

1A

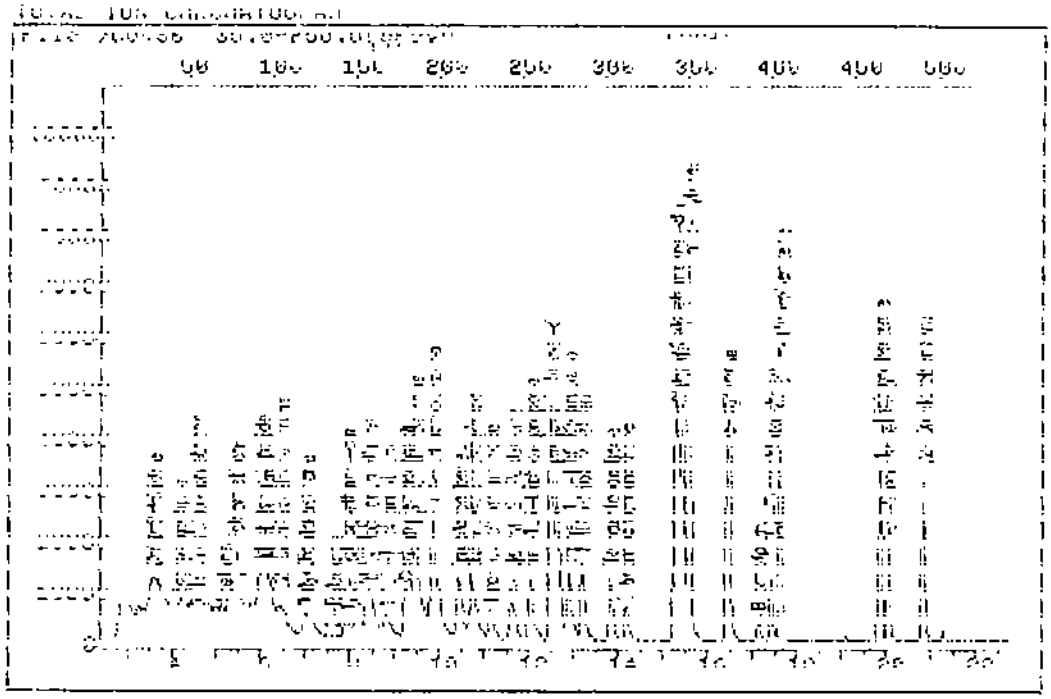
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS@20

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: LCS@20
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0486
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	19.	
74-83-9	Bromomethane	19.	
75-01-4	Vinyl Chloride	15.	
75-00-3	Chloroethane	19.	
75-09-2	Methylene Chloride	18.	
67-64-1	Acetone	17.	
75-15-0	Carbon Disulfide	14.	
75-35-4	1,1-Dichloroethene	13.	
75-34-3	1,1-Dichloroethane	19.	
156-60-5	1,2-Dichloroethene-trans	13.	
67-66-3	Chloroform	18.	
107-06-2	1,2-Dichloroethane	19.	
78-93-3	2-Butanone	19.	
71-55-6	1,1,1-Trichloroethane	23.	
56-23-5	Carbon Tetrachloride	22.	
75-27-4	Bromodichloromethane	21.	
78-87-5	1,2-Dichloropropane	22.	
10061-01-5	cis-1,3-Dichloropropene	19.	
79-01-6	Trichloroethene	21.	
124-48-1	Dibromochloromethane	24.	
79-00-5	1,1,2-Trichloroethane	22.	
71-43-2	Benzene	19.	
10061-02-6	trans-1,3-Dichloropropene	19.	
75-25-2	Bromoform	24.	
108-10-1	4-Methyl-2-Pentanone	20.	
591-78-6	2-Hexanone	22.	
127-18-4	Tetrachloroethene	20.	
79-34-5	1,1,2,2-Tetrachloroethane	24.	
108-88-3	Toluene	20.	
108-90-7	Chlorobenzene	21.	
100-41-4	Ethylbenzene	19.	
100-42-5	Styrene	18.	
156-59-2	1,2-Dichloroethene-cis	18.	
106-42-3	m,p-Xylenes	35.	
95-47-6	o-Xylene	19.	



Data File: >[illegible]:04
Name: [illegible]
Mass: 2000[illegible]

Id File: [illegible]:[illegible]
Title: HP 5[illegible] Confirming Calibration Standard
Last Calibration: [illegible]

Operator ID: MARIE
Event Time : [illegible]
Injected at: **/07/19 21:04

Quant Output File: [illegible]
Instrument ID: [illegible]
Last mod time: [illegible]

Operator ID: CHRIS
Output File: C:\DATA\A:\01
Data File: A:\DATA\A:\04
Name: 113020
Misc: 20ML

Quant Rev: Wed Jan 02 09:19:12 2019
Injected at: 1/2/19 21:04
Dilution Factor: 1.000
Instrument ID: 5971 C.

ID File: C:\HP5971\:MT
Title: HP 5/8 continuing calibration standard
Last Calibration: 01/02/19 10:10 Last Quant Time: 1/2/19 09:22

	Compound	R.T.	Resp	Area	Conc	Units	Q
1)	*Bromochloromethane	8.41	100.0	80001	20.000	ug	
2)	Dibromomethane	9.59	98.0	11178	19.501	ug	2
3)	Bromomethane	9.15	94.0	9[illegible]M	18.901	ug	
4)	Vinyl Chloride	9.59	82.0	14796	19.103	ug	8
5)	Chloromethane	9.76	84.0	11[illegible]M	17.401	ug	
6)	Methylene Chloride	8.07	84.0	21328	18.101	ug	8
8)	Acetone	9.16	43.0	61[illegible]M	18.972	ug	
10)	Trichlorofluoromethane	8.56	101.0	17736	19.261	ug	7
12)	Carbon Disulfide	8.10	76.0	4[illegible]7	17.189	ug	
13)	1,1-Dichloroethene	9.42	96.0	11143	19.864	ug	2
15)	1,1-Dichloroethane	9.99	63.0	29461	19.698	ug	
16)	1,2-Dichloroethene-trans	8.43	96.0	6402	17.999	ug	8
18)	1,2-Dichloroethene-cis	10.92	61.0	20[illegible]9	17.599	ug	7
19)	Chloroform	8.19	83.0	19879	18.499	ug	8
20)	1,2-Dichloroethane-d4	9.27	67.0	36[illegible]9	42.864	ug	
21)	1,2-Dichloroethane	9.45	62.0	21732	18.663	ug	9
22)	2-Butanone	7.63	43.0	8[illegible]7	16.008	ug	
23)	*1,4-Difluorobenzene	9.83	114.0	88992	20.000	ug	9
24)	1,1,1-Trichloroethane	8.82	97.0	14238	23.041	ug	
25)	Carbon Tetrachloride	9.23	117.0	13228	22.398	ug	8
26)	Vinyl Acetate	9.99	43.0	3[illegible]47	21.223	ug	
27)	Bromodichloromethane	11.13	83.0	15821	21.922	ug	9
28)	1,2-Dichloropropane	10.22	63.0	2[illegible]4	21.265	ug	
29)	cis-1,3-Dichloropropene	12.02	75.0	22176	19.399	ug	8
30)	Trichloroethene	10.42	130.0	9[illegible]2	20.004	ug	
31)	Dibromochloromethane	14.19	129.0	12[illegible]4	23.641	ug	9
32)	1,1,2-Trichloroethane	10.18	97.0	10944	22.449	ug	
33)	Benzene	9.46	78.0	52223	19.106	ug	9
34)	trans-1,3-Dichloropropene	10.38	75.0	20[illegible]85	19.996	ug	
35)	2-Chloroethylvinylether	10.22	63.0	21614	21.726	ug	8
36)	Bromoform	12.12	173.0	8[illegible]39	22.208	ug	
37)	*Chlorobenzene-d5	10.22	117.0	71980	20.000	ug	9
38)	2-Hexanone	10.18	43.0	13[illegible]2	17.443	ug	
39)	4-Methyl-2-Pentanone	11.61	43.0	28192	20.328	ug	9
40)	Tetrachloroethene	10.81	164.0	20[illegible]1	19.109	ug	
41)	1,1,2,2-Tetrachloroethane	12.43	83.0	16644	21.142	ug	9
42)	Toluene	11.02	92.0	64[illegible]2	17.206	ug	2
43)	Toluene d-8	12.42	98.0	98651	42.109	ug	9
44)	Chlorobenzene	10.34	112.0	2[illegible]6	21.219	ug	2
45)	Ethylbenzene	10.42	106.0	12942	19.326	ug	9

Operator ID: MARIE Quant Rev: 7 Quant Time: 8/30/19 21:22
Report File: 21.D486\...QT Injected at: 8/30/19 21:...
Data File: 21.D486\...D4 Dilution Factor: 1.00000
Name: [illegible] Instrument ID: 7000 C
Misc: 2000ug

ID File: 0826[illegible]
Title: HP 0826 Continuing Calibration Standard
Last Calibration: 8/31 ...:03 Last Qual ...: 8/30/19 ...:...

	Compound	R.T.	M.Wgt	Area	Conc.	Units	Q
46)	Styrene	16.46	104.1	36962	16.46	UG	8
47)	m,p-Xylenes	15.26	106.1	[illegible]	35.85	ug	
48)	o-Xylene	16.42	106.1	28098	16.62	UG	9
49)	Bromofluorobenzene	17.61	95.0	52[illegible]	100.29	ug	
50)	1,3-Dichlorobenzene	17.85	146.0	2[illegible]96	17.44	UG	9[illegible]
51)	1,4-Dichlorobenzene	18.04	146.0	2[illegible]	17.42	ug	
52)	1,2-Dichlorotoluene	20.82	146.0	21266	20.20	UG	9[illegible]

* Compound is [illegible]

CLP

SAMPLE CALCULATIONS FOR VOLATILE ORGANICS:

1) RRF of Benzene from the VSTD050 analyzed on 2/19/03:

$$= \frac{\text{area of Benzene in std.}}{\text{area of internal std}} \quad \mathbf{X} \quad \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{154758}{70650} \times \frac{50}{50} = 2.190$$

2) Amount of Benzene in sample LCS@20 (AES sample number Laboratory Control Sample):

$$\text{ug/L} = \frac{\text{area of Benzene in sample}}{\text{area of internal standard in sample}} \times \frac{\text{amount of internal std. (ng)}}{\text{(ml of sample purged)(RRF)}}$$

$$= \frac{57273}{68592} \times \frac{(250)}{(5.0)(2.190)} = 19.1 \text{ ug/L}$$

which is reported as 19 ug/L on the Form I for Volatile Organics

3) Calculation of spike recovery for Benzene in sample LCS@20:

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Benzene} = \frac{(19.1 - 0.0)}{20.0} \times 100 = 95.5\ \%$$

SEMI-VOLATILE

ORGANICS ANALYSIS

QC

SUMMARY

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	TOT OUT
1	MEGDD0241	37	59	69	N/A	N/A	N/A	0
2	MEGCIM0102	38	44	61	N/A	N/A	N/A	0
3	MEGDD0237	64	76	80	N/A	N/A	N/A	0
4	MEGDIM8618	66	82	79	N/A	N/A	N/A	0
5	MEGDD0239	64	74	73	N/A	N/A	N/A	0
6	MEGDD0236	56	68	68	N/A	N/A	N/A	0
7	MEGUSH8602	53	64	64	N/A	N/A	N/A	0
8	MEGDIM0236	51	62	62	N/A	N/A	N/A	0
9	MEGDD0117	53	65	65	N/A	N/A	N/A	0
10	WBLK02	66	68	67	25	62	80	0
11	WMSB	59	65	64	24	52	74	0
12	WBLK01	46	47	52	15	41	46	0
13	WBLK03	60	59	77	18	52	66	0
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-110)
S5 (2FP) = 2-Fluorophenol	(21-110)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3C

WATER SEMI-VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,4 Dichlorobenzene	25	0	14	55	36-97
N-Nitroso-di-n-propylamine	25	0	12	47	41-116
1,2,4 Trichlorobenzene	25	0	13	52	39-98
Acenaphthene	25	0	14	55	46-118
2,4 Dinitrotoluene	25	0	11	46	24-96
Pyrene	25	0	11	43	26-127

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 6 outside limits

Comments: _____

_____

_____

FORM III SV-1

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: B0508 Lab Sample ID: WBLK 2/12/03

Instrument ID: 5973 B Date Extracted: 02/12/03

Matrix: (soil/water) WATER Date Analyzed: 03/05/03

Level:(low/med) LOW Time Analyzed: 12:43

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDD0241	MEGDD0241	B0402	02/19/03
2	MEGCIM0102	MEGCIM0102	B0403	02/19/03
3	MEGDD0237	MEGDD0237	B0467	02/27/03
4	MEGDIM8618	MEGDIM8618	B0468	02/27/03
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: B0499 Lab Sample ID: WBLK 2/14/03

Instrument ID: 5973 B Date Extracted: 02/14/03

Matrix: (soil/water) WATER Date Analyzed: 03/04/03

Level:(low/med) LOW Time Analyzed: 14:30

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	WMSB	WMSB 2/14/03	B0500	03/04/03
2				
3				
4				
5				
6				
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: B0509 Lab Sample ID: WBLK 2/18/03

Instrument ID: 5973 B Date Extracted: 02/18/03

Matrix: (soil/water) WATER Date Analyzed: 03/05/03

Level:(low/med) LOW Time Analyzed: 13:51

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDD0239	MEGDD0239	B0469	02/27/03
2	MEGDD0236	MEGDD0236	B0470	02/27/03
3	MEGUSH8602	MEGUSH8602	B0474	02/28/03
4	MEGDIM0236	MEGDIM0236	B0475	02/28/03
5	MEGDD0117	MEGDD0117	B0476	02/28/03
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: BT489 DFTPP Injection Date: 12/17/02

Instrument ID.: 5973 B DFTPP Injection Time: 09:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.9
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	38.3
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	51.5
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 30.0% of mass 198	21.9
365	Greater than 0.75% of mass 198	2.50
441	Present, but less than mass 443	8.8
442	40.0 - 110.0% of mass 198	57.8
443	15.0 - 23.0% of mass 442	11.2 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD020	SSTD020	BS490	12/17/02	11:20
2	SSTD080	SSTD080	BS491	12/17/02	12:14
3	SSTD120	SSTD120	BS492	12/17/02	13:08
4	SSTD160	SSTD160	BS493	12/17/02	14:01
5	SSTD050	SSTD050	BS494	12/17/02	14:56
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: BT040 DFTPP Injection Date: 02/18/03

Instrument ID.: 5973 B DFTPP Injection Time: 17:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.0
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	38.0
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	49.9
197	Less than 1.0% of mass 198	1.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.3
275	10.0 - 30.0% of mass 198	23.3
365	Greater than 0.75% of mass 198	1.42
441	Present, but less than mass 443	9.7
442	40.0 - 110.0% of mass 198	65.8
443	15.0 - 23.0% of mass 442	14.5 (22.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTTD050	BS040	02/18/03	18:04
2	MEGDD0241	MEGDD0241	B0402	02/19/03	03:48
3	MEGCIM0102	MEGCIM0102	B0403	02/19/03	05:02
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: BT046 DFTPP Injection Date: 02/27/03

Instrument ID.: 5973 B DFTPP Injection Time: 11:48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.7
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	41.7
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	50.5
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	22.5
365	Greater than 0.75% of mass 198	2.38
441	Present, but less than mass 443	10.8
442	40.0 - 110.0% of mass 198	77.9
443	15.0 - 23.0% of mass 442	15.6 (20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS046	02/27/03	12:20
2	MEGDD0237	MEGDD0237	B0467	02/27/03	19:09
3	MEGDIM8618	MEGDIM8618	B0468	02/27/03	20:18
4	MEGDD0239	MEGDD0239	B0469	02/27/03	21:32
5	MEGDD0236	MEGDD0236	B0470	02/27/03	22:45
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: BT047 DFTPP Injection Date: 02/28/03

Instrument ID.: 5973 B DFTPP Injection Time: 10:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.2
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	35.3
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	47.9
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	25.0
365	Greater than 0.75% of mass 198	2.92
441	Present, but less than mass 443	11.0
442	40.0 - 110.0% of mass 198	75.3
443	15.0 - 23.0% of mass 442	17.0 (22.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS047	02/28/03	10:25
2	MEGUSH8602	MEGUSH8602	B0474	02/28/03	11:43
3	MEGDIM0236	MEGDIM0236	B0475	02/28/03	12:37
4	MEGDD0117	MEGDD0117	B0476	02/28/03	13:30
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: BT049 DFTPP Injection Date: 03/04/03

Instrument ID.: 5973 B DFTPP Injection Time: 11:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.6
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	40.5
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	52.8
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	24.1
365	Greater than 0.75% of mass 198	2.42
441	Present, but less than mass 443	12.0
442	40.0 - 110.0% of mass 198	79.7
443	15.0 - 23.0% of mass 442	16.3 (20.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS049	03/04/03	11:51
2	WBLK02	WBLK 2/14/03	B0499	03/04/03	14:30
3	WMSB	WMSB 2/14/03	B0500	03/04/03	15:23
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Lab File ID: BT050 DFTPP Injection Date: 03/05/03

Instrument ID.: 5973 B DFTPP Injection Time: 11:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.3
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	43.6
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	53.4
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.6
275	10.0 - 30.0% of mass 198	25.3
365	Greater than 0.75% of mass 198	2.13
441	Present, but less than mass 443	12.8
442	40.0 - 110.0% of mass 198	82.7
443	15.0 - 23.0% of mass 442	17.6 (21.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS050	03/05/03	11:50
2	WBLK01	WBLK 2/12/03	B0508	03/05/03	12:43
3	WBLK03	WBLK 2/18/03	B0509	03/05/03	13:51
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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS040 Date Analyzed: 02/18/03
Instrument ID: 5973 B Time Analyzed: 18:04

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	95421.		10.48		222357.		14.77		137818.		20.40	
	UPPER LIMIT	190842.		10.98		444714.		15.27		275636.		20.90	
	LOWER LIMIT	47711.		9.98		111179.		14.27		68909.		19.90	
	EPA SAMPLE NO.												
1	MEGDD0241	100394.		10.48		199139.		14.76		132358.		20.41	
2	MEGCIM0102	119227.		10.47		237613.		14.76		163162.		20.41	
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22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS040 Date Analyzed: 02/18/03
Instrument ID: 5973 B Time Analyzed: 18:04

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	277641.		24.84		356053.		32.81		320771.		36.77	
	UPPER LIMIT	555282.		25.34		712106.		33.31		641542.		37.27	
	LOWER LIMIT	138821.		24.34		178027.		32.31		160386.		36.27	
	EPA SAMPLE NO.												
1	MEGDD0241	296538.		24.86		357118.		32.81		331331.		36.78	
2	MEGCIM0102	335727.		24.85		384888.		32.81		373485.		36.78	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS046 Date Analyzed: 02/27/03
Instrument ID: 5973 B Time Analyzed: 12:20

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	93168.		10.17		213001.		14.47		134078.		20.12	
	UPPER LIMIT	186336.		10.67		426002.		14.97		268156.		20.62	
	LOWER LIMIT	46584.		9.67		106501.		13.97		67039.		19.62	
	EPA SAMPLE NO.												
1	MEGDD0237	94432.		10.17		231184.		14.47		146930.		20.11	
2	MEGDIM8618	104061.		10.16		255907.		14.46		158910.		20.11	
3	MEGDD0239	144705.		10.17		352128.		14.47		220265.		20.11	
4	MEGDD0236	113339.		10.17		268418.		14.47		163914.		20.11	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS046 Date Analyzed: 02/27/03
Instrument ID: 5973 B Time Analyzed: 12:20

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	271839.	24.56	299498.	32.52	354641.	36.47
	UPPER LIMIT	543678.	25.06	598996.	33.02	709282.	36.97
	LOWER LIMIT	135920.	24.06	149749.	32.02	177321.	35.97
	EPA SAMPLE NO.						
1	MEGDD0237	284760.	24.55	298859.	32.51	348530.	36.47
2	MEGDIM8618	321416.	24.56	382461.	32.52	432778.	36.48
3	MEGDD0239	432790.	24.56	486257.	32.52	583152.	36.48
4	MEGDD0236	294285.	24.56	293244.	32.51	360365.	36.48
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	100487.	10.11	239201.	14.42	158142.	20.07
	UPPER LIMIT	200974.	10.61	478402.	14.92	316284.	20.57
	LOWER LIMIT	50244.	9.61	119601.	13.92	79071.	19.57
	EPA SAMPLE NO.						
1	MEGUSH8602	118050.	10.08	277867.	14.39	167789.	20.03
2	MEGDIM0236	131116.	10.07	308404.	14.37	190255.	20.02
3	MEGDD0117	87529.	10.06	220093.	14.37	138160.	20.02
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	324856.		24.51		330846.		32.47		364804.		36.41	
	UPPER LIMIT	649712.		25.01		661692.		32.97		729608.		36.91	
	LOWER LIMIT	162428.		24.01		165423.		31.97		182402.		35.91	
	EPA SAMPLE NO.												
1	MEGUSH8602	327388.		24.47		364694.		32.43		453751.		36.39	
2	MEGDIM0236	390869.		24.46		437929.		32.41		526893.		36.37	
3	MEGDD0117	288316.		24.46		327253.		32.41		399381.		36.37	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS049 Date Analyzed: 03/04/03
Instrument ID: 5973 B Time Analyzed: 11:51

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	118173.		10.08		307789.		14.57		220457.		20.52	
	UPPER LIMIT	236346.		10.58		615578.		15.07		440914.		21.02	
	LOWER LIMIT	59087.		9.58		153895.		14.07		110229.		20.02	
	EPA SAMPLE NO.												
1	WBLK02	120886.		9.71		279883.		14.02		183189.		19.69	
2	WMSB	77039.		9.70		176274.		14.02		118247.		19.68	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS049 Date Analyzed: 03/04/03
Instrument ID: 5973 B Time Analyzed: 11:51

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	424798.		25.11		464197.		33.15		527990.		37.16	
	UPPER LIMIT	849596.		25.61		928394.		33.65		1055980.		37.66	
	LOWER LIMIT	212399.		24.61		232099.		32.65		263995.		36.66	
	EPA SAMPLE NO.												
1	WBLK02	366113.		24.12		447150.		32.07		548026.		36.01	
2	WMSB	234548.		24.12		282124.		32.06		351448.		36.01	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS050 Date Analyzed: 03/05/03
Instrument ID: 5973 B Time Analyzed: 11:50

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	66258.		9.71		158617.		14.03		107533.		19.69	
	UPPER LIMIT	132516.		10.21		317234.		14.53		215066.		20.19	
	LOWER LIMIT	33129.		9.21		79309.		13.53		53767.		19.19	
	EPA SAMPLE NO.												
1	WBLK01	131436.		9.71		305642.		14.02		198911.		19.69	
2	WBLK03	67372.		9.71		158968.		14.03		108735.		19.69	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS050 Date Analyzed: 03/05/03
Instrument ID: 5973 B Time Analyzed: 11:50

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	219978.	24.13	252530.	32.07	280305.	36.01
	UPPER LIMIT	439956.	24.63	505060.	32.57	560610.	36.51
	LOWER LIMIT	109989.	23.63	126265.	31.57	140153.	35.51
	EPA SAMPLE NO.						
1	WBLK01	381174.	24.12	403768.	32.07	439355.	36.01
2	WBLK03	223506.	24.12	255185.	32.06	312399.	36.01
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
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AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Semi-Volatile Method Detection Limits

Date Performed: **2/5/2003**

Parameter	Conc 1 BMDL1	Conc 2 BMDL2	Conc 3 BMDL3	Conc 4 BMDL4	Conc 5 BMDL5	Conc 6 BMDL6	Conc 7 BMDL7	SD	MDL
Pyridine	4.08	6.10	4.20	8.63	7.35	4.01	4.07	1.895	5.957
N-Nitroso-di-methylamine	13.37	15.57	14.14	14.60	13.94	17.60	15.88	1.446	4.543
Analine	10.94	13.62	11.97	15.56	13.60	14.69	13.25	1.556	4.892
Phenol	13.27	17.62	16.03	16.25	15.49	17.59	16.63	1.484	4.665
bis(2-chloroethyl) ether	23.36	26.27	24.34	23.44	22.12	27.13	23.61	1.767	5.554
2-Chlorophenol	27.62	32.18	28.87	29.48	27.42	32.92	29.43	2.116	6.649
1,3 Dichlorobenzene	15.21	17.19	15.38	16.39	14.15	17.89	17.44	1.370	4.305
1,4 Dichlorobenzene	15.72	17.75	15.84	16.79	14.52	18.19	17.65	1.333	4.189
Benzyl Alcohol	22.38	27.14	25.14	23.19	22.48	25.75	22.54	1.910	6.003
1,2 Dichlorobenzene	15.90	17.91	16.26	17.21	15.02	18.51	17.90	1.267	3.981
2-Methylphenol	21.32	23.99	22.77	21.94	20.71	24.68	22.53	1.410	4.432
2,2'-oxybis (1-chloropropane)	22.25	25.72	23.77	23.33	21.87	25.34	23.43	1.439	4.524
4-Methylphenol	18.19	20.95	19.15	19.32	17.43	20.44	19.57	1.214	3.816
N-Nitroso-di-n-propylamine	23.67	27.34	25.85	24.89	23.77	26.52	24.96	1.368	4.300
Hexachloroethane	14.14	15.85	13.60	15.09	12.71	16.57	16.46	1.485	4.666
Nitrobenzene	22.17	26.03	24.53	23.45	22.68	26.26	23.54	1.584	4.978
Isophorone	25.66	28.71	27.27	26.59	25.27	27.97	26.25	1.240	3.897
2-Nitrophenol	31.63	36.32	33.68	33.81	31.99	38.06	33.98	2.286	7.185
2,4 Dimethylphenol	26.39	31.38	26.78	28.43	26.20	28.59	26.64	1.860	5.847
bis(2-chloroethoxy)methane	23.66	26.78	25.37	25.21	23.64	26.82	25.17	1.288	4.047
2,4 Dichlorophenol	29.82	34.21	30.58	31.30	30.18	34.13	31.45	1.804	5.669
1,2,4 Trichlorobenzene	17.25	19.40	17.70	18.21	16.55	19.53	18.98	1.132	3.557
Naphthalene	21.60	24.26	23.40	22.43	21.72	24.68	23.22	1.192	3.747
Benzoic Acid			3.99		3.37	3.56	3.10	0.374	1.700
4-Chloroanaline	21.76	25.18	23.29	25.34	23.57	24.90	24.41	1.281	4.026
Hexachlorobutadiene	14.84	16.49	14.07	15.64	13.66	16.99	17.32	1.435	4.511
4-Chloro-3-methylphenol	30.61	37.86	33.80	32.35	32.59	36.29	32.25	2.541	7.985
2-Methylnaphthalene	23.78	26.94	25.06	24.33	23.85	26.38	24.98	1.219	3.832
Hexachlorocyclopentadiene	12.78	15.28	13.75	14.39	13.24	15.56	16.38	1.316	4.135
2,4,6 Trichlorophenol	33.65	39.71	37.02	36.18	35.77	38.20	35.62	1.955	6.145
2,4,5 Trichlorophenol	25.34	29.36	27.93	26.29	26.37	26.81	26.03	1.352	4.248
2-Chloronaphthalene	21.74	24.97	23.37	23.91	22.33	24.17	23.37	1.097	3.448
2-Nitroaniline	24.28	29.02	27.85	25.58	25.80	27.11	24.60	1.741	5.473
Dimethylphthalene	19.70	22.59	20.21	19.95	18.17	23.40	21.98	1.850	5.814
Acenaphthylene	25.99	29.59	28.51	27.45	26.40	28.00	26.24	1.336	4.198
2,6 Dinitrotoluene	28.30	32.47	31.10	29.90	28.80	30.25	29.21	1.434	4.507
3-Nitroaniline	26.63	30.89	29.29	27.52	27.39	28.81	27.33	1.478	4.645
Acenaphthene	26.35	30.15	28.61	27.80	26.76	27.99	26.53	1.353	4.253

Semi-Volatile Method Detection Limits

Date Performed: **2/5/2003**

Parameter	Conc 1 BMDL1	Conc 2 BMDL2	Conc 3 BMDL3	Conc 4 BMDL4	Conc 5 BMDL5	Conc 6 BMDL6	Conc 7 BMDL7	SD	MDL
2,4 Dinitrophenol	16.76	25.26	23.85	23.24	23.54	25.33	23.41	2.907	9.136
4-Nitrophenol	6.78	10.96	7.16	8.86	6.69	8.44	8.18	1.499	4.710
Dibenzofuran	28.47	32.38	30.35	29.29	28.48	30.51	28.49	1.466	4.607
2,4 Dinitrotoluene	25.64	29.62	28.13	27.36	26.13	28.03	26.83	1.348	4.235
Diethylphthalate	25.70	29.60	27.15	26.29	25.56	27.82	27.64	1.417	4.454
Fluorene	26.85	30.71	29.15	28.37	27.17	28.45	27.70	1.309	4.115
4-Chlorophenyl phenylether	25.23	29.31	26.33	26.74	26.81	27.36	27.31	1.241	3.902
4-Nitroaniline	26.73	33.42	31.81	29.26	27.98	29.10	29.71	2.259	7.100
4,6-Dinitro-2-methylphenol	32.67	40.53	36.88	36.01	36.45	38.79	35.51	2.492	7.833
N-Nitrosodi-n-phenylamine	28.59	31.26	29.42	29.62	28.26	29.86	27.29	1.278	4.018
Azobenzene	24.05	28.05	24.72	25.46	24.78	25.89	24.68	1.320	4.148
4-Bromophenyl phenylether	26.09	30.09	27.53	27.65	26.70	28.32	25.15	1.603	5.039
Hexachlorobenzene	28.01	31.36	29.26	29.14	28.07	29.42	26.14	1.607	5.050
Pentachlorophenol	30.49	36.70	34.07	32.40	32.89	35.24	32.18	2.079	6.535
Phenanthrene	27.84	31.51	29.74	28.86	28.23	28.97	26.81	1.497	4.705
Anthracene	26.92	30.68	29.31	28.49	24.41	28.92	26.45	2.095	6.586
Benzidine	49.64	49.87	50.04	50.38	50.11	49.88	49.49	0.297	0.934
Carbazole	33.40	38.92	36.52	35.25	34.53	35.38	32.95	2.013	6.328
Di-n-butylphthalate	28.86	32.64	30.56	29.66	28.41	30.38	28.23	1.543	4.848
Fluoranthene	27.51	31.29	29.48	28.59	27.15	28.74	26.57	1.599	5.024
Pyrene	27.00	30.02	29.33	28.82	27.33	27.21	26.22	1.400	4.401
Butylbenzylphthalate	27.47	30.49	28.81	28.54	27.07	29.51	27.21	1.280	4.022
Benzo(a)anthracene	27.21	30.44	29.61	28.89	27.25	28.67	26.42	1.448	4.552
3,3'-Dichlorobenzidine	31.40	34.12	33.43	33.99	31.08	33.98	29.05	1.958	6.154
Chrysene	28.08	31.45	30.32	29.94	28.04	29.74	27.17	1.520	4.777
bis(2-ethylhexyl) phthalate	28.12	31.71	29.99	29.22	27.82	29.54	27.21	1.527	4.798
Di-n-octylphthalate	26.59	29.97	28.93	27.52	27.26	27.56	25.47	1.476	4.638
Benzo(b)fluoranthene	26.85	30.46	29.05	27.92	27.73	26.84	25.20	1.693	5.321
Benzo(k)fluoranthene	27.14	31.40	29.52	28.65	28.14	29.40	27.57	1.435	4.511
Benzo(a)pyrene	26.73	30.16	29.51	28.26	27.16	28.21	25.92	1.511	4.750
Indeno(1,2,3-cd)pyrene	25.69	30.17	28.12	28.54	26.24	27.27	24.78	1.849	5.810
Dibenz(a,h)anthracene	25.10	28.34	26.84	27.30	25.29	26.54	24.55	1.356	4.262
Benzo(g,h,i)perylene	26.79	30.03	28.75	28.94	27.09	27.45	26.18	1.378	4.330

SAMPLE

DATA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGCIM0102

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0403

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

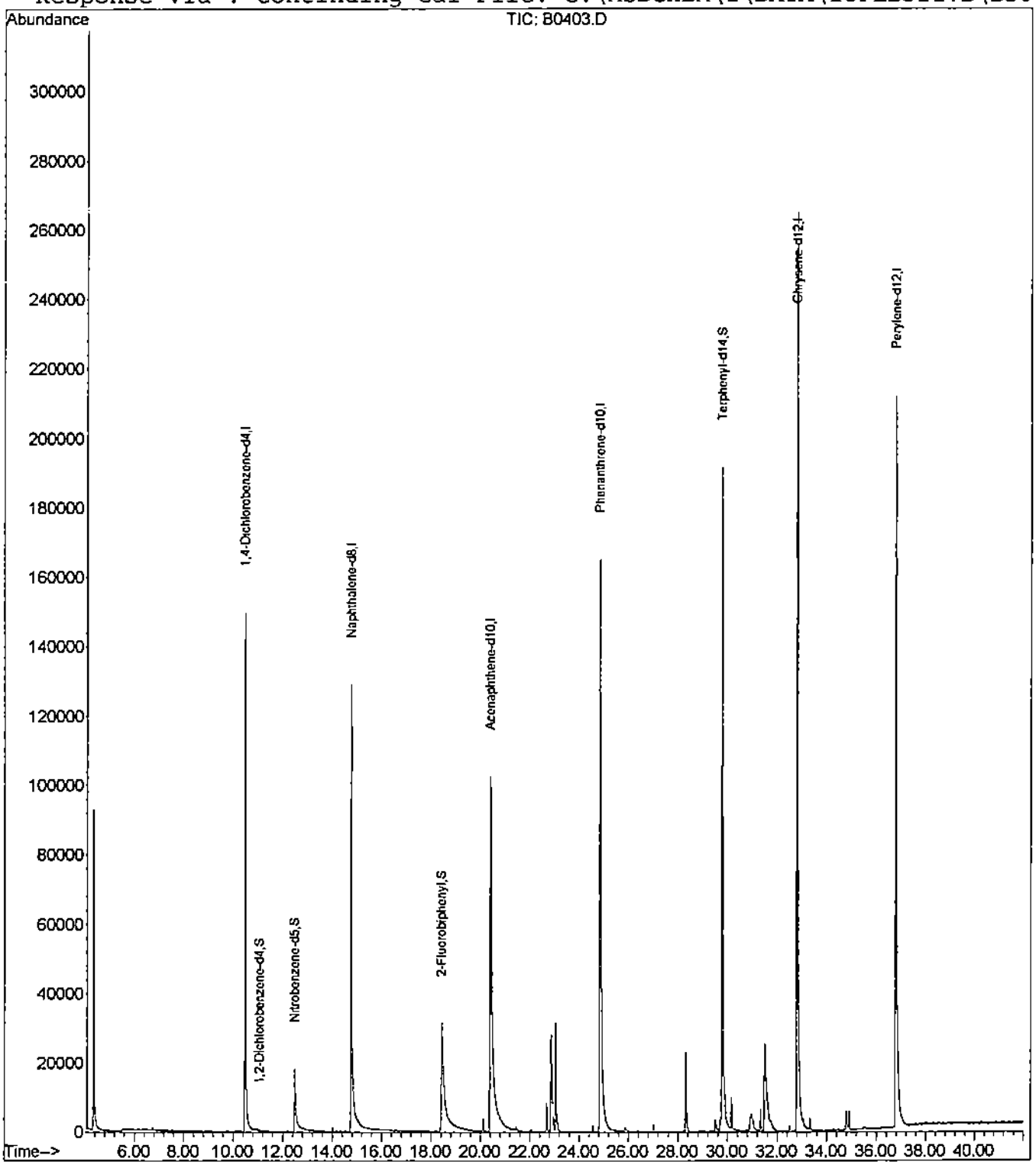
FORM I SV-1 3/90

AMK 4/8/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\B0403.D Vial: 14
Acq On : 19 Feb 2003 5:02 am Operator:
Sample : MEGCIM0102 Inst : gcms b
Misc : GCMS-B 030207J02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:15 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\B0403.D Vial: 14
Acq On : 19 Feb 2003 5:02 am Operator:
Sample : MEGCIM0102 Inst : gcms b
Misc : GCMS-B 030207J02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 09:22:23 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Feb 19 09:21:08 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.47	152	119227	40.00	ug	0.00
21) Naphthalene-d8	14.76	136	237613	40.00	ug	0.00
36) Acenaphthene-d10	20.41	164	163162	40.00	ug	0.01
56) Phenanthrene-d10	24.85	188	335727	40.00	ug	0.01
70) Chrysene-d12	32.81	240	384888	40.00	ug	0.00
78) Perylene-d12	36.78	264	373485	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	11.07	152	123	0.08	ug	-0.02
22) Nitrobenzene-d5	12.49	82	55114	19.03	ug	0.00
40) 2-Fluorobiphenyl	18.43	172	145175	22.06	ug	0.02
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.79	244	253066	30.39	ug	0.00

Target Compounds Qvalue

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0117

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0476

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	~~U~~ UJ
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

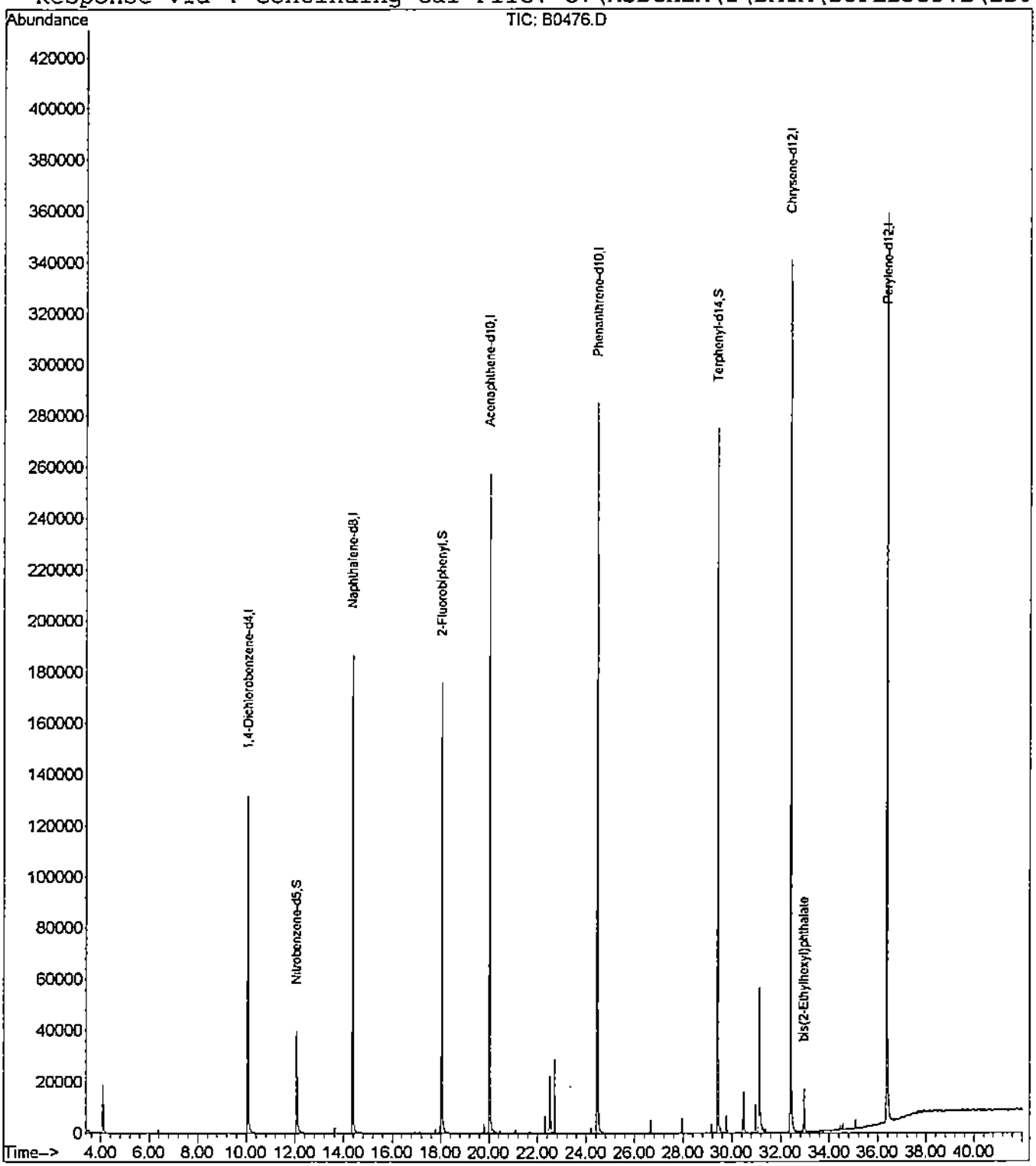
(1) - Cannot be separated from diphenylamine

AMK 6/23/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0476.D Vial: 5
Acq On : 28 Feb 2003 1:30 pm Operator:
Sample : MEGDD0117 Inst : gcms b
Misc : GCMS-B 030212M05 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:29 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



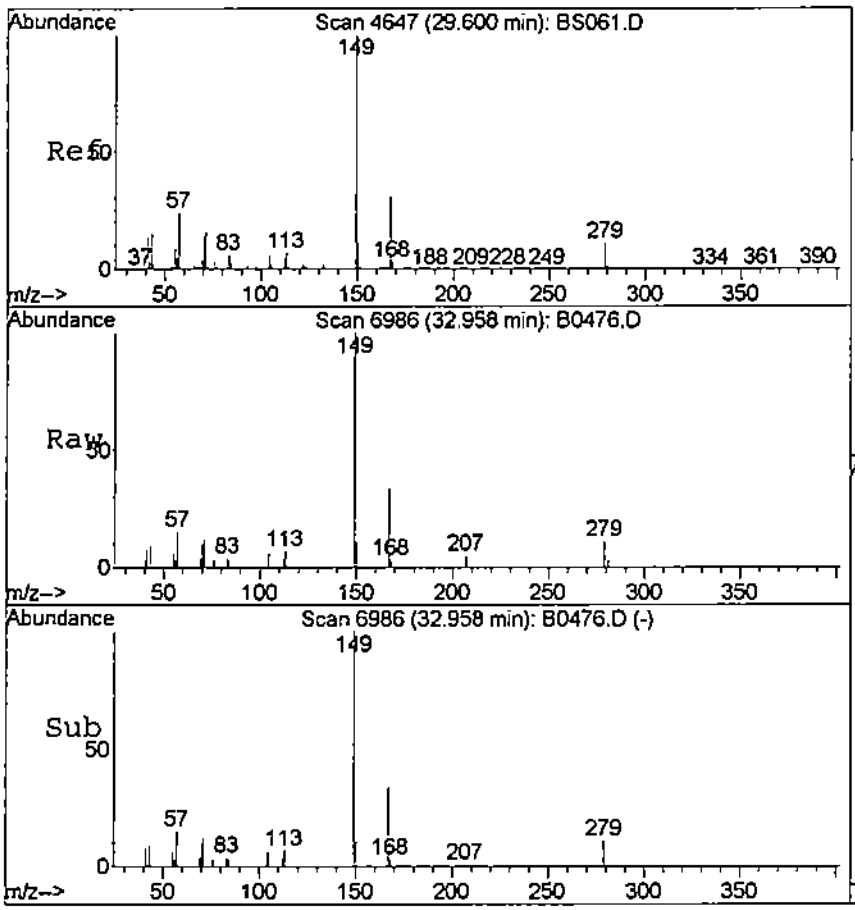
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0476.D Vial: 5
Acq On : 28 Feb 2003 1:30 pm Operator:
Sample : MEGDD0117 Inst : gcms b
Misc : GCMS-B 030212M05 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:02:48 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	87529	40.00	ug	-0.05
21) Naphthalene-d8	14.37	136	220093	40.00	ug	-0.05
36) Acenaphthene-d10	20.02	164	138160	40.00	ug	-0.05
56) Phenanthrene-d10	24.46	188	288316	40.00	ug	-0.05
70) Chrysene-d12	32.41	240	327253	40.00	ug	-0.05
78) Perylene-d12	36.37	264	399381	40.00	ug	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.07	82	73968	26.39	ug	-0.05
40) 2-Fluorobiphenyl	18.04	172	179415	32.44	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.42	244	248624	32.38	ug	-0.04
Target Compounds						Qvalue
77) bis(2-Ethylhexyl)phthalate	32.96	149	20659	3.18	ug	87

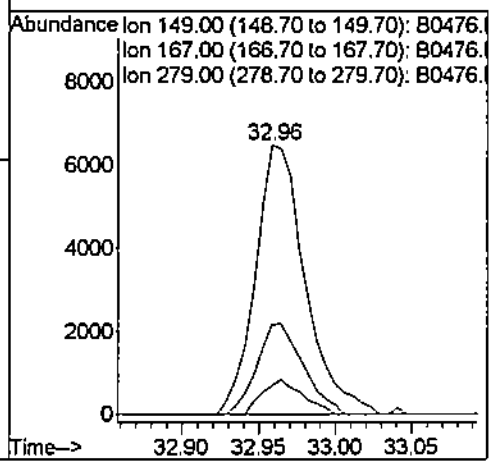
(#) = qualifier out of range (m) = manual integration



#77
bis(2-Ethylhexyl)phthalate
Concen: 3.18 ug
RT: 32.96 min Scan# 6986
Delta R.T. -0.05 min
Lab File: B0476.D
Acq: 28 Feb 2003 1:30 pm

Tgt Ion:149 Resp: 20659

Ion	Ratio	Lower	Upper
149	100		
167	22.1	24.3	36.5#
279	7.4	5.4	8.2



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0236

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: B0470

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

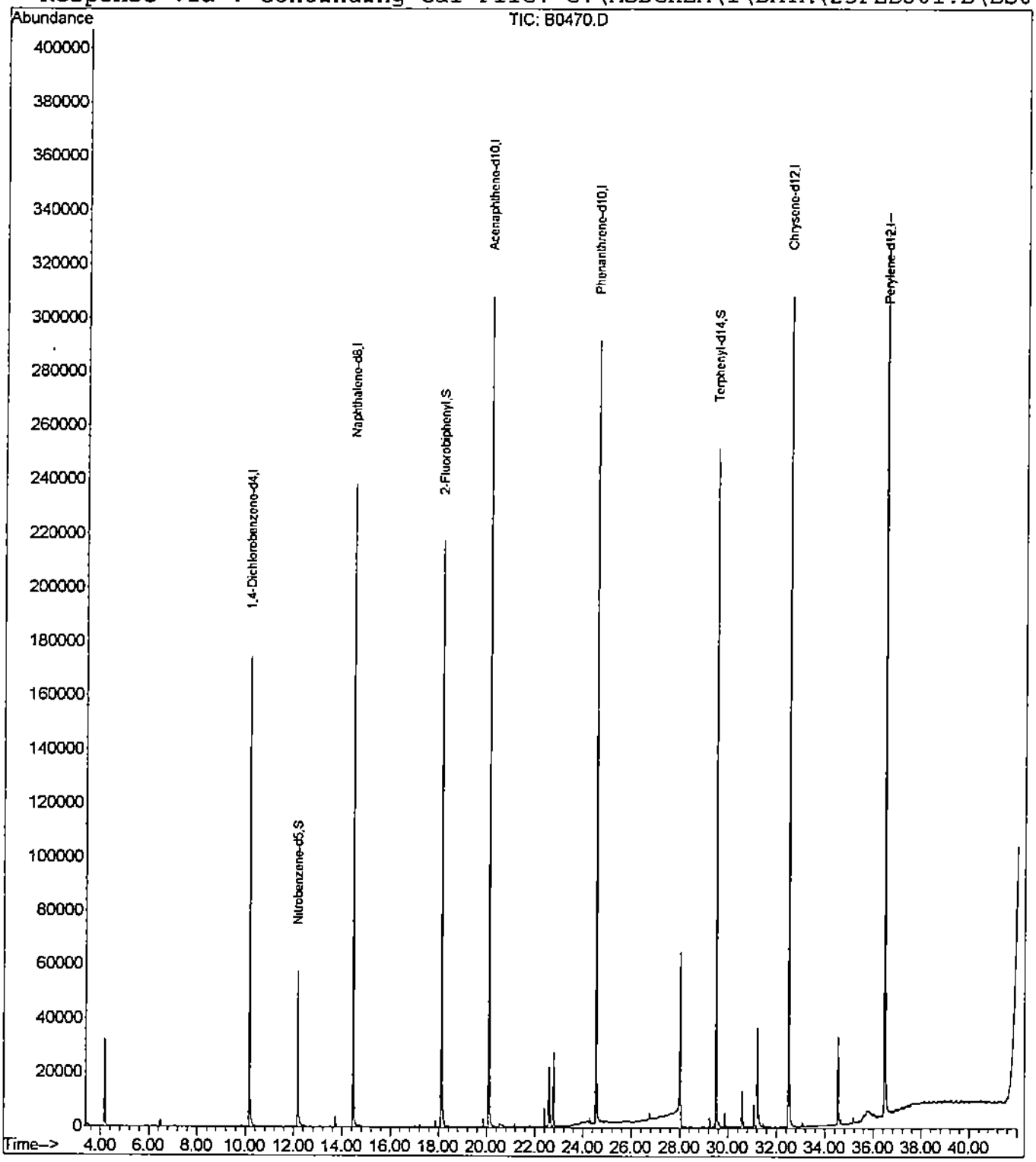
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0470.D Vial: 12
Acq On : 27 Feb 2003 10:45 pm Operator:
Sample : MEGDD0236 Inst : gcms b
Misc : GCMS-B 03212M02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:23 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0470.D Vial: 12
Acq On : 27 Feb 2003 10:45 pm Operator:
Sample : MEGDD0236 Inst : gcms b
Misc : GCMS-B 03212M02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 09:12:11 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 17:15:52 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.17	152	113339	40.00	ug	-0.06
21) Naphthalene-d8	14.47	136	268418	40.00	ug	-0.06
36) Acenaphthene-d10	20.11	164	163914	40.00	ug	-0.06
56) Phenanthrene-d10	24.56	188	294285	40.00	ug	-0.06
70) Chrysene-d12	32.51	240	293244	40.00	ug	-0.05
78) Perylene-d12	36.48	264	360365	40.00	ug	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.18	82	98222	29.02	ug	-0.06
40) 2-Fluorobiphenyl	18.13	172	220486	31.97	ug	-0.06
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.51	244	231888	34.40	ug	-0.05
Target Compounds						Qvalue

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0237

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: B0467

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

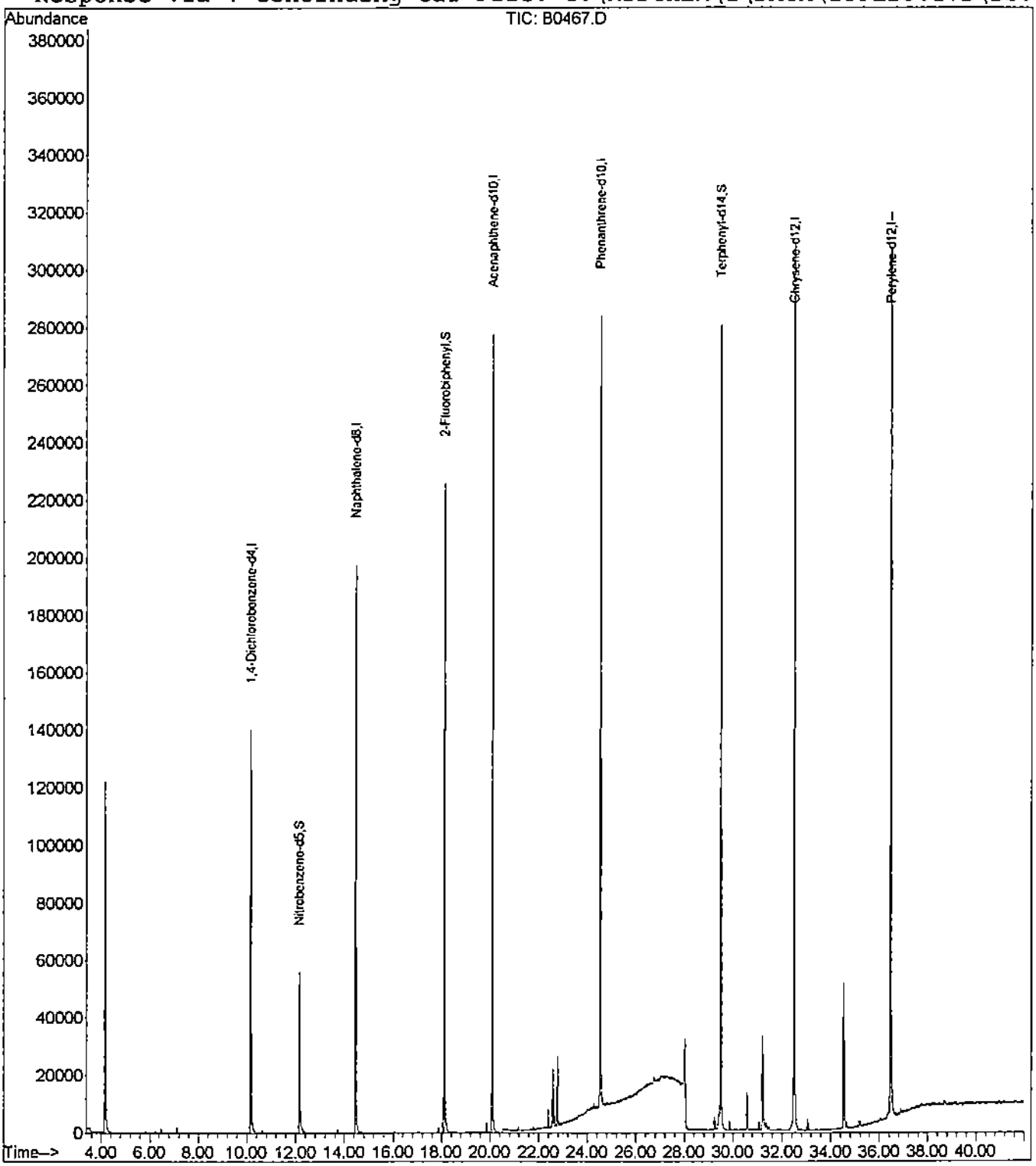
GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0467.D Vial: 9
Acq On : 27 Feb 2003 7:09 pm Operator:
Sample : MEGDD0237 Inst : gcms b
Misc : GCMS-B 030207J03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:17 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0467.D Vial: 9
Acq On : 27 Feb 2003 7:09 pm Operator:
Sample : MEGDD0237 Inst : gcms b
Misc : GCMS-B 030207J03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 09:11:58 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 17:15:52 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.17	152	94432	40.00	ug	-0.06
21) Naphthalene-d8	14.47	136	231184	40.00	ug	-0.06
36) Acenaphthene-d10	20.11	164	146930	40.00	ug	-0.06
56) Phenanthrene-d10	24.55	188	284760	40.00	ug	-0.06
70) Chrysene-d12	32.51	240	298859	40.00	ug	-0.05
78) Perylene-d12	36.47	264	348530	40.00	ug	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.17	82	96609	33.14	ug	-0.06
40) 2-Fluorobiphenyl	18.13	172	221227	35.79	ug	-0.06
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.51	244	275281	40.07	ug	-0.05

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
B0467.D ME1125.M Mon Mar 10 10:18:07 2003 GCMSB Page 1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0239

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: B0469

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

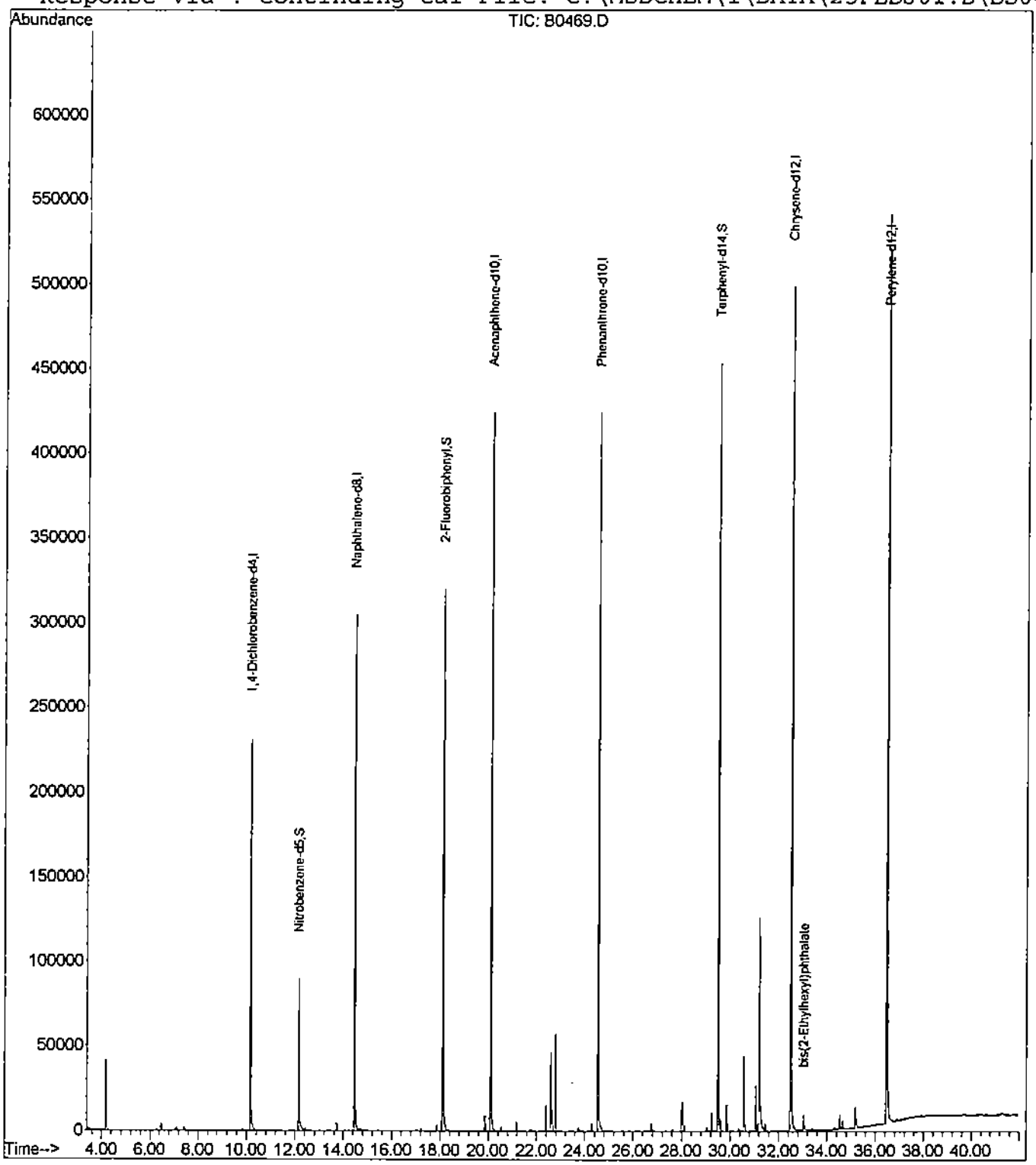
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0469.D Vial: 11
Acq On : 27 Feb 2003 9:32 pm Operator:
Sample : MEGDD0239 Inst : gcms b
Misc : GCMS-B 03212M01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:22 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D



228

Quantitation Report (QT Reviewed)

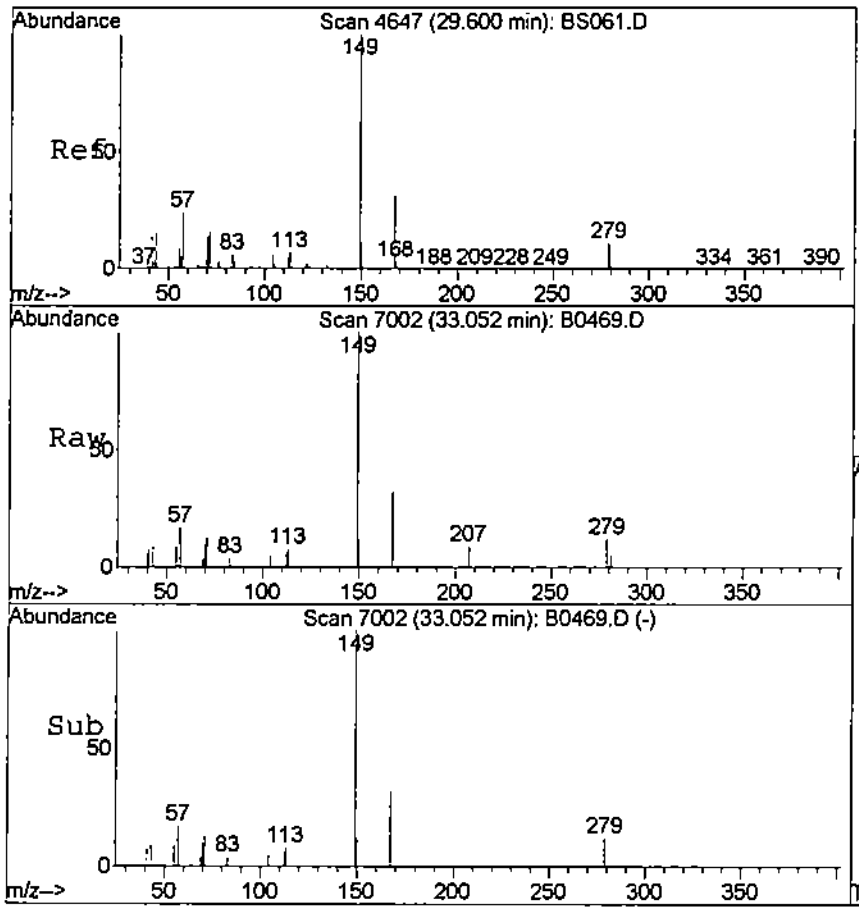
Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0469.D Vial: 11
Acq On : 27 Feb 2003 9:32 pm Operator:
Sample : MEGDD0239 Inst : gcms b
Misc : GCMS-B 03212M01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 09:12:07 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 17:15:52 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.17	152	144705	40.00	ug	-0.06
21) Naphthalene-d8	14.47	136	352128	40.00	ug	-0.06
36) Acenaphthene-d10	20.11	164	220265	40.00	ug	-0.06
56) Phenanthrene-d10	24.56	188	432790	40.00	ug	-0.05
70) Chrysene-d12	32.52	240	486257	40.00	ug	-0.04
78) Perylene-d12	36.48	264	583152	40.00	ug	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.18	82	146976	33.10	ug	-0.06
40) 2-Fluorobiphenyl	18.13	172	323307	34.89	ug	-0.06
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.52	244	412408	36.90	ug	-0.05
Target Compounds						Qvalue
77) bis(2-Ethylhexyl)phthalate	33.05	149	11382	1.18	ug	88

229

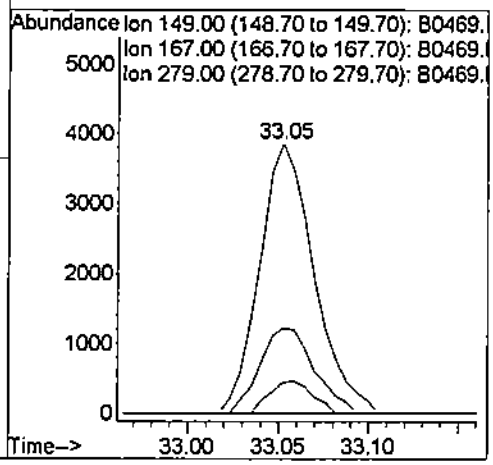
(#) = qualifier out of range (m) = manual integration
B0469.D ME1125.M Mon Mar 10 10:22:35 2003 GCMSB Page 1



#77
bis(2-Ethylhexyl)phthalate
Concen: 1.18 ug
RT: 33.05 min Scan# 7002
Delta R.T. -0.05 min
Lab File: B0469.D
Acq: 27 Feb 2003 9:32 pm

Tgt Ion:149 Resp: 11382

Ion	Ratio	Lower	Upper
149	100		
167	22.4	24.3	36.5#
279	6.7	5.4	8.2



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0241

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0402

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	~~U~~ UJ
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

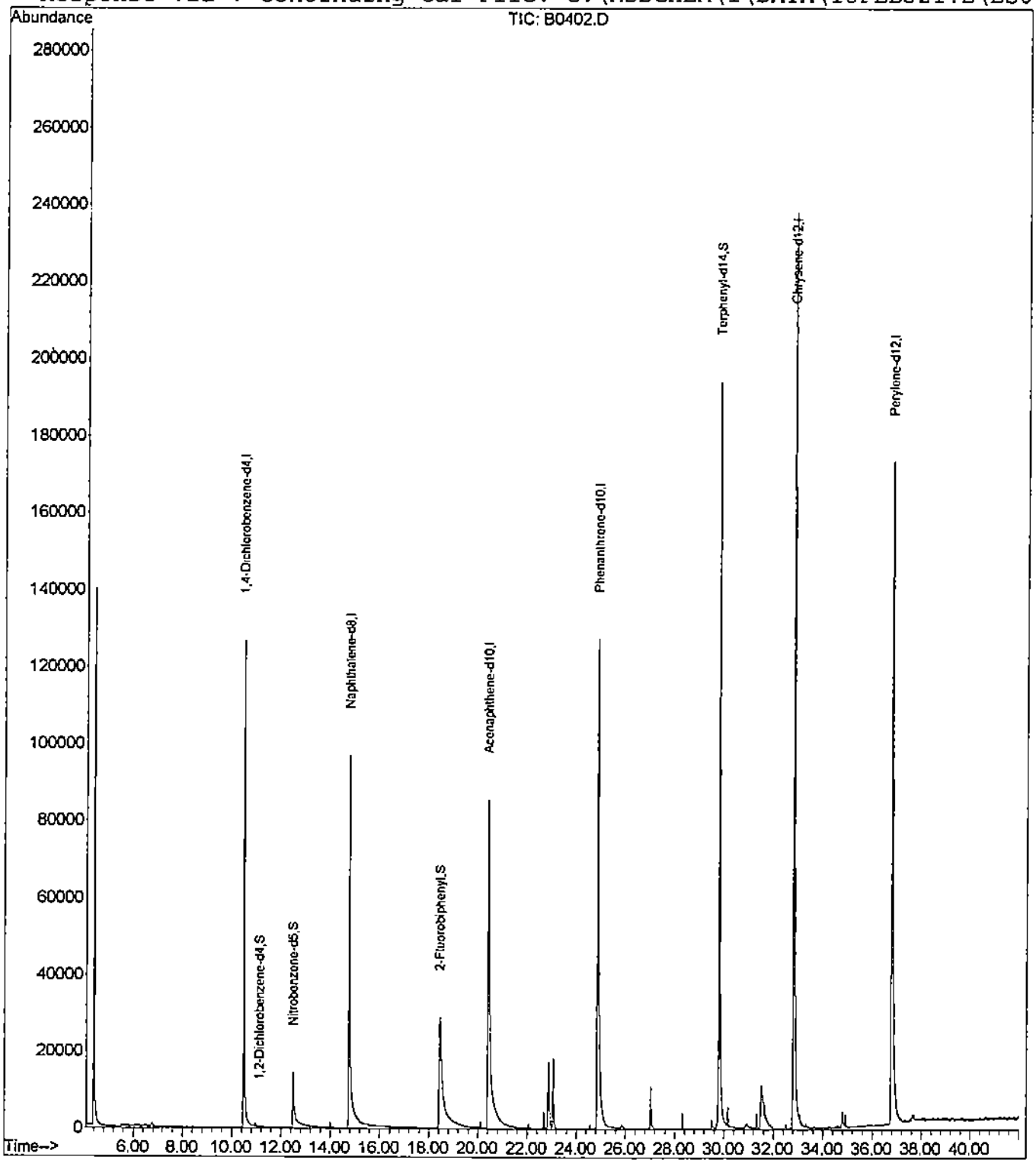
FORM I SV-1 3/90

AMK 4/28/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\B0402.D Vial: 13
Acq On : 19 Feb 2003 3:48 am Operator:
Sample : MEDD0241 Inst : gcms b
Misc : GCMS-B 030207J01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:14 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\B0402.D Vial: 13
Acq On : 19 Feb 2003 3:48 am Operator:
Sample : MEDD0241 Inst : gcms b
Misc : GCMS-B 030207J01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 09:22:19 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Feb 19 09:21:08 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.48	152	100394	40.00	ug	0.00
21) Naphthalene-d8	14.76	136	199139	40.00	ug	0.00
36) Acenaphthene-d10	20.41	164	132358	40.00	ug	0.01
56) Phenanthrene-d10	24.86	188	296538	40.00	ug	0.02
70) Chrysene-d12	32.81	240	357118	40.00	ug	0.00
78) Perylene-d12	36.78	264	331331	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	11.12	152	54	0.04	ug	0.03
22) Nitrobenzene-d5	12.49	82	45333	18.68	ug	0.00
40) 2-Fluorobiphenyl	18.45	172	157215	29.45	ug	0.04
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.79	244	266959	34.55	ug	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0236

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0236

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0475

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

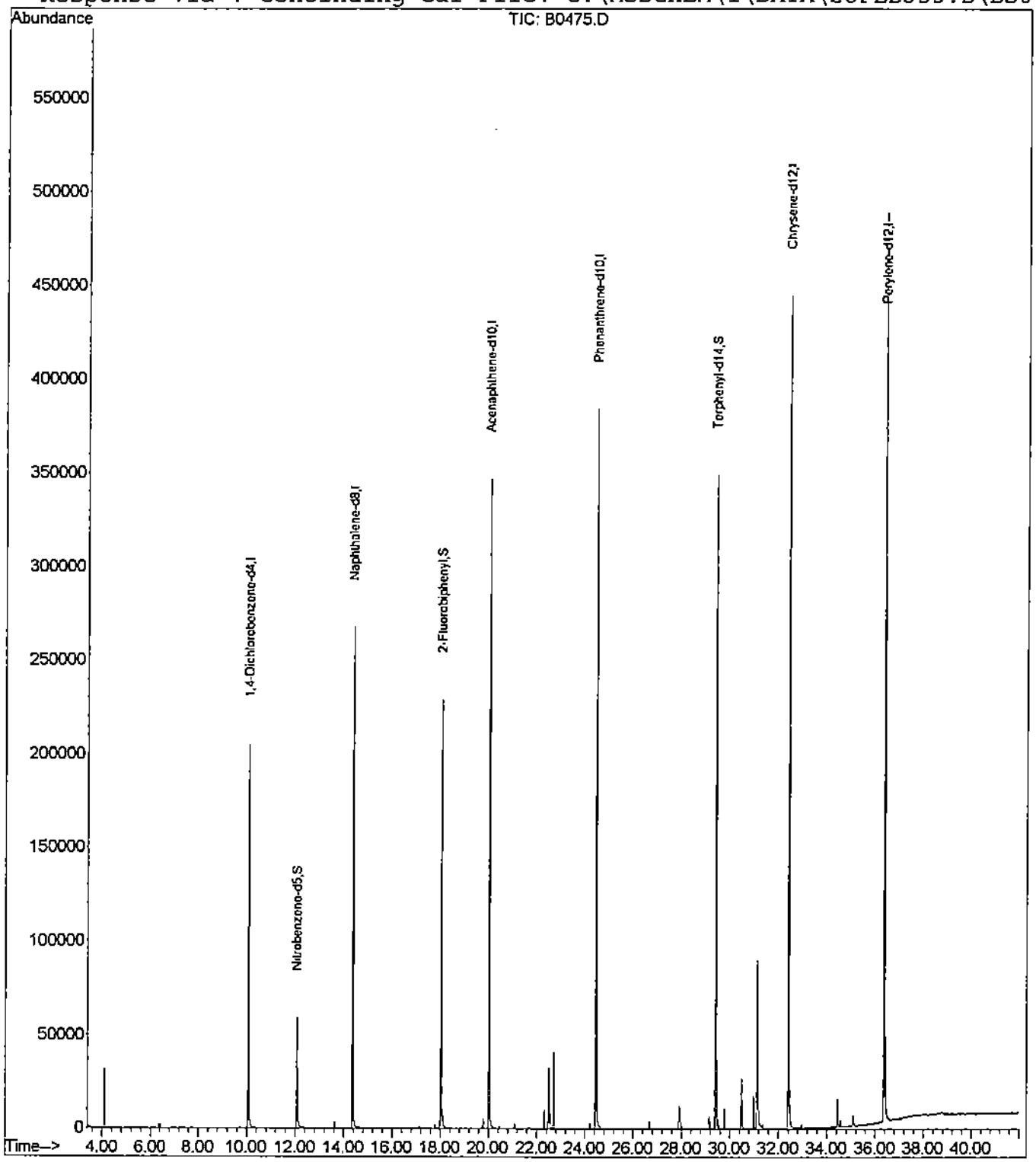
FORM I SV-1 3/90

AMK 6/23/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0475.D Vial: 4
Acq On : 28 Feb 2003 12:37 pm Operator:
Sample : MEGDIM0236 Inst : gcms b
Misc : GCMS-B 030212M04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:27 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0475.D Vial: 4
Acq On : 28 Feb 2003 12:37 pm Operator:
Sample : MEGDIM0236 Inst : gcms b
Misc : GCMS-B 030212M04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:02:44 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.07	152	131116	40.00	ug	-0.05
21) Naphthalene-d8	14.37	136	308404	40.00	ug	-0.05
36) Acenaphthene-d10	20.02	164	190255	40.00	ug	-0.05
56) Phenanthrene-d10	24.46	188	390869	40.00	ug	-0.05
70) Chrysene-d12	32.41	240	437929	40.00	ug	-0.05
78) Perylene-d12	36.37	264	526893	40.00	ug	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.07	82	99440	25.32	ug	-0.05
40) 2-Fluorobiphenyl	18.04	172	234819	30.83	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.42	244	320916	31.24	ug	-0.04
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
B0475.D ME1125.M Mon Mar 10 10:27:57 2003 GCMSB Page 1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM8618

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0468

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

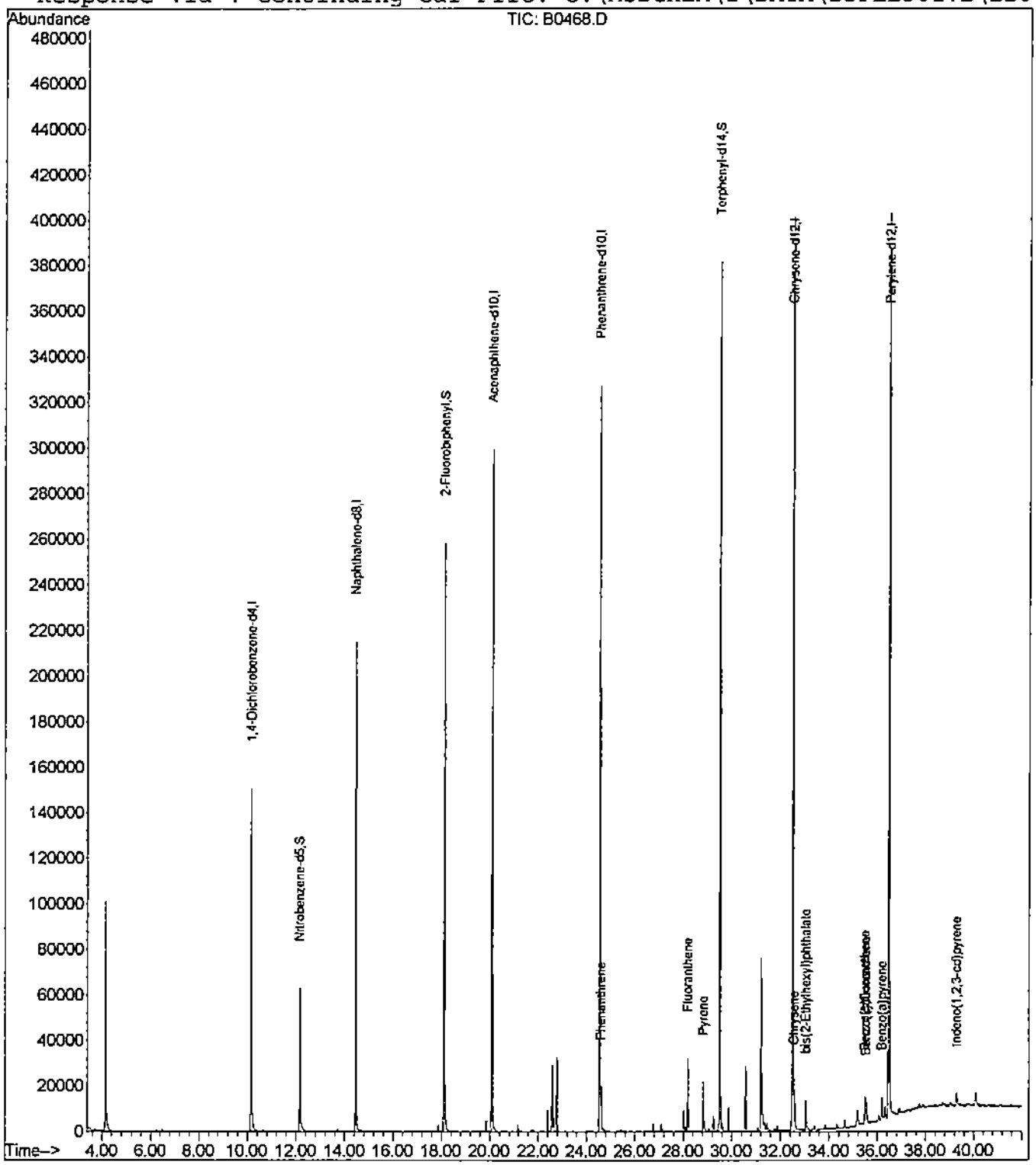
GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	1.	J
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	2.	J
129-00-0	Pyrene	1.	J
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	.9	J
205-99-2	Benzo(b)fluoranthene	.8	J
207-08-9	Benzo(k)fluoranthene	.8	J
50-32-8	Benzo(a)pyrene	.6	J
193-39-5	Indeno(1,2,3-cd)pyrene	.6	J
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0468.D Vial: 10
Acq On : 27 Feb 2003 8:18 pm Operator:
Sample : MEGDIM8618 Inst : gcms b
Misc : GCMS-B 030207J04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:20 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D



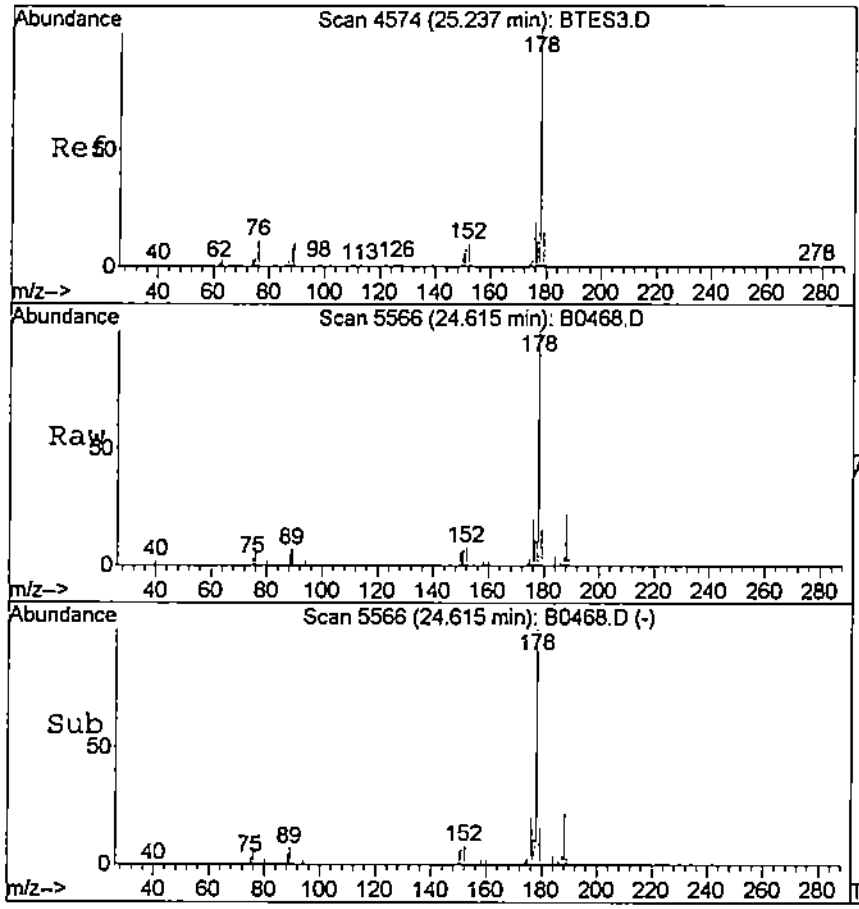
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\B0468.D Vial: 10
Acq On : 27 Feb 2003 8:18 pm Operator:
Sample : MEGDIM8618 Inst : gcms b
Misc : GCMS-B 030207J04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 09:12:02 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 17:15:52 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\25FEBJ01.B\BS044.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.16	152	104061	40.00	ug	-0.07
21) Naphthalene-d8	14.46	136	255907	40.00	ug	-0.07
36) Acenaphthene-d10	20.11	164	158910	40.00	ug	-0.06
56) Phenanthrene-d10	24.56	188	321416	40.00	ug	-0.06
70) Chrysene-d12	32.52	240	382461	40.00	ug	-0.05
78) Perylene-d12	36.48	264	432778	40.00	ug	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.17	82	111447	34.54	ug	-0.06
40) 2-Fluorobiphenyl	18.13	172	258994	38.74	ug	-0.06
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.52	244	347816	39.56	ug	-0.05
Target Compounds						Qvalue
64) Phenanthrene	24.62	178	22953	2.40	ug	90
69) Fluoranthene	28.20	202	37838	4.20	ug	85
71) Pyrene	28.84	202	29404	2.60	ug	83
76) Chrysene	32.58	228	22088	1.63	ug	83
77) bis(2-Ethylhexyl)phthalate	33.05	149	15415	2.03	ug	87
80) Benzo(b)fluoranthene	35.50	252	15851	1.46	ug	90
81) Benzo(k)fluoranthene	35.54	252	16824m	1.39	ug	
82) Benzo(a)pyrene	36.20	252	12303m	1.18	ug	
83) Indeno(1,2,3-cd)pyrene	39.29	276	12911	1.15	ug	70

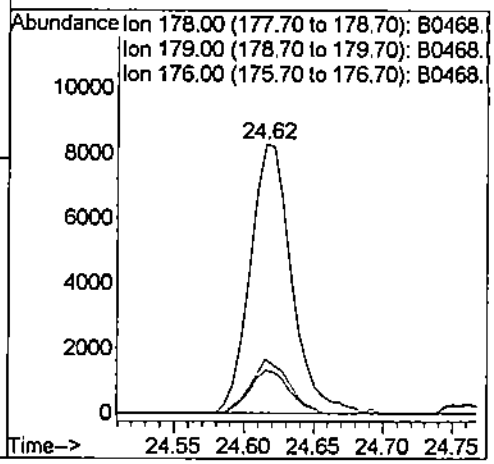
(#) = qualifier out of range (m) = manual integration

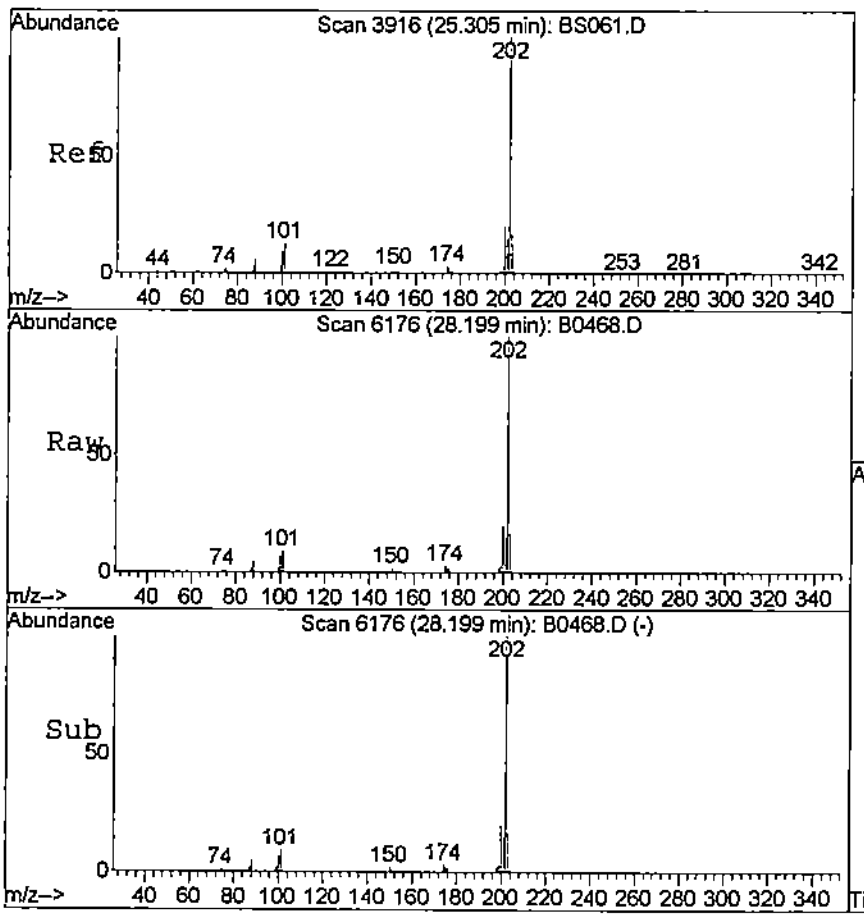


#64
Phenanthrene
Concen: 2.40 ug
RT: 24.62 min Scan# 5566
Delta R.T. -0.06 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:178 Resp: 22953

Ion	Ratio	Lower	Upper
178	100		
179	11.4	12.2	18.4#
176	13.7	14.7	22.1#

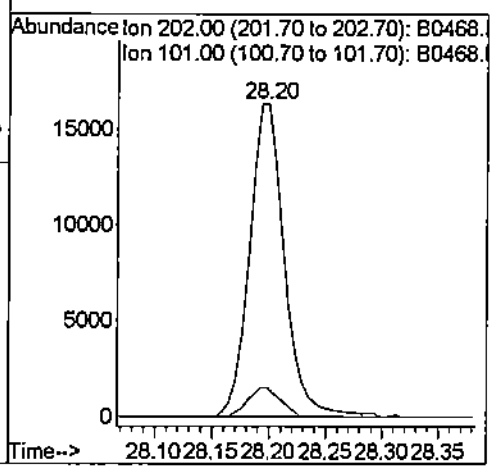


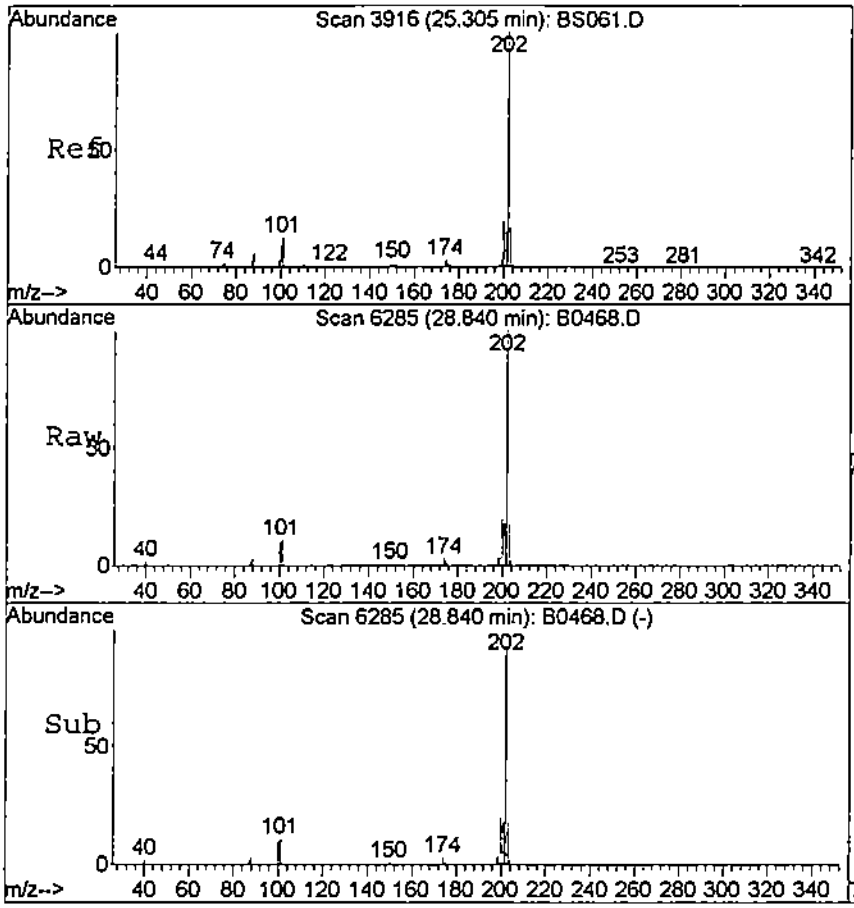


#69
Fluoranthene
Concen: 4.20 ug
RT: 28.20 min Scan# 6176
Delta R.T. -0.05 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:202 Resp: 37838

Ion	Ratio	Lower	Upper
202	100		
101	8.0	11.4	17.2#

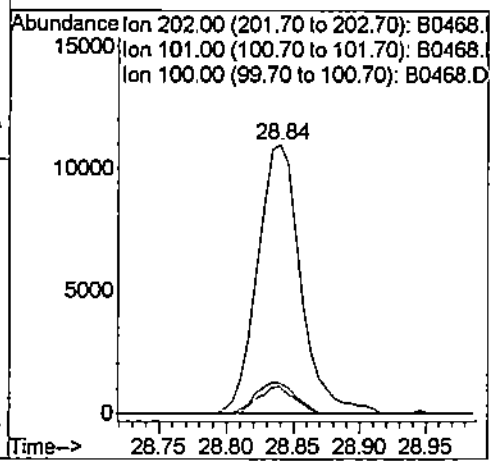


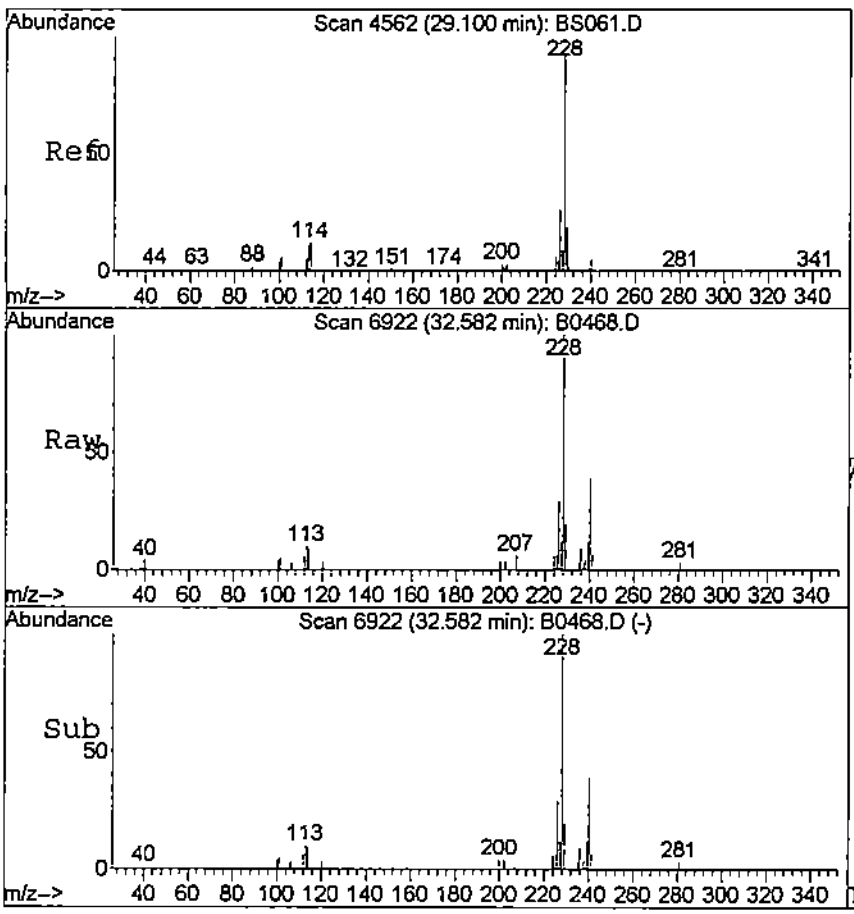


#71
Pyrene
Concen: 2.60 ug
RT: 28.84 min Scan# 6285
Delta R.T. -0.05 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:202 Resp: 29404

Ion	Ratio	Lower	Upper
202	100		
101	8.9	13.5	20.3#
100	6.9	10.5	15.7#

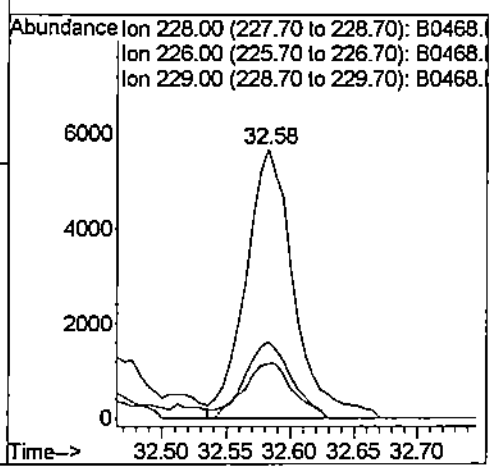


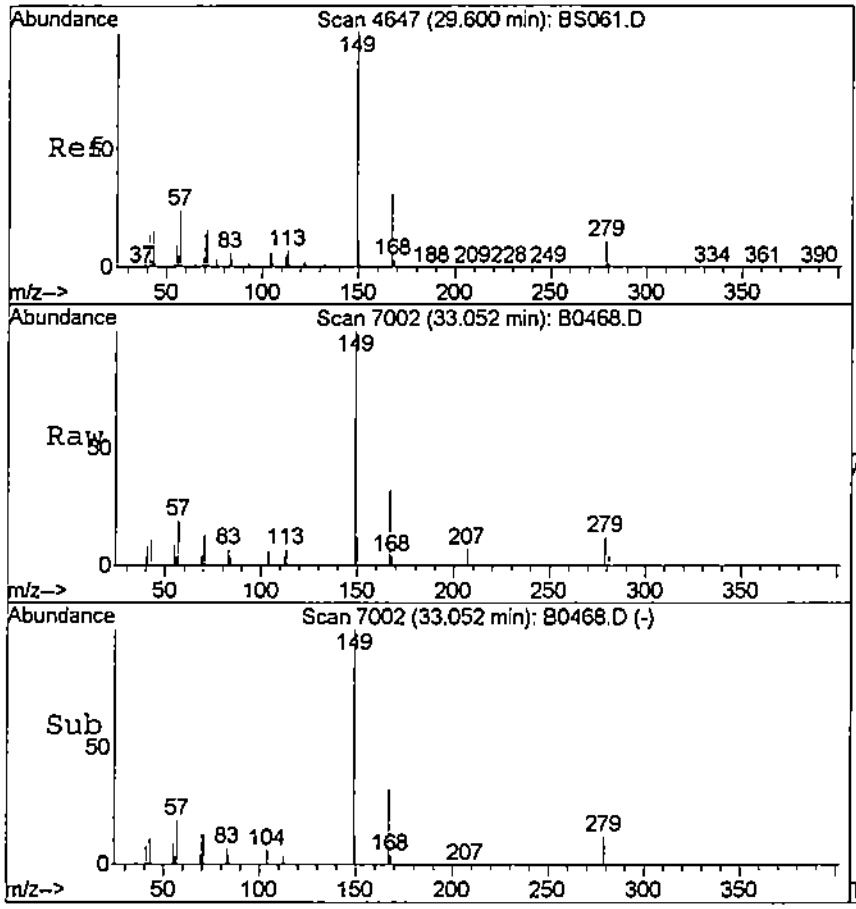


#76
Chrysene
Concen: 1.63 ug
RT: 32.58 min Scan# 6922
Delta R.T. -0.06 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:228 Resp: 22088

Ion	Ratio	Lower	Upper
228	100		
226	18.3	23.4	35.0#
229	14.3	15.4	23.0#

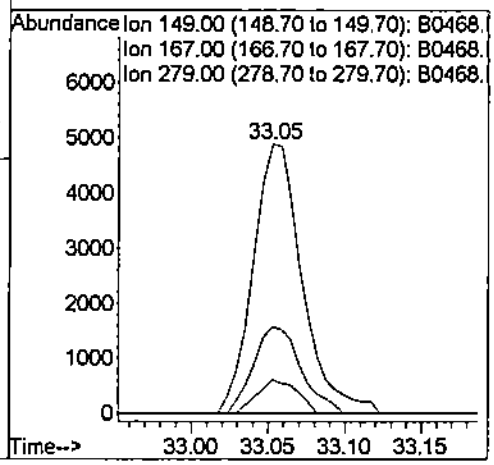


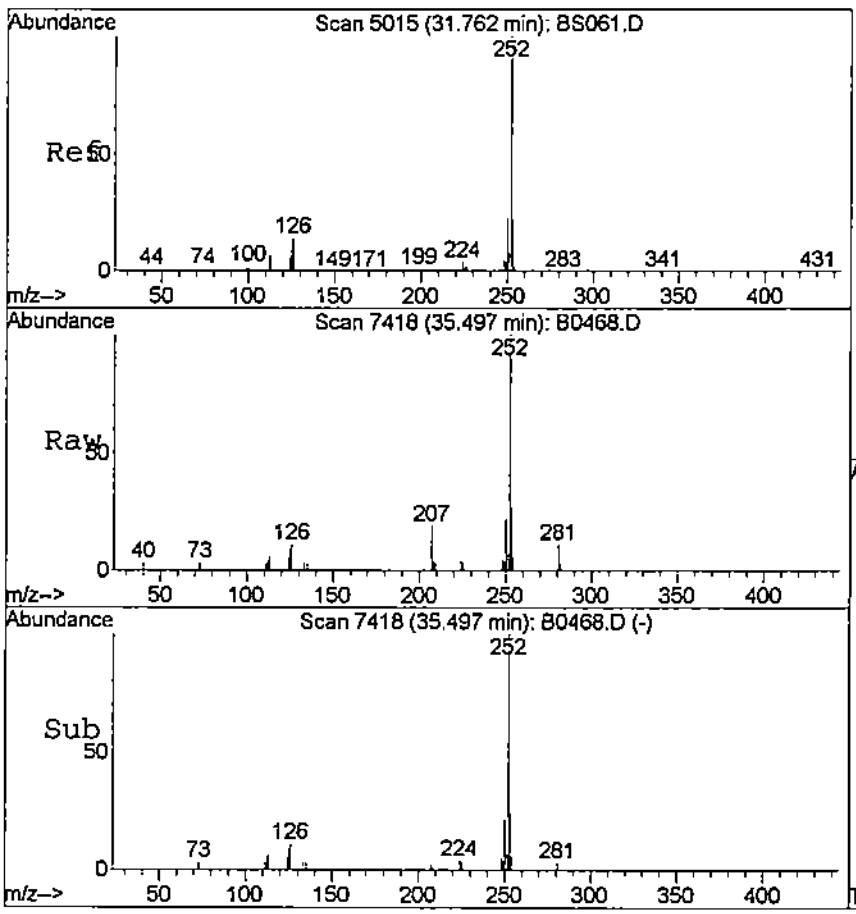


#77
bis(2-Ethylhexyl)phthalate
Concen: 2.03 ug
RT: 33.05 min Scan# 7002
Delta R.T. -0.05 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:149 Resp: 15415

Ion	Ratio	Lower	Upper
149	100		
167	22.1	24.3	36.5#
279	7.2	5.4	8.2

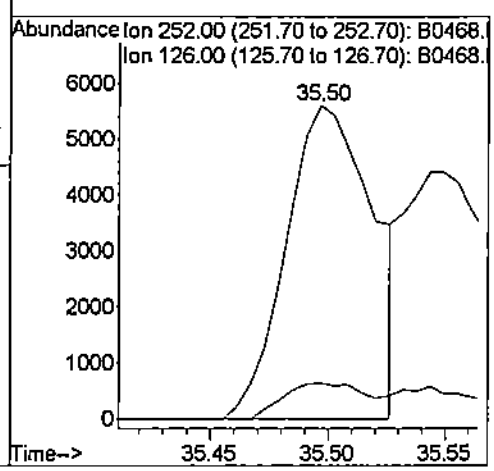


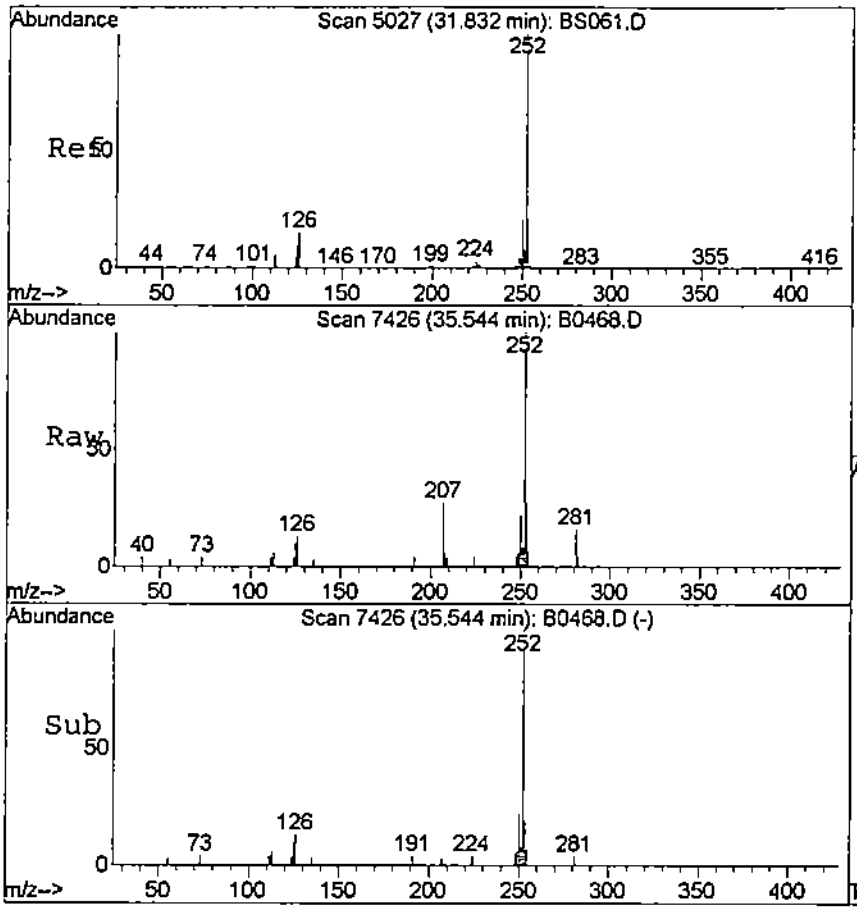


#80
Benzo(b)fluoranthene
Concen: 1.46 ug
RT: 35.50 min Scan# 7418
Delta R.T. -0.06 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:252 Resp: 15851

Ion	Ratio	Lower	Upper
252	100		
126	9.6	10.8	16.2#

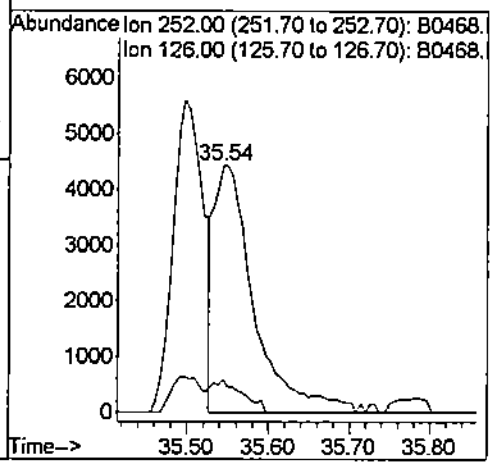


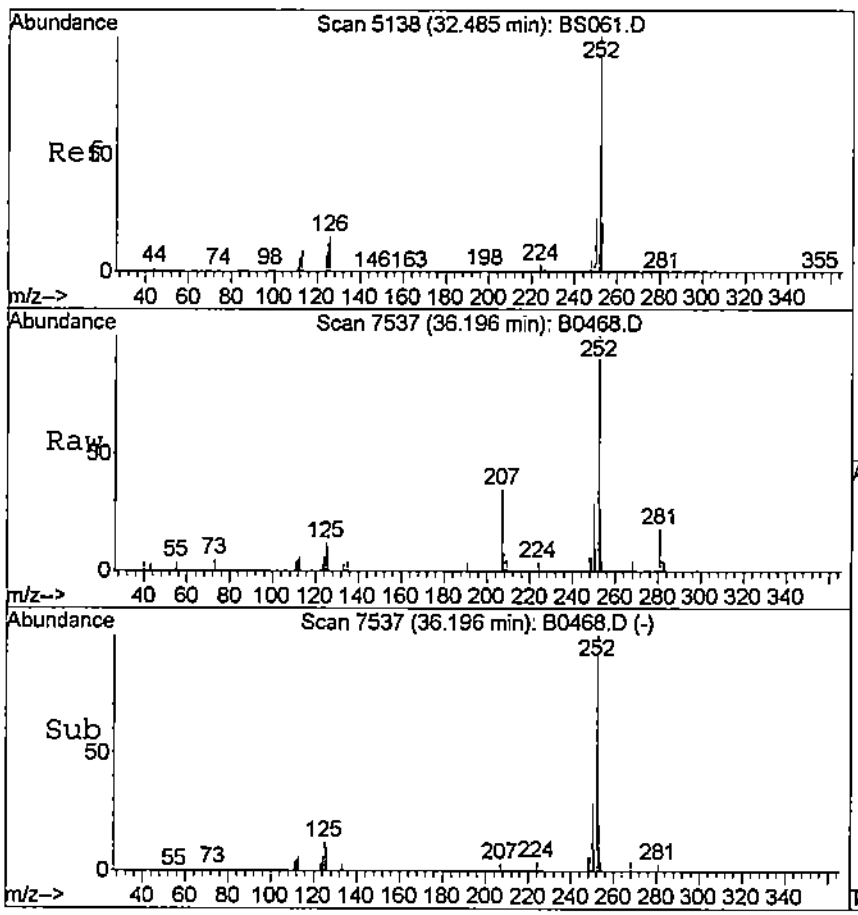


#81
Benzo(k)fluoranthene
Concen: 1.39 ug m
RT: 35.54 min Scan# 7426
Delta R.T. -0.07 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:252 Resp: 16824

Ion	Ratio	Lower	Upper
252	100		
126	9.1	11.8	17.6#

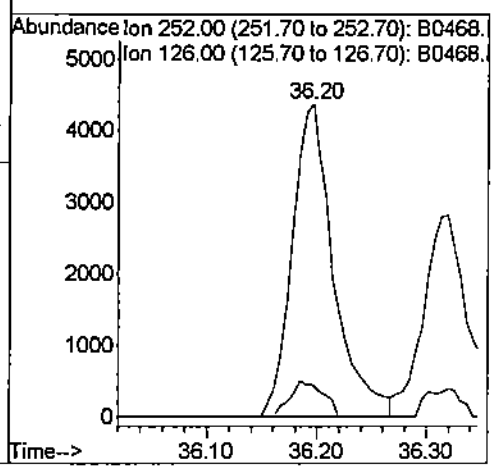


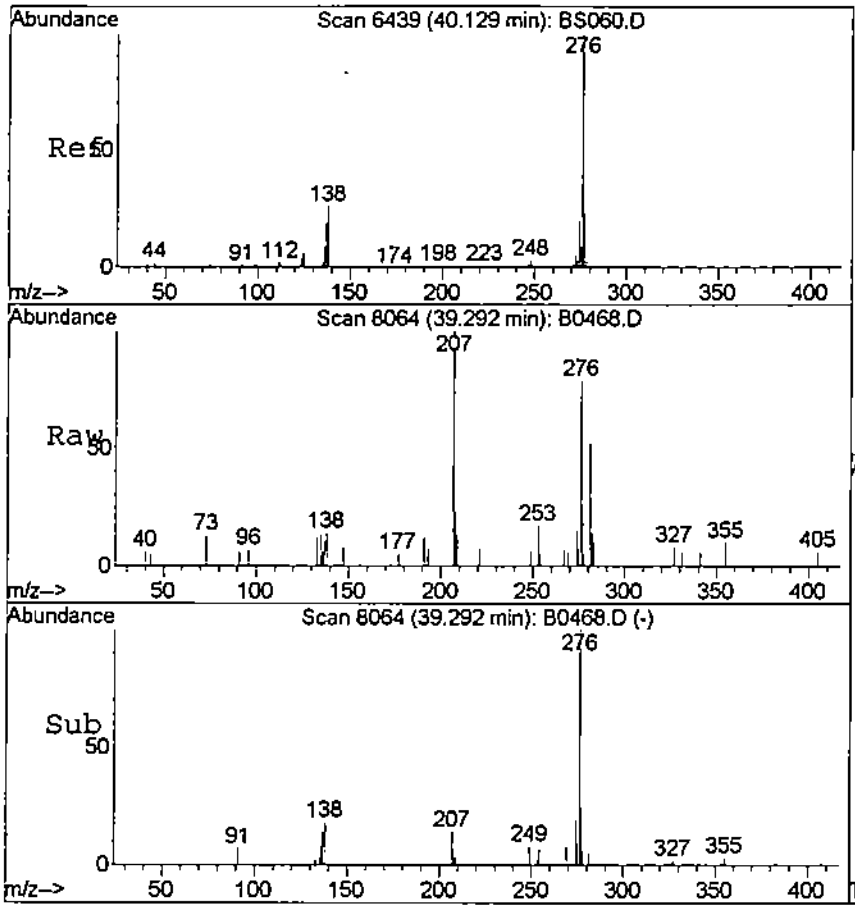


#82
Benzo(a)pyrene
Concen: 1.18 ug m
RT: 36.20 min Scan# 7537
Delta R.T. -0.17 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:252 Resp: 12303

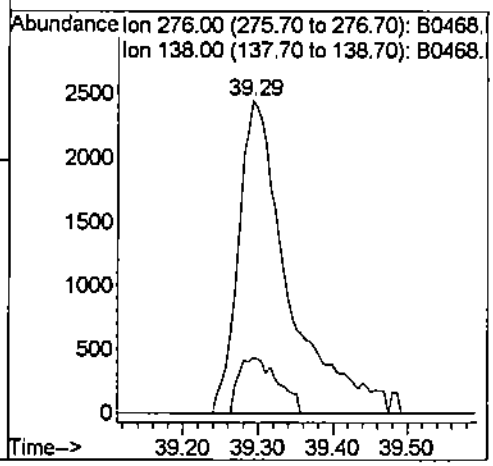
Ion	Ratio	Lower	Upper
252	100		
126	7.0	16.8	25.2#





#83
Indeno(1,2,3-cd)pyrene
Concen: 1.15 ug
RT: 39.29 min Scan# 8064
Delta R.T. -0.08 min
Lab File: B0468.D
Acq: 27 Feb 2003 8:18 pm

Tgt Ion:276	Resp:	12911	
Ion	Ratio	Lower	Upper
276	100		
138	12.2	22.6	34.0#



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8602

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0474

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

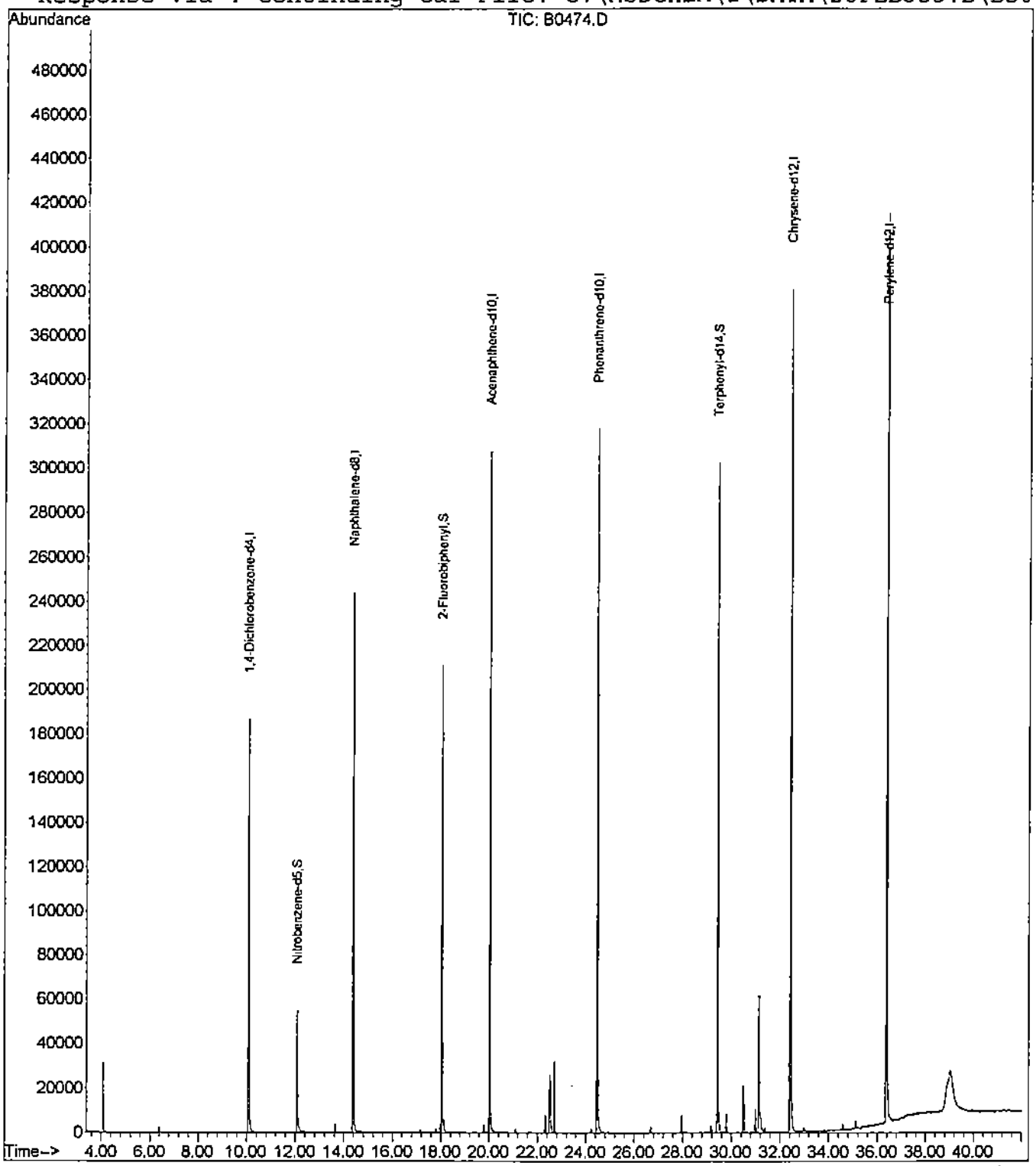
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0474.D Vial: 3
Acq On : 28 Feb 2003 11:43 am Operator:
Sample : MEGGUSH8602 Inst : gcms b
Misc : GCMS-B 030212M03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:26 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0474.D Vial: 3
Acq On : 28 Feb 2003 11:43 am Operator:
Sample : MEGGUSH8602 Inst : gcms b
Misc : GCMS-B 030212M03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:02:40 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	118050	40.00	ug	-0.04
21) Naphthalene-d8	14.39	136	277867	40.00	ug	-0.04
36) Acenaphthene-d10	20.03	164	167789	40.00	ug	-0.04
56) Phenanthrene-d10	24.47	188	327388	40.00	ug	-0.04
70) Chrysene-d12	32.43	240	364694	40.00	ug	-0.04
78) Perylene-d12	36.39	264	453751	40.00	ug	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.09	82	94473	26.69	ug	-0.04
40) 2-Fluorobiphenyl	18.05	172	214599	31.95	ug	-0.04
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.43	244	274476	32.08	ug	-0.03
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

STANDARDS

DATA

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Instrument ID: 5973 B Calibration Date(s): 12/17/02 12/17/02

Calibration Times: 11:20 14:01

LAB FILE ID: RRF020= BS490 RRF050= BS494
RRF080= BS491 RRF120= BS492 RRF160= BS493

COMPOUND	RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	% RSD
1,4-Dichlorobenzene *	1.701	1.629	1.623	1.536	1.509	1.599	4.8*
n-Nitroso-di-n-propylamine *	.554	.498	.540	.416	.460	.494	11.6*
1,2,4-Trichlorobenzene *	.704	.711	.668	.680	.650	.683	3.7*
Naphthalene *	1.148	1.102	1.068	1.031	1.019	1.074	4.9*
2-Methylnaphthalene *	1.232	1.145	1.148	1.038	1.058	1.124	6.9*
Acenaphthylene *	2.191	2.197	2.117	2.028	2.011	2.109	4.1*
Acenaphthene *	2.538	2.448	2.338	2.244	2.211	2.356	5.8*
Dibenzofuran *	2.024	1.957	1.914	1.829	1.836	1.912	4.3*
2,4-Dinitrotoluene *	.420	.446	.499	.447	.476	.458	6.7*
Fluorene *	2.444	2.300	2.280	2.080	2.118	2.244	6.6*
Phenanthrene *	1.190	1.162	1.114	1.074	1.059	1.120	5.0*
Anthracene *	1.194	1.184	1.122	1.092	1.085	1.135	4.5*
Fluoranthene *	1.096	1.055	1.052	.982	1.013	1.040	4.2*
Pyrene *	1.114	1.061	1.034	.981	.974	1.033	5.6*
Benzo(a)anthracene *	1.300	1.330	1.266	1.265	1.237	1.280	2.8*
Chrysene *	1.346	1.351	1.276	1.239	1.212	1.285	4.9*
Benzo(b)fluoranthene *	.854	.930	.902	.914	.879	.896	3.3*
Benzo(k)fluoranthene *	1.040	1.045	.981	.931	.931	.986	5.7*
Benzo(a)pyrene *	.915	.898	.914	.892	.872	.898	2.0*
Indeno(1,2,3-cd)pyrene *	.965	.868	1.099	.981	1.120	1.006	10.3*
Dibenzo(a,h)anthracene *	.964	.943	1.138	.971	1.077	1.018	8.3*
Benzo(g,h,i)perylene *	1.302	1.124	1.352	1.122	1.289	1.238	8.7*
Nitrobenzene-d5	.483	.495	.491	.495	.476	.488	1.7
2-Fluorobiphenyl *	1.620	1.648	1.469	1.551	1.469	1.551	5.3*
Terphenyl-d14 *	.784	.777	.729	.720	.717	.745	4.4*
Phenol-d5 *	1.027	1.008	1.104	.977	1.010	1.025	4.6*
2-Fluorophenol *	.558	.665	.644	.735	.671	.655	9.8*
2,4,6-Tribromophenol	.273	.309	.294	.303	.303	.296	4.8

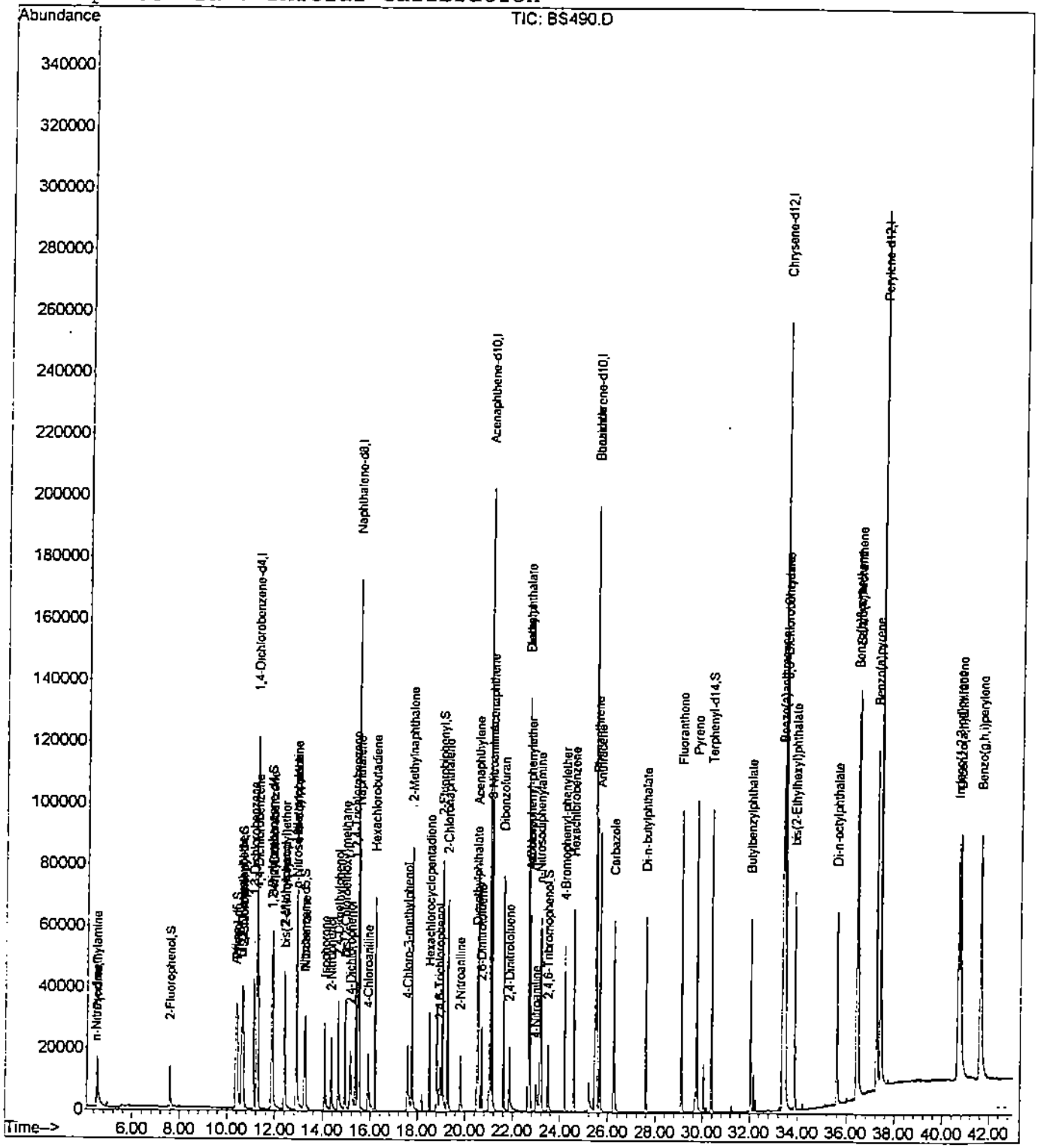
(1) Cannot be separated from Diphenylamine

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:57 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:27 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	81174m	40.00	ug		0.00
21) Naphthalene-d8	15.46	136	210100	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	113792	40.00	ug		0.00
56) Phenanthrene-d10	25.45	188	219290	40.00	ug		0.00
70) Chrysene-d12	33.41	240	256073	40.00	ug		0.00
78) Perylene-d12	37.40	264	339472	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.59	112	22650	17.05	ug		0.00
3) Phenol-d5	10.38	99	41677	20.03	ug		0.00
8) 2-Chlorophenol-d4	10.62	132	28142	20.28	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	22793	21.80	ug		0.00
22) Nitrobenzene-d5	13.22	82	50688	19.77	ug		0.00
40) 2-Fluorobiphenyl	19.03	172	92147	20.88	ug		0.00
59) 2,4,6-Tribromophenol	23.48	330	29913	18.41	ug		0.01
72) Terphenyl-d14	30.37	244	100398	21.04	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.52	79	29291m	17.99	ug		
5) n-Nitrosodimethylamine	4.49	74	11424	17.56	ug		100
6) Aniline	10.36	93	40860	22.53	ug	#	82
7) Phenol	10.42	94	55218	20.83	ug		81
9) bis(2-Chloroethyl)ether	10.59	93	51447	31.89	ug		65
10) 2-Chlorophenol	10.67	128	54637	20.44	ug		70
11) 1,3-Dichlorobenzene	11.10	146	68370	21.30	ug		68
12) 1,4-Dichlorobenzene	11.28	146	69022	21.27	ug		69
13) Benzyl alcohol	11.88	108	25510m	15.17	ug		
15) 1,2-Dichlorobenzene	11.89	146	64521	21.77	ug		68
16) 2-Methylphenol	12.38	108	46564	21.50	ug		59
17) bis(2-chloroisopropyl)ethe	12.41	45	49897	22.65	ug		82
18) 4-Methylphenol	12.89	108	53542	21.51	ug		39
19) n-Nitroso-di-n-propylamine	12.88	70	22493	22.44	ug		70
20) Hexachloroethane	12.91	117	34654	21.12	ug		51
23) Nitrobenzene	13.27	77	44648	20.26	ug		69
24) Isophorone	14.07	82	46277	17.17	ug		97
25) 2-Nitrophenol	14.34	139	27311	17.74	ug		69
26) 2,4-Dimethylphenol	14.63	107	67574	18.57	ug		49
27) bis(2-Chloroethoxy)methane	14.93	93	45713	19.93	ug		83
28) 2,4-Dichlorophenol	15.14	162	53109	18.00	ug		61
29) 1,2,4-Trichlorobenzene	15.36	180	73958	20.63	ug		51
30) Naphthalene	15.52	128	120587	21.38	ug		94
32) 4-Chloroaniline	15.90	127	38626	17.20	ug		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:27 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) Hexachlorobutadiene	16.18	225	44991	19.73 ug		54
34) 4-Chloro-3-methylphenol	17.56	107	30074	18.70 ug		87
35) 2-Methylnaphthalene	17.75	142	129451	21.92 ug		57
37) Hexachlorocyclopentadiene	18.50	237	23081	13.69 ug		68
38) 2,4,6-Trichlorophenol	18.93	196	36537	16.97 ug		50
39) 2,4,5-Trichlorophenol	18.93	196	36537	16.97 ug		52
41) 2-Chloronaphthalene	19.26	162	100939	20.97 ug	#	22
42) 2-Nitroaniline	19.79	65	35046	18.44 ug		35
43) Dimethylphthalate	20.50	163	67863	20.13 ug		96
44) Acenaphthylene	20.54	152	124654	20.78 ug		90
45) 2,6-Dinitrotoluene	20.68	165	19977	19.02 ug		68
46) 3-Nitroaniline	21.10	138	25765	19.93 ug		45
47) Acenaphthene	21.12	153	144383	21.54 ug		48
50) Dibenzofuran	21.61	168	115132	21.17 ug		79
51) 2,4-Dinitrotoluene	21.86	165	23883	18.35 ug		56
52) Diethylphthalate	22.66	149	73225	20.77 ug		90
53) Fluorene	22.65	166	139082	21.78 ug		54
54) 4-Chlorophenyl-phenylether	22.74	204	59592	20.85 ug		68
55) 4-Nitroaniline	22.99	138	22466	23.83 ug		66
58) n-Nitrosodiphenylamine	23.15	169	72482	20.57 ug		70
60) Azobenzene	22.74	77	9542	21.29 ug	#	85
61) 4-Bromophenyl-phenylether	24.19	248	54296	19.97 ug		40
62) Hexachlorobenzene	24.56	284	40595	20.67 ug		65
64) Phenanthrene	25.51	178	130480	21.26 ug		89
65) Anthracene	25.65	178	130902	21.03 ug		90
66) Benzidine	25.46	184	27025	51.45 ug	#	30
67) Carbazole	26.24	167	86857	23.11 ug		95
68) Di-n-butylphthalate	27.58	149	96299	19.84 ug		97
69) Fluoranthene	29.10	202	120188	21.08 ug		90
71) Pyrene	29.74	202	142656	21.57 ug		87
73) Butylbenzylphthalate	32.04	149	68834	19.09 ug		60
74) Benzo(a)anthracene	33.36	228	166435	20.32 ug		85
75) 3,3'-Dichlorobenzidine	33.46	252	71314	20.73 ug		68
76) Chrysene	33.48	228	172398	20.96 ug		86
77) bis(2-Ethylhexyl)phthalate	33.86	149	74503	18.62 ug		88
79) Di-n-octylphthalate	35.60	149	95981	16.96 ug		95
80) Benzo(b)fluoranthene	36.40	252	144951	18.47 ug		85
81) Benzo(k)fluoranthene	36.47	252	176501	21.10 ug		83
82) Benzo(a)pyrene	37.24	252	155278	20.37 ug		82
83) Indeno(1,2,3-cd)pyrene	40.66	276	163749	19.17 ug		77
84) Dibenzo(a,h)anthracene	40.76	278	163572	18.93 ug		80

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:27 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

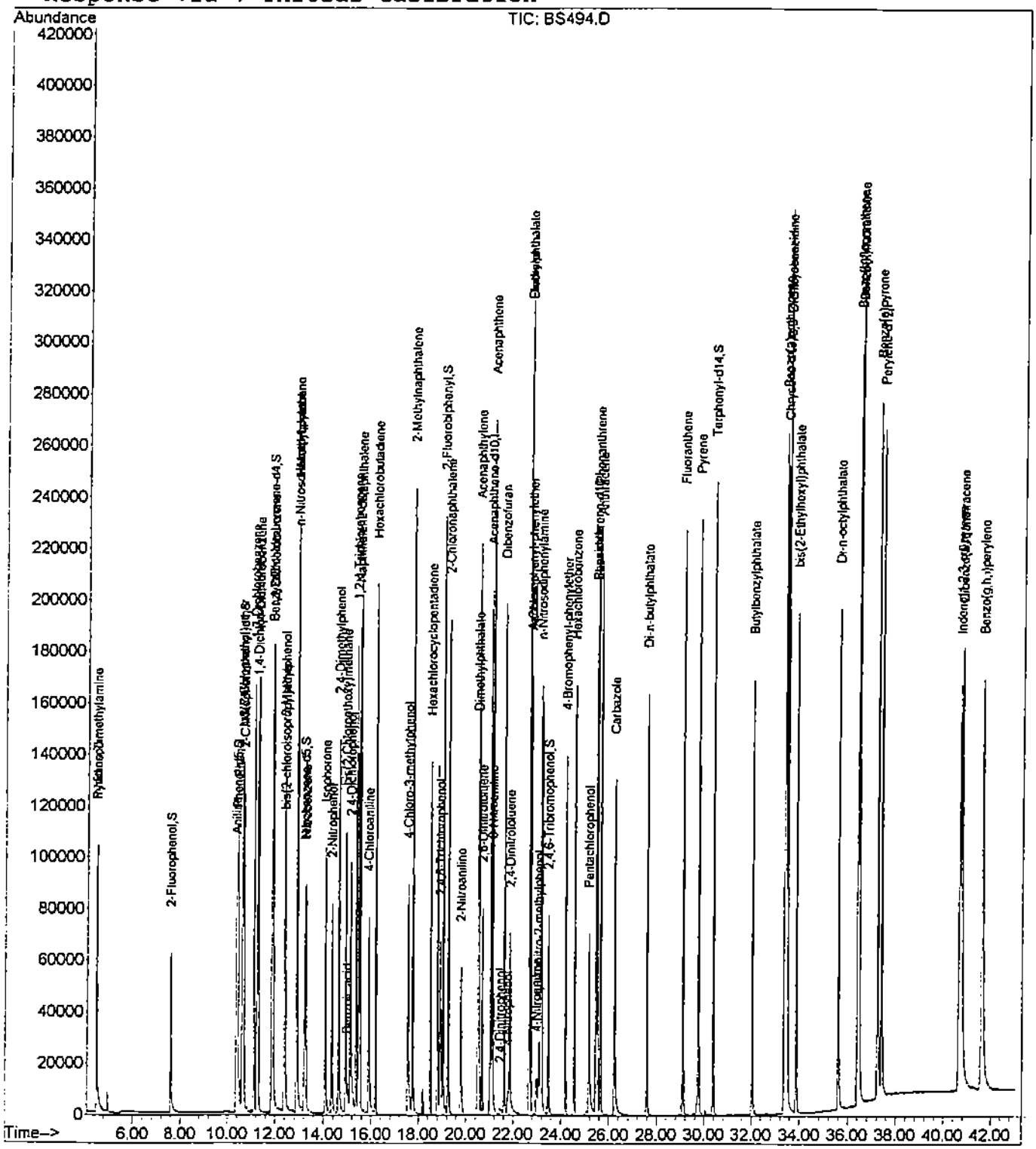
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Benzo(g,h,i)perylene	41.62	276	220987	21.04	ug	72

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:54 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:53:05 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	101327	40.00	ug		0.00
21) Naphthalene-d8	15.47	136	227154	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	115595	40.00	ug		0.00
56) Phenanthrene-d10	25.45	188	204909	40.00	ug		0.00
70) Chrysene-d12	33.41	240	241660	40.00	ug		0.00
78) Perylene-d12	37.39	264	311494	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.59	112	84238	50.78	ug		0.00
3) Phenol-d5	10.39	99	127613	49.14	ug		0.00
8) 2-Chlorophenol-d4	10.63	132	87806	50.68	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	66085	50.64	ug		0.00
22) Nitrobenzene-d5	13.22	82	140588	50.73	ug		0.00
40) 2-Fluorobiphenyl	19.03	172	238055	53.10	ug		0.00
59) 2,4,6-Tribromophenol	23.47	330	79207	52.16	ug		0.00
72) Terphenyl-d14	30.37	244	234637	52.11	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.48	79	93860	46.19	ug		93
5) n-Nitrosodimethylamine	4.48	74	38388	47.26	ug		100
6) Aniline	10.36	93	105802	46.75	ug	#	85
7) Phenol	10.43	94	161044	48.66	ug		79
9) bis(2-Chloroethyl)ether	10.60	93	147864	73.43	ug		67
10) 2-Chlorophenol	10.67	128	169672	50.86	ug		70
11) 1,3-Dichlorobenzene	11.10	146	204434	51.02	ug		68
12) 1,4-Dichlorobenzene	11.28	146	206268	50.91	ug		69
13) Benzyl alcohol	11.87	108	103848	49.46	ug		31
15) 1,2-Dichlorobenzene	11.90	146	187264	50.63	ug		68
16) 2-Methylphenol	12.38	108	133367	49.33	ug		59
17) bis(2-chloroisopropyl)ethe	12.41	45	139928	50.89	ug		82
18) 4-Methylphenol	12.89	108	155038	49.89	ug		40
19) n-Nitroso-di-n-propylamine	12.88	70	63132	50.47	ug		70
20) Hexachloroethane	12.91	117	106993	52.25	ug		51
23) Nitrobenzene	13.28	77	120884	50.73	ug		70
24) Isophorone	14.07	82	151821	52.12	ug		97
25) 2-Nitrophenol	14.34	139	85344	51.28	ug		69
26) 2,4-Dimethylphenol	14.63	107	205357	52.21	ug		48
27) bis(2-Chloroethoxy)methane	14.93	93	130447	52.59	ug		84
28) 2,4-Dichlorophenol	15.13	162	161302	50.56	ug		62
29) 1,2,4-Trichlorobenzene	15.37	180	201742	52.05	ug		51
30) Naphthalene	15.53	128	313016	51.33	ug		94
31) Benzoic acid	15.01	105	25622	35.00	ug	#	46

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:53:05 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32)	4-Chloroaniline	15.89	127	121933	50.22 ug		86
33)	Hexachlorobutadiene	16.18	225	128927	52.29 ug		54
34)	4-Chloro-3-methylphenol	17.55	107	84198	48.41 ug		92
35)	2-Methylnaphthalene	17.75	142	325118	50.91 ug		58
37)	Hexachlorocyclopentadiene	18.50	237	92148	53.79 ug		68
38)	2,4,6-Trichlorophenol	18.91	196	106438	48.66 ug		52
39)	2,4,5-Trichlorophenol	18.91	196	106438	48.66 ug		54
41)	2-Chloronaphthalene	19.26	162	256056	52.37 ug	#	22
42)	2-Nitroaniline	19.79	65	94010	48.70 ug		36
43)	Dimethylphthalate	20.50	163	176360	51.49 ug		97
44)	Acenaphthylene	20.54	152	317494	52.09 ug		90
45)	2,6-Dinitrotoluene	20.68	165	53394	50.05 ug		68
46)	3-Nitroaniline	21.09	138	64401	49.04 ug		44
47)	Acenaphthene	21.12	153	353748	51.96 ug		48
48)	2,4-Dinitrophenol	21.44	184	8493m	18.52 ug		
49)	4-Nitrophenol	21.78	109	39590m	30.15 ug		
50)	Dibenzofuran	21.61	168	282828	51.19 ug		79
51)	2,4-Dinitrotoluene	21.85	165	64435	48.73 ug		56
52)	Diethylphthalate	22.66	149	184726	51.57 ug		89
53)	Fluorene	22.65	166	332350	51.24 ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	149129	51.36 ug		68
55)	4-Nitroaniline	22.98	138	44273	46.22 ug		63
57)	4,6-Dinitro-2-methylphenol	23.06	198	29025	37.92 ug	#	100
58)	n-Nitrosodiphenylamine	23.14	169	176339	53.55 ug		70
60)	Azobenzene	22.74	77	22835	54.53 ug	#	86
61)	4-Bromophenyl-phenylether	24.19	248	135801	53.44 ug		40
62)	Hexachlorobenzene	24.56	284	94990	51.75 ug		65
63)	Pentachlorophenol	25.16	266	99982	54.17 ug		53
64)	Phenanthrene	25.51	178	297569	51.88 ug		90
65)	Anthracene	25.65	178	303244	52.14 ug		90
66)	Benzidine	25.45	184	25422	51.80 ug	#	34
67)	Carbazole	26.23	167	188810	53.75 ug		95
68)	Di-n-butylphthalate	27.58	149	239319	52.78 ug		98
69)	Fluoranthene	29.09	202	270310	50.75 ug		90
71)	Pyrene	29.74	202	320546	51.36 ug		87
73)	Butylbenzylphthalate	32.03	149	176725	51.93 ug		60
74)	Benzo(a)anthracene	33.36	228	401623	51.95 ug		85
75)	3,3'-Dichlorobenzidine	33.46	252	176587	54.41 ug		68
76)	Chrysene	33.48	228	408173	52.59 ug		86
77)	bis(2-Ethylhexyl)phthalate	33.86	149	198670	52.62 ug		88
79)	Di-n-octylphthalate	35.60	149	282608	54.43 ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:53:05 2002 Quant Results File: ME1125.RES

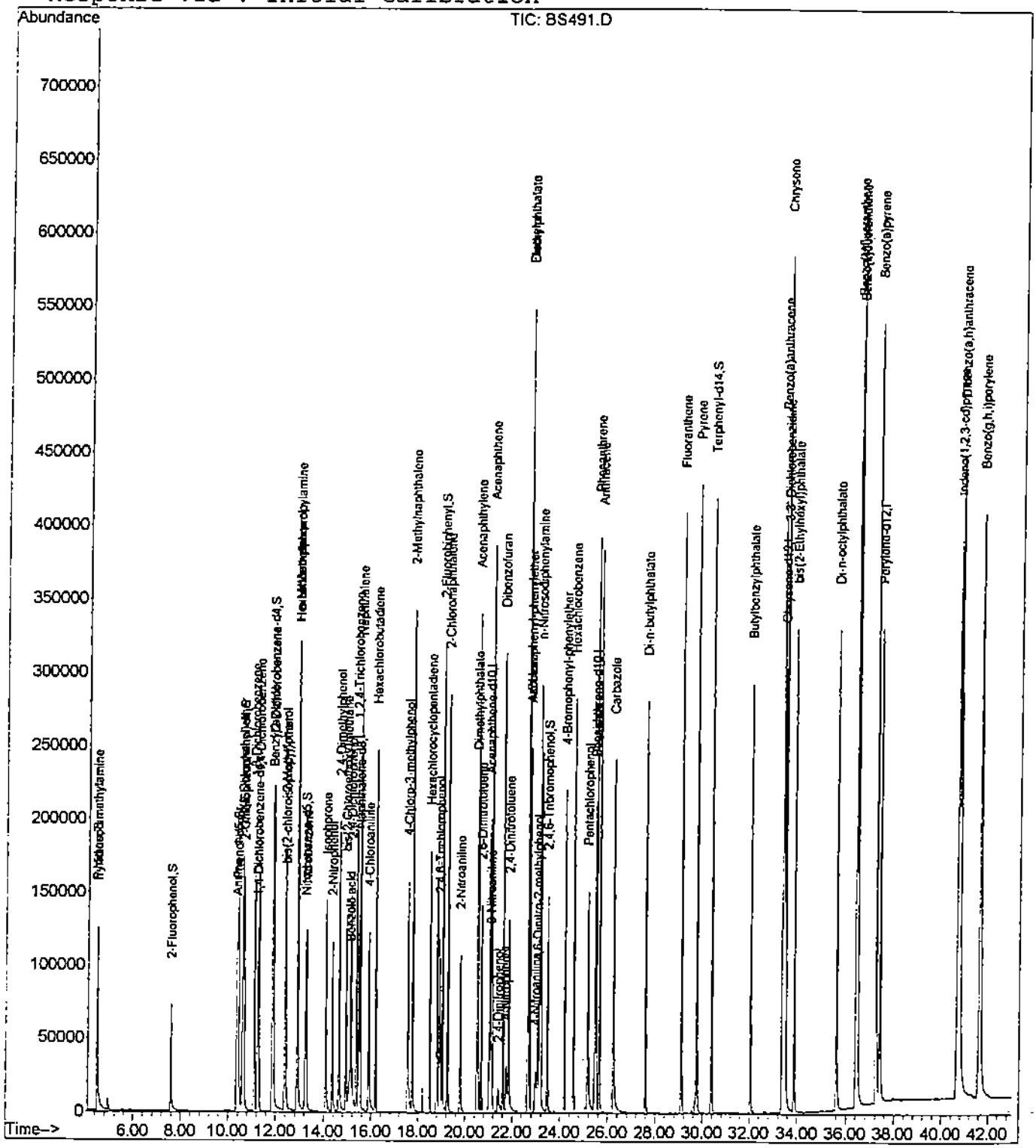
Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) Benzo(b)fluoranthene	36.41	252	361968	50.28 ug	84
81) Benzo(k)fluoranthene	36.47	252	406819	53.01 ug	84
82) Benzo(a)pyrene	37.24	252	349572	49.98 ug	82
83) Indeno(1,2,3-cd)pyrene	40.67	276	338091	43.14 ug	78
84) Dibenzo(a,h)anthracene	40.76	278	367117	46.29 ug	78
85) Benzo(g,h,i)perylene	41.62	276	437822	45.42 ug	72

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:52 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:38 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	76861	40.00	ug		0.00
21) Naphthalene-d8	15.46	136	195471	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	113438	40.00	ug		0.00
56) Phenanthrene-d10	25.45	188	227889	40.00	ug		0.00
70) Chrysene-d12	33.42	240	277689	40.00	ug		0.00
78) Perylene-d12	37.40	264	373244	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.58	112	99011	78.69	ug		0.00
3) Phenol-d5	10.39	99	169659	86.13	ug		0.00
8) 2-Chlorophenol-d4	10.62	132	109851	83.59	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	80671	81.49	ug		0.00
22) Nitrobenzene-d5	13.22	82	191972	80.50	ug		0.00
40) 2-Fluorobiphenyl	19.04	172	333369	75.77	ug		0.00
59) 2,4,6-Tribromophenol	23.47	330	134030	79.36	ug		0.00
72) Terphenyl-d14	30.37	244	404653	78.21	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.47	79	119092	77.26	ug		92
5) n-Nitrosodimethylamine	4.48	74	49355	80.11	ug		100
6) Aniline	10.36	93	144536	84.19	ug	#	83
7) Phenol	10.43	94	218277	86.95	ug		80
9) bis(2-Chloroethyl)ether	10.60	93	182982	119.80	ug		67
10) 2-Chlorophenol	10.67	128	211007	83.39	ug		70
11) 1,3-Dichlorobenzene	11.10	146	243320	80.06	ug		68
12) 1,4-Dichlorobenzene	11.28	146	249423	81.16	ug		69
13) Benzyl alcohol	11.87	108	140965	88.50	ug		33
15) 1,2-Dichlorobenzene	11.89	146	230219	82.05	ug		68
16) 2-Methylphenol	12.38	108	177774	86.68	ug		58
17) bis(2-chloroisopropyl)ethe	12.41	45	169809	81.41	ug		82
18) 4-Methylphenol	12.89	108	211290	89.64	ug		41
19) n-Nitroso-di-n-propylamine	12.88	70	83078	87.55	ug		69
20) Hexachloroethane	12.91	117	123510	79.51	ug		51
23) Nitrobenzene	13.28	77	164563	80.25	ug		70
24) Isophorone	14.07	82	213860	85.31	ug		97
25) 2-Nitrophenol	14.34	139	118164	82.50	ug		69
26) 2,4-Dimethylphenol	14.63	107	274522	81.10	ug		48
27) bis(2-Chloroethoxy)methane	14.93	93	168924	79.14	ug		84
28) 2,4-Dichlorophenol	15.13	162	230496	83.95	ug		63
29) 1,2,4-Trichlorobenzene	15.37	180	260996	78.25	ug		51
30) Naphthalene	15.53	128	417641	79.59	ug		94
31) Benzoic acid	15.10	105	52614	83.52	ug	#	49

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:38 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	15.88	127	179835	86.07	ug		86
33)	Hexachlorobutadiene	16.19	225	159331	75.09	ug		54
34)	4-Chloro-3-methylphenol	17.55	107	131152	87.63	ug		92
35)	2-Methylnaphthalene	17.75	142	448968	81.70	ug		59
37)	Hexachlorocyclopentadiene	18.50	237	122731	73.00	ug		68
38)	2,4,6-Trichlorophenol	18.90	196	178062	82.95	ug		50
39)	2,4,5-Trichlorophenol	18.90	196	178062	82.95	ug		52
41)	2-Chloronaphthalene	19.26	162	372013	77.54	ug	#	22
42)	2-Nitroaniline	19.79	65	162462	85.76	ug		36
43)	Dimethylphthalate	20.50	163	270778	80.56	ug		97
44)	Acenaphthylene	20.54	152	480345	80.31	ug		90
45)	2,6-Dinitrotoluene	20.68	165	86991	83.09	ug		68
46)	3-Nitroaniline	21.08	138	112352	87.18	ug		45
47)	Acenaphthene	21.13	153	530543	79.41	ug		48
48)	2,4-Dinitrophenol	21.40	184	34136	75.84	ug		56
49)	4-Nitrophenol	21.74	109	79854	61.97	ug		84
50)	Dibenzofuran	21.61	168	434157	80.07	ug		80
51)	2,4-Dinitrotoluene	21.85	165	113275	87.29	ug	#	56
52)	Diethylphthalate	22.66	149	283967	80.78	ug		89
53)	Fluorene	22.65	166	517236	81.26	ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	225529	79.14	ug		68
55)	4-Nitroaniline	22.97	138	98948	105.27	ug		66
57)	4,6-Dinitro-2-methylphenol	23.06	198	66482	78.10	ug	#	100
58)	n-Nitrosodiphenylamine	23.15	169	287157	78.41	ug		70
60)	Azobenzene	22.74	77	34738	74.59	ug	#	85
61)	4-Bromophenyl-phenylether	24.19	248	215522	76.26	ug		40
62)	Hexachlorobenzene	24.57	284	159681	78.23	ug		65
63)	Pentachlorophenol	25.15	266	172459	84.01	ug		54
64)	Phenanthrene	25.52	178	507589	79.57	ug		90
65)	Anthracene	25.65	178	511227	79.04	ug		91
66)	Benzidine	25.46	184	28108	51.49	ug	#	31
67)	Carbazole	26.23	167	329525	84.36	ug		96
68)	Di-n-butylphthalate	27.58	149	396312	78.59	ug		98
69)	Fluoranthene	29.10	202	479597	80.96	ug		90
71)	Pyrene	29.75	202	574488	80.11	ug		87
73)	Butylbenzylphthalate	32.04	149	305873	78.22	ug		60
74)	Benzo(a)anthracene	33.36	228	703357	79.18	ug		85
75)	3,3'-Dichlorobenzidine	33.46	252	275092	73.76	ug		68
76)	Chrysene	33.49	228	708450	79.43	ug		86
77)	bis(2-Ethylhexyl)phthalate	33.86	149	323170	74.49	ug		88
79)	Di-n-octylphthalate	35.60	149	453669	72.92	ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:38 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

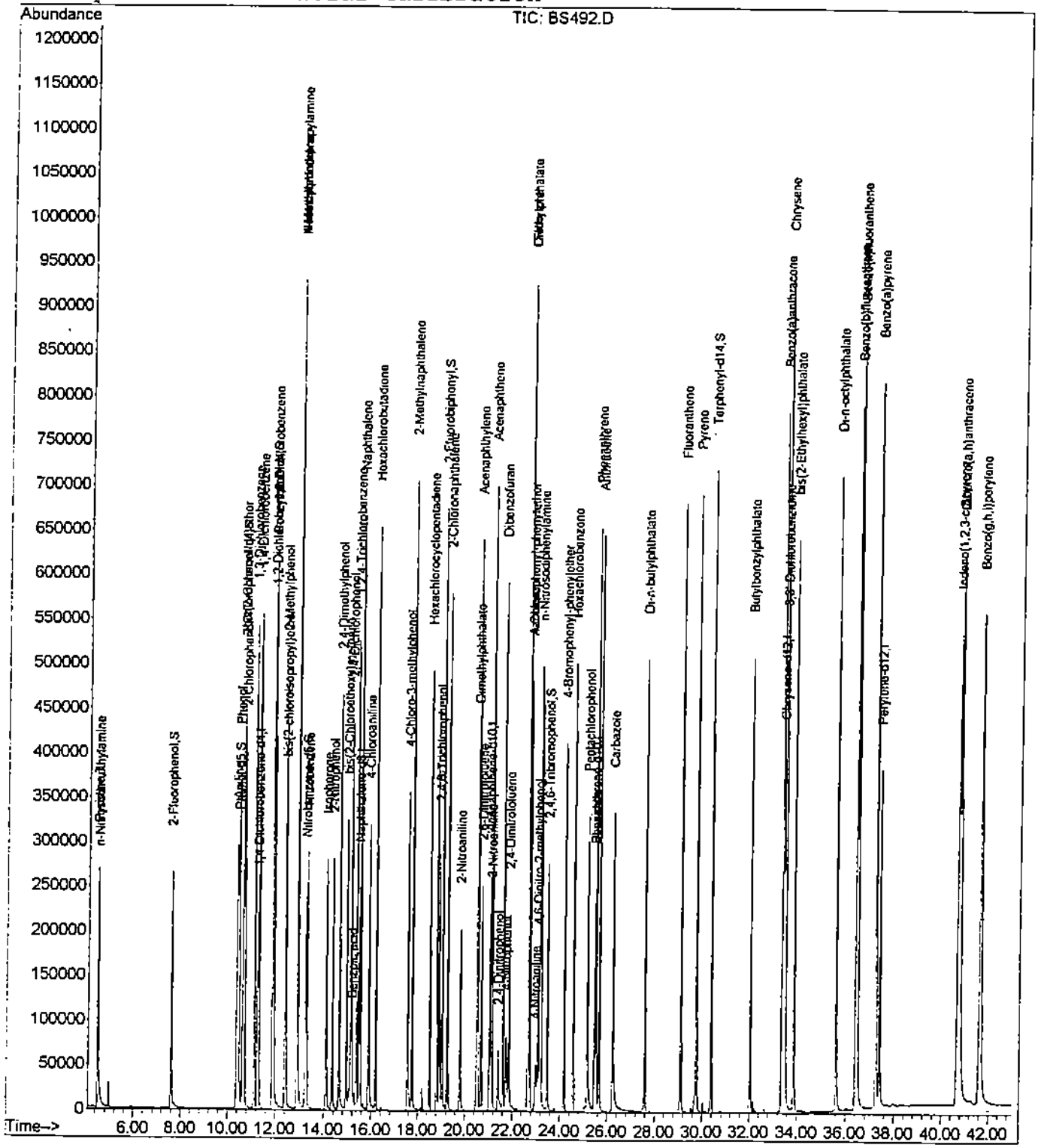
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80) Benzo(b)fluoranthene	36.41	252	673342	78.05 ug	85
81) Benzo(k)fluoranthene	36.48	252	732204	79.62 ug	83
82) Benzo(a)pyrene	37.25	252	682310	81.42 ug	82
83) Indeno(1,2,3-cd)pyrene	40.69	276	820236	87.34 ug	77
84) Dibenzo(a,h)anthracene	40.77	278	849292	89.37 ug	78
85) Benzo(g,h,i)perylene	41.65	276	1009362	87.39 ug	72

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:52 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:47 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.24	152	144752	40.00	ug		0.02
21) Naphthalene-d8	15.47	136	302994	40.00	ug		0.01
36) Acenaphthene-d10	21.03	164	151131	40.00	ug		0.00
56) Phenanthrene-d10	25.46	188	274404	40.00	ug		0.00
70) Chrysene-d12	33.42	240	327013	40.00	ug		0.01
78) Perylene-d12	37.41	264	423598	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.60	112	319301	134.75	ug		0.02
3) Phenol-d5	10.42	99	424466	114.42	ug		0.03
8) 2-Chlorophenol-d4	10.64	132	284754	115.06	ug		0.02
14) 1,2-Dichlorobenzene-d4	11.87	152	210369	112.83	ug		0.02
22) Nitrobenzene-d5	13.23	82	450251	121.80	ug		0.02
40) 2-Fluorobiphenyl	19.05	172	703332	119.99	ug		0.01
59) 2,4,6-Tribromophenol	23.48	330	249436	122.65	ug		0.00
72) Terphenyl-d14	30.38	244	706694	115.98	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.49	79	325872	112.25	ug		92
5) n-Nitrosodimethylamine	4.51	74	136660	117.78	ug		100
6) Aniline	10.37	93	366192	113.26	ug	#	86
7) Phenol	10.46	94	524804	111.00	ug		79
9) bis(2-Chloroethyl)ether	10.62	93	451084	156.81	ug		68
10) 2-Chlorophenol	10.69	128	552982	116.03	ug		70
11) 1,3-Dichlorobenzene	11.11	146	662683	115.78	ug		68
12) 1,4-Dichlorobenzene	11.30	146	666801	115.21	ug		69
13) Benzyl alcohol	11.89	108	370071	123.37	ug		32
15) 1,2-Dichlorobenzene	11.91	146	591890	112.01	ug		68
16) 2-Methylphenol	12.39	108	415715	107.63	ug		58
17) bis(2-chloroisopropyl)ethe	12.42	45	426182	108.49	ug		83
18) 4-Methylphenol	12.91	108	452425	101.92	ug		41
19) n-Nitroso-di-n-propylamine	12.91	70	180529	101.02	ug		69
20) Hexachloroethane	12.91	117	337402	115.34	ug		52
23) Nitrobenzene	13.29	77	379460	119.38	ug		70
24) Isophorone	14.09	82	469279	120.77	ug		99
25) 2-Nitrophenol	14.36	139	277331	124.92	ug		70
26) 2,4-Dimethylphenol	14.64	107	633221	120.69	ug		48
27) bis(2-Chloroethoxy)methane	14.94	93	392406	118.61	ug		84
28) 2,4-Dichlorophenol	15.14	162	520695	122.35	ug		62
29) 1,2,4-Trichlorobenzene	15.37	180	618385	119.61	ug		51
30) Naphthalene	15.54	128	937433	115.25	ug		95
31) Benzoic acid	15.20	105	118920	121.78	ug	#	10

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:47 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32)	4-Chloroaniline	15.89	127	395491	122.11 ug		87
33)	Hexachlorobutadiene	16.19	225	416937	126.77 ug		54
34)	4-Chloro-3-methylphenol	17.55	107	266749	114.99 ug		92
35)	2-Methylnaphthalene	17.76	142	943864	110.81 ug		59
37)	Hexachlorocyclopentadiene	18.50	237	344457	153.78 ug		68
38)	2,4,6-Trichlorophenol	18.90	196	367922	128.65 ug		50
39)	2,4,5-Trichlorophenol	18.90	196	367922	128.65 ug		52
41)	2-Chloronaphthalene	19.26	162	759007	118.74 ug	#	22
42)	2-Nitroaniline	19.79	65	302668	119.93 ug		36
43)	Dimethylphthalate	20.51	163	522992	116.79 ug		97
44)	Acenaphthylene	20.55	152	919610	115.41 ug		90
45)	2,6-Dinitrotoluene	20.70	165	166096	119.08 ug		68
46)	3-Nitroaniline	21.09	138	192035	111.85 ug		45
47)	Acenaphthene	21.13	153	1017612	114.32 ug		48
48)	2,4-Dinitrophenol	21.40	184	90666	151.19 ug		56
49)	4-Nitrophenol	21.74	109	178886	104.20 ug		81
50)	Dibenzofuran	21.62	168	829215	114.79 ug		80
51)	2,4-Dinitrotoluene	21.87	165	202750	117.27 ug	#	56
52)	Diethylphthalate	22.68	149	525917	112.29 ug		89
53)	Fluorene	22.66	166	942922	111.20 ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	442976	116.68 ug		69
55)	4-Nitroaniline	22.98	138	164257	131.17 ug		62
57)	4,6-Dinitro-2-methylphenol	23.07	198	134922	131.63 ug	#	100
58)	n-Nitrosodiphenylamine	23.15	169	516586	117.14 ug		69
60)	Azobenzene	22.74	77	66409	118.42 ug	#	86
61)	4-Bromophenyl-phenylether	24.19	248	411796	121.02 ug		40
62)	Hexachlorobenzene	24.57	284	288831	117.51 ug		65
63)	Pentachlorophenol	25.15	266	319981	129.45 ug		54
64)	Phenanthrene	25.53	178	884453	115.15 ug		90
65)	Anthracene	25.66	178	899022	115.44 ug		90
66)	Benzidine	25.46	184	33918	51.61 ug	#	31
67)	Carbazole	26.23	167	504076	107.17 ug		96
68)	Di-n-butylphthalate	27.58	149	702601	115.70 ug		98
69)	Flucranthene	29.10	202	808537	113.35 ug		90
71)	Pyrene	29.76	202	962512	113.98 ug		87
73)	Butylbenzylphthalate	32.04	149	558627	121.30 ug		60
74)	Benzo(a)anthracene	33.38	228	1241207	118.65 ug		86
75)	3,3'-Dichlorobenzidine	33.46	252	510544	116.24 ug		67
76)	Chrysene	33.51	228	1215286	115.70 ug		86
77)	bis(2-Ethylhexyl)phthalate	33.87	149	652296	127.67 ug		88
79)	Di-n-octylphthalate	35.60	149	954802	135.22 ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:47 2002 Quant Results File: ME1125.RES

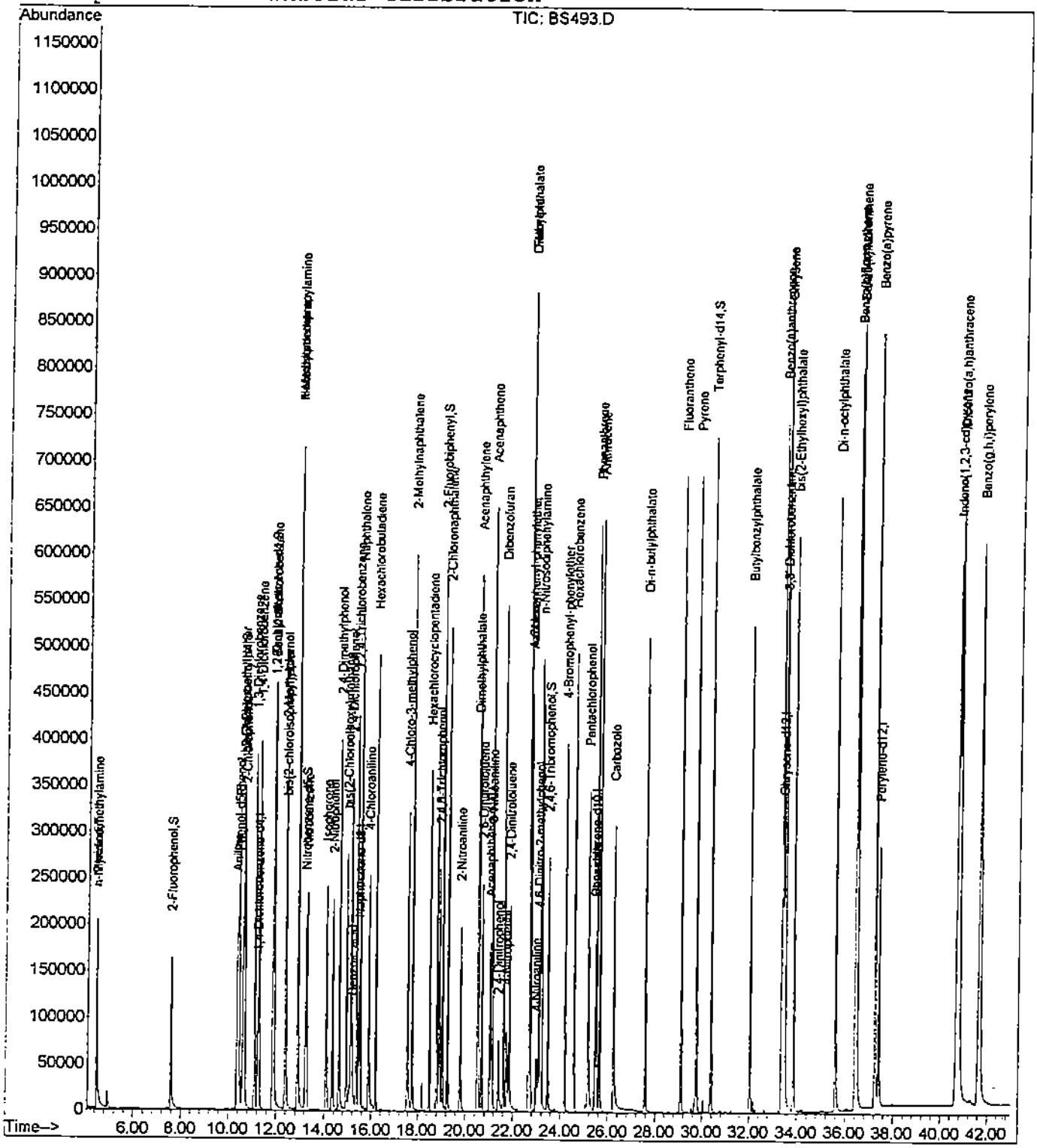
Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	Benzo(b)fluoranthene	36.43	252	1161857	118.67 ug	84
81)	Benzo(k)fluoranthene	36.50	252	1183261	113.37 ug	84
82)	Benzo(a)pyrene	37.26	252	1133736	119.21 ug	82
83)	Indeno(1,2,3-cd)pyrene	40.71	276	1246140	116.91 ug	77
84)	Dibenzo(a,h)anthracene	40.80	278	1233873	114.41 ug	77
85)	Benzo(g,h,i)perylene	41.67	276	1425639	108.76 ug	72

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:52 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:59 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	80791	40.00	ug		0.00
21) Naphthalene-d8	15.47	136	189404	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	104240	40.00	ug		0.00
56) Phenanthrene-d10	25.46	188	201307	40.00	ug		0.00
70) Chrysene-d12	33.42	240	245149	40.00	ug		0.01
78) Perylene-d12	37.40	264	323230	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.58	112	217003	164.08	ug		0.00
3) Phenol-d5	10.40	99	326410	157.65	ug		0.02
8) 2-Chlorophenol-d4	10.63	132	214099	155.00	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	156248	150.15	ug		0.00
22) Nitrobenzene-d5	13.22	82	360639	156.07	ug		0.01
40) 2-Fluorobiphenyl	19.04	172	612595	151.52	ug		0.00
59) 2,4,6-Tribromophenol	23.48	330	244069	163.59	ug		0.00
72) Terphenyl-d14	30.38	244	702715	153.84	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.46	79	237163	146.37	ug		93
5) n-Nitrosodimethylamine	4.48	74	94260	145.55	ug		100
6) Aniline	10.36	93	272057	150.75	ug	#	86
7) Phenol	10.44	94	411080	155.78	ug		79
9) bis(2-Chloroethyl)ether	10.60	93	352217	219.38	ug		67
10) 2-Chlorophenol	10.67	128	404871	152.21	ug		69
11) 1,3-Dichlorobenzene	11.10	146	484979	151.81	ug		68
12) 1,4-Dichlorobenzene	11.28	146	487766	151.00	ug		70
13) Benzyl alcohol	11.88	108	299518	178.90	ug		32
15) 1,2-Dichlorobenzene	11.90	146	443423	150.35	ug		68
16) 2-Methylphenol	12.38	108	330449	153.29	ug		58
17) bis(2-chloroisopropyl)ethe	12.41	45	325571	148.49	ug		83
18) 4-Methylphenol	12.90	108	379383	153.12	ug		40
19) n-Nitroso-di-n-propylamine	12.89	70	148778	149.16	ug		69
20) Hexachloroethane	12.91	117	246527	150.99	ug		52
23) Nitrobenzene	13.28	77	309794	155.92	ug		70
24) Isophorone	14.08	82	398827	164.19	ug		98
25) 2-Nitrophenol	14.35	139	225438	162.44	ug		70
26) 2,4-Dimethylphenol	14.64	107	528761	161.22	ug		48
27) bis(2-Chloroethoxy)methane	14.94	93	322342	155.86	ug		84
28) 2,4-Dichlorophenol	15.13	162	434151	163.20	ug		62
29) 1,2,4-Trichlorobenzene	15.37	180	492558	152.41	ug		51
30) Naphthalene	15.53	128	772056	151.85	ug		94
31) Benzoic acid	15.19	105	116191	190.35	ug	#	10

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:59 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32)	4-Chloroaniline	15.89	127	337679	166.78 ug		86
33)	Hexachlorobutadiene	16.19	225	319956	155.63 ug		54
34)	4-Chloro-3-methylphenol	17.55	107	242076	166.93 ug		93
35)	2-Methylnaphthalene	17.76	142	801821	150.59 ug		59
37)	Hexachlorocyclopentadiene	18.50	237	258550	167.35 ug		68
38)	2,4,6-Trichlorophenol	18.90	196	337556	171.12 ug		51
39)	2,4,5-Trichlorophenol	18.90	196	337556	171.12 ug		53
41)	2-Chloronaphthalene	19.26	162	666743	151.23 ug	#	22
42)	2-Nitroaniline	19.79	65	287535	165.18 ug		36
43)	Dimethylphthalate	20.51	163	486169	157.40 ug		97
44)	Acenaphthylene	20.55	152	838623	152.59 ug		90
45)	2,6-Dinitrotoluene	20.69	165	156570	162.74 ug		68
46)	3-Nitroaniline	21.10	138	178347	150.60 ug		45
47)	Acenaphthene	21.13	153	921917	150.16 ug		48
48)	2,4-Dinitrophenol	21.40	184	94091	227.48 ug		55
49)	4-Nitrophenol	21.74	109	178615	150.85 ug		80
50)	Dibenzofuran	21.62	168	765559	153.65 ug		80
51)	2,4-Dinitrotoluene	21.87	165	198357	166.34 ug	#	56
52)	Diethylphthalate	22.68	149	509037	157.58 ug		89
53)	Fluorene	22.66	166	883023	150.97 ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	405905	155.01 ug		69
55)	4-Nitroaniline	22.97	138	159245	184.37 ug		63
57)	4,6-Dinitro-2-methylphenol	23.07	198	140571	186.94 ug	#	100
58)	n-Nitrosodiphenylamine	23.15	169	488789	151.09 ug		70
60)	Azobenzene	22.74	77	60919	148.08 ug	#	87
61)	4-Bromophenyl-phenylether	24.19	248	387832	155.36 ug		40
62)	Hexachlorobenzene	24.57	284	281127	155.91 ug		65
63)	Pentachlorophenol	25.15	266	328329	181.07 ug		54
64)	Phenanthrene	25.53	178	852340	151.26 ug		90
65)	Anthracene	25.66	178	873479	152.88 ug		90
66)	Benzidine	25.46	184	24513	50.84 ug	#	29
67)	Carbazole	26.23	167	453884	131.53 ug		96
68)	Di-n-butylphthalate	27.58	149	716834	160.91 ug		98
69)	Fluoranthene	29.10	202	815584	155.86 ug		90
71)	Pyrene	29.76	202	955107	150.87 ug		87
73)	Butylbenzylphthalate	32.04	149	562586	162.96 ug		60
74)	Benzo(a)anthracene	33.38	228	1213017	154.67 ug		86
75)	3,3'-Dichlorobenzidine	33.46	252	518667	157.52 ug		67
76)	Chrysene	33.51	228	1188185	150.90 ug		86
77)	bis(2-Ethylhexyl)phthalate	33.87	149	625934	163.43 ug		88
79)	Di-n-octylphthalate	35.60	149	883594	164.00 ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:59 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	Benzo(b)fluoranthene	36.43	252	1135895	152.04 ug	84
81)	Benzo(k)fluoranthene	36.50	252	1203882	151.16 ug	83
82)	Benzo(a)pyrene	37.26	252	1126918	155.28 ug	82
83)	Indeno(1,2,3-cd)pyrene	40.71	276	1448148	178.05 ug	76
84)	Dibenzo(a,h)anthracene	40.80	278	1392114	169.17 ug	78
85)	Benzo(g,h,i)perylene	41.68	276	1666156	166.57 ug	72

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Instrument ID: 5973 B Calibration Date: 02/18/03 Time: 18:04

Lab File ID: BS040 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

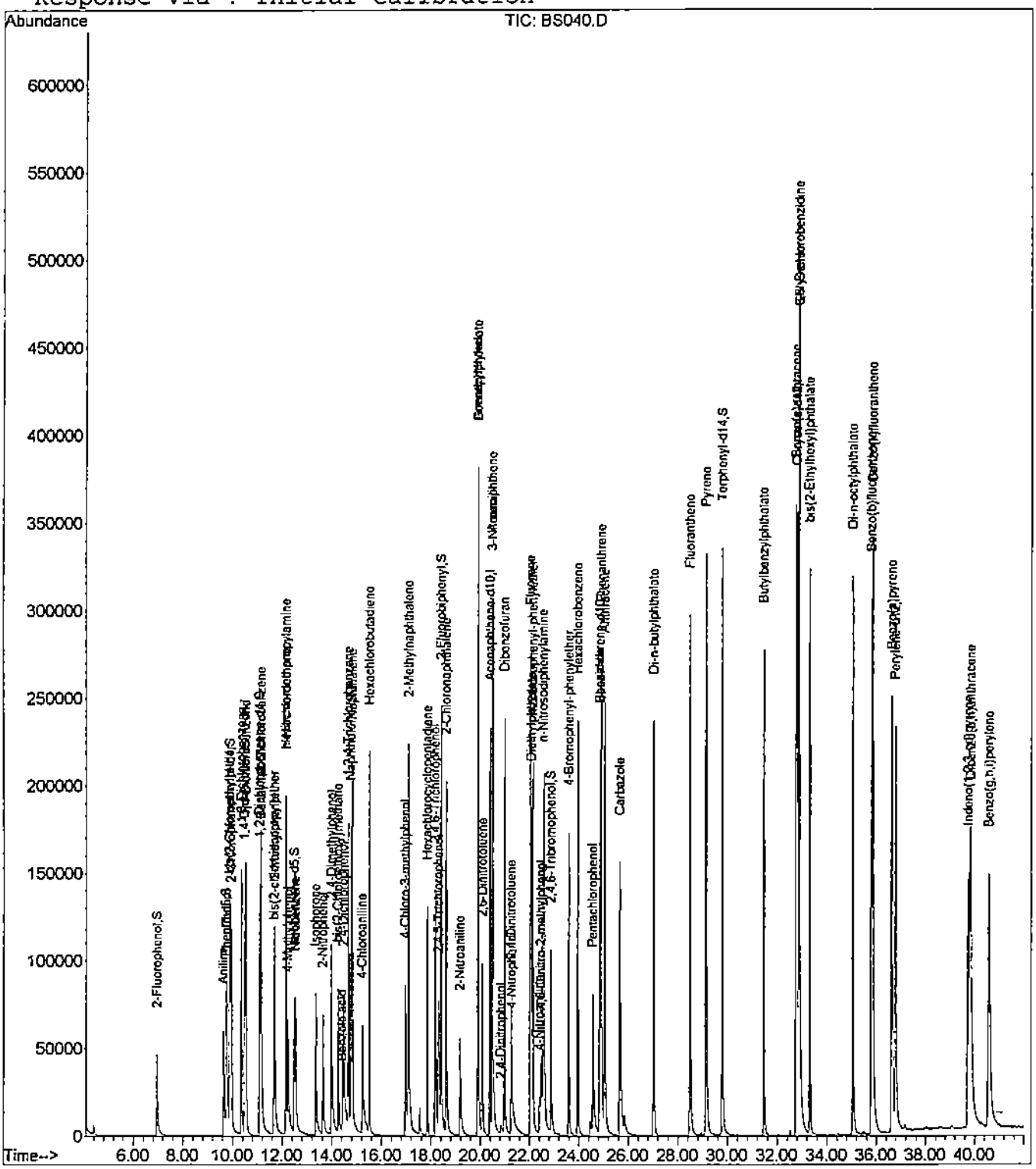
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.662	.500	-3.9	25.0
n-Nitroso-di-n-propylamine	.494	.474	.500	4.0	25.0
1,2,4-Trichlorobenzene	.683	.755	.200	-10.5	25.0
Naphthalene	1.074	1.147	.700	-6.8	25.0
2-Methylnaphthalene	1.124	1.282	.400	-14.1	25.0
Acenaphthylene	2.109	2.195	1.300	-4.1	25.0
Acenaphthene	2.356	2.521	.800	-7.0	25.0
Dibenzofuran	1.912	2.086	.800	-9.1	25.0
2,4-Dinitrotoluene	.458	.533	.200	-16.4	25.0
Fluorene	2.244	2.535	.900	-13.0	25.0
Phenanthrene	1.120	1.194	.700	-6.6	25.0
Anthracene	1.135	1.250	.700	-10.1	25.0
Fluoranthene	1.040	1.227	.600	-18.0	25.0
Pyrene	1.033	1.117	.600	-8.1	25.0
Benzo(a)anthracene	1.280	1.390	.800	-8.6	25.0
Chrysene	1.285	1.439	.700	-12.0	25.0
Benzo(b)fluoranthene	.896	1.002	.700	-11.8	25.0
Benzo(k)fluoranthene	.986	1.309	.700	-32.8	25.0
Benzo(a)pyrene	.898	1.010	.700	-12.5	25.0
Indeno(1,2,3-cd)pyrene	1.006	.830	.500	17.5	25.0
Dibenzo(a,h)anthracene	1.018	1.009	.400	.9	25.0
Benzo(g,h,i)perylene	1.238	1.083	.500	12.5	25.0
Nitrobenzene-d5	.488	.488		.0	
2-Fluorobiphenyl	1.551	1.613	.700	-4.0	25.0
Terphenyl-d14	.745	.865	.500	-16.1	25.0
Phenol-d5	1.025	.950	.800	7.3	25.0
2-Fluorophenol	.655	.614	.600	6.3	25.0
2,4,6-Tribromophenol	.296	.360		-21.6	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D Vial: 2
Acq On : 18 Feb 2003 6:04 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 9:19 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D Vial: 2
Acq On : 18 Feb 2003 6:04 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 09:16:36 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Feb 18 10:47:12 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.48	152	95421	40.00	ug		-0.04
21) Naphthalene-d8	14.77	136	222357	40.00	ug		-0.04
36) Acenaphthene-d10	20.40	164	137818	40.00	ug		-0.03
56) Phenanthrene-d10	24.84	188	277641	40.00	ug		-0.03
70) Chrysene-d12	32.81	240	356053	40.00	ug		-0.03
78) Perylene-d12	36.77	264	320771	40.00	ug		-0.03
System Monitoring Compounds							
2) 2-Fluorophenol	6.96	112	73208	46.87	ug		-0.04
3) Phenol-d5	9.74	99	113260	46.31	ug		-0.04
8) 2-Chlorophenol-d4	9.90	132	83333	51.08	ug		-0.04
14) 1,2-Dichlorobenzene-d4	11.09	152	64675	52.62	ug		-0.04
22) Nitrobenzene-d5	12.48	82	135508	49.95	ug		-0.04
40) 2-Fluorobiphenyl	18.41	172	277955	52.00	ug		-0.03
59) 2,4,6-Tribromophenol	22.86	330	124834	60.67	ug		-0.03
72) Terphenyl-d14	29.79	244	385185	58.06	ug		-0.03
Target Compounds							Qvalue
6) Aniline	9.64	93	83119	39.00	ug	#	85
7) Phenol	9.77	94	134321	43.10	ug		81
9) bis(2-Chloroethyl)ether	9.88	93	128183	46.69	ug		65
10) 2-Chlorophenol	9.94	128	153582	48.89	ug		68
11) 1,3-Dichlorobenzene	10.35	146	195870	51.91	ug		68
12) 1,4-Dichlorobenzene	10.53	146	198279	51.97	ug		70
13) Benzyl alcohol	11.15	108	81174	41.05	ug		29
15) 1,2-Dichlorobenzene	11.13	146	181995	52.25	ug		68
16) 2-Methylphenol	11.70	108	118790	46.66	ug		59
17) bis(2-chloroisopropyl)ethe	11.67	45	120991	46.72	ug		84
18) 4-Methylphenol	12.22	108	139923	47.81	ug		40
19) n-Nitroso-di-n-propylamine	12.15	70	56533	47.99	ug		70
20) Hexachloroethane	12.14	117	107995	56.00	ug		52
23) Nitrobenzene	12.54	77	112910	48.41	ug		70
24) Isophorone	13.35	82	139296	48.85	ug		97
25) 2-Nitrophenol	13.64	139	80200	49.22	ug		70
26) 2,4-Dimethylphenol	13.99	107	204550	53.12	ug		46
27) bis(2-Chloroethoxy)methane	14.26	93	119223	49.10	ug		82
28) 2,4-Dichlorophenol	14.47	162	168321	53.89	ug		63
29) 1,2,4-Trichlorobenzene	14.67	180	209737	55.28	ug		51
30) Naphthalene	14.83	128	318668	53.39	ug		94
31) Benzoic acid	14.43	105	22019	31.13	ug	#	10
32) 4-Chloroaniline	15.24	127	125768	52.91	ug		84
33) Hexachlorobutadiene	15.51	225	140551	58.23	ug		54

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D Vial: 2
Acq On : 18 Feb 2003 6:04 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 09:16:36 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Feb 18 10:47:12 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	4-Chloro-3-methylphenol	16.98	107	96622	56.75	ug		88
35)	2-Methylnaphthalene	17.09	142	356199	56.98	ug		58
37)	Hexachlorocyclopentadiene	17.86	237	92987	45.52	ug		67
38)	2,4,6-Trichlorophenol	18.18	196	162142	62.17	ug		51
39)	2,4,5-Trichlorophenol	18.31	196	134123	51.43	ug		52
41)	2-Chloronaphthalene	18.62	162	297640	51.06	ug	#	23
42)	2-Nitroaniline	19.18	65	116927	50.81	ug		36
43)	Dimethylphthalate	19.90	163	217166	53.18	ug		97
44)	Acenaphthylene	19.91	152	378075	52.03	ug		90
45)	2,6-Dinitrotoluene	20.09	165	71412	56.14	ug		67
46)	3-Nitroaniline	20.50	138	81120	52.44	ug		45
47)	Acenaphthene	20.49	153	434385	53.51	ug		48
48)	2,4-Dinitrophenol	20.84	184	10308m	18.85	ug		
49)	4-Nitrophenol	21.29	109	31406m	25.16	ug		
50)	Dibenzofuran	20.99	168	359360	54.55	ug		79
51)	2,4-Dinitrotoluene	21.27	165	91789	58.22	ug		55
52)	Diethylphthalate	22.08	149	250338	58.62	ug		90
53)	Fluorene	22.04	166	436719	56.48	ug		54
54)	4-Chlorophenyl-phenylether	22.14	204	196127	56.65	ug		68
55)	4-Nitroaniline	22.41	138	61755	47.63	ug		68
57)	4,6-Dinitro-2-methylphenol	22.48	198	49835	48.05	ug	#	100
58)	n-Nitrosodiphenylamine	22.56	169	243366	54.54	ug		69
60)	Azobenzene	22.14	77	29273	51.59	ug	#	85
61)	4-Bromophenyl-phenylether	23.59	248	193558	56.22	ug		40
62)	Hexachlorobenzene	23.95	284	146394	58.87	ug		64
63)	Pentachlorophenol	24.57	266	127663m	47.00	ug		
64)	Phenanthrene	24.91	178	414320	53.31	ug		90
65)	Anthracene	25.04	178	433820	55.05	ug		89
66)	Benzidine	24.84	184	36276	54.55	ug	#	47
67)	Carbazole	25.65	167	289147	60.76	ug		96
68)	Di-n-butylphthalate	27.02	149	388470	63.23	ug		97
69)	Fluoranthene	28.49	202	425946	59.02	ug		88
71)	Pyrene	29.13	202	497198	54.07	ug		85
73)	Butylbenzylphthalate	31.47	149	312654	62.35	ug		59
74)	Benzo(a)anthracene	32.76	228	618592	54.31	ug		85
75)	3,3'-Dichlorobenzidine	32.88	252	264307	55.27	ug		67
76)	Chrysene	32.88	228	640413	56.00	ug		83
77)	bis(2-Ethylhexyl)phthalate	33.31	149	353601	63.57	ug		88
79)	Di-n-octylphthalate	35.04	149	465283	87.02	ug		96
80)	Benzo(b)fluoranthene	35.80	252	401725	55.93	ug		94
81)	Benzo(k)fluoranthene	35.86	252	524803	66.40	ug		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\BS040.D Vial: 2
Acq On : 18 Feb 2003 6:04 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 19 09:16:36 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Feb 18 10:47:12 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Benzo(a)pyrene	36.62	252	405150	56.26	ug	79
83)	Indeno(1,2,3-cd)pyrene	39.73	276	332702	41.22	ug	74
84)	Dibenzo(a,h)anthracene	39.83	278	404434	49.52	ug	76
85)	Benzo(g,h,i)perylene	40.59	276	434239	43.75	ug	69

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Instrument ID: 5973 B Calibration Date: 02/27/03 Time: 12:20

Lab File ID: BS046 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

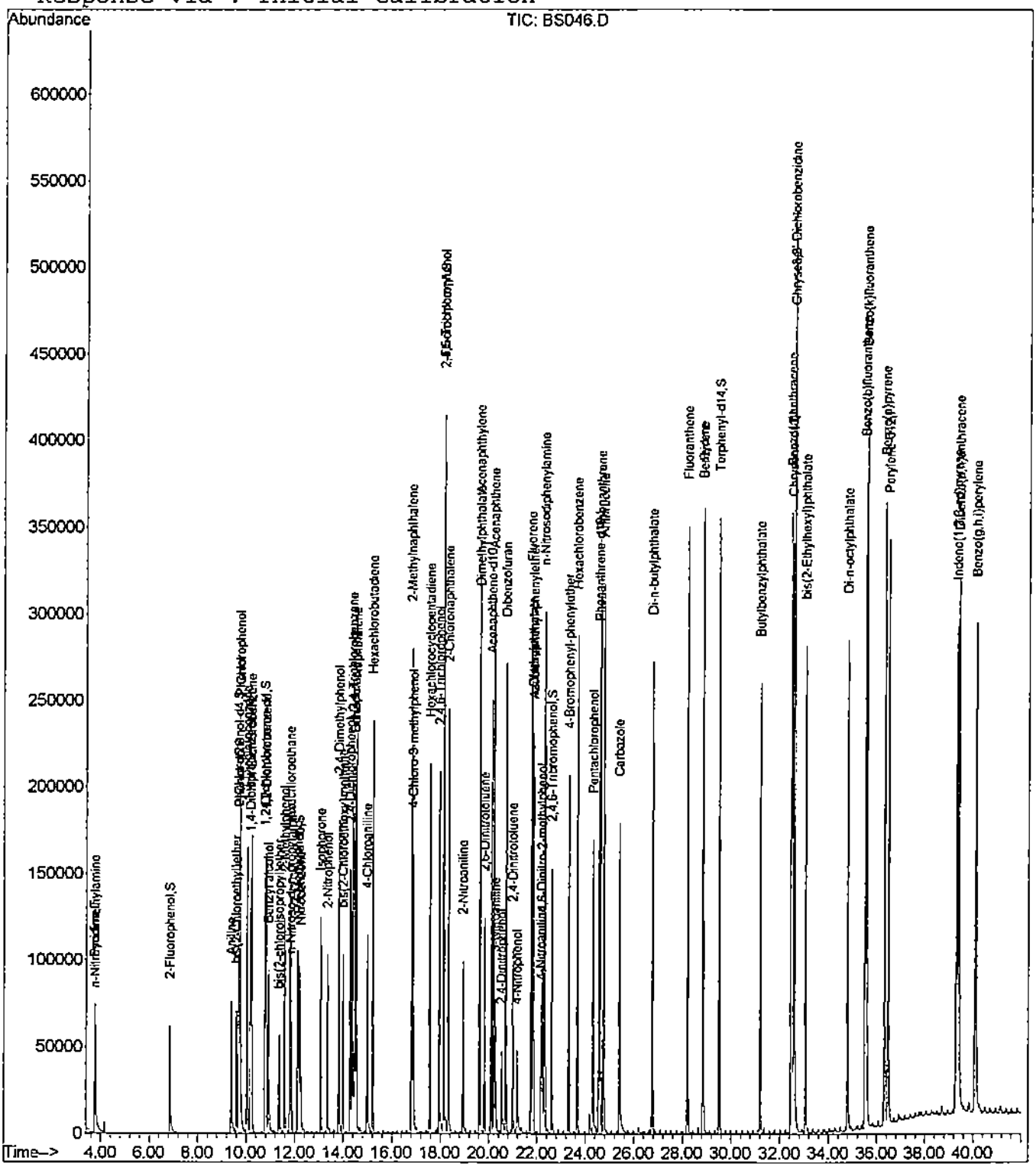
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.684	.500	-5.3	25.0
n-Nitroso-di-n-propylamine	.494	.497	.500	-.6	25.0
1,2,4-Trichlorobenzene	.683	.803	.200	-17.6	25.0
Naphthalene	1.074	1.143	.700	-6.4	25.0
2-Methylnaphthalene	1.124	1.264	.400	-12.5	25.0
Acenaphthylene	2.109	2.192	1.300	-3.9	25.0
Acenaphthene	2.356	2.541	.800	-7.9	25.0
Dibenzofuran	1.912	2.092	.800	-9.4	25.0
2,4-Dinitrotoluene	.458	.575	.200	-25.5	25.0
Fluorene	2.244	2.512	.900	-11.9	25.0
Phenanthrene	1.120	1.200	.700	-7.1	25.0
Anthracene	1.135	1.198	.700	-5.6	25.0
Fluoranthene	1.040	1.133	.600	-8.9	25.0
Pyrene	1.033	1.183	.600	-14.5	25.0
Benzo(a)anthracene	1.280	1.458	.800	-13.9	25.0
Chrysene	1.285	1.372	.700	-6.8	25.0
Benzo(b)fluoranthene	.896	1.005	.700	-12.2	25.0
Benzo(k)fluoranthene	.986	1.084	.700	-9.9	25.0
Benzo(a)pyrene	.898	.958	.700	-6.7	25.0
Indeno(1,2,3-cd)pyrene	1.006	1.059	.500	-5.3	25.0
Dibenzo(a,h)anthracene	1.018	1.113	.400	-9.3	25.0
Benzo(g,h,i)perylene	1.238	1.229	.500	.7	25.0
Nitrobenzene-d5	.488	.525		-7.6	
2-Fluorobiphenyl	1.551	1.585	.700	-2.2	25.0
Terphenyl-d14	.745	.927	.500	-24.4	25.0
Phenol-d5	1.025	1.146	.800	-11.8	25.0
2-Fluorophenol	.655	.721	.600	-10.1	25.0
2,4,6-Tribromophenol	.296	.403		-36.1	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\BS046.D Vial: 2
Acq On : 27 Feb 2003 12:20 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:13 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\BS046.D Vial: 2
Acq On : 27 Feb 2003 12:20 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:10:18 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 15:09:42 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.17	152	93168	40.00	ug	0.00
21) Naphthalene-d8	14.47	136	213001	40.00	ug	0.00
36) Acenaphthene-d10	20.12	164	134078	40.00	ug	0.00
56) Phenanthrene-d10	24.56	188	271839	40.00	ug	0.00
70) Chrysene-d12	32.52	240	299498	40.00	ug	0.00
78) Perylene-d12	36.47	264	354641	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.86	112	84011	55.08	ug	0.00
3) Phenol-d5	9.71	99	133515	55.92	ug	0.00
8) 2-Chlorophenol-d4	9.69	132	86152	54.08	ug	0.00
14) 1,2-Dichlorobenzene-d4	10.77	152	64096	53.41	ug	0.00
22) Nitrobenzene-d5	12.18	82	139835	53.81	ug	0.00
40) 2-Fluorobiphenyl	18.13	172	265721	51.10	ug	0.00
59) 2,4,6-Tribromophenol	22.61	330	136847	67.93	ug	0.00
72) Terphenyl-d14	29.51	244	346896	62.16	ug	0.00
Target Compounds						Qvalue
4) Pyridine	3.75	79	84453	48.71	ug	92
5) n-Nitrosodimethylamine	3.77	74	31575	44.83	ug	100
6) Aniline	9.39	93	85588	41.13	ug	90
7) Phenol	9.74	94	171697	56.42	ug	82
9) bis(2-Chloroethyl)ether	9.59	93	121689	45.40	ug	65
10) 2-Chlorophenol	9.73	128	161233	52.56	ug	70
11) 1,3-Dichlorobenzene	10.03	146	192682	52.30	ug	68
12) 1,4-Dichlorobenzene	10.22	146	196112	52.65	ug	70
13) Benzyl alcohol	10.91	108	124016	64.24	ug	32
15) 1,2-Dichlorobenzene	10.82	146	178869	52.59	ug	68
16) 2-Methylphenol	11.58	108	128449	51.67	ug	54
17) bis(2-chloroisopropyl)ethe	11.37	45	115584	45.71	ug	86
18) 4-Methylphenol	12.12	108	155790	54.52	ug	40
19) n-Nitroso-di-n-propylamine	11.86	70	57937	50.37	ug	70
20) Hexachloroethane	11.81	117	113376	60.22	ug	52
23) Nitrobenzene	12.24	77	115284	51.59	ug	71
24) Isophorone	13.07	82	151253	55.37	ug	99
25) 2-Nitrophenol	13.35	139	94775	60.72	ug	71
26) 2,4-Dimethylphenol	13.83	107	212502	57.61	ug	47
27) bis(2-Chloroethoxy)methane	13.99	93	116367	50.03	ug	83
28) 2,4-Dichlorophenol	14.29	162	180241	60.25	ug	62
29) 1,2,4-Trichlorobenzene	14.38	180	213865	58.84	ug	51
30) Naphthalene	14.54	128	304262	53.21	ug	95
31) Benzoic acid	14.49	105	52065	76.83	ug	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\BS046.D Vial: 2
Acq On : 27 Feb 2003 12:20 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:10:18 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 15:09:42 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	15.00	127	129181	56.74	ug		87
33)	Hexachlorobutadiene	15.22	225	149562	64.69	ug		54
34)	4-Chloro-3-methylphenol	16.87	107	102044	62.57	ug		93
35)	2-Methylnaphthalene	16.81	142	336581	56.21	ug		59
37)	Hexachlorocyclopentadiene	17.57	237	139036	69.97	ug		68
38)	2,4,6-Trichlorophenol	17.96	196	158075m	62.30	ug		
39)	2,4,5-Trichlorophenol	18.13	196	145276	57.26	ug		51
41)	2-Chloronaphthalene	18.33	162	292094	51.51	ug	#	22
42)	2-Nitroaniline	18.95	65	119935	53.57	ug		36
43)	Dimethylphthalate	19.65	163	218670	55.04	ug		96
44)	Acenaphthylene	19.63	152	367453	51.98	ug		90
45)	2,6-Dinitrotoluene	19.83	165	72392	58.50	ug		68
46)	3-Nitroaniline	20.27	138	81715	54.29	ug		44
47)	Acenaphthene	20.21	153	425820	53.92	ug		48
48)	2,4-Dinitrophenol	20.54	184	50524	94.97	ug		55
49)	4-Nitrophenol	21.17	109	79847	65.76	ug		80
50)	Dibenzofuran	20.71	168	350544	54.70	ug		81
51)	2,4-Dinitrotoluene	21.01	165	96429	62.87	ug	#	56
52)	Diethylphthalate	21.84	149	252469	60.76	ug		90
53)	Fluorene	21.76	166	421020	55.96	ug		54
54)	4-Chlorophenyl-phenylether	21.87	204	196740	58.41	ug		69
55)	4-Nitroaniline	22.17	138	79509	63.03	ug		68
57)	4,6-Dinitro-2-methylphenol	22.22	198	80773	79.55	ug	#	100
58)	n-Nitrosodiphenylamine	22.31	169	231693	53.04	ug		69
60)	Azobenzene	21.87	77	32130	57.84	ug	#	87
61)	4-Bromophenyl-phenylether	23.32	248	196427	58.27	ug		40
62)	Hexachlorobenzene	23.67	284	152368	62.58	ug		64
63)	Pentachlorophenol	24.32	266	141336	53.15	ug		54
64)	Phenanthrene	24.63	178	407674	53.58	ug		90
65)	Anthracene	24.76	178	407086	52.76	ug		91
66)	Benzidine	28.83	184	10229	15.71	ug	#	89
67)	Carbazole	25.40	167	220563	47.33	ug		96
68)	Di-n-butylphthalate	26.76	149	366975	61.00	ug		98
69)	Fluoranthene	28.21	202	385037	54.49	ug		86
71)	Pyrene	28.85	202	442751	57.24	ug		84
73)	Butylbenzylphthalate	31.21	149	260118	61.67	ug		59
74)	Benzo(a)anthracene	32.47	228	545930	56.98	ug		85
75)	3,3'-Dichlorobenzidine	32.61	252	237167	58.96	ug		68
76)	Chrysene	32.59	228	513664	53.40	ug		84
77)	bis(2-Ethylhexyl)phthalate	33.05	149	291934	62.39	ug		87
79)	Di-n-octylphthalate	34.79	149	385186	65.16	ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\BS046.D Vial: 2
Acq On : 27 Feb 2003 12:20 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 27 15:10:18 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Thu Feb 27 15:09:42 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	Benzo(b)fluoranthene	35.51	252	445515m	56.10	ug	
81)	Benzo(k)fluoranthene	35.57	252	480581	55.00	ug	91
82)	Benzo(a)pyrene	36.32	252	424675	53.34	ug	78
83)	Indeno(1,2,3-cd)pyrene	39.31	276	469235	52.58	ug	73
84)	Dibenzo(a,h)anthracene	39.40	278	493568	54.66	ug	75
85)	Benzo(g,h,i)perylene	40.11	276	544704	49.63	ug	68

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Instrument ID: 5973 B Calibration Date: 02/28/03 Time: 10:25

Lab File ID: BS047 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

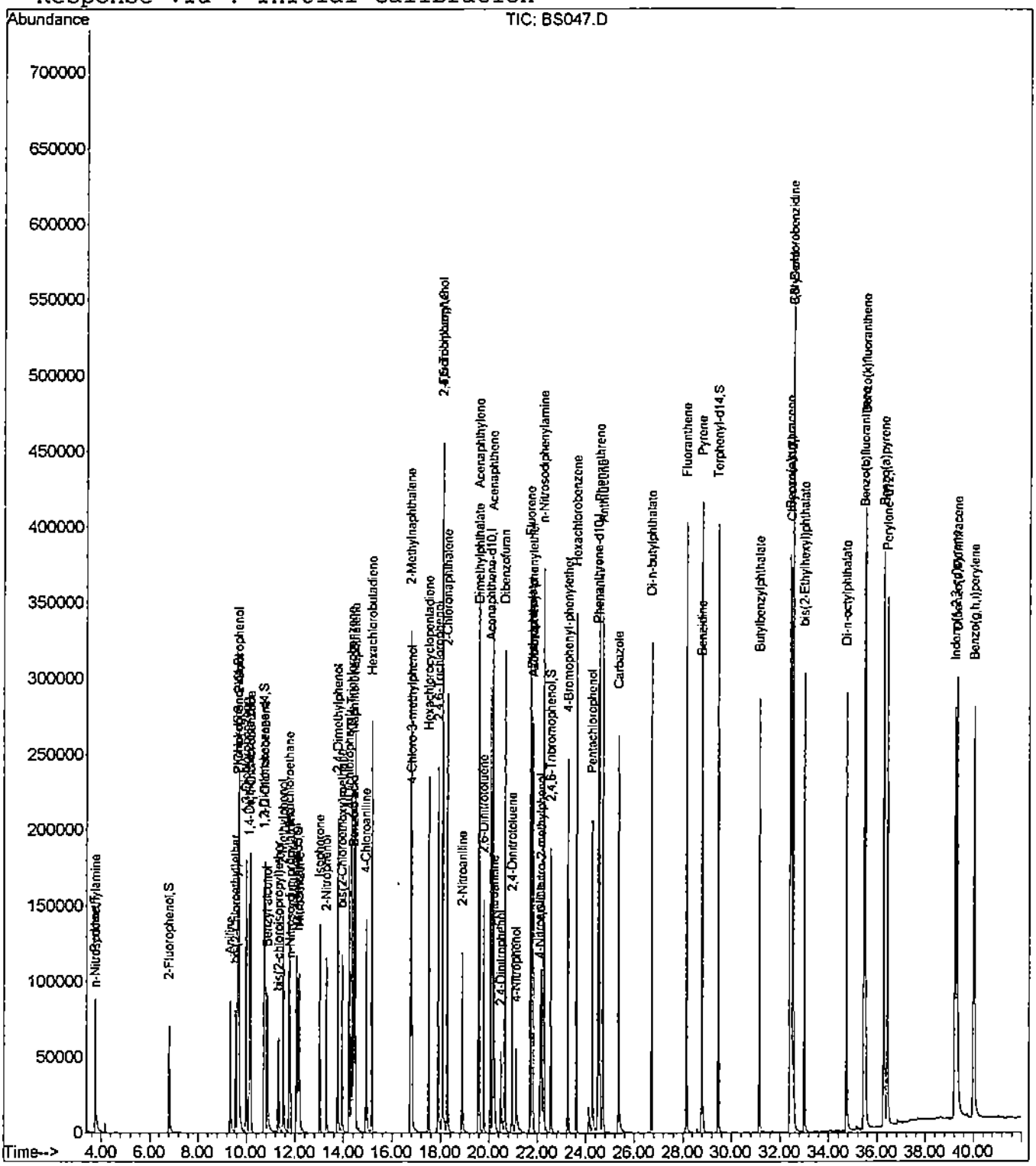
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.652	.500	-3.3	25.0
n-Nitroso-di-n-propylamine	.494	.547	.500	-10.7	25.0
1,2,4-Trichlorobenzene	.683	.818	.200	-19.8	25.0
Naphthalene	1.074	1.177	.700	-9.6	25.0
2-Methylnaphthalene	1.124	1.369	.400	-21.8	25.0
Acenaphthylene	2.109	2.273	1.300	-7.8	25.0
Acenaphthene	2.356	2.561	.800	-8.7	25.0
Dibenzofuran	1.912	2.179	.800	-14.0	25.0
2,4-Dinitrotoluene	.458	.570	.200	-24.5	25.0
Fluorene	2.244	2.578	.900	-14.9	25.0
Phenanthrene	1.120	1.185	.700	-5.8	25.0
Anthracene	1.135	1.196	.700	-5.4	25.0
Fluoranthene	1.040	1.097	.600	-5.5	25.0
Pyrene	1.033	1.195	.600	-15.7	25.0
Benzo(a)anthracene	1.280	1.450	.800	-13.3	25.0
Chrysene	1.285	1.408	.700	-9.6	25.0
Benzo(b)fluoranthene	.896	1.043	.700	-16.4	25.0
Benzo(k)fluoranthene	.986	1.126	.700	-14.2	25.0
Benzo(a)pyrene	.898	.991	.700	-10.4	25.0
Indeno(1,2,3-cd)pyrene	1.006	1.002	.500	.4	25.0
Dibenzo(a,h)anthracene	1.018	1.039	.400	-2.1	25.0
Benzo(g,h,i)perylene	1.238	1.169	.500	5.6	25.0
Nitrobenzene-d5	.488	.509		-4.3	
2-Fluorobiphenyl	1.551	1.601	.700	-3.2	25.0
Terphenyl-d14	.745	.938	.500	-25.9	25.0
Phenol-d5	1.025	1.144	.800	-11.6	25.0
2-Fluorophenol	.655	.651	.600	.6	25.0
2,4,6-Tribromophenol	.296	.404		-36.5	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:21:23 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	100487	40.00	ug		0.00
21) Naphthalene-d8	14.42	136	239201	40.00	ug		0.00
36) Acenaphthene-d10	20.07	164	158142	40.00	ug		0.00
56) Phenanthrene-d10	24.51	188	324856	40.00	ug		0.00
70) Chrysene-d12	32.46	240	330846	40.00	ug		0.00
78) Perylene-d12	36.41	264	364804	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	6.81	112	81806	49.73	ug		0.00
3) Phenol-d5	9.64	99	143683	55.79	ug		0.00
8) 2-Chlorophenol-d4	9.63	132	91385	53.19	ug		0.09
14) 1,2-Dichlorobenzene-d4	10.72	152	69453	53.66	ug		0.00
22) Nitrobenzene-d5	12.12	82	152326	52.20	ug		-0.02
40) 2-Fluorobiphenyl	18.09	172	316545	51.61	ug		0.00
59) 2,4,6-Tribromophenol	22.55	330	164003	68.12	ug		0.02
72) Terphenyl-d14	29.46	244	388095	62.96	ug		0.00
Target Compounds							Qvalue
4) Pyridine	3.74	79	95988	51.33	ug		99
5) n-Nitrosodimethylamine	3.77	74	31928	42.03	ug		100
6) Aniline	9.33	93	94822	42.24	ug		90
7) Phenol	9.67	94	183680	55.96	ug		74
9) bis(2-Chloroethyl)ether	9.54	93	132485	45.83	ug		65
10) 2-Chlorophenol	9.67	128	175652	53.09	ug		70
11) 1,3-Dichlorobenzene	9.98	146	206229	51.90	ug		68
12) 1,4-Dichlorobenzene	10.17	146	207567	51.66	ug		70
13) Benzyl alcohol	10.85	108	129081	61.99	ug		33
15) 1,2-Dichlorobenzene	10.76	146	199040	54.26	ug		68
16) 2-Methylphenol	11.51	108	144015	53.71	ug		54
17) bis(2-chloroisopropyl)ethe	11.31	45	129342	47.43	ug		86
18) 4-Methylphenol	12.05	108	170983	55.48	ug		39
19) n-Nitroso-di-n-propylamine	11.80	70	68698	55.37	ug		70
20) Hexachloroethane	11.76	117	121504	59.83	ug		52
23) Nitrobenzene	12.18	77	133450	53.18	ug		70
24) Isophorone	13.02	82	176020	57.38	ug		99
25) 2-Nitrophenol	13.29	139	105289	60.07	ug		70
26) 2,4-Dimethylphenol	13.77	107	241305	58.26	ug		47
27) bis(2-Chloroethoxy)methane	13.94	93	136117	52.11	ug		83
28) 2,4-Dichlorophenol	14.22	162	202172	60.18	ug		62
29) 1,2,4-Trichlorobenzene	14.33	180	244645	59.94	ug		51
30) Naphthalene	14.48	128	351815	54.79	ug		95
31) Benzoic acid	14.44	105	52142	68.52	ug	#	57

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:21:23 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	14.94	127	154194	60.30	ug		87
33)	Hexachlorobutadiene	15.17	225	168902	65.05	ug		54
34)	4-Chloro-3-methylphenol	16.81	107	120772	65.94	ug		93
35)	2-Methylnaphthalene	16.76	142	409306	60.87	ug		60
37)	Hexachlorocyclopentadiene	17.52	237	157704	67.29	ug		68
38)	2,4,6-Trichlorophenol	17.91	196	210945	70.49	ug		51
39)	2,4,5-Trichlorophenol	18.08	196	172728	57.72	ug		52
41)	2-Chloronaphthalene	18.28	162	351808	52.60	ug	#	23
42)	2-Nitroaniline	18.89	65	145795	55.21	ug		36
43)	Dimethylphthalate	19.60	163	266944	56.97	ug		96
44)	Acenaphthylene	19.57	152	449265	53.88	ug		90
45)	2,6-Dinitrotoluene	19.78	165	90056	61.70	ug		68
46)	3-Nitroaniline	20.22	138	106645	60.08	ug		44
47)	Acenaphthene	20.16	153	506337	54.36	ug		48
48)	2,4-Dinitrophenol	20.49	184	56762	90.46	ug		56
49)	4-Nitrophenol	21.11	109	94746	66.16	ug		81
50)	Dibenzofuran	20.66	168	430668	56.98	ug		81
51)	2,4-Dinitrotoluene	20.95	165	112688	62.29	ug	#	56
52)	Diethylphthalate	21.79	149	306631	62.57	ug		90
53)	Fluorene	21.71	166	509604	57.43	ug		54
54)	4-Chlorophenyl-phenylether	21.82	204	236402	59.51	ug		69
55)	4-Nitroaniline	22.12	138	97146	65.30	ug		69
57)	4,6-Dinitro-2-methylphenol	22.17	198	94771	78.10	ug	#	100
58)	n-Nitrosodiphenylamine	22.26	169	282159	54.05	ug		70
60)	Azobenzene	21.82	77	38321	57.72	ug	#	87
61)	4-Bromophenyl-phenylether	23.27	248	237237	58.89	ug		40
62)	Hexachlorobenzene	23.62	284	183173	62.95	ug		64
63)	Pentachlorophenol	24.26	266	170746	53.73	ug		54
64)	Phenanthrene	24.57	178	481373	52.94	ug		90
65)	Anthracene	24.70	178	485766	52.69	ug		90
66)	Benzidine	28.77	184	16665	21.42	ug	#	89
67)	Carbazole	25.35	167	301806	54.20	ug		96
68)	Di-n-butylphthalate	26.71	149	424445	59.04	ug		98
69)	Fluoranthene	28.15	202	445565	52.77	ug		86
71)	Pyrene	28.79	202	494233	57.85	ug		83
73)	Butylbenzylphthalate	31.15	149	301276	64.66	ug		59
74)	Benzo(a)anthracene	32.41	228	599774	56.67	ug		85
75)	3,3'-Dichlorobenzidine	32.55	252	283894	63.89	ug		67
76)	Chrysene	32.54	228	582099	54.78	ug		84
77)	bis(2-Ethylhexyl)phthalate	33.01	149	328885	63.63	ug		87
79)	Di-n-octylphthalate	34.74	149	419975	69.06	ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:21:23 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	Benzo(b)fluoranthene	35.45	252	475824	58.25	ug	98
81)	Benzo(k)fluoranthene	35.51	252	513330	57.11	ug	98
82)	Benzo(a)pyrene	36.26	252	452023	55.19	ug	78
83)	Indeno(1,2,3-cd)pyrene	39.23	276	456857	49.77	ug	73
84)	Dibenzo(a,h)anthracene	39.32	278	473861	51.02	ug	75
85)	Benzo(g,h,i)perylene	40.02	276	533234	47.23	ug	67

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Instrument ID: 5973 B Calibration Date: 03/04/03 Time: 11:51

Lab File ID: BS049 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

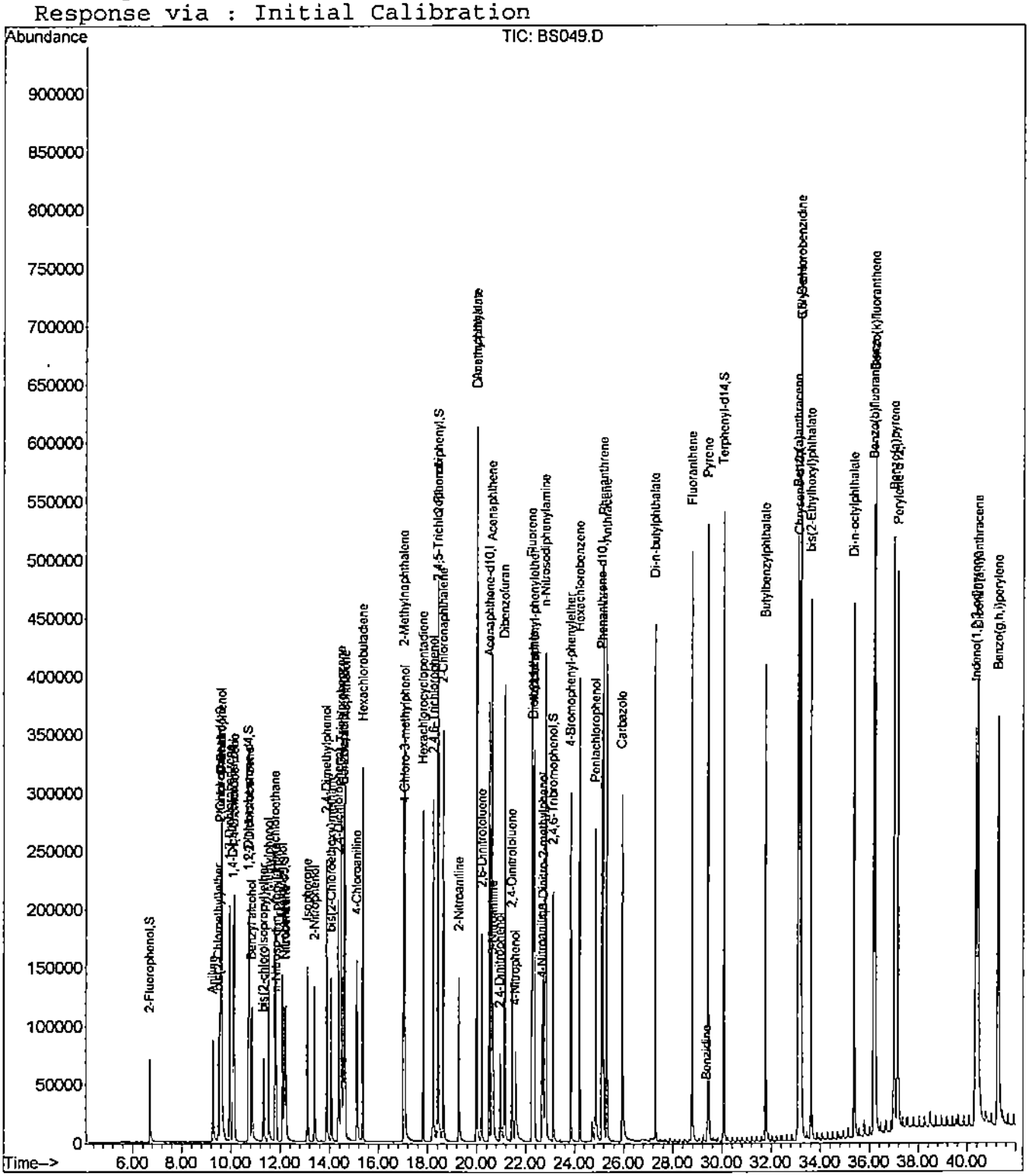
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.640	.500	-2.6	25.0
n-Nitroso-di-n-propylamine	.494	.531	.500	-7.5	25.0
1,2,4-Trichlorobenzene	.683	.788	.200	-15.4	25.0
Naphthalene	1.074	1.160	.700	-8.0	25.0
2-Methylnaphthalene	1.124	1.392	.400	-23.8	25.0
Acenaphthylene	2.109	2.167	1.300	-2.8	25.0
Acenaphthene	2.356	2.526	.800	-7.2	25.0
Dibenzofuran	1.912	2.090	.800	-9.3	25.0
2,4-Dinitrotoluene	.458	.570	.200	-24.5	25.0
Fluorene	2.244	2.569	.900	-14.5	25.0
Phenanthrene	1.120	1.210	.700	-8.0	25.0
Anthracene	1.135	1.215	.700	-7.0	25.0
Fluoranthene	1.040	1.140	.600	-9.6	25.0
Pyrene	1.033	1.200	.600	-16.2	25.0
Benzo(a)anthracene	1.280	1.422	.800	-11.1	25.0
Chrysene	1.285	1.383	.700	-7.6	25.0
Benzo(b)fluoranthene	.896	1.029	.700	-14.8	25.0
Benzo(k)fluoranthene	.986	1.157	.700	-17.3	25.0
Benzo(a)pyrene	.898	.983	.700	-9.5	25.0
Indeno(1,2,3-cd)pyrene	1.006	1.038	.500	-3.2	25.0
Dibenzo(a,h)anthracene	1.018	1.120	.400	-10.0	25.0
Benzo(g,h,i)perylene	1.238	1.213	.500	2.0	25.0
Nitrobenzene-d5	.488	.476		2.5	
2-Fluorobiphenyl	1.551	1.538	.700	.8	25.0
Terphenyl-d14	.745	.913	.500	-22.6	25.0
Phenol-d5	1.025	1.099	.800	-7.2	25.0
2-Fluorophenol	.655	.578	.600	11.8	25.0
2,4,6-Tribromophenol	.296	.372		-25.7	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D Vial: 2
Acq On : 4 Mar 2003 11:51 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 5 9:36 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D Vial: 2
Acq On : 4 Mar 2003 11:51 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 09:35:39 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 09:35:24 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	118173	40.00	ug	0.00
21) Naphthalene-d8	14.57	136	307789	40.00	ug	0.00
36) Acenaphthene-d10	20.52	164	220457	40.00	ug	0.00
56) Phenanthrene-d10	25.11	188	424798	40.00	ug	0.00
70) Chrysene-d12	33.15	240	464197	40.00	ug	0.00
78) Perylene-d12	37.16	264	527990	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.69	112	85448	44.17	ug	0.00
3) Phenol-d5	9.59	99	162405	53.63	ug	0.00
8) 2-Chlorophenol-d4	9.57	132	103788	51.37	ug	0.00
14) 1,2-Dichlorobenzene-d4	10.71	152	83062	54.57	ug	0.00
22) Nitrobenzene-d5	12.17	82	183042	48.74	ug	0.00
40) 2-Fluorobiphenyl	18.42	172	423947	49.58	ug	0.00
59) 2,4,6-Tribromophenol	23.12	330	197555	62.75	ug	0.00
72) Terphenyl-d14	30.08	244	529623	61.23	ug	0.00
Target Compounds						Qvalue
6) Aniline	9.27	93	101368	38.40	ug	89
7) Phenol	9.62	94	207664	53.80	ug	75
9) bis(2-Chloroethyl)ether	9.49	93	148564	43.70	ug	65
10) 2-Chlorophenol	9.62	128	198906	51.12	ug	70
11) 1,3-Dichlorobenzene	9.94	146	242429	51.88	ug	69
12) 1,4-Dichlorobenzene	10.13	146	242194	51.26	ug	69
13) Benzyl alcohol	10.85	108	154934	63.27	ug	32
15) 1,2-Dichlorobenzene	10.76	146	233800	54.20	ug	68
16) 2-Methylphenol	11.53	108	171205	54.30	ug	53
17) bis(2-chloroisopropyl)ethe	11.33	45	155046	48.35	ug	85
18) 4-Methylphenol	12.09	108	198628	54.81	ug	39
19) n-Nitroso-di-n-propylamine	11.84	70	78473	53.79	ug	70
20) Hexachloroethane	11.79	117	146796	61.47	ug	52
23) Nitrobenzene	12.24	77	156677	48.53	ug	70
24) Isophorone	13.10	82	212320	53.79	ug	99
25) 2-Nitrophenol	13.39	139	132256	58.64	ug	70
26) 2,4-Dimethylphenol	13.89	107	295991	55.54	ug	48
27) bis(2-Chloroethoxy)methane	14.07	93	168430	50.12	ug	84
28) 2,4-Dichlorophenol	14.36	162	252877	58.49	ug	62
29) 1,2,4-Trichlorobenzene	14.47	180	303291	57.75	ug	51
30) Naphthalene	14.64	128	446379	54.02	ug	95
31) Benzoic acid	14.59	105	73753	75.32	ug	91
32) 4-Chloroaniline	15.11	127	186992	56.83	ug	87
33) Hexachlorobutadiene	15.36	225	209402	62.68	ug	54

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D Vial: 2
Acq On : 4 Mar 2003 11:51 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 09:35:39 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 09:35:24 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	4-Chloro-3-methylphenol	17.07	107	156329	66.34	ug		94
35)	2-Methylnaphthalene	17.03	142	535645m	61.91	ug		
37)	Hexachlorocyclopentadiene	17.83	237	208207	63.72	ug		68
38)	2,4,6-Trichlorophenol	18.23	196	275861	66.13	ug		51
39)	2,4,5-Trichlorophenol	18.41	196	226011	54.18	ug		51
41)	2-Chloronaphthalene	18.63	162	466921	50.08	ug	#	23
42)	2-Nitroaniline	19.27	65	194994	52.97	ug		36
43)	Dimethylphthalate	20.02	163	343827	52.63	ug		97
44)	Acenaphthylene	20.00	152	597117	51.37	ug		90
45)	2,6-Dinitrotoluene	20.21	165	117498	57.75	ug		67
46)	3-Nitroaniline	20.67	138	146236	59.09	ug		44
47)	Acenaphthene	20.62	153	696025	53.60	ug		48
48)	2,4-Dinitrophenol	20.96	184	84434	96.52	ug		55
49)	4-Nitrophenol	21.58	109	130459	65.35	ug		83
50)	Dibenzofuran	21.15	168	576041	54.67	ug		80
51)	2,4-Dinitrotoluene	21.45	165	156962	62.24	ug	#	55
52)	Diethylphthalate	22.31	149	411208	60.19	ug		91
53)	Fluorene	22.26	166	707997	57.24	ug		54
54)	4-Chlorophenyl-phenylether	22.36	204	315813	57.03	ug		68
55)	4-Nitroaniline	22.66	138	128758	62.08	ug		66
57)	4,6-Dinitro-2-methylphenol	22.72	198	127996	80.66	ug	#	100
58)	n-Nitrosodiphenylamine	22.81	169	375819	55.05	ug		69
60)	Azobenzene	22.36	77	54518	62.80	ug	#	82
61)	4-Bromophenyl-phenylether	23.85	248	305959	58.08	ug		40
62)	Hexachlorobenzene	24.21	284	224586	59.02	ug		64
63)	Pentachlorophenol	24.86	266	220180	52.98	ug		54
64)	Phenanthrene	25.18	178	642580	54.04	ug		90
65)	Anthracene	25.31	178	645367	53.53	ug		90
66)	Benzidine	29.38	184	21532	21.16	ug	#	93
67)	Carbazole	25.94	167	378013	51.91	ug		96
68)	Di-n-butylphthalate	27.28	149	584984	62.23	ug		98
69)	Fluoranthene	28.79	202	605231	54.81	ug		88
71)	Pyrene	29.43	202	696495	58.10	ug		86
73)	Butylbenzylphthalate	31.77	149	425459	65.08	ug		59
74)	Benzo(a)anthracene	33.09	228	824893	55.55	ug		85
75)	3,3'-Dichlorobenzidine	33.21	252	381056	61.12	ug		68
76)	Chrysene	33.22	228	802739	53.84	ug		84
77)	bis(2-Ethylhexyl)phthalate	33.62	149	478918	66.04	ug		88
79)	Di-n-octylphthalate	35.37	149	625246	71.04	ug		96
80)	Benzo(b)fluoranthene	36.17	252	679146	57.44	ug		98
81)	Benzo(k)fluoranthene	36.24	252	763893	58.72	ug		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D Vial: 2
Acq On : 4 Mar 2003 11:51 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 09:35:39 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 09:35:24 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Benzo(a)pyrene	37.01	252	648682	54.72	ug	81
83)	Indeno(1,2,3-cd)pyrene	40.36	276	685217	51.58	ug	76
84)	Dibenzo(a,h)anthracene	40.45	278	739394	55.00	ug	77
85)	Benzo(g,h,i)perylene	41.28	276	800667	49.00	ug	71

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Instrument ID: 5973 B Calibration Date: 03/05/03 Time: 11:50

Lab File ID: BS050 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

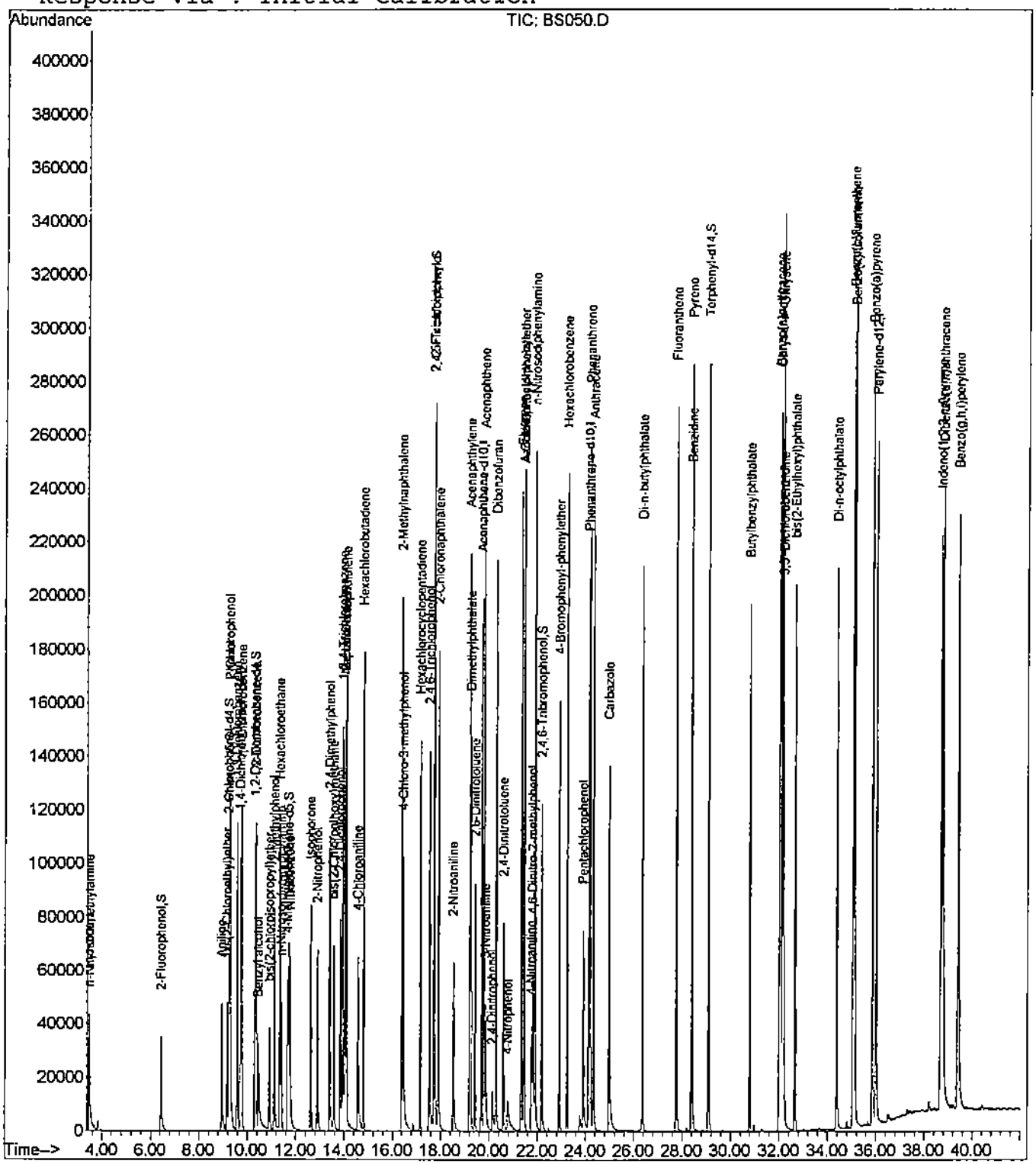
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.696	.500	-6.1	25.0
n-Nitroso-di-n-propylamine	.494	.501	.500	-1.4	25.0
1,2,4-Trichlorobenzene	.683	.824	.200	-20.6	25.0
Naphthalene	1.074	1.136	.700	-5.8	25.0
2-Methylnaphthalene	1.124	1.224	.400	-8.9	25.0
Acenaphthylene	2.109	2.209	1.300	-4.7	25.0
Acenaphthene	2.356	2.429	.800	-3.1	25.0
Dibenzofuran	1.912	2.051	.800	-7.3	25.0
2,4-Dinitrotoluene	.458	.539	.200	-17.7	25.0
Fluorene	2.244	2.499	.900	-11.4	25.0
Phenanthrene	1.120	1.174	.700	-4.8	25.0
Anthracene	1.135	1.227	.700	-8.1	25.0
Fluoranthene	1.040	1.146	.600	-10.2	25.0
Pyrene	1.033	1.127	.600	-9.1	25.0
Benzo(a)anthracene	1.280	1.375	.800	-7.4	25.0
Chrysene	1.285	1.388	.700	-8.0	25.0
Benzo(b)fluoranthene	.896	1.030	.700	-15.0	25.0
Benzo(k)fluoranthene	.986	1.125	.700	-14.1	25.0
Benzo(a)pyrene	.898	.897	.700	.1	25.0
Indeno(1,2,3-cd)pyrene	1.006	.860	.500	14.5	25.0
Dibenzo(a,h)anthracene	1.018	.991	.400	2.7	25.0
Benzo(g,h,i)perylene	1.238	1.035	.500	16.4	25.0
Nitrobenzene-d5	.488	.484		.8	
2-Fluorobiphenyl	1.551	1.611	.700	-3.9	25.0
Terphenyl-d14	.745	.900	.500	-20.8	25.0
Phenol-d5	1.025	1.096	.800	-6.9	25.0
2-Fluorophenol	.655	.608	.600	7.2	25.0
2,4,6-Tribromophenol	.296	.429		-44.9	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D Vial: 2
Acq On : 5 Mar 2003 11:50 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 5 16:01 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D Vial: 2
Acq On : 5 Mar 2003 11:50 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 15:58:59 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.71	152	66258	40.00	ug	0.00
21) Naphthalene-d8	14.03	136	158617	40.00	ug	0.02
36) Acenaphthene-d10	19.69	164	107533	40.00	ug	0.01
56) Phenanthrene-d10	24.13	188	219978	40.00	ug	0.00
70) Chrysene-d12	32.07	240	252530	40.00	ug	0.00
78) Perylene-d12	36.01	264	280305	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.44	112	50380	46.45	ug	0.00
3) Phenol-d5	9.24	99	90781	53.46	ug	0.01
8) 2-Chlorophenol-d4	9.23	132	61841	54.59	ug	0.00
14) 1,2-Dichlorobenzene-d4	10.31	152	45165	52.92	ug	0.00
22) Nitrobenzene-d5	11.71	82	95968	49.59	ug	0.00
40) 2-Fluorobiphenyl	17.72	172	216555	51.92	ug	0.06
59) 2,4,6-Tribromophenol	22.18	330	117907	72.32	ug	-0.04
72) Terphenyl-d14	29.09	244	284081	60.38	ug	-0.01
Target Compounds						Qvalue
4) Pyridine	3.46	79	50132m	40.66	ug	
5) n-Nitrosodimethylamine	3.49	74	23688m	47.29	ug	
6) Aniline	8.93	93	57877	39.11	ug	90
7) Phenol	9.28	94	115562	53.40	ug	76
9) bis(2-Chloroethyl)ether	9.16	93	81858	42.94	ug	65
10) 2-Chlorophenol	9.27	128	113676	52.11	ug	70
11) 1,3-Dichlorobenzene	9.57	146	138645	52.92	ug	68
12) 1,4-Dichlorobenzene	9.76	146	140486	53.03	ug	70
13) Benzyl alcohol	10.45	108	67329	49.04	ug	34
15) 1,2-Dichlorobenzene	10.35	146	128826	53.26	ug	68
16) 2-Methylphenol	11.11	108	87603	49.55	ug	53
17) bis(2-chloroisopropyl)ethe	10.92	45	78053	43.41	ug	87
18) 4-Methylphenol	11.66	108	104289	51.32	ug	40
19) n-Nitroso-di-n-propylamine	11.40	70	41470	50.70	ug	71
20) Hexachloroethane	11.34	117	82391	61.53	ug	53
23) Nitrobenzene	11.77	77	83761	50.34	ug	69
24) Isophorone	12.61	82	107749	52.97	ug	98
25) 2-Nitrophenol	12.90	139	65568	56.42	ug	71
26) 2,4-Dimethylphenol	13.39	107	146331	53.28	ug	47
27) bis(2-Chloroethoxy)methane	13.57	93	80792	46.65	ug	83
28) 2,4-Dichlorophenol	13.83	162	118911	53.37	ug	60
29) 1,2,4-Trichlorobenzene	13.94	180	163321	60.34	ug	51
30) Naphthalene	14.09	128	225202	52.89	ug	94
31) Benzoic acid	14.04	105	27699	54.89	ug #	54

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D Vial: 2
Acq On : 5 Mar 2003 11:50 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 15:58:59 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	14.56	127	91862	54.18	ug		86
33)	Hexachlorobutadiene	14.79	225	117376	68.17	ug		54
34)	4-Chloro-3-methylphenol	16.45	107	78122	64.33	ug		91
35)	2-Methylnaphthalene	16.38	142	242647	54.42	ug		59
37)	Hexachlorocyclopentadiene	17.15	237	98918	62.07	ug		68
38)	2,4,6-Trichlorophenol	17.53	196	134872	66.28	ug		51
39)	2,4,5-Trichlorophenol	17.71	196	110118	54.11	ug		53
41)	2-Chloronaphthalene	17.91	162	234729	51.61	ug	#	22
42)	2-Nitroaniline	18.53	65	86958	48.43	ug		36
43)	Dimethylphthalate	19.25	163	176685	55.45	ug		96
44)	Acenaphthylene	19.20	152	296969	52.38	ug		90
45)	2,6-Dinitrotoluene	19.43	165	57398	57.83	ug		69
46)	3-Nitroaniline	19.86	138	65429	54.20	ug		44
47)	Acenaphthene	19.79	153	326530	51.56	ug		48
48)	2,4-Dinitrophenol	20.14	184	24612	57.68	ug		55
49)	4-Nitrophenol	20.78	109	33258	34.15	ug		82
50)	Dibenzofuran	20.29	168	275657	53.63	ug		82
51)	2,4-Dinitrotoluene	20.60	165	72430	58.88	ug		56
52)	Diethylphthalate	21.44	149	210891	63.29	ug		89
53)	Fluorene	21.34	166	335872	55.67	ug		54
54)	4-Chlorophenyl-phenylether	21.45	204	163271	60.44	ug		69
55)	4-Nitroaniline	21.75	138	58602	57.93	ug		67
57)	4,6-Dinitro-2-methylphenol	21.80	198	53095	64.62	ug	#	100
58)	n-Nitrosodiphenylamine	21.89	169	189339	53.56	ug		70
60)	Azobenzene	21.45	77	25850	57.50	ug	#	87
61)	4-Bromophenyl-phenylether	22.91	248	163299	59.86	ug		40
62)	Hexachlorobenzene	23.24	284	129216	65.58	ug		64
63)	Pentachlorophenol	23.90	266	80614	37.46	ug		53
64)	Phenanthrene	24.19	178	322944	52.45	ug		91
65)	Anthracene	24.32	178	337257	54.02	ug		91
66)	Benzidine	28.41	184	7567	14.36	ug	#	79
67)	Carbazole	24.98	167	185887	49.30	ug		96
68)	Di-n-butylphthalate	26.36	149	296219	60.85	ug		98
69)	Fluoranthene	27.76	202	315250	55.13	ug		84
71)	Pyrene	28.40	202	355788	54.56	ug		82
73)	Butylbenzylphthalate	30.79	149	216044	60.75	ug		58
74)	Benzo(a)anthracene	32.02	228	434126	53.74	ug		86
75)	3,3'-Dichlorobenzidine	32.17	252	210898	62.18	ug		68
76)	Chrysene	32.14	228	438144	54.02	ug		84
77)	bis(2-Ethylhexyl)phthalate	32.65	149	239100	60.60	ug		86
79)	Di-n-octylphthalate	34.38	149	277407m	59.37	ug		

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D Vial: 2
Acq On : 5 Mar 2003 11:50 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 15:58:59 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80) Benzo(b)fluoranthene	35.04	252	360755	57.48	ug	99
81) Benzo(k)fluoranthene	35.11	252	394313	57.09	ug	97
82) Benzo(a)pyrene	35.85	252	314369m	49.95	ug	
83) Indeno(1,2,3-cd)pyrene	38.68	276	301173m	42.70	ug	
84) Dibenzo(a,h)anthracene	38.77	278	347245m	48.66	ug	
85) Benzo(g,h,i)perylene	39.42	276	362630m	41.81	ug	

(#) = qualifier out of range (m) = manual integration

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS040 Date Analyzed: 02/18/03
Instrument ID: 5973 B Time Analyzed: 18:04

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	95421.	10.48	222357.	14.77	137818.	20.40
	UPPER LIMIT	190842.	10.98	444714.	15.27	275636.	20.90
	LOWER LIMIT	47711.	9.98	111179.	14.27	68909.	19.90
	EPA SAMPLE NO.						
1	MEGDD0241	100394.	10.48	199139.	14.76	132358.	20.41
2	MEGCIM0102	119227.	10.47	237613.	14.76	163162.	20.41
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS040 Date Analyzed: 02/18/03
Instrument ID: 5973 B Time Analyzed: 18:04

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	277641.		24.84		356053.		32.81		320771.		36.77	
	UPPER LIMIT	555282.		25.34		712106.		33.31		641542.		37.27	
	LOWER LIMIT	138821.		24.34		178027.		32.31		160386.		36.27	
	EPA SAMPLE NO.												
1	MEGDD0241	296538.		24.86		357118.		32.81		331331.		36.78	
2	MEGCIM0102	335727.		24.85		384888.		32.81		373485.		36.78	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS046 Date Analyzed: 02/27/03
Instrument ID: 5973 B Time Analyzed: 12:20

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	93168.	10.17	213001.	14.47	134078.	20.12
	UPPER LIMIT	186336.	10.67	426002.	14.97	268156.	20.62
	LOWER LIMIT	46584.	9.67	106501.	13.97	67039.	19.62
	EPA SAMPLE NO.						
1	MEGDD0237	94432.	10.17	231184.	14.47	146930.	20.11
2	MEGDIM8618	104061.	10.16	255907.	14.46	158910.	20.11
3	MEGDD0239	144705.	10.17	352128.	14.47	220265.	20.11
4	MEGDD0236	113339.	10.17	268418.	14.47	163914.	20.11
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS046 Date Analyzed: 02/27/03
Instrument ID: 5973 B Time Analyzed: 12:20

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	271839.		24.56		299498.		32.52		354641.		36.47	
	UPPER LIMIT	543678.		25.06		598996.		33.02		709282.		36.97	
	LOWER LIMIT	135920.		24.06		149749.		32.02		177321.		35.97	
	EPA SAMPLE NO.												
1	MEGDD0237	284760.		24.55		298859.		32.51		348530.		36.47	
2	MEGDIM8618	321416.		24.56		382461.		32.52		432778.		36.48	
3	MEGDD0239	432790.		24.56		486257.		32.52		583152.		36.48	
4	MEGDD0236	294285.		24.56		293244.		32.51		360365.		36.48	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	100487.		10.11		239201.		14.42		158142.		20.07	
	UPPER LIMIT	200974.		10.61		478402.		14.92		316284.		20.57	
	LOWER LIMIT	50244.		9.61		119601.		13.92		79071.		19.57	
	EPA SAMPLE NO.												
1	MEGUSH8602	118050.		10.08		277867.		14.39		167789.		20.03	
2	MEGDIM0236	131116.		10.07		308404.		14.37		190255.		20.02	
3	MEGDD0117	87529.		10.06		220093.		14.37		138160.		20.02	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	324856.		24.51		330846.		32.47		364804.		36.41	
	UPPER LIMIT	649712.		25.01		661692.		32.97		729608.		36.91	
	LOWER LIMIT	162428.		24.01		165423.		31.97		182402.		35.91	
	EPA SAMPLE NO.												
1	MEGUSH8602	327388.		24.47		364694.		32.43		453751.		36.39	
2	MEGDIM0236	390869.		24.46		437929.		32.41		526893.		36.37	
3	MEGDD0117	288316.		24.46		327253.		32.41		399381.		36.37	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS049 Date Analyzed: 03/04/03
Instrument ID: 5973 B Time Analyzed: 11:51

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	118173.	10.08	307789.	14.57	220457.	20.52
	UPPER LIMIT	236346.	10.58	615578.	15.07	440914.	21.02
	LOWER LIMIT	59087.	9.58	153895.	14.07	110229.	20.02
	EPA SAMPLE NO.						
1	WBLK02	120886.	9.71	279883.	14.02	183189.	19.69
2	WMSB	77039.	9.70	176274.	14.02	118247.	19.68
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

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* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS049 Date Analyzed: 03/04/03
Instrument ID: 5973 B Time Analyzed: 11:51

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	424798.		25.11		464197.		33.15		527990.		37.16	
	UPPER LIMIT	849596.		25.61		928394.		33.65		1055980.		37.66	
	LOWER LIMIT	212399.		24.61		232099.		32.65		263995.		36.66	
	EPA SAMPLE NO.												
1	WBLK02	366113.		24.12		447150.		32.07		548026.		36.01	
2	WMSB	234548.		24.12		282124.		32.06		351448.		36.01	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS050 Date Analyzed: 03/05/03
Instrument ID: 5973 B Time Analyzed: 11:50

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	66258.	9.71	158617.	14.03	107533.	19.69
	UPPER LIMIT	132516.	10.21	317234.	14.53	215066.	20.19
	LOWER LIMIT	33129.	9.21	79309.	13.53	53767.	19.19
	EPA SAMPLE NO.						
1	WBLK01	131436.	9.71	305642.	14.02	198911.	19.69
2	WBLK03	67372.	9.71	158968.	14.03	108735.	19.69
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
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RT LOWER LIMIT = - .50 minutes of internal standard RT

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* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Lab File ID (Standard): BS050 Date Analyzed: 03/05/03
Instrument ID: 5973 B Time Analyzed: 11:50

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	219978.		24.13		252530.		32.07		280305.		36.01	
	UPPER LIMIT	439956.		24.63		505060.		32.57		560610.		36.51	
	LOWER LIMIT	109989.		23.63		126265.		31.57		140153.		35.51	
	EPA SAMPLE NO.												
1	WBLK01	381174.		24.12		403768.		32.07		439355.		36.01	
2	WBLK03	223506.		24.12		255185.		32.06		312399.		36.01	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

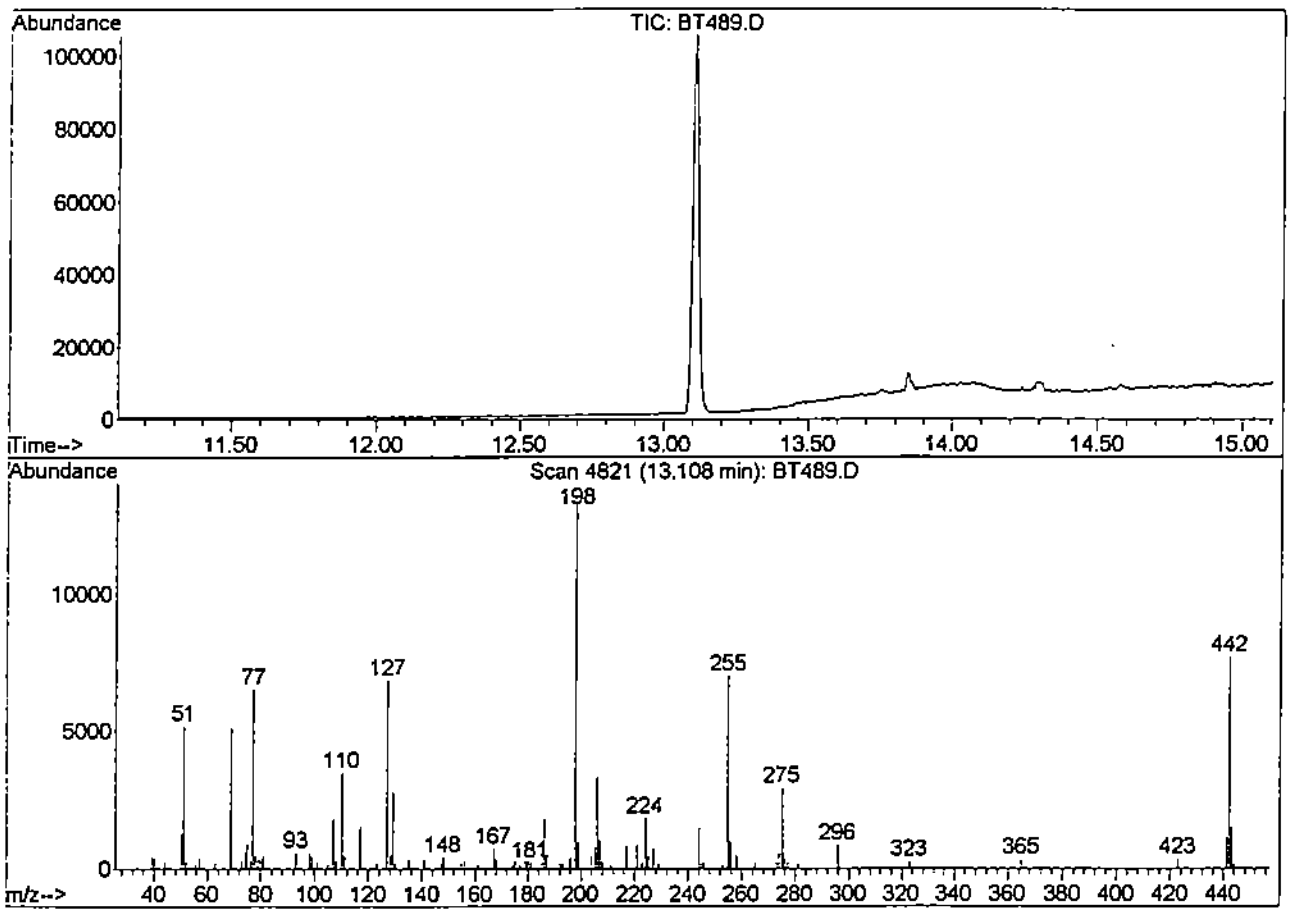
Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

RAW QC

DATA

DFTPP

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BT489.D Vial: 1
Acq On : 17 Dec 2002 9:41 am Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine

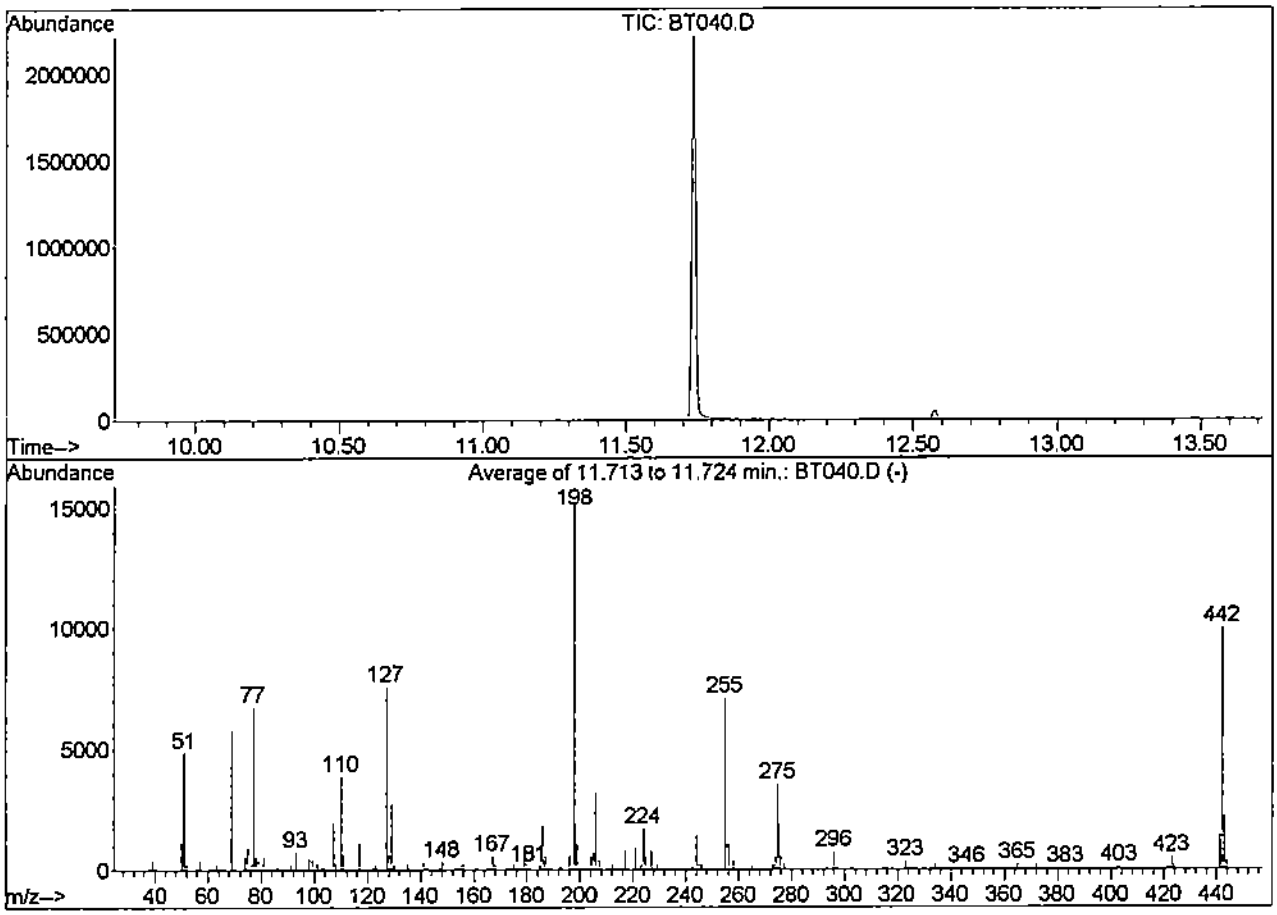


Spectrum Information: Scan 4821

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.9	5183	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.3	5111	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	51.5	6864	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	13337	PASS
199	198	5	9	7.4	985	PASS
275	198	10	30	21.9	2921	PASS
365	198	1	100	2.5	334	PASS
441	443	0.01	100	78.0	1169	PASS
442	198	40	100	57.8	7709	PASS
443	442	17	23	19.4	1499	PASS

DFTPP

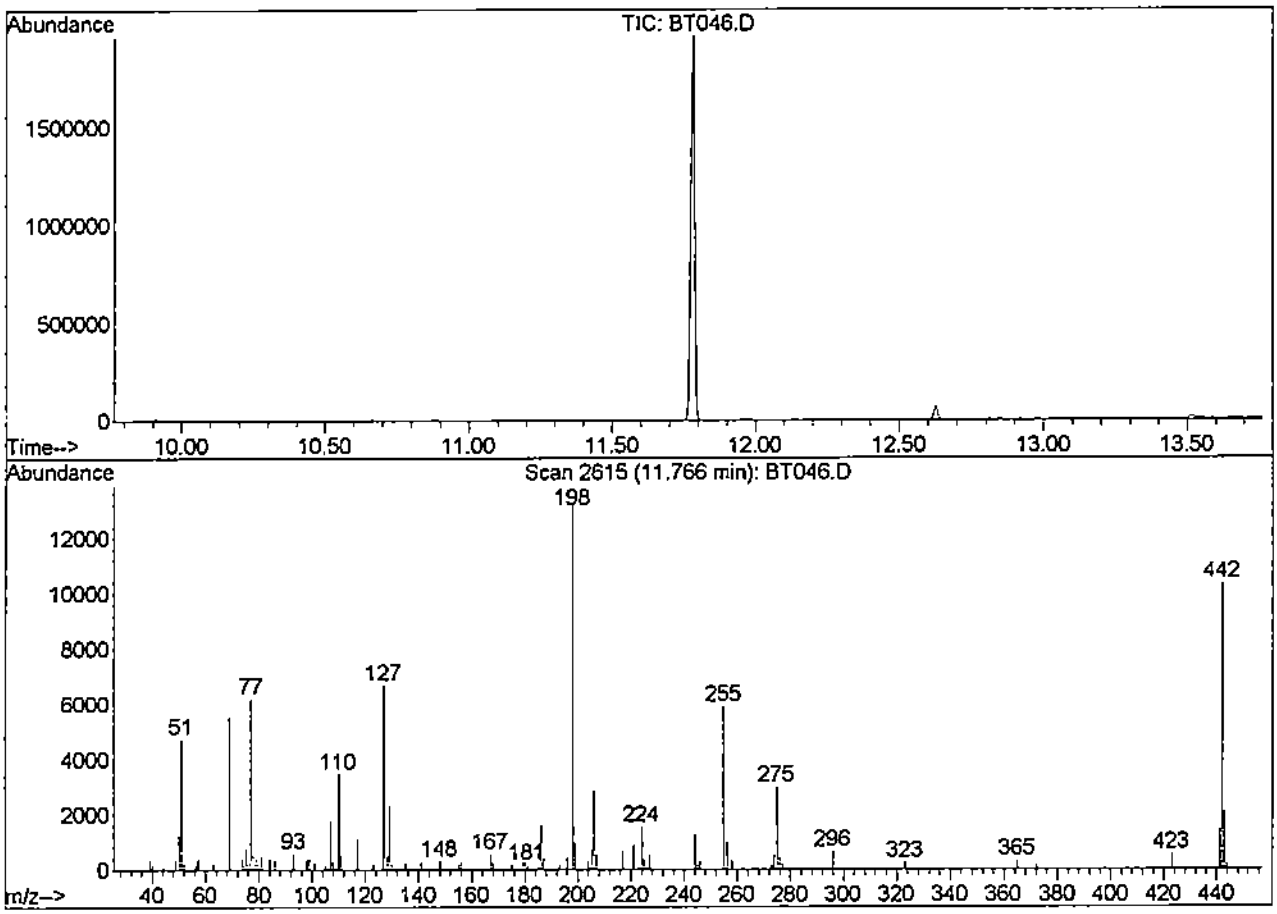
Data File : C:\MSDCHEM\1\DATA\18FEBJ21.B\BT040.D Vial: 1
Acq On : 18 Feb 2003 5:39 pm Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine



Spectrum Information: Average of 11.713 to 11.724 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.0	4869	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.0	5782	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.9	7587	PASS
197	198	0.00	1	1.0	147	PASS
198	198	100	100	100.0	15209	PASS
199	198	5	9	7.3	1110	PASS
275	198	10	30	23.3	3547	PASS
365	198	1	100	1.4	216	PASS
441	443	0.01	100	67.3	1482	PASS
442	198	40	100	65.8	10004	PASS
443	442	17	23	22.0	2201	PASS

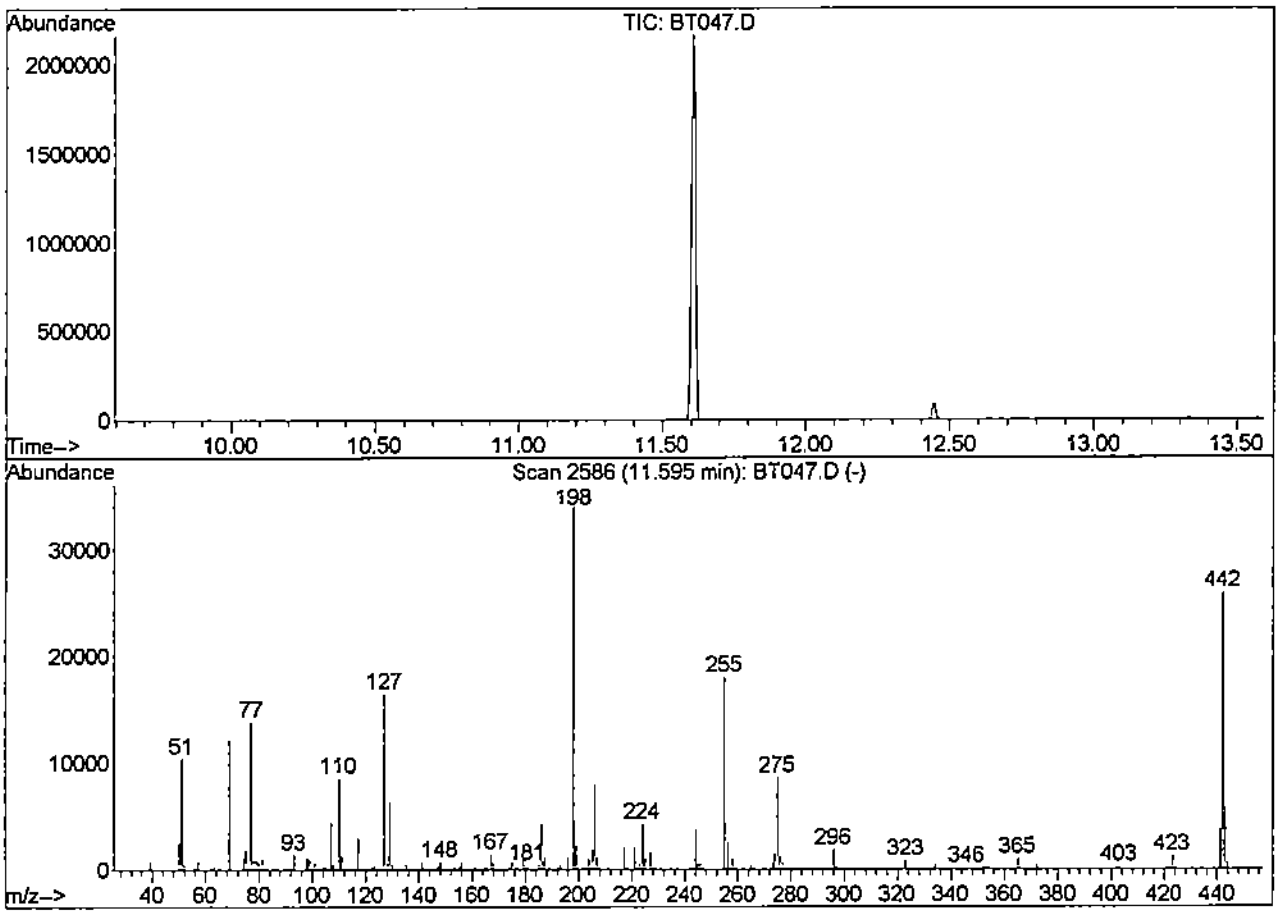
Data File : C:\MSDCHEM\1\DATA\27FEBL16.B\BT046.D Vial: 1
Acq On : 27 Feb 2003 11:48 am Operator:
Sample : DFTPP Inst : gcms b
Misc : ERM[DATA]LIST[VDemo]ID[57] Multiplr: 1.00
MS Integration Params: EVENTS2.E
Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine



Spectrum Information: Scan 2615

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	4737	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.7	5525	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.5	6698	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	13261	PASS
199	198	5	9	7.7	1015	PASS
275	198	10	30	22.5	2986	PASS
365	198	1	100	2.4	315	PASS
441	443	0.01	100	69.3	1435	PASS
442	198	40	100	77.9	10329	PASS
443	442	17	23	20.1	2072	PASS

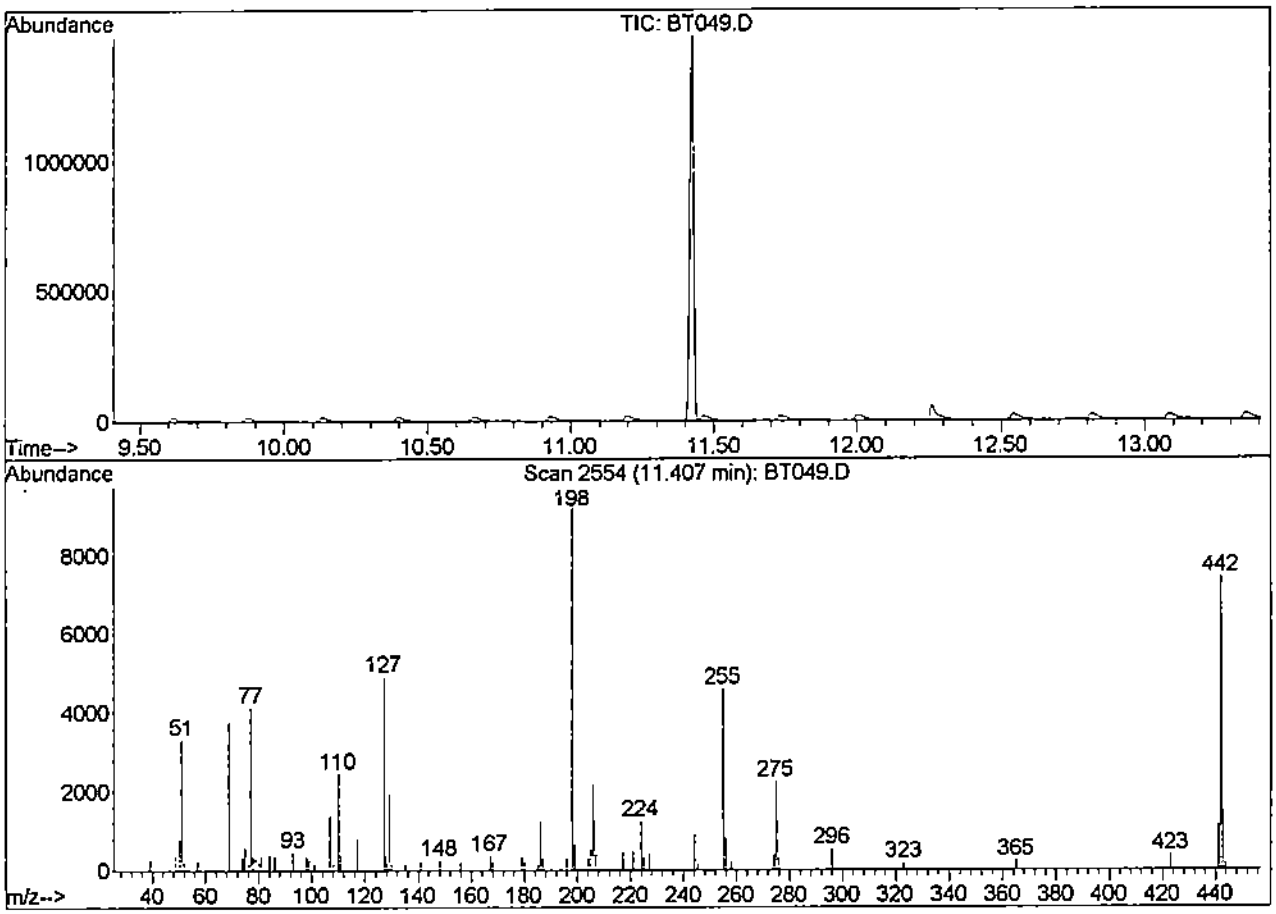
Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BT047.D Vial: 1
Acq On : 28 Feb 2003 10:00 am Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine



Spectrum Information: Scan 2586

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.2	10391	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.3	12156	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	47.9	16482	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	34398	PASS
199	198	5	9	6.9	2381	PASS
275	198	10	30	25.0	8607	PASS
365	198	1	100	2.9	1003	PASS
441	443	0.01	100	64.5	3775	PASS
442	198	40	100	75.3	25893	PASS
443	442	17	23	22.6	5854	PASS

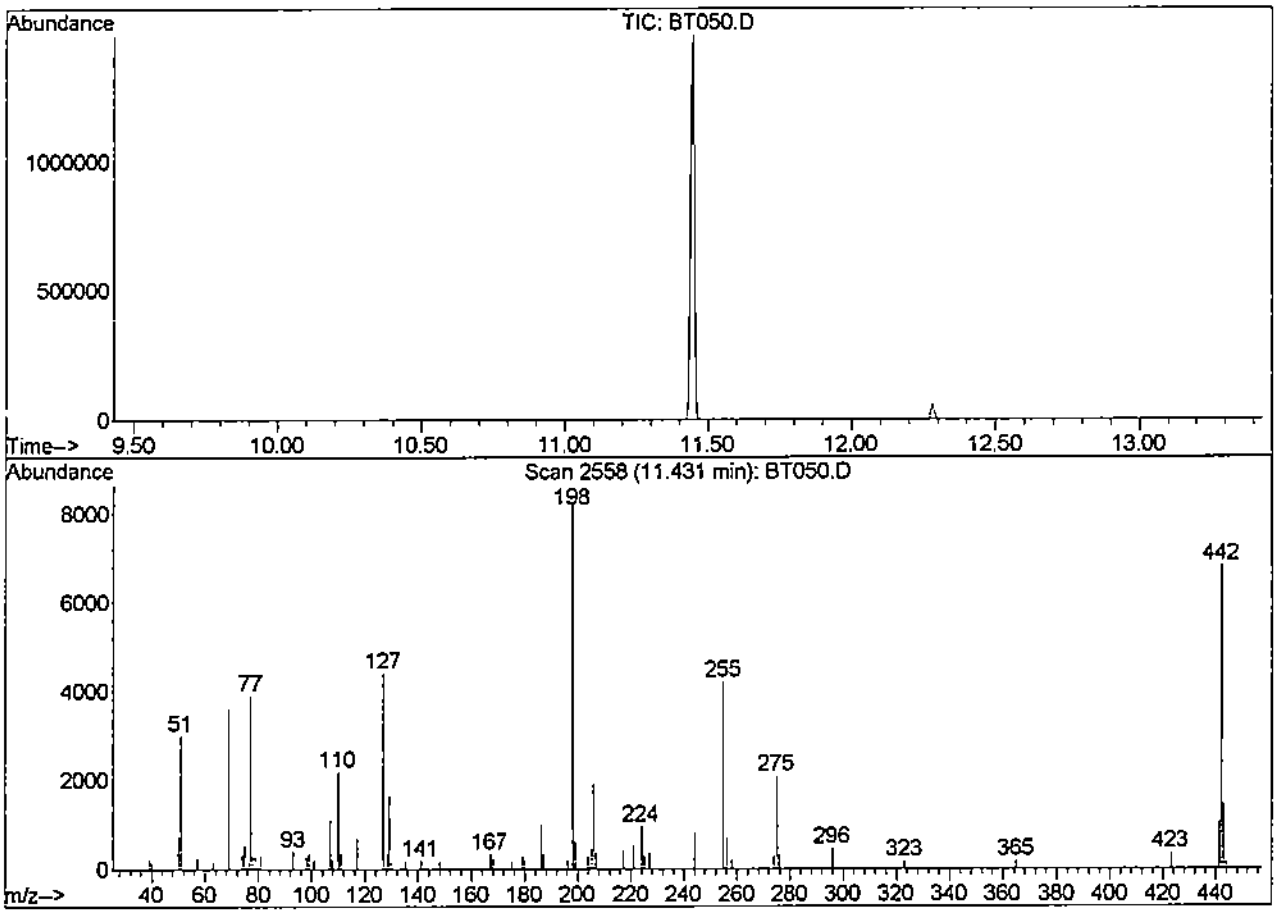
Data File : C:\MSDCHEM\1\DATA\03MARJ34.B\BT049.D Vial: 1
Acq On : 4 Mar 2003 11:19 am Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine



Spectrum Information: Scan 2554

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.6	3315	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.5	3770	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	52.8	4915	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	9302	PASS
199	198	5	9	7.2	674	PASS
275	198	10	30	24.1	2244	PASS
365	198	1	100	2.4	225	PASS
441	443	0.01	100	73.6	1118	PASS
442	198	40	100	79.7	7416	PASS
443	442	17	23	20.5	1520	PASS

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\BT050.D Vial: 1
Acq On : 5 Mar 2003 11:20 am Operator:
Sample : DFTPP Inst : gcms b
Misc : ERM[DATA]LIST[VDemo]ID[57] Multiplr: 1.00
MS Integration Params: EVENTS2.E
Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine



Spectrum Information: Scan 2558

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	2995	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.6	3597	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.4	4409	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	8249	PASS
199	198	5	9	7.6	631	PASS
275	198	10	30	25.3	2090	PASS
365	198	1	100	2.1	176	PASS
441	443	0.01	100	72.6	1055	PASS
442	198	40	100	82.7	6824	PASS
443	442	17	23	21.3	1454	PASS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/12/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0508

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/05/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

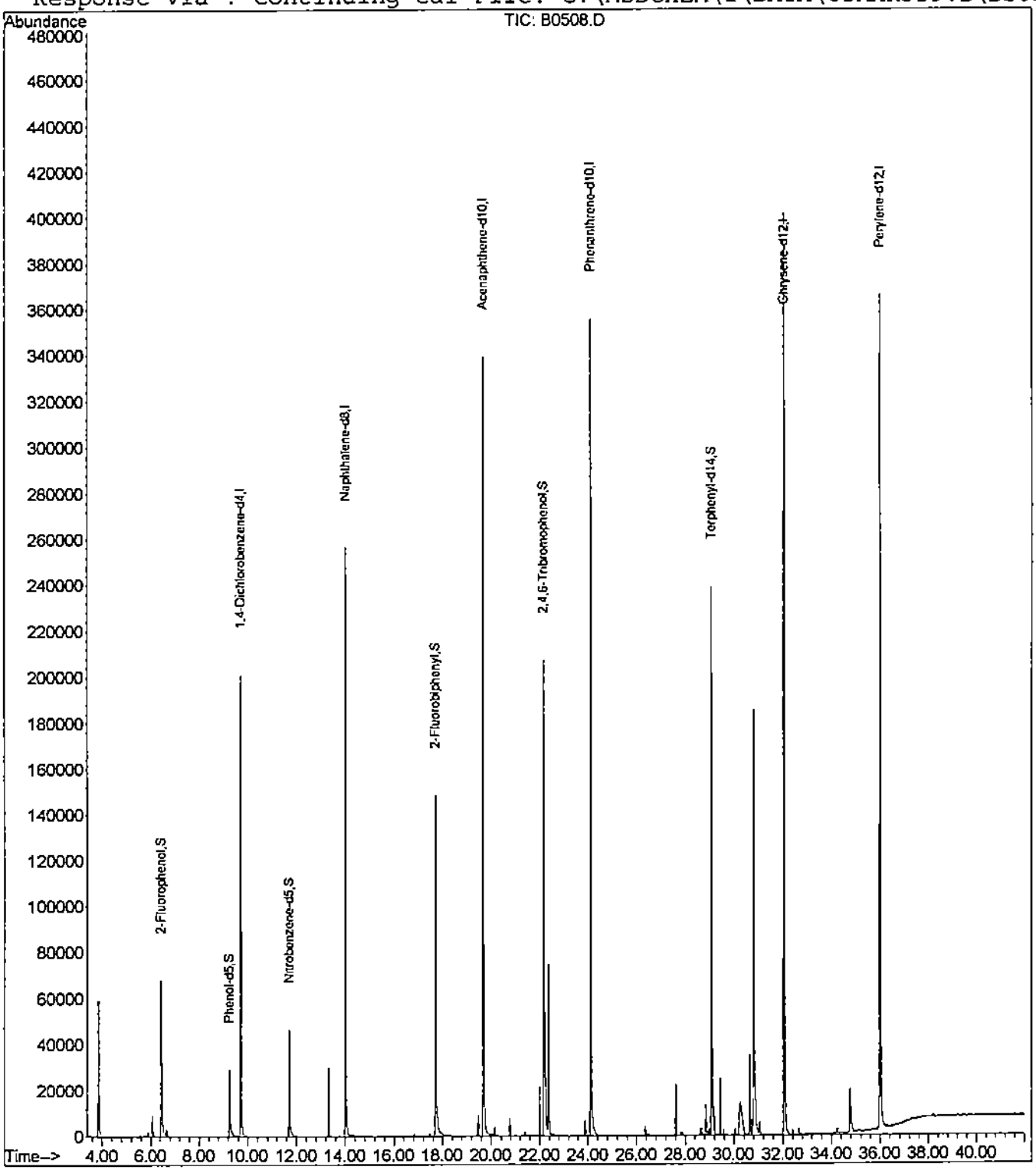
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
120-82-1	1,2,4-Trichlorobenzene	5.	U
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\B0508.D Vial: 3
Acq On : 5 Mar 2003 12:43 pm Operator:
Sample : wblk 2/12/03 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:32 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\B0508.D Vial: 3
Acq On : 5 Mar 2003 12:43 pm Operator:
Sample : wblk 2/12/03 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 16:02:22 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 16:02:02 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.71	152	131436	40.00	ug	0.00
21) Naphthalene-d8	14.02	136	305642	40.00	ug	-0.01
36) Acenaphthene-d10	19.69	164	198911	40.00	ug	0.00
56) Phenanthrene-d10	24.12	188	381174	40.00	ug	0.00
70) Chrysene-d12	32.07	240	403768	40.00	ug	0.00
78) Perylene-d12	36.01	264	439355	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.44	112	81744	40.90	ug	0.00
3) Phenol-d5	9.24	99	54955	15.26	ug	0.00
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.70	82	85717	23.18	ug	-0.01
40) 2-Fluorobiphenyl	17.72	172	187700	23.43	ug	0.00
59) 2,4,6-Tribromophenol	22.18	330	187811	45.96	ug	0.00
72) Terphenyl-d14	29.08	244	235431	25.92	ug	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/14/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0499

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/14/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/04/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

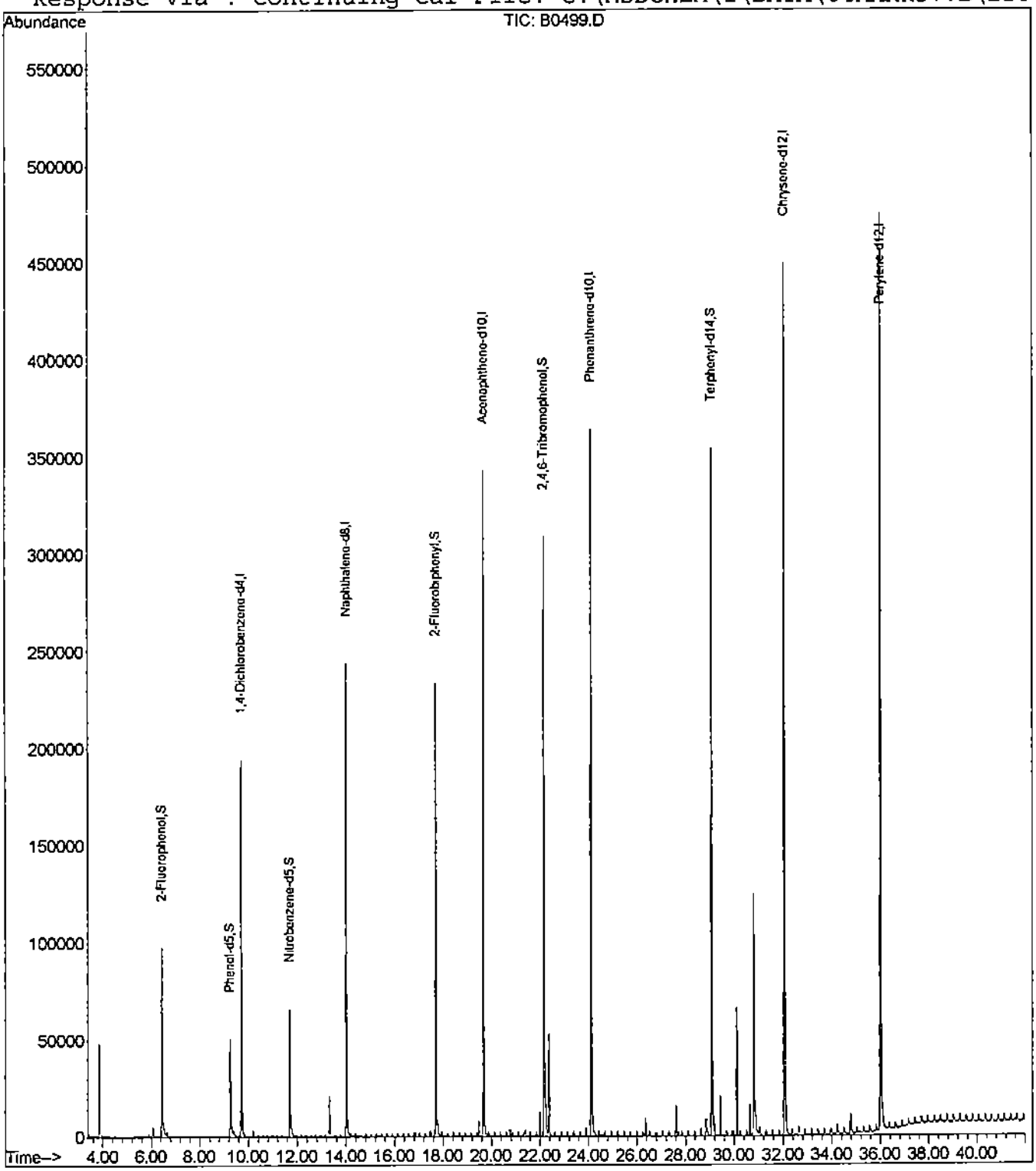
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	5.	U
621-64-7	n-Nitroso-di-n-propylamine	5.	U
120-82-1	1,2,4-Trichlorobenzene	5.	U
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
121-14-2	2,4-Dinitrotoluene	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
84-74-2	Di-n-butylphthalate	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\B0499.D Vial: 5
Acq On : 4 Mar 2003 2:30 pm Operator:
Sample : WBLK 2/14/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:30 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\B0499.D Vial: 5
Acq On : 4 Mar 2003 2:30 pm Operator:
Sample : WBLK 2/14/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 09:40:43 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 09:37:41 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.71	152	120886	40.00	ug	0.01
21) Naphthalene-d8	14.02	136	279883	40.00	ug	0.00
36) Acenaphthene-d10	19.69	164	183189	40.00	ug	0.00
56) Phenanthrene-d10	24.12	188	366113	40.00	ug	0.00
70) Chrysene-d12	32.07	240	447150	40.00	ug	0.00
78) Perylene-d12	36.01	264	548026	40.00	ug	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	6.45	112	107713	61.61	ug	0.01
3) Phenol-d5	9.25	99	83254	25.06	ug	0.03
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.70	82	109186	32.80	ug	0.00
40) 2-Fluorobiphenyl	17.71	172	239626	34.01	ug	0.04
59) 2,4,6-Tribromophenol	22.18	330	273305	80.26	ug	-0.03
72) Terphenyl-d14	29.09	244	339795	33.30	ug	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/18/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0509

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/05/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

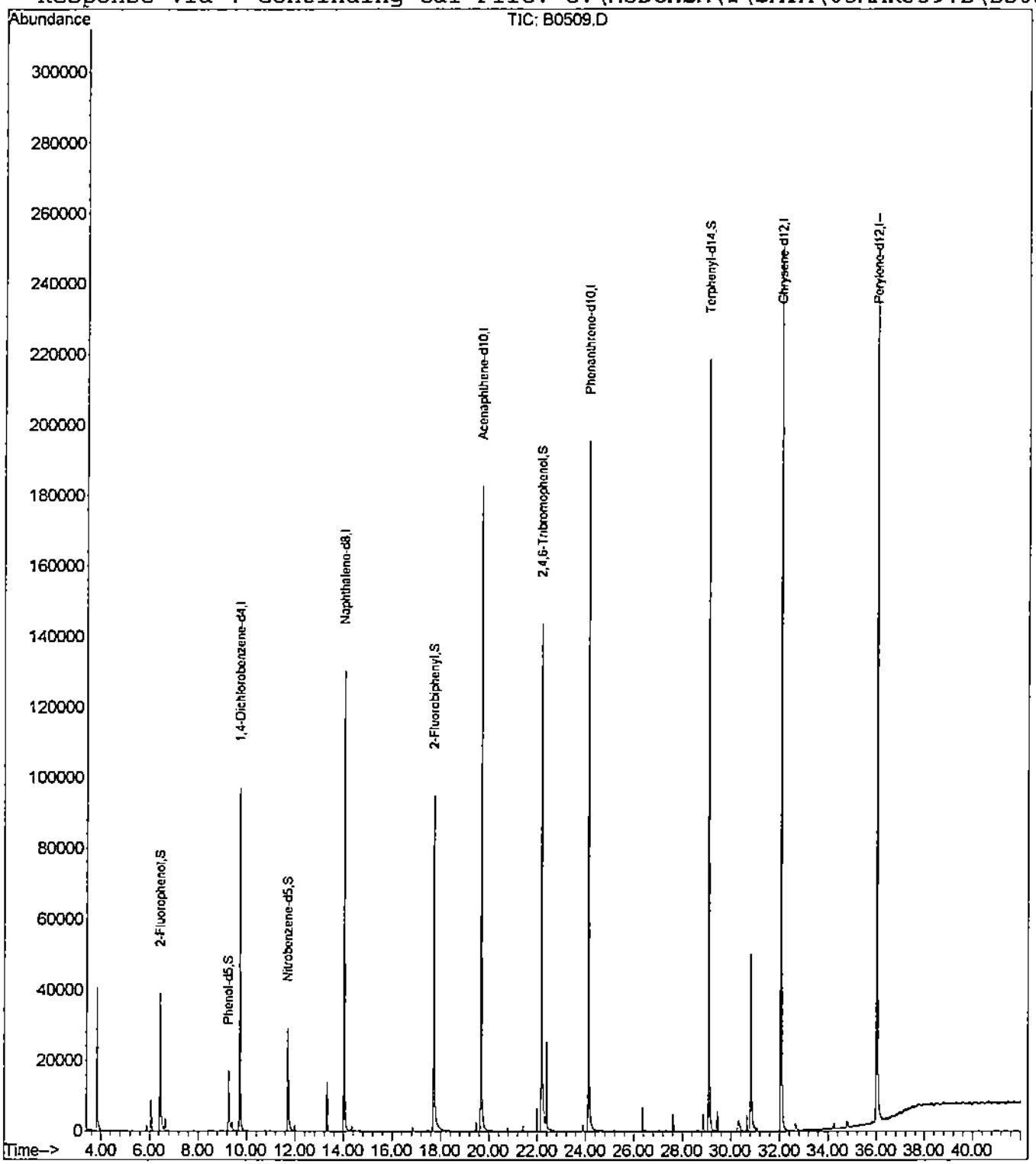
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\B0509.D Vial: 4
Acq On : 5 Mar 2003 1:51 pm Operator:
Sample : wblk 2/18/03 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 10 10:33 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\05MARJ59.B\B0509.D Vial: 4
Acq On : 5 Mar 2003 1:51 pm Operator:
Sample : wblk 2/18/03 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 16:03:40 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 16:02:02 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\05MARJ59.B\BS050.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.71	152	67372	40.00	ug	0.00
21) Naphthalene-d8	14.03	136	158968	40.00	ug	0.00
36) Acenaphthene-d10	19.69	164	108735	40.00	ug	0.00
56) Phenanthrene-d10	24.12	188	223506	40.00	ug	0.00
70) Chrysene-d12	32.06	240	255185	40.00	ug	0.00
78) Perylene-d12	36.01	264	312399	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.44	112	53595	52.31	ug	0.00
3) Phenol-d5	9.24	99	33025	17.89	ug	0.00
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.71	82	57276	29.78	ug	0.00
40) 2-Fluorobiphenyl	17.72	172	130191	29.73	ug	0.00
59) 2,4,6-Tribromophenol	22.18	330	158395	66.11	ug	0.00
72) Terphenyl-d14	29.09	244	220371	38.38	ug	0.00
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMSB

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: WMSB 2/14/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0500

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/14/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/04/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

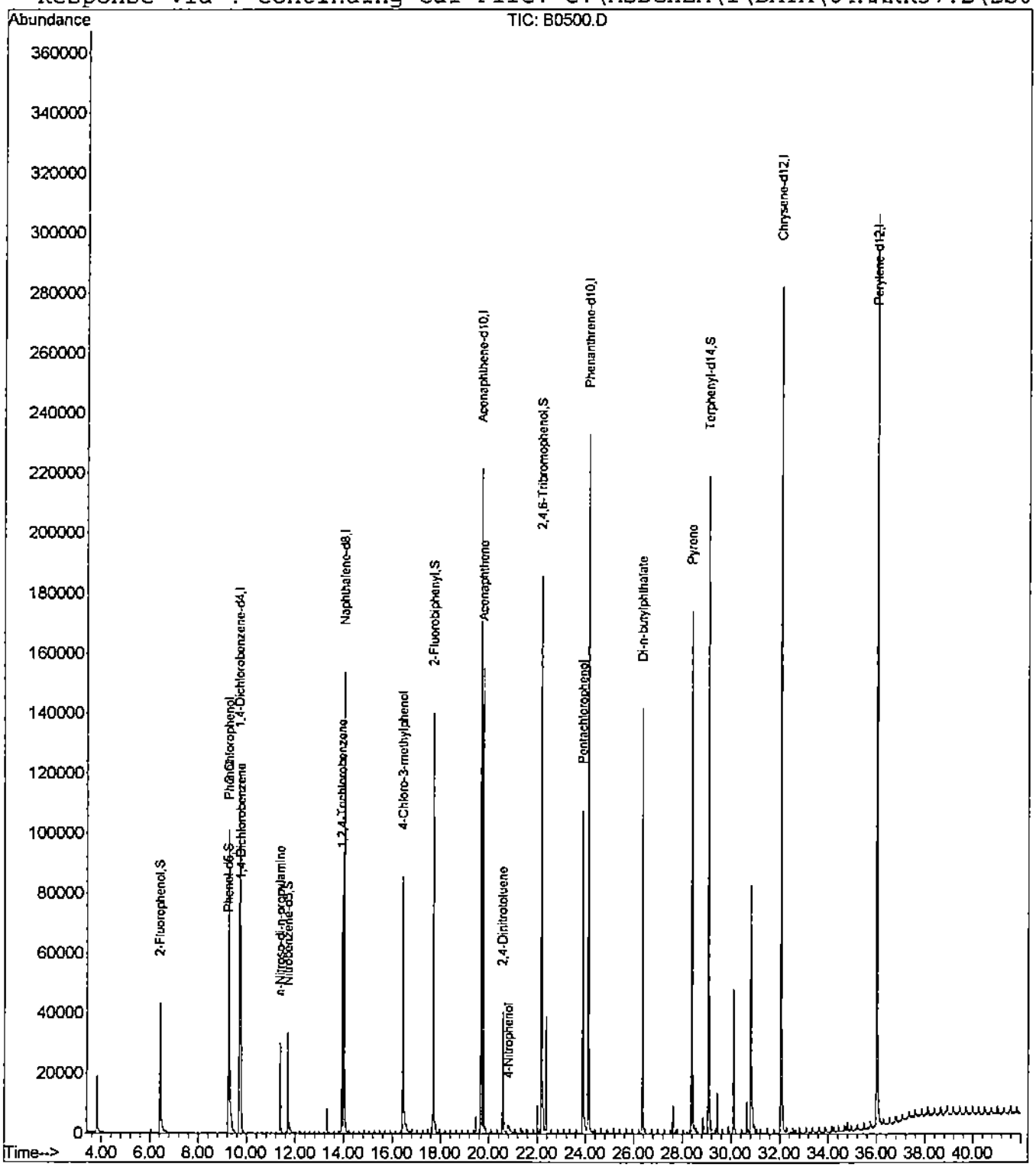
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-46-7	1,4-Dichlorobenzene	12.	
621-64-7	n-Nitroso-di-n-propylamine	12.	
120-82-1	1,2,4-Trichlorobenzene	13.	
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	14.	
132-64-9	Dibenzofuran	5.	U
121-14-2	2,4-Dinitrotoluene	11.	
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
84-74-2	Di-n-butylphthalate	15.	
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	11.	
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\B0500.D Vial: 6
Acq On : 4 Mar 2003 3:23 pm Operator:
Sample : WMSB 2/14/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 7 11:05 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (Chemstation Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 15:58:55 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\04MARK57.B\B0500.D Vial: 6
Acq On : 4 Mar 2003 3:23 pm Operator:
Sample : WMSB 2/14/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 05 09:42:00 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 05 09:37:41 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\04MARK57.B\BS049.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.70	152	77039	40.00	ug	0.00
21) Naphthalene-d8	14.02	136	176274	40.00	ug	0.00
36) Acenaphthene-d10	19.68	164	118247	40.00	ug	0.00
56) Phenanthrene-d10	24.12	188	234548	40.00	ug	0.00
70) Chrysene-d12	32.06	240	282124	40.00	ug	0.00
78) Perylene-d12	36.01	264	351448	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.43	112	58144	52.19	ug	0.00
3) Phenol-d5	9.24	99	50635	23.91	ug	0.02
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.69	82	61614	29.39	ug	0.00
40) 2-Fluorobiphenyl	17.71	172	147392	32.41	ug	0.04
59) 2,4,6-Tribromophenol	22.17	330	161615	74.08	ug	-0.04
72) Terphenyl-d14	29.08	244	207099	32.17	ug	-0.01
Target Compounds						Qvalue
7) Phenol	9.27	94	56815m	20.98	ug	
10) 2-Chlorophenol	9.26	128	105698	40.76	ug	67
12) 1,4-Dichlorobenzene	9.75	146	78085	24.73	ug	70
19) n-Nitroso-di-n-propylamine	11.38	70	23832	23.29	ug	71
29) 1,2,4-Trichlorobenzene	13.93	180	90806	26.14	ug	51
34) 4-Chloro-3-methylphenol	16.44	107	66408	37.09	ug	92
47) Acenaphthene	19.77	153	206031	27.59	ug	48
49) 4-Nitrophenol	20.83	109	7052m	5.04	ug	
51) 2,4-Dinitrotoluene	20.58	165	38456m	22.84	ug	
63) Pentachlorophenol	23.88	266	96024	39.49	ug	53
68) Di-n-butylphthalate	26.35	149	194500	30.11	ug	98
71) Pyrene	28.39	202	183816m	21.71	ug	

(#) = qualifier out of range (m) = manual integration

CLP

SAMPLE CALCULATIONS FOR SEMI-VOLATILE ORGANICS:

1) RRF of Acenaphthene from the STD050 analyzed on 3/4/03:

$$= \frac{\text{area of Acenaphthene in std.}}{\text{area of internal std}} \quad \mathbf{X} \quad \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{696025}{220457} \times \frac{40}{50} = 2.526$$

2) Concentration of Acenaphthene in sample WMSB (AES sample number Matrix Spike Blank):

$$\text{ug/L} = \frac{\text{area of Acenaphthene in sample}}{\text{area of internal standard in sample}} \times \frac{\{\text{amount of internal std. (ng)}\}\{\text{Vol. extract (ul)}\}(\text{Df})}{\{\text{Vol. extracted (ml)}\}(\text{RRF})\{\text{Vol. injected(uL)}\}}$$

$$= \frac{206031}{118247} \times \frac{(40)(1000)(1)}{(1000)(2.526)(2)} = 13.8 \text{ ug/L}$$

which is reported as 14 ug/L on the Form I for Semi-Volatile Organics

3) Calculation of spike recovery for Acenaphthene for Matrix Spike Blank:

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Acenaphthene} = \frac{(13.8 - 0.0)}{25.0} \times 100 = 55.2\ \%$$

alyst STAN SAIA

te Extracted: 2/12/03 #238

lvent 1 Lot No.: 42322

lvent 2 Lot No.: 050115 MC/ACE

Sodium Sulfate Lot No.: 140308

NaOH Lot No: 10703 NaOH

Acid Lot No.: 021015 H_2SO_4

Internal Standard Lot No.: 020618 ISTD

B/N Surrogate Lot No.: 050216WBN 021210SBN

Acid Surrogate Lot No.: 021210WACID 021210SACID

B/N Spike Solution Lot No.: 021219WBNSP 050204SBNSP

Acid Spike Solution Lot No.: 021219WACSP 050204SACSP

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
	2/12 ACID BLK	DI	1L	Phenol	<2	-		100 ul ACID	1.0	2/12B	2A
	2/12 ACID MSB	L				-	70 ul SD 100 ppm Acid				3A
PITTH TECH	030212 C2	W				-					4A
	4					-					5A
	5					-					6A new septum
	2/12 Benz BLK	DI	1L	Benz					1.0	2/18B	2B
	2/12 Benz MSB	L					1 ml 10 ppm Benz ACN				3B
tsburgh ity DO	030207 F1	W									4B
	030207 G1	L									5B
	2/12 WBLK	DI	1L	BNA	>11	<2		1ml WBNA	1.0	2/13A	1A
LS/DAMES	030207 J1	W	900 mls	PAH	-	-		1 ml WBN		2/18D	2C
	2		950 mls		-	-					3C
	3		910 mls		-	-					4C
	4		950 mls		-	-					5C
											020623

23

yst STAN SAIA

Extracted: 2/14/03 (#24)

nt 1 Lot No.: 42317

nt 2 Lot No.: 030115 MC/MCE

Sodium Sulfate Lot No.: 140308

NaOH Lot No: 10703 NaOH

Acid Lot No.: 021015 H_2SO_4

Internal Standard Lot No.: 020618 ISTD

BNA Surrogate Lot No.: 030206 WBNA 030206 SBNA

B/N Surrogate Lot No.: 030210 WBN 021210 SBN

Acid Surrogate Lot No.: 021210 WACID 021210 SACID

B/N Spike Solution Lot No.: 021219 WBNsp 030204 SBNsp

Acid Spike Solution Lot No.: 021219 WACsp 030204 SACsp

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
Via Pace	030213034-001	W	1L	PAH	-	-		1 ml WBN	1.0	2/14A	4A
	2/14 EXBLK	DI	1L	BNA	>11	<2		1 ml WBNA	1.0	2/14B	1A
	2/14 LCSB	L	L	L	L	L	1ml WBNsp 1ml WACsp	L	L	L	2A
CAN	030212 F4	W	960 ml	Phenol	<2	-		1 ml WACID	L	2/18C	3A
TREPET	030211004-1	W	~~1L~~ 1L ml.	BNprep	>11	-		1 ml WBN	1.0	2/19A	4 B
L	2	L	L	L	L	-		L	L	L	5A
V	3	L	L	L	L	-		L	L	L	6A
	2/14 SBLK	Na_2SO_4	60 g	BNA	-	-		1 ml SBNA	2.0	2/18A	
	2/14 SMSB	L	L	L	-	-	1ml SBNsp 1ml STDsp	L	L	L	
DUPST	030214 C1	S	30 g	CLP BNA	-	-		L	L	L	2
	2	L	L	L	-	-		L	L	L	2
Collins	030214 I1	W	950 ml	TCL BNA	>11	<2		1 ml WBNA	1.0	2/14C	2B
Via Pace	030214030-1	W	1L	CLP PAH	-	-		1 ml WBN	1.0	2/18A	2C

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Analyst: STAN SALA

Date Extracted: 2/18/03 #240 #241

Solvent 1 Lot No.: 42317

Solvent 2 Lot No.: 050115 MC/ACE

Sodium Sulfate Lot No.: 140308

NaOH Lot No: 10705 Li.OH

Acid Lot No.: 021015 H_2SO_4

Internal Standard Lot No.: 020618 FSTD

BNA Surrogate Lot No.: 030206WBNA 030206SBNA

B/N Surrogate Lot No.: 030210WBN 021210SBN

Acid Surrogate Lot No.: 021210WACID 021210SACID

B/N Spike Solution Lot No.: 021219WBNsp 030201SBNsp

Acid Spike Solution Lot No.: 021219WAcsp 030204SAcsp

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
	2/18 WBLK	DI	1L	BNA	>11	<2		1 mL WBNA	1.0	2/19A	1A
	2/18 TCLPsp	L	L	V	V	V	same TCLPsp	V	V	2/20B	2A
URS	030212M1	W	990mls	PAH	–	–		1 mL WBN	1.0	2/19B	2B
V	2	V	L	V	–	–		V	V	V	3A
	3		950mls		–	–					4A
	4		900mls		–	–					5A
	5		L		–	–					6A

000032

B21

Analyst	Date	Time	Job #	File ID	Sample ID 030210E03	DF	QA/QC Checks: Surrogate Check	QA/QC Checks: Internal Std Check	Comments
				BC377	~~030214C01~~		OK	OK	~~D.I. Check~~
	111515			BC378	C030214701		OK	OK	D.I. Check
	254611			BC379	SBLK 2/13/03		OK	OK	
	144242			BC380	030212C-01		OK	OK	MB
	233230			BC381	LCSW 2/13/03		OK	OK	
	321257			BC382	030211M01		28 41 ✓	OK	
	200203			BC383	LCS 2/13		OK	OK	MB HIGH @ECD
		9:50		BC384	SBLK 2/14		OK	OK	
LHT	2/15/03	7:36		BT039	OK				
				BS039	QC W/L				
				BC385	030214C30-001B	✓	OK	OK	MP
	104986			BC386	030212C03		32 21 33	↓↓VVV	3g → 1mL
	223847			387	BTC				
	137134			388	↓				
	267488			389	~~SBLK 2/14~~				
	346183			390	~~030214C01~~ 103				
	310258			391	~~104 C02~~				Blank
		5:39		BT040	OK				mb and lcsb.
				BS040					
				BC392	SBLK 2/14		OK	OK	
				393	030214C01 103		V18 VVVV	OK	Extract MB HITS
				394	104 - C02		V23 VV14V	OK	↓ ↓
		9 34		395	030207B01 97		OK	OK	

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
				B0459	030225SWA		good	OK	
				B0460	030225WBLA		√√√√√	OK	
	2/27/03		-	Col. maintenance		-			
		11.48		B0462	OK	√			
	93168			B0463	scaled	√			
	213001			B0461	SBLa 2/19/03	√	OK	OK	
	134078			B0462	030219C01	√ ICEX	√√√√√	OK	
	271539			B0463	104 02	√√	OK	OK	
	299445			B0464	SBLa 2/20/03	√	OK	OK	
	354641			B0465	030220E02	MS √	OK	OK	
				B0466	E02	MSD √	OK	OK	
				B0467	030207T03		OK	OK	
				B0468	T04		OK	OK	
				B0469	030212M01		OK	OK	
				B0470	2		OK	OK	
				B0471	3		OK	OK	
		01		B0472	4		OK	OK	
				B0473	5		OK	OK	

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
UHT	2/28/03	10:39AM		BTC47		✓			
				BSC47	9cd'd - PA11 CU				
				BC474	C20212H03		OK	OK	
	170487			475	MC4		OK	OK	
	239201			476	MC5		OK	OK	
	158142			477	LCSW 2/20/03		OK	OK	
	324856			478	LCSS 2/20/03		OK	OK	BN-gard!
	330846			479	030218T01		OK	OK	
	364804			480	2		OK	OK	
		5:55PM		481	3		OK	OK	
				482	4		did not run QC		inlet pressure not at ground.
				483	5				
				484	6				
				485	LCC226AC1				
				486	LCS 2/27				
				487	Rerun 5D				
UHT	3/3/03			BT048	OK				
				B5048	9cd'd - TCLP				
	85945			B0483	030227C01		OK	OK	
	203580			484	2		OK	OK	
	135329			485	3		OK	OK	
	284578			486	4		OK	OK	
	336720			487	5		OK	OK	
	384657			488	6		OK	OK	
				489	7		9.5/11	OK	
				490	LCSW 2/28		OK	OK	

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
				BC491	LCS 2/12		did not go -		what pressure
				BC492	LCS 2/13				did not get
				BC493	LCS 2/14				down to
				BC494	LCSSS 2/14				Setpoint -
				BC495	030211M01				stayed in
				BC496	Mef 50				prefit
	3/9/03			w/ maintenance					
				BTC49	CC				
				BSC49	CC				
	118173			5C497	LCS 2/12		OK	OK	
	307892			498	" 2/13		OK	VVVVV	
	220457			499	" 2/14		OK	OK	
	424782			500	LCSSS 2/14		OK	OK	
	464197			501	030211M01		OK	OK	
	527990			562	030211SC4		OK	OK	
				503	"		OK	VVVVV	
				504	"		OK	OK	
				505	030226A01		- dilute -		
				506	LCS 2/27		OK	OK	Good!
				507	Mef 50		—	VVVVV	100/25

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
UH	2/5/03	1:20a		BT050	OK				
				BS050	qc ck				
				BC508	LCS 2/12		OK	OK	
	66258			BC509	LCS 2/13		OK	OK	
	158617			BC510	030226MC1	1/10		OK	
	107533			BC511	SBL 3/5/03		OK	OK	
	29970		7 →	512	SAMPLE 3/5/03		OK	OK	
	252550			513	030305-0013		OK	WW/TP	METHYS
	252565			514	-0026		OK	OK	DBL SURR.
				515	-0033		OK	OK	↓
				516	LCS 2/21		OK	OK	METHYS
				517	030227MB1		OK	OK	↓
				518	H03		OK	OK	↓
				BT051	OK				
				BS051	LL. PYR.				
				BS052	↓				
				BS053	↓	✓	—	677110	GRAY
				BS519	LCS 3/5		OK	✓	
				BC520	030227EB1		OK	✓	
				BC521	LMSR 3/5		OK	✓	
				BC522	030227EB1				METHYS
				BS523	5ppb x 9-30				

REVIEW _____ DATE _____

INORGANIC - METALS

ANALYSIS

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ADIRONDACK_ENVIRONMENTAL_ Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIMI0102

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
_030207F01_____	_030207F01___
_030207F01_D___	_030207F01_D_
_030207F01_S___	_030207F01_S_
_030207F01_F___	_030207F01_F_
_030207F01_FD__	_030207F01_FD
_030207F01_FS__	_030207F01_FS
_030207G01_____	_030207G01___
_030207G01_D___	_030207G01_D_
_030207G01_S___	_030207G01_S_
_MEGCIM0102____	_MEGCIM0102__
_MEGCIM0102F___	_MEGCIM0102F_
_MEGDD0237_____	_MEGDD0237___
_MEGDD0237F____	_MEGDD0237F__
_MEGDD0241_____	_MEGDD0241___
_MEGDD0241F____	_MEGDD0241F__
_MEGDIM8618____	_MEGDIM8618__
_____	_____
_____	_____
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES_

Were ICP background corrections applied ? Yes/No YES_
If yes - were raw data generated before application of background corrections ? Yes/No NO__

Comments:

_____
_____
_____
_____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Sheryl L. MacHugo Name: Sheryl L. MacHugo

Date: 4/7/03 Title: Inorganics Manager

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ADIRONDACK_ENVIRONMENTAL_ Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIM0102

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
_MEGDD0117_____	_MEGDD0117___
_MEGDD0117_F___	_MEGDD0117_F_
_MEGDD0236_____	_MEGDD0236___
_MEGDD0236_F___	_MEGDD0236_F_
_MEGDD0239_____	_MEGDD0239___
_MEGDD0239_F___	_MEGDD0239_F_
_MEGDIM0117____	_MEGDIM0117__
_MEGDIM0236____	_MEGDIM0236__
_MEGDIM0236_F__	_MEGDIM0236_F
_MEGUSH8602____	_MEGUSH8602__
_MEGUSH8602_F__	_MEGUSH8602_F
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES_

Were ICP background corrections applied ? Yes/No YES_
If yes - were raw data generated before application of background corrections ? Yes/No NO__

Comments:

_____
_____
_____
_____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGCIM0102_

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1650		J	P
7440-36-0	Antimony	3.1	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	458			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	56100			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	847			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	56.7			P
7440-42-8	Boron				NR

AMK 6/23/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

_____

_____

_____

_____

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGCIM0102_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13.3	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	3.0	B		P
7440-39-3	Barium	294			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron	12.1	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	614			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	6.0		J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	6.2	B		P
7440-42-8	Boron				NR

AMK 6/23/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0117

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0117__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	520000			P
7440-36-0	Antimony	21.0	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	8280			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	1530			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1630			P
7439-89-6	Iron	1670000		J	P
7439-92-1	Lead	2.2	B	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	21900			P
7439-97-6	Mercury	0.94			AV
7440-02-0	Nickel	637			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	501			P
7440-66-6	Zinc	1990			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0117_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	112	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.1	B		P
7440-39-3	Barium	466			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	315			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	9.3	B		P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0236

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0236__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	560			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1740			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1110			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	166			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.9	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0236_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.3	B		P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.7	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	46.9	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	155			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0237__

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8610		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	627			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.3			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	16800			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	172			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	14.6	B		P
7440-66-6	Zinc	46.2			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0237_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27.3	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.5	B		P
7440-39-3	Barium	436			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.1	B		P
7439-89-6	Iron	13.7	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	12.8	B		P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.58	B		P
7440-42-8	Boron				NR

AMK 6/23/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0239__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	47000			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1790			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	67.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	68.3			P
7439-89-6	Iron	63300			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	732			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	61.4			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	65.8			P
7440-66-6	Zinc	126			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0239_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.6	B		P
7440-39-3	Barium	434			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	13.3	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	29.0			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.3	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0241__

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3660		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1890			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	6340			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	79.9			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	14.4	B		P
7440-42-8	Boron				NR

AMK 6/18/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0241_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.5	B		P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	5.0	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	38.8			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.9	B	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	6.2	B		P
7440-42-8	Boron				NR

AMS 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0236

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0236_

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21300			P
7440-36-0	Antimony	7.9	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1080			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	56.6		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	55.1			P
7439-89-6	Iron	30800			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	441			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	43.0			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	24.1	B		P
7440-66-6	Zinc	84.2			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0236 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0236_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	4.1	B		P
7440-38-2	Arsenic	7.9	B		P
7440-39-3	Barium	592			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.7	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	14.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	25.1			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	1.7	B		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM8618_

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	730		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	431			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	1310			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	177			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	86.8			P
7440-42-8	Boron				NR

AMK 6/23/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8602_

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	503			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	97.0	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	31.3		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.5	B		P
7439-89-6	Iron	1080			P
7439-92-1	Lead	1.7	B	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	2430			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	11.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8602_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.0	B		P
7440-39-3	Barium	87.8	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	25.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1920			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

amk 6/4/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIMI0102

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	2000.0	2060.17	103.0	2000.0	2055.18	102.8	2214.21	110.7	P
Antimony	2000.0	1940.53	97.0	2000.0	1925.36	96.3	2038.09	101.9	P
Arsenic	2000.0	1993.62	99.7	2000.0	1986.86	99.3	2160.52	108.0	P
Barium	2000.0	2001.56	100.1	2000.0	1990.30	99.5	2023.89	101.2	P
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2014.98	100.7	2000.0	2006.50	100.3	2115.03	105.8	P
Cobalt									
Copper	2000.0	1976.30	98.8	2000.0	1973.79	98.7	2011.05	100.6	P
Iron	2000.0	2004.84	100.2	2000.0	2009.37	100.5	2118.24	105.9	P
Lead	2000.0	2009.57	100.5	2000.0	2009.98	100.5	2107.49	105.4	P
Magnesium									
Manganese	2000.0	1945.91	97.3	2000.0	1952.05	97.6	2050.51	102.5	P
Mercury									
Nickel	2000.0	2045.31	102.3	2000.0	2044.55	102.2	2000.09	100.0	P
Potassium									
Selenium	2000.0	2107.40	105.4	2000.0	2103.78	105.2	2081.08	104.1	P
Silver	500.0	503.20	100.6	500.0	497.96	99.6	516.41	103.3	P
Sodium									
Thallium									
Vanadium	2000.0	1999.70	100.0	2000.0	1997.18	99.9	2101.70	105.1	P
Zinc	2000.0	2030.89	101.5	2000.0	2030.73	101.5	2163.93	108.2	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIMI0102

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2208.24	110.4	2225.92	111.3	P
Antimony				2000.0	2097.28	104.9	2092.47	104.6	P
Arsenic				2000.0	2030.52	101.5	1808.60	90.4	P
Barium				2000.0	2055.62	102.8	2061.54	103.1	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2129.09	106.5	2131.82	106.6	P
Cobalt									
Copper				2000.0	2059.07	103.0	2066.62	103.3	P
Iron				2000.0	1971.05	98.6	1977.88	98.9	P
Lead				2000.0	2074.05	103.7	2060.76	103.0	P
Magnesium									
Manganese				2000.0	2122.20	106.1	2114.21	105.7	P
Mercury									
Nickel				2000.0	1834.25	91.7	1830.55	91.5	P
Potassium									
Selenium				2000.0	1945.05	97.3	1942.69	97.1	P
Silver				500.0	528.91	105.8	523.78	104.8	P
Sodium									
Thallium									
Vanadium				2000.0	2159.04	108.0	2160.21	108.0	P
Zinc				2000.0	1829.03	91.5	1824.94	91.2	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIM0102

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	2000.0	2174.68	108.7	2000.0	2133.65	106.7	1975.38	98.8	P
Antimony	2000.0	2126.19	106.3	2000.0	2134.39	106.7	2180.32	109.0	P
Arsenic	2000.0	1998.37	99.9	2000.0	2010.44	100.5	2060.71	103.0	P
Barium	2000.0	2087.71	104.4	2000.0	2086.49	104.3	2107.90	105.4	P
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2033.50	101.7	2000.0	2019.62	101.0	2034.75	101.7	P
Cobalt									
Copper	2000.0	2059.12	103.0	2000.0	2056.48	102.8	2069.95	103.5	P
Iron	2000.0	2019.66	101.0	2000.0	2037.47	101.9	2080.10	104.0	P
Lead	2000.0	2077.41	103.9	2000.0	2083.68	104.2	2161.25	108.1	P
Magnesium									
Manganese	2000.0	1994.89	99.7	2000.0	2009.51	100.5	2048.32	102.4	P
Mercury	2.0	1.99	99.5	2.0	1.94	97.0			AV
Nickel	2000.0	2076.08	103.8	2000.0	2060.65	103.0	2119.47	106.0	P
Potassium									
Selenium	2000.0	2084.02	104.2	2000.0	2092.15	104.6	2154.95	107.7	P
Silver	500.0	506.95	101.4	500.0	503.48	100.7	511.10	102.2	P
Sodium									
Thallium									
Vanadium	2000.0	2029.29	101.5	2000.0	2033.46	101.7	2073.21	103.7	P
Zinc	2000.0	2110.29	105.5	2000.0	2117.96	105.9	2165.03	108.3	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIM0102

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2170.22	108.5	2151.21	107.6	P
Antimony				2000.0	2059.89	103.0	2113.61	105.7	P
Arsenic				2000.0	1949.16	97.5	2019.67	101.0	P
Barium				2000.0	2127.78	106.4	2148.30	107.4	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2079.13	104.0	2106.79	105.3	P
Cobalt									
Copper				2000.0	2079.27	104.0	2111.28	105.6	P
Iron				2000.0	1925.98	96.3	1979.94	99.0	P
Lead				2000.0	1844.27	92.2	1924.02	96.2	P
Magnesium									
Manganese				2000.0	2169.52	108.5	1996.40	99.8	P
Mercury	2.0	1.99	99.5	2.0	1.94	97.0			AV
Nickel				2000.0	1907.38	95.4	1972.84	98.6	P
Potassium									
Selenium				2000.0	1922.70	96.1	1982.50	99.1	P
Silver				500.0	530.62	106.1	539.14	107.8	P
Sodium									
Thallium									
Vanadium				2000.0	2124.78	106.2	2182.04	109.1	P
Zinc				2000.0	1949.38	97.5	2000.88	100.0	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIM0102

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2110.34	105.5	2134.66	106.7	P
Antimony				2000.0	2075.14	103.8	2081.73	104.1	P
Arsenic				2000.0	1977.05	98.9	1988.82	99.4	P
Barium				2000.0	2124.59	106.2	2119.18	106.0	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2065.84	103.3	2069.81	103.5	P
Cobalt									
Copper				2000.0	2083.55	104.2	2075.38	103.8	P
Iron				2000.0	1951.58	97.6	1957.04	97.9	P
Lead				2000.0	1887.96	94.4	2156.47	107.8	P
Magnesium									
Manganese				2000.0	1958.87	97.9	1966.26	98.3	P
Mercury									
Nickel				2000.0	1934.01	96.7	1971.69	98.6	P
Potassium									
Selenium				2000.0	1945.92	97.3	2113.42	105.7	P
Silver				500.0	531.12	106.2	526.58	105.3	P
Sodium									
Thallium									
Vanadium				2000.0	2134.09	106.7	2135.79	106.8	P
Zinc				2000.0	1967.07	98.4	1975.77	98.8	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIMI01

AA CRDL Standard Source: _____

ICP CRDL Standard Source: HIGH_PURITY__

abc ICP

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	118.34	98.6	129.94	108.3
Arsenic				20.0	19.19	96.0	16.85	84.2
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium				20.0	21.55	107.8	22.32	111.6
Cobalt								
Copper				50.0	51.30	102.6	56.64	113.3
Iron								
Lead				6.0	7.11	118.5	6.25	104.2
Magnesium								
Manganese				30.0	31.48	104.9	34.61	115.4
Mercury								
Nickel				80.0	82.70	103.4	75.28	94.1
Potassium								
Selenium				10.0	14.56	145.6	14.10	141.0
Silver				20.0	19.33	96.6	20.53	102.6
Sodium								
Thallium								
Vanadium				100.0	97.71	97.7	107.24	107.2
Zinc				40.0	45.26	113.2	41.03	102.6

Control Limits: no limits have been established by EPA at this time

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIM010

AA CRDL Standard Source: _____

ICP CRDL Standard Source: HIGH_PURITY__

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	131.67	109.7	128.06	106.7
Arsenic				20.0	19.16	95.8	21.99	110.0
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium				20.0	23.78	118.9	24.68	123.4
Cobalt								
Copper				50.0	46.83	93.7	49.87	99.7
Iron								
Lead				6.0	7.28	121.3	6.22	103.7
Magnesium								
Manganese				30.0	30.14	100.5	29.82	99.4
Mercury								
Nickel				80.0	83.50	104.4	79.37	99.2
Potassium								
Selenium				10.0	7.10	71.0	10.91	109.1
Silver				20.0	17.76	88.8	18.63	93.1
Sodium								
Thallium								
Vanadium				100.0	93.54	93.5	101.73	101.7
Zinc				40.0	42.93	107.3	48.15	120.4

Control Limits: no limits have been established by EPA at this time

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIMI

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	5.9	B	6.2	B	6.2	B	8.6	B	2.500	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	1.8	B	2.2	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	2.3	B	2.6	B	1.9	B	1.400	U	P
Iron	1.7	B	1.0	B	2.2	B	1.3	B	1.935	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury											
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	4.7	B	4.2	B	4.179	B	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIMI

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			13.0	B							P
Antimony			4.5	B							P
Arsenic			2.2	U							P
Barium			2.4	B							P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U							P
Cobalt											
Copper			2.7	B							P
Iron			3.0	B							P
Lead			1.3	U							P
Magnesium											
Manganese			0.3	U							P
Mercury											
Nickel			1.0	U							P
Potassium											
Selenium			3.0	B							P
Silver			1.8	U							P
Sodium											
Thallium											
Vanadium			3.1	U							P
Zinc			0.5	U							P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIM0

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	2.5	B	2.5	U	2.5	U	2.5	U	2.500	U	P
Arsenic	2.2	U	2.2	U	-3.0	B	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	1.6	B	4.0	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	9.0	B	4.2	B	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	3.405	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.0	U	0.0	U					0.070	B	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	1.067	B	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIM0

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U	12.8	U	12.8	U			P
Antimony			3.7	B	2.5	U	2.5	U			P
Arsenic			3.7	B	2.2	U	2.5	B			P
Barium			4.9	B	5.2	B	5.4	B			P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U	3.6	U	3.6	U			P
Cobalt											
Copper			1.4	U	1.4	U	1.4	U			P
Iron			1.0	U	1.0	U	1.0	U			P
Lead			2.0	B	1.3	U	1.3	U			P
Magnesium											
Manganese			0.3	U	0.3	U	0.3	U			P
Mercury	0.0	U	0.0	U					0.000	B	AV
Nickel			1.0	U	1.0	U	1.0	U			P
Potassium											
Selenium			2.5	U	2.5	U	2.5	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium											
Thallium											
Vanadium			3.1	U	3.1	U	3.1	U			P
Zinc			0.5	U	0.5	U	0.5	U			P
Boron											

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIMI0102

ICP ID Number: IRIS_____ ICS Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial %R	Final Found Sol. A	Final Found Sol. AB	Final %R
Aluminum	500000	500000	412995	414675.7	82.9	432182	434317.1	86.9
Antimony								
Arsenic								
Barium		500		466.1	93.2		484.7	96.9
Beryllium								
Cadmium								
Calcium								
Chromium		500		467.6	93.5		489.0	97.8
Cobalt								
Copper		500		421.7	84.3		442.8	88.6
Iron	200000	200000	122193	122876.0	61.4	121161	122299.7	61.1
Lead		1000		972.2	97.2		1039.4	103.9
Magnesium								
Manganese		500		454.6	90.9		485.6	97.1
Mercury								
Nickel		1000		905.8	90.6		877.3	87.7
Potassium								
Selenium								
Silver		1000		983.8	98.4		1058.6	105.9
Sodium								
Thallium								
Vanadium		500		434.8	87.0		475.4	95.1
Zinc		1000		926.0	92.6		848.9	84.9

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.: MEGCIM0102

ICP ID Number: IRIS_____ ICS Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	472534	470734.5	94.1	486100	406900.0	81.4
Antimony								
Arsenic								
Barium		500		491.1	98.2		520.4	104.1
Beryllium								
Cadmium								
Calcium								
Chromium		500		524.7	104.9		483.1	96.6
Cobalt								
Copper		500		469.5	93.9		477.8	95.6
Iron	200000	200000	123590	123153.5	61.6	122800	118000.0	59.0
Lead		1000		956.6	95.7		1139.0	113.9
Magnesium								
Manganese		500		470.9	94.2		513.3	102.7
Mercury								
Nickel		1000		907.1	90.7		983.1	98.3
Potassium								
Selenium								
Silver		1000		1010.8	101.1		939.1	93.9
Sodium								
Thallium								
Vanadium		500		442.2	88.4		416.1	83.2
Zinc		1000		937.5	93.8		845.5	84.6

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
030207F01 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0305 SAS No.:_____ SDG No.:MEGCIMI

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2504.1633		402.9606		2000.00	105.1		P
Antimony	75-125	449.6059		2.9314	B	500.00	89.3		P
Arsenic	75-125	31.8463		2.2000	U	40.00	79.6		P
Barium	75-125	2170.3467		12.1649	B	2000.00	107.9		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	222.4413		3.6000	U	200.00	111.2		P
Cobalt									NR
Copper	75-125	298.8573		13.8522	B	250.00	114.0		P
Iron	75-125	1325.9757		179.6667		1000.00	114.6		P
Lead	75-125	18.0477		1.3000	U	20.00	90.2		P
Magnesium									NR
Manganese	75-125	585.5978		40.5277		500.00	109.0		P
Mercury									NR
Nickel	75-125	534.5667		1.4622	B	500.00	106.6		P
Potassium									NR
Selenium	75-125	11.5581		2.5000	U	10.00	115.6		P
Silver	75-125	48.0405		1.8000	U	50.00	96.1		P
Sodium									NR
Thallium									NR
Vanadium	75-125	532.3768		3.1000	U	500.00	106.5		P
Zinc	75-125	597.7030		31.1683		500.00	113.3		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

030207G01 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0305 SAS No.:_____ SDG No.:MEGCIMI

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	2.5670		0.6568		2.00	95.5		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
030207F01 FS

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0305 SAS No.:_____ SDG No.:MEGCIMI

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2079.1699		48.8471	B	2000.00	101.5		P
Antimony	75-125	446.7770		2.5000	U	500.00	89.4		P
Arsenic	75-125	31.0583		2.2000	U	40.00	77.6		P
Barium	75-125	2126.3589		8.2171	B	2000.00	105.9		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	218.8756		3.6000	U	200.00	109.4		P
Cobalt									NR
Copper	75-125	277.8638		10.0134	B	250.00	107.1		P
Iron	75-125	1142.1397		44.2032	B	1000.00	109.8		P
Lead	75-125	16.7790		1.3000	U	20.00	83.9		P
Magnesium									NR
Manganese	75-125	532.7063		6.6483	B	500.00	105.2		P
Mercury									NR
Nickel	75-125	524.7900		3.0531	B	500.00	104.3		P
Potassium									NR
Selenium	75-125	11.1025		2.5000	U	10.00	111.0		P
Silver	75-125	41.6467		2.0931	B	50.00	79.1		P
Sodium									NR
Thallium									NR
Vanadium	75-125	521.3294		3.1000	U	500.00	104.3		P
Zinc	75-125	591.8845		46.0243		500.00	109.2		P
Boron									NR

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

030207F01 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIMI01

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	402.9606		433.4130		7.3		P
Antimony	60.0	2.9314	B	2.7752	B	5.5		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	12.1649	B	18.2216	B	39.9		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	5.0783	B	200.0		P
Cobalt								NR
Copper	25.0	13.8522	B	25.5458		59.4		P
Iron	100.0	179.6667		202.1069		11.8		P
Lead	~~3.0~~	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese	15.0	40.5277		46.5266		13.8		P
Mercury								NR
Nickel	40.0	1.4622	B	2.3106	B	45.0		P
Potassium								NR
Selenium	~~5.0~~	2.5000	U	2.5000	U			P
Silver	~~10.0~~	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	~~50.0~~	3.1000	U	3.1000	U			P
Zinc	20.0	31.1683		49.2849		45.0		P
Boron								NR

U.S. EPA - CLP

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DUPLICATES

EPA SAMPLE NO.

030207G01 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIMI01

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.6568		0.6169		6.3		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

030207F01 FD

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIMI01

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	48.8471	B	44.8682	B	8.5		P
Antimony	~~60.0~~	2.5000	U	2.5000	U			P
Arsenic	~~10.0~~	2.2000	U	2.2000	U			P
Barium	200.0	8.2171	B	7.4741	B	9.5		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	~~10.0~~	3.6000	U	3.6000	U			P
Cobalt								NR
Copper	25.0	10.0134	B	9.8598	B	1.5		P
Iron	100.0	44.2032	B	40.9526	B	7.6		P
Lead	~~3.0~~	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese	15.0	6.6483	B	6.0089	B	10.1		P
Mercury								NR
Nickel	40.0	3.0531	B	1.5696	B	64.2		P
Potassium								NR
Selenium	~~5.0~~	2.5000	U	2.5000	U			P
Silver	10.0	2.0931	B	1.8000	U	200.0		P
Sodium								NR
Thallium								NR
Vanadium	~~50.0~~	3.1000	U	3.1000	U			P
Zinc	20.0	46.0243		42.9049		7.0		P
Boron								NR

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305SAS No.: _____ SDG No.:MEGCIMI01

Solid LCS Source: _____

Aqueous LCS Source: HIGH_PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	2086.0	104.3						
Antimony	2000.0	1939.9	97.0						
Arsenic	2000.0	1998.8	99.9						
Barium	2000.0	1995.4	99.8						
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2027.5	101.4						
Cobalt									
Copper	2000.0	1971.8	98.6						
Iron	2000.0	2012.6	100.6						
Lead	2000.0	2031.7	101.6						
Magnesium									
Manganese	2000.0	1953.6	97.7						
Mercury									
Nickel	2000.0	2058.9	102.9						
Potassium									
Selenium	2000.0	2107.8	105.4						
Silver	500.0	503.7	100.7						
Sodium									
Thallium									
Vanadium	2000.0	2004.3	100.2						
Zinc	2000.0	2040.3	102.0						
Boron									

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305SAS No.: _____ SDG No.:MEGCIM010

Solid LCS Source: _____

Aqueous LCS Source: HIGH_PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	2166.8	108.3						
Antimony	2000.0	2151.0	107.6						
Arsenic	2000.0	2024.8	101.2						
Barium	2000.0	2094.2	104.7						
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2029.2	101.5						
Cobalt									
Copper	2000.0	2064.6	103.2						
Iron	2000.0	2050.9	102.5						
Lead	2000.0	2109.7	105.5						
Magnesium									
Manganese	2000.0	2018.9	100.9						
Mercury									
Nickel	2000.0	2077.3	103.9						
Potassium									
Selenium	2000.0	2114.4	105.7						
Silver	500.0	509.8	102.0						
Sodium									
Thallium									
Vanadium	2000.0	2041.2	102.1						
Zinc	2000.0	2134.7	106.7						
Boron									

U.S. EPA - CLP
8
STANDARD ADDITION RESULTS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: _____ SDG No.:MEGCIM0102

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

U.S. EPA - CLP
10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIM010

ICP ID Number: IRIS_____ Date: 10/26/02

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-round	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	12.8	P
Antimony	206.83		60	2.5	P
Arsenic	193.76		10	2.2	P
Barium	493.41		200	0.5	P
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium	357.87		10	3.6	P
Cobalt			50		NR
Copper	324.75		25	1.4	P
Iron	259.94		100	1.0	P
Lead	220.35		3	1.3	P
Magnesium			5000		NR
Manganese	257.61		15	0.3	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium			5000		NR
Selenium	196.09		5	2.5	P
Silver	328.07		10	1.8	P
Sodium			5000		NR
Thallium			10		NR
Vanadium	292.40		50	3.1	P
Zinc	213.86		20	0.5	P

Comments:

U.S. EPA - CLP
10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIM010

ICP ID Number: _____ Date: 10/26/02

Flame AA ID Number: PE-FIMS____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-round	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.13	AV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP
11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.: MEGC

ICP ID Number:IRIS_____ Date: 11/04/02

Analyte	Wave-length (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	_
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.83	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	193.76	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium						
Cadmium						
Calcium						
Chromium	357.87	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt						
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium						
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium						
Selenium	196.09	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium						
Thallium						
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

U.S. EPA - CLP
12
ICP LINEAR RANGES (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0305 SAS No.: _____ SDG No.:MEGCIM010

ICP ID Number:IRIS_____ Date: 11/04/02

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	60.00	500000	P
Antimony	60.00	50000	P
Arsenic	60.00	50000	P
Barium	60.00	10000	P
Beryllium			NR
Cadmium			NR
Calcium			NR
Chromium	60.00	5000	P
Cobalt			NR
Copper	60.00	100000	P
Iron	60.00	80000	P
Lead	60.00	200000	P
Magnesium			NR
Manganese	60.00	10000	P
Mercury			NR
Nickel	60.00	500000	P
Potassium			NR
Selenium	60.00	10000	P
Silver	60.00	50000	P
Sodium			NR
Thallium			NR
Vanadium	60.00	50000	P
Zinc	60.00	20000	P

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0305 SAS No.:_____ SDG No.: MEGCIMI010

Method: P__

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCS-W	02/20/03		100
030207F01	02/20/03		100
030207F01_D	02/20/03		100
030207F01_S	02/20/03		100
030207F01_F	02/20/03		100
030207F01_FD	02/20/03		100
030207F01_FS	02/20/03		100
MEGCIM0102	02/20/03		100
MEGCIM0102F	02/20/03		100
MEGDD0237	02/20/03		100
MEGDD0237F	02/20/03		100
MEGDD0241	02/20/03		100
MEGDD0241F	02/20/03		100
MEGDIM8618	02/20/03		100
PBW	02/20/03		100

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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0305 SAS No.:_____ SDG No.: MEGCIM0102

Method: P__

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCS-W	02/26/03		100
MEGDD0117	02/26/03		100
MEGDD0117F	02/26/03		100
MEGDD0236	02/26/03		100
MEGDD0236F	02/26/03		100
MEGDD0239	02/26/03		100
MEGDD0239F	02/26/03		100
MEGDIM0236	02/26/03		100
MEGDIM0236F	02/26/03		100
MEGUSH8602	02/26/03		100
MEGUSH8602F	02/26/03		100
PBW	02/26/03		100

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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0305 SAS No.:_____ SDG No.: MEGCIMI010

Method: AV_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_030207G01___	____02/11/03___	_____	_____100____
_030207G01_D_	____02/11/03___	_____	_____100____
_030207G01_S_	____02/11/03___	_____	_____100____
_MEGDD0241___	____02/11/03___	_____	_____100____
_MEGDD0241_F_	____02/11/03___	_____	_____100____
_MEGCIM0102__	____02/11/03___	_____	_____100____
MEGCIM0102F	____02/11/03___	_____	_____100____
_MEGDD0237___	____02/11/03___	_____	_____100____
_MEGDD0237_F_	____02/11/03___	_____	_____100____
_MEGDIM8618__	____02/11/03___	_____	_____100____
_PBW_____	____02/11/03___	_____	_____100____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0305 SAS No.:_____ SDG No.: MEGCIM0102

Method: AV_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_MEGDD0117___	____02/13/03___	_____	_____100____
_MEGDD0117_F_	____02/13/03___	_____	_____100____
_MEGDD0236___	____02/13/03___	_____	_____100____
_MEGDD0236_F_	____02/13/03___	_____	_____100____
_MEGDD0239___	____02/13/03___	_____	_____100____
_MEGDD0239_F_	____02/13/03___	_____	_____100____
_MEGDIM0236__	____02/13/03___	_____	_____100____
_MEGDIM0236_F	____02/13/03___	_____	_____100____
_MEGUSH8602__	____02/13/03___	_____	_____100____
MEGUSH8602F	____02/13/03___	_____	_____100____
_PBW_____	____02/13/03___	_____	_____100____

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIMI

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/20/03 End Date: 02/20/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
S0	1.00	1028		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
S	1.00	1130													X						X					
S235.1819	1.00	1138					X							X			X									
S	1.00	1225																								
S	1.00	1229		X															X						X	
S533.4988	1.00	1232			X																					
ICV	1.00	1242		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ICB	1.00	1245		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1318			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1322		X										X													
ICSAB	1.00	1326		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1330		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1334		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
PBW	1.00	1505		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
LCS-W	1.00	1509		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
030207F01	1.00	1517		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
030207F01D	1.00	1527		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
030207F01S	1.00	1530		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
030207F01F	1.00	1533		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
030207F01FD	1.00	1537		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
030207F01FS	1.00	1541		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0241	1.00	1549		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0241F	1.00	1558		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1603		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1609		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGCIM0102	1.00	1616		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGCIM0102F	1.00	1620		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0237	1.00	1624		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0237F	1.00	1628		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM8618	1.00	1637		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ	1.00	1704																								
ZZZZZZ	1.00	1711																								

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIMI

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/20/03 End Date: 02/20/03

EPA Sample No.	D/F	Time	% R	Analytes																									
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ZZZZZZ	1.00	1715		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCV	1.00	1719		X	X	X	X	-	-	-	X	-	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-
CCB	1.00	1725		X	X	X	X	-	-	-	X	-	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-
CRI	1.00	1728		X	X	X	-	-	-	-	X	-	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-
ICSA	1.00	1731		X	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-
ICSAB	1.00	1735		X	X	X	X	-	-	-	X	-	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-
CCV AL	1.00	1739		X	X	X	X	-	-	-	X	-	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-
CCB	1.00	1742		X	X	X	X	-	-	-	X	-	X	X	X	-	X	-	X	-	X	X	-	-	X	X	-

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U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIM0

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/28/03 End Date: 02/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
S0	1.00	0943		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
S0	1.00	0947		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
S	1.00	0951													X						X						
S	1.00	0958					X							X			X										
S	1.00	1002																									
S	1.00	1007		X															X						X	
S	1.00	1010			X																					
S0	1.00	1020																		X						
S2.4032	1.00	1023																		X						
ICV	1.00	1026		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ICB	1.00	1030		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1034			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1044		X							X																
ICSAB	1.00	1048		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1058		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1101		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
PBW	1.00	1118		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
LCSW	1.00	1125		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ	1.00	1130																								
ZZZZZZ	1.00	1135																								
ZZZZZZ	1.00	1139																								
ZZZZZZ	1.00	1145																								
ZZZZZZ	1.00	1149																								
ZZZZZZ	1.00	1156																								
ZZZZZZ	10.00	1201																								
ZZZZZZ	10.00	1205																								
CCV	1.00	1214		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1218		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ	10.00	1221																								
ZZZZZZ	100.00	1225																								

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIM0

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/28/03 End Date: 02/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ZZZZZZ	10.00	1230																										
ZZZZZZ	20.00	1236																										
ZZZZZZ	1.00	1240																										
ZZZZZZ	1.00	1244																										
ZZZZZZ	1.00	1244																										
ZZZZZZ	1.00	1251																										
ZZZZZZ	1.00	1254																										
ZZZZZZ	1.00	1258																										
ZZZZZZ	1.00	1302																										
MEGDD0239	1.00	1306		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1312		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1325		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0236	1.00	1349		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8602	1.00	1354		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0236	1.00	1358		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0117	1.00	1403		X	X	X	X				X		X		X				X		X	X			X	X	
MEGDD0117	10.00	1407		X													X										
MEGDD0117	100.00	1411												X													
MEGDD0239F	1.00	1419		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0236F	1.00	1423		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8602F	1.00	1428		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0236F	1.00	1432		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1440		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1453		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0117F	1.00	1546		X	X	X	X				X		X		X				X		X	X			X	X	
ZZZZZZ	1.00	1551																									
ZZZZZZ	1.00	1554																									
ZZZZZZ	1.00	1559																									
ZZZZZZ	1.00	1602																									
ZZZZZZ	1.00	1605																									

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIM0

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/28/03 End Date: 02/28/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ZZZZZZ	1.00	1610																										
ZZZZZZ	1.00	1614																										
ZZZZZZ	1.00	1617																										
CCV	1.00	1623		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1626		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1633			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1644		X										X														
ICSAB	1.00	1651		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1700		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1703		X	X	X	X				X		X	X	X		X		X		X	X			X	X	

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIM0

Instrument ID Number:PE-FIMS_____ Method: AV

Start Date:02/11/03 End Date: 02/11/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ICV	1.00	1308																X								
ICB	1.00	1310																X								
PBW	1.00	1311																X								
MEGDD0241	1.00	1315																X								
MEGCIM0102	1.00	1316																X								
MEGDD0237	1.00	1318																X								
MEGDIM8602	1.00	1320																X								
MEGDD241_F	1.00	1322																X								
MEGCIM0102F	1.00	1323																X								
MEGDD0237_F	1.00	1325																X								
CCV	1.00	1328																X								
CCB	1.00	1330																X								
030207G01	1.00	1332																X								
030207G01D	1.00	1333																X								
030207G01S	1.00	1335																X								
CCV	1.00	1349																X								
CCB	1.00	1351																X								

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0305 SAS No.:_____ SDG No.: MEGCIM0

Instrument ID Number:PE-FIMS_____ Method: AV

Start Date:02/13/03 End Date: 02/13/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ICV	1.00	1441																X								
ICB	1.00	1443																X								
PBW	1.00	1445																X								
MEGDD0239_F	1.00	1452																X								
MEGDD0236_F	1.00	1453																X								
MEGUSH8602_F	1.00	1455																X								
MEGDIM0236_F	1.00	1457																X								
MEGDD0117_F	1.00	1458																X								
MEGDD0239	1.00	1500																X								
CCV	1.00	1502																X								
CCB	1.00	1504																X								
MEGDD0236	1.00	1505																X								
MEGUSH8602	1.00	1507																X								
MEGDIM0236	1.00	1509																X								
MEGDD0117	1.00	1511																X								
CCV	1.00	1524																X								
CCB	1.00	1526																X								

RAW QC

DATA

Method: SHER Sample Name: Blank Operator: I4f-26
Comment:
Run Time: 02/20/03 10:28 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0236	.3861	.0503	-.0009
Stddev	.0568	.0549	.0188	.0109
%RSD	241.2	14.14	37.31	1178.
#1	.0166	.4269	.0635	.0068
#2	-.0638	.3493	.0370	-.0086

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1289	12.70	.4283	.0623
Stddev	.0201	.59	.0059	.0192
%RSD	15.57	4.635	1.369	30.81
#1	.1431	12.28	.4324	.0759
#2	.1147	13.12	.4241	.0487

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0444	.0814	.0821	-.0208
Stddev	.0470	.0061	.0113	.0059
%RSD	106.1	7.501	13.82	28.29
#1	-.0111	.0858	.0740	-.0166
#2	-.0776	.0771	.0901	-.0249

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1289	.3415	.0253	.0305
Stddev	.0059	.0013	.0218	.0144
%RSD	4.558	.3851	86.24	47.14
#1	.1331	.3424	.0407	.0204
#2	.1247	.3406	.0099	.0407

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7278	-34.84	-.0873	.0194
Stddev	.1823	.24	.0059	.0284
%RSD	25.05	.7020	6.730	145.9
#1	.8567	-34.67	-.0915	-.0006
#2	.5989	-35.01	-.0832	.0395

Sample Name: Blank Run Time: 02/20/03 10:28

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0126	-46.54	.0136	.0157
Stddev	.0057	.06	.0166	.0135
%RSD	44.84	.1389	122.1	85.96
#1	.0086	-46.59	.0253	.0062
#2	.0167	-46.50	.0019	.0253

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0167	.0003	-.0086	.0984
Stddev	.0052	.0022	.0183	.0216
%RSD	31.42	707.5	212.1	21.91
#1	.0130	.0019	-.0216	.1137
#2	.0204	-.0012	.0043	.0832

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0046	-.0277	.2156	-.0238
Stddev	.0100	.1137	.0039	.0144
%RSD	216.8	410.1	1.820	60.61
#1	-.0117	.0527	.2128	-.0136
#2	.0025	-.1081	.2184	-.0339

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0125	-.0642	.0014	3.394
Stddev	.0176	.0035	.0372	.002
%RSD	141.4	5.441	2685.	.0621
#1	.0000	-.0666	-.0249	3.393
#2	-.0249	-.0617	.0277	3.396

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	Cts/S	Cts/S	Cts/S
Avg	.1246	.2218	-.0554
Stddev	.0314	.0065	.0392
%RSD	25.20	2.952	70.71
#1	.1024	.2264	-.0277
#2	.1468	.2172	-.0832

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 02/20/03 11:30 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B_2496	Cd2288	Pb2203	Se1960
Line	249.678 (135)	228.802 (147)	220.353 (152)	196.090 (171)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	16.10	109.0	18.66	3.645
Stddev	.02	.0	.05	.019
%RSD	.1478	.0034	.2630	.5136
#1	16.09	109.0	18.63	3.632
#2	16.12	109.0	18.70	3.658

Elem	Tl1908
Line	190.864 (176)
Units	Cts/S
Avg	7.950
Stddev	.007
%RSD	.0890
#1	7.955
#2	7.945

Method: SHER Sample Name: 200.7-2 Operator:
Comment:
Run Time: 02/20/03 11:38 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1025.	1055.	354.8	35.57
Stddev	7.	2.	.4	.15
%RSD	.7016	.1453	.1179	.4291
#1	1030.	1056.	354.5	35.67
#2	1020.	1054.	355.1	35.46

Elem	Fe2599	Mn2576	Sr3464
Line	259.940 {129}	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S	Cts/S
Avg	2690.	1127.	235.2
Stddev	9.	4.	.5
%RSD	.3430	.3270	.2300
#1	2684.	1125.	235.6
#2	2697.	1130.	234.8

Method: SHER Sample Name: 200.7 Operator:
Comment:
Run Time: 02/20/03 12:25 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	As1937	Cr3578	Li6103
Line	328.068 {102}	193.759 {173}	357.869 { 94}	610.362 { 55}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	12.56	17.76	43.17	256.3
Stddev	.06	.04	.11	.3
%RSD	.4553	.2283	.2614	.1204
#1	12.60	17.73	43.25	256.5
#2	12.52	17.79	43.09	256.1

Elem	Sn1899	V_2924	V_3102
Line	189.989 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S
Avg	41.68	36.28	52.71
Stddev	.14	.02	.53
%RSD	.3316	.0623	.9981
#1	41.59	36.26	52.34
#2	41.78	36.29	53.08

Method: SHER Sample Name: 200.7-1 Operator:
Comment:
Run Time: 02/20/03 12:29 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ca3179	K_7664	Mg3838
Line	308.215 (109)	317.933 (105)	766.490 (44)	383.826 (87)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	47.12	166.0	1124.	65.90
Stddev	.18	.4	1.	.09
%RSD	.3756	.2114	.0863	.1349
#1	46.99	165.7	1125.	65.84
#2	47.24	166.2	1123.	65.97

Elem	Na5889	Ni2316	Zn2138
Line	588.995 (57)	231.604 (145)	213.856 (157)
Units	Cts/S	Cts/S	Cts/S
Avg	6447.	572.9	1541.
Stddev	21.	1.3	1.
%RSD	.3282	.2353	.0872
#1	6432.	572.0	1540.
#2	6462.	573.9	1542.

Method: SHER Sample Name: 200.7-4 Operator:
Comment:
Run Time: 02/20/03 12:32 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 (166)	206.833 (162)	336.121 (100)
Units	Cts/S	Cts/S	Cts/S
Avg	741.1	118.7	533.5
Stddev	1.9	.4	2.8
%RSD	.2563	.3142	.5288
#1	739.7	118.4	535.5
#2	742.4	119.0	531.5

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0252	-0.0236	1.0000000	02/20/03 12:28:03
Al3082	0.0047	0.3881	1.0000000	02/20/03 12:32:10
As1937	0.0089	0.0503	1.0000000	02/20/03 12:28:03
Au2427	-0.0003	-0.0009	-1.0000000	02/20/03 10:31:46
B_2496	0.0799	0.1289	1.0000000	02/20/03 11:33:13
Ba4934	1.0123	12.6989	1.0000000	02/20/03 11:41:31
Be3130	1.0545	0.4283	1.0000000	02/20/03 11:41:31
Bi1902	0.0084	0.0623	1.0000000	02/20/03 10:31:46
Ca3179	0.0166	-0.0444	1.0000000	02/20/03 12:32:10
Cd2288	0.2179	0.0814	1.0000000	02/20/03 11:33:13
Co2286	0.1773	0.0821	1.0000000	02/20/03 11:41:31
Cr3578	0.0216	-0.0208	1.0000000	02/20/03 12:28:03
Cu3247	0.0354	0.1289	1.0000000	02/20/03 11:41:31
Fe2599	0.2690	0.3415	1.0000000	02/20/03 11:41:31
Ge2068	0.0052	0.0253	1.0000000	02/20/03 10:31:46
In2306	0.0102	0.0305	1.0000000	02/20/03 10:31:46
K_7664	0.1123	0.7278	1.0000000	02/20/03 12:32:10
Li6103	0.1456	-34.8395	1.0000000	02/20/03 12:28:03
Mg3838	0.0066	-0.0873	1.0000000	02/20/03 12:32:10
Mn2576	1.1273	0.0194	1.0000000	02/20/03 11:41:31
Mo2020	0.0741	0.0126	1.0000000	02/20/03 12:35:58
Na5889	0.6494	-46.5432	1.0000000	02/20/03 12:32:10
Ni2316	0.1146	0.0136	1.0000000	02/20/03 12:32:10
Os1898	-0.0003	0.0157	-1.0000000	02/20/03 10:31:46
Pb2203	0.0186	0.0167	1.0000000	02/20/03 11:33:13
Sb2068	0.0119	0.0003	1.0000000	02/20/03 12:35:58
Se1960	0.0073	-0.0086	1.0000000	02/20/03 11:33:13
Si2881	0.0035	0.0984	1.0000000	02/20/03 10:31:46
Sn1899	0.0208	-0.0046	1.0000000	02/20/03 12:28:03
Sr3464	0.0235	-0.0277	1.0000000	02/20/03 11:41:31
Ta2400	0.0000	0.2156	-1.0000000	02/20/03 10:31:46
Te2142	0.0061	-0.0238	1.0000000	02/20/03 10:31:46
Ti3361	0.0534	-0.0125	1.0000000	02/20/03 12:35:58
Tl1908	0.0080	-0.0642	1.0000000	02/20/03 11:33:13
V_2924	0.0181	0.0014	1.0000000	02/20/03 12:28:03
V_3102	0.0247	3.3944	1.0000000	02/20/03 12:28:03
W_2397	0.0000	0.1246	-1.0000000	02/20/03 10:31:46
Zn2138	0.3081	0.2218	1.0000000	02/20/03 12:32:10
Zr3391	0.0422	-0.0554	1.0000000	02/20/03 10:31:46

Method: SHER Sample Name: ICV-1 Operator:
Comment:
Run Time: 02/20/03 12:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	503.2	2060.	1994.	9141.
Stddev	1.2	2.	9.	61.
%RSD	.2320	.0944	.4588	.6640
#1	502.4	2059.	1987.	9184.
#2	504.0	2062.	2000.	9098.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2115.	2002.	2014.	1.355
Stddev	6.	5.	2.	.983
%RSD	.3053	.2271	.1121	72.56
#1	2111.	2005.	2016.	2.050
#2	2120.	1998.	2012.	.6598

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2078.	2006.	1956.	2015.
Stddev	2.	2.	2.	9.
%RSD	.0964	.0793	.1011	.4465
#1	2076.	2005.	1954.	2021.
#2	2079.	2007.	1957.	2009.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1976.	2005.	<.0000	<.0000
Stddev	3.	5.	1.933	1.458
%RSD	.1342	.2573	1.616	2.951
#1	1974.	2001.	< .0000	< .0000
#2	1978.	2008.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9790.	1995.	2056.	1946.
Stddev	3.	5.	3.	7.
%RSD	.0286	.2645	.1299	.3422
#1	9792.	1991.	2054.	1941.
#2	9789.	1999.	2058.	1951.

Sample Name: ICV-1 Run Time: 02/20/03 12:42

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1940.	2172.	2045.	699.1
Stddev	10.	1.	4.	23.9
%RSD	.5044	.0510	.2138	3.419
#1	1933.	2171.	2042.	682.2
#2	1946.	2173.	2048.	716.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2010.	1941.	2107.	9581.
Stddev	3.	5.	4.	12.
%RSD	.1679	.2410	.2016	.1290
#1	2007.	1937.	2104.	9590.
#2	2012.	1944.	2110.	9572.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2014.	2030.	19290.	<.0000
Stddev	1.	9.	304.	2.981
%RSD	.0607	.4479	1.574	.8381
#1	2013.	2036.	19070.	< .0000
#2	2015.	2023.	19500.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	2.963	1950.	2000.	1946.
Stddev	.331	2.	5.	24.
%RSD	11.17	.0786	.2269	1.213
#1	3.196	1949.	1996.	1930.
#2	2.729	1951.	2003.	1963.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1196000.	2031.	<.0000
Stddev	8712.	3.	.0000
%RSD	.7287	.1537	.0002
#1	1202000.	2029.	<.0000
#2	1190000.	2033.	<.0000

Method: SHER Sample Name: ICB-1 Operator:
Comment:
Run Time: 02/20/03 12:45 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	.6608	11.25	2.173	6.606
Stddev	1.791	5.73	.197	85.66
%RSD	271.0	50.94	9.056	1297.
#1	< .0000	7.196	2.034	< .0000
#2	1.927	15.30	2.312	67.17

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	3.063	.1358	.0944	.9883
Stddev	1.437	.2278	.0055	.0514
%RSD	46.91	167.7	5.795	5.203
#1	4.079	<.0000	.0906	.9519
#2	2.047	.2969	.0983	1.025

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	.6689	.1699	.1027	<.0000
Stddev	.4717	.0561	.1008	.2733
%RSD	70.52	33.00	98.22	41780.
#1	1.002	.2096	.0314	<.0000
#2	.3353	.1303	.1740	.1926

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	1.328	1.734	<.0000	<.0000
Stddev	1.160	1.478	1.765	3.861
%RSD	87.38	85.21	66.01	195.8
#1	.5074	2.779	< .0000	.7586
#2	2.148	.6893	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	11.01	2.104	.1092
Stddev	.9584	1.92	9.207	.1208
%RSD	3501.	17.43	437.6	110.6
#1	<.0000	12.36	< .0000	.1946
#2	.6503	9.649	8.614	.0236

Sample Name: ICB-1 Run Time: 02/20/03 12:45

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	6.124	<.0000	.2046	39.13
Stddev	4.121	.0686	.0685	23.90
%RSD	67.30	1.111	33.49	61.07
#1	9.038	<.0000	.1562	56.03
#2	3.209	<.0000	.2531	22.23

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.1144	5.899	2.280	<.0000
Stddev	1.522	2.058	.836	5.051
%RSD	1331.	34.89	36.67	628.5
#1	< .0000	7.355	2.871	2.768
#2	1.191	4.444	1.688	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.2812	.2950	<.0000	.4516
Stddev	.3767	.9165	444.7	1.704
%RSD	134.0	310.7	29.59	377.3
#1	.0148	<.0000	< .0000	1.656
#2	.5476	.9431	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.322	.4352	.3241	2.117
%RSD	565.6	75990.	303400.	752.9
#1	< .0000	.3072	<.0000	< .0000
#2	.7012	<.0000	.2290	1.216

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	1.643
Stddev	105.4	.0736	1.022
%RSD	18.49	34.87	62.20
#1	< .0000	<.0000	.9203
#2	< .0000	<.0000	2.366

Method: SHER Sample Name: CRI-1 Operator:
Comment:
Run Time: 02/20/03 13:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	19.33	4.151	19.19	508.7
Stddev	.31	11.64	.03	38.9
%RSD	1.628	280.3	.1798	7.650
#1	19.55	< .0000	19.16	536.3
#2	19.10	12.38	19.21	481.2

Elem	B 2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	.0927	.3445	9.656	1.390
Stddev	.2404	.0332	.063	.931
%RSD	259.3	9.629	.6560	66.97
#1	<.0000	.3680	9.611	2.049
#2	.2627	.3210	9.701	.7319

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	34.22	9.974	98.68	21.55
Stddev	1.65	.244	.02	.81
%RSD	4.813	2.446	.0198	3.772
#1	33.06	10.15	98.69	20.98
#2	35.39	9.802	98.67	22.13

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	51.30	7.625	<.0000	<.0000
Stddev	.06	.127	1.849	1.287
%RSD	.1259	1.662	27.78	65.27
#1	51.35	7.535	< .0000	< .0000
#2	51.26	7.715	< .0000	< .0000

Elem	K 7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	56.01	7.239	35.91	31.48
Stddev	.88	1.011	.00	.02
%RSD	1.576	13.96	.0105	.0763
#1	56.63	7.953	35.91	31.46
#2	55.38	6.524	35.91	31.50

Sample Name: CRI-1 Run Time: 02/20/03 13:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	89.57	36.45	82.70	15.12
Stddev	.66	.22	.11	10.06
%RSD	.7387	.6042	.1355	66.56
#1	89.10	36.29	82.78	22.23
#2	90.04	36.60	82.62	8.002

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	7.108	118.3	14.56	3.561
Stddev	.281	.3	.54	1.127
%RSD	3.952	.2819	3.690	31.64
#1	6.909	118.1	14.18	4.358
#2	7.306	118.6	14.94	2.765

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.6512	2.593	114.3	<.0000
Stddev	.1883	.167	1841.	5.325
%RSD	28.92	6.437	1611.	28.36
#1	.7843	2.711	< .000	< .0000
#2	.5180	2.475	1416.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	17.01	97.71	174.7
Stddev	.4406	.33	.88	2.6
%RSD	51.41	1.919	.9016	1.517
#1	<.0000	17.24	98.34	172.8
#2	<.0000	16.78	97.09	176.6

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	60720.	45.26	<.0000
Stddev	2274.	.06	2.509
%RSD	3.745	.1288	224.7
#1	62330.	45.30	.6574
#2	59110.	45.22	< .0000

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 02/20/03 13:22 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	413000.	<.0000	214100.
Stddev	2.091	2278.	13.48	2119.
%RSD	14.72	.5517	1.148	.9896
#1	< .0000	411400.	< .0000	212600.
#2	< .0000	414600.	< .0000	215600.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0695	4.866
Stddev	1.946	.0539	.0814	.879
%RSD	.5184	13.14	117.1	18.07
#1	< .0000	<.0000	.0119	5.488
#2	< .0000	<.0000	.1271	4.245

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	378800.	<.0000	<.0000	15.61
Stddev	1750.	.0060	.0517	1.06
%RSD	.4619	.6707	10.50	6.801
#1	377600.	<.0000	<.0000	14.86
#2	380000.	<.0000	<.0000	16.36

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	122200.	<.0000	<.0000
Stddev	1.967	1293.	.1680	1.417
%RSD	5.776	1.058	2.395	1.716
#1	< .0000	121300.	<.0000	< .0000
#2	< .0000	123100.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1.182	<.0000	404300.	.6648
Stddev	.896	21.49	2401.	.0209
%RSD	75.80	1.287	.5938	3.146
#1	1.815	< .0000	402600.	.6500
#2	.5483	< .0000	406000.	.6796

Sample Name: ICSA-1 Run Time: 02/20/03 13:22

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	43.82	<.0000	3295.
Stddev	.6182	.72	2.195	10.
%RSD	9.447	1.640	.6152	.3070
#1	<.0000	43.31	< .0000	3288.
#2	<.0000	44.32	< .0000	3302.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	23.39
Stddev	2.329	2.982	5.724	9.01
%RSD	.8823	58.10	2.094	38.53
#1	< .0000	< .0000	< .0000	29.76
#2	< .0000	< .0000	< .0000	17.02

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	36.42	9.132	642500.	16.27
Stddev	.46	.244	556.	7.60
%RSD	1.263	2.670	.0865	46.71
#1	36.75	8.959	642900.	10.89
#2	36.10	9.304	642100.	21.64

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.9346	4.573	.9648	2.552
%RSD	1.265	48.68	9.715	11.22
#1	<.0000	< .0000	<.0000	< .0000
#2	<.0000	< .0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	32.97	4.140
Stddev	1194.	.14	.091
%RSD	.6366	.4355	2.192
#1	< .000	32.87	4.076
#2	< .000	33.07	4.204

Method: SHER Sample Name: ICSAB-1 Operator:
Comment:
Run Time: 02/20/03 13:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	983.8	414700.	<.0000	226200.
Stddev	3.1	1728.	5.786	22.
%RSD	.3135	.4167	.4871	.0098
#1	986.0	415900.	< .0000	226200.
#2	981.7	413500.	< .0000	226200.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	466.1	456.2	5.233
Stddev	.3655	1.7	1.0	.983
%RSD	.0942	.3605	.2278	18.78
#1	<.0000	467.3	456.9	4.538
#2	<.0000	465.0	455.4	5.928

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	377700.	880.5	436.5	467.6
Stddev	1175.	1.0	.4	2.9
%RSD	.3111	.1182	.0844	.6188
#1	378500.	881.3	436.2	465.6
#2	376800.	879.8	436.8	469.6

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	421.7	122900.	<.0000	<.0000
Stddev	.1	420.	.2523	3.346
%RSD	.0172	.3421	2.320	3.858
#1	421.8	123200.	<.0000	< .0000
#2	421.7	122600.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	413100.	454.6
Stddev	.2465	34.79	2000.	1.6
%RSD	51.45	1.972	.4841	.3440
#1	<.0000	< .0000	414500.	455.7
#2	<.0000	< .0000	411700.	453.5

Sample Name: ICSAB-1 Run Time: 02/20/03 13:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	39.80	905.6	3519.
Stddev	.1590	.39	.7	84.
%RSD	3.187	.9811	.0755	2.395
#1	<.0000	39.53	905.3	3579.
#2	<.0000	40.08	906.2	3459.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	972.2	4.461	<.0000	3.192
Stddev	.9	3.038	1.231	12.92
%RSD	.0938	68.11	.4441	404.7
#1	972.8	2.313	< .0000	< .0000
#2	971.6	6.609	< .0000	12.33

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.421	11.85	666900.	<.0000
Stddev	.314	.59	4675.	.0711
%RSD	22.10	4.957	.7010	.1146
#1	1.643	11.43	670200.	<.0000
#2	1.199	12.27	663600.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	434.8	432.7
Stddev	1.077	.6534	4.0	.7
%RSD	1.494	3.052	.9099	.1565
#1	< .0000	<.0000	437.6	432.3
#2	< .0000	<.0000	432.0	433.2

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	926.0	1.906
Stddev	1400.	.2	.279
%RSD	14.07	.0254	14.62
#1	< .000	926.2	2.193
#2	< .000	925.9	1.709

Method: SHER Sample Name: CCV-1 Operator:
Comment:
Run Time: 02/20/03 13:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	498.0	2055.	1987.	9210.
Stddev	1.7	23.	3.	31.
%RSD	.3442	1.129	.1425	.3382
#1	499.2	2039.	1985.	9188.
#2	496.8	2072.	1989.	9232.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2116.	1990.	2006.	.9159
Stddev	9.	6.	5.	.0517
%RSD	.4172	.2787	.2571	5.647
#1	2110.	1994.	2009.	.8793
#2	2122.	1986.	2002.	.9524

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2084.	2001.	1954.	2007.
Stddev	2.	4.	3.	5.
%RSD	.0963	.1751	.1460	.2308
#1	2083.	1998.	1952.	2010.
#2	2085.	2003.	1956.	2003.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1974.	2009.	<.0000	<.0000
Stddev	13.	1.	3.699	.2574
%RSD	.6392	.0282	3.234	.5326
#1	1983.	2010.	< .0000	<.0000
#2	1965.	2009.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9897.	2021.	2060.	1952.
Stddev	9.	4.	9.	4.
%RSD	.0904	.1826	.4471	.2268
#1	9904.	2018.	2067.	1949.
#2	9891.	2023.	2054.	1955.

Sample Name: CCV-1 Run Time: 02/20/03 13:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1938.	2182.	2045.	709.8
Stddev	13.	1.	3.	21.4
%RSD	.6654	.0394	.1536	3.013
#1	1929.	2183.	2042.	724.9
#2	1947.	2181.	2047.	694.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2010.	1925.	2104.	9602.
Stddev	4.	5.	4.	40.
%RSD	.1816	.2500	.1674	.4207
#1	2007.	1922.	2101.	9630.
#2	2013.	1929.	2106.	9573.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2012.	2022.	21000.	<.0000
Stddev	4.	6.	2165.	.4263
%RSD	.2049	.2763	10.31	.1231
#1	2009.	2026.	19470.	<.0000
#2	2015.	2018.	22530.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	1.403	1947.	1997.	1977.
Stddev	.772	3.	11.	17.
%RSD	55.00	.1398	.5576	.8406
#1	1.949	1945.	2005.	1989.
#2	.8575	1949.	1989.	1966.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1160000.	2031.	<.0000
Stddev	5147.	5.	.4649
%RSD	.4436	.2642	5.398
#1	1164000.	2027.	<.0000
#2	1157000.	2035.	<.0000

Method: SHER Sample Name: CCB-1 Operator:
Comment:
Run Time: 02/20/03 13:34 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	8.304	.7513	123.3
Stddev	.6224	4.811	.2394	141.7
%RSD	161.7	57.94	31.87	114.9
#1	<.0000	11.71	.9206	223.5
#2	.1553	4.902	.5829	23.12

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.518	.1520	.0353	.8782
Stddev	.694	.0846	.0002	1.448
%RSD	45.71	55.67	.4360	164.9
#1	2.009	.2118	.0352	< .0000
#2	1.027	.0922	.0355	1.902

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	.5015	<.0000	<.0000	.7699
Stddev	.9450	.0040	.0861	1.361
%RSD	188.4	12.92	708.7	176.8
#1	1.170	<.0000	.0467	< .0000
#2	< .0000	<.0000	<.0000	1.732

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2.345	1.001	<.0000	<.0000
Stddev	.274	.240	2.774	.7294
%RSD	11.70	23.99	47.14	171.9
#1	2.539	1.171	< .0000	.0913
#2	2.151	.8314	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	9.672	3.784	.0464
Stddev	.6436	.674	.887	.0464
%RSD	118.1	6.965	23.46	95.88
#1	<.0000	9.195	3.156	.0313
#2	<.1107	10.15	4.411	.0615

Sample Name: CCB-1 Run Time: 02/20/03 13:34

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.406	<.0000	.1281	17.71
Stddev	.807	.0933	.1713	1.26
%RSD	33.53	1.759	163.2	7.083
#1	2.976	<.0907	<.0000	16.89
#2	1.836	<.0000	.2561	18.53

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	6.159	1.477	2.371
Stddev	.6550	.515	.537	6.178
%RSD	281.8	8.359	36.36	260.6
#1	.2307	6.523	1.857	< .0000
#2	<.0000	5.795	1.098	6.739

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.5624	1.709	<.0000	<.0000
Stddev	.0210	.417	383.8	.9232
%RSD	3.726	24.39	27.37	29.66
#1	.5772	1.414	< .0000	<.0000
#2	.5476	2.004	< .0000	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.770	<.0000	.7986
Stddev	.2197	1.416	3.350	.4285
%RSD	13.43	79.97	243.5	53.65
#1	<.0000	.7693	.9928	1.102
#2	<.0000	2.771	< .0000	.4957

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	245.6	.1190	.8368
%RSD	23.06	35.26	1279.
#1	< .1111	<.0000	.5263
#2	< .1110	<.0000	<.0000

Method: SHER Sample Name: PB Operator:
Comment:
Run Time: 02/20/03 15:05 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg				
Stddev	.4672	5.907	.0084	34.3
%RSD	56.55	76.86	1.774	26.60
#1				
#2				

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg				
Stddev	.3224	.1689	.0315	1.501
%RSD	491.4	348.3	52.11	164.1
#1				
#2				

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg				
Stddev	3.540	.0621	.0885	.2727
%RSD	48.19	52.86	22.51	35.37
#1				
#2				

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.172	1.935	3.804	.9098
Stddev	1.381	.084	2.857	2.273
%RSD	117.8	4.344	75.11	249.8
#1	2.149	1.994	5.825	2.517
#2	.1957	1.875	1.784	.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.2457	12.38	5.883	.0263
Stddev	.5741	2.22	3.859	.0066
%RSD	233.6	17.91	65.60	25.06
#1				
#2				

Sample Name: PB Run Time: 02/20/03 15:05

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.1540	.0000	.0969	49.80
Stddev	.0000	.2473	.2894	3.77
%RSD	.0207	4.496	298.5	7.576
#1	.1540	.0000	.0000	52.47
#2	.1540	.0000	.3016	47.13

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.0000	2.183	4.179	107.8
Stddev	1.544	.992	1.135	8.4
%RSD	332.1	45.45	27.15	7.765
#1	.6270	2.884	3.377	113.8
#2	.0000	1.481	4.982	101.9

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.0000	1.945	.0000	.4013
Stddev	.4185	.250	282.3	3.905
%RSD	166.4	12.87	33.43	973.1
#1	.0000	1.768	.0000	3.163
#2	.0444	2.122	.0000	.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.0000	.5949
Stddev	.1098	2.505	.2160	.9920
%RSD	8.806	464.6	56.54	166.7
#1	<.0000	1.232	<.0000	<.0000
#2	<.0000	<.0000	.0000	1.296

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	.0000	.3414	.7230
Stddev	1786.	.0850	.4648
%RSD	232.7	24.91	64.29
#1	495.4	.2813	1.052
#2	.000	.4016	.3943

Method: SHER Sample Name: LCS Operator:
Comment:
Run Time: 02/20/03 15:09 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	503.7	2086.	1999.	9241.
Stddev	.4	6.	4.	34.
%RSD	.0766	.3028	.1903	.3712
#1	503.5	2082.	2001.	9217.
#2	504.0	2090.	1996.	9265.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	2115.	1995.	2012.	1.355
Stddev	3.	10.	6.	2.018
%RSD	.1628	.5125	.3071	148.9
#1	2117.	2003.	2017.	< .0000
#2	2112.	1988.	2008.	2.782

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	2097.	2017.	1970.	2027.
Stddev	3.	11.	9.	13.
%RSD	.1303	.5466	.4575	.6185
#1	2099.	2024.	1977.	2036.
#2	2095.	2009.	1964.	2019.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	1972.	2013.	<.0000	<.0000
Stddev	12.	8.	4.792	2.102
%RSD	.5957	.3859	4.057	4.095
#1	1980.	2018.	< .0000	< .0000
#2	1964.	2007.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	10010.	2042.	2070.	1954.
Stddev	91.	10.	2.	8.
%RSD	.9129	.5021	.0725	.4055
#1	10070.	2049.	2071.	1959.
#2	9941.	2034.	2069.	1948.

Sample Name: LCS Run Time: 02/20/03 15:09

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1944.	2214.	2059.	707.1
Stddev	5.	22.	9.	20.1
%RSD	.2372	.9801	.4201	2.846
#1	1948.	2229.	2065.	721.3
#2	1941.	2199.	2053.	692.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2032.	1940.	2108.	9634.
Stddev	8.	5.	5.	48.
%RSD	.4116	.2648	.2488	.4958
#1	2038.	1944.	2112.	9668.
#2	2026.	1936.	2104.	9600.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2038.	2043.	21220.	<.0000
Stddev	10.	22.	1295.	6.105
%RSD	.4885	1.062	6.104	1.725
#1	2045.	2058.	20300.	< .0000
#2	2031.	2028.	22130.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.6236	1963.	2004.	1935.
Stddev	.7718	7.	13.	4.
%RSD	123.8	.3491	.6642	.2129
#1	1.169	1968.	2014.	1932.
#2	.0779	1958.	1995.	1938.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1196000.	2040.	<.0000
Stddev	8257.	9.	.2789
%RSD	.6902	.4402	3.891
#1	1202000.	2047.	<.0000
#2	1191000.	2034.	<.0000

Method: SHER Sample Name: 0207-F01 Operator:
Comment:
Run Time: 02/20/03 15:17 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.8811	403.0	.3844	1987.
Stddev	.8570	6.8	.2032	132.
%RSD	97.26	1.698	52.86	6.661
#1	.2751	407.8	.2407	2080.
#2	1.487	398.1	.5281	1893.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	139.0	12.16	.0830	<.0000
Stddev	.6	.04	.0186	3.053
%RSD	.4217	.2999	22.45	185.6
#1	139.5	12.19	.0962	.5136
#2	138.6	12.14	.0698	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	40550.	.0567	.8386	.6623
Stddev	266.	.0200	.0885	.8169
%RSD	.6547	35.29	10.56	123.3
#1	40370.	.0709	.9012	.0847
#2	40740.	.0426	.7760	1.240

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	13.85	179.7	<.0000	<.0000
Stddev	.16	.6	.2523	.3432
%RSD	1.190	.3135	142.3	18.56
#1	13.74	179.3	<.0000	<.0000
#2	13.97	180.1	.0011	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14070.	934.4	10050.	40.53
Stddev	139.	11.6	36.	.26
%RSD	.9870	1.241	.3542	.6349
#1	13970.	926.2	10030.	40.35
#2	14170.	942.6	10080.	40.71

Sample Name: 0207-F01 Run Time: 02/20/03 15:17

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	14.94	69660.	1.462	77.38
Stddev	3.30	434.	.004	22.64
%RSD	22.06	.6234	.2572	29.26
#1	17.27	69350.	1.465	61.36
#2	12.61	69970.	1.460	93.39

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.931	1.722	3544.
Stddev	1.171	4.778	2.568	27.
%RSD	201.5	163.0	149.1	.7693
#1	.2467	6.310	< .0000	3524.
#2	< .0000	< .0000	3.538	3563.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.125	162.9	<.0000	<.0000
Stddev	.146	2.2	1517.	.4972
%RSD	13.02	1.324	251.7	15.47
#1	1.228	161.4	< .000	<.0000
#2	1.021	164.5	470.0	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	12.64
Stddev	.1104	2.722	2.487	.57
%RSD	10.11	271.5	812.9	4.479
#1	<.0000	< .0000	< .0000	13.05
#2	<.0000	.9222	1.452	12.24

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	31.17	.5255
Stddev	2206.	.17	1.116
%RSD	141.3	.5479	212.3
#1	< .000	31.05	< .0000
#2	< .000	31.29	1.315

Method: SHER Sample Name: DUP 0207-F01 Operator:
Comment:
Run Time: 02/20/03 15:27 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.0550	433.4	2.013	2238.
Stddev	.4673	2.5	1.732	135.
%RSD	849.4	.5779	86.05	6.050
#1	<.0000	431.6	3.238	2142.
#2	.3854	435.2	.7883	2334.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	148.2	18.22	.0724	<.0000
Stddev	.1	.24	.0966	.8282
%RSD	.0984	1.316	133.5	37.76
#1	148.1	18.39	.1407	<.0000
#2	148.3	18.05	.0041	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	46680.	.1417	.3307	5.078
Stddev	185.	.0921	.0296	2.724
%RSD	.3962	65.03	8.940	53.63
#1	46550.	.2068	.3516	3.152
#2	46820.	.0765	.3098	7.004

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	25.55	202.1	<.0000	<.0000
Stddev	.67	.8	4.120	3.089
%RSD	2.615	.3866	277.4	109.5
#1	25.07	201.6	1.428	< .0000
#2	26.02	202.7	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	15720.	975.7	11340.	46.53
Stddev	70.	16.4	23.	.30
%RSD	.4430	1.677	.2051	.6451
#1	15670.	964.1	11320.	46.31
#2	15770.	987.3	11360.	46.74

Sample Name: DUP 0207-F01 Run Time: 02/20/03 15:27

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	11.22	72760.	2.311	88.94
Stddev	.47	152.	.267	26.42
%RSD	4.193	.2095	11.54	29.70
#1	10.89	72660.	2.499	107.6
#2	11.55	72870.	2.122	70.26

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.775	2.102	3804.
Stddev	.2099	1.838	1.075	40.
%RSD	22.96	66.22	51.15	1.046
#1	<.0000	1.476	2.862	3776.
#2	<.0000	4.075	1.342	3832.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.095	187.7	<.0000	<.0000
Stddev	.607	1.6	141.1	3.196
%RSD	55.43	.8746	14.90	90.90
#1	1.525	188.8	< .0000	< .0000
#2	.6660	186.5	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	8.513
Stddev	1.102	1.089	1.189	.497
%RSD	52.36	176.1	64.81	5.842
#1	< .0000	.1517	< .0000	8.161
#2	< .0000	< .0000	< .0000	8.864

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	49.28	<.0000
Stddev	2242.	.29	.0932
%RSD	92.28	.5958	12.89
#1	< .000	49.08	<.0000
#2	< .000	49.49	<.0000

Method: SHER Sample Name: SPK 0207-F01 Operator:
Comment:
Run Time: 02/20/03 15:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	48.04	2504.	31.85	5502.
Stddev	1.79	7.	.50	42.
%RSD	3.735	.2671	1.556	.7643
#1	49.31	2499.	31.50	5532.
#2	46.77	2509.	32.20	5472.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	150.9	2170.	56.12	<.0000
Stddev	1.0	15.	.39	.8279
%RSD	.6410	.7118	.6877	40.43
#1	150.2	2159.	55.85	<.0000
#2	151.5	2181.	56.39	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	46060.	23.33	544.9	222.4
Stddev	298.	.06	2.7	2.7
%RSD	.6481	.2746	.4909	1.218
#1	45850.	23.29	543.0	220.5
#2	46270.	23.38	546.8	224.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	298.9	1326.	<.0000	<.0000
Stddev	.5	8.	.5044	5.319
%RSD	.1618	.5828	1.711	1953.
#1	298.5	1321.	<.0000	< .0000
#2	299.2	1331.	<.0000	3.489

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	15610.	1015.	11220.	585.6
Stddev	101.	5.	52.	3.3
%RSD	.6443	.4845	.4613	.5677
#1	15540.	1012.	11180.	583.2
#2	15680.	1019.	11260.	587.9

Sample Name: SPK 0207-F01 Run Time: 02/20/03 15:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	11.86	71740.	534.6	145.0
Stddev	.16	39.	3.0	17.6
%RSD	1.341	.0539	.5706	12.15
#1	11.74	71720.	532.4	157.4
#2	11.97	71770.	536.7	132.5

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	18.05	449.6	11.56	3807.
Stddev	1.91	.3	1.49	28.
%RSD	10.60	.0736	12.92	.7321
#1	16.70	449.4	12.61	3787.
#2	19.40	449.8	10.50	3826.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.7548	184.9	6809.	<.0000
Stddev	.5442	.8	1599.	2.130
%RSD	72.10	.4462	23.48	2.188
#1	.3700	184.3	7940.	< .0000
#2	1.140	185.4	5679.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	34.19	532.4	956.7
Stddev	.0000	1.09	5.5	9.3
%RSD	.0052	3.185	1.031	.9671
#1	<.0000	34.96	528.5	950.1
#2	<.0000	33.42	536.3	963.2

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	329500.	597.7	<.0000
Stddev	840.	3.7	.5580
%RSD	.2551	.6150	116100.
#1	328900.	595.1	<.0000
#2	330100.	600.3	.3941

Method: SHER Sample Name: 0207-F01 F Operator:
Comment:
Run Time: 02/20/03 15:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	2.093	48.85	1.568	1876.
Stddev	1.480	2.46	2.858	61.
%RSD	70.72	5.037	182.3	3.241
#1	1.046	50.59	< .0000	1833.
#2	3.140	47.11	3.589	1919.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	146.5	8.217	.0854	<.0000
Stddev	.4	.149	.0076	.5170
%RSD	.2991	1.819	8.907	78.55
#1	146.2	8.323	.0801	<.0000
#2	146.8	8.111	.0908	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	43390.	.1288	.0783	3.054
Stddev	298.	.0420	.1107	.817
%RSD	.6861	32.62	141.4	26.76
#1	43180.	.1585	.0000	2.476
#2	43600.	.0991	.1566	3.632

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	10.01	44.20	<.0000	<.0000
Stddev	1.17	.58	2.269	2.145
%RSD	11.65	1.315	131.7	119.9
#1	9.189	43.79	< .0000	< .0000
#2	10.84	44.61	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	15450.	978.0	10860.	6.648
Stddev	105.	.9	64.	.011
%RSD	.6774	.0930	.5854	.1617
#1	15360.	977.4	10810.	6.641
#2	15530.	978.6	10900.	6.656

Sample Name: 0207-F01 F Run Time: 02/20/03 15:33

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	11.16	72080.	3.053	74.70
Stddev	.22	40.	.114	3.77
%RSD	2.000	.0561	3.746	5.049
#1	11.32	72110.	2.972	77.37
#2	11.00	72050.	3.134	72.03

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.234	.7167	3777.
Stddev	.7727	.404	3.881	25.
%RSD	29.70	18.10	541.5	.6744
#1	<.0000	1.948	< .0000	3759.
#2	<.0000	2.520	3.461	3795.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	177.0	<.0000	<.0000
Stddev	.1465	6.1	1153.	2.626
%RSD	494.8	3.473	669.9	45.10
#1	.0740	172.6	< .000	< .0000
#2	<.0000	181.3	643.1	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	9.333
Stddev	.5522	.3262	.0005	.186
%RSD	19.68	15.69	.0336	1.994
#1	<.0000	<.0000	<.0000	9.465
#2	<.0000	<.0000	<.0000	9.202

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	46.02	<.0000
Stddev	629.5	.22	2.046
%RSD	47.07	.4815	259.2
#1	< .0000	45.87	.6574
#2	< .0000	46.18	< .0000

Method: SHER Sample Name: DUP0207-F01 F Operator:
Comment:
Run Time: 02/20/03 15:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	44.87	1.484	1940.
Stddev	.9349	4.91	.449	33.
%RSD	339.2	10.94	30.27	1.685
#1	<.0000	48.34	1.167	1917.
#2	.3854	41.40	1.802	1963.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	137.5	7.474	.0093	<.0000
Stddev	.4	.153	.0149	.2587
%RSD	.3091	2.046	159.9	21.44
#1	137.2	7.366	<.0000	<.0000
#2	137.8	7.582	.0198	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	40900.	.1656	.0678	2.094
Stddev	231.	.1221	.0467	1.089
%RSD	.5651	73.73	68.87	52.04
#1	40740.	.2520	.0348	2.864
#2	41060.	.0793	.1009	1.323

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	9.860	40.95	<.0000	<.0000
Stddev	.277	.10	2.858	1.115
%RSD	2.805	.2330	171.7	66.86
#1	9.664	40.89	.3569	< .0000
#2	10.06	41.02	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14410.	909.5	10250.	6.009
Stddev	50.	7.4	25.	.041
%RSD	.3466	.8172	.2460	.6754
#1	14380.	904.3	10230.	5.980
#2	14450.	914.8	10270.	6.038

Sample Name: DUP0207-F01 F Run Time: 02/20/03 15:37

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	10.43	69790.	1.570	104.0
Stddev	.12	75.	.042	15.1
%RSD	1.186	.1080	2.669	14.51
#1	10.52	69850.	1.599	93.38
#2	10.34	69740.	1.540	114.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.922	1.392	3544.
Stddev	.3743	1.066	1.134	18.
%RSD	16.87	55.44	81.47	.5061
#1	<.0000	2.676	2.194	3532.
#2	<.0000	1.169	.5902	3557.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3552	167.2	<.0000	<.0000
Stddev	.2721	1.0	910.6	2.627
%RSD	76.61	.5988	73.99	56.88
#1	.1628	167.9	< .0000	< .0000
#2	.5476	166.5	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	8.355
Stddev	.1103	.3265	1.621	.875
%RSD	5.440	18.44	48.21	10.48
#1	<.0000	<.0000	< .0000	8.974
#2	<.0000	<.0000	< .0000	7.736

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	42.90	.4599
Stddev	175.1	.20	.4649
%RSD	11.23	.4545	101.1
#1	< .0000	42.77	.7886
#2	< .0000	43.04	.1312

Method: SHER Sample Name: SPK 0207-F01 F Operator:
Comment:
Run Time: 02/20/03 15:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	41.65	2079.	31.06	5177.
Stddev	.23	1.	2.59	84.
%RSD	.5573	.0676	8.329	1.624
#1	41.81	2078.	29.23	5237.
#2	41.48	2080.	32.89	5118.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	146.6	2126.	55.34	<.0000
Stddev	.1	12.	.36	1.190
%RSD	.0886	.5830	.6492	87.99
#1	146.6	2118.	55.08	< .0000
#2	146.5	2135.	55.59	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	42540.	23.06	537.2	218.9
Stddev	322.	.02	2.9	1.9
%RSD	.7568	.0703	.5417	.8684
#1	42320.	23.05	535.2	220.2
#2	42770.	23.07	539.3	217.5

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	277.9	1142.	<.0000	<.0000
Stddev	2.3	5.	2.858	1.845
%RSD	.8205	.4235	9.282	169.0
#1	276.3	1139.	< .0000	< .0000
#2	279.5	1146.	< .0000	.2128

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	15100.	989.7	10630.	532.7
Stddev	96.	7.4	66.	2.8
%RSD	.6339	.7441	.6217	.5242
#1	15040.	984.5	10580.	530.7
#2	15170.	994.9	10680.	534.7

Sample Name: SPK 0207-F01 F Run Time: 02/20/03 15:41

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	11.67	71390.	524.8	153.9
Stddev	.09	59.	2.4	57.9
%RSD	.7556	.0825	.4500	37.60
#1	11.74	71430.	523.1	194.8
#2	11.61	71340.	526.5	113.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	16.78	446.8	11.10	3710.
Stddev	1.36	1.8	1.43	5.
%RSD	8.112	.3958	12.91	.1250
#1	17.74	445.5	10.09	3707.
#2	15.82	448.0	12.12	3714.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.3404	169.9	7725.	<.0000
Stddev	.6698	1.4	2327.	3.195
%RSD	196.8	.8379	30.12	3.210
#1	<.0000	168.9	6080.	< .0000
#2	.8140	170.9	9370.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	35.19	521.3	930.3
Stddev	.8821	1.20	3.8	3.5
%RSD	102.8	3.403	.7298	.3722
#1	<.0000	36.03	518.6	927.8
#2	<.0000	34.34	524.0	932.7

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	333900.	591.9	.9858
Stddev	1012.	2.6	2.138
%RSD	.3032	.4392	216.9
#1	334700.	590.0	< .0000
#2	333200.	593.7	2.498

Method: SHER Sample Name: 0207-J01 Operator:
Comment:
Run Time: 02/20/03 15:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3701.	<.0000	9757.
Stddev	.1558	65.	1.791	140.
%RSD	12.29	1.761	5.176	1.436
#1	<.0000	3655.	< .0000	9657.
#2	<.0000	3747.	< .0000	9856.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1219.	1904.	.7483	<.0000
Stddev	13.	24.	.0000	.1035
%RSD	1.058	1.236	.0013	5.240
#1	1210.	1887.	.7483	<.0000
#2	1228.	1920.	.7483	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	20710.	<.0000	1.420	9.246
Stddev	494.	.0979	.113	.771
%RSD	2.384	.3913	7.972	8.338
#1	20360.	<.0000	1.500	8.701
#2	21050.	<.0000	1.340	9.791

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	3.288	6418.	<.0000	<.0000
Stddev	.830	77.	2.858	2.660
%RSD	25.24	1.199	150.3	9.181
#1	2.701	6363.	.1197	< .0000
#2	3.875	6472.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	19480.	5481.	6929.	81.56
Stddev	398.	122.	61.	1.78
%RSD	2.044	2.218	.8739	2.188
#1	19200.	5395.	6886.	80.30
#2	19760.	5567.	6972.	82.83

Sample Name: 0207-J01 Run Time: 02/20/03 15:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	4.734	117500.	<.0000	193.0
Stddev	.259	3345.	.2475	25.2
%RSD	5.473	2.847	4.499	13.04
#1	4.917	119900.	<.0000	210.8
#2	4.550	115100.	<.0000	175.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.144	<.0000	10160.
Stddev	.9773	1.139	2.805	196.
%RSD	19.25	99.54	78.30	1.927
#1	<.0000	.3387	< .0000	10020.
#2	<.0000	1.949	< .0000	10300.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.5920	3502.	31430.	<.0000
Stddev	.0209	61.	122.	5.397
%RSD	3.536	1.751	.3868	238.8
#1	.5772	3459.	31520.	1.556
#2	.6068	3546.	31350.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	18.63	<.0000	1.452	37.88
Stddev	.00	2.614	.432	4.29
%RSD	.0008	23.25	29.77	11.33
#1	18.63	< .0000	1.147	34.85
#2	18.63	< .0000	1.758	40.92

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	14.60	<.0000
Stddev	805.4	.19	.8367
%RSD	7.310	1.309	10.35
#1	< .0000	14.46	<.0000
#2	< .0000	14.73	<.0000

Method: SHER Sample Name: 0207-J01F Operator:
Comment:
Run Time: 02/20/03 15:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	12.53	2.540	754.5
Stddev	1.948	4.17	.942	143.4
%RSD	1764.	33.27	37.10	19.00
#1	< .0000	15.48	1.874	855.8
#2	1.267	9.582	3.206	653.1

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1177.	1752.	.3341	<.0000
Stddev	9.	29.	.0539	1.500
%RSD	.7975	1.682	16.15	241.8
#1	1183.	1773.	.3722	< .0000
#2	1170.	1731.	.2959	.4403

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	20240.	<.0000	<.0000	2.693
Stddev	29.	.2924	.1599	1.362
%RSD	.1410	1.298	32.04	50.57
#1	20260.	<.0000	<.0000	1.730
#2	20220.	<.0000	<.0000	3.656

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2.466	4.956	<.0000	<.0000
Stddev	.664	.257	3.195	.3883
%RSD	26.92	5.183	1349.	1.388
#1	1.997	5.138	< .0000	<.0000
#2	2.935	4.775	2.022	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	17960.	5527.	5136.	38.80
Stddev	19.	19.	67.	.04
%RSD	.1066	.3522	1.311	.0999
#1	17970.	5513.	5183.	38.83
#2	17940.	5541.	5088.	38.78

Sample Name: 0207-J01F Run Time: 02/20/03 15:58

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.178	118300.	.9345	58.70
Stddev	.177	1002.	.0344	59.12
%RSD	15.00	.8468	3.679	100.7
#1	1.303	117600.	.9588	100.5
#2	1.053	119000.	.9101	16.89

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.4677	2.913	5035.
Stddev	1.358	.4779	3.165	53.
%RSD	157.0	102.2	108.6	1.051
#1	< .0000	.8057	.6750	5072.
#2	.0954	.1298	5.151	4997.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.0148	3390.	<.0000	3.715
Stddev	.2512	9.	646.5	.639
%RSD	1702.	.2714	46.50	17.20
#1	.1924	3396.	< .0000	3.263
#2	<.0000	3383.	< .0000	4.167

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	25.40
Stddev	.9922	2.721	1.730	1.11
%RSD	53.03	29.20	68.57	4.362
#1	<.0000	< .0000	< .0000	24.62
#2	<.0000	< .0000	< .0000	26.18

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	6.192	<.0000
Stddev	979.3	.026	.9299
%RSD	35.93	.4219	28.29
#1	< .0000	6.210	<.0000
#2	< .0000	6.173	<.0000

Method: SHER Sample Name: CCV-2 Operator:
Comment:
Run Time: 02/20/03 16:03 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	516.4	2214.	2160.	9900.
Stddev	.5	6.	13.	40.
%RSD	.0892	.2861	.6108	.4091
#1	516.7	2219.	2170.	9928.
#2	516.0	2210.	2151.	9871.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	2040.	2024.	2136.	3.477
Stddev	254.	1.	5.	.673
%RSD	12.45	.0516	.2116	19.35
#1	2220.	2024.	2133.	3.953
#2	1860.	2025.	2139.	3.001

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	2059.	2132.	2110.	2115.
Stddev	270.	11.	14.	2.
%RSD	13.10	.4992	.6595	.0918
#1	2250.	2140.	2120.	2114.
#2	1868.	2125.	2100.	2116.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2011.	2118.	<.0000	<.0000
Stddev	5.	11.	3.951	.9867
%RSD	.2682	.5243	3.084	1.872
#1	2007.	2126.	< .0000	<.0000
#2	2015.	2111.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	11080.	2309.	2156.	2050.
Stddev	39.	14.	12.	12.
%RSD	.3523	.5915	.5360	.5836
#1	11100.	2319.	2165.	2059.
#2	11050.	2299.	2148.	2042.

Sample Name: CCV-2 Run Time: 02/20/03 16:03

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2053.	2183.	2000.	748.0
Stddev	10.	360.	313.	15.1
%RSD	.4696	16.49	15.65	2.018
#1	2060.	2438.	2222.	737.3
#2	2046.	1929.	1779.	758.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2107.	2038.	2081.	10030.
Stddev	176.	7.	307.	21.
%RSD	8.348	.3265	14.75	.2112
#1	2231.	2043.	2298.	10050.
#2	1983.	2033.	1864.	10020.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units.	ppb	ppb	ppb	ppm
Avg	2136.	2186.	22820.	<.0000
Stddev	141.	6.	1983.	1.776
%RSD	6.588	.2809	8.690	.4663
#1	2236.	2190.	24220.	< .0000
#2	2036.	2181.	21420.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	1.169	2105.	2102.	1936.
Stddev	.441	8.	.	10.
%RSD	37.71	.3673	.0065	.5026
#1	.8575	2111.	2101.	1929.
#2	1.481	2100.	2102.	1943.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1313000.	2164.	<.0000
Stddev	11410.	12.	.3720
%RSD	.8697	.5380	5.338
#1	1321000.	2172.	<.0000
#2	1304000.	2155.	<.0000

Method: SHER Sample Name: CCB-2 Operator:
Comment:
Run Time: 02/20/03 16:09 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	7.225	2.071	159.7
Stddev	1.868	5.229	.658	59.2
%RSD	377.6	72.37	31.77	37.06
#1	.8262	10.92	1.606	201.5
#2	< .0000	3.527	2.536	117.8

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	3.148	1.812	.1220	1.025
Stddev	1.295	.264	.0670	3.001
%RSD	41.12	14.56	54.92	292.8
#1	4.063	1.626	.1694	3.146
#2	2.233	1.999	.0746	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	.4186	.3794	.1548	.9615
Stddev	1.062	.0480	.2780	.5431
%RSD	253.6	12.66	179.5	56.48
#1	1.169	.4134	.3514	1.345
#2	< .0000	.3454	<.0000	.5775

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2.579	2.171	<.0000	<.0000
Stddev	1.163	2.144	2.270	1.244
%RSD	45.08	98.76	224.6	51.27
#1	3.401	3.687	.5945	< .0000
#2	1.757	.6550	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	43.94	8.193	.1472
Stddev	.8564	1.20	.593	.1467
%RSD	133.0	2.736	7.232	99.62
#1	<.0000	43.09	8.613	.2509
#2	<.0000	44.79	7.774	.0435

Sample Name: CCB-2 Run Time: 02/20/03 16:09

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	7.764	<.0000	.1400	<.0000
Stddev	4.804	.7412	.1142	22.64
%RSD	61.87	5.784	81.57	847.6
#1	11.16	<.0000	.2208	< .0000
#2	4.367	<.0000	.0592	13.34

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	6.159	4.728	6.727
Stddev	.4896	2.131	1.433	1.113
%RSD	324.9	34.61	30.30	16.55
#1	.1955	7.666	5.741	5.940
#2	<.0000	4.652	3.715	7.514

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.6216	1.473	<.0000	<.0000
Stddev	.4395	2.749	829.3	1.846
%RSD	70.71	186.6	32.93	94.28
#1	.9324	3.417	< .0000	< .0000
#2	.3108	< .0000	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2206	.2176	2.377	1.161
%RSD	25.74	14.13	1036.	43.93
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	1.451	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	642.9	<.0000	<.0000
Stddev	910.3	.2506	.4650
%RSD	141.6	127.7	64.39
#1	1287.	<.0000	<.0000
#2	< .000	<.0000	<.0000

Method: SHER Sample Name: 0207-J02 Operator:
Comment:
Run Time: 02/20/03 16:16 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1652.	<.0000	93250.
Stddev	2.960	11.	4.343	134.
%RSD	49.30	.6625	1.562	.1437
#1	< .0000	1660.	< .0000	93160.
#2	< .0000	1644.	< .0000	93350.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	457.9	.2447	<.0000
Stddev	.8829	.9	.0019	.6729
%RSD	1.301	.2024	.7760	26.67
#1	<.0000	457.3	.2433	<.0000
#2	<.0000	458.6	.2460	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	88190.	<.0000	3.052	<.0000
Stddev	376.	.0322	.113	2.457
%RSD	.4266	.6013	3.713	92.96
#1	87930.	<.0000	3.132	< .0000
#2	88460.	<.0000	2.972	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	56080.	.0011	<.0000
Stddev	1.771	466.	.6724	.9021
%RSD	30.38	.8305	60990.	2.216
#1	< .0000	55750.	<.0000	<.0000
#2	< .0000	56410.	.4766	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	8398.	399.9	24590.	847.5
Stddev	11.	2.0	23.	1.0
%RSD	.1295	.4903	.0930	.1214
#1	8391.	401.2	24570.	846.8
#2	8406.	398.5	24610.	848.2

Sample Name: 0207-J02 Run Time: 02/20/03 16:16

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.440	46770.	<.0000	1420.
Stddev	.442	140.	2.087	24.
%RSD	18.10	.3003	1.666	1.680
#1	2.752	46670.	< .0000	1403.
#2	2.128	46870.	< .0000	1437.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3.096	<.0000	8499.
Stddev	1.093	1.728	1.078	13.
%RSD	2.161	55.80	1.268	.1578
#1	< .0000	4.318	< .0000	8489.
#2	< .0000	1.874	< .0000	8508.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1815.	285900.	10.09
Stddev	.5024	1.	212.	5.11
%RSD	125.7	.0611	.0740	50.66
#1	<.0000	1815.	286000.	6.477
#2	<.0000	1816.	285700.	13.71

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	18.79	<.0000	<.0000	15.84
Stddev	.88	.7620	.1081	2.87
%RSD	4.700	36.62	35.35	18.13
#1	18.16	<.0000	<.0000	13.81
#2	19.41	<.0000	<.0000	17.87

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	56.71	<.0000
Stddev	2903.	.02	.2788
%RSD	3.270	.0366	47.09
#1	< .000	56.70	<.0000
#2	< .000	56.73	<.0000

Method: SHER Sample Name: 0207-J02F Operator:
Comment:
Run Time: 02/20/03 16:20 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	.2752	13.33	2.958	3091.
Stddev	2.026	.77	.678	83.
%RSD	736.0	5.765	22.93	2.670
#1	1.708	12.79	3.437	3149.
#2	< .0000	13.87	2.478	3032.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	75.10	293.7	.0935	<.0000
Stddev	.34	.3	.0260	1.552
%RSD	.4591	.0912	27.84	714.5
#1	74.86	293.5	.0751	.8804
#2	75.35	293.9	.1119	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	83410.	<.0000	.8370	1.726
Stddev	297.	.0781	.1993	2.181
%RSD	.3556	2.138	23.81	126.4
#1	83200.	<.0000	.9779	.1839
#2	83620.	<.0000	.6961	3.268

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	3.249	12.06	2.677	<.0000
Stddev	1.771	2.58	3.447	.0430
%RSD	54.51	21.41	128.8	.3582
#1	4.501	13.89	.2393	<.0000
#2	1.996	10.24	5.115	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	7941.	405.4	24080.	614.3
Stddev	38.	11.7	63.	2.3
%RSD	.4837	2.878	.2605	.3728
#1	7914.	397.1	24040.	612.7
#2	7968.	413.6	24130.	615.9

Sample Name: 0207-J02F Run Time: 02/20/03 16:20

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.895	47430.	4.713	84.49
Stddev	.165	254.	.046	22.64
%RSD	8.703	.5367	.9702	26.80
#1	1.778	47250.	4.681	100.5
#2	2.011	47610.	4.745	68.48

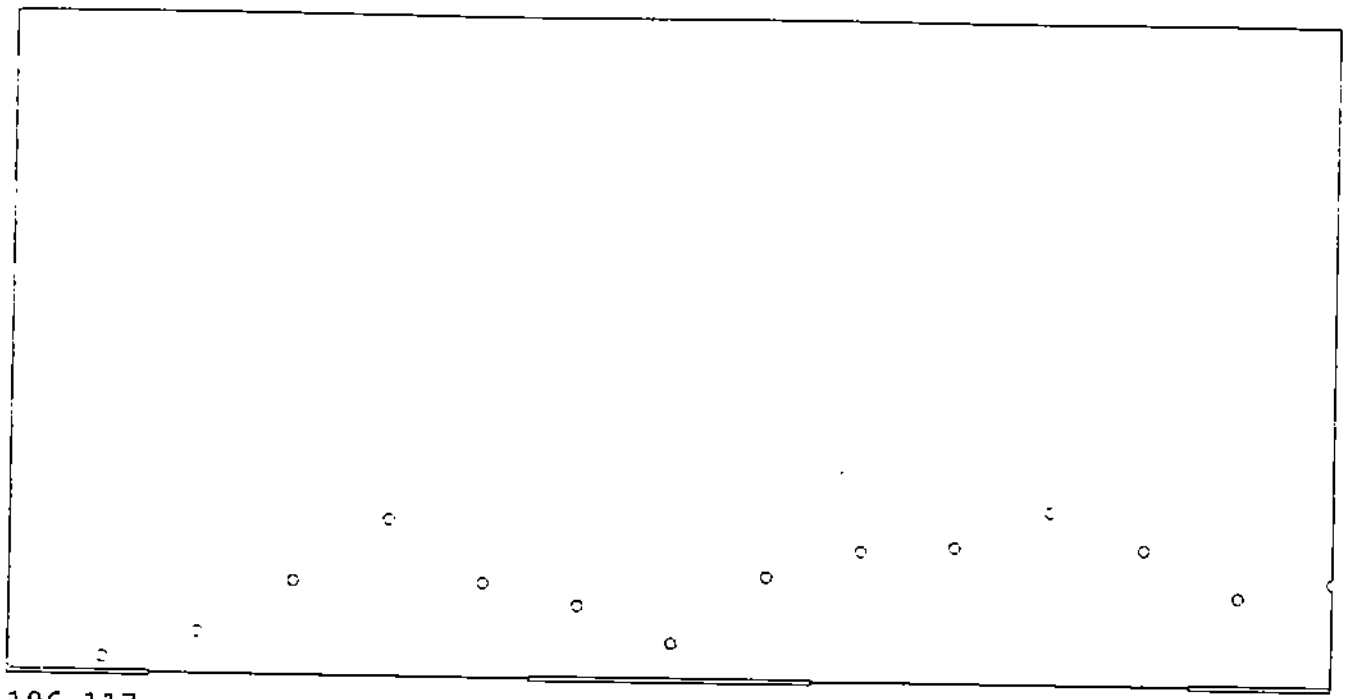
Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.196	5.996	4020.
Stddev	1.126	1.581	2.150	2.
%RSD	37.66	132.2	35.86	.0430
#1	< .0000	.0778	4.475	4022.
#2	< .0000	2.313	7.516	4019.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1766.	<.0000	<.0000
Stddev	.2512	11.	81.09	1.136
%RSD	80.79	.6079	3.198	748.6
#1	<.0000	1758.	< .0000	< .0000
#2	<.0000	1773.	< .0000	.6517

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	9.377
Stddev	.2204	1.634	2.270	.876
%RSD	4.961	301.7	92.81	9.345
#1	<.0000	< .0000	< .0000	9.997
#2	<.0000	.6136	< .0000	8.758

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	6.231	<.0000
Stddev	1366.	.016	.0929
%RSD	63.30	.2508	8.312
#1	< .000	6.220	<.0000
#2	< .000	6.243	<.0000

Method: SHER Element: Se 196.090 (171)



196.117 Wavelength 196.063

Subarray Width : 15 Left Bkg pos: 1 Used Rep#: 1
Subarray Height: 3 Right Bkg pos: 14 Used
Center Width : 3

Samplename	Raw Intens	Background	Corrected
0207-J02F	4.46	4.44	0.02

Method: SHER Sample Name: 0207-J03 Operator:
Comment:
Run Time: 02/20/03 16:24 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	8608.	<.0000	25770.
Stddev	.2335	49.	2.496	206.
%RSD	10.60	.5737	2.816	.7974
#1	<.0000	8573.	< .0000	25630.
#2	<.0000	8643.	< .0000	25920.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	569.0	626.8	.5695	2.965
Stddev	2.1	5.3	.0149	.052
%RSD	.3684	.8524	2.624	1.746
#1	567.5	623.0	.5589	2.928
#2	570.5	630.6	.5800	3.001

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	7987.	<.0000	5.144	12.29
Stddev	84.	.0320	.076	1.42
%RSD	1.054	.3865	1.482	11.53
#1	7928.	<.0000	5.090	13.29
#2	8047.	<.0000	5.198	11.29

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	8.609	16750.	<.0000	<.0000
Stddev	1.273	94.	2.606	1.072
%RSD	14.79	.5611	399.1	6.269
#1	7.708	16690.	< .0000	< .0000
#2	9.509	16820.	1.190	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14650.	3840.	6017.	171.8
Stddev	67.	22.	38.	1.1
%RSD	.4591	.5823	.6289	.6273
#1	14600.	3824.	5991.	171.0
#2	14700.	3856.	6044.	172.5

Sample Name: 0207-J03 Run Time: 02/20/03 16:24

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.856	93410.	<.0000	418.9
Stddev	.336	519.	.6625	2.5
%RSD	11.75	.5552	2.787	.6009
#1	3.093	93780.	<.0000	420.7
#2	2.619	93040.	<.0000	417.1

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.479	<.0000	16910.
Stddev	.9916	1.361	2.029	98.
%RSD	5.510	54.90	9.568	.5775
#1	<.0000	3.441	< .0000	16840.
#2	<.0000	1.516	< .0000	16980.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	992.0	87770.	<.0000
Stddev	.5652	7.8	182.	1.775
%RSD	318.1	.7883	.2077	50.50
#1	<.0000	986.5	87900.	< .0000
#2	.2220	997.5	87640.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	60.03	<.0000	14.60	44.13
Stddev	.78	.9800	2.59	.25
%RSD	1.292	23.14	17.76	.5685
#1	59.48	<.0000	16.43	43.95
#2	60.58	<.0000	12.77	44.30

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	46.18	<.0000
Stddev	350.0	.26	1.116
%RSD	1.124	.5609	20.21
#1	< .0000	46.00	< .0000
#2	< .0000	46.36	< .0000

Method: SHER Sample Name: 0207-J03F Operator:
Comment:
Run Time: 02/20/03 16:28 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	28.51	3.522	308.3
Stddev	.0001	5.95	3.112	126.1
%RSD	.0292	20.85	88.35	40.91
#1	<.0000	24.31	5.722	397.5
#2	<.0000	32.72	1.322	219.1

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	634.2	436.2	.1159	2.085
Stddev	7.1	1.6	.0093	3.363
%RSD	1.116	.3564	8.055	161.3
#1	629.2	435.1	.1225	< .0000
#2	639.2	437.3	.1093	4.463

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	4250.	<.0000	<.0000	3.073
Stddev	59.	.0160	.0320	.817
%RSD	1.386	.2780	13.62	26.58
#1	4208.	<.0000	<.0000	2.496
#2	4292.	<.0000	<.0000	3.651

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	3.014	13.33	4.042	<.0000
Stddev	.664	.00	2.858	2.960
%RSD	22.05	.0130	70.71	43.56
#1	3.484	13.33	2.021	< .0000
#2	2.544	13.33	6.063	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	15420.	4031.	1231.	12.95
Stddev	332.	67.	6.	.16
%RSD	2.151	1.674	.4520	1.258
#1	15190.	3983.	1227.	12.83
#2	15660.	4079.	1235.	13.06

Sample Name: 0207-J03F Run Time: 02/20/03 16:28

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.2123	93340.	.1885	.8879
Stddev	.3532	1250.	.3884	10.06
%RSD	166.4	1.339	206.1	1133.
#1	<.0000	94230.	.4631	< .0000
#2	.4621	92460.	<.0000	8.003

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.1377	1.221	1.181	5778.
Stddev	1.053	.294	2.388	73.
%RSD	764.4	24.07	202.1	1.255
#1	.8822	1.013	2.870	5727.
#2	< .0000	1.429	< .0000	5830.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.2664	847.5	<.0000	.2510
Stddev	.1884	8.5	2367.	2.414
%RSD	70.71	1.006	116.5	961.9
#1	.1332	841.5	< .000	< .0000
#2	.3996	853.5	< .000	1.958

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	13.43
Stddev	.1104	1.089	2.270	.71
%RSD	5.901	44.19	148.5	5.252
#1	<.0000	< .0000	.0764	12.93
#2	<.0000	< .0000	< .0000	13.93

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	.6408	.1967
Stddev	1855.	.0864	1.767
%RSD	299.5	13.48	898.1
#1	692.5	.5797	< .0000
#2	< .000	.7019	1.446

Method: SHER Sample Name: 0207-J04 Operator:
Comment:
Run Time: 02/20/03 16:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	.3306	729.9	<.0000	4478.
Stddev	1.012	3.4	.7314	45.
%RSD	306.1	.4630	20.70	1.009
#1	< .0000	732.3	<.0000	4510.
#2	1.046	727.6	<.0000	4446.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	120.7	431.2	.1234	<.0000
Stddev	.6	.0	.0354	.6727
%RSD	.5161	.0090	28.68	80.06
#1	121.1	431.1	.1484	<.0000
#2	120.2	431.2	.0983	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	77390.	<.0000	.6194	9.606
Stddev	349.	.1101	.2165	2.991
%RSD	.4505	2.748	34.95	31.14
#1	77140.	<.0000	.4663	7.491
#2	77630.	<.0000	.7725	11.72

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	8.600	1312.	5.054	<.0000
Stddev	1.384	2.	3.783	.6004
%RSD	16.09	.1875	74.86	1.935
#1	9.579	1310.	2.379	<.0000
#2	7.622	1313.	7.729	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	6676.	504.9	23040.	176.5
Stddev	33.	12.3	17.	.5
%RSD	.4918	2.435	.0745	.2789
#1	6653.	496.2	23060.	176.2
#2	6700.	513.6	23030.	176.9

Sample Name: 0207-J04 Run Time: 02/20/03 16:37

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	3.077	47430.	.4713	162.8
Stddev	.047	137.	.2628	7.5
%RSD	1.531	.2886	55.76	4.637
#1	3.110	47530.	.6571	168.1
#2	3.043	47340.	.2855	157.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1.281	.1457	<.0000	5694.
Stddev	.840	.9189	.0597	8.
%RSD	65.59	630.5	6.049	.1436
#1	.6869	.7955	<.0000	5688.
#2	1.875	<.0000	<.0000	5700.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.2220	3786.	2345.	.6019
Stddev	.1256	8.	182.	.4971
%RSD	56.59	.2083	7.768	82.59
#1	.1332	3780.	2216.	.9534
#2	.3108	3791.	2474.	.2504

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	4.363	<.0000	<.0000	13.04
Stddev	1.213	.3267	.3242	2.09
%RSD	27.79	9.425	53.04	16.00
#1	5.220	<.0000	<.0000	14.52
#2	3.506	<.0000	<.0000	11.56

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	86.80	<.0000
Stddev	1085.	.19	.5581
%RSD	20.20	.2203	20.23
#1	< .000	86.66	<.0000
#2	< .000	86.93	<.0000

Method: SHER Sample Name: CCV-3 Operator:
Comment:
Run Time: 02/20/03 17:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	528.9	2208.	2030.	10120.
Stddev	2.7	13.	319.	73.
%RSD	.5013	.5935	15.70	.7225
#1	527.0	2199.	2256.	10170.
#2	530.8	2218.	1805.	10070.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1933.	2056.	1872.	3.513
Stddev	2.	2.	6.	1.966
%RSD	.0795	.1020	.3123	55.96
#1	1932.	2055.	1867.	2.123
#2	1934.	2058.	1876.	4.904

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1931.	1995.	1987.	2129.
Stddev	3.	1.	2.	7.
%RSD	.1473	.0319	.0904	.3065
#1	1929.	1995.	1989.	2133.
#2	1933.	1994.	1986.	2124.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2059.	1971.	<.0000	<.0000
Stddev	4.	2.	2.942	.2147
%RSD	.1994	.0962	2.413	.3928
#1	2056.	1972.	< .0000	<.0000
#2	2062.	1969.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	11340.	2404.	2176.	2122.
Stddev	53.	13.	3.	3.
%RSD	.4652	.5352	.1507	.1509
#1	11370.	2413.	2174.	2124.
#2	11300.	2395.	2179.	2119.

Sample Name: CCV-3 Run Time: 02/20/03 17:19

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2127.	2015.	1834.	736.4
Stddev	5.	13.	1.	39.0
%RSD	.2352	.6388	.0795	5.294
#1	2131.	2024.	1835.	764.0
#2	2124.	2006.	1833.	708.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2074.	2097.	1945.	10230.
Stddev	3.	1.	1.	1.
%RSD	.1517	.0345	.0466	.0060
#1	2076.	2098.	1944.	10230.
#2	2072.	2097.	1946.	10230.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2125.	2226.	23610.	<.0000
Stddev	1.	1.	263.	.5658
%RSD	.0408	.0407	1.115	.1495
#1	2125.	2227.	23420.	<.0000
#2	2124.	2225.	23790.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	1.949	2148.	2159.	2062.
Stddev	.661	6.	1.	9.
%RSD	33.94	.2732	.0496	.4391
#1	2.417	2152.	2160.	2069.
#2	1.481	2143.	2159.	2056.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1301000.	1829.	<.0000
Stddev	4069.	1.	.8369
%RSD	.3128	.0329	10.35
#1	1298000.	1829.	<.0000
#2	1304000.	1828.	<.0000

Method: SHER Sample Name: CCB-3 Operator:
Comment:
Run Time: 02/20/03 17:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	.6611	<.0000	<.0000	56.16
Stddev	1.323	12.62	.7502	65.40
%RSD	200.2	436.6	527.2	116.5
#1	< .0000	< .0000	.3882	9.908
#2	1.597	6.034	<.0000	102.4

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	3.646	2.163	.7723	1.573
Stddev	2.360	.318	.0166	2.328
%RSD	64.72	14.71	2.153	148.0
#1	5.314	2.388	.7841	3.219
#2	1.977	1.938	.7606	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1.170	.1444	.2052	3.464
Stddev	.000	.1922	.1033	3.539
%RSD	.0087	133.1	50.35	102.2
#1	1.170	.2803	.2783	.9615
#2	1.170	.0085	.1322	5.966

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	1.875	1.304	<.0000	<.0000
Stddev	2.266	1.012	.6725	2.616
%RSD	120.9	77.62	11.55	616.1
#1	3.477	2.019	<.0000	< .0000
#2	.2721	.5882	<.0000	1.425

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	43.52	<.0000	.1874
Stddev	1.221	3.19	4.749	.1888
%RSD	218.6	7.335	151.1	100.7
#1	.3049	45.77	< .0000	.3210
#2	< .0000	41.26	.2160	.0539

Sample Name: CCB-3 Run Time: 02/20/03 17:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	13.74	<.0000	.0915	30.24
Stddev	11.55	.0888	.4112	11.32
%RSD	84.06	.4338	449.2	37.43
#1	21.91	<.0000	.3823	38.24
#2	5.573	<.0000	<.0000	22.23

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.7433	8.627	4.221	<.0000
Stddev	.3517	5.623	.358	10.65
%RSD	47.32	65.18	8.477	1321.
#1	.4946	12.60	3.968	< .0000
#2	.9920	4.651	4.474	6.727

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.9767	1.885	<.0000	<.0000
Stddev	1.067	3.665	1032.	.7808
%RSD	109.3	194.4	55.50	155.6
#1	1.731	4.477	< .000	.0504
#2	.2220	< .0000	< .000	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.5509	3.810	.1081	.6248
%RSD	50.52	550.2	7.865	68.56
#1	<.0000	2.002	<.0000	<.0000
#2	<.0000	< .0000	<.0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	524.8	.2166	.2789
%RSD	78.56	52.77	85.07
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: CRI-2 Operator:
Comment:
Run Time: 02/20/03 17:28 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	20.53	5.875	16.85	472.4
Stddev	.63	4.170	1.47	121.5
%RSD	3.054	70.98	8.731	25.72
#1	20.98	8.823	17.89	386.5
#2	20.09	2.926	15.81	558.3

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	.5061	2.420	9.967	1.976
Stddev	.2129	.357	.013	1.966
%RSD	42.08	14.77	.1347	99.48
#1	.6566	2.673	9.977	3.366
#2	.3555	2.167	9.958	.5859

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	28.96	10.07	100.9	22.32
Stddev	1.78	.09	.3	.82
%RSD	6.133	.8899	.3409	3.679
#1	30.21	10.13	100.7	22.90
#2	27.70	10.01	101.2	21.74

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	56.64	7.552	<.0000	<.0000
Stddev	.32	.087	.5883	.5147
%RSD	.5622	1.154	7.442	22.63
#1	56.42	7.614	<.0000	<.0000
#2	56.87	7.490	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	62.91	46.49	42.83	34.61
Stddev	.14	2.20	4.46	.20
%RSD	.2254	4.723	10.41	.5837
#1	62.81	44.94	45.99	34.47
#2	63.01	48.04	39.68	34.76

Sample Name: CRI-2 Run Time: 02/20/03 17:28

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	99.51	22.70	75.28	<.0000
Stddev	.97	.19	.29	47.80
%RSD	.9748	.8298	.3839	1074.
#1	98.83	22.83	75.08	29.35
#2	100.2	22.57	75.49	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	6.248	129.9	14.10	5.931
Stddev	1.123	3.3	.72	3.356
%RSD	17.97	2.522	5.086	56.58
#1	7.042	127.6	13.59	3.558
#2	5.454	132.3	14.61	8.304

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.7104	.1773	571.8	<.0000
Stddev	.3139	1.250	708.6	2.202
%RSD	44.19	705.0	123.9	10.54
#1	.9323	< .0000	1073.	< .0000
#2	.4884	1.061	70.74	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	19.55	107.2	189.5
Stddev	.8814	1.52	.1	.8
%RSD	377.2	7.798	.1227	.4153
#1	<.0000	18.48	107.3	190.0
#2	.3896	20.63	107.1	188.9

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	68050.	41.03	<.0000
Stddev	1018.	.34	.5579
%RSD	1.496	.8226	85.00
#1	67330.	40.79	<.0000
#2	68770.	41.27	<.0000

Method: SHER Sample Name: ICSA-2 Operator:
Comment:
Run Time: 02/20/03 17:31 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	432200.	<.0000	240600.
Stddev	1.557	2105.	13.62	1538.
%RSD	8.537	.4870	1.084	.6393
#1	< .0000	430700.	< .0000	239500.
#2	< .0000	433700.	< .0000	241700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	2.173	.6944	4.756
Stddev	2.161	.179	.0055	1.035
%RSD	.5540	8.252	.7908	21.77
#1	< .0000	2.300	.6905	5.488
#2	< .0000	2.047	.6983	4.024

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	347300.	<.0000	<.0000	17.25
Stddev	1944.	.0120	.1476	.83
%RSD	.5596	1.134	40.03	4.815
#1	345900.	<.0000	<.0000	16.66
#2	348700.	<.0000	<.0000	17.84

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	121200.	<.0000	<.0000
Stddev	1.879	1328.	1.092	4.328
%RSD	5.294	1.096	15.44	4.941
#1	< .0000	120200.	< .0000	< .0000
#2	< .0000	122100.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	3.507	<.0000	431600.	.1070
Stddev	.017	7.092	304.	.0155
%RSD	.4753	.3720	.0705	14.46
#1	3.495	< .0000	431800.	.0961
#2	3.518	< .0000	431400.	.1180

Sample Name: ICSA-2 Run Time: 02/20/03 17:31

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	24.18	<.0000	3722.
Stddev	.7592	.42	2.062	78.
%RSD	12.72	1.738	.5733	2.090
#1	<.0000	23.89	< .0000	3667.
#2	<.0000	24.48	< .0000	3777.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.5244	<.0000	42.85
Stddev	4.825	1.132	.3266	9.53
%RSD	1.521	216.0	.1206	22.24
#1	< .0000	1.325	<.0000	36.11
#2	< .0000	< .0000	<.0000	49.59

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	37.92	13.68	760900.	11.60
Stddev	.19	.50	1987.	.71
%RSD	.4920	3.664	.2612	6.118
#1	37.78	14.03	759500.	11.10
#2	38.05	13.32	762300.	12.10

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	2.089	.0011	2.378	2.474
%RSD	2.803	.0083	24.11	8.777
#1	< .0000	<.0000	< .0000	< .0000
#2	< .0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	29.97	2.235
Stddev	1039.	.09	.744
%RSD	.4832	.3070	33.28
#1	< .000	29.90	2.761
#2	< .000	30.03	1.709

Method: SHER Sample Name: ICSAB-2 Operator:
Comment:
Run Time: 02/20/03 17:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	1059.	434300.	<.0000	251300.
Stddev	1.	223.	6.355	167.
%RSD	.0554	.0514	.4957	.0664
#1	1059.	434500.	< .0000	251400.
#2	1058.	434200.	< .0000	251200.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	484.7	428.8	3.257
Stddev	1.429	3.1	1.3	.362
%RSD	.3535	.6341	.3057	11.12
#1	< .0000	486.9	429.7	3.001
#2	< .0000	482.5	427.9	3.514

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	347500.	890.6	394.0	489.0
Stddev	339.	3.6	1.2	4.8
%RSD	.0974	.3996	.3024	.9775
#1	347800.	893.1	394.8	492.4
#2	347300.	888.1	393.1	485.7

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	442.8	122300.	<.0000	<.0000
Stddev	2.7	694.	.5884	3.647
%RSD	.6161	.5679	5.656	3.762
#1	444.8	122800.	<.0000	< .0000
#2	440.9	121800.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	439800.	485.6
Stddev	.1400	48.23	2068.	1.7
%RSD	127.2	2.431	.4703	.3429
#1	<.0000	< .0000	441300.	486.8
#2	<.0000	< .0000	438300.	484.5

Sample Name: ICSAB-2 Run Time: 02/20/03 17:35

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	18.87	877.3	3958.
Stddev	.0883	.22	3.5	19.
%RSD	1.611	1.163	.4018	.4774
#1	<.0000	18.71	879.8	3971.
#2	<.0000	19.02	874.8	3945.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1039.	6.083	<.0000	.4070
Stddev	5.	.040	5.560	10.10
%RSD	.4985	.6509	1.972	2482.
#1	1043.	6.055	< .0000	7.549
#2	1036.	6.111	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.1776	14.85	789600.	<.0000
Stddev	.0628	1.67	7715.	.7818
%RSD	35.37	11.23	.9771	1.059
#1	.1332	16.03	795100.	<.0000
#2	.2220	13.68	784200.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	475.4	425.9
Stddev	.2234	2.614	1.5	7.2
%RSD	.2939	11.17	.3145	1.694
#1	<.0000	< .0000	474.4	420.8
#2	<.0000	< .0000	476.5	431.0

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	848.9	2.498
Stddev	2136.	2.2	.744
%RSD	99.09	.2563	29.78
#1	< .000	850.4	1.972
#2	< .000	847.3	3.024

Method: SHER Sample Name: CCV-4 Operator:
Comment:
Run Time: 02/20/03 17:39 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	523.8	2226.	1809.	10270.
Stddev	1.0	18.	5.	125.
%RSD	.1906	.8280	.2846	1.215
#1	523.1	2239.	1805.	10360.
#2	524.5	2213.	1812.	10190.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1928.	2062.	1874.	3.695
Stddev	11.	6.	8.	1.395
%RSD	.5666	.2978	.4203	37.76
#1	1920.	2057.	1869.	4.682
#2	1935.	2066.	1880.	2.709

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1947.	1987.	1979.	2132.
Stddev	6.	10.	8.	5.
%RSD	.2939	.4883	.4290	.2528
#1	1951.	1980.	1973.	2128.
#2	1943.	1994.	1985.	2136.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2067.	1978.	<.0000	<.0000
Stddev	10.	1.	3.683	4.897
%RSD	.5032	.0537	2.985	9.004
#1	2059.	1979.	< .0000	< .0000
#2	2074.	1977.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	11210.	2376.	2198.	2114.
Stddev	6.	3.	6.	9.
%RSD	.0558	.1249	.2866	.4138
#1	11210.	2378.	2203.	2108.
#2	11220.	2374.	2194.	2120.

Sample Name: CCV-4 Run Time: 02/20/03 17:39

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2108.	1990.	1831.	781.7
Stddev	21.	2.	3.	27.8
%RSD	.9804	.1142	.1741	3.552
#1	2094.	1992.	1828.	762.1
#2	2123.	1989.	1833.	801.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2061.	2092.	1943.	10330.
Stddev	9.	5.	2.	41.
%RSD	.4254	.2344	.0791	.3936
#1	2055.	2089.	1944.	10300.
#2	2067.	2096.	1942.	10360.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2114.	2218.	20400.	<.0000
Stddev	10.	6.	952.	3.713
%RSD	.4795	.2566	4.668	.9800
#1	2107.	2214.	19730.	< .0000
#2	2121.	2222.	21070.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	2.495	2146.	2160.	2077.
Stddev	.331	2.	14.	17.
%RSD	13.26	.1044	.6528	.8395
#1	2.261	2144.	2150.	2064.
#2	2.729	2148.	2170.	2089.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1310000.	1825.	<.0000
Stddev	7986.	5.	.7441
%RSD	.6098	.2664	8.574
#1	1315000.	1821.	<.0000
#2	1304000.	1828.	<.0000

Method: SHER Sample Name: CCB-4 Operator:
Comment:
Run Time: 02/20/03 17:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	1.377	13.01	<.0000	22.02
Stddev	1.869	8.19	1.483	1.56
%RSD	135.7	62.99	76.17	7.072
#1	.0553	7.213	< .0000	23.12
#2	2.698	18.80	< .0000	20.92

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.371	2.438	.7449	1.207
Stddev	.820	.282	.0671	1.189
%RSD	34.56	11.56	9.012	98.55
#1	2.951	2.637	.7924	.3659
#2	1.792	2.239	.6975	2.048

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	3.924	.2335	.1061	.7688
Stddev	.354	.0060	.0222	3.538
%RSD	9.019	2.560	20.90	460.2
#1	3.673	.2293	.1218	3.271
#2	4.174	.2378	.0904	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2.697	2.959	1.545	<.0000
Stddev	1.328	1.095	.336	2.102
%RSD	49.26	37.01	21.74	165.0
#1	3.636	3.733	1.308	.2124
#2	1.758	2.184	1.783	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.8742	45.44	<.0000	.0670
Stddev	.2110	.09	7.123	.0596
%RSD	24.13	.2088	125.8	88.90
#1	1.023	45.51	< .0000	.1092
#2	.7250	45.38	< .0000	.0249

Sample Name: CCB-4 Run Time: 02/20/03 17:42

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	6.477	<.0000	.2450	<.0000
Stddev	4.492	.2721	.0571	10.06
%RSD	69.35	1.414	23.30	1133.
#1	9.653	<.0000	.2046	6.225
#2	3.301	<.0000	.2854	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.521	2.955	3.164
Stddev	.2798	.993	.716	7.295
%RSD	40.13	21.95	24.24	230.6
#1	<.0000	5.223	2.448	8.322
#2	<.0000	3.820	3.461	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.6659	2.062	<.0000	<.0000
Stddev	.2512	.250	302.8	.0708
%RSD	37.72	12.11	7.669	5.876
#1	.8435	1.886	< .0000	<.0000
#2	.4883	2.239	< .0000	<.0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	.5174
Stddev	.1103	1.197	1.080	2.435
%RSD	35.39	222.2	471.1	470.6
#1	<.0000	.3078	< .0000	< .0000
#2	<.0000	< .0000	.5346	2.239

Elem	W 2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	.1319
Stddev	1785.	.0212	.5573
%RSD	72.84	4.574	422.5
#1	< .000	<.0000	.5260
#2	< .000	<.0000	<.0000

Method: SHER Sample Name: Blank Operator:
Comment:
Run Time: 02/28/03 09:47 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0304	.4926	.0395	-.0025
Stddev	.0196	.0312	.0035	.0166
%RSD	64.27	6.340	8.831	671.9
#1	.0443	.5147	.0370	.0093
#2	.0166	.4705	.0419	-.0142

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.422	4.401	.6490	.0355
Stddev	.008	.066	.0138	.0022
%RSD	.3344	1.496	2.126	6.157
#1	2.416	4.447	.6393	.0370
#2	2.428	4.354	.6588	.0339

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0374	.0580	.0660	-.0332
Stddev	.0372	.0227	.0305	.0117
%RSD	99.53	39.12	46.25	35.34
#1	-.0111	.0740	.0444	-.0415
#2	-.0637	.0419	.0876	-.0249

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2214	.3938	.0333	.0093
Stddev	.0392	.0136	.0087	.0166
%RSD	17.69	3.441	26.20	179.1
#1	.1937	.4034	.0395	.0210
#2	.2491	.3843	.0271	-.0025

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4623	-42.18	-.0028	-.0179
Stddev	.0939	.08	.0548	.0166
%RSD	20.31	.1884	1983.	92.65
#1	.5287	-42.24	-.0415	-.0062
#2	.3959	-42.13	.0360	-.0296

Sample Name: Blank Run Time: 02/28/03 09:47

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0210	-28.19	.0068	.0154
Stddev	.0087	.11	.0052	.0044
%RSD	41.60	.3732	77.16	28.29
#1	.0271	-28.26	.0105	.0185
#2	.0148	-28.11	.0031	.0123

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0108	.0210	-.0167	.0927
Stddev	.0074	.0009	.0017	.0059
%RSD	68.69	4.167	10.47	6.317
#1	-.0160	.0216	-.0154	.0969
#2	-.0056	.0204	-.0179	.0886

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0077	.0125	.1314	-.0262
Stddev	.0048	.0215	.0131	.0144
%RSD	62.22	172.9	9.952	54.91
#1	.0043	.0277	.1221	-.0364
#2	.0111	-.0028	.1406	-.0160

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0166	-.0308	-.0111	4.860
Stddev	.0352	.0105	.0039	.031
%RSD	212.2	33.95	35.37	.6286
#1	.0415	-.0382	-.0083	4.882
#2	-.0083	-.0234	-.0138	4.838

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	Cts/S	Cts/S	Cts/S
Avg	.1092	.0626	-.0526
Stddev	.0035	.0109	.0352
%RSD	3.189	17.41	66.98
#1	.1067	.0549	-.0775
#2	.1116	.0703	-.0277

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 02/28/03 09:51 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B_2496	Cd2288	Pb2203	Se1960
Line	249.678 (135)	228.802 (147)	220.353 (152)	196.090 (171)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	15.06	77.86	11.34	2.210
Stddev	.05	.07	.01	.001
%RSD	.3201	.0841	.1264	.0549
#1	15.02	77.82	11.33	2.209
#2	15.09	77.91	11.35	2.211

Elem	Tl1908
Line	190.864 (176)
Units	Cts/S
Avg	5.307
Stddev	.012
%RSD	.2345
#1	5.316
#2	5.298

Method: SHER Sample Name: 200.7-2 Operator:
Comment:
Run Time: 02/28/03 09:58 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	790.4	747.0	243.5	27.03
Stddev	2.9	.5	.2	.06
%RSD	.3644	.0715	.0805	.2293
#1	792.4	747.3	243.7	26.98
#2	788.3	746.6	243.4	27.07

Elem	Fe2599	Mn2576	Sr3464
Line	259.940 {129}	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S	Cts/S
Avg	1964.	769.2	143.5
Stddev	1.	1.3	.1
%RSD	.0561	.1693	.0770
#1	1965.	768.2	143.6
#2	1963.	770.1	143.4

Method: SHER Sample Name: 200.7 Operator:
Comment:
Run Time: 02/28/03 10:02 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	As1937	Cr3578	Li6103
Line	328.068 {102}	193.759 {173}	357.869 { 94}	610.362 { 55}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.614	12.22	27.55	99.34
Stddev	.067	.05	.29	.12
%RSD	.6929	.4434	1.067	.1258
#1	9.661	12.18	27.76	99.43
#2	9.567	12.26	27.34	99.25

Elem	Sn1899	V_2924	V_3102
Line	189.989 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S
Avg	26.62	25.29	38.42
Stddev	.06	.09	.26
%RSD	.2073	.3561	.6741
#1	26.58	25.36	38.24
#2	26.65	25.23	38.61

Method: SHER Sample Name: 200.7-1 Operator:
Comment:
Run Time: 02/28/03 10:07 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ca3179	K_7664	Mg3838
Line	308.215 (109)	317.933 (105)	766.490 (44)	383.826 (87)
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	29.92	98.04	649.7	47.42
Stddev	.08	.16	3.8	.01
%RSD	.2752	.1621	.5806	.0166
#1	29.86	98.15	647.0	47.42
#2	29.98	97.92	652.4	47.41

Elem	Na5889	Ni2316	Zn2138
Line	588.995 (57)	231.604 (145)	213.856 (157)
Units	Cts/S	Cts/S	Cts/S
Avg	3333.	381.4	1072.
Stddev	2.	.8	1.
%RSD	.0732	.2090	.0621
#1	3332.	380.8	1072.
#2	3335.	382.0	1072.

Method: SHER Sample Name: 200.7-4 Operator:
Comment:
Run Time: 02/28/03 10:10 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 (166)	206.833 (162)	336.121 (100)
Units	Cts/S	Cts/S	Cts/S
Avg	486.5	81.27	559.1
Stddev	.7	.21	6.1
%RSD	.1489	.2539	1.088
#1	486.0	81.12	563.4
#2	487.0	81.42	554.8

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0192	0.0304	1.0000000	02/28/03 10:05:54
Al3082	0.0029	0.4926	1.0000000	02/28/03 10:10:11
As1937	0.0061	0.0395	1.0000000	02/28/03 10:05:54
Au2427	-0.0003	-0.0025	-1.0000000	02/28/03 09:49:32
B_2496	0.0632	2.4218	1.0000000	02/28/03 09:54:16
Ba4934	0.7860	4.4005	1.0000000	02/28/03 10:01:20
Be3130	0.7463	0.6490	1.0000000	02/28/03 10:01:20
Bi1902	0.0084	0.0355	1.0000000	02/28/03 09:49:32
Ca3179	0.0098	-0.0374	1.0000000	02/28/03 10:10:11
Cd2288	0.1556	0.0580	1.0000000	02/28/03 09:54:16
Co2286	0.1217	0.0660	1.0000000	02/28/03 10:01:20
Cr3578	0.0138	-0.0332	1.0000000	02/28/03 10:05:54
Cu3247	0.0268	0.2214	1.0000000	02/28/03 10:01:20
Fe2599	0.1963	0.3938	1.0000000	02/28/03 10:01:20
Ge2068	0.0052	0.0333	1.0000000	02/28/03 09:49:32
In2306	0.0102	0.0093	1.0000000	02/28/03 09:49:32
K_7664	0.0649	0.4623	1.0000000	02/28/03 10:10:11
Li6103	0.0708	-42.1841	1.0000000	02/28/03 10:05:54
Mg3838	0.0047	-0.0028	1.0000000	02/28/03 10:10:11
Mn2576	0.7692	-0.0179	1.0000000	02/28/03 10:01:20
Mo2020	0.0486	0.0210	1.0000000	02/28/03 10:13:38
Na5889	0.3361	-28.1855	1.0000000	02/28/03 10:10:11
Ni2316	0.0763	0.0068	1.0000000	02/28/03 10:10:11
Os1898	-0.0003	0.0154	-1.0000000	02/28/03 09:49:32
Pb2203	0.0113	-0.0108	1.0000000	02/28/03 09:54:16
Sb2068	0.0081	0.0210	1.0000000	02/28/03 10:13:38
Se1960	0.0045	-0.0167	1.0000000	02/28/03 09:54:16
Si2881	0.0035	0.0927	1.0000000	02/28/03 09:49:32
Sn1899	0.0133	0.0077	1.0000000	02/28/03 10:05:54
Sr3464	0.0144	0.0125	1.0000000	02/28/03 10:01:20
Ta2400	0.0000	0.1314	-1.0000000	02/28/03 09:49:32
Te2142	0.0061	-0.0262	1.0000000	02/28/03 09:49:32
Ti3361	0.0559	0.0166	1.0000000	02/28/03 10:13:38
Tl1908	0.0053	-0.0308	1.0000000	02/28/03 09:54:16
V_2924	0.0127	-0.0111	1.0000000	02/28/03 10:05:54
V_3102	0.0168	4.8599	1.0000000	02/28/03 10:05:54
W_2397	0.0000	0.1092	-1.0000000	02/28/03 09:49:32
Zn2138	0.2144	0.0626	1.0000000	02/28/03 10:10:11
Zr3391	0.0422	-0.0526	1.0000000	02/28/03 09:49:32

Method: SHER Sample Name: Blank Operator:
Comment:
Run Time: 02/28/03 10:20 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Se1960
Line	196.090 (171)
Units	Cts/S
Avg	.0136
Stddev	.0017
%RSD	12.86
#1	.0148
#2	.0123

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 02/28/03 10:23 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Se1960
Line	196.090 {171}
Units	Cts/S
Avg	2.403
Stddev	.021
%RSD	.8798
#1	2.388
#2	2.418

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0192	0.0304	1.0000000	02/28/03 10:05:54
Al3082	0.0029	0.4926	1.0000000	02/28/03 10:10:11
As1937	0.0061	0.0395	1.0000000	02/28/03 10:05:54
Au2427	-0.0003	-0.0025	-1.0000000	02/28/03 09:49:32
B_2496	0.0632	2.4218	1.0000000	02/28/03 09:54:16
Ba4934	0.7860	4.4005	1.0000000	02/28/03 10:01:20
Be3130	0.7463	0.6490	1.0000000	02/28/03 10:01:20
Bi1902	0.0084	0.0355	1.0000000	02/28/03 09:49:32
Ca3179	0.0098	-0.0374	1.0000000	02/28/03 10:10:11
Cd2288	0.1556	0.0580	1.0000000	02/28/03 09:54:16
Co2286	0.1217	0.0660	1.0000000	02/28/03 10:01:20
Cr3578	0.0138	-0.0332	1.0000000	02/28/03 10:05:54
Cu3247	0.0268	0.2214	1.0000000	02/28/03 10:01:20
Fe2599	0.1963	0.3938	1.0000000	02/28/03 10:01:20
Ge2068	0.0052	0.0333	1.0000000	02/28/03 09:49:32
In2306	0.0102	0.0093	1.0000000	02/28/03 09:49:32
K_7664	0.0649	0.4623	1.0000000	02/28/03 10:10:11
Li6103	0.0708	-42.1841	1.0000000	02/28/03 10:05:54
Mg3838	0.0047	-0.0028	1.0000000	02/28/03 10:10:11
Mn2576	0.7692	-0.0179	1.0000000	02/28/03 10:01:20
Mo2020	0.0486	0.0210	1.0000000	02/28/03 10:13:38
Na5889	0.3361	-28.1855	1.0000000	02/28/03 10:10:11
Ni2316	0.0763	0.0068	1.0000000	02/28/03 10:10:11
Os1898	-0.0003	0.0154	-1.0000000	02/28/03 09:49:32
Pb2203	0.0113	-0.0108	1.0000000	02/28/03 09:54:16
Sb2068	0.0081	0.0210	1.0000000	02/28/03 10:13:38
Se1960	0.0048	0.0136	1.0000000	02/28/03 10:26:28
Si2881	0.0035	0.0927	1.0000000	02/28/03 09:49:32
Sn1899	0.0133	0.0077	1.0000000	02/28/03 10:05:54
Sr3464	0.0144	0.0125	1.0000000	02/28/03 10:01:20
Ta2400	0.0000	0.1314	-1.0000000	02/28/03 09:49:32
Te2142	0.0061	-0.0262	1.0000000	02/28/03 09:49:32
Ti3361	0.0559	0.0166	1.0000000	02/28/03 10:13:38
Tl1908	0.0053	-0.0308	1.0000000	02/28/03 09:54:16
V_2924	0.0127	-0.0111	1.0000000	02/28/03 10:05:54
V_3102	0.0168	4.8599	1.0000000	02/28/03 10:05:54
W_2397	0.0000	0.1092	-1.0000000	02/28/03 09:49:32
Zn2138	0.2144	0.0626	1.0000000	02/28/03 10:10:11
Zr3391	0.0422	-0.0526	1.0000000	02/28/03 09:49:32

Method: SHER Sample Name: ICV-1 Operator:
Comment:
Run Time: 02/28/03 10:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	507.0	2175.	1998.	3904.
Stddev	2.5	3.	14.	139.
%RSD	.4855	.1362	.7216	3.554
#1	508.7	2177.	1988.	3806.
#2	505.2	2173.	2009.	4002.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2171.	2088.	2050.	2.160
Stddev	14.	6.	11.	1.034
%RSD	.6257	.2705	.5220	47.90
#1	2162.	2084.	2042.	1.428
#2	2181.	2092.	2057.	2.891

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2019.	2098.	2003.	2034.
Stddev	24.	8.	9.	14.
%RSD	1.207	.4034	.4524	.6907
#1	2002.	2092.	1997.	2024.
#2	2036.	2104.	2009.	2043.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2059.	2020.	<.0000	<.0000
Stddev	11.	8.	1.512	1.115
%RSD	.5529	.3862	.8226	3.423
#1	2051.	2014.	< .0000	< .0000
#2	2067.	2025.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9577.	2012.	2038.	1995.
Stddev	39.	3.	13.	7.
%RSD	.4100	.1672	.6277	.3547
#1	9549.	2009.	2029.	1990.
#2	9605.	2014.	2047.	2000.

Sample Name: ICV-1 Run Time: 02/28/03 10:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2079.	2057.	2076.	419.1
Stddev	56.	9.	7.	1.3
%RSD	2.716	.4399	.3482	.2996
#1	2039.	2051.	2071.	418.2
#2	2119.	2063.	2081.	420.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2077.	2126.	2084.	6788.
Stddev	9.	15.	10.	63.
%RSD	.4506	.7091	.4812	.9243
#1	2071.	2116.	2077.	6744.
#2	2084.	2137.	2091.	6832.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2022.	2072.	27350.	<.0000
Stddev	10.	12.	4351.	3.051
%RSD	.5087	.5989	15.91	1.079
#1	2015.	2063.	30430.	< .0000
#2	2029.	2081.	24280.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2026.	2029.	1886.
Stddev	.3156	6.	4.	36.
%RSD	12.86	.2899	.2074	1.919
#1	<.0000	2022.	2032.	1860.
#2	<.0000	2030.	2026.	1911.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1040000.	2110.	<.0000
Stddev	4030.	8.	.2789
%RSD	.3874	.3957	9.633
#1	1037000.	2104.	<.0000
#2	1043000.	2116.	<.0000

Method: SHER Sample Name: ICB-1 Operator:
Comment:
Run Time: 02/28/03 10:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	5.512
Stddev	.3064	2.779	.6454	67.02
%RSD	38.58	16.64	101.0	1216.
#1	<.0000	< .0000	<.0000	< .0000
#2	<.0000	< .0000	<.0000	52.90

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	7.487	.3471	.0705	<.0000
Stddev	.779	.0326	.0394	.2584
%RSD	10.40	9.392	55.85	365700.
#1	8.038	.3702	.0983	.1827
#2	6.937	.3241	.0427	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0059	.1064	.6015
Stddev	4.989	.0925	.0430	2.554
%RSD	589.3	1559.	40.39	424.6
#1	< .0000	.0713	.1368	< .0000
#2	2.681	<.0000	.0760	2.408

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	.6714	.3707	<.0000	<.0000
Stddev	1.534	.4686	1.513	1.458
%RSD	228.4	126.4	42.42	104.5
#1	1.756	.7020	< .0000	< .0000
#2	< .0000	.0393	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	1.066	10.18	4.085	.0088
Stddev	.844	6.23	2.476	.0363
%RSD	79.13	61.15	60.63	411.5
#1	.4698	14.58	5.836	.0345
#2	1.663	5.779	2.334	<.0000

Sample Name: ICB-1 Run Time: 02/28/03 10:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	6.510	<.0000	.1294	23.13
Stddev	4.581	.1420	.0915	27.67
%RSD	70.36	8.296	70.71	119.7
#1	9.750	<.0000	.0647	3.560
#2	3.271	<.0000	.1941	42.69

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1.087	2.543	<.0000	3.168
Stddev	.039	.912	.1826	5.038
%RSD	3.574	35.88	3.724	159.0
#1	1.059	3.188	<.0000	< .0000
#2	1.114	1.898	<.0000	6.731

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.4868	<.0000	845.2	<.0000
Stddev	1.049	.9547	1594.	.8515
%RSD	215.5	55.00	188.6	113.1
#1	1.229	<.0000	1972.	<.0000
#2	< .0000	<.0000	< .000	<.0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.6301	.8169	1.547	.9447
%RSD	70.71	37.21	88.38	35.98
#1	<.0000	<.0000	< .0000	<.0000
#2	<.0000	<.0000	< .0000	<.0000

Elem	W 2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1158.	<.0000	<.0000
Stddev	1478.	.0447	1.114
%RSD	127.6	621.8	565.3
#1	113.3	.0244	< .0000
#2	2203.	<.0000	.5905

Method: SHER Sample Name: CRI-1 Operator:
Comment:
Run Time: 02/28/03 10:34 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	17.76	<.0000	19.16	140.0
Stddev	.01	.0788	2.44	32.7
%RSD	.0300	.3464	12.72	23.37
#1	17.77	<.0000	17.44	163.1
#2	17.76	<.0000	20.88	116.8

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	.2338	.8622	9.609	.6580
Stddev	.5695	.0242	.029	.9819
%RSD	243.6	2.806	.3030	149.2
#1	.6365	.8793	9.629	1.352
#2	<.0000	.8451	9.588	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	10.77	99.49	23.78
Stddev	1.594	.02	.24	2.12
%RSD	36.44	.1653	.2395	8.927
#1	< .0000	10.76	99.32	22.28
#2	< .0000	10.79	99.66	25.28

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	46.83	.7775	<.0000	<.0000
Stddev	1.11	.0753	1.512	1.243
%RSD	2.371	9.683	9.151	124.3
#1	47.62	.8307	< .0000	< .0000
#2	46.05	.7243	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	7.323	<.0000	30.14
Stddev	.3903	6.255	9.492	.01
%RSD	37.40	85.41	216.8	.0391
#1	<.0000	11.75	2.334	30.13
#2	<.0000	2.900	< .0000	30.15

Sample Name: CRI-1 Run Time: 02/28/03 10:34

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.504	<.0000	83.50	<.0000
Stddev	.063	.0707	.28	.0051
%RSD	2.517	2.011	.3377	.0359
#1	2.459	<.0000	83.30	<.0000
#2	2.549	<.0000	83.70	<.0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	7.277	131.7	7.098	<.0000
Stddev	.462	.4	.913	14.01
%RSD	6.346	.2945	12.87	443.1
#1	6.950	131.4	6.452	6.743
#2	7.603	131.9	7.744	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1.253	<.0000	<.0000
Stddev	.3606	4.910	264.7	.5693
%RSD	777.6	391.7	565.1	4.556
#1	.2086	< .0000	< .0000	<.0000
#2	<.0000	4.725	140.3	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	19.07	93.54	174.2
Stddev	.3149	1.80	.13	2.6
%RSD	28.27	9.422	.1381	1.480
#1	<.0000	20.34	93.45	176.0
#2	<.0000	17.80	93.63	172.3

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	55880.	42.93	<.0000
Stddev	156.	.08	1.857
%RSD	.2788	.1796	940.4
#1	55990.	42.88	< .0000
#2	55760.	42.99	1.115

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 02/28/03 10:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	471800.	<.0000	133700.
Stddev	.3071	388.	2.059	382.
%RSD	1.762	.0822	.1635	.2862
#1	<.0000	471500.	< .0000	133400.
#2	<.0000	472000.	< .0000	133900.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0760	5.195
Stddev	.7371	.1248	.0131	.569
%RSD	.1821	9.535	17.30	10.96
#1	<.0000	<.0000	.0667	5.597
#2	<.0000	<.0000	.0853	4.792

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	395400.	<.0000	<.0000	<.0000
Stddev	1473.	.2495	.1362	4.148
%RSD	.3726	46.12	46.36	23.09
#1	394300.	<.0000	<.0000	< .0000
#2	396400.	<.0000	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	123400.	.8938	<.0000
Stddev	.8780	196.	1.262	2.447
%RSD	3.033	.1584	141.2	4.846
#1	<.0000	123300.	1.786	< .0000
#2	<.0000	123600.	.0017	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	461200.	<.0000
Stddev	1.601	18.19	1396.	.0391
%RSD	20.46	.6270	.3027	4.241
#1	< .0000	< .0000	460300.	<.0000
#2	< .0000	< .0000	462200.	<.0000

Sample Name: ICSA-1 Run Time: 02/28/03 10:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	56.63	<.0000	1636.
Stddev	.3675	.29	1.067	21.
%RSD	6.940	.5053	.3219	1.311
#1	<.0000	56.83	< .0000	1651.
#2	<.0000	56.43	< .0000	1621.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.4586	<.0000	40.11
Stddev	1.295	1.820	1.099	13.46
%RSD	.5346	396.8	.3835	33.56
#1	< .0000	< .0000	< .0000	49.63
#2	< .0000	1.745	< .0000	30.59

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2.551	9.470	749900.	9.788
Stddev	.295	.957	2290.	.710
%RSD	11.56	10.10	.3053	7.256
#1	2.342	8.794	751500.	10.29
#2	2.759	10.15	748300.	9.286

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.9472	.4911	1.085	4.793
%RSD	5.239	5.244	12.22	17.15
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	35.71	1.575
Stddev	711.3	.17	.465
%RSD	.4085	.4630	29.51
#1	< .0000	35.59	1.247
#2	< .0000	35.82	1.904

Method: SHER Sample Name: ICSAB-1 Operator:
Comment:
Run Time: 02/28/03 10:48 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	1011.	470700.	<.0000	139600.
Stddev	1.	283.	2.216	199.
%RSD	.1081	.0601	.1756	.1428
#1	1010.	470500.	< .0000	139700.
#2	1012.	470900.	< .0000	139500.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	491.1	439.2	6.805
Stddev	1.175	.8	.5	2.845
%RSD	.2813	.1643	.1247	41.81
#1	< .0000	490.6	438.8	4.793
#2	< .0000	491.7	439.6	8.817

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	394500.	914.0	465.8	524.7
Stddev	97.	1.6	.3	6.3
%RSD	.0245	.1725	.0648	1.196
#1	394500.	915.2	465.6	520.3
#2	394600.	912.9	466.0	529.1

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	469.5	123200.	1.251	<.0000
Stddev	.5	174.	1.766	.8148
%RSD	.0968	.1412	141.1	1.490
#1	469.9	123000.	2.500	<.0000
#2	469.2	123300.	.0028	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	459500.	470.9
Stddev	1.118	30.65	570.	.3
%RSD	59.18	1.083	.1241	.0667
#1	< .0000	< .0000	459100.	470.7
#2	< .0000	< .0000	459900.	471.2

Sample Name: ICSAB-1 Run Time: 02/28/03 10:48

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	52.94	907.1	1829.
Stddev	.2511	.01	2.1	44.
%RSD	4.714	.0201	.2272	2.409
#1	<.0000	52.95	905.7	1797.
#2	<.0000	52.93	908.6	1860.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	956.6	<.0000	<.0000	17.50
Stddev	.1	.2108	2.745	5.05
%RSD	.0090	58.29	.9291	28.84
#1	956.6	<.0000	< .0000	13.93
#2	956.7	<.0000	< .0000	21.07

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.090	13.14	754800.	<.0000
Stddev	2.230	3.14	7206.	5.538
%RSD	204.6	23.92	.9547	10.56
#1	2.667	15.36	759900.	< .0000
#2	< .0000	10.92	749700.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	442.2	414.4
Stddev	.1046	3.433	1.7	2.3
%RSD	.5345	17.17	.3823	.5583
#1	<.0000	< .0000	441.0	412.8
#2	<.0000	< .0000	443.4	416.1

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	937.5	.7208
Stddev	3597.	.6	.3719
%RSD	82.58	.0619	51.60
#1	< .000	937.1	.4578
#2	< .000	938.0	.9838

Method: SHER Sample Name: CCV-1 Operator:
Comment:
Run Time: 02/28/03 10:58 Type: Unk Mode: CONC Corr.Fact: 1.00000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	503.5	2134.	2010.	3846.
Stddev	2.9	4.	5.	37.
%RSD	.5697	.1696	.2421	.9732
#1	501.5	2131.	2007.	3819.
#2	505.5	2136.	2014.	3872.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	2170.	2086.	2048.	2.233
Stddev	18.	1.	5.	1.448
%RSD	.8235	.0408	.2245	64.86
#1	2157.	2087.	2051.	1.209
#2	2183.	2086.	2045.	3.257

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	2030.	2103.	2012.	2020.
Stddev	10.	8.	10.	16.
%RSD	.5031	.3885	.4822	.7810
#1	2023.	2097.	2005.	2031.
#2	2037.	2109.	2019.	2008.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2056.	2037.	<.0000	<.0000
Stddev	4.	15.	1.429	.5147
%RSD	.1806	.7141	.8157	1.466
#1	2059.	2027.	< .0000	<.0000
#2	2054.	2048.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9597.	2036.	2030.	2010.
Stddev	1.	.	5.	10.
%RSD	.0111	.0087	.2656	.5204
#1	9598.	2036.	2026.	2002.
#2	9596.	2036.	2034.	2017.

Sample Name: CCV-1 Run Time: 02/28/03 10:58

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2064.	2069.	2061.	398.6
Stddev	21.	2.	10.	42.8
%RSD	1.018	.0894	.4676	10.73
#1	2050.	2067.	2054.	368.4
#2	2079.	2070.	2067.	428.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2084.	2134.	2092.	6793.
Stddev	14.	13.	18.	17.
%RSD	.6508	.6165	.8641	.2469
#1	2074.	2125.	2079.	6805.
#2	2093.	2144.	2105.	6781.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2032.	2067.	29520.	<.0000
Stddev	12.	6.	33.	1.278
%RSD	.5747	.3033	.1126	.4566
#1	2024.	2071.	29490.	< .0000
#2	2040.	2062.	29540.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2035.	2033.	1873.
Stddev	.4209	10.	.	8.
%RSD	17.68	.4902	.0084	.4189
#1	<.0000	2028.	2033.	1867.
#2	<.0000	2042.	2034.	1878.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1032000.	2118.	<.0000
Stddev	920.	11.	.1859
%RSD	.0892	.5158	4.790
#1	1031000.	2110.	<.0000
#2	1032000.	2126.	<.0000

Method: SHER Sample Name: CCB-1 Operator:
Comment:
Run Time: 02/28/03 11:01 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.099	41.88
Stddev	1.736	13.40	.771	3.12
%RSD	343.6	42.56	70.18	7.443
#1	.7222	< .0000	.5536	39.67
#2	< .0000	< .0000	1.644	44.08

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.179	.3668	.0372	<.0000
Stddev	1.277	.0102	.0131	.3102
%RSD	108.3	2.770	35.36	22.93
#1	2.082	.3596	.0279	<.0000
#2	.2763	.3740	.0465	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0158	.1874	9.030
Stddev	5.188	.0056	.1719	.000
%RSD	216.3	35.44	91.74	.0036
#1	< .0000	.0119	.3090	9.030
#2	1.270	.0198	.0658	9.030

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	.2071	.7554	<.0000	<.0000
Stddev	.2923	.1555	1.597	.1286
%RSD	141.1	20.58	50.69	5.810
#1	.0004	.8653	< .0000	<.0000
#2	.4139	.6455	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.9176	13.01	<.0000	.0265
Stddev	.2108	.31	1.238	.0125
%RSD	22.97	2.399	15.71	47.14
#1	1.067	12.79	< .0000	.0353
#2	.7686	13.23	< .0000	.0176

Sample Name: CCB-1 Run Time: 02/28/03 11:01

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	6.263	<.0000	.0162	29.35
Stddev	5.038	1.144	.3774	46.54
%RSD	80.44	51.48	2332.	158.5
#1	9.826	< .0000	<.0000	< .0000
#2	2.700	< .0000	.2830	62.26

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.0266	1.291	<.0000	<.0000
Stddev	.8453	1.288	.7297	.5607
%RSD	3176.	99.82	10.28	17.72
#1	.6243	2.202	<.0000	<.0000
#2	<.0000	.3797	<.0000	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.9503	<.0000	<.0000	2.208
Stddev	.1311	.5455	730.4	.497
%RSD	13.80	29.77	103.8	22.50
#1	.8576	<.0000	< .0000	2.560
#2	1.043	<.0000	< .0000	1.857

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.7657	<.0000
Stddev	.2100	2.288	.4641	2.323
%RSD	47.15	82.51	60.61	22.41
#1	<.0000	< .0000	.4375	< .0000
#2	<.0000	< .0000	1.094	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	311.3	.0582	.9842
Stddev	1079.	.0135	.1856
%RSD	346.5	23.15	18.86
#1	< .000	.0487	.8530
#2	1074.	.0677	1.115

Method: SHER Sample Name: PB Operator:
Comment:
Run Time: 02/28/03 11:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.1017	3.867	.7832	74.80
%RSD	28.18	22.35	39.75	51.42
#1	<.0000	< .0000	<.0000	< .0000
#2	<.0000	< .0000	<.0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	17.18	.2284	.0129	<.0000
Stddev	.26	.3917	.0155	.8269
%RSD	1.502	171.5	119.9	322.9
#1	17.36	<.0000	.0020	.3287
#2	16.99	.5053	.0238	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	.5646	.0436	.2533	6.920
Stddev	2.196	.0337	.0358	2.978
%RSD	388.9	77.24	14.12	43.04
#1	< .0000	.0198	.2786	4.814
#2	2.117	.0674	.2280	9.026

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	3.649	3.209	<.0000
Stddev	1.969	.040	.673	1.586
%RSD	292.9	1.084	20.97	88.69
#1	< .0000	3.677	2.733	< .0000
#2	.7200	3.621	3.685	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	1.705	18.35	<.0000	.0986
Stddev	.239	3.04	2.478	.0295
%RSD	14.00	16.56	38.59	29.90
#1	1.536	20.50	< .0000	.0778
#2	1.874	16.20	< .0000	.1195

Sample Name: PB Run Time: 02/28/03 11:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.3233	5.477	.7924	43.58
Stddev	.2241	.763	.0114	6.29
%RSD	69.31	13.93	1.434	14.43
#1	.4817	6.017	.8005	48.03
#2	.1648	4.938	.7844	39.14

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.4177	<.0000	<.0000
Stddev	.2304	1.557	.3649	2.246
%RSD	14.34	372.7	13.47	43.62
#1	<.0000	< .0000	<.0000	< .0000
#2	<.0000	1.519	<.0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.2892	1127.	<.0000
Stddev	.0983	.5451	663.	.3554
%RSD	16.32	188.5	58.85	13.62
#1	<.0000	<.0000	658.0	<.0000
#2	<.0000	.6747	1596.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	.3714	<.0000	<.0000	<.0000
Stddev	.9453	.0008	.6191	.9678
%RSD	254.5	.0188	141.5	8.677
#1	1.040	<.0000	<.0000	<.0000
#2	< .0000	<.0000	.0003	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	1.040	.7872
Stddev	318.7	.030	1.578
%RSD	22.57	2.898	200.4
#1	< .0000	1.019	< .0000
#2	< .0000	1.062	1.903

Method: SHER Sample Name: PB Operator:
Comment:
Run Time: 02/28/03 11:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.6127	8.225	1.012	14.03
%RSD	35.36	37.22	71.99	14.63
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	10.71	.0604	.0094	.6216
Stddev	2.16	.2043	.0000	1.655
%RSD	20.14	338.2	.2633	266.2
#1	12.24	<.0000	.0093	1.792
#2	9.189	.2049	.0094	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1784	.0811	<.0000
Stddev	.5988	.0056	.2508	1.703
%RSD	42.43	3.167	309.4	71800.
#1	<.0000	.1824	.2584	1.202
#2	<.0000	.1744	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	3.405	.7725	<.0000
Stddev	.1458	.024	.2527	.7287
%RSD	23.56	.7050	32.71	800.6
#1	<.0000	3.388	.9512	<.0000
#2	<.0000	3.422	.5938	.4243

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	13.75	.2909	.1119
Stddev	.5125	2.51	1.238	.0493
%RSD	39.43	18.22	425.6	44.09
#1	<.0000	15.52	< .0000	.0770
#2	<.0000	11.98	1.166	.1467

Sample Name: PB Run Time: 02/28/03 11:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.6593	5.027	.4286	7.116
Stddev	.4123	.889	.0687	10.07
%RSD	62.54	17.68	16.02	141.5
#1	.3677	4.399	.4771	< .0000
#2	.9508	5.656	.3800	14.23

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.6835	<.0000	2.774
Stddev	.8456	.6443	.9122	.001
%RSD	162.9	94.26	15.37	.0300
#1	<.0000	1.139	<.0000	2.774
#2	.0787	.2279	<.0000	2.775

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.6753	234.7	<.0000
Stddev	.5901	1.091	598.3	.4254
%RSD	2550.	161.6	254.9	17.30
#1	.3941	< .0000	< .0000	<.0000
#2	<.0000	1.447	657.8	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	.0001	<.0000	2.516	<.0000
Stddev	.2101	.0006	1.083	3.856
%RSD	266300.	.0320	43.04	32.78
#1	<.0000	<.0000	1.750	< .0000
#2	.1486	<.0000	3.282	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	1.067	1.312
Stddev	840.0	.066	.093
%RSD	20.51	6.166	7.072
#1	< .0000	1.020	1.247
#2	< .0000	1.113	1.378

Method: SHER Sample Name: LCS Operator:
Comment:
Run Time: 02/28/03 11:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	509.8	2167.	2025.	3923.
Stddev	.9	14.	4.	22.
%RSD	.1799	.6461	.2176	.5566
#1	509.1	2157.	2022.	3907.
#2	510.4	2177.	2028.	3938.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	2171.	2094.	2064.	1.831
Stddev	8.	14.	7.	3.155
%RSD	.3781	.6669	.3443	172.4
#1	2165.	2084.	2059.	4.062
#2	2176.	2104.	2069.	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	2045.	2123.	2029.	2029.
Stddev	7.	4.	3.	11.
%RSD	.3316	.1734	.1527	.5246
#1	2041.	2120.	2027.	2022.
#2	2050.	2125.	2032.	2037.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2065.	2051.	<.0000	<.0000
Stddev	14.	4.	.3366	1.415
%RSD	.7008	.1865	.1909	4.270
#1	2054.	2048.	<.0000	< .0000
#2	2075.	2054.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9601.	2037.	2052.	2019.
Stddev	53.	4.	7.	3.
%RSD	.5522	.2062	.3217	.1696
#1	9563.	2034.	2047.	2016.
#2	9638.	2040.	2057.	2021.

Sample Name: LCS Run Time: 02/28/03 11:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2078.	2070.	2077.	377.3
Stddev	16.	5.	5.	10.1
%RSD	.7553	.2396	.2171	2.669
#1	2067.	2067.	2074.	370.2
#2	2089.	2074.	2081.	384.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2110.	2151.	2114.	6873.
Stddev	2.	7.	3.	43.
%RSD	.1129	.3346	.1426	.6196
#1	2108.	2146.	2112.	6843.
#2	2111.	2156.	2117.	6903.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2057.	2092.	30530.	<.0000
Stddev	5.	1.	1461.	.0707
%RSD	.2615	.0516	4.787	.0248
#1	2054.	2091.	31560.	<.0000
#2	2061.	2092.	29490.	<.0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2044.	2041.	1823.
Stddev	.8417	1.	9.	31.
%RSD	33.28	.0319	.4245	1.691
#1	<.0000	2045.	2035.	1801.
#2	<.0000	2044.	2047.	1845.

Elem	W 2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1041000.	2135.	<.0000
Stddev	3076.	4.	.2789
%RSD	.2956	.2057	6.057
#1	1043000.	2132.	<.0000
#2	1039000.	2138.	<.0000

Method: SHER Sample Name: CCV-2 Operator:
Comment:
Run Time: 02/28/03 12:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	511.1	1975.	2061.	4067.
Stddev	1.0	3.	5.	23.
%RSD	.1878	.1712	.2619	.5747
#1	511.8	1973.	2057.	4051.
#2	510.4	1978.	2065.	4084.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	2197.	2108.	2097.	2.306
Stddev	8.	4.	5.	.414
%RSD	.3430	.1688	.2580	17.94
#1	2192.	2110.	2101.	2.599
#2	2202.	2105.	2093.	2.013

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	2099.	2149.	2068.	2035.
Stddev	4.	5.	6.	2.
%RSD	.1695	.2095	.2758	.1126
#1	2102.	2146.	2064.	2036.
#2	2097.	2152.	2072.	2033.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2070.	2080.	<.0000	<.0000
Stddev	.	7.	5.382	.5576
%RSD	.0076	.3592	2.970	1.763
#1	2070.	2075.	< .0000	<.0000
#2	2070.	2085.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9663.	2096.	2057.	2048.
Stddev	6.	4.	1.	7.
%RSD	.0673	.1929	.0679	.3657
#1	9667.	2093.	2058.	2043.
#2	9658.	2099.	2056.	2054.

Sample Name: CCV-2 Run Time: 02/28/03 12:14

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2176.	2102.	2119.	389.7
Stddev	9.	6.	5.	17.6
%RSD	.4086	.2737	.2555	4.521
#1	2170.	2106.	2116.	402.2
#2	2182.	2098.	2123.	377.3

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2161.	2180.	2155.	6946.
Stddev	11.	1.	7.	12.
%RSD	.4975	.0465	.3259	.1691
#1	2154.	2180.	2150.	6954.
#2	2169.	2181.	2160.	6938.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2109.	2143.	24280.	<.0000
Stddev	5.	1.	3720.	3.054
%RSD	.2547	.0498	15.32	1.048
#1	2106.	2143.	26910.	< .0000
#2	2113.	2144.	21650.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2083.	2073.	1824.
Stddev	.2102	3.	5.	10.
%RSD	6.729	.1410	.2391	.5212
#1	<.0000	2081.	2070.	1831.
#2	<.0000	2085.	2077.	1818.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1067000.	2165.	<.0000
Stddev	7397.	7.	2.324
%RSD	.6930	.3174	55.20
#1	1073000.	2160.	< .0000
#2	1062000.	2170.	< .0000

Method: SHER Sample Name: CCB-2 Operator:
Comment:
Run Time: 02/28/03 12:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	30.86
Stddev	1.124	.6608	1.073	56.11
%RSD	81.92	1.240	35.48	181.8
#1	< .0000	<.0000	< .0000	70.54
#2	< .0000	<.0000	< .0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1.559	.0170	.8410
Stddev	1.317	.264	.0210	1.034
%RSD	20.17	16.93	123.3	123.0
#1	< .0000	1.746	.0318	.1097
#2	< .0000	1.372	.0022	1.572

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0713	.2736	4.214
Stddev	4.391	.0504	.1075	3.407
%RSD	207.3	70.68	39.29	80.84
#1	< .0000	.1070	.1976	1.805
#2	.9869	.0357	.3496	6.623

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.6912	<.0000	<.0000
Stddev	1.680	.0599	.5881	.5573
%RSD	3448.	8.664	197.9	96.76
#1	< .0000	.7336	.1187	<.0000
#2	1.139	.6489	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.4294	17.15	<.0000	.0221
Stddev	.2413	.23	3.716	.0142
%RSD	56.19	1.337	141.4	64.28
#1	.6000	17.31	< .0000	.0321
#2	.2588	16.99	< .0000	.0120

Sample Name: CCB-2 Run Time: 02/28/03 12:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	4.019	1.942	.4043	.8886
Stddev	2.116	.715	.3545	6.291
%RSD	52.64	36.83	87.68	708.0
#1	5.515	1.436	.6550	5.337
#2	2.523	2.448	.1537	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.0810	1.937	<.0000	<.0000
Stddev	.2306	3.382	1.369	.5597
%RSD	284.8	174.6	30.75	23.65
#1	.2440	4.328	< .0000	<.0000
#2	<.0000	< .0000	< .0000	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.2782	<.0000	<.0000	<.0000
Stddev	.9507	.8185	630.3	.2132
%RSD	341.7	852.5	52.64	10.11
#1	.9504	<.0000	< .0000	<.0000
#2	<.0000	.4828	< .0000	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.094	<.0000
Stddev	.8404	.1632	3.095	3.037
%RSD	94.30	15.69	282.9	18.53
#1	<.0000	<.0000	3.282	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1525.	<.0000	<.0000
Stddev	1199.	.0322	.2785
%RSD	78.60	57.19	53850.
#1	2373.	<.0000	.1964
#2	677.5	<.0000	<.0000

Method: SHER Sample Name: CCV-3 Operator:
Comment:
Run Time: 02/28/03 13:12 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	530.6	2170.	1949.	4534.
Stddev	3.2	3.	1.	12.
%RSD	.5941	.1575	.0558	.2753
#1	532.8	2173.	1948.	4542.
#2	528.4	2168.	1950.	4525.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1911.	2128.	1886.	1.465
Stddev	2.	6.	1.	.776
%RSD	.1169	.2897	.0323	52.97
#1	1909.	2132.	1886.	.9162
#2	1912.	2123.	1887.	2.013

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1900.	2034.	1977.	2079.
Stddev	10.	6.	3.	10.
%RSD	.5016	.2781	.1519	.4886
#1	1906.	2038.	1979.	2086.
#2	1893.	2030.	1975.	2072.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2079.	1926.	<.0000	<.0000
Stddev	8.	2.	1.430	.7292
%RSD	.3939	.1282	.6885	2.026
#1	2085.	1928.	< .0000	<.0000
#2	2073.	1924.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9827.	2325.	2143.	2170.
Stddev	75.	13.	.	4.
%RSD	.7629	.5456	.0036	.1651
#1	9880.	2334.	2143.	2172.
#2	9774.	2316.	2143.	2167.

Sample Name: CCV-3 Run Time: 02/28/03 13:12

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2026.	2124.	1907.	455.6
Stddev	2.	11.	1.	.0
%RSD	.0981	.5280	.0700	.0002
#1	2024.	2132.	1906.	455.6
#2	2027.	2116.	1908.	455.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1844.	2060.	1923.	7324.
Stddev	3.	.	5.	46.
%RSD	.1551	.0080	.2420	.6244
#1	1842.	2060.	1919.	7357.
#2	1846.	2060.	1926.	7292.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2364.	2368.	23410.	<.0000
Stddev	2.	1.	166.	.4255
%RSD	.0737	.0541	.7093	.1328
#1	2365.	2369.	23530.	<.0000
#2	2363.	2367.	23290.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1975.	2125.	1692.
Stddev	.8419	2.	9.	1.
%RSD	18.86	.0868	.4195	.0510
#1	<.0000	1974.	2131.	1692.
#2	<.0000	1976.	2118.	1691.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1194000.	1949.	<.0000
Stddev	5274.	.	.0927
%RSD	.4416	.0115	1.762
#1	1191000.	1949.	<.0000
#2	1198000.	1950.	<.0000

Method: SHER Sample Name: CCB-3 Operator:
Comment:
Run Time: 02/28/03 13:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.001	39.69
Stddev	1.021	2.599	.213	9.36
%RSD	44.19	9.688	21.24	23.57
#1	< .0000	< .0000	.8509	46.31
#2	< .0000	< .0000	1.152	33.08

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4.038	1.227	1.867
Stddev	1.657	.182	.008	.414
%RSD	12.67	4.512	.6769	22.17
#1	< .0000	4.167	1.221	1.574
#2	< .0000	3.909	1.233	2.159

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1.694	.0735	.1877	1.506
Stddev	1.795	.1430	.1075	2.696
%RSD	106.0	194.6	57.28	179.0
#1	.4244	.1746	.1117	< .0000
#2	2.963	<.0000	.2637	3.412

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	<.0000	.5370	<.0000
Stddev	1.312	.2266	.9248	.0429
%RSD	141.1	38.92	172.2	8.317
#1	< .0000	<.0000	<.0000	<.0000
#2	< .0000	<.0000	1.191	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.4260	38.22	<.0000	.0100
Stddev	.9060	4.21	14.03	.0153
%RSD	212.7	11.01	400.5	152.9
#1	<.0000	41.20	6.418	.0208
#2	1.067	35.25	< .0000	<.0000

Sample Name: CCB-3 Run Time: 02/28/03 13:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.9958	<.0000	.0445	1.765
Stddev	1.103	4.197	.1887	25.17
%RSD	110.8	16.74	424.0	1426.
#1	1.776	< .0000	<.0000	< .0000
#2	.2157	< .0000	.1780	19.56

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1.017	<.0000	<.0000	5.935
Stddev	.600	2.739	1.917	4.472
%RSD	59.00	153.6	27.76	75.34
#1	.5927	.1531	< .0000	9.097
#2	1.441	< .0000	< .0000	2.773

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.7422	.6749	<.0000	.0489
Stddev	.7542	.8178	2623.	3.550
%RSD	101.6	121.2	259.0	7264.
#1	1.276	1.253	< .000	< .0000
#2	.2089	.0966	842.0	2.559

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.0001	<.0000
Stddev	.7348	.7356	.0002	1.804
%RSD	47.13	36.33	183.2	6.449
#1	<.0000	<.0000	.0002	< .0000
#2	<.0000	<.0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	.0267	<.0000
Stddev	1838.	.0691	.5562
%RSD	170.7	258.8	40.37
#1	222.8	<.0000	<.0000
#2	< .000	.0756	<.0000

Method: SHER Sample Name: MEGDD~~0236~~ 0239 KH 3/24/03 Operator:
Comment:
Run Time: 02/28/03 13:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	.8712	560.0	<.0000	1773.
Stddev	1.023	7.5	2.835	53.
%RSD	117.4	1.334	153.0	2.989
#1	1.595	565.3	.1514	1810.
#2	.1479	554.7	< .0000	1735.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	456.5	1739.	1.505	.6235
Stddev	2.3	5.	.032	.4138
%RSD	.5091	.2647	2.094	66.36
#1	454.9	1736.	1.527	.9161
#2	458.2	1743.	1.482	.3310

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	27370.	<.0000	1.412	.8371
Stddev	260.	.0251	.247	3.845
%RSD	.9519	.1078	17.52	459.3
#1	27190.	<.0000	1.237	3.556
#2	27550.	<.0000	1.587	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	1110.	.9539	<.0000
Stddev	1.975	10.	1.682	.1286
%RSD	184.5	.9359	176.3	.9841
#1	< .0000	1103.	2.143	<.0000
#2	.3263	1117.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	14940.	2520.	8810.	165.7
Stddev	84.	32.	32.	1.7
%RSD	.5612	1.267	.3575	1.007
#1	14880.	2498.	8788.	164.5
#2	15000.	2543.	8832.	166.9

0239 (ED 2/28/03)

Sample Name: MEGDD~~0236~~ Run Time: 02/28/03 13:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.271	114800.	1.877	85.41
Stddev	.162	141.	.137	5.03
%RSD	7.111	.1227	7.315	5.894
#1	2.156	114900.	1.780	81.85
#2	2.385	114700.	1.974	88.97

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4833.
Stddev	.3834	1.933	.5477	51.
%RSD	12.51	68.64	6.945	1.045
#1	<.0000	< .0000	<.0000	4798.
#2	<.0000	< .0000	<.0000	4869.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.1394	3360.	4834.	.1489
Stddev	.4263	17.	531.	.9941
%RSD	305.8	.5091	10.99	667.5
#1	.4409	3348.	5209.	<.0000
#2	<.0000	3372.	4458.	.8519

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	3.870	<.0000	1.423	<.0000
Stddev	.842	1.717	3.565	.5819
%RSD	21.75	63.13	250.5	6.632
#1	3.274	< .0000	< .0000	<.0000
#2	4.465	< .0000	3.944	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	.3263
Stddev	3077.	.0268	.5579
%RSD	77.15	.2875	171.0
#1	< .000	<.0000	<.0000
#2	< .000	<.0000	.7208

Method: SHER Sample Name: MEGUSH8602 Operator:
Comment:
Run Time: 02/28/03 13:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	503.4	.9268	4112.
Stddev	1.841	13.6	.0355	53.
%RSD	182.4	2.699	3.830	1.289
#1	.2925	493.8	.9519	4150.
#2	< .0000	513.0	.9017	4075.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	39.83	97.05	1.310	<.0000
Stddev	.64	.02	.024	2.069
%RSD	1.613	.0203	1.806	102.9
#1	40.28	97.03	1.326	< .0000
#2	39.37	97.06	1.293	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	100800.	<.0000	2.560	31.31
Stddev	374.	.0421	.129	2.56
%RSD	.3710	4.168	5.041	8.165
#1	100500.	<.0000	2.651	29.50
#2	101100.	<.0000	2.469	33.12

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	3.481	1084.	1.311	<.0000
Stddev	1.390	4.	1.009	.3002
%RSD	39.92	.3425	76.98	1002.
#1	2.499	1082.	2.024	.1823
#2	4.464	1087.	.5973	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9514.	205.2	21880.	2431.
Stddev	10.	13.9	10.	12.
%RSD	.1064	6.780	.0470	.5041
#1	9506.	195.3	21870.	2423.
#2	9521.	215.0	21890.	2440.

Sample Name: MEGUSH8602 Run Time: 02/28/03 13:54

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.434	67560.	11.51	87.19
Stddev	.054	179.	.07	20.13
%RSD	3.754	.2650	.5964	23.09
#1	1.395	67430.	11.56	72.95
#2	1.472	67690.	11.46	101.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1.688	<.0000	<.0000	4199.
Stddev	1.681	.4831	.5481	10.
%RSD	99.60	23.93	8.152	.2408
#1	.4991	<.0000	<.0000	4206.
#2	2.876	<.0000	<.0000	4191.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.160	466.8	9859.	<.0000
Stddev	1.213	3.0	1461.	1.207
%RSD	104.6	.6443	14.82	199.8
#1	.3017	468.9	8826.	.2493
#2	2.018	464.6	10890.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	3.572	<.0000	2.190	<.0000
Stddev	.000	2.943	1.860	3.389
%RSD	.0003	133.8	84.92	19.89
#1	3.572	< .0000	3.505	< .0000
#2	3.572	< .0000	.8751	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	639.5	.0686	.4649
%RSD	9.918	.5461	39.20
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: MEGDIM0236 Operator:
Comment:
Run Time: 02/28/03 13:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	21340.	<.0000	40410.
Stddev	.6139	43.	.1440	122.
%RSD	9.435	.2035	.0920	.3015
#1	<.0000	21310.	<.0000	40330.
#2	<.0000	21380.	<.0000	40500.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	605.1	1076.	2.591	.8430
Stddev	2.4	2.	.055	.4138
%RSD	.3908	.2171	2.133	49.09
#1	603.5	1074.	2.630	.5504
#2	606.8	1077.	2.552	1.136

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	17640.	<.0000	18.85	56.59
Stddev	98.	.0758	.18	5.65
%RSD	.5582	.5550	.9701	9.990
#1	17570.	<.0000	18.72	60.59
#2	17710.	<.0000	18.98	52.59

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	55.10	30830.	<.0000	<.0000
Stddev	2.27	178.	.8409	.2146
%RSD	4.119	.5783	37.26	1.111
#1	56.70	30700.	<.0000	<.0000
#2	53.49	30950.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	19810.	2558.	14000.	441.2
Stddev	90.	16.	60.	2.5
%RSD	.4519	.6130	.4283	.5645
#1	19750.	2547.	13960.	439.5
#2	19880.	2569.	14040.	443.0

Sample Name: MEGDIM0236 Run Time: 02/28/03 13:58

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	9.253	111400.	43.05	490.3
Stddev	.135	259.	.57	41.5
%RSD	1.454	.2326	1.316	8.471
#1	9.158	111600.	42.65	460.9
#2	9.349	111200.	43.45	519.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	7.942	<.0000	20390.
Stddev	2.088	1.451	2.464	37.
%RSD	14.51	18.26	4.357	.1814
#1	< .0000	8.968	< .0000	20360.
#2	< .0000	6.917	< .0000	20410.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.345	1389.	214400.	<.0000
Stddev	.951	3.	1662.	3.834
%RSD	70.70	.1938	.7750	263.0
#1	.6728	1387.	213200.	1.253
#2	2.018	1391.	215600.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	60.86	<.0000	24.11	56.32
Stddev	.21	.4904	2.17	.34
%RSD	.3428	9.218	9.003	.6044
#1	60.71	<.0000	25.64	56.08
#2	61.01	<.0000	22.57	56.56

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	84.23	.7865
Stddev	200.3	.44	1.209
%RSD	.4292	.5228	153.7
#1	< .0000	83.92	< .0000
#2	< .0000	84.54	1.641

Method: SHER Sample Name: MEGDD0117 Operator:
Comment:
Run Time: 02/28/03 14:03 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	428000.	<.0000	119400.
Stddev	3.884	2538.	15.44	2872.
%RSD	2.622	.5931	.9203	2.405
#1	< .0000	426200.	< .0000	121500.
#2	< .0000	429800.	< .0000	117400.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	8281.	23.57	39.14
Stddev	53.75	53.	.04	2.64
%RSD	15.12	.6355	.1649	6.741
#1	< .0000	8244.	23.54	37.27
#2	< .0000	8318.	23.60	41.00

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	624400.	<.0000	316.5	1527.
Stddev	1685.	.2270	3.3	21.
%RSD	.2698	.2354	1.043	1.359
#1	623200.	<.0000	314.2	1513.
#2	625600.	<.0000	318.8	1542.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	1631.	250000.	<.0000	<.0000
Stddev	11.	1964.	2.102	8.363
%RSD	.6749	.7855	3.137	1.923
#1	1623.	251400.	< .0000	< .0000
#2	1639.	248600.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	118400.	5240.	335900.	16230.
Stddev	903.	67.	1557.	231.
%RSD	.7625	1.273	.4636	1.424
#1	117800.	5192.	334800.	16070.
#2	119100.	5287.	337000.	16390.

Sample Name: MEGDD0117 Run Time: 02/28/03 14:03

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	21.81	153600.	637.2	12710.
Stddev	.40	1469.	3.6	269.
%RSD	1.850	.9565	.5654	2.119
#1	21.53	154700.	634.7	12520.
#2	22.10	152600.	639.8	12900.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2.224	21.05	<.0000	229100.
Stddev	5.548	1.58	35.93	1306.
%RSD	249.5	7.486	1.738	.5699
#1	< .0000	19.93	< .0000	228200.
#2	6.147	22.16	< .0000	230100.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	7764.	2438000.	46.14
Stddev	.6887	45.	25140.	.57
%RSD	106.1	.5856	1.031	1.231
#1	<.0000	7732.	2455000.	45.74
#2	<.0000	7796.	2420000.	46.54

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	1435.	<.0000	500.9	1294.
Stddev	5.	.7357	1.4	7.
%RSD	.3423	4.952	.2762	.5573
#1	1432.	<.0000	500.0	1288.
#2	1439.	<.0000	501.9	1299.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	1990.	10.12
Stddev	1280.	17.	.46
%RSD	.2410	.8718	4.591
#1	< .000	1978.	9.794
#2	< .000	2002.	10.45

Method: SHER Sample Name: MEGDD0117 1/10 Operator:
Comment:
Run Time: 02/28/03 14:07 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	51980.	<.0000	147000.
Stddev	.3070	33.	.2634	348.
%RSD	1.578	.0631	.0430	.2367
#1	<.0000	51960.	<.0000	147200.
#2	<.0000	52010.	<.0000	146700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1002.	3.934	.0387
Stddev	.0147	2.	.047	.9313
%RSD	.0068	.2467	1.203	2406.
#1	<.0000	1003.	3.901	.6972
#2	<.0000	1000.0	3.968	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	112700.	<.0000	45.64	121.2
Stddev	20.	.1855	.04	2.5
%RSD	.0176	1.433	.0977	2.101
#1	112700.	<.0000	45.67	123.0
#2	112700.	<.0000	45.61	119.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	169.9	114600.	<.0000	<.0000
Stddev	1.2	19.	3.195	1.417
%RSD	.6894	.0162	29.53	2.538
#1	169.0	114600.	< .0000	< .0000
#2	170.7	114600.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	10650.	510.8	40560.	2194.
Stddev	3.	7.0	47.	5.
%RSD	.0245	1.378	.1158	.2346
#1	10650.	515.8	40600.	2197.
#2	10650.	505.8	40530.	2190.

Sample Name: MEGDD0117 1/10 Run Time: 02/28/03 14:07

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.091	64130.	89.65	1822.
Stddev	.054	30.	.36	52.
%RSD	4.927	.0472	.4054	2.836
#1	1.053	64110.	89.91	1858.
#2	1.129	64150.	89.40	1785.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	28100.
Stddev	.4471	.9672	.5403	22.
%RSD	.7432	65.09	.2210	.0783
#1	<.0000	<.0000	<.0000	28080.
#2	<.0000	<.0000	<.0000	28110.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.3018	998.6	864400.	.1486
Stddev	.1968	6.2	2586.	3.124
%RSD	65.21	.6161	.2992	2102.
#1	.4410	994.2	866200.	2.358
#2	.1626	1003.	862600.	< .0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	169.5	<.0000	57.75	146.0
Stddev	.2	.2455	1.71	.1
%RSD	.1246	84.10	2.952	.0814
#1	169.3	<.0000	56.54	145.9
#2	169.6	<.0000	58.96	146.1

Elem	W 2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	235.0	<.0000
Stddev	2312.	.8	1.116
%RSD	1.317	.3339	153.8
#1	< .000	235.6	.0633
#2	< .000	234.5	< .0000

Method: SHER Sample Name: MEGDD0117 1/100 Operator:
Comment:
Run Time: 02/28/03 14:11 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	5398.	<.0000	21270.
Stddev	.9211	29.	2.960	98.
%RSD	55.47	.5378	3.581	.4616
#1	<.0000	5377.	< .0000	21340.
#2	<.0000	5418.	< .0000	21200.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	109.7	1.405	<.0000
Stddev	.5594	.5	.078	.8793
%RSD	1.192	.4393	5.566	608.6
#1	<.0000	109.3	1.350	<.0000
#2	<.0000	110.0	1.460	.4773

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	12230.	<.0000	5.966	9.612
Stddev	9.	.1009	.086	.420
%RSD	.0749	6.090	1.442	4.374
#1	12220.	<.0000	6.027	9.314
#2	12230.	<.0000	5.905	9.909

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	15.54	16650.	<.0000	<.0000
Stddev	.43	2.	2.691	.3861
%RSD	2.782	.0145	119.2	5.813
#1	15.24	16650.	< .0000	<.0000
#2	15.85	16660.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	698.7	166.0	4455.	280.5
Stddev	3.2	.3	17.	.0
%RSD	.4602	.1610	.3712	.0054
#1	696.4	166.2	4443.	280.5
#2	700.9	165.9	4467.	280.5

Sample Name: MEGDD0117 1/100 Run Time: 02/28/03 14:11

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.0826	7710.	10.99	226.0
Stddev	.0807	1.	.29	7.5
%RSD	97.71	.0133	2.654	3.341
#1	.1397	7711.	11.20	231.3
#2	.0255	7710.	10.78	220.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2999.
Stddev	1.497	2.094	.5471	13.
%RSD	18.28	112.6	1.559	.4394
#1	< .0000	< .0000	<.0000	2990.
#2	< .0000	< .0000	<.0000	3008.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	103.3	116100.	<.0000
Stddev	.8199	.2	1727.	2.698
%RSD	886.4	.2362	1.488	1771.
#1	.4873	103.2	114900.	1.756
#2	<.0000	103.5	117300.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	16.60	.7490	6.795	<.0000
Stddev	.10	3.188	.312	1.675
%RSD	.6055	425.6	4.588	15.72
#1	16.53	< .0000	7.016	< .0000
#2	16.67	3.003	6.575	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	28.87	<.0000
Stddev	599.4	.12	2.047
%RSD	2.184	.4182	107.1
#1	< .0000	28.95	< .0000
#2	< .0000	28.78	< .0000

Method: SHER Sample Name: MEGDD0239F Operator:
Comment:
Run Time: 02/28/03 14:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	5.644	370.4
Stddev	2.762	2.052	.443	65.5
%RSD	348.5	7.366	7.849	17.68
#1	< .0000	< .0000	5.331	416.7
#2	1.161	< .0000	5.957	324.1

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	666.7	433.9	1.326	<.0000
Stddev	5.8	2.6	.032	1.086
%RSD	.8714	.6090	2.374	165.3
#1	662.6	432.0	1.304	< .0000
#2	670.8	435.7	1.349	.1110

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	10850.	<.0000	.5602	2.098
Stddev	274.	.1429	.0753	2.987
%RSD	2.524	2.630	13.44	142.4
#1	10660.	<.0000	.6134	< .0000
#2	11050.	<.0000	.5070	4.211

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	.7401	13.29	2.083	<.0000
Stddev	1.171	3.28	3.783	1.029
%RSD	158.2	24.69	181.7	19.74
#1	1.568	15.60	4.758	< .0000
#2	< .0000	10.97	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	13850.	4188.	3662.	29.03
Stddev	153.	78.	47.	.55
%RSD	1.102	1.862	1.285	1.911
#1	13750.	4133.	3629.	28.63
#2	13960.	4243.	3696.	29.42

Sample Name: MEGDD0239F Run Time: 02/28/03 14:19

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.137	136700.	1.294	62.27
Stddev	.135	438.	.240	17.62
%RSD	6.296	.3207	18.56	28.29
#1	2.232	136300.	1.464	74.72
#2	2.042	137000.	1.124	49.81

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.5486	<.0000	<.0000	3495.
Stddev	1.018	1.933	.8216	34.
%RSD	185.5	364.4	12.61	.9773
#1	< .0000	< .0000	<.0000	3471.
#2	1.268	.8364	<.0000	3520.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.3248	1141.	<.0000	<.0000
Stddev	.4263	21.	66.24	.5681
%RSD	131.2	1.819	10.79	38.99
#1	.0234	1126.	< .0000	<.0000
#2	.6263	1156.	< .0000	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.313	<.0000
Stddev	1.368	1.962	2.170	3.276
%RSD	167.3	67.84	165.2	26.23
#1	.1494	< .0000	< .0000	< .0000
#2	< .0000	< .0000	2.848	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	2198.	.1449	1.488
%RSD	63.17	5.126	2180.
#1	< .000	<.0000	< .0000
#2	< .000	<.0000	.9838

Method: SHER Sample Name: MEGDD0236F Operator:
Comment:
Run Time: 02/28/03 14:23 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	4.272	513.8
Stddev	.9207	5.188	.864	31.2
%RSD	67.14	15.85	20.23	6.075
#1	<.0000	< .0000	3.661	491.8
#2	<.0000	< .0000	4.883	535.9

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	443.9	1750.	1.404	<.0000
Stddev	4.6	2.	.063	.0515
%RSD	1.028	.1165	4.496	6.421
#1	440.6	1751.	1.449	<.0000
#2	447.1	1749.	1.360	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	28720.	<.0000	1.115	8.713
Stddev	178.	.1779	.043	1.279
%RSD	.6186	.7669	3.864	14.68
#1	28590.	<.0000	1.085	7.808
#2	28850.	<.0000	1.146	9.617

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	.5850	46.90	2.382	<.0000
Stddev	1.390	.48	1.850	.1707
%RSD	237.5	1.029	77.66	.9737
#1	< .0000	46.56	3.689	<.0000
#2	1.567	47.24	1.074	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	15130.	2617.	8711.	155.4
Stddev	25.	25.	1.	1.6
%RSD	.1657	.9502	.0153	1.059
#1	15110.	2599.	8710.	154.3
#2	15150.	2634.	8712.	156.6

Sample Name: MEGDD0236F Run Time: 02/28/03 14:23

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.2349	114000.	2.120	71.17
Stddev	.0269	314.	.069	.00
%RSD	11.47	.2755	3.244	.0020
#1	.2158	113800.	2.071	71.17
#2	.2539	114200.	2.168	71.17

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4275.
Stddev	1.315	.9666	1.095	12.
%RSD	171.1	41.08	16.32	.2718
#1	< .0000	<.0000	< .0000	4267.
#2	.1611	<.0000	< .0000	4283.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.4410	3521.	<.0000	<.0000
Stddev	1.181	26.	1328.	1.704
%RSD	267.8	.7298	55.31	135.6
#1	< .0000	3503.	< .000	< .0000
#2	1.276	3539.	< .000	< .0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.971	<.0000
Stddev	.8418	3.925	.620	2.347
%RSD	40.42	53.02	31.46	12.18
#1	<.0000	< .0000	2.409	< .0000
#2	<.0000	< .0000	1.533	< .0000

Elem	W 2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	3638.	.0565	.8368
%RSD	154.7	.4604	126.8
#1	221.4	<.0000	<.0000
#2	< .000	<.0000	<.0000

Method: SHER Sample Name: MEGUSH8602F Operator:
Comment:
Run Time: 02/28/03 14:28 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	4.991	2468.
Stddev	1.432	4.833	1.726	56.
%RSD	47.19	13.46	34.58	2.273
#1	< .0000	< .0000	3.771	2507.
#2	< .0000	< .0000	6.211	2428.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	31.94	87.82	1.176	<.0000
Stddev	.17	.31	.103	.8276
%RSD	.5240	.3534	8.727	83.99
#1	31.82	87.60	1.248	<.0000
#2	32.06	88.04	1.103	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	101000.	<.0000	1.397	1.488
Stddev	608.	.0757	.333	2.133
%RSD	.6024	7.876	23.86	143.3
#1	100600.	<.0000	1.633	< .0000
#2	101400.	<.0000	1.161	2.996

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	25.20	1.014	.4857
Stddev	.7309	.07	2.103	1.029
%RSD	832.4	.2622	207.3	212.0
#1	<.0000	25.24	< .0000	< .0000
#2	.4290	25.15	2.501	1.214

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9176.	230.6	21150.	1918.
Stddev	90.	13.8	99.	18.
%RSD	.9811	5.996	.4682	.9331
#1	9112.	220.8	21080.	1905.
#2	9239.	240.3	21220.	1931.

Sample Name: MEGUSH8602F Run Time: 02/28/03 14:28

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	1.072	67120.	2.799	70.28
Stddev	.188	250.	.240	6.29
%RSD	17.57	.3722	8.585	8.952
#1	.9390	66940.	2.629	74.73
#2	1.205	67300.	2.969	65.83

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	3631.
Stddev	.6921	.1611	1.096	37.
%RSD	121.2	6.529	17.32	1.013
#1	<.0000	<.0000	< .0000	3605.
#2	<.0000	<.0000	< .0000	3657.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.6729	470.4	628.6	<.0000
Stddev	.2624	5.4	1827.	2.201
%RSD	38.99	1.155	290.6	64.43
#1	.8585	466.6	< .000	< .0000
#2	.4874	474.3	1920.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2102	.7360	2.635	.5656
%RSD	5.232	24.00	479.3	2.897
#1	<.0000	<.0000	< .0000	<.0000
#2	<.0000	<.0000	1.313	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	639.3	.0814	.8366
%RSD	27.52	.7356	52.94
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: MEGDIM0236F Operator:
Comment:
Run Time: 02/28/03 14:32 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	7.914	83.79
Stddev	1.330	11.40	1.091	115.4
%RSD	264.3	47.91	13.79	137.7
#1	< .0000	< .0000	8.685	165.4
#2	.4372	< .0000	7.142	2.211

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	782.9	592.2	1.237	2.598
Stddev	4.6	1.8	.032	1.448
%RSD	.5900	.2967	2.543	55.73
#1	779.7	591.0	1.259	1.574
#2	786.2	593.5	1.215	3.622

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	8048.	<.0000	.8415	5.717
Stddev	81.	.0333	.0429	3.838
%RSD	1.002	.4341	5.102	67.15
#1	7991.	<.0000	.8111	8.431
#2	8105.	<.0000	.8718	3.002

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	.1191	14.16	1.369	<.0000
Stddev	.4392	.31	.924	1.029
%RSD	368.8	2.207	67.51	14.50
#1	<.0000	13.94	.7156	< .0000
#2	.4296	14.38	2.023	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	12980.	3174.	2287.	25.10
Stddev	57.	17.	13.	.19
%RSD	.4392	.5299	.5637	.7610
#1	13030.	3162.	2278.	24.96
#2	12940.	3186.	2296.	25.23

Sample Name: MEGDIM0236F Run Time: 02/28/03 14:32

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	4.230	123700.	2.483	73.83
Stddev	.081	496.	.172	3.77
%RSD	1.903	.4008	6.905	5.110
#1	4.173	124100.	2.362	71.17
#2	4.287	123400.	2.604	76.50

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.140	<.0000	3484.
Stddev	.4845	.162	.2740	11.
%RSD	29.29	3.903	5.115	.3253
#1	<.0000	4.254	<.0000	3476.
#2	<.0000	4.025	<.0000	3492.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1459.	<.0000	<.0000
Stddev	.1640	18.	1162.	2.485
%RSD	44.22	1.230	33.62	154.5
#1	<.0000	1446.	< .000	.1492
#2	<.0000	1472.	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.7365	1.225	.9298	2.328
%RSD	76.20	19.81	60.54	15.04
#1	<.0000	< .0000	<.0000	< .0000
#2	<.0000	< .0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	1.687	.0633
Stddev	2918.	.062	.3719
%RSD	153.9	3.681	587.4
#1	< .000	1.731	<.0000
#2	166.9	1.643	.3263

Method: SHER Sample Name: CCV-4 Operator:
Comment:
Run Time: 02/28/03 14:40 Type: Unk Mode: CONC Corr.Fact: 1.000000

Run Status: User Aborted

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	539.1	2151.	2020.	4738.
Stddev	.7	14.	5.	114.
%RSD	.1317	.6652	.2645	2.403
#1	539.6	2161.	2023.	4657.
#2	538.6	2141.	2016.	4818.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1954.	2148.	1941.	3.184
Stddev	6.	9.	3.	1.138
%RSD	.3091	.4232	.1803	35.74
#1	1958.	2155.	1943.	3.988
#2	1950.	2142.	1938.	2.379

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1985.	2093.	2047.	2107.
Stddev	7.	.	2.	.
%RSD	.3615	.0075	.1145	.0011
#1	1990.	2093.	2049.	2107.
#2	1980.	2093.	2045.	2107.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2111.	1980.	<.0000	<.0000
Stddev	5.	.	3.783	1.029
%RSD	.2449	.0016	1.809	2.737
#1	2115.	1980.	< .0000	< .0000
#2	2108.	1980.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	10080.	2454.	1943.	1996.
Stddev	9.	17.	4.	4.
%RSD	.0904	.6760	.1904	.1959
#1	10070.	2443.	1946.	1999.
#2	10080.	2466.	1941.	1994.

Sample Name: CCV-4 Run Time: 02/28/03 14:40

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2082.	1835.	1973.	437.8
Stddev	3.	2.	5.	30.2
%RSD	.1494	.1269	.2361	6.899
#1	2085.	1834.	1976.	416.4
#2	2080.	1837.	1970.	459.1

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1924.	2114.	1982.	7515.
Stddev	1.	.	1.	11.
%RSD	.0377	.0071	.0282	.1407
#1	1924.	2114.	1982.	7522.
#2	1925.	2114.	1983.	7507.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2466.	2450.	25170.	<.0000
Stddev	6.	3.	996.	1.205
%RSD	.2282	.1405	3.958	.3688
#1	2470.	2447.	25880.	< .0000
#2	2462.	2452.	24470.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2040.	2182.	1731.
Stddev	1.578	1.	8.	1.
%RSD	37.22	.0726	.3611	.0823
#1	< .0000	2039.	2188.	1730.
#2	< .0000	2041.	2176.	1732.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1232000.	2001.	<.0000
Stddev	12020.	4.	.1859
%RSD	.9758	.2044	4.218
#1	1241000.	2004.	<.0000
#2	1224000.	1998.	<.0000

Method: SHER Sample Name: CCB-4 Operator:
Comment:
Run Time: 02/28/03 14:53 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	3.746	<.0000
Stddev	.3063	5.122	.634	1.559
%RSD	60.58	13.43	16.93	8.322
#1	<.0000	< .0000	4.194	< .0000
#2	<.0000	< .0000	3.297	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4.922	1.188	1.830
Stddev	3.105	.451	.000	1.706
%RSD	51.85	9.161	.0051	93.26
#1	< .0000	4.603	1.188	3.036
#2	< .0000	5.241	1.188	.6232

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1686	.3321	1.505
Stddev	.5987	.2271	.0107	.426
%RSD	14.15	134.7	3.220	28.30
#1	<.0000	.3292	.3397	1.204
#2	<.0000	.0080	.3246	1.806

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.2850	<.0000	<.0000
Stddev	1.095	.6398	1.345	2.401
%RSD	78.46	224.5	39.04	88.00
#1	< .0000	.7374	< .0000	< .0000
#2	< .0000	<.0000	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.6807	54.14	6.709	.0208
Stddev	.7840	4.02	6.189	.0749
%RSD	115.2	7.426	92.24	359.2
#1	.1264	51.30	2.333	.0738
#2	1.235	56.99	11.09	<.0000

Sample Name: CCB-4 Run Time: 02/28/03 14:53

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	15.49	<.0000	.0202	32.02
Stddev	12.89	.6426	.3260	7.55
%RSD	83.18	2.002	1611.	23.58
#1	24.60	<.0000	.2508	37.36
#2	6.380	<.0000	<.0000	26.68

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1.995	3.684	<.0000	2.764
Stddev	.092	5.315	1.369	.001
%RSD	4.595	144.3	32.65	.0314
#1	2.060	7.443	< .0000	2.764
#2	1.930	< .0000	< .0000	2.765

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	1.832	1.542	<.0000	<.0000
Stddev	1.180	.409	1528.	1.633
%RSD	64.43	26.52	63.73	270.6
#1	2.667	1.253	< .000	.5512
#2	.9973	1.832	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2100	.7363	2.474	1.391
%RSD	10.88	16.54	377.2	5.163
#1	<.0000	<.0000	1.094	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	986.1	.0034	.0658
Stddev	1558.	.0306	.3712
%RSD	158.0	911.7	563.7
#1	< .000	.0250	.3283
#2	2088.	<.0000	<.0000

Method: SHER Sample Name: MEGDD0117F Operator:
Comment:
Run Time: 02/28/03 15:46 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	.4373	112.0	4.138	437.8
Stddev	1.023	11.4	1.470	17.1
%RSD	234.0	10.23	35.53	3.917
#1	1.161	103.9	3.098	449.9
#2	< .0000	120.1	5.177	425.6

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1354.	466.0	1.338	.5509
Stddev	11.	.7	.095	.2070
%RSD	.7808	.1404	7.062	37.57
#1	1347.	466.4	1.271	.4045
#2	1362.	465.5	1.404	.6972

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	7917.	<.0000	.8190	4.631
Stddev	114.	.0169	.2258	3.415
%RSD	1.434	.2772	27.57	73.73
#1	7837.	<.0000	.9786	7.046
#2	7997.	<.0000	.6593	2.217

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	315.4	4.522	<.0000
Stddev	2.561	4.0	.673	.2574
%RSD	121.7	1.282	14.87	3.120
#1	< .0000	312.5	4.998	<.0000
#2	< .0000	318.2	4.047	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	19030.	10730.	1607.	9.301
Stddev	75.	102.	19.	.117
%RSD	.3948	.9552	1.152	1.263
#1	18980.	10660.	1594.	9.218
#2	19080.	10800.	1620.	9.384

Sample Name: MEGDD0117F Run Time: 02/28/03 15:46

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	.6916	149900.	2.083	30.23
Stddev	.0269	686.	.017	22.65
%RSD	3.891	.4575	.8237	74.93
#1	.7106	149400.	2.095	14.22
#2	.6726	150400.	2.071	46.25

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.2132	<.0000	<.0000	2920.
Stddev	.8964	.6443	1.095	2.
%RSD	420.5	38.55	15.42	.0518
#1	<.0000	<.0000	< .0000	2918.
#2	.8470	<.0000	< .0000	2921.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1426.	<.0000	<.0000
Stddev	.4920	16.	1528.	1.775
%RSD	265.6	1.125	532.3	117.7
#1	<.0000	1414.	< .000	< .0000
#2	.1627	1437.	793.3	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	3.200	<.0000	.4367	.3234
Stddev	.105	1.717	1.240	1.536
%RSD	3.295	13.44	283.9	474.9
#1	3.275	< .0000	1.313	1.409
#2	3.125	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	319.8	.0297	.9300
%RSD	1.807	3.934	61.39
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: CCV-5 Operator:
Comment:
Run Time: 02/28/03 16:23 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	531.1	2110.	1977.	4566.
Stddev	1.2	9.	5.	139.
%RSD	.2281	.4355	.2483	3.039
#1	530.3	2117.	1974.	4467.
#2	532.0	2104.	1981.	4664.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	1918.	2125.	1911.	2.891
Stddev	10.	.	4.	1.448
%RSD	.5358	.0235	.2048	50.09
#1	1910.	2125.	1913.	1.867
#2	1925.	2124.	1908.	3.915

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	1948.	2061.	2012.	2066.
Stddev	1.	18.	8.	2.
%RSD	.0646	.8599	.4073	.1206
#1	1949.	2048.	2006.	2064.
#2	1947.	2073.	2017.	2068.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	2084.	1952.	<.0000	<.0000
Stddev	4.	9.	.8407	1.287
%RSD	.1715	.4594	.4282	3.483
#1	2086.	1945.	<.0000	< .0000
#2	2081.	1958.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	9893.	2397.	1904.	1959.
Stddev	16.	3.	5.	7.
%RSD	.1627	.1179	.2636	.3692
#1	9905.	2399.	1908.	1954.
#2	9882.	2395.	1900.	1964.

Sample Name: CCV-5 Run Time: 02/28/03 16:23

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2041.	2215.	1934.	469.8
Stddev	11.	7.	9.	2.5
%RSD	.5324	.3150	.4667	.5357
#1	2034.	2220.	1928.	468.0
#2	2049.	2210.	1940.	471.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1888.	2075.	1946.	7402.
Stddev	7.	16.	10.	25.
%RSD	.3796	.7530	.4926	.3380
#1	1883.	2064.	1939.	7385.
#2	1893.	2086.	1953.	7420.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2414.	2401.	19680.	<.0000
Stddev	13.	3.	4982.	.0708
%RSD	.5475	.1449	25.32	.0222
#1	2404.	2399.	23200.	<.0000
#2	2423.	2404.	16150.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1999.	2134.	1749.
Stddev	1.052	6.	13.	8.
%RSD	27.20	.3189	.5913	.4775
#1	< .0000	1994.	2143.	1743.
#2	< .0000	2003.	2125.	1755.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1196000.	1967.	<.0000
Stddev	4835.	9.	.3721
%RSD	.4043	.4769	6.816
#1	1193000.	1960.	<.0000
#2	1199000.	1974.	<.0000

Method: SHER Sample Name: CCB-5 Operator:
Comment:
Run Time: 02/28/03 16:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.918	122.4
Stddev	.9187	.0911	2.367	10.9
%RSD	41.05	.2647	123.4	8.927
#1	<.0000	<.0000	.2446	114.6
#2	<.0000	<.0000	3.591	130.1

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	5.227	1.138	1.940
Stddev	2.712	.133	.087	.518
%RSD	51.44	2.542	7.628	26.69
#1	< .0000	5.133	1.200	1.574
#2	< .0000	5.321	1.077	2.306

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1270	.5070	2.408
Stddev	.5977	.1514	.0216	.851
%RSD	35.33	119.2	4.255	35.34
#1	<.0000	.2340	.4917	3.009
#2	<.0000	.0199	.5222	1.806

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.3180	<.0000	<.0000
Stddev	1.240	.4998	1.766	1.286
%RSD	95.97	157.2	60.66	1062.
#1	< .0000	.6714	< .0000	.7886
#2	< .0000	<.0000	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.2336	53.79	1.459	.0052
Stddev	.3930	5.33	6.190	.0391
%RSD	168.3	9.916	424.4	752.0
#1	.5115	50.02	5.835	.0329
#2	<.0000	57.56	< .0000	<.0000

Sample Name: CCB-5 Run Time: 02/28/03 16:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	10.53	<.0000	<.0000	8.884
Stddev	8.29	.7170	.1201	12.58
%RSD	78.71	2.567	44.33	141.7
#1	16.39	<.0000	<.0000	17.78
#2	4.668	<.0000	<.0000	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	.2985	2.089	<.0000	2.371
Stddev	.6454	1.449	4.108	3.923
%RSD	216.3	69.37	76.70	165.4
#1	.7549	3.114	< .0000	5.145
#2	<.0000	1.064	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.6494	<.0000	<.0000	<.0000
Stddev	1.016	2.455	1960.	2.414
%RSD	156.5	101.8	93.65	123.2
#1	1.368	< .0000	< .000	< .0000
#2	< .0000	< .0000	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2102	.2447	.7735	.6607
%RSD	12.87	14.59	101.1	2.548
#1	<.0000	<.0000	<.0000	<.0000
#2	<.0000	<.0000	<.0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1466.	<.0000	<.0000
Stddev	1438.	.0791	.1858
%RSD	98.07	183.4	40.47
#1	449.5	.0128	<.0000
#2	2483.	<.0000	<.0000

Method: SHER Sample Name: CRI-2 Operator:
Comment:
Run Time: 02/28/03 16:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	18.63	<.0000	21.99	227.1
Stddev	.61	5.742	2.79	21.8
%RSD	3.268	12.85	12.67	9.614
#1	18.20	< .0000	20.02	211.7
#2	19.06	< .0000	23.96	242.5

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	5.742	10.43	2.049
Stddev	.0200	.114	.02	1.293
%RSD	.1502	1.990	.2051	63.09
#1	<.0000	5.823	10.41	2.963
#2	<.0000	5.662	10.44	1.135

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	10.50	100.7	24.68
Stddev	1.196	.04	.0	.86
%RSD	56.52	.4034	.0030	3.467
#1	< .0000	10.47	100.7	25.29
#2	< .0000	10.53	100.7	24.08

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	49.87	.0540	<.0000	.2731
Stddev	.74	.0601	1.345	.1287
%RSD	1.487	111.3	9.123	47.12
#1	50.40	.0115	< .0000	.3640
#2	49.35	.0964	< .0000	.1821

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	.7043	52.37	<.0000	29.82
Stddev	.9934	.11	4.951	.03
%RSD	141.0	.2025	77.11	.0883
#1	.0019	52.29	< .0000	29.83
#2	1.407	52.44	< .0000	29.80

Sample Name: CRI-2 Run Time: 02/28/03 16:33

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2.023	<.0000	79.37	9.775
Stddev	.296	1.106	.19	6.290
%RSD	14.63	3.323	.2408	64.35
#1	2.232	< .0000	79.23	5.327
#2	1.814	< .0000	79.50	14.22

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	6.225	128.1	10.91	<.0000
Stddev	.231	.5	1.37	5.043
%RSD	3.707	.3804	12.55	91.03
#1	6.061	127.7	11.88	< .0000
#2	6.388	128.4	9.942	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.6030	.3859	<.0000	<.0000
Stddev	.3607	.1366	2723.	2.839
%RSD	59.81	35.39	82.77	17.51
#1	.8581	.4825	< .000	< .0000
#2	.3480	.2893	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	15.14	101.7	162.1
Stddev	1.365	2.45	2.5	1.9
%RSD	167.1	16.20	2.414	1.169
#1	< .0000	13.41	99.99	160.7
#2	.1485	16.87	103.5	163.4

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	63150.	48.15	<.0000
Stddev	2836.	.06	.3710
%RSD	4.490	.1148	564.3
#1	65160.	48.11	.1966
#2	61140.	48.19	<.0000

Method: SHER Sample Name: ICSA-2 Operator:
Comment:
Run Time: 02/28/03 16:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	468100.	<.0000	161300.
Stddev	.8191	1659.	4.992	265.
%RSD	4.494	.3545	.4229	.1645
#1	<.0000	466900.	< .0000	161500.
#2	<.0000	469300.	< .0000	161100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4.549	1.070	3.695
Stddev	.5698	.137	.095	2.587
%RSD	.1319	3.006	8.833	70.00
#1	<.0000	4.646	1.137	5.524
#2	<.0000	4.452	1.003	1.866

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	382700.	<.0000	.0433	<.0000
Stddev	1870.	.0252	.0107	4.057
%RSD	.4886	4.632	24.75	7.376
#1	381400.	<.0000	.0357	< .0000
#2	384100.	<.0000	.0508	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	122800.	<.0000	<.0000
Stddev	.1473	348.	.4208	2.320
%RSD	.4467	.2832	64.52	3.981
#1	<.0000	122600.	<.0000	< .0000
#2	<.0000	123100.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	432800.	<.0000
Stddev	.3625	38.57	201.	.0172
%RSD	6.444	1.223	.0464	.7804
#1	<.0000	< .0000	432600.	<.0000
#2	<.0000	< .0000	432900.	<.0000

Sample Name: ICSA-2 Run Time: 02/28/03 16:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	71.48	<.0000	2041.
Stddev	.2955	2.12	.1522	25.
%RSD	4.740	2.961	.5256	1.241
#1	<.0000	69.98	<.0000	2059.
#2	<.0000	72.98	<.0000	2023.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	40.90
Stddev	1.799	4.051	11.24	4.49
%RSD	.6119	72.29	3.803	10.98
#1	< .0000	< .0000	< .0000	37.73
#2	< .0000	< .0000	< .0000	44.08

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.3481	9.663	921600.	5.169
Stddev	1.836	.136	4256.	5.680
%RSD	527.6	1.409	.4618	109.9
#1	1.647	9.759	924600.	1.153
#2	< .0000	9.566	918500.	9.185

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.8409	5.638	3.411	1.763
%RSD	4.671	44.14	9.209	3.163
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	1.049
Stddev	1782.	.2462	1.023
%RSD	.9163	.0599	97.45
#1	< .000	<.0000	1.773
#2	< .000	<.0000	.3263

Method: SHER Sample Name: ICSAB-2 Operator:
Comment:
Run Time: 02/28/03 16:51 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	1051.	466400.	<.0000	166300.
Stddev	4.	225.	.8023	549.
%RSD	.3846	.0483	.0680	.3303
#1	1054.	466500.	<.0000	165900.
#2	1048.	466200.	<.0000	166700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	504.2	430.8	3.806
Stddev	.5815	.5	.6	.776
%RSD	.1302	.1018	.1378	20.39
#1	<.0000	503.8	431.2	4.354
#2	<.0000	504.5	430.3	3.257

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	382900.	912.8	484.0	521.0
Stddev	143.	2.6	.5	9.1
%RSD	.0374	.2878	.1114	1.742
#1	382800.	910.9	483.6	514.6
#2	383000.	914.7	484.4	527.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	471.0	123200.	4.224	<.0000
Stddev	1.2	149.	3.616	1.244
%RSD	.2534	.1208	85.60	1.984
#1	470.1	123300.	1.667	< .0000
#2	471.8	123100.	6.781	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	431100.	510.7
Stddev	1.057	32.70	1145.	.2
%RSD	41.79	1.085	.2657	.0368
#1	< .0000	< .0000	430300.	510.8
#2	< .0000	< .0000	431900.	510.6

Sample Name: ICSAB-2 Run Time: 02/28/03 16:51

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	55.29	934.0	2299.
Stddev	.4305	3.65	2.4	3.
%RSD	7.146	6.606	.2612	.1091
#1	<.0000	57.87	932.3	2301.
#2	<.0000	52.71	935.8	2298.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	1045.	<.0000	<.0000	25.83
Stddev	4.	3.380	1.921	13.46
%RSD	.3434	60.59	.6107	52.11
#1	1043.	< .0000	< .0000	35.35
#2	1048.	< .0000	< .0000	16.31

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	.3249	10.44	938600.	<.0000
Stddev	.0328	2.87	4620.	1.420
%RSD	10.09	27.50	.4922	2.375
#1	.3481	8.407	935300.	< .0000
#2	.3017	12.47	941900.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	436.7	383.0
Stddev	.6304	1.962	4.5	6.7
%RSD	3.234	8.278	1.034	1.761
#1	<.0000	< .0000	433.5	387.8
#2	<.0000	< .0000	439.9	378.3

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	428.7	1.838
Stddev	3877.	1.9	.279
%RSD	60.93	.4498	15.17
#1	< .000	427.4	1.641
#2	< .000	430.1	2.036

Method: SHER Sample Name: CCV-6 Operator:
Comment:
Run Time: 02/28/03 17:00 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	526.6	2135.	1989.	4617.
Stddev	3.6	7.	2.	65.
%RSD	.6867	.3402	.0956	1.418
#1	524.0	2130.	1987.	4571.
#2	529.1	2140.	1990.	4664.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1928.	2119.	1912.	3.037
Stddev	9.	.	3.	.310
%RSD	.4467	.0067	.1325	10.22
#1	1922.	2119.	1910.	2.818
#2	1934.	2119.	1913.	3.257

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1948.	2059.	2018.	2070.
Stddev	8.	3.	4.	7.
%RSD	.4070	.1286	.1836	.3569
#1	1942.	2057.	2016.	2065.
#2	1953.	2060.	2021.	2075.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2075.	1957.	<.0000	<.0000
Stddev	4.	3.	1.092	.1718
%RSD	.1794	.1546	.5332	.4575
#1	2073.	1955.	< .0000	<.0000
#2	2078.	1959.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9908.	2409.	1915.	1966.
Stddev	54.	5.	11.	6.
%RSD	.5445	.2158	.5762	.3143
#1	9946.	2413.	1923.	1962.
#2	9870.	2405.	1908.	1971.

Sample Name: CCV-6 Run Time: 02/28/03 17:00

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	2051.	2216.	1972.	462.7
Stddev	6.	3.	6.	42.8
%RSD	.3039	.1164	.3094	9.248
#1	2047.	2215.	1967.	492.9
#2	2056.	2218.	1976.	432.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	2156.	2082.	2113.	7422.
Stddev	1.	4.	3.	14.
%RSD	.0583	.1930	.1551	.1822
#1	2156.	2079.	2111.	7431.
#2	2157.	2085.	2116.	7412.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	2427.	2411.	25410.	<.0000
Stddev	1.	4.	2059.	2.555
%RSD	.0374	.1860	8.104	.7935
#1	2426.	2414.	23950.	< .0000
#2	2427.	2407.	26860.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2008.	2136.	1724.
Stddev	.7363	7.	4.	27.
%RSD	18.68	.3416	.2099	1.560
#1	<.0000	2003.	2133.	1705.
#2	<.0000	2013.	2139.	1743.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	1202000.	1976.	<.0000
Stddev	9067.	4.	1.302
%RSD	.7541	.2245	32.45
#1	1196000.	1973.	< .0000
#2	1209000.	1979.	< .0000

Method: SHER Sample Name: CCB-6 Operator:
Comment:
Run Time: 02/28/03 17:03 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 (102)	308.215 (109)	193.759 (173)	242.795 (138)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.527	77.17
Stddev	2.757	3.136	.219	31.19
%RSD	181.9	8.999	8.665	40.41
#1	< .0000	< .0000	2.372	99.22
#2	.4338	< .0000	2.682	55.12

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 (135)	493.409 (68)	313.042 (107)	190.241 (176)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	5.440	1.133	.9883
Stddev	.4780	.345	.016	3.827
%RSD	6.111	6.334	1.413	387.2
#1	<.0000	5.684	1.122	< .0000
#2	<.0000	5.197	1.145	3.694

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 (105)	228.802 (147)	228.616 (147)	357.869 (94)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1091	.4765	1.806
Stddev	1.197	.0925	.6020	3.406
%RSD	94.21	84.81	126.3	188.6
#1	< .0000	.1745	.0508	4.214
#2	< .0000	.0437	.9022	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 (103)	259.940 (129)	206.866 (162)	230.606 (146)
Units	ppb	ppb	ppm	ppb
Avg	<.0000	<.0000	<.0000	.1214
Stddev	1.241	.1268	1.849	.5147
%RSD	45.35	4780.	390.0	423.9
#1	< .0000	.0870	< .0000	.4853
#2	< .0000	<.0000	.8335	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 (44)	610.362 (55)	383.826 (87)	257.610 (131)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	54.87	<.0000	<.0000
Stddev	.6022	1.13	8.669	.0306
%RSD	157.4	2.055	228.4	123.1
#1	.0433	55.66	2.334	<.0000
#2	<.0000	54.07	< .0000	<.0000

Sample Name: CCB-6 Run Time: 02/28/03 17:03

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 (166)	588.995 (57)	231.604 (145)	189.865 (176)
Units	ppb	ppb	ppb	ppm
Avg	3.126	<.0000	.2386	21.34
Stddev	1.480	.7360	.0858	2.52
%RSD	47.34	3.177	35.95	11.78
#1	4.173	<.0000	.1780	23.12
#2	2.080	<.0000	.2993	19.56

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 (152)	206.833 (162)	196.090 (171)	288.158 (116)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.178	.0660	<.0000
Stddev	.8071	.161	1.917	5.043
%RSD	106.0	13.68	2904.	640.6
#1	<.0000	1.292	< .0000	< .0000
#2	<.0000	1.064	1.421	2.779

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 (176)	346.446 (97)	240.063 (140)	214.281 (157)
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.0004	<.0000	<.0000
Stddev	.3607	1.773	298.2	1.846
%RSD	111.2	464000.	13.08	3606.
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	1.254	< .0000	1.254

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 (100)	190.864 (176)	292.402 (115)	310.230 (108)
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.750	<.0000
Stddev	.4200	1.472	4.641	1.203
%RSD	28.28	66.97	265.2	4.199
#1	<.0000	< .0000	5.032	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 (140)	213.856 (157)	339.198 (99)
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	360.2	.0088	.8349
%RSD	140.3	15.90	48.92
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

HGC-77

Method Name: mercury
Method Description:
Element: Hg

Date: 02/11/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: Results Data Set Name:

Element: Hg Seq. No.: 102 AS Loc.: --- Date: 02/11/2003
Sample ID: Sample

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.1360	-0.1360	-0.0010	-0.0442	-0.0006	05:07:14	No
Mean:	-0.1360	-0.1360	-0.0010				
SD :							
%RSD:							

Method Name: mercury
Method Description:
Element: Hg

Date: 02/11/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: Results Data Set Name:

Element: Hg Seq. No.: 103 AS Loc.: --- Date: 02/11/2003
Sample ID: Sample

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1115	0.1115	0.0008	0.0051	0.0012	05:09:32	No
Mean:	0.1115	0.1115	0.0008				
SD :							
%RSD:							

Method Name: mercury
Method Description:
Element: Hg

Date: 02/12/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: HGC-44.SIF Results Data Set Name: HGC-44

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/12/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0002	-0.0119	0.0002	12:57:34	No

541

2		0.0009	0.0014	0.0009	12:58:03	No
Mean:		0.0005				
SD :		0.0004				
%RSD:		83.1520				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/12/2003
Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0049	0.0229	0.0055	12:59:15	No
2			0.0041	0.0254	0.0046	12:59:44	No
Mean:			0.0045				
SD :			0.0006				
%RSD:			13.3451				

[Hg] Standard number 1 applied. [0.5000]
Correlation Coefficient: 1.00000 Slope: 0.00902

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/12/2003
Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0112	0.0583	0.0117	01:00:57	No
2			0.0129	0.0742	0.0134	01:01:26	No
Mean:			0.0120				
SD :			0.0012				
%RSD:			9.8633				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.00722

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/12/2003
Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0245	0.1296	0.0250	01:02:39	No
2			0.0244	0.1265	0.0249	01:03:08	No
Mean:			0.0244				
SD :			0.0001				
%RSD:			0.2544				

S-shaped calibration curve detected. Two-coefficient equation used.
[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99354 Slope: 0.00939

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/12/2003
Sample ID: 5.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0622	0.3217	0.0627	01:04:23	No
2			0.0615	0.3196	0.0620	01:04:52	No
Mean:			0.0618				
SD :			0.0005				
%RSD:			0.8466				

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99797 Slope: 0.01067

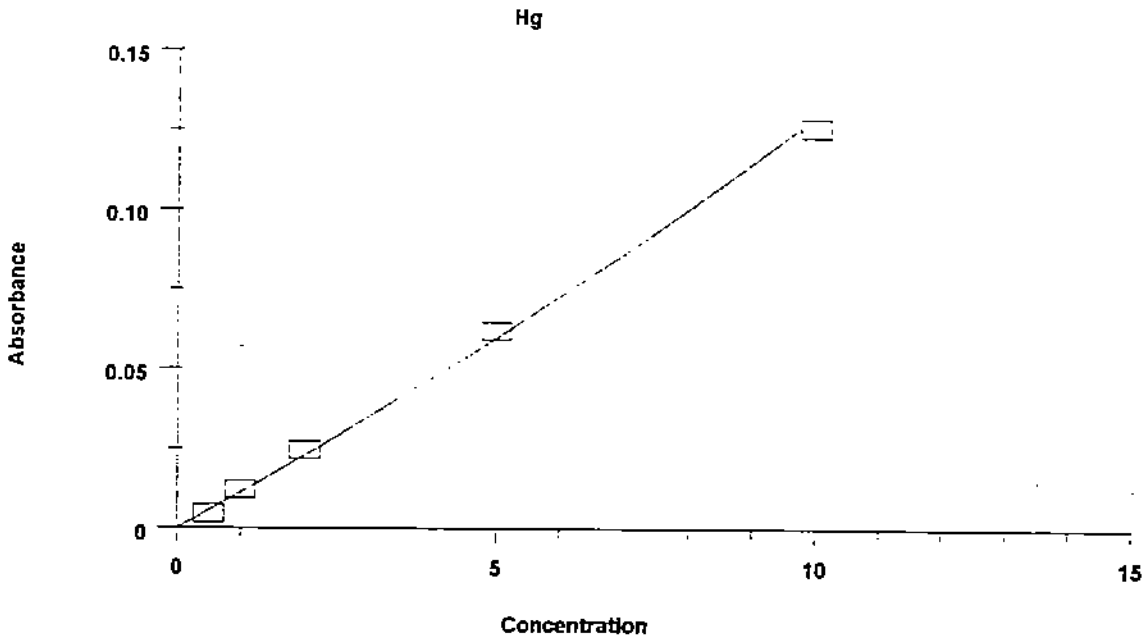
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/12/2003
Sample ID: 10.0 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1252	0.6377	0.1257	01:06:11	No
2			0.1260	0.6588	0.1265	01:06:40	No
Mean:			0.1256				
SD :			0.0006				
%RSD:			0.4479				

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99897 Slope: 0.01109

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0005	----	----	----	----
0.5 ppb	0.0045	0.5000	0.4045	0.00060	13.3
1.00 ppb	0.0120	1.0000	1.068	0.00119	9.9
2.00 ppb	0.0244	2.0000	2.136	0.00006	0.3
5.00 ppb	0.0618	5.0000	5.162	0.00052	0.8
10.0 ppb	0.1256	10.0000	9.737	0.00056	0.4
Correlation Coefficient: 0.99897		Slope:	0.01109	----	



Element: Hg Seq. No.: 7 AS Loc.: 4 Date: 02/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.099	2.099	0.0240	0.1296	0.0245	01:08:00	No

2	2.049	2.049	0.0234	0.1169	0.0239	01:08:29 No
Mean:	2.074	2.074	0.0237			
SD :	0.03543	0.03543	0.0004			
%RSD:	1.7	1.7	1.7609			

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 02/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0206	-0.0206	-0.0002	0.0022	0.0003	01:09:41	No
2	-0.0278	-0.0278	-0.0003	0.0010	0.0002	01:10:10	No
Mean:	-0.0242	-0.0242	-0.0003				
SD :	0.00511	0.00511	0.0001				
%RSD:	21.1	21.1	21.1115				

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 9 Date: 02/12/2003
Sample ID: MB-146

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0232	-0.0232	-0.0003	0.0008	0.0003	01:11:21	No
2	-0.0419	-0.0419	-0.0005	-0.0051	0.0001	01:11:50	No
Mean:	-0.0325	-0.0325	-0.0004				
SD :	0.01324	0.01324	0.0001				
%RSD:	40.7	40.7	40.6880				

Element: Hg Seq. No.: 10 AS Loc.: 10 Date: 02/12/2003
Sample ID: 030211026-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0391	0.0391	0.0004	-0.0112	0.0010	01:13:02	No
2	0.1925	0.1925	0.0021	0.0137	0.0027	01:13:31	No
Mean:	0.1158	0.1158	0.0013				
SD :	0.1084	0.1084	0.0012				
%RSD:	93.6	93.6	93.7256				

Element: Hg Seq. No.: 11 AS Loc.: 11 Date: 02/12/2003
Sample ID: 0207-J01 MB-30021

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0380	0.0380	0.0004	0.0034	0.0010	01:14:43	No
2	0.1812	0.1812	0.0020	0.0238	0.0026	01:15:12	No
Mean:	0.1096	0.1096	0.0012				
SD :	0.1012	0.1012	0.0011				
%RSD:	92.4	92.4	92.4436				

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/12/2003
Sample ID: 0207-J02 MB-30021

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0131	-0.0131	-0.0001	-0.0002	0.0004	01:16:25	No
2	0.0090	0.0090	0.0001	-0.0013	0.0006	01:16:54	No

Mean:	-0.0021	-0.0021	0.0000
SD :	0.01567	0.01567	0.0002
%RSD:	759.0	759.0	759.6392

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/12/2003
Sample ID: 0207-J03 MEGDDG237

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0005	-0.0005	0.0000	0.0009	0.0005	01:18:09	No
2	0.0457	0.0457	0.0005	0.0062	0.0010	01:18:37	No
Mean:	0.0226	0.0226	0.0003				
SD :	0.03269	0.03269	0.0004				
%RSD:	144.6	144.6	144.6090				

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/12/2003
Sample ID: 0207-J04 MEGDMEG19

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0689	0.0689	0.0008	0.0113	0.0013	01:19:53	No
2	-0.0451	-0.0451	-0.0005	-0.0034	0.0000	01:20:22	No
Mean:	0.0119	0.0119	0.0001				
SD :	0.08061	0.08061	0.0009				
%RSD:	675.2	675.2	672.7248				

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/12/2003
Sample ID: 0207-J01F MEGDDG241 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0236	-0.0236	-0.0003	-0.0061	0.0003	01:21:38	No
2	-0.0244	-0.0244	-0.0003	-0.0027	0.0003	01:22:07	No
Mean:	-0.0240	-0.0240	-0.0003				
SD :	0.00051	0.00051	0.0000				
%RSD:	2.1	2.1	2.1229				

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 02/12/2003
Sample ID: 0207-J02F MEGDHG10AF

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1809	0.1809	0.0020	0.0272	0.0025	01:23:23	No
2	-0.0050	-0.0050	-0.0001	-0.0018	0.0005	01:23:52	No
Mean:	0.0879	0.0879	0.0010				
SD :	0.1315	0.1315	0.0015				
%RSD:	149.5	149.5	149.5087				

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 02/12/2003
Sample ID: 0207-J03F MEGDDG237 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0233	-0.0233	-0.0003	-0.0035	0.0003	01:25:06	No
2	-0.0875	-0.0875	-0.0010	-0.0409	-0.0004	01:25:35	No
Mean:	-0.0554	-0.0554	-0.0006				
SD :	0.04539	0.04539	0.0005				
%RSD:	81.9	81.9	81.8364				

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 02/12/2003
Sample ID: 0207-F01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1590	0.1590	0.0018	0.0131	0.0023	01:26:45	No
2	-0.0453	-0.0453	-0.0005	-0.0067	0.0000	01:27:14	No
Mean:	0.0569	0.0569	0.0006				
SD :	0.1444	0.1444	0.0016				
%RSD:	254.0	254.0	253.5337				

Element: Hg Seq. No.: 19 AS Loc.: 4 Date: 02/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.144	2.144	0.0245	0.1311	0.0251	01:28:27	No
2	2.197	2.197	0.0252	0.1354	0.0257	01:28:56	No
Mean:	2.170	2.170	0.0248				
SD :	0.03721	0.03721	0.0004				
%RSD:	1.7	1.7	1.7700				

QC value within specified limits.

Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 02/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0179	-0.0179	-0.0002	0.0002	0.0003	01:30:09	No
2	0.0218	0.0218	0.0002	0.0066	0.0008	01:30:38	No
Mean:	0.0019	0.0019	0.0000				
SD :	0.02808	0.02808	0.0003				
%RSD:	1466	1466	1462.0451				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 19 Date: 02/12/2003
Sample ID: 0207-G01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.6198	0.6198	0.0069	0.0369	0.0075	01:31:49	No
2	0.6939	0.6939	0.0078	0.0409	0.0083	01:32:18	No
Mean:	0.6568	0.6568	0.0074				
SD :	0.05237	0.05237	0.0006				
%RSD:	8.0	8.0	8.0495				

Element: Hg Seq. No.: 22 AS Loc.: 20 Date: 02/12/2003
Sample ID: DUP 0207-G01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.6117	0.6117	0.0068	0.0425	0.0074	01:33:29	No
2	0.6220	0.6220	0.0070	0.0399	0.0075	01:33:58	No
Mean:	0.6169	0.6169	0.0069				
SD :	0.00730	0.00730	0.0001				
%RSD:	1.2	1.2	1.1943				

Element: Hg Seq. No.: 23 AS Loc.: 21 Date: 02/12/2003
Sample ID: SPK 0207-G01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.610	2.610	0.0301	0.1734	0.0306	01:35:10	No
2	2.525	2.525	0.0291	0.1610	0.0296	01:35:39	No
Mean:	2.567	2.567	0.0296				
SD :	0.06022	0.06022	0.0007				
%RSD:	2.3	2.3	2.4357				

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/12/2003
Sample ID: PB TCLP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0487	0.0487	0.0005	-0.0021	0.0011	01:36:51	No
2	0.0293	0.0293	0.0003	0.0043	0.0009	01:37:20	No
Mean:	0.0390	0.0390	0.0004				
SD :	0.01374	0.01374	0.0002				
%RSD:	35.2	35.2	35.2603				

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/12/2003
Sample ID: 0207-I01 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0363	0.0363	0.0004	-0.0012	0.0009	01:38:33	No
2	-0.0379	-0.0379	-0.0004	-0.0169	0.0001	01:39:02	No
Mean:	-0.0008	-0.0008	0.0000				
SD :	0.05247	0.05247	0.0006				
%RSD:	6596	6596	6764.1839				

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/12/2003
Sample ID: 0207-I02 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0455	-0.0455	-0.0005	-0.0103	0.0000	01:40:16	No
2	-0.0490	-0.0490	-0.0005	-0.0070	0.0000	01:40:45	No
Mean:	-0.0473	-0.0473	-0.0005				
SD :	0.00246	0.00246	0.0000				
%RSD:	5.2	5.2	5.1937				

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 02/12/2003
Sample ID: DUP 0207-I02 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0165	-0.0165	-0.0002	0.0029	0.0004	01:42:00	No
2	0.0244	0.0244	0.0003	0.0037	0.0008	01:42:29	No
Mean:	0.0039	0.0039	0.0000				
SD :	0.02894	0.02894	0.0003				
%RSD:	733.2	733.2	732.0778				

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 02/12/2003
Sample ID: SPK 0207-I02 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	3.399	3.399	0.0396	0.2108	0.0402	01:43:43	No
2	3.472	3.472	0.0405	0.2152	0.0411	01:44:12	No
Mean:	3.436	3.436	0.0401				
SD :	0.05206	0.05206	0.0006				
%RSD:	1.5	1.5	1.5943				

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 02/12/2003
Sample ID: 0207-I03 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0428	0.0428	0.0005	0.0101	0.0010	01:45:26	No
2	-0.0293	-0.0293	-0.0003	-0.0158	0.0002	01:45:56	No
Mean:	0.0067	0.0067	0.0001				
SD :	0.05101	0.05101	0.0006				
%RSD:	758.1	758.1	756.0634				

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 02/12/2003
Sample ID: 0207-I04 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0010	-0.0010	0.0000	0.0026	0.0005	01:47:11	No
2	0.0523	0.0523	0.0006	0.0110	0.0011	01:47:40	No
Mean:	0.0256	0.0256	0.0003				
SD :	0.03774	0.03774	0.0004				
%RSD:	147.2	147.2	147.1928				

Element: Hg Seq. No.: 31 AS Loc.: 4 Date: 02/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.109	2.109	0.0241	0.1264	0.0247	01:48:55	No
2	2.118	2.118	0.0242	0.1249	0.0248	01:49:24	No
Mean:	2.113	2.113	0.0242				
SD :	0.00641	0.00641	0.0001				
%RSD:	0.3	0.3	0.3128				

QC value within specified limits.

Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 02/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0072	-0.0072	-0.0001	0.0035	0.0005	01:50:36	No
2	-0.0323	-0.0323	-0.0004	-0.0031	0.0002	01:51:05	No
Mean:	-0.0197	-0.0197	-0.0002				
SD :	0.01775	0.01775	0.0002				
%RSD:	89.9	89.9	89.8638				

QC value within specified limits.

Element: Hg Seq. No.: 33 AS Loc.: 29 Date: 02/12/2003
Sample ID: PB-S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0413	-0.0413	-0.0005	-0.0015	0.0001	01:52:18	No

HGC-45

Mean: -0.0733 -0.0733 -0.0008
SD :
%RSD:

Method Name: mercury
Method Description:
Element: Hg

Date: 02/13/2003
Technique: FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: HGC-45.SIF Results Data Set Name: HGC-45

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/13/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0004	0.0043	0.0004	02:30:49	No
2			0.0006	0.0071	0.0006	02:31:19	No
Mean:			0.0005				
SD :			0.0001				
%RSD:			26.6142				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/13/2003
Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0049	0.0227	0.0054	02:32:32	No
2			0.0058	0.0342	0.0063	02:33:01	No
Mean:			0.0053				
SD :			0.0007				
%RSD:			12.6737				

[Hg] Standard number 1 applied. [0.5000]
Correlation Coefficient: 1.00000 Slope: 0.01067

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/13/2003
Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0102	0.0547	0.0107	02:34:14	No
2			0.0120	0.0709	0.0126	02:34:43	No
Mean:			0.0111				
SD :			0.0013				
%RSD:			11.9878				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.01027

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/13/2003
Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0234	0.1348	0.0239	02:35:57	No

2	0.0214	0.0966	0.0220	02:36:26	No
Mean:	0.0224				
SD :	0.0014				
%RSD:	6.1396				

S-shaped calibration curve detected. Two-coefficient equation used.
[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99986 Slope: 0.01063

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/13/2003
Sample ID: 5.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0589	0.3198	0.0595	02:37:41	No
2			0.0589	0.3214	0.0594	02:38:10	No
Mean:			0.0589				
SD :			0.0000				
%RSD:							

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99998 Slope: 0.01075

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/13/2003
Sample ID: 10.0 ppb

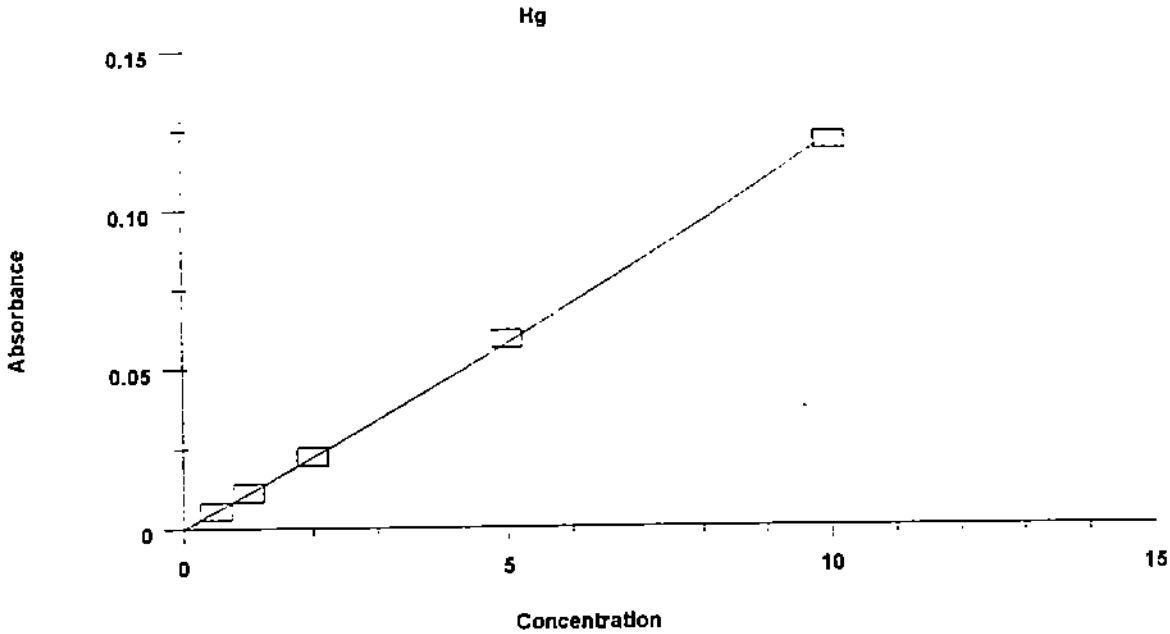
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1196	0.6507	0.1202	02:39:27	No
2			0.1221	0.6595	0.1226	02:39:56	No
Mean:			0.1209				
SD :			0.0017				
%RSD:			1.4379				

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99982 Slope: 0.01089

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0005	----	----	----	----
0.5 ppb	0.0053	0.5000	0.4871	0.00068	12.7
1.00 ppb	0.0111	1.0000	1.008	0.00133	12.0
2.00 ppb	0.0224	2.0000	2.011	0.00137	6.1
5.00 ppb	0.0589	5.0000	5.106	0.00004	----
10.0 ppb	0.1209	10.0000	9.897	0.00174	1.4

Correlation Coefficient: 0.99982 Slope: 0.01089 ----



Element: Hg Seq. No.: 7 AS Loc.: 4 Date: 02/13/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.021	2.021	0.0225	0.1283	0.0230	02:41:16	No
2	1.958	1.958	0.0218	0.1191	0.0223	02:41:45	No
Mean:	1.989	1.989	0.0222				
SD :	0.04423	0.04423	0.0005				
%RSD:	2.2	2.2	2.2724				

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 02/13/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0039	-0.0039	0.0000	0.0036	0.0005	02:42:57	No
2	-0.0060	-0.0060	-0.0001	0.0032	0.0005	02:43:26	No
Mean:	-0.0050	-0.0050	-0.0001				
SD :	0.00149	0.00149	0.0000				
%RSD:	29.8	29.8	29.7565				

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 9 Date: 02/13/2003
Sample ID: MB-175

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0536	0.0536	0.0006	0.0058	0.0011	02:44:36	No
2	0.0858	0.0858	0.0009	0.0158	0.0015	02:45:05	No

Mean:	0.0697	0.0697	0.0008
SD :	0.02279	0.02279	0.0002
%RSD:	32.7	32.7	32.7302

Element: Hg Seq. No.: 10 AS Loc.: 10 Date: 02/13/2003
Sample ID: 030212035-001C

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0425	-0.0425	-0.0005	-0.0038	0.0001	02:46:17	No
2	0.0930	0.0930	0.0010	0.0167	0.0015	02:46:46	No
Mean:	0.0252	0.0252	0.0003				
SD :	0.09581	0.09581	0.0010				
%RSD:	379.9	379.9	379.2271				

Element: Hg Seq. No.: 11 AS Loc.: 11 Date: 02/13/2003
Sample ID: DUP 035-001C

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0236	-0.0236	-0.0003	-0.0092	0.0003	02:47:59	No
2	0.0394	0.0394	0.0004	-0.0015	0.0010	02:48:28	No
Mean:	0.0079	0.0079	0.0001				
SD :	0.04449	0.04449	0.0005				
%RSD:	563.4	563.4	562.7286				

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/13/2003
Sample ID: SPK 035-001C

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.648	1.648	0.0183	0.1000	0.0188	02:49:42	No
2	1.795	1.795	0.0199	0.1116	0.0205	02:50:11	No
Mean:	1.722	1.722	0.0191				
SD :	0.1039	0.1039	0.0012				
%RSD:	6.0	6.0	6.1486				

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/13/2003
Sample ID: 0212-M01F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0449	-0.0449	-0.0005	-0.0038	0.0000	02:51:26	No
2	-0.0287	-0.0287	-0.0003	0.0011	0.0002	02:51:56	No
Mean:	-0.0368	-0.0368	-0.0004				
SD :	0.01145	0.01145	0.0001				
%RSD:	31.1	31.1	31.0633				

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/13/2003
Sample ID: 0212-M02F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0440	0.0440	0.0005	0.0090	0.0010	02:53:12	No
2	0.1247	0.1247	0.0014	0.0192	0.0019	02:53:41	No
Mean:	0.0844	0.0844	0.0009				
SD :	0.05707	0.05707	0.0006				
%RSD:	67.7	67.7	67.7084				

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/13/2003
Sample ID: 0212-M03F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0277	-0.0277	-0.0003	0.0000	0.0002	02:54:57	No
2	-0.0353	-0.0353	-0.0004	-0.0071	0.0002	02:55:26	No
Mean:	-0.0315	-0.0315	-0.0003				
SD :	0.00542	0.00542	0.0001				
%RSD:	17.2	17.2	17.2031				

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 02/13/2003
Sample ID: 0212-M04F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0148	-0.0148	-0.0002	0.0006	0.0004	02:56:43	No
2	-0.0392	-0.0392	-0.0004	-0.0116	0.0001	02:57:12	No
Mean:	-0.0270	-0.0270	-0.0003				
SD :	0.01719	0.01719	0.0002				
%RSD:	63.7	63.7	63.6527				

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 02/13/2003
Sample ID: 0212-M05F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0536	-0.0536	-0.0006	-0.0068	0.0000	02:58:26	No
2	0.0985	0.0985	0.0011	0.0114	0.0016	02:58:55	No
Mean:	0.0225	0.0225	0.0002				
SD :	0.1076	0.1076	0.0012				
%RSD:	478.9	478.9	477.6380				

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 02/13/2003
Sample ID: 0212-M01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0914	0.0914	0.0010	0.0121	0.0015	03:00:05	No
2	0.0423	0.0423	0.0005	0.0046	0.0010	03:00:34	No
Mean:	0.0668	0.0668	0.0007				
SD :	0.03470	0.03470	0.0004				
%RSD:	51.9	51.9	51.9658				

Element: Hg Seq. No.: 19 AS Loc.: 4 Date: 02/13/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.990	1.990	0.0222	0.1388	0.0227	03:01:47	No
2	1.881	1.881	0.0209	0.1146	0.0215	03:02:16	No
Mean:	1.936	1.936	0.0215				
SD :	0.07708	0.07708	0.0009				
%RSD:	4.0	4.0	4.0683				

QC value within specified limits.

Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 02/13/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0344	-0.0344	-0.0004	-0.0018	0.0002	03:03:29	No
2	-0.0592	-0.0592	-0.0006	-0.0056	-0.0001	03:03:58	No
Mean:	-0.0468	-0.0468	-0.0005				
SD :	0.01754	0.01754	0.0002				
%RSD:	37.5	37.5	37.4401				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 19 Date: 02/13/2003
Sample ID: 0212-M02 MEGDUP3W

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0154	-0.0154	-0.0002	0.0026	0.0004	03:05:10	No
2	-0.0125	-0.0125	-0.0001	0.0006	0.0004	03:05:39	No
Mean:	-0.0139	-0.0139	-0.0002				
SD :	0.00207	0.00207	0.0000				
%RSD:	14.9	14.9	14.8702				

Element: Hg Seq. No.: 22 AS Loc.: 20 Date: 02/13/2003
Sample ID: 0212-M03 MEGSPK3W

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0159	-0.0159	-0.0002	0.0019	0.0004	03:06:51	No
2	-0.0526	-0.0526	-0.0006	-0.0034	0.0000	03:07:21	No
Mean:	-0.0343	-0.0343	-0.0004				
SD :	0.02598	0.02598	0.0003				
%RSD:	75.8	75.8	75.8209				

Element: Hg Seq. No.: 23 AS Loc.: 21 Date: 02/13/2003
Sample ID: 0212-M04 MEGDMC3W

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0245	-0.0245	-0.0003	-0.0023	0.0003	03:08:33	No
2	-0.0477	-0.0477	-0.0005	-0.0086	0.0000	03:09:02	No
Mean:	-0.0361	-0.0361	-0.0004				
SD :	0.01637	0.01637	0.0002				
%RSD:	45.4	45.4	45.3461				

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/13/2003
Sample ID: 0212-M05 MEGDUP2W

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.8607	0.8607	0.0095	0.0454	0.0100	03:10:14	No
2	1.011	1.011	0.0111	0.0587	0.0117	03:10:43	No
Mean:	0.9356	0.9356	0.0103				
SD :	0.1060	0.1060	0.0012				
%RSD:	11.3	11.3	11.4443				

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/13/2003
Sample ID: 0212-G01 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.3390	0.3390	0.0037	0.0335	0.0042	03:11:55	No
2	0.1678	0.1678	0.0018	0.0216	0.0024	03:12:24	No
Mean:	0.2534	0.2534	0.0028				
SD :	0.1211	0.1211	0.0013				
%RSD:	47.8	47.8	47.8988				

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 26 AS Loc.: 23 Date: 02/13/2003
Sample ID: 0212-G01 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2477	0.2477	0.0027	0.0242	0.0032	03:13:39	No
2	0.1870	0.1870	0.0020	0.0155	0.0026	03:14:08	No
Mean:	0.2174	0.2174	0.0024				
SD :	0.04292	0.04292	0.0005				
%RSD:	19.7	19.7	19.7893				

Element: Hg Seq. No.: 27 AS Loc.: 24 Date: 02/13/2003
Sample ID: 030212008-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4259	0.4259	0.0047	0.0276	0.0052	03:15:22	No
2	0.4211	0.4211	0.0046	0.0270	0.0051	03:15:52	No
Mean:	0.4235	0.4235	0.0046				
SD :	0.00344	0.00344	0.0000				
%RSD:	0.8	0.8	0.8168				

Element: Hg Seq. No.: 28 AS Loc.: 25 Date: 02/13/2003
Sample ID: 030212003-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.231	2.231	0.0249	0.1460	0.0254	03:17:06	No
2	2.214	2.214	0.0247	0.1385	0.0252	03:17:35	No
Mean:	2.222	2.222	0.0248				
SD :	0.01240	0.01240	0.0001				
%RSD:	0.6	0.6	0.5720				

Element: Hg Seq. No.: 29 AS Loc.: 26 Date: 02/13/2003
Sample ID: DUP 003-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.801	1.801	0.0200	0.1147	0.0205	03:18:49	No
2	1.769	1.769	0.0196	0.1133	0.0202	03:19:18	No
Mean:	1.785	1.785	0.0198				
SD :	0.02268	0.02268	0.0003				
%RSD:	1.3	1.3	1.2959				

Element: Hg Seq. No.: 30 AS Loc.: 27 Date: 02/13/2003
Sample ID: SPK 003-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.394	3.394	0.0384	0.2133	0.0389	03:20:33	No
2	3.357	3.357	0.0380	0.2171	0.0385	03:21:02	No

Mean:	3.376	3.376	0.0382
SD :	0.02606	0.02606	0.0003
%RSD:	0.8	0.8	0.8014

Element: Hg Seq. No.: 31 AS Loc.: 28 Date: 02/13/2003
Sample ID: BLANK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0648	0.0648	0.0007	0.0094	0.0012	03:22:19	No
2	0.0843	0.0843	0.0009	0.0006	0.0015	03:22:48	No
Mean:	0.0746	0.0746	0.0008				
SD :	0.01381	0.01381	0.0002				
%RSD:	18.5	18.5	18.5375				

Element: Hg Seq. No.: 32 AS Loc.: 4 Date: 02/13/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.082	2.082	0.0232	0.1344	0.0237	03:24:03	No
2	1.969	1.969	0.0219	0.1195	0.0225	03:24:32	No
Mean:	2.025	2.025	0.0226				
SD :	0.08006	0.08006	0.0009				
%RSD:	4.0	4.0	4.0421				

QC value within specified limits.

Element: Hg Seq. No.: 33 AS Loc.: 1 Date: 02/13/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0046	0.0046	0.0000	0.0046	0.0006	03:25:45	No
2	-0.0407	-0.0407	-0.0004	-0.0008	0.0001	03:26:15	No
Mean:	-0.0181	-0.0181	-0.0002				
SD :	0.03203	0.03203	0.0003				
%RSD:	177.0	177.0	177.0593				

QC value within specified limits.

Date	Sample ID	Initial wt/vol.	Final wt/vol.	Analytical Method	Tech	Comments
2/12/03	PB-W	100 mls	100 mls	AV-Hg	GW	LRS0305
	MEGCIM0102					
	MEGCIM0102F					
	MEG DD0237					
	MEG DD 0237F					
	MEG-DD 0241					
	MEGDD0241 F					
	MEGDIM8618					
	0207-G01					
	0207-G01 DUP					
	0207-G01 MS	↓	↓	↓	↓	↓
2/13/03	PB-W	100 mls	100 mls	AV-Hg	GW	LRS0305
	MEGDD0117					
	MEGDD 0117F					
	MEGDDG236					
	MEGDDG236F					
	MEGDDG234					
	MEGDDG234F					
	MEGDIM8236					
	MEGDIM8236F					
	MEGUSH8602					
	MEGUSH8602F	↓	↓	↓	↓	↓

Date	Sample ID	Initial wt/vol	Final wt/vol	Analytical Method	Tech	Comments
2/20/03	PB-W	100 mL	100 mL	TCP	SR	URS0305
	LCS-W					
	0207-F01					
	0207-F01 DUP					
	0207-F01 SPL					
	0207-F01 F					
	0207-F01 F DUP					
	0207 F01 F SPL					
	MEGCIM0102					
	MEGCIM0102F					
	MEGDD0237					
	MEGDD0237 F					
	MEGDD0241					
	MEGDD0241 F					
	MEGDIM8618	"	"	"	"	"
2/20/03	PB-W	100 mL	100 mL	AV Hg	SR	URS0305
	0218-F01					
	0218-F01 DUP					
	0218-F01 SPL					
	DUP021803					
	DUP021803F					
	MEGDD0129					
	MEGDD0129 F					
	MEGDD014					
	MEGDD014 F					
	MEGDD0238					
	MEGDD0243					
	MEGDD0243F					
	MEGDIM0117					
	MEGDIM0117F	"	"	"	"	"

Date	Sample ID	Initial wt/vol.	Final wt/vol.	Analytical Method	Tech	Comments
2/26/03	PB-W	100 mls	100 mls	ICP	SR	CRS03C5
	LCS-W					
	MEGDD0117					
	MEGDD0117F					
	MEGDD0236					
	MEGDD0236F					
	MEGDD0239					
	MEGDD0239F					
	MEGDIM0117					
	MEGDIM0236					
	MEGDMC236F					
	MEGUSH802					
	MEGUSH802F					
2/26/03	PB-C	100 mls	100 mls	ICP	SR	CRS03C7
	LCS-C					
	DUP 2/18/03					
	DUP 2/18/03F					
	MEGDD012F					
	MEGDD0299					
	MEGDD014					
	MEGDD014F					
	MEGDD0238					
	MEGDD0243					
	MEGDD0243F					
	MEGDMD117					
	MEGDIMD117F					

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ANALYSIS

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CONVENTIONALS ANALYSIS DATA SHEET

MEGCIM0102

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-02

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0117

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-05

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0236

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-02

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-03

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0239

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-01

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U-J		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U-J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0241

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-01

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0236

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-04

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM8618

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-04

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	48			EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8602

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-03

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	19			EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

CV 2130

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	40	35	88				EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G.
Specific Conductance							EPA 120.1
Cyanide	300	273	91	300	270	90	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	30	31	103	30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	267	89				EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

CV 2/18

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	40	38	95	40	38	95	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	248	83	300	252	84	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	250	83				EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part I) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

CJ 2/25

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	297	99	300	295	98	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	293	98	300	292	97	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

C3 2b-1

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	287	96	300	285	95	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	284	95	300	283	94	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
CRQL STANDARDS FOR CONVENTIONALS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM010

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Initial Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	10	7.6	76				EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 2) - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols									2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U			10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols									2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U					EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols											EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols											EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDD0239

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	123		10	U	100	123		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGUSH8602

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	120		10	U	100	120		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

U.S. EPA - CLP

6
DUPLICATES

MEGUSH8602

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols	20	2	U	2	U	NC		
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments Phenol duplicate performed on another AES sample number 030214028-006.

FORM VI - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG: MEGCIM0102

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	40	35	88						
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	300	273	91						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM VII - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG: MEGCIM0102

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	300	248	83						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM VII - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG: MEGCIM0102

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	300	297	99						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM VII - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG: MEGCIM0102

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	261	308	118						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM VII - CONV

RAW QC

DATA

Advanced Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

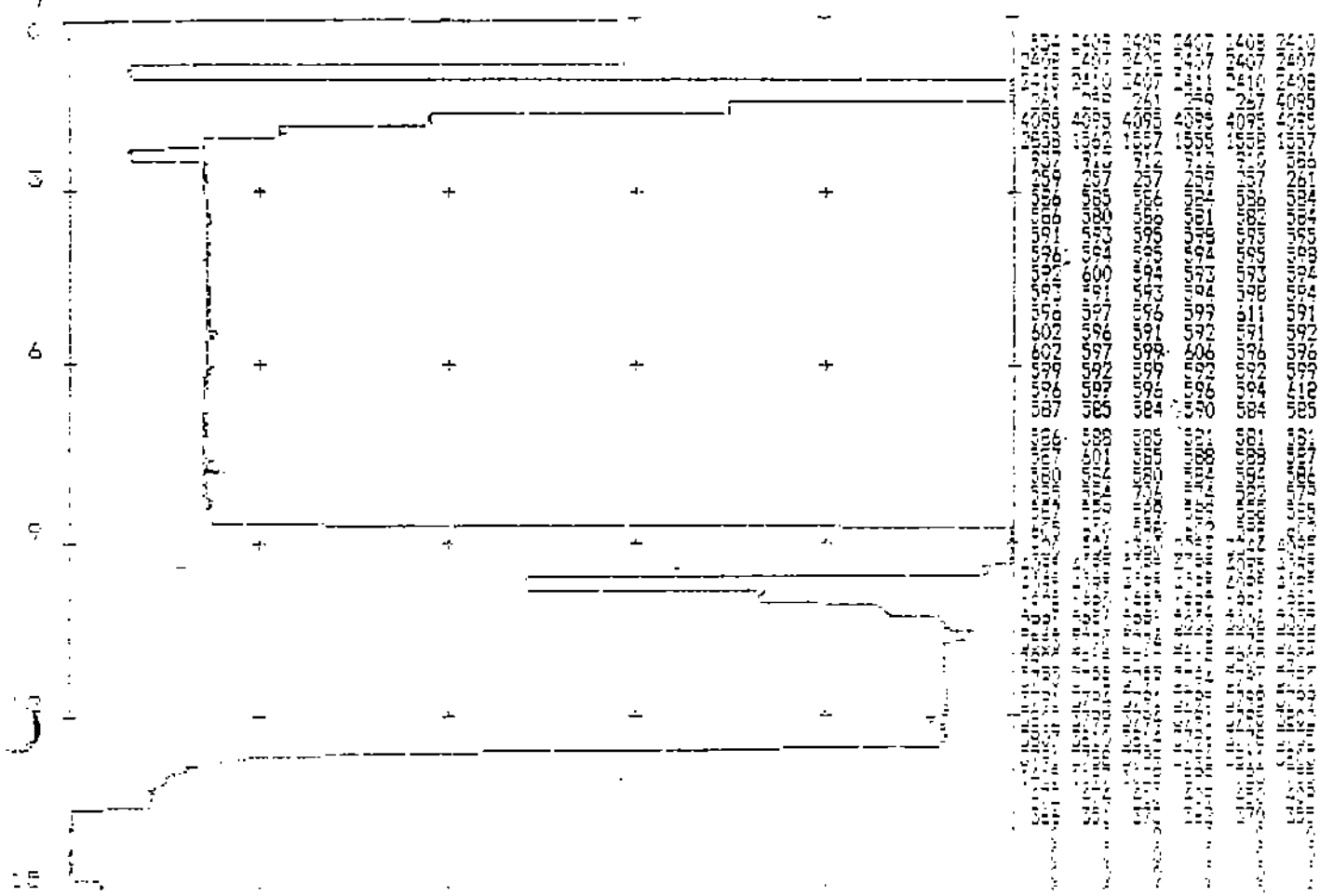
SAMPLE ID	CHANNEL #2 ~~ARSENIC~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.01
	1.01
	1.01
	1.00
500.0 PPB	506.22
300.0 PPB	308.14
400.0 PPB	388.77
200.0 PPB	201.07
100.0 PPB	100.29
50.00 PPB	48.64
10.00 PPB	12.15
500.0 PPB	506.25
100.0 PPB	99.59
100.0 PPB	99.62
ICV 300 PPB	273.02
ICB	3.50
~~W~~30205 B01	8.75
~~0~~30207 F01	63.92
~~0~~30207 G01	12.06

Adirondack Environmental Services, Inc.
284 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~ANIONS~~ CYANIDE
930206003 01WD	8.48
930212009 01	38.54
930212009 02	0.47
930205052 01 AD	253.16
DUP 38.1 38ppb	318.38
REG BLANK 0.1?	2.07
930207 02 11	4.78
CCV	248.68
CCB	1.15
930219018 01	18.48
930219019 01DUP	21.51
930207033 01	5.16
930213009 06	70.61
930213009 08	3.97
930207 J01	1.28
930207 J02	9.66
930207 J03	5.38
930207 J04	48.06
~~1223~~214019 01	1.67
CCV	267.49
CCB	1.40
200.0 PPB	196.45
500.0 PPB	508.04

TOTAL

Chart minimum: 0%, maximum 100%
Active analyses: 1



Base and gain found. They are:
Channel 2: base 64, gain 30, rel. abs. 0.37. Actual low 4%, high 89%.
Actual lag time: 7.9 min. Base and gain were changed from 100 13.



Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name	B:CYANIDE.INP		Analysis	1	2	3	4
# of anal.	1		Channel	1	2	3	4
Samples/hr	080	Sample/wash	2.0000		Peaking	N	
Sample time	0030	Wash time	0015		Base Corr	Y	

Anal	Fit	Chem	ITV Base Concent.	Dilution Carryover	Carryover	Chem Name	Units	Base in Calib
1	L	N	.000000	.000000	.000000	cyanide	ug/l	Y
2	L		.000000	.000000	.000000			Y
3	L	N	.000000	.000000	.000000			Y
4	L	N	.000000	.000000	.000000			Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (6 characters,no blanks)

2 Store 3 Rec 3 4 Exit 5 Re-file 6 Print 7 Del

Technicon TRAACS 800 System Editor

Record Screen

to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol

P,6@1,H@1,2L@4,26S@7,I@3,B@1,S

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edore 3 Res 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

1

Technicon TRAACS 800 System Editor

Date --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Edits
1	1	1	S	5011 PPE.....	1.000000	1.000000	N
2	2	1	S	[illegible]	[illegible]	[illegible]	
3	4	1	S	5111 PPE	1.000000	1.000000	N
4	5	1	S	[illegible]	1.000000	1.000000	N
5	6	1	S	50.0 PPE	1.000000	1.000000	N
6	7	1	S	[illegible]	1.000000	1.000000	N
7	11	1	S	[illegible]	[illegible]	[illegible]	N
8	12	1	S	[illegible]	1.000000	1.000000	N
9	13	1	S	030205 501	1.000000	1.000000	N
10	14	1	S	030207 F01	1.000000	1.000000	N
11	15	1	S	030207 G01	1.000000	1.000000	N
12	16	1	S	[illegible]	1.000000	1.000000	N
13	17	1	S	030212009 01	1.000000	1.000000	N
14	18	1	S	030212009 12	1.000000	1.000000	N
15	19	1	S	[illegible]	1.000000	1.000000	N
16	20	1	S	DCP 5511 2B1PPB	1.000000	1.000000	N
17	21	1	S	PREP BLANK 2'19	1.000000	1.000000	N
18	22	1	S	030207022 01	1.000000	1.000000	N
19	23	1	S	DCV	1.000000	1.000000	N
20	24	1	S	DIP	1.000000	1.000000	N

Sample id: [illegible]

1 Copy 2 Edone 3 Res E 4 E i t 5 Rd fi e Wr fi 7 Sc Lb 8 Bc dn 9 DIR 0 ConDe
l

Technicon TRAACS 800 System Editor

Batch ---- 001 Third Screen

Disk	Peak Name	Count	Type	Sample ID	Weight	Dilution	Save
21	27	1	S	030219015 01...	1.000000	1.000000	Y
22	26	1	S	030219018 01DUP	1.000000	1.000000	N
23	27	1	S	030207123 01	1.000000	1.000000	N
24	28	1	S	030213009 0b	1.000000	1.000000	N
25	29	1	S	030213009 08	1.000000	1.000000	N
26	30	1	S	030207 301	1.000000	1.000000	N
27	31	1	S	030207 302	1.000000	1.000000	N
28	32	1	S	[illegible]	[illegible]	[illegible]	N
29	33	1	S	[illegible]	[illegible]	[illegible]	Y
30	34	1	S	[illegible]	[illegible]	[illegible]	Y
31	35	1	S	03[illegible]	1.000000	1.000000	N
32	36	1	S	03[illegible]	1.000000	1.000000	N
33					1.000000	1.000000	N
34					1.000000	1.000000	N
35					1.000000	1.000000	N
36					1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

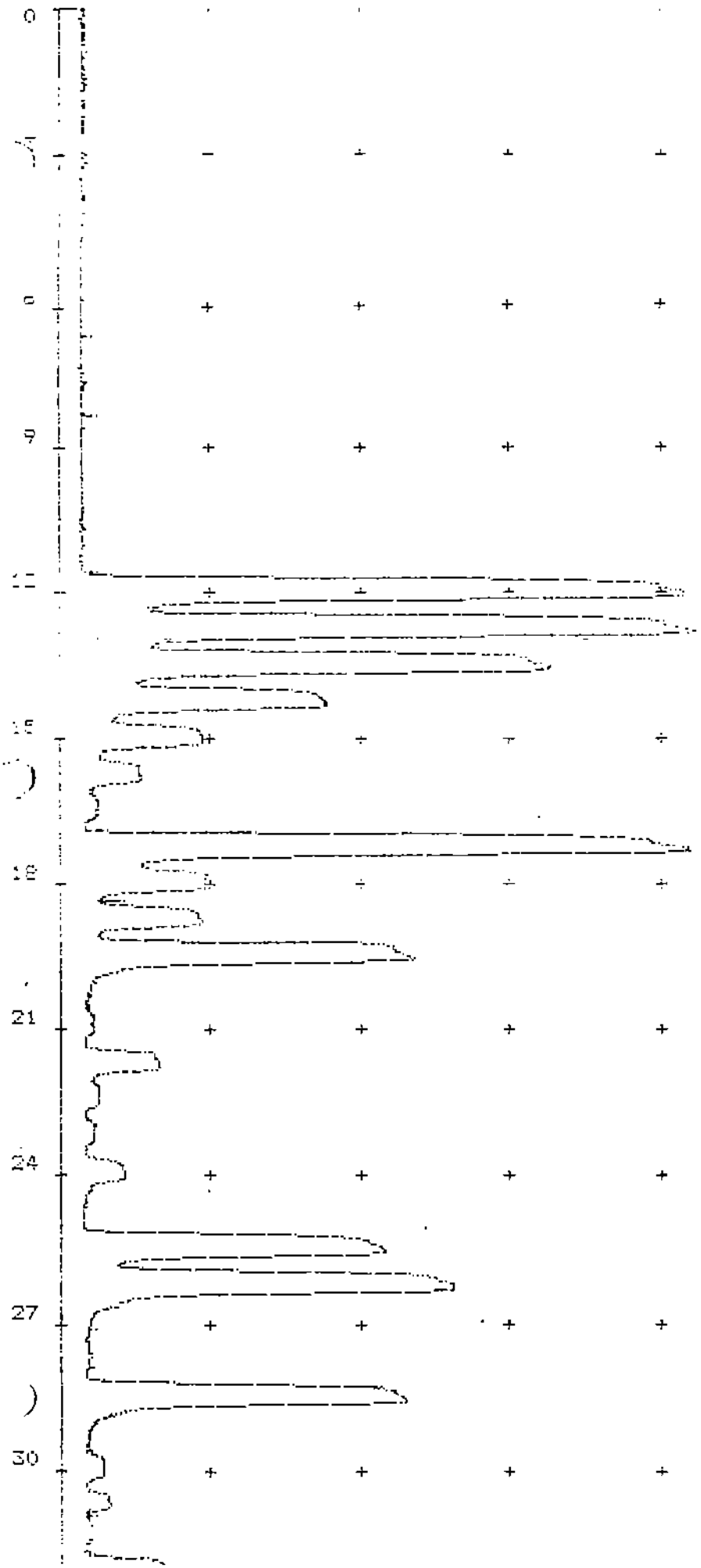
Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
:

Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
Time: 11:17; Date: 02-20-103
Operator: MAC

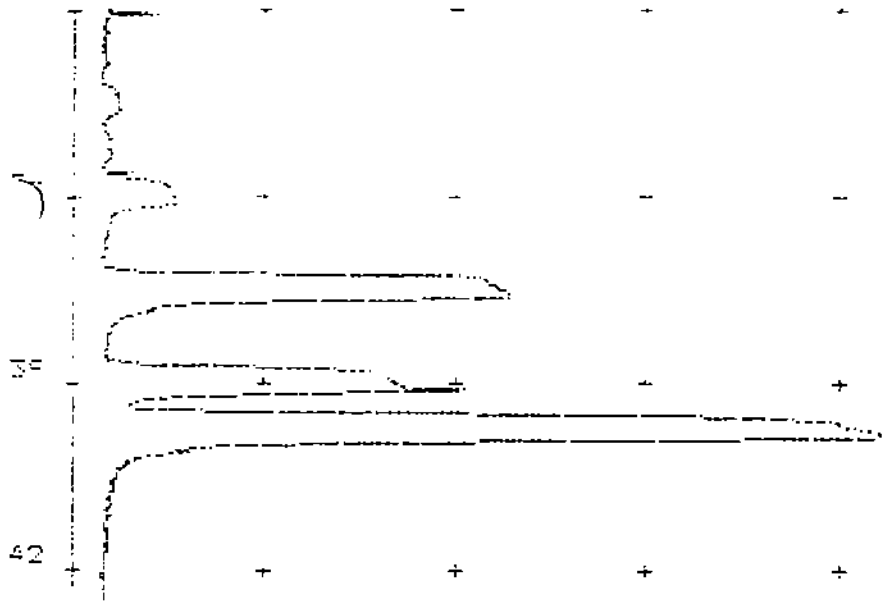
Comment:



Channels
Base: 54
Gain: 50
cyanide
uG/l

Inst base 113

PK	4	DP	1	typ	S	N
PK	5	DP	2	typ	S	6.24 N
PK	6	DP	3	typ	S	N
PK	7	DP	4	typ	S	
PK	8	DP	5	typ	S	
PK	9	DP	6	typ	S	
PK	10	DP	7	typ	S	12.05 M
PK	11	DP	8	typ	S	501.8 N
PK	12	DP	9	typ	S	102.9
PK	13	DP	10	typ	S	99.44
PK	14	DP	11	typ	S	271.3 N
PK	15	DP	12	typ	S	5.827 M
PK	16	DP	13	typ	S	8.710 M
PK	17	DP	14	typ	S	63.48
PK	18	DP	15	typ	S	12.65 M
PK	19	DP	16	typ	S	8.710 M
PK	20	DP	17	typ	S	35.56
PK	21	DP	18	typ	S	1.124 M
PK	22	DP	19	typ	S	251.3 N
PK	23	DP	20	typ	S	308.4 N
PK	24	DP	21	typ	S	5.372 M
PK	25	DP	22	typ	S	5.372 M
PK	26	DP	23	typ	S	266.0
PK	27	DP	24	typ	S	4.310 M
PK	28	DP	25	typ	S	17.21 M
PK	29	DP	26	typ	S	22.[illegible]
PK	30	DP	27	typ	S	5.233 M



PK	29 CP	25 typ S	5.676 M
PK	30 CP	26 typ S	3.469 M
PK	31 CP	27 typ S	10.80 M
PK	32 CP	28 typ S	6.708 M
PK	33 CP	29 typ S	49.07
PK	34 CP	30 typ S	3.591 M
PK	35 CP	31 typ S	286.6 N
PK	36 CP	32 typ S	5.372 M
PK	37 CP	3 typ I	196.4 N
PK	38 CP	1 typ G	507.0 N
Last base			132

Time: 11:17; Date: 08-29-105
Operator: MAD

Comments:

Channels 2
Base: 64
Gain: 30

cyanide
ug/l

Base drift correction made
Carryover correction made
Gain drift correction made

Init base				113	
PK	1 CP	1	typ P	505.2	N
Rel	Abs			0.34	
PK	2 CP	1	typ C	508.0	N
PK	3 CP	2	typ C	389.0	N
PK	4 CP	3	typ C	201.1	
PK	5 CP	4	typ C	100.3	
PK	6 CP	5	typ C	48.64	
PK	7 CP	6	typ C	12.15	M
PK	8 CP	1	typ R	506.2	N
PK	9 CP	4	typ L	99.59	
PK	10 CP	4	typ L	99.62	
PK	11 CP	7	typ S	273.0	N
PK	12 CP	8	typ S	3.499	M
PK	13 CP	9	typ S	8.748	M
PK	14 CP	10	typ S	63.92	
PK	15 CP	11	typ S	12.06	M
PK	16 CP	12	typ S	8.476	M
PK	17 CP	13	typ S	35.54	
PK	18 CP	14	typ S	0.4727	M
PK	19 CP	15	typ S	253.2	N
PK	20 CP	16	typ S	308.4	N
PK	21 CP	17	typ S	2.071	M
PK	22 CP	18	typ S	4.752	M
PK	23 CP	19	typ S	269.7	
PK	24 CP	20	typ S	1.155	M
PK	25 CP	21	typ S	16.49	M
PK	26 CP	22	typ S	21.51	

```
PK  29 CP   25 typ S        3.970 M
PK  30 CP   26 typ S        1.278 M
PK  31 CP   27 typ S        9.657 M
PK  32 CP   28 typ S        5.377 M
PK  33 CP   29 typ S        42.06
PK  34 CP   30 typ S        1.675 M
    35 CP   31 typ S        267.5 N
PK  36 CP   32 typ S        1.395 M
PK  37 CP    3 typ I        196.5 N
PK  38 CP    1 typ S        506.0 N
   Last base                 152

Sample statistics
 Anal level    cubs          avg        std dev        CV

    1   all     26          65.29          106       162%

  Anal 1:  linear    fit
         Carryover factor:     0.90%.

Chart saved to file B:CN0220.CHR.

Text file B:CN0220.TXT has been saved on disk.
```

Page #1
(C) Copyright

Accutrak Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~ANION~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	514.91
500.0 PPB	513.70
400.0 PPB	382.61
200.0 PPB	200.45
100.0 PPB	91.80
50.00 PPB	52.19
10.00 PPB	18.02
500.0 PPB	516.97
100.0 PPB	87.88
100.0 PPB	87.99
ICV 300 PPB	348.04
ICB	1.38
DOH CN 6011	738.80
DOH CN 6011	358.38
DOH CN 6011	~~422.27~~ over

83%

600

Adirondack Environmental Services, Inc.
214 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 AMMONIA → CYANIDE
DCH CN 4011	~~[illegible]~~ over
DUH 6011Cc1L3/L	340.32 (0.178.0.344)
030213009 06WD	8.90
030207 JC4WD	7.29
030219006 01	30.91
030212035 01	3.35
030212008 01	34.88
CCV	251.53 94%
CCB	2.36
030212 M01	3.46
030212 M01 SPK	122.82
030218 C01R	0.50
CCV	250.01 48%
CCB	0.69
200.0 PPB	199.31
500.0 PPB	513.73

CN8820M

Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name B:CYANIDE.INP Analysis 1 2 3 4
# of anal. 1 Channel 1 2 3 4

Samples/hr 060 Sample/wash 2.0000 Reslope N
Sample time 0030 Wash time 0015 Base Corr -
Rep output N

Anal	Fit	Inv Chem	Base Concent.	Carryover	Dilutor Carryover	Anal Name	Units	Base or Calc
1	L	N	.000000	.000000	.000000	cyanide	ug/l	Y
2	L	N	.000000	.000000	.000000			Y
3	L	N	.000000	.000000	.000000			Y
4	L	N	.000000	.000000	.000000			Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (8 characters,no spaces).
2 Edone 3 Res 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 Dental

Technicon TRAACS 800 System Editor

Second Screen

to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol
P,6C>1,H@1,2L@4,19S>7,I@3,G@1,E

Gain,peak # 002

# of cups to resample after offscale (0-2). SEND RESAMPLE/AUTODILUTION
2 Edone 3 Res 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 Dental

Technicon TRAACS 800 System Editor

Third Screen

Cup --> 000

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
1	1	4	P	500.0 PPB.....	1.000000	1.000000	N
2	1	1	C	400.0 PPB	1.000000	1.000000	N
3	1	1	C	200.0 PPB	1.000000	1.000000	N
4	1	1	C	100.0 PPB	1.000000	1.000000	N
5	1	1	C	50.00 PPB	1.000000	1.000000	N
6	1	1	C	10.00 PPB	1.000000	1.000000	N

602

Time: 16:31: Date: [illegible]
Operator: MAC

Comment:

Channels 2
Base: 64
Gain: 30

cyanide
ug/l
Base drift correction made
Carryover correction made
Gain drift correction made
Init base 94

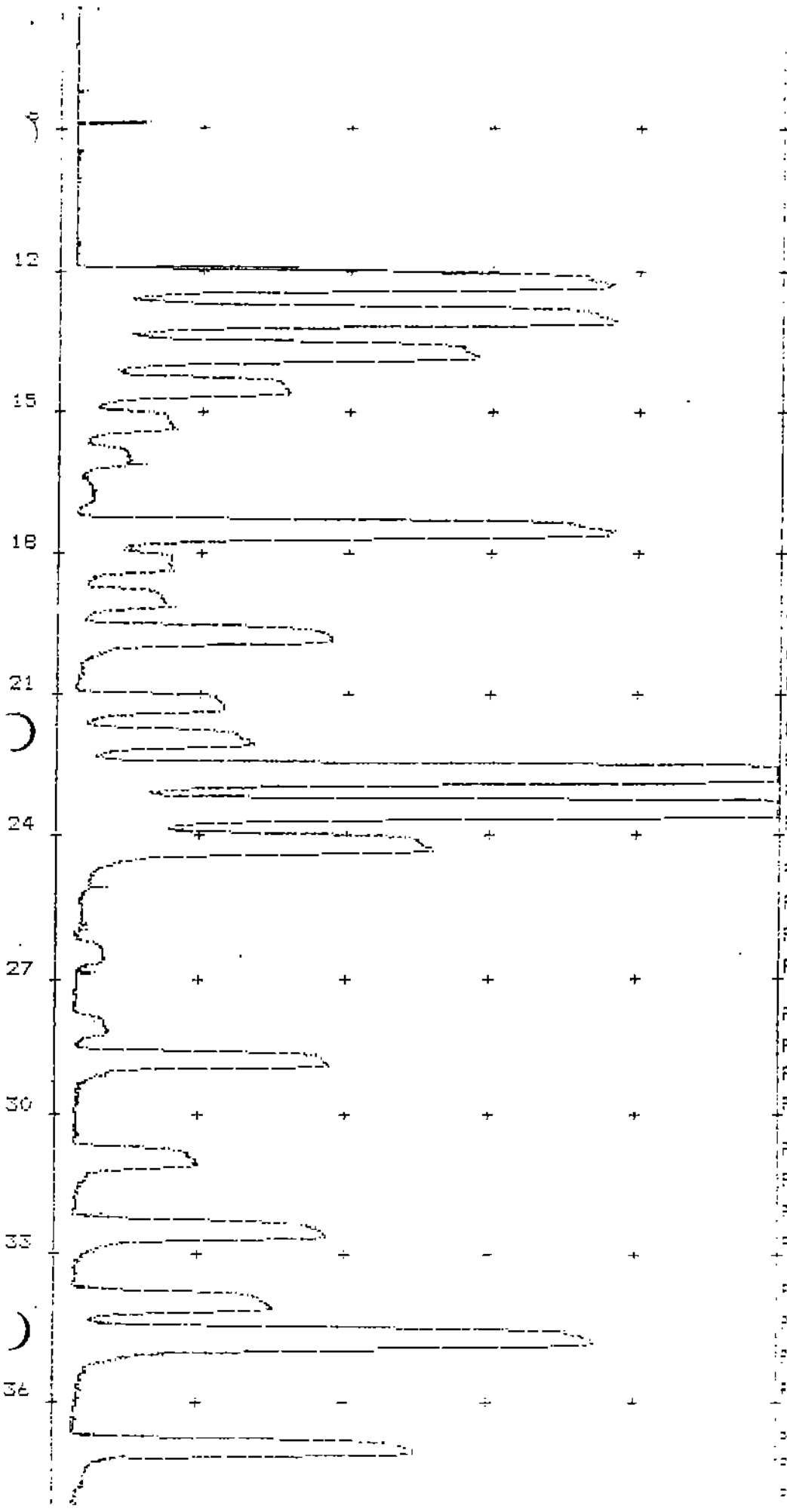
PK	1	CP	1	typ P	514.9	N
Rel	Abs				0.31	
PK	2	CP	1	typ C	513.7	N
PK	3	CP	2	typ C	382.6	N
PK	4	CP	3	typ C	200.5	
PK	5	CP	4	typ C	91.80	
PK	6	CP	5	typ C	52.19	N
PK	7	CP	6	typ C	18.02	M
PK	8	CP	1	typ H	517.0	
PK	9	CP	4	typ L	87.88	
PK	10	CP	4	typ L	87.99	N
PK	11	CP	7	typ S	248.6	
PK	12	CP	8	typ S	3.882	M
PK	13	CP	9	typ S	147.8	N
PK	14	CP	10	typ S	171.2	N
PK	15	CP	11	typ S	687.4	O
PK	16	CP	12	typ S	680.7	O
PK	17	CP	13	typ R	340.3	N *
PK	18	CP	14	typ R	8.903	M *
PK	19	CP	15	typ S	7.290	M
PK	20	CP	16	typ S	30.91	
PK	21	CP	17	typ S	3.347	M
PK	22	CP	18	typ S	34.88	
PK	23	CP	19	typ S	251.5	
PK	24	CP	20	typ S	2.858	M
PK	25	CP	21	typ S	3.463	M
PK	26	CP	22	typ S	122.8	N
PK	27	CP	23	typ S	0.4965	M
PK	28	CP	24	typ S	250.0	
PK	29	CP	25	typ S	1.5905	M
PK	30	CP	3	typ I	199.2	N
PK	31	CP	1	typ S	513.9	
Last base					117	

Sample statistics

Anal level	Type			
1	all	[illegible]	[illegible]	[illegible]

Anal 1: linear
Carryover factor: [illegible]

Chart saved to file [illegible].CHR.



Init base 94

Rel Abs 0.31

PK	1	CP	1	typ P	N
PK	2	CP	1	typ C	N
PK	3	CP	2	typ C	N
PK	4	CP	3	typ C	
PK	5	CP	4	typ C	
PK	6	CP	5	typ C	N
PK	7	CP	6	typ C	17.79 M
PK	8	CP	1	typ H	506.7
PK	9	CP	4	typ L	92.69
PK	10	CP	4	typ L	56.96 N
PK	11	CP	7	typ S	244.0
PK	12	CP	8	typ S	6.876 M
PK	13	CP	9	typ S	144.1 N
PK	14	CP	10	typ S	168.8 N
PK	15	CP	11	typ S	672.1 C
PK	16	CP	12	typ S	672.1 C
PK	17	CP	13	typ S	340.4 N
PK	18	CP	14	typ S	16.45 M
PK	19	CP	15	typ S	7.380 M
PK	20	CP	16	typ S	30.22
PK	21	CP	17	typ S	3.853 M
PK	22	CP	18	typ S	34.08
PK	23	CP	19	typ S	244.2
PK	24	CP	20	typ S	6.540 M
PK	25	CP	21	typ S	3.853 M
PK	26	CP	22	typ S	119.1 N
PK	27	CP	23	typ S	3.677 M
PK	29	CP	24	typ S	241.5
PK	29	CP	25	typ S	4.693 M
PK	30	CP	0	typ S	152.5 N
PK	31	CP	1	typ S	497.1 N
PK	32	CP	0	typ N	11.74 M
PK	33	CP	0	typ N	4.102 M
PK	34	CP	12	typ S	337.1
PK	35	CP	14	typ S	14.11 M

9	13	1	S	QC= CN = 11	1.000000	1.000000	N
10	14	1	S	QC= CN 0011	1.000000	1.000000	N
11	15	1	S	QC= CN 0011	1.000000	1.000000	N
12	16	1	S	QC= CN 0011	1.000000	1.000000	N
13	17	1	S	QCV 05112411B1	1.000000	1.000000	N
14	18	1	S	1011213009 1845	1.000000	1.000000	N
15	19	1	S	1011CN 0014C	1.000000	1.000000	N
16	20	1	S	0211211F0B 11	1.000000	1.111000	N
17	21	1	S	1011211136 01	1.000000	1.000000	N
18	22	1	S	1011213006 01	1.000000	1.000000	N
19	23	1	S	CCV	1.000000	1.000000	N
20	24	1	S	CCB	1.000000	1.000000	N

Sample id for the specified cup
1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 CanDel

Technicon TRAACS 800 System Editor

Goto --> 000

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	S	030212 M01.....	1.000000	1.000000	N
22	26	1	S	030212 M01 SPK	1.000000	1.000000	N
23	27	1	S	030218 C01R	1.000000	1.000000	N
24	28	1	S	CCV	1.000000	1.000000	N
25	29	1	S	CCB	1.000000	1.000000	N
26					1.000000	1.000000	N
27					1.000000	1.000000	N
28					1.000000	1.000000	N
29					1.000000	1.000000	N
30					1.000000	1.000000	N
31					1.000000	1.000000	N
32					1.000000	1.000000	N
33					1.000000	1.000000	N
34					1.000000	1.000000	N
35					1.000000	1.000000	N
36					1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

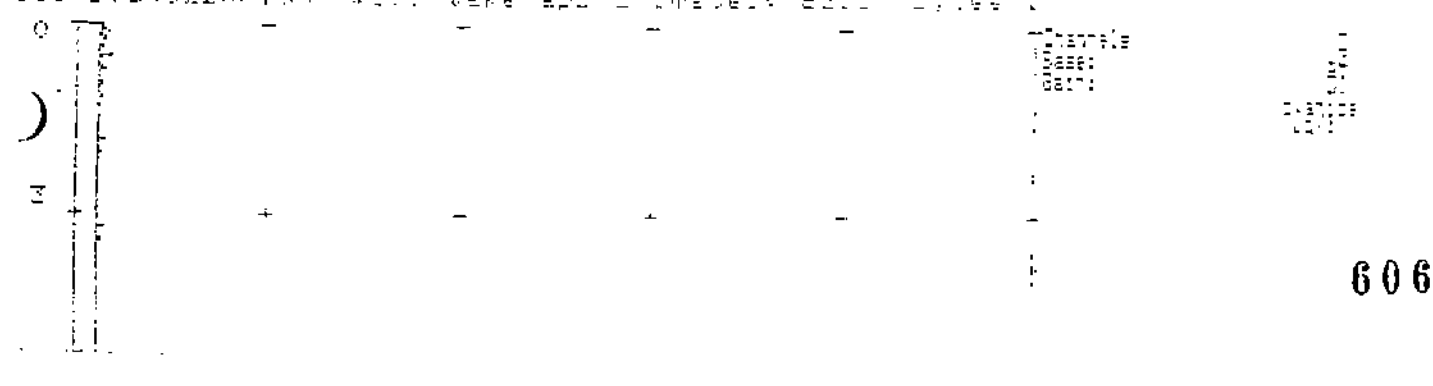
Sample id for the specified cup
1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 CanDel

Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
Time: 16:31; Date: 02-20-103
Operator: MAC

Comment:

[illegible] are only 13 blanks [illegible] free on disk,
File B:CH022004.CHR will take approximately 255 [illegible]



Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 AMMONIA ~~CYANIDE~~
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	467.47
500.0 PPB	468.18
400.0 PPB	405.24
200.0 PPB	215.80
100.0 PPB	102.80
50.00 PPB	48.78
[illegible]	3.57
[illegible]	471.75
100.0 PPB	101.92
100.0 PPB	101.84
[illegible]	[illegible] (99%)

607

[illegible]	[illegible]
✓[illegible]	[illegible]
✓[illegible]	[illegible]
✓[illegible]	[illegible]

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
✓030212 M05	-6.13
✓030214021 002A	-3.60
030213011 001B	9.69
✓030213 F01	-5.76
✓030213 F02	-5.46
✓030220026 002	-5.62
PREP BLANK 2/21	-5.75
CCV	294.59 (98%)
CCB	-7.03
✓030234018 001	-6.17
✓030234018 002	-5.24
✓030213 J01	7.43
✓030213 J02	-5.79
✓030213 J03	-7.13
✓030213 J04	-4.32
✓030213 J05	-4.67
✓030213 J06	-3.47
✓030220 J08 DUP	-6.51
✓030203101 J [illegible]	19.39
CCV	291.67 (97%)

608

-0.12

-- 398.10 (97%)

779 -0.83

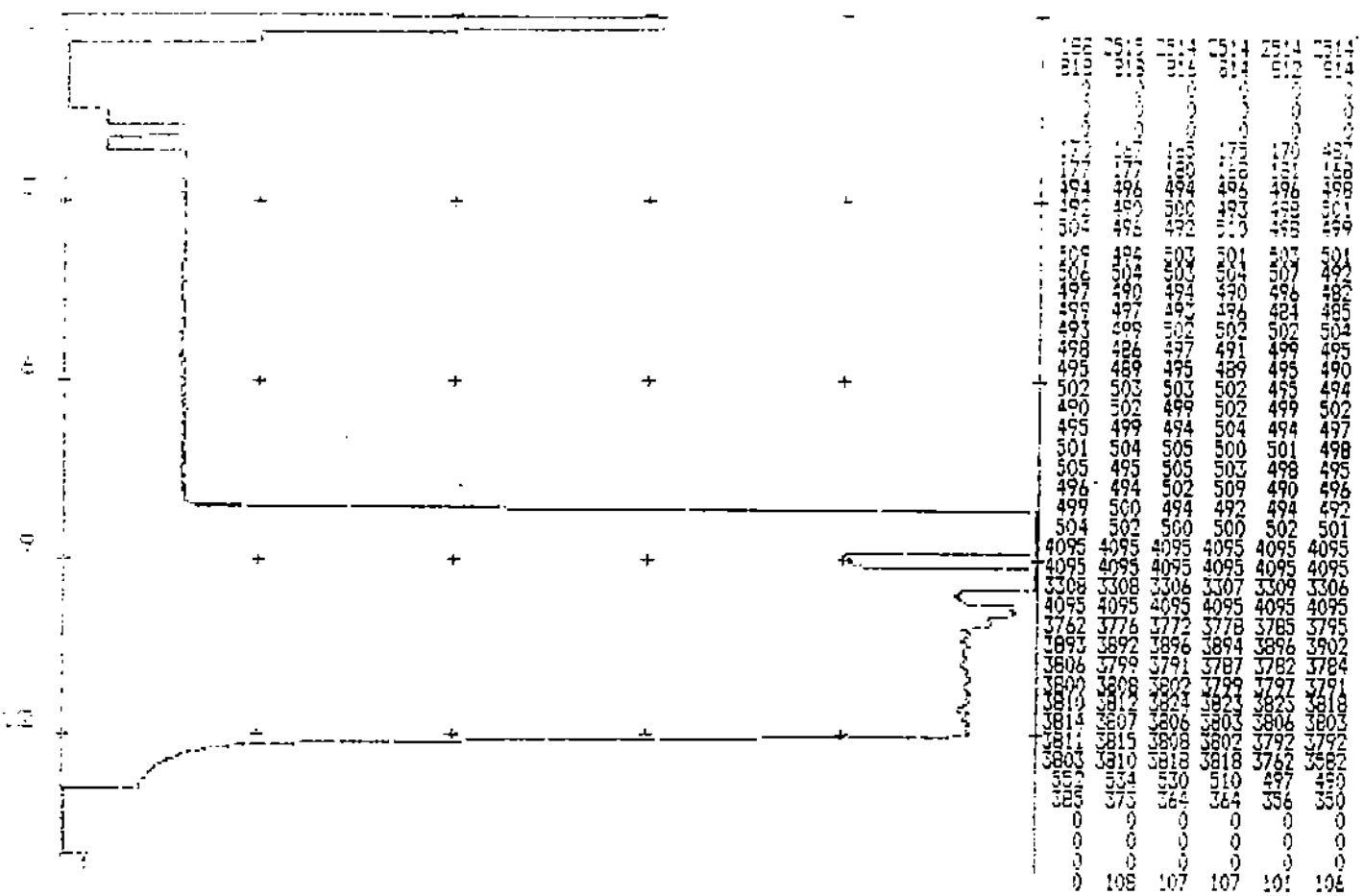
Page No. 1
VALID ID

Adirondack Environmental Services, Inc.
314 Northern Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
200.0 PPB	208.94
500.0 PPB	489.18

LN0225

Chart minimum: 0%, maximum 100%
Table analyses: 2



Base and gain found. They are:
Channel 2: base 63, gain 36, rel. abs. 0.31. Actual low 8%, high 94%.
Actual lag time: 7.9 min. Base and gain were changed from 100 13.

Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name	B:CYANIDE.INP	Analysis	1	2	3	4	
# of anal.	1	Channel	2	2	3	4	

Samples/hr	060	Sample/wash	2.0000	Peaking	N
Sample time	0050	Wash time	0010	Base Corr	Y
				Rec. outputs	N

	Dr.	Base		Dilution			Base Dr
Anal	Fit	Chem	Concent.	Carryover	Carryover	Chem Name	Units	Calib

2	.	4	.000000	.000000	.000000				Y
3	.	6	.000000	.000000	.000000				Y
4	.	8	.000000	.000000	.000000				Y

Calibrate Values

Anal	1	2	3	4	5	6	7	8
1	800.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (8 characters,no spaces).

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

:

Technicon TRAACS 200 System Editor

Second Screen

= to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol

1,SD>1,P@1,2L@4,268>7,I@3,S@1,E

Batch Seal # 002

[illegible] SAMPLE/AUTODILUTION

[illegible] Exam [illegible] Edit [illegible] DIP Conc

Technicon TRAACS 800 System Editor

Second Screen

to resample 2 Old cal file name Dual Probe System N

Run Comment

Assay Protocol

1:SO:1,491,2104,268/7,103,301,E

Rack/Cup # 002

[illegible] SAMPLE/AUTODILUTION

[illegible] Exam [illegible] Edit [illegible] DIP Conc

Technicon TRAACS 800 System Editor

Line	Table	Table	Type	Sample ID	Weight	Dilution	Solve
1		4	7	00.0 PPB.....	1.000000	1.000000	N
2	7	1	3	410.1 PPB	1.000000	1.000000	N
3	8	1	3	390.1 PPB	1.000000	1.000000	N
4	9	1	3	410.1 PPB	1.000000	1.000000	N
5	10	1	3	30.00 PPB	1.000000	1.000000	N
6	11	1	3	40.10 PPB	1.000000	1.000000	N
7	11	1	8	IDV 001 PPB	1.000000	1.000000	N
8	12	1	8	IDB	1.000000	1.000000	N
9	13	1	8	030212 M02	1.000000	1.000000	N
10	14	1	8	030212 M03	1.000000	1.000000	N
11	15	1	8	030212 M04	1.000000	1.000000	N
12	16	1	8	030212 M05	1.000000	1.000000	N
13	17	1	8	[illegible]	1.000000	1.000000	N
14	18	1	8	[illegible]	1.000000	1.000000	N
15	19	1	8	030216 P01	1.000000	1.000000	N
16	20	1	8	030216 P0201	1.000000	1.000000	N
17	21	1	8	030216002A 002	1.000000	1.000000	N
18	22	1	8	PREP BLANK 3/21	1.000000	1.000000	N
19	23	1	8	CCV	1.000000	1.000000	N
20	24	1	8	CCB	1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Rename 3 Reset 4 Exit 5 Refresh 6 Print 7 Scroll Up 8 Scroll Down 9 DIR 0 Configure

Technicon TRAACS 800 System Editor

Edit Mode 001 Third Screen

Line	Table	Count	Type	Sample ID	Weight	Dilution	Solve
21	25	1	8	030224018 001..	1.000000	1.000000	N
22	26	1	8	030224018 002	1.000000	1.000000	N
23	27	1	8	030219 P01	1.000000	1.000000	N
24	28	1	8	030219 P02	1.000000	1.000000	N
25	29	1	8	030219 P03	1.000000	1.000000	N
26	30						

[illegible]							
[illegible]							
[illegible]							
[illegible]							
[illegible]							
[illegible]							
[illegible]					1.000000	1.000000	N
[illegible]					1.000000	1.000000	N
[illegible]					1.000000	1.000000	N
[illegible]					1.000000	1.000000	N
[illegible]					1.000000	1.000000	N
[illegible]					1.000000	1.000000	N
[illegible]					1.000000	1.000000	N

Sample id for the specified cup

. Copy I Store D Rec E 4 Exit 8 Rd fi 6 Wr fi 7 Sc Lo 8 Sc dn 9 DIR 0 ConDa

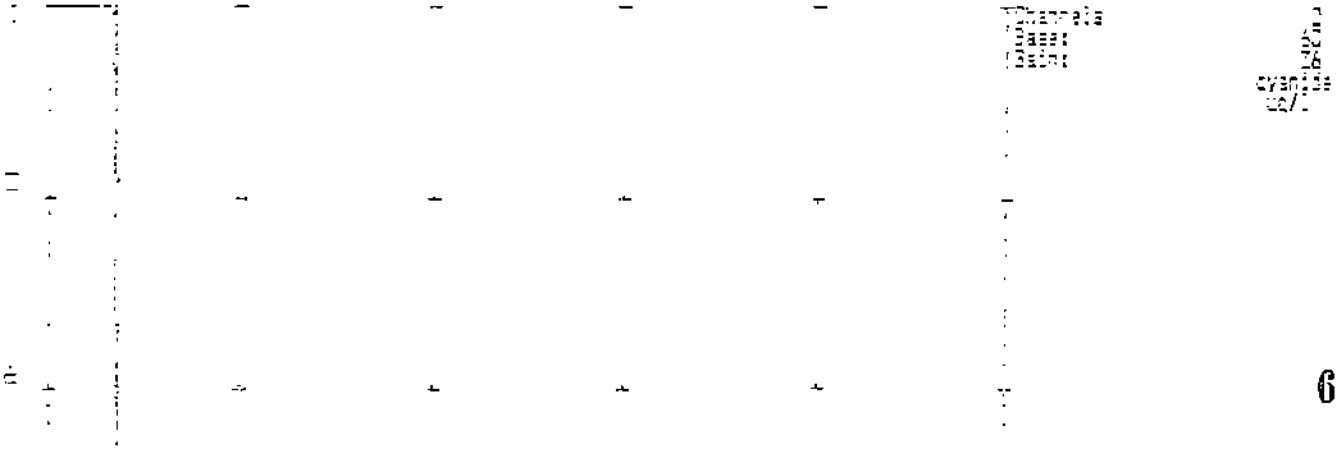
I ent minimum: 1%, maximum 110%
Active analyses: 2

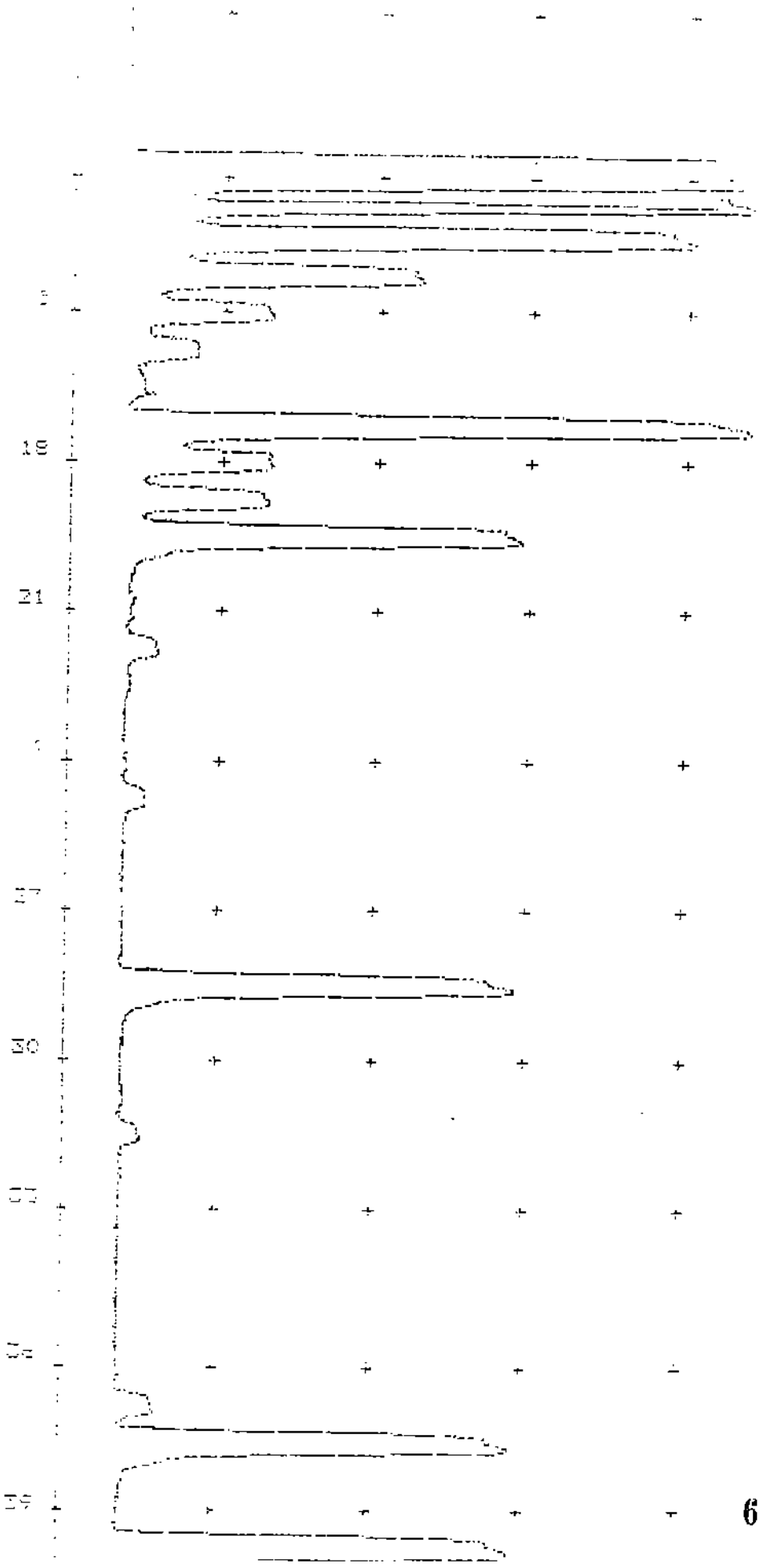
Ernt minimum: 0%, maximum 100%
Active analyses: 0

 Input Filename: B:CYANIDE.INP
 Time: 17:29; Date: 02-25-102
 Operator: MAD

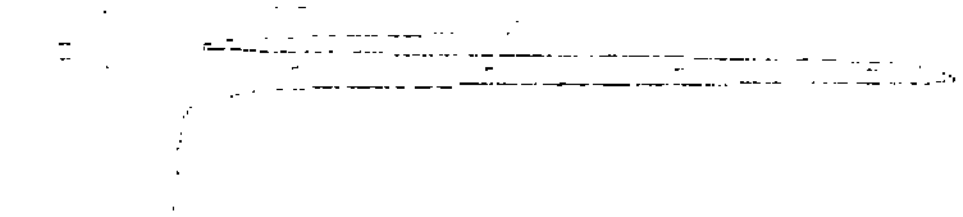
 Comment:

There are 125942A0 (bytes) free on disk.
File B:IN0225.CHF will take approximately 7605 (bytes).





				291
PK	1 CP	1 typ F	0.25	M
PK	2 CP	1 typ C		M
PK	3 CP	2 typ C		M
PK	4 CP	3 typ C		
PK	5 CP	4 typ C		
PK	6 CP	5 typ C		
PK	7 CP	6 typ C	5.982	M
PK	8 CP	1 typ H	468.9	
PK	9 CP	4 typ L	104.5	
PK	10 CP	4 typ L	102.1	
PK	11 CP	7 typ S	296.6	N
PK	12 CP	8 typ S	-1.333	M
PK	13 CP	9 typ S	-0.1857	M
PK	14 CP	10 typ S	19.04	
PK	15 CP	11 typ S	-2.911	M
PK	16 CP	12 typ S	-5.637	M
PK	17 CP	13 typ S	-3.055	M
PK	18 CP	14 typ S	10.29	M
PK	19 CP	15 typ S	-4.919	M
PK	20 CP	16 typ S	-5.637	M
PK	21 CP	17 typ S	-5.780	M
PK	22 CP	18 typ S	-5.780	M
PK	23 CP	19 typ S	294.6	N
PK	24 CP	20 typ S	-3.772	M
PK	25 CP	21 typ S	-4.919	M
PK	26 CP	22 typ S	-3.915	M
PK	27 CP	23 typ S	8.631	M
PK	28 CP	24 typ S	-4.202	M
PK	29 CP	25 typ S	-5.493	M
PK	30 CP	26 typ S	-4.776	M
PK	31 CP	27 typ S	-4.919	M
PK	32 CP	28 typ S	-6.354	M
PK	33 CP	29 typ S	-4.919	M
PK	34 CP	30 typ S	32.33	
PK	35 CP	31 typ S	294.4	N
PK	36 CP	32 typ S	-2.337	M
PK	37 CP	33 typ S	-3.772	M



Comments:

Channels	2
Base:	63
Gain:	36

cyanide
ug/l

Base drift correction made
Carryover correction made
Gain drift correction made

	Init base					291	
	1	CP	1	typ	F	467.5	N
	Rel Abs					0.28	
	2	CP	1	typ	C	469.2	N
	3	CP	2	typ	C	425.2	N
	4	CP	3	typ	C	216.5	
	5	CP	4	typ	C	102.8	
	6	CP	5	typ	C	46.79	
	7	CP	6	typ	C	5.968	M
	8	CP	1	typ	H	471.8	
	9	CP	4	typ	C	101.9	
	10	CP	4	typ	C	101.9	
	11	CP	7	typ	G	297.4	N
	12	CP	8	typ	E	-3.576	M
	13	CP	9	typ	G	-0.4112	M
	14	CP	10	typ	G	18.81	
	15	CP	11	typ	G	-3.464	M
	16	CP	12	typ	G	-6.132	M
	17	CP	13	typ	G	-3.604	M
	18	CP	14	typ	G	9.690	
	19	CP	15	typ	G	-4.757	M
	20	CP	16	typ	G	-6.488	M

text file B:CN0227.TXT has been saved to disk.

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	456.60
500.0 PPB	467.88
400.0 PPB	424.41
200.0 PPB	214.10
100.0 PPB	104.44
50.00 PPB	46.36
10.00 PPB	5.18
500.0 PPB	471.13
100.0 PPB	102.70
100.0 PPB	102.55
ICV 300 PPB	287.38 (96%)
ICB	-4.55
CRDL	7.61
PB	-3.83
LCS DOH5511 261	308.18 (118%)

617

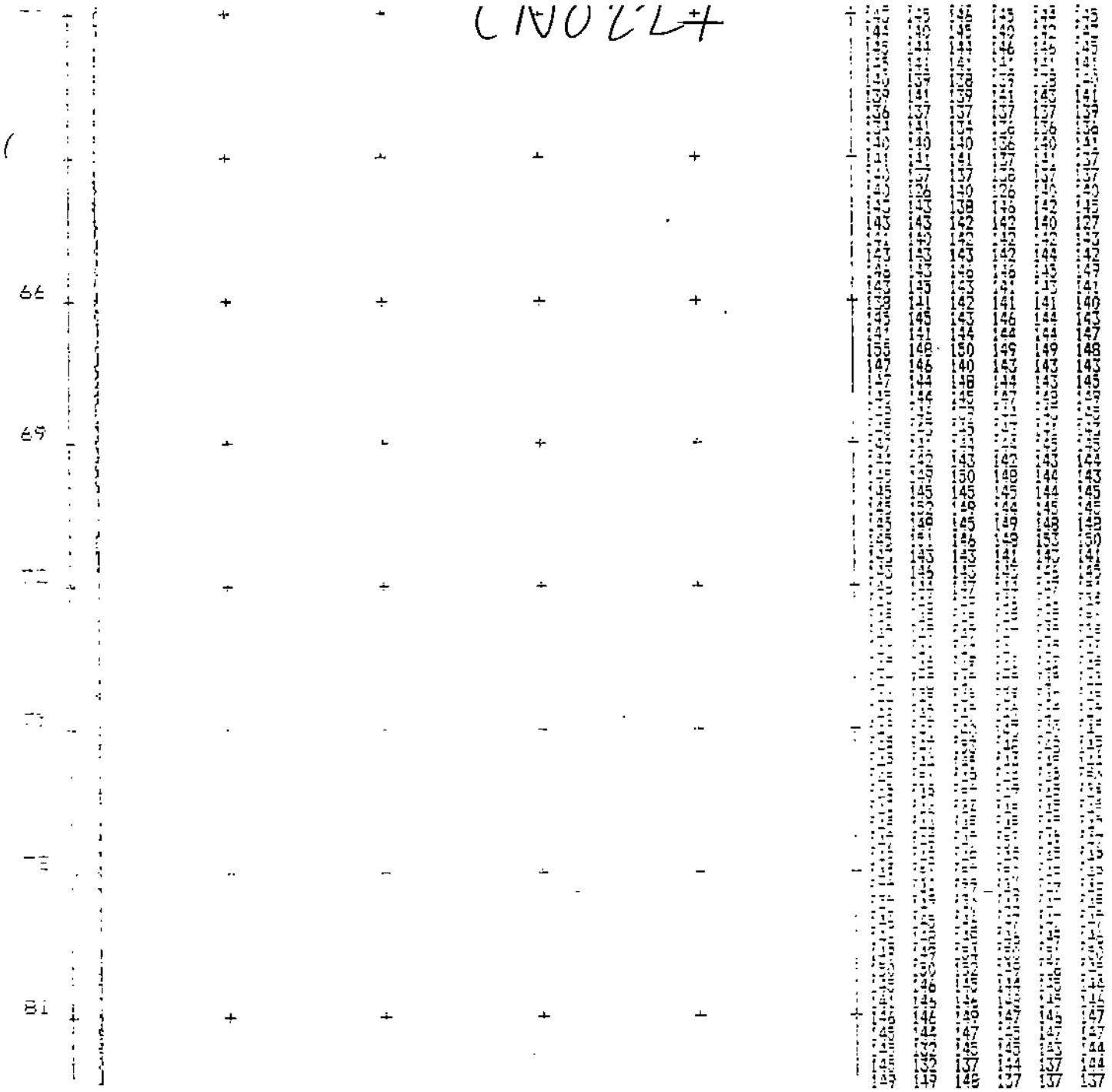
Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE	
CCV	285.07	(96%)
CCB	0.80	
030212 M03 DUP	2.18	
030212 M03 SPK	120.21	(120%)
030212 M03 WD	-4.44	
030225028 001	-5.12	
030220 B01	89.08	
030220 B02	1.52	
030220 B03	-4.09	
030220 B04	0.15	
030220 B05	-5.17	
CCV	283.78	(95%)
CCB	-5.17	
030226039 001	9.20	
030220 B03 DUP	-2.69	
030220 B03 SPK	78.89	(79%)
030220 B06	-3.15	
030220 B07	8.40	
030220 B08	6.53	
030220 B09	3.10	
030224006 004	-7.07	
030224 C01	3.42	
030224 C02	-1.83	
CCV	282.55	(94%)

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 AMMONIA
CCB	-7.84
200.0 PPB	212.80
500.0 PPB	469.88

CN0274



Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name	B:CYANIDE.INP	Analysis	1	2	3	4	
# of anal.	1	Channel	2	3	3	4	
Samples/an	020	Sample/wash	1.0000		Replans	N	
Sample time	0030	Wash time	0015		Base Corr	Y	620
					Raw output	N	

Anal	Fit	Chem Concent.	Carryover	Carryover	Item Name	Units	Calib
1	L	%	.000000	.000000	.000000 Glucose	mg/l	Y
2	L	%	.000000	.000000	.000000		Y
3	L	%	.000000	.000000	.000000		Y
4	L	%	.000000	.000000	.000000		Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	300.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

[illegible]

[illegible] Save Copy Print Edit Quit Help Menu #1 F DIR 0 CanDe

Technicon TRAACS 800 System Editor

Record Screen

[illegible] Protocol File name Dual Probe System A

Run Comments

Tray Protocol

P,S01,H01,D184,D087,I03,G01,E

621

Page mark # 003

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

1

Technicon TRAACS 800 System Editor

Gate --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
1	1	4	P	500.0 PPB.....	1.000000	1.000000	N
2	3	1	C	400.0 PPB	1.000000	1.000000	N
3	4	2	C	200.0 PPB	1.000000	1.000000	N
4	5	3	C	100.0 PPB	1.000000	1.000000	N
5	6	1	C	50.00 PPB	1.000000	1.000000	N
6	7	1	C	10.10 PPB	1.000000	1.000000	N
7	11	1	S	ICV 200 PPB	1.000000	1.000000	N
8	12	1	S	ICB	1.000000	1.000000	N
9	13	1	S	CRDL	1.000000	1.000000	N
10	14	1	S	FB	1.000000	1.000000	N
11	15	1	S	LCS D0H5511 261	1.000000	1.000000	N
12	16	1	S	CCV	1.000000	1.000000	N
13	17	1	S	CCB	1.000000	1.000000	N
14	18	1	S	030212 M03 DUP	1.000000	1.000000	N
15	19	1	S	030212 M03 SPK	1.000000	1.000000	N
16	20	1	S	030212 M03 WD	1.000000	1.000000	N
17	21	1	S	030225025 001	1.000000	1.000000	N
18	22	1	S	030220 G01	1.000000	1.000000	N
19	23	1	S	030220 G02	1.000000	1.000000	N
20	24	1	S	030220 G03	1.000000	1.000000	N

622

Sample id for the specified cup

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	S	030220 B04.....	1.000000	1.000000	N
22	26	1	S	030220 B05	1.000000	1.000000	N
23	27	1	S	CCV	1.000000	1.000000	N
24	28	1	S	CCB	1.000000	1.000000	N
25	29	1	S	030226039 001	1.000000	1.000000	N
26	30	1	S	030220 B03 DUP	1.000000	1.000000	N
27	31	1	S	030220 B03 SPK	1.000000	1.000000	N
28	32	1	S	030220 B06	1.000000	1.000000	N
29	33	1	S	030220 B07	1.000000	1.000000	N
30	34	1	S	030220 B08	1.000000	1.000000	N
31	35	1	S	030220 B09	1.000000	1.000000	N
32	36	1	S	030224006 C04	1.000000	1.000000	N
33	37	1	S	030224 C01	1.000000	1.000000	N
34	38	1	S	030224 C02	1.000000	1.000000	N
35	39	1	S	CCV	1.000000	1.000000	N
36	40	1	S	CCB	1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

Sample id for the specified cup

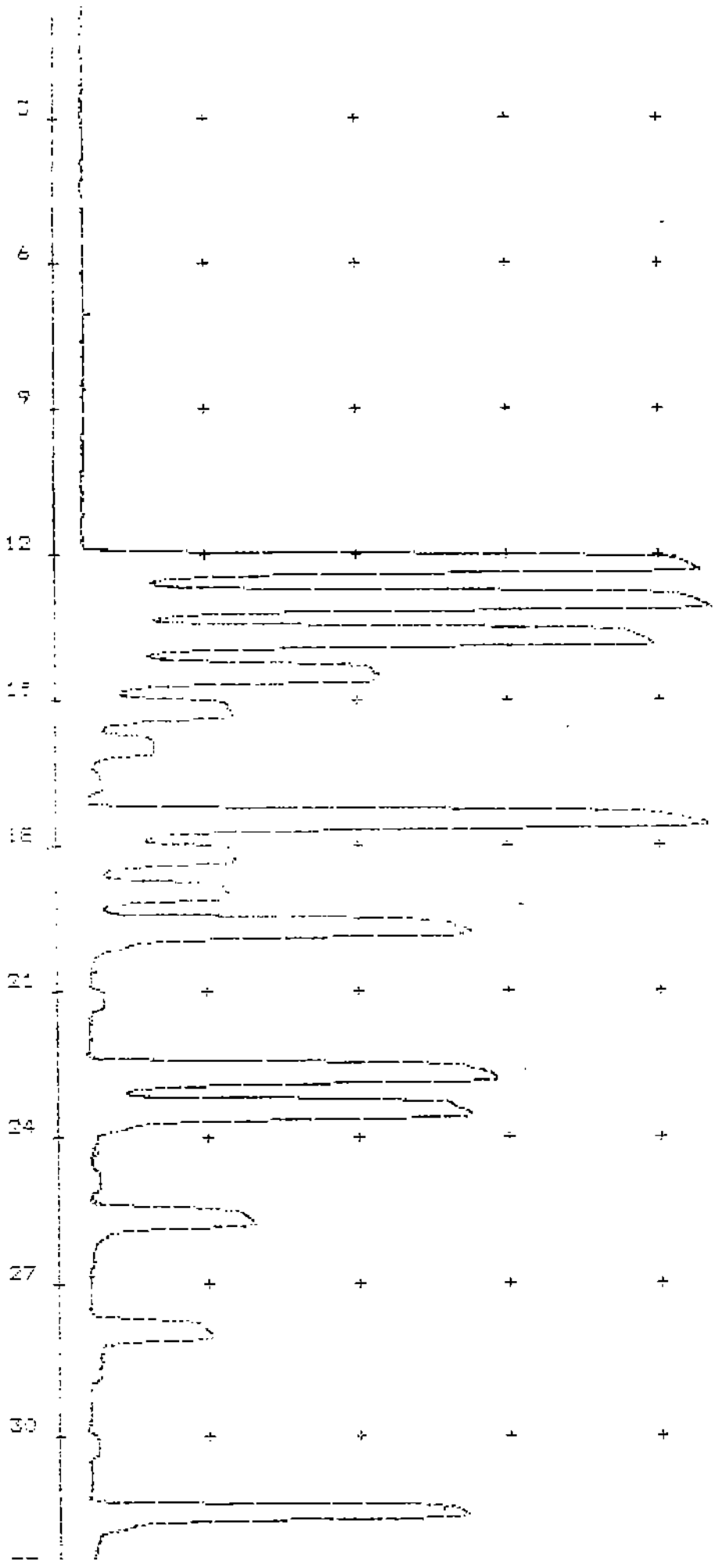
1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
1

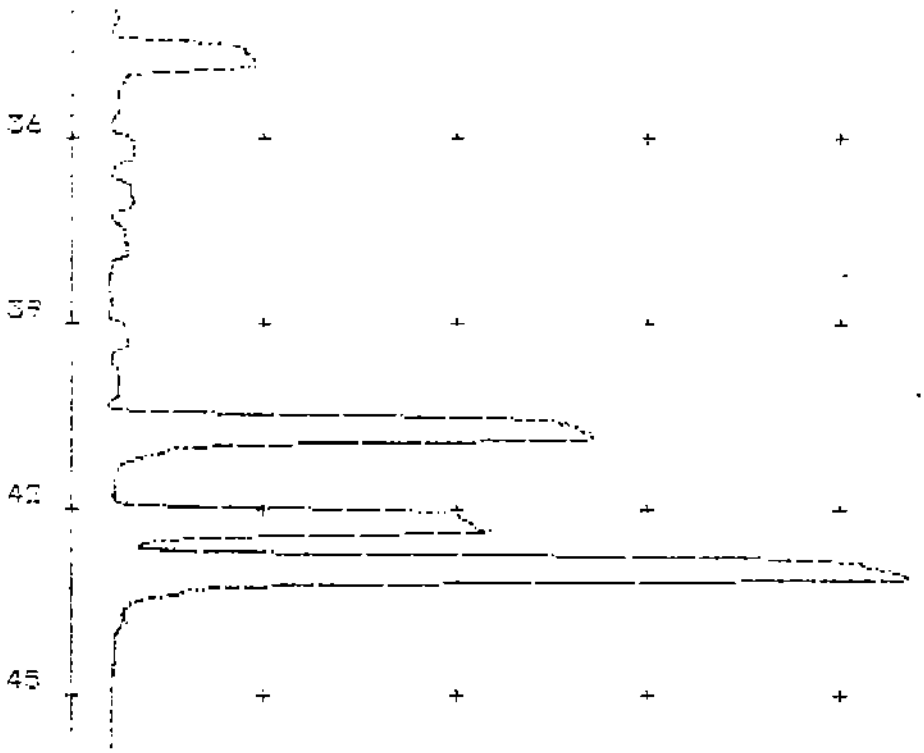
Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
me: 16:40; Date: 02-27-100
Operator: MAC

Comment:

There are 12474368 (bytes) free on disk.
File B:CN0227.CHR will take approximately 7730 (bytes).


Gain:
cvention
wc/1
Init base
152
0.29
624



PK	30	CP	28	typ S	-1.807 M
PK	31	CP	27	typ S	72.90
PK	32	CP	28	typ S	-1.388 M
PK	33	CP	29	typ S	9.225 M
PK	34	CP	30	typ S	7.549 M
PK	35	CP	31	typ S	4.198 M
PK	36	CP	32	typ S	-3.856 M
PK	37	CP	33	typ S	4.477 M
PK	38	CP	34	typ S	-0.3500 M
PK	39	CP	35	typ S	281.1 N
PK	40	CP	36	typ S	-3.343 M
PK	41	CP	0	typ I	212.1 N
PK	42	CP	1	typ S	469.2 N
Last base					171

Time: 15:41; Date: 12-07-1993
Operator: MAD

Comments:

Channels 2
Base: 63
Gain: 37

Overlap
1.0/1

Base drift correction made
Carryover correction made
Gain drift correction made

Init base					152
PK	1	CP	1	typ P	466.6 N
Rel Abs					0.28
PK	2	CP	1	typ C	469.9 N
PK	3	CP	2	typ C	424.4 N
PK	4	CP	3	typ C	216.1
PK	5	CP	4	typ C	104.4
PK	6	CP	5	typ C	46.36
PK	7	CP	6	typ C	5.177 M
PK	8	CP	1	typ H	471.1
PK	9	CP	4	typ L	102.7
PK	10	CP	4	typ L	102.5
PK	11	CP	7	typ S	287.4 N
PK	12	CP	8	typ S	-4.546 M
PK	13	CP	9	typ S	7.613 M
PK	14	CP	10	typ S	-3.833 M
PK	15	CP	11	typ S	308.2
PK	16	CP	12	typ S	285.1 N
PK	17	CP	13	typ S	0.7989 M
PK	18	CP	14	typ S	2.175 M
PK	19	CP	15	typ S	120.2 S
PK	20	CP	16	typ S	-4.443 M
PK	21	CP	17	typ S	-5.120 M

PK	24	CP	20	typ	S	-4.091	M
PK	25	CP	21	typ	S	0.1526	M
PK	26	CP	22	typ	S	-5.172	M
PK	27	CP	23	typ	S	284.0	N
PK	28	CP	24	typ	S	-5.169	M
	29	CP	25	typ	S	9.200	M
PK	30	CP	26	typ	S	-2.689	M
PK	31	CP	27	typ	S	78.89	
PK	32	CP	28	typ	S	-3.152	M
PK	33	CP	29	typ	S	8.398	M
PK	34	CP	30	typ	S	6.529	M
PK	35	CP	31	typ	S	3.104	M
PK	36	CP	32	typ	S	-7.070	M
PK	37	CP	33	typ	S	3.417	M
PK	38	CP	34	typ	S	-1.833	M
PK	39	CP	35	typ	S	282.5	N
PK	40	CP	36	typ	S	-7.843	M
PK	41	CP	3	typ	I	212.8	N
PK	42	CP	1	typ	G	469.9	N
Last base						171	

Sample statistics

Anal level	cups	avg	std dev	cv
1 all	30	57.41	110	191%

Anal 1: linear fit
Carryover factor: 1.10%.

Phenol 460am speed 10 — 2/19.03 JL

Power	Sample ID	Vol dist	Vol used	abs	mg/L equiv	mg/L D
	BK		500	0.000		
	BK prep	500		<0.001		
	Ref. std 0.04 mg/L			0.255	0.041	0.041 A = 102%
Valley	0206003-019B Eff	500		0.007	0.002	0.002
	020E River		↓	<0.001	<0.002	<0.002
Cent	0206008-001C Splitting		400	High		
Cap	3C-4-Eff		400	0.146	0.024	0.03
	5C mitVer.		400	0.098	0.016	0.02
L. Bay	0207005-002A GF/ET		500	<0.001	<0.002	<0.002
[illegible]	0207006-001A Encore		↓	0.004	↓	↓
[illegible]	0207015-002A 047-001			<0.001		
Refel	0207016-005A Wetlab			<0.001		
Ida	0207022-001B			0.071	0.012	0.012
	0207023-001A			0.102	0.017	0.017
Hg	0207FCI WPCD Eff <1			<0.001	<0.001	<0.001 —
	0207GCI — " — Inf			0.147	0.024	0.024 —
Lk	0210005-004A 048-00			0.004	<0.002	<0.002
Tuk	5A 049-001			<0.001	↓	↓
	6A 050-001	↓	↓	<0.001	↓	↓
	BK		500	0.000		2.20.03 JL
	Std 0.04 mg/L			0.216	0.035	0.035 A = 88%
Ref	0219034-003B 01B	500		0.059	0.010	0.010 —
	0207J01 MEC-24'			<0.001	<0.002	<0.002 —
	2 — " — 102			<0.001		—
Creek	3 — " — 232			<0.001		—
	4 — " — 618			0.005		—
Eff	0211008-001B051-001			0.002		—
Cr	0212005-003A 055-01A			0.015	0.003	0.003 —
Bl	004A 054-01N			0.031	0.006	0.006 —
Tuk	005A 052-001			0.011	0.002	0.002 —
Can	0212 F04	↓	↓	0.023	0.004	0.004 —

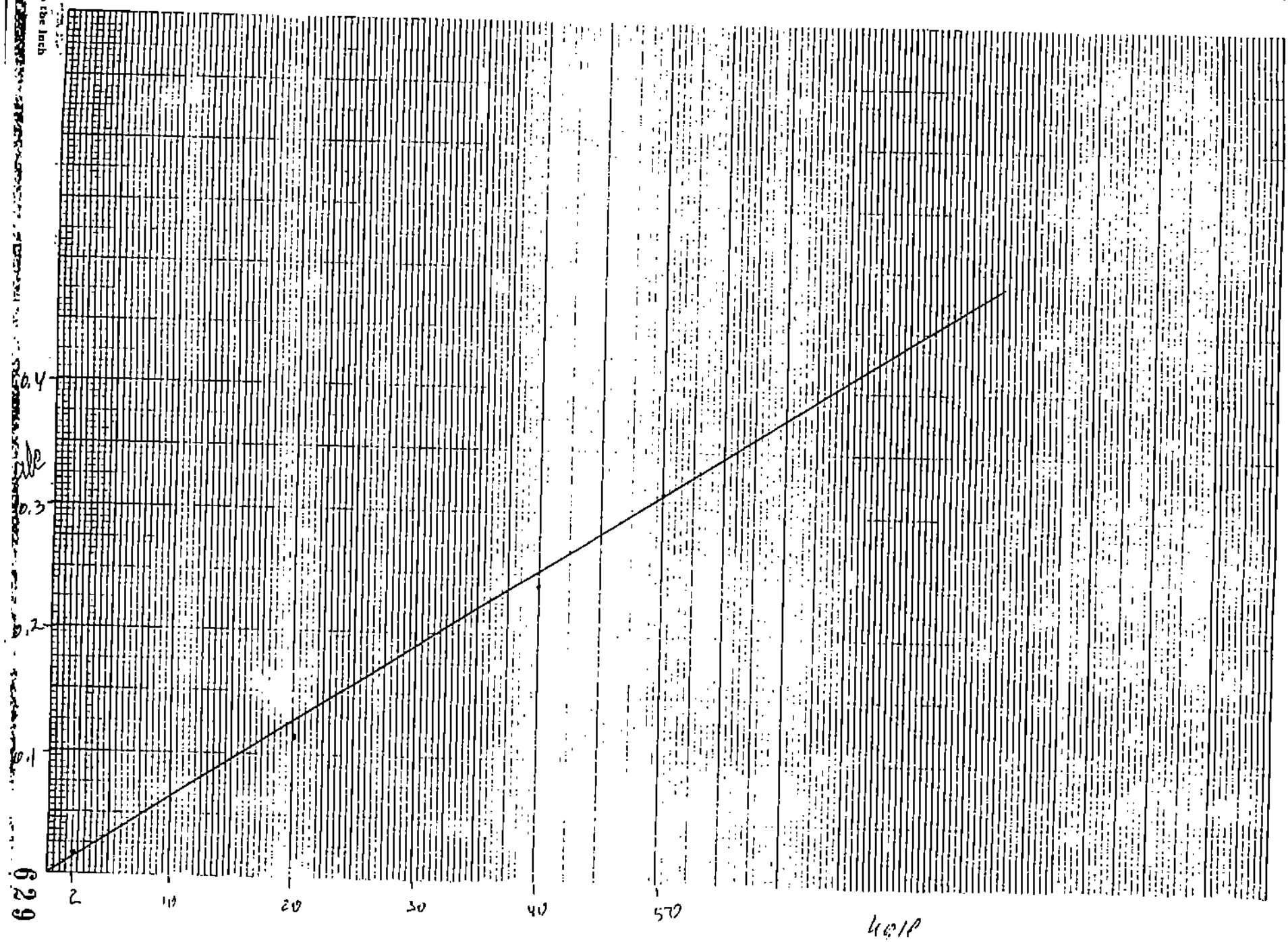
Phenol 460nm spec G10 2.24.03 LS

from	sample ID	vol dist	vol used	abs	mg/L diluted	mg/L ep
	BK		500	0.000		
	BK prep	200		<0.001		
	Ref std 0.04 mg/L			0.236	0.038	0.038 R² = 95%
PL	02 20039 -001C -K08	500		<0.001	<0.001	<0.001
XT	0221012-002C CD ##			0.109	0.018	0.018
duca	0211 A01 mw-83			<0.001	<0.002	<0.002
	2 -u- 93			<0.001	↓	↓
	0212M01 MEG-239			0.012	0.002	0.002
/	2 -u- 236			<0.001	<0.002	<0.002
uu	3 -u- G02			<0.001		
	4 MEC 236			<0.001		
	5 -u- 117			<0.001		
tw	0213 B01 mw-35			<0.001		
	2 -u- 23			0.002		
	0213C24-002B C53-001			<0.001		
ki	0214012-002A 058-001			<0.001		
	0218010-004A 058-001			<0.001		
wt	5A 058-001			<0.001		
	6A 059-001			<0.001		
	0214028-001C mw-1B			0.001		
4	054C -u- -4			0.002		
	006C dup 1B			<0.001		
003e	dup 006C			<0.001		RPD = <1%
G	Lut 0218007-002A 060-001			<0.001		
	Ref std 0.04 mg/L			0.236	0.038	0.038 R² = 95%

T. Reynolds 460 nm spec 6/20

1.9.03 KS

$r^2 = 0.9981$



Cyanide Distillation II

06

Sample ID	VOL/AMT		Apparatus	Tech/Date
030205 B01	5g		1	MAC 2/19
030207 P01	50		2	
034207 G01	↓		3	
030206003 19 WD		HEAT ON: 1310	4	
030212009 01			5	
030212009 02			6	
030205052-01 AC			7	
DOH 5511 (26 ug/l)			8	
prep blank			9	
030207022-01	↓		10	↓
030219018 01	50		1	MAC 2/19
030219018 01 dup			2	
030207 23 01			3	
030213009 06		HEAT ON: 1720	4	
030213009 08			5	
030207 J01			6	
030207 J02			7	
030207 J03			8	
*030207 J04			9	
030214 I9 01	↓		10	↓
DOH CN-6011	50			MAC 2/20
CN-6011				
DOH 5511 (26 ug/l)		HEAT ON: 1310		
030213 009 06 WD				
*030207 J04 WD				
030219006-001B				
030212035-001B	↓			
030212008-001A	5g			
030212 M01	50			
030212 M01 spike	↓			↓

Cyanide Distillation

U1

Sample ID	VOL/AMT	apparatus	Tech/Date
030212 M02	50	1	MAE 2/21
030212 M03		2	
030212 M04		3	
030212 M05	HEAT ON: 1455	4	
030214 021 002A		5	
030213 011 001B		6	
030218 F01		7	
030218 F02		8	
030220026 -002		9	
Prep blank		10	
~~030218 J01~~ ~~218~~	MAE 2/25	1	MAE 2/25
030224018 01	50 g	1	
030224018 02	53 g	2	
030218 J01	50 HEAT ON 1120	3	
218 J02		4	
218 J03		5	
218 J04		6	
218 J05		7	
218 J06		8	
030220 18 02		9	
030213 011 01 AC		10	
030212 M03 dup	50	1	MAE 2/26
030212 M03 Spike		2	
212 M03 40 0	HEAT ON: 1310	3	
DUP 5511		4	
030225015 001C		5	
030220 G01		6	
030220 G02		7	
030220 G03		8	
030220 G04		9	
030220 G05		10	

Different Sample ID	VCI	#	Date	Tech
T/Lung 0206028-002D mw-98	500	1	2·19·03	LS 11°,
3D → 2BR		2		
3 mg/mm		3		
4 mw-26		4		
5 →u-18		5		
6 →u-18R		6		
Spike³ 0.06ug/0206028 003		7		
Sidew 0211 A01 mw-88	500	1	2·19·03	LS
2 →u-98		2		
URB/Docw 207 J01 mEG 241		3		
2 →u-102		4		
3 →u 237		5		
4 →u-618		6		
Quab 0214 3-001B	280/500	7		
Sidew 0213 D01 mw-35	500	1	2·20·03	LS
D02 →u 23		2		
URB/Docw 212 M01 mEG 239		3		
2 →u 236.		4		
G.C 0219034-003B 01B		5		
Silt 001B 001		6		
002B 01A		7		
Vat/Liver 02/4028-001C mw-1B	500	1	2·20·03	LS
4C →u -4		2		
6C dup 1B		3		
dup 6		4		
BK		5-7		
URB/Docw 0212M03 602	500	1	2·20·03	LS
4 236		2		
5 117		3		
Silt 02130 24-002B 053·001		4		
0214012-002A 056-001		5		
Jul 0218007-002A 060-001		6		632
0218010-004A 057-001		7		
BK				
Sili 0212010-005A 058-001	500	1-5	2·21·03	LS
1			1	

NYSEG

New York State Electric & Gas Corporation

Mechanicville Central Avenue
Former Manufactured Gas Plant
Mechanicville, New York

SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
APPENDIX F CONTINUED
SEPTEMBER 2004

VOL. IV OF V



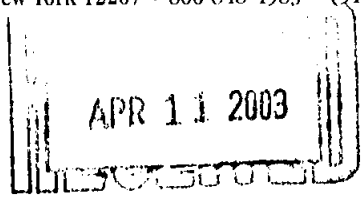
Prepared For:
New York State Electric & Gas Corporation
Kirkwood Industrial Park
Binghamton, New York

URS

URS Corporation - New York
28 Corporate Drive, Suite 200
Clifton Park, New York 12065

Adirondack Environmental Services, Inc.
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X
AMK



URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, New York 12065

Attention: Eriko Fujita

Adirondack Environmental Services, Inc.
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TITLE PAGE

On February 18, 2003 seven water samples were received by Adirondack Environmental Services, Inc. from URS Consultants, Inc. at the NYSEG Mechanicville site. On February 20, 2003 eight water samples were received by Adirondack Environmental Services, Inc. from URS Consultants, Inc. at the NYSEG Mechanicville site. On February 24, 2003 six water samples were received by Adirondack Environmental Services, Inc. from URS Consultants, Inc. at the NYSEG Mechanicville site. On 2/26/03 the samples were requested to have a NYSDEC ASP Category B data package supplied. These samples were analyzed for Volatile Organics, Semi-Volatile Organics, Metals and Conventionals as specified by the contract. The project was completed on April 10, 2003.

Laboratory Manager

Date: 4/10/03

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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Metals	*Other CN
MEGDIM0117	030218J-01	X	X			X	X
MEGDD0243	030218J-02	X	X			X	X
MEGDD0238	030218J-03	X	X			X	X
MEGDD014	030218J-04	X	X			X	X
MEGDD0129	030218J-05	X	X			X	X
DUP021803	030218J-06	X	X			X	X
TB030218	030218J-07	X					
MEGDIM0110	030220G-01	X	X			X	X
MEGUSH8601	030220G-02	X	X			X	X
MEGDD0121	030220G-03	X	X			X	X
MEGDSH0121	030220G-04	X	X			X	X
MEGDD0123	030220G-05	X	X			X	X
MEGDD0115	030220G-06	X	X			X	X
MEGDIM0128	030220G-07	X	X			X	X
TB030220	030220G-08	X					
MEGUSH8611	030224C-01	X	X			X	X
MEGDD0132	030224C-02	X				X	X
MEGCD0131	030224C-03	X	X			X	X
DUP022003	030224C-04	X	X			X	X
MEGUSH8616	030224C-05	X	X			X	X
TB030224	030224C-06	X					

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
030218J-01	WATER	2/14/03	2/18/03	N/A	2/26/03
030218J-02	WATER	2/13/03	2/18/03	N/A	2/26/03
030218J-03	WATER	2/14/03	2/18/03	N/A	2/26/03
030218J-04	WATER	2/18/03	2/18/03	N/A	2/26/03
030218J-05	WATER	2/18/03	2/18/03	N/A	2/26/03
030218J-06	WATER	2/18/03	2/18/03	N/A	2/26/03
030218J-07	WATER	2/18/03	2/18/03	N/A	2/26/03
030220G-01	WATER	2/18/03	2/20/03	N/A	2/26/03
030220G-02	WATER	2/19/03	2/20/03	N/A	2/26/03
030220G-03	WATER	2/19/03	2/20/03	N/A	2/26/03
030220G-04	WATER	2/19/03	2/20/03	N/A	2/27/03
030220G-05	WATER	2/19/03	2/20/03	N/A	2/27/03
030220G-06	WATER	2/20/03	2/20/03	N/A	2/27/03
030220G-07	WATER	2/20/03	2/20/03	N/A	2/26/03
030220G-08	WATER	2/20/03	2/20/03	N/A	2/27/03
030224C-01	WATER	2/20/03	2/24/03	N/A	2/27/03
030224C-02	WATER	2/21/03	2/24/03	N/A	2/27/03
030224C-03	WATER	2/21/03	2/24/03	N/A	2/27/03
030224C-04	WATER	2/20/03	2/24/03	N/A	2/27/03
030224C-05	WATER	2/24/03	2/24/03	N/A	2/27/03
030224C-06	WATER	2/24/03	2/24/03	N/A	2/27/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
030218J-01	WATER	2/14/03	2/18/03	2/20/03	2/28/03
030218J-02	WATER	2/13/03	2/18/03	2/20/03	2/28/03
030218J-03	WATER	2/14/03	2/18/03	2/20/03	2/28/03
030218J-04	WATER	2/18/03	2/18/03	2/20/03	3/17/03
030218J-05	WATER	2/18/03	2/18/03	2/20/03	3/17/03
030218J-06	WATER	2/18/03	2/18/03	2/20/03	3/17/03
030220G-01	WATER	2/18/03	2/20/03	2/24/03	3/17/03
030220G-02	WATER	2/19/03	2/20/03	2/24/03	3/17/03
030220G-03	WATER	2/19/03	2/20/03	2/24/03	3/17/03
030220G-04	WATER	2/19/03	2/20/03	2/24/03	3/24/03
030220G-05	WATER	2/19/03	2/20/03	2/24/03	3/18/03
030220G-06	WATER	2/20/03	2/20/03	2/24/03	3/18/03
030220G-07	WATER	2/20/03	2/20/03	2/24/03	3/18/03
030224C-01	WATER	2/20/03	2/24/03	2/26/03	3/19/03
030224C-03	WATER	2/21/03	2/24/03	2/26/03	3/19/03
030224C-04	WATER	2/20/03	2/24/03	2/26/03	3/19/03
030224C-05	WATER	2/24/03	2/24/03	2/26/03	3/19/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030218J-01	WATER	ICP	2/18/03	2/26/03	2/28/03
		Mercury		2/20/03	2/20/03
		Total Cyanide		2/25/03	2/25/03
		Free Cyanide		2/25/03	2/25/03
		Total Phenols		2/25/03	3/13/03
030218J-02	WATER	ICP	2/18/03	2/26/03	2/28/03
		Mercury		2/20/03	2/20/03
		Total Cyanide		2/25/03	2/25/03
		Free Cyanide		2/25/03	2/25/03
		Total Phenols		2/25/03	3/13/03
030218J-03	WATER	ICP	2/18/03	2/26/03	2/28/03
		Mercury		2/20/03	2/20/03
		Total Cyanide		2/25/03	2/25/03
		Free Cyanide		2/25/03	2/25/03
		Total Phenols		2/25/03	3/13/03
030218J-04	WATER	ICP	2/18/03	2/26/03	2/28/03
		Mercury		2/20/03	2/20/03
		Total Cyanide		2/25/03	2/25/03
		Free Cyanide		2/25/03	2/25/03
		Total Phenols		2/25/03	3/13/03
030218J-05	WATER	ICP	2/18/03	2/26/03	2/28/03
		Mercury		2/20/03	2/20/03
		Total Cyanide		2/25/03	2/25/03
		Free Cyanide		2/25/03	2/25/03
		Total Phenols		2/25/03	3/13/03
030218J-06	WATER	ICP	2/18/03	2/26/03	2/28/03
		Mercury		2/20/03	2/20/03
		Total Cyanide		2/25/03	2/25/03
		Free Cyanide		2/25/03	2/25/03
		Total Phenols		2/25/03	3/13/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030220G-01	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		3/3/03	3/4/03
		Total Phenols		3/3/03	3/13/03
030220G-02	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		3/3/03	3/13/03
030220G-03	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		3/3/03	3/13/03
030220G-04	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		3/3/03	3/13/03
030220G-05	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		3/3/03	3/13/03
030220G-06	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		3/3/03	3/13/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030220G-07	WATER	ICP	2/20/03	3/3/03	3/3/03
		Mercury		2/21/03	2/21/03
		Total Cyanide		2/26/03	2/27/03
		Free Cyanide		2/26/03	2/27/03
		Total Phenols		3/3/03	3/13/03
030224C-01	WATER	ICP	2/24/03	3/3/03	3/3/03
		Mercury		2/25/03	2/25/03
		Total Cyanide		3/3/03	3/4/03
		Free Cyanide		3/3/03	3/4/03
		Total Phenols		3/5/03	3/13/03
030224C-02	WATER	ICP	2/24/03	3/3/03	3/3/03
		Mercury		2/25/03	2/25/03
		Total Cyanide		3/3/03	3/4/03
		Free Cyanide		3/3/03	3/4/03
		Total Phenols		3/5/03	3/13/03
030224C-03	WATER	ICP	2/24/03	3/3/03	3/3/03
		Mercury		2/25/03	2/25/03
		Total Cyanide		3/3/03	3/4/03
		Free Cyanide		3/3/03	3/4/03
		Total Phenols		3/5/03	3/13/03
030224C-04	WATER	ICP	2/24/03	3/3/03	3/3/03
		Mercury		2/25/03	2/25/03
		Total Cyanide		3/3/03	3/4/03
		Free Cyanide		3/3/03	3/4/03
		Total Phenols		3/5/03	3/13/03
030224C-05	WATER	ICP	2/24/03	3/3/03	3/3/03
		Mercury		2/25/03	2/25/03
		Total Cyanide		3/3/03	3/4/03
		Free Cyanide		3/3/03	3/4/03
		Total Phenols		3/5/03	3/13/03

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Case Narrative

Client: URS Consultants, Inc. – NYSEG Mechanicville

Case: URS 0307

SDG: MEGCD0131

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MEGDIM0117 MW-17I 2/14/03	030218J-01	02/18/03	16:17	Water
MEGDD0243 MW-43D 2/13/03	030218J-02	02/18/03	16:17	Water
MEGDD0238 MW-38D 2/14/03	030218J-03	02/18/03	16:17	Water
MEGDD014 MW-14D 2/18/03	030218J-04	02/18/03	16:17	Water
MEGDD0129 MW-29D 2/18/03	030218J-05	02/18/03	16:17	Water
DUP021803 DUP-2/18/03	030218J-06	02/18/03	16:17	Water
TB030218	030218J-07	02/18/03	16:17	Water
MEGDIM0110 MW-10I 2/18/03	030220G-01	02/20/03	12:16	Water
MEGUSH8601 MW-1 2/19/03	030220G-02	02/20/03	12:16	Water
MEGDD0121 MW-21D 2/19/03	030220G-03	02/20/03	12:16	Water
MEGDSH0121 MW-21S 2/19/03	030220G-04	02/20/03	12:16	Water
MEGDD0123 MW-23D 2/19/03	030220G-05	02/20/03	12:16	Water
MEGDD0115 MW-15D 2/20/03	030220G-06	02/20/03	12:16	Water
MEGDIM0128 MW-28I 2/20/03	030220G-07	02/20/03	12:16	Water
TB030220	030220G-08	02/20/03	12:16	Water
MEGUSH8611 MW-11 2/20/03	030224C-01	02/24/03	16:35	Water
MEGDD0132 MW-32D 2/28/03	030224C-02	02/24/03	16:35	Water
MEGCD0131 MW-31D 2/21/03	030224C-03	02/24/03	16:35	Water
DUP022003 DUP-02/20/03	030224C-04	02/24/03	16:35	Water
MEGUSH8616 MW-16 2/24/03	030224C-05	02/24/03	16:35	Water
TB030224	030224C-06	02/24/03	16:35	Water

Initially this project was received as a routine analysis. On 2/26/03 the samples were requested to have a NYSDEC ASP Category B data package supplied. At this time some of the analyses had been extracted and/or completed.

Volatile Organics

1) The samples were analyzed using EPA Method 8260 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

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2) The %RSD for the compound Bromomethane in the initial calibration analyzed on 2/21/03 was outside the criteria established by the method. The %RSD for this compound was 25.3 %. The RRF for the compound Trichloroethene in the initial calibration analyzed on 2/21/03 was outside the required limits. The RRF for this compound was 0.283. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for these compounds.

3) The %D for the compound 1,2-Dichloroethane in the continuing calibration analyzed on 2/26/03 was outside the criteria established by the method. The %D for this compound was 27.2 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

4) Sample MEGDIM0128 (AES sample number 030220G-07) was used for the matrix spike and matrix spike duplicate analysis. All recoveries were within required limits.

5) The surrogate recovery for 1,2-Dichloroethane-d4 on sample MEGDD014 (AES sample number 030218J-04) was outside required limits. The recovery was just above the specified limits. This sample was not re-analyzed.

6) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed for Polynuclear Aromatic Hydrocarbons only using EPA Method 8270 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The RRF for the compound N-Nitroso-di-n-propylamine in the initial calibration analyzed on 12/17/02 was outside the required limits. The RRF for this compound was 0.494. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Terphenyl-d14 in the continuing calibration analyzed on 2/28/03 was outside the criteria established by the method. The %D for this compound was 25.9 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

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4) The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 3/18/03 was outside the required limits. The RRF for this compound was 0.472. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D's for the compounds Pyrene and Terphenyl-d14 in the continuing calibration analyzed on 3/24/03 were outside the criteria established by the method. The %D's for these compounds were 32.1 % and 37.9 %, respectively. The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 3/24/03 was outside the required limits. The RRF for this compound was 0.404. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

6) Sample MEGDIM0128 (AES sample number 030220G-07) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within required limits.

7) The surrogate recovery for Nitrobenzene-d5 on sample MEGDSH0121 (AES sample number 030220G-04) was outside required limits. According to the protocol, one base/neutral surrogate may be outside specified limits with no further action necessary.

Inorganics – Total Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) The digested spike recoveries for the elements Antimony, Arsenic, Lead, Nickel, Selenium and Silver for sample MEGDIM0110 (AES sample number 030220G-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recovery for Antimony was within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

3) The digested spike recoveries for the elements Arsenic, Lead, Mercury and Selenium for sample MEGUSH8611 (AES sample number 030224C-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recoveries for Lead and Selenium were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

4) The elements Chromium, Iron and Zinc for sample MEGDIM0110 (AES sample number 030220G-01) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol for the water samples. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

5) The %RPD recovery for Lead between sample MEGDIM0110 (AES sample number 030220G-01) and the duplicate sample was outside of the required 20 % acceptance limit. The results for this element are flagged with an "*" as required by the protocol.

Inorganics – Filtered Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) The digested spike recoveries for the elements Arsenic, Lead, Selenium and Silver for sample MEGDIM0110 filtered (AES sample number 030220G-01) were outside the required 75-125 % limits. A post digestion spike was performed and all recoveries were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

3) The digested spike recovery for the element Mercury for sample MEGUSH9601 filtered (AES sample number 030220G-02) was outside the required 75-125 % limits. The results for this element are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

4) The digested spike recoveries for the elements Arsenic and Mercury for sample MEGUSH8611 (AES sample number 030224C-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recovery for Arsenic was within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

Conventionals

1) Samples MEGDD0121 and MEGDIM0128 (AES sample numbers 030220G-03 and 030220G-07) were used for the Cyanide and Phenols matrix spike and duplicate analysis. All recoveries were within required limits.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 4/10/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCD0131

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGCD0131
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0599
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD014

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD014
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0574
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U J
108-10-1	4-Methyl-2-Pentanone	10.	U J
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0115

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0115
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0595
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U 3J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMS 6/24/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0121
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0580
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	~~U~~
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	~~U~~
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	~~U~~
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	11.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	~~U~~
108-10-1	4-Methyl-2-Pentanone	10.	~~U~~
591-78-6	2-Hexanone	10.	~~U~~
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	~~U~~
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	4.	J
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	~~U~~
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0123

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0123
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0596
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U GS
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0129
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0589
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane		10.	U
74-83-9	Bromomethane		10.	U
75-01-4	Vinyl Chloride		10.	U
75-00-3	Chloroethane		10.	U
75-09-2	Methylene Chloride		5.	U
67-64-1	Acetone		10.	U
75-15-0	Carbon Disulfide		5.	U
75-35-4	1,1-Dichloroethene		5.	U
75-34-3	1,1-Dichloroethane		5.	U
156-60-5	1,2-Dichloroethene-trans		5.	U
67-66-3	Chloroform		5.	U
107-06-2	1,2-Dichloroethane		5.	U
78-93-3	2-Butanone		10.	U
71-55-6	1,1,1-Trichloroethane		5.	U
56-23-5	Carbon Tetrachloride		5.	U
75-27-4	Bromodichloromethane		5.	U
78-87-5	1,2-Dichloropropane		5.	U
10061-01-5	cis-1,3-Dichloropropene		5.	U
79-01-6	Trichloroethene		5.	U
124-48-1	Dibromochloromethane		5.	U
79-00-5	1,1,2-Trichloroethane		5.	U
71-43-2	Benzene		5.	U
10061-02-6	trans-1,3-Dichloropropene		5.	U
75-25-2	Bromoform		5.	U
108-10-1	4-Methyl-2-Pentanone		10.	U
591-78-6	2-Hexanone		10.	U
127-18-4	Tetrachloroethene		5.	U
79-34-5	1,1,2,2-Tetrachloroethane		5.	U
108-88-3	Toluene		5.	U
108-90-7	Chlorobenzene		5.	U
100-41-4	Ethylbenzene		5.	U
100-42-5	Styrene		5.	U
156-59-2	1,2-Dichloroethene-cis		5.	U
106-42-3	m,p-Xylenes		5.	U
95-47-6	o-Xylene		5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0132

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0132
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0598
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U 55
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	4.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

Amk 6/24/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0238

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0238
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0573
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U J
108-10-1	4-Methyl-2-Pentanone	10.	U J
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0243

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0243
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0572
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	2.	J
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6b4p3

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0110
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0578
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	1.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0117

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0117
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0571
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U JJ
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U JJ
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U JJ
108-10-1	4-Methyl-2-Pentanone	10.	U JJ
591-78-6	2-Hexanone	10.	U JJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U JJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U JJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0128

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0584
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U SS
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SS
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	1.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U SS
108-10-1	4-Methyl-2-Pentanone	10.	U ↓
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U SS
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U SS
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 4/24/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGSH0121

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGSH0121
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0593
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	2.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	3.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	3.	J
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	7.	
95-47-6	o-Xylene	22.	

AMS 4/4/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8601
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0579
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8611
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0597
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8616

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8616
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0601
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U 5J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: DUP021803
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0590
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	CJ
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	CJ
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	CJ
108-10-1	4-Methyl-2-Pentanone	10.	U	↓
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	CJ
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	CJ
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB030218

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030218
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0577
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U SS
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SS
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U SS
108-10-1	4-Methyl-2-Pentanone	10.	U ↓
591-78-6	2-Hexanone	10.	U ↓
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U SS
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U SS
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030220

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030220
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0609
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	7.	
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030224

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030224
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0602
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP022003

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: DUP022003
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0600
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGCD0131

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGCD0131

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0569

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD014

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0539

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0115

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0115

Sample wt/vol: 850.0 (g/mL) ML Lab File ID: B0564

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0121

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: B0544

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	23.	
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	3.	J
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0123

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0123

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0563

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0129

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0129

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0540

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0238

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0238

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0481

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	
91-57-6	2-Methylnaphthalene	3.	J J
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	2.	J
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	.7	J
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Amk 6/6/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0243

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0243

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0480

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Amk 4/25/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0110

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0542

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	3.	J
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0117

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0117

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0479

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
84-74-2	Di-n-butylphthalate	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Amic 4/28/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0565

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDSH0121

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0595

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/24/03

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	180.	
91-57-6	2-Methylnaphthalene	20.	
208-96-8	Acenaphthylene	20.	U
83-32-9	Acenaphthene	4.	J
132-64-9	Dibenzofuran	20.	U
86-73-7	Fluorene	20.	U
85-01-8	Phenanthrene	20.	U
120-12-7	Anthracene	20.	U
86-74-8	Carbazole	20.	U
206-44-0	Fluoranthene	20.	U
129-00-0	Pyrene	20.	U
56-55-3	Benzo(a)anthracene	20.	U
218-01-9	Chrysene	20.	U
205-99-2	Benzo(b)fluoranthene	20.	U
207-08-9	Benzo(k)fluoranthene	20.	U
50-32-8	Benzo(a)pyrene	20.	U
193-39-5	Indeno(1,2,3-cd)pyrene	20.	U
53-70-3	Dibenzo(a,h)anthracene	20.	U
191-24-2	Benzo(g,h,i)perylene	20.	U

UJ

(1) - Cannot be separated from diphenylamine

AMK 6/30/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8601

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8601

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0543

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8611

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0568

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8616

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8616

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: B0579

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
91-20-3	Naphthalene		5.	U
91-57-6	2-Methylnaphthalene		5.	U
208-96-8	Acenaphthylene		5.	U
83-32-9	Acenaphthene		5.	U
132-64-9	Dibenzofuran		5.	U
86-73-7	Fluorene		5.	U
85-01-8	Phenanthrene		5.	U
120-12-7	Anthracene		5.	U
86-74-8	Carbazole		5.	U
206-44-0	Fluoranthene		5.	U
129-00-0	Pyrene		5.	U
56-55-3	Benzo(a)anthracene		5.	U
218-01-9	Chrysene		5.	U
205-99-2	Benzo(b)fluoranthene		5.	U
207-08-9	Benzo(k)fluoranthene		5.	U
50-32-8	Benzo(a)pyrene		5.	U
193-39-5	Indeno(1,2,3-cd)pyrene		5.	U
53-70-3	Dibenzo(a,h)anthracene		5.	U
191-24-2	Benzo(g,h,i)perylene		5.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 4/28/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: DUP021803

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: B0541

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP022003

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: DUP022003

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0570

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGCD0131

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGCD0131__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	558			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	1480			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.9	B		P
7439-89-6	Iron	3440		E J	P
7439-92-1	Lead	7.7		N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	178			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	59.0		E J	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCD0131 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGCD0131_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	151	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N S	P
7440-39-3	Barium	1610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.9	B		P
7439-89-6	Iron	161			P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	85.6			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	63.7			P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD014___

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5960			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	786			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	18.8	B		P
7439-89-6	Iron	184000		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	677			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~1.0~~	U	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	9.5	B		P
7440-66-6	Zinc	237		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD014_F_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	S	P
7440-39-3	Barium	2.3	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	4.3	B		P
7439-92-1	Lead	1.3	U	S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	0.30	U		P
7439-97-6	Mercury	0.13	U	S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	W	P
7440-22-4	Silver	1.8	U	W	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0115__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	138	B		P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	443		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.9	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.8	B		P
7439-89-6	Iron	32700		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	234			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	8.5	B	E	P
7440-42-8	Boron				NR

amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0115F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.3	B	N S	P
7440-39-3	Barium	700		S	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	75.8	B		P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3.5	B		P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	10.8	B		P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0121

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0121__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1920			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1530			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	17.0	B		P
7439-89-6	Iron	13600		E J	P
7439-92-1	Lead	1.3	U	~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	505			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

AMK 4/28/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0121F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	3.5	B	N S	P
7440-39-3	Barium	1390			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	401			P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	463			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	106			P
7440-42-8	Boron				NR

Amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0123

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0123__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3140			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1130			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.1	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	59.0			P
7439-89-6	Iron	21400		E	P
7439-92-1	Lead	1.3	U	~~N~~ U	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	226			P
7439-97-6	Mercury	0.13	U	N	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	18.4	B	E	P
7440-42-8	Boron				NR

amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0123F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0123F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1060			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N S	P
7440-39-3	Barium	968			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	28.8			P
7439-89-6	Iron	1990			P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	32.9			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	52.1			P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0129__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	113000		J	P
7440-36-0	Antimony	~~34.0~~	~~B~~	J	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	J	P
7440-39-3	Barium	6290		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	800		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1740		J	P
7439-89-6	Iron	1940000		J	P
7439-92-1	Lead	165		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	9590		J	P
7439-97-6	Mercury	0.30		J	AV
7440-02-0	Nickel	~~157~~		J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	J	P
7440-22-4	Silver	~~1.8~~	~~U~~	J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	166		J	P
7440-66-6	Zinc	1770		J	P
7440-42-8	Boron				NR

Amk 4/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0129_F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69.6	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	841			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	317		J+	P
7439-92-1	Lead	1.3	U	J+	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	19.5			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	136			P
7440-42-8	Boron				NR

AMK 6/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0132

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0132__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	356			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	939			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	7.7	B		P
7439-89-6	Iron	2420		E J	P
7439-92-1	Lead	1.3	U	W J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	27.4			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

Amk 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0238

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0238__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	583			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	163	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.7	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.2	B		P
7439-89-6	Iron	2350		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	31.4			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~3.2~~	B	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	16.5	B		P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0243

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0243__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	1610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	22.8	B		P
7439-89-6	Iron	20500		J	P
7439-92-1	Lead	3.2		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	607			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~14.4~~	B	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.4	B		P
7440-66-6	Zinc	57.8		J	P
7440-42-8	Boron				NR

Amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0243F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0243F_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.3	B	J	P
7440-39-3	Barium	1690			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	35.0	B		P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	208			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	50.5			P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0110

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0110_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	322000			P
7440-36-0	Antimony	~~15.4~~	~~B~~	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	~~N~~ R	P
7440-39-3	Barium	6530			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	782		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1010			P
7439-89-6	Iron	941000		E J	P
7439-92-1	Lead	44.3		N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	11500			P
7439-97-6	Mercury	0.50		N J	AV
7440-02-0	Nickel	~~1.0~~	~~U~~	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	~~U~~	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	501			P
7440-66-6	Zinc	2460		E J	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0110_F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.7	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	286			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.8	B		P
7439-89-6	Iron	811			P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	398			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0117

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0117_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25900			P
7440-36-0	Antimony	~~8.0~~	~~B~~	R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	R	P
7440-39-3	Barium	3480			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	65.3		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	69.1			P
7439-89-6	Iron	406000		J+	P
7439-92-1	Lead	1.3	U	J+	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	7610			P
7439-97-6	Mercury	0.13	B	J	AV
7440-02-0	Nickel	~~58.5~~		R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	R	P
7440-22-4	Silver	~~1.8~~	~~U~~	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	33.1	B		P
7440-66-6	Zinc	268		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0117F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0117F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	936			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	676			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3010			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	8.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	167			P
7440-42-8	Boron				NR

amk 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0128_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5730			P
7440-36-0	Antimony	~~3.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	2060			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	19.6		E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	20.6	B		P
7439-89-6	Iron	12900		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	327			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	8.8	B		P
7440-66-6	Zinc	321		E J	P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH0121_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4450			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	216			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	101		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	48.5			P
7439-89-6	Iron	6320		E J	P
7439-92-1	Lead	10.7		W J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3150			P
7439-97-6	Mercury	0.13	U	M J	AV
7440-02-0	Nickel	~~41.5~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	6.9	B		P
7440-66-6	Zinc	623		E J	P
7440-42-8	Boron				NR

Amik 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts:_____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH0121F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.5	B	N J	P
7440-39-3	Barium	726			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.2	B		P
7439-89-6	Iron	28.9	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	2850			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	7.9	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	189			P
7440-42-8	Boron				NR

AMK 4/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8601_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30800			P
7440-36-0	Antimony	~~3370~~		~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	~~N~~ R	P
7440-39-3	Barium	2610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	201000		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3040			P
7439-89-6	Iron	927000		E J	P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	161000			P
7439-97-6	Mercury	0.46		N J	AV
7440-02-0	Nickel	~~21500~~		~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	~~U~~	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	101			P
7440-66-6	Zinc	786		E J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8601F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.6	B	N S	P
7440-39-3	Barium	687			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.5	B		P
7439-89-6	Iron	11.6	B		P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	811			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	223			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	212			P
7440-42-8	Boron				NR

AMK 4/28/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8611_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	986			P
7440-36-0	Antimony	~~11.5~~	B	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	749			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	893		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	112			P
7439-89-6	Iron	8800		E J	P
7439-92-1	Lead	1.3	U	W J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	32600			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1550~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~6.4~~		N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.1	B	J	P
7440-66-6	Zinc	2950		F J	P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGUSH8611 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8611_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.4	B	N J	P
7440-39-3	Barium	779		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	76.2	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	5900			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	127			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	234		J	P
7440-42-8	Boron				NR

AMK 4/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8616

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8616_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.1	B		P
7440-36-0	Antimony	~~8.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	441			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.7	B		P
7439-89-6	Iron	719		E J	P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	909			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

Amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
DUP021803

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP021803

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8100			P
7440-36-0	Antimony	~~2.5~~	U		P
7440-38-2	Arsenic	~~2.2~~	U		P
7440-39-3	Barium	894			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	34.6			P
7439-89-6	Iron	244000			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	780			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	~~1.0~~	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U		P
7440-22-4	Silver	~~1.8~~	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	14.1	B		P
7440-66-6	Zinc	343			P
7440-42-8	Boron				NR

AMK 6/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP021803_F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	128	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	960			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1280		J+	P
7439-92-1	Lead	1.3	U	J+	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	26.3			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J+	P
7440-22-4	Silver	1.8	U	J+	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	139			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP022003

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1160			P
7440-36-0	Antimony	~~10.5~~	B	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	1030			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	873		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	173			P
7439-89-6	Iron	7760		E J	P
7439-92-1	Lead	3.1		N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	53600			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~2550~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~10.5~~		N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	18.8	B	J	P
7440-66-6	Zinc	4300		E J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP022003_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	409		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.8	B		P
7439-89-6	Iron	70.7	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	6020			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	129			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	98.7		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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CONVENTIONALS ANALYSIS DATA SHEET

MEGCD0131

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-03

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD014

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-04

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0115

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-06

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0123

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-05

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

AMK 4/25/03

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-03

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0129

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-05

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0132

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-02

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	3			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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Amk 4/28/03

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0238

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-03

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0243

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-02

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	3			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0117

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-01

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0110

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-01

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	88			EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-07

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	4			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDSH0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-04

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	5			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8601

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-02

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8611

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-01

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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AMK 6/26/03

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8616

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-05

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

DUP 021803

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-06

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

DUP 022003

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-04

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	VBLK01	96	98	110		0
2	MEGDIM0117	108	111	110		0
3	MEGDD0243	99	108	113		0
4	MEGDD0238	106	112	101		0
5	MEGDD014	104	115	115 *		1
6	TB030218	101	102	99		0
7	MEGDIM0110	103	114	111		0
8	MEGUSH8601	102	110	110		0
9	MEGDD0121	108	115	109		0
10	MEGDIM0128	99	105	110		0
11	MEGDIM0128 MS	102	108	109		0
12	MEGDIM0128 MSD	103	109	96		0
13	VMSB	104	108	114		0
14	MEGDD0129	106	110	98		0
15	DUP021803	99	100	109		0
16	VBLK02	97	95	85		0
17	MEGSH0121	94	97	94		0
18	MEGDD0115	90	94	106		0
19	MEGDD0123	94	93	96		0
20	MEGUSH8611	94	91	98		0
21	MEGDD0132	99	93	96		0
22	MEGDD0131	102	93	104		0
23	DUP022003	99	98	98		0
24	MEGUSH8616	98	93	92		0
25	TB030224	102	96	99		0
26	TB030220	98	93	93		0
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	TOT OUT
1	WBLK01	60	66	63	25	59	65	0
2	MEGDIM0117	47	58	56	N/A	N/A	N/A	0
3	MEGDD0243	48	59	60	N/A	N/A	N/A	0
4	MEGDD0238	52	65	63	N/A	N/A	N/A	0
5	WMSB	60	69	94	29	48	79	0
6	WBLK03	44	51	76	12	40	54	0
7	MEGDD014	46	62	75	N/A	N/A	N/A	0
8	MEGDD0129	44	69	84	N/A	N/A	N/A	0
9	DUP021803	39	67	78	N/A	N/A	N/A	0
10	MEGDIM0110	77	99	112	N/A	N/A	N/A	0
11	MEGUSH8601	47	61	78	N/A	N/A	N/A	0
12	MEGDD0121	46	67	86	N/A	N/A	N/A	0
13	WBLK02	42	57	70	16	37	55	0
14	MEGDD0123	50	79	95	N/A	N/A	N/A	0
15	MEGDD0115	54	81	88	N/A	N/A	N/A	0
16	MEGDIM0128	36	52	65	N/A	N/A	N/A	0
17	MEGDIM0128 MS	64	84	79	N/A	N/A	N/A	0
18	MEGDIM0128 MSD	64	74	86	N/A	N/A	N/A	0
19	MEGUSH8611	53	78	64	N/A	N/A	N/A	0
20	MEGCD0131	46	75	66	N/A	N/A	N/A	0
21	DUP022003	38	51	63	N/A	N/A	N/A	0
22	MEGUSH8616	35	57	49	N/A	N/A	N/A	0
23	MEGDSH0121	32 *	60	59	N/A	N/A	N/A	1
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-110)
S5 (2FP) = 2-Fluorophenol	(21-110)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: MEGDIM0128

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	0.	37.	74	61-145
Trichloroethene	50.	0.	39.	78	71-120
Benzene	50.	1.	45.	88	76-127
Toluene	50.	0.	49.	98	76-125
Chlorobenzene	50.	0.	47.	94	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	35.	70	6	14	61-145
Trichloroethene	50.	41.	82	5	14	71-120
Benzene	50.	50.	98	11	11	76-127
Toluene	50.	51.	102	4	13	76-125
Chlorobenzene	50.	50.	100	6	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: MEGDIM0128

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,4-Dichlorobenzene	25.	0.	15.	60	36- 97
n-Nitroso-di-n-propylam	25.	0.	16.	64	41-116
1,2,4-Trichlorobenzene	25.	0.	16.	64	39- 98
Acenaphthene	25.	0.	19.	76	46-118
2,4-Dinitrotoluene	25.	0.	14.	56	24- 96
Pyrene	25.	0.	17.	68	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	28.	17.	61	13	28	36- 97
n-Nitroso-di-n-propylam	28.	18.	64	12	38	41-116
1,2,4-Trichlorobenzene	28.	17.	61	6	28	39- 98
Acenaphthene	28.	18.	64	5	31	46-118
2,4-Dinitrotoluene	28.	13.	46	7	38	24- 96
Pyrene	28.	20.	71	16	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

3A

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,1 Dichloroethene	50	0	37	74	61-145
Trichloroethene	50	0	44	89	71-120
Benzene	50	0	46	91	76-127
Toluene	50	0	50	100	76-125
Chlorobenzene	50	0	49	97	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

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FORM III VOA

3C

WATER SEMI-VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,4 Dichlorobenzene	25	0	16	63	36-97
N-Nitroso-di-n-propylamine	25	0	14	57	41-116
1,2,4 Trichlorobenzene	25	0	15	61	39-98
Acenaphthene	25	0	15	60	46-118
2,4 Dinitrotoluene	25	0	12	48	24-96
Pyrene	25	0	22	87	26-127

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 6 outside limits

Comments: _____

_____

_____

FORM III SV-1

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

0218F01 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGDIM0110 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		322228.8750		307755.4370		4.6		P
Antimony	60.0	15.3771	B	13.4845	B	13.1		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium		6530.2949		6212.8174		5.0		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium		782.0043		741.0913		5.4		P
Cobalt								NR
Copper		1010.5567		941.1747		7.1		P
Iron		940953.9100		965516.5000		2.6		P
Lead		44.2568		35.3975		22.2	*	P
Magnesium								NR
Manganese		11497.9820		12582.9000		9.0		P
Mercury								NR
Nickel	40.0	1.0000	U	1.0000	U			P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium		500.6099		476.6815		4.9		P
Zinc		2456.4351		2390.0884		2.7		P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGDIM0110F D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	19.7038	B	24.5286	B	21.8		P
Antimony	60.0	2.5000	U	2.5000	U			P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	286.2757		288.1596		0.7		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	3.6000	U			P
Cobalt								NR
Copper	25.0	1.8007	B	2.3799	B	27.7		P
Iron		810.6653		830.8408		2.5		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese		398.2062		401.0252		0.7		P
Mercury								NR
Nickel	40.0	1.0000	U	1.0000	U			P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	3.1000	U	3.1000	U			P
Zinc	20.0	0.5000	U	0.5000	U			P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGUSH8601 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.4597		0.4263		7.5		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGUSH8601 FD

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.0279	B	0.0130	U	200.0		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGUSH8611 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	986.1309		963.4279		2.3		P
Antimony	60.0	11.4934	B	11.1160	B	3.3		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	748.7143		730.4109		2.5		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium		892.5408		853.0939		4.5		P
Cobalt								NR
Copper	25.0	112.4329		108.8427		3.2		P
Iron		8797.6836		8516.3106		3.3		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese		32582.9780		31611.3400		3.0		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel		1550.3503		1499.6748		3.3		P
Potassium								NR
Selenium	5.0	6.3693		5.6659		11.7		P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	11.0726	B	10.4900	B	5.4		P
Zinc		2952.9243		2851.3023		3.5		P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGUSH8611 F D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	12.8000	U	12.8000	U			P
Antimony	60.0	2.5000	U	2.5000	U			P
Arsenic	10.0	2.4384	B	2.2000	U	200.0		P
Barium	200.0	779.2368		802.8721		3.0		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	3.6000	U			P
Cobalt								NR
Copper	25.0	1.4000	U	5.2203	B	200.0		P
Iron	100.0	76.2012	B	80.9242	B	6.0		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese		5900.9790		6070.9058		2.8		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel	40.0	126.5838		130.4927		3.0		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	3.1000	U	3.1000	U			P
Zinc		233.8365		245.5197		4.9		P
Boron								NR

U.S. EPA - CLP

6
DUPLICATES

MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols								
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments _____

FORM VI - CONV

U.S. EPA - CLP

6
DUPLICATES

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols	20	4		3.4		16.2		
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide								
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments _____

FORM VI - CONV

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

0218F01 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.7684		0.0291	B	2.00	87.0		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0110 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		320842.8430		322228.8750		2000.00	-69.3		P
Antimony	75-125	75.9579		15.3771	B	500.00	12.1	N	P
Arsenic	75-125	2.2000	U	2.2000	U	40.00	0.0	N	P
Barium	75-125	8154.9023		6530.2949		2000.00	81.2		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	968.5664		782.0043		200.00	93.3		P
Cobalt									NR
Copper		1218.5710		1010.5567		250.00	83.2		P
Iron		267780.6250		940953.9100		1000.00	-9999.9		P
Lead	75-125	53.7752		44.2568		20.00	47.6	N	P
Magnesium									NR
Manganese		8596.6074		11497.9820		500.00	-580.3		P
Mercury									NR
Nickel	75-125	84.4760		1.0000	U	500.00	16.9	N	P
Potassium									NR
Selenium	75-125	2.5000	U	2.5000	U	10.00	0.0	N	P
Silver	75-125	1.8000	U	1.8000	U	50.00	0.0	N	P
Sodium									NR
Thallium									NR
Vanadium	75-125	913.3826		500.6099		500.00	82.6		P
Zinc		2866.7685		2456.4351		500.00	82.1		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0110F S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1933.9120		19.7038	B	2000.00	95.7		P
Antimony	75-125	415.6575		2.5000	U	500.00	83.1		P
Arsenic	75-125	27.5098		2.2000	U	40.00	68.8	N	P
Barium	75-125	2226.5410		286.2757		2000.00	97.0		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	202.7257		3.6000	U	200.00	101.4		P
Cobalt									NR
Copper	75-125	248.1586		1.8007	B	250.00	98.5		P
Iron	75-125	1799.0435		810.6653		1000.00	98.8		P
Lead	75-125	14.2594		1.3000	U	20.00	71.3	N	P
Magnesium									NR
Manganese	75-125	867.2140		398.2062		500.00	93.8		P
Mercury									NR
Nickel	75-125	462.5798		1.0000	U	500.00	92.5		P
Potassium									NR
Selenium	75-125	3.0464	B	2.5000	U	10.00	30.5	N	P
Silver	75-125	23.5023		1.8000	U	50.00	47.0	N	P
Sodium									NR
Thallium									NR
Vanadium	75-125	456.2089		3.1000	U	500.00	91.2		P
Zinc	75-125	457.0108		0.5000	U	500.00	91.4		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8601 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	2.0620		0.4597		2.00	80.1		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8601 FS

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.4010		0.0279	B	2.00	68.7	N	AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8611 F S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2051.5864		12.8000	U	2000.00	102.6		P
Antimony	75-125	440.5218		2.5000	U	500.00	88.1		P
Arsenic	75-125	30.4161		2.4384	B	40.00	69.9	N	P
Barium	75-125	2873.9145		779.2368		2000.00	104.7		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	213.9018		3.6000	U	200.00	107.0		P
Cobalt									NR
Copper	75-125	264.9052		1.4000	U	250.00	106.0		P
Iron	75-125	1070.1103		76.2012	B	1000.00	99.4		P
Lead	75-125	19.5771		1.3000	U	20.00	97.9		P
Magnesium									NR
Manganese		6768.7188		5900.9790		500.00	173.5		P
Mercury	75-125	0.8729		0.0130	U	2.00	43.6	N	AV
Nickel	75-125	627.5800		126.5838		500.00	100.2		P
Potassium									NR
Selenium	75-125	11.9784		2.5000	U	10.00	119.8		P
Silver	75-125	44.8981		1.8000	U	50.00	89.8		P
Sodium									NR
Thallium									NR
Vanadium	75-125	479.9049		3.1000	U	500.00	96.0		P
Zinc	75-125	786.9419		233.8365		500.00	110.6		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8611 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2909.7793		986.1309		2000.00	96.2		P
Antimony	75-125	418.8396		11.4934	B	500.00	81.5		P
Arsenic	75-125	2.2000	U	2.2000	U	40.00	0.0	N	P
Barium	75-125	2686.8137		748.7143		2000.00	96.9		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		1136.9940		892.5408		200.00	122.2		P
Cobalt									NR
Copper	75-125	354.6207		112.4329		250.00	96.9		P
Iron		9682.7930		8797.6836		1000.00	88.5		P
Lead	75-125	14.1904		1.3000	U	20.00	71.0	N	P
Magnesium									NR
Manganese		23590.5781		32582.9780		500.00	-1798.5		P
Mercury	75-125	1.0000		0.0445	B	2.00	47.8	N	AV
Nickel	75-125	1950.5166		1550.3503		500.00	80.0		P
Potassium									NR
Selenium	75-125	13.2600		6.3693		10.00	68.9	N	P
Silver	75-125	40.2120		1.8000	U	50.00	80.4		P
Sodium									NR
Thallium									NR
Vanadium	75-125	452.6183		11.0726	B	500.00	88.3		P
Zinc		3302.9634		2952.9243		500.00	70.0		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0110 A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		323332.38		322228.88		4000.0	27.6		P
Antimony		868.96		15.38	B	1000.0	85.4		P
Arsenic		2.20		2.20	U	80.0	0.0		P
Barium		9786.28		6530.29		4000.0	81.4		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		1222.31		782.00		400.0	110.1		P
Cobalt									NR
Copper		1544.10		1010.56		500.0	106.7		P
Iron		267752.69		940953.91		200000.0	-336.6		P
Lead		69.51		44.26		40.0	63.1		P
Magnesium									NR
Manganese		10561.51		11497.98		10000.0	-9.4		P
Mercury									NR
Nickel		461.89		1.00	U	1000.0	46.2		P
Potassium									NR
Selenium		2.50		2.50	U	20.0	0.0		P
Silver		2.79		1.80	U	100.0	2.8		P
Sodium									NR
Thallium									NR
Vanadium		1444.44		500.61		1000.0	94.4		P
Zinc		3409.33		2456.44		1000.0	95.3		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0110F A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3871.09		19.70	B	4000.0	96.3		P
Antimony		821.66		2.50	U	1000.0	82.2		P
Arsenic		71.96		2.20	U	80.0	89.9		P
Barium		4131.53		286.28		4000.0	96.1		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		406.45		3.60	U	400.0	101.6		P
Cobalt									NR
Copper		498.97		1.80	B	500.0	99.4		P
Iron		2766.55		810.67		2000.0	97.8		P
Lead		31.88		1.30	U	40.0	79.7		P
Magnesium									NR
Manganese		1326.18		398.21		1000.0	92.8		P
Mercury									NR
Nickel		939.62		1.00	U	1000.0	94.0		P
Potassium									NR
Selenium		15.14		2.50	U	20.0	75.7		P
Silver		83.82		1.80	U	100.0	83.8		P
Sodium									NR
Thallium									NR
Vanadium		919.29		3.10	U	1000.0	91.9		P
Zinc		957.62		0.50	U	1000.0	95.8		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGUSH8611 A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		4849.99		986.13		4000.0	96.6		P
Antimony		820.34		11.49	B	1000.0	80.9		P
Arsenic		43.38		2.20	U	80.0	54.2		P
Barium		4610.30		748.71		4000.0	96.5		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		1282.62		892.54		400.0	97.5		P
Cobalt									NR
Copper		612.80		112.43		500.0	100.1		P
Iron		10330.47		8797.68		2000.0	76.6		P
Lead		34.17		1.30	U	40.0	85.4		P
Magnesium									NR
Manganese		24115.49		32582.98		10000.0	-84.7		P
Mercury									NR
Nickel		2448.27		1550.35		1000.0	89.8		P
Potassium									NR
Selenium		25.78		6.37		20.0	97.0		P
Silver		81.71		1.80	U	100.0	81.7		P
Sodium									NR
Thallium									NR
Vanadium		913.88		11.07	B	1000.0	90.3		P
Zinc		3811.74		2952.92		1000.0	85.9		P
Boron									NR

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8611 F A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3960.16		12.80	U	4000.0	99.0		P
Antimony		855.70		2.50	U	1000.0	85.6		P
Arsenic		70.83		2.44	B	80.0	85.5		P
Barium		4723.64		779.24		4000.0	98.6		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		420.97		3.60	U	400.0	105.2		P
Cobalt									NR
Copper		518.11		1.40	U	500.0	103.6		P
Iron		2041.68		76.20	B	2000.0	98.3		P
Lead		36.42		1.30	U	40.0	91.1		P
Magnesium									NR
Manganese		6966.80		5900.98		1000.0	106.6		P
Mercury									NR
Nickel		1126.30		126.58		1000.0	100.0		P
Potassium									NR
Selenium		17.14		2.50	U	20.0	85.7		P
Silver		88.30		1.80	U	100.0	88.3		P
Sodium									NR
Thallium									NR
Vanadium		951.09		3.10	U	1000.0	95.1		P
Zinc		1277.68		233.84		1000.0	104.4		P
Boron									NR

Comments:

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	79		10	U	100	79		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	75-125	62		4		60	97		
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide									
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CB082 Lab Sample ID: VBLK01

Date Analyzed: 02/26/03 Time Analyzed: 10:16

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGDIM0117	MEGDIM0117	C0571	11:14
2	MEGDD0243	MEGDD0243	C0572	11:41
3	MEGDD0238	MEGDD0238	C0573	12:08
4	MEGDD014	MEGDD014	C0574	12:35
5	TB030218	TB030218	C0577	13:56
6	MEGDIM0110	MEGDIM0110	C0578	14:23
7	MEGUSH8601	MEGUSH8601	C0579	14:50
8	MEGDD0121	MEGDD0121	C0580	15:17
9	MEGDIM0128	MEGDIM0128	C0584	17:05
10	MEGDIM0128 MS	MEGDIM0128 MS	C0586	17:59
11	MEGDIM0128 MSD	MEGDIM0128 MSD	C0587	18:26
12	VMSB	VMSB	C0588	18:53
13	MEGDD0129	MEGDD0129	C0589	19:20
14	DUP021803	DUP021803	C0590	19:48
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: VBLK01
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB082
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CB083 Lab Sample ID: VBLK02

Date Analyzed: 02/27/03 Time Analyzed: 11:02

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGSH0121	MEGSH0121	C0593	11:29
2	MEGDD0115	MEGDD0115	C0595	12:23
3	MEGDD0123	MEGDD0123	C0596	12:50
4	MEGUSH8611	MEGUSH8611	C0597	13:17
5	MEGDD0132	MEGDD0132	C0598	13:44
6	MEGDD0131	MEGDD0131	C0599	14:11
7	DUP022003	DUP022003	C0600	14:38
8	MEGUSH8616	MEGUSH8616	C0601	15:05
9	TB030224	TB030224	C0602	15:32
10	TB030220	TB030220	C0609	18:41
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COMMENTS:

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: VBLK02
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB083
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: B0477 Lab Sample ID: WBLK 2/20/03

Instrument ID: 5973 B Date Extracted: 02/20/03

Matrix: (soil/water) WATER Date Analyzed: 02/28/03

Level: (low/med) LOW Time Analyzed: 14:23

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDIM0117	MEGDIM0117	B0479	02/28/03
2	MEGDD0243	MEGDD0243	B0480	02/28/03
3	MEGDD0238	MEGDD0238	B0481	02/28/03
4	MEGDD014	MEGDD014	B0539	03/17/03
5	MEGDD0129	MEGDD0129	B0540	03/17/03
6	DUP021803	DUP021803	B0541	03/17/03
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/20/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0477

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: B0562 Lab Sample ID: WBLK 2/24/03

Instrument ID: 5973 B Date Extracted: 02/24/03

Matrix: (soil/water) WATER Date Analyzed: 03/18/03

Level:(low/med) LOW Time Analyzed: 19:37

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	WMSB	WMSB 2/24/03	B0537	03/17/03
2	MEGDIM0110	MEGDIM0110	B0542	03/17/03
3	MEGUSH8601	MEGUSH8601	B0543	03/17/03
4	MEGDD0121	MEGDD0121	B0544	03/17/03
5	MEGDD0123	MEGDD0123	B0563	03/18/03
6	MEGDD0115	MEGDD0115	B0564	03/18/03
7	MEGDIM018	MEGDIM0128	B0565	03/18/03
8	MEGDIM0128 MS	MEGDIM0128MS	B0566	03/18/03
9	MEGDIM0128 MSD	MEGDIM0128MSD	B0567	03/19/03
10	MEGDSH0121	MEGDSH0121	B0595	03/24/03
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/24/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0562

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: B0538 Lab Sample ID: WBLK 2/26/03

Instrument ID: 5973 B Date Extracted: 02/26/03

Matrix: (soil/water) WATER Date Analyzed: 03/17/03

Level: (low/med) LOW Time Analyzed: 18:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGUSH8611	MEGUSH8611	B0568	03/19/03
2	MEGCD0131	MEGCD0131	B0569	03/19/03
3	DUP022003	DUP022003	B0570	03/19/03
4	MEGUSH8616	MEGUSH8616	B0579	03/19/03
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30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/26/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0538

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	2.5	B	2.5	U	2.5	U	2.5	U	2.500	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	1.6	B	4.0	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	9.0	B	4.2	B	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	3.405	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.1	B	0.1	U					0.130	U	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	1.067	B	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U	12.8	U	12.8	U			P
Antimony			3.7	B	2.5	U	2.5	U			P
Arsenic			3.7	B	2.2	U	2.5	B			P
Barium			4.9	B	5.2	B	5.4	B			P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U	3.6	U	3.6	U			P
Cobalt											
Copper			1.4	U	1.4	U	1.4	U			P
Iron			1.0	U	1.0	U	1.0	U			P
Lead			2.0	B	1.3	U	1.3	U			P
Magnesium											
Manganese			0.3	U	0.3	U	0.3	U			P
Mercury											
Nickel			1.0	U	1.0	U	1.0	U			P
Potassium											
Selenium			2.5	U	2.5	U	2.5	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium											
Thallium											
Vanadium			3.1	U	3.1	U	3.1	U			P
Zinc			0.5	U	0.5	U	0.5	U			P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	2.5	U	2.5	U	2.5	U	3.8	B	2.500	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.7	B	1.4	B	1.4	U	1.400	U	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	2.894	B	P
Lead	1.8	B	1.3	U	1.3	U	1.5	B	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.0	B	0.1	B	0.0	B	0.1	B	0.130	U	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U	12.8	U	12.8	U			P
Antimony			2.5	U	2.5	U	2.5	U			P
Arsenic			2.2	U	2.2	U	2.7	B			P
Barium			0.5	U	0.5	U	0.5	U			P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U	3.6	U	3.6	U			P
Cobalt											
Copper			1.4	U	1.4	U	1.4	U			P
Iron			1.0	U	1.0	U	1.0	U			P
Lead			1.5	B	1.3	U	1.3	U			P
Magnesium											
Manganese			0.3	U	0.3	U	0.3	U			P
Mercury			0.0	U					0.130	U	AV
Nickel			1.0	U	1.0	U	1.0	U			P
Potassium											
Selenium			2.5	U	2.5	U	2.5	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium											
Thallium											
Vanadium			3.1	U	3.1	U	3.1	U			P
Zinc			0.5	U	0.5	U	0.5	U			P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U							P
Antimony			2.5	U							P
Arsenic			2.7	B							P
Barium			0.5	U							P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U							P
Cobalt											
Copper			1.4	U							P
Iron			1.0	U							P
Lead			1.3	U							P
Magnesium											
Manganese			0.3	U							P
Mercury	0.0	B	0.0	B	0.1	B	0.0	B			AV
Nickel			1.0	U							P
Potassium											
Selenium			2.5	U							P
Silver			1.8	U							P
Sodium											
Thallium											
Vanadium			3.1	U							P
Zinc			0.5	U							P
Boron											

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols	2	U	2	U	2	U	2	U	2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

_____

_____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols			2	U							EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols											EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): CS082 Date Analyzed: 02/26/03
Instrument ID: H5970 C Time Analyzed: 09:49
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	5335.	8.37	43304.	9.78	38699.	15.22
	UPPER LIMIT	10670.	8.87	86608.	10.28	77398.	15.72
	LOWER LIMIT	2668.	7.87	21652.	9.28	19350.	14.72
	EPA SAMPLE NO.						
1	VBLK01	4027.	8.38	37062.	9.80	29958.	15.24
2	MEGDIM0117	4530.	8.36	37084.	9.82	31072.	15.21
3	MEGDD0243	4540.	8.40	36210.	9.81	33105.	15.25
4	MEGDD0238	4484.	8.39	35484.	9.80	30378.	15.24
5	MEGDD014	4629.	8.40	38582.	9.82	32880.	15.25
6	TB030218	4704.	8.34	36013.	9.76	33608.	15.19
7	MEGDIM0110	4953.	8.33	40860.	9.75	37329.	15.19
8	MEGUSH8601	4458.	8.33	31911.	9.78	29222.	15.18
9	MEGDD0121	5393.	8.33	42185.	9.75	36876.	15.19
10	MEGDIM0128	5523.	8.33	45722.	9.78	41731.	15.18
11	MEGDIM0128 MS	5503.	8.37	47123.	9.78	40513.	15.19
12	MEGDIM0128 MSD	6054.	8.33	44884.	9.78	40966.	15.18
13	VMSB	5252.	8.33	43276.	9.78	40069.	15.19
14	MEGDD0129	5451.	8.37	39054.	9.78	36525.	15.18
15	DUP021803	5074.	8.33	40743.	9.78	40147.	15.18
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): CS084 Date Analyzed: 02/27/03
Instrument ID: H5970 C Time Analyzed: 10:35
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	5559.	8.38	48925.	9.79	41031.	15.19
	UPPER LIMIT	11118.	8.88	97850.	10.29	82062.	15.69
	LOWER LIMIT	2780.	7.88	24463.	9.29	20516.	14.69
	EPA SAMPLE NO.						
1	VBLK02	5065.	8.37	37991.	9.79	34630.	15.19
2	MEGSH0121	5771.	8.37	46507.	9.78	43928.	15.18
3	MEGDD0115	5449.	8.37	46119.	9.79	43610.	15.19
4	MEGDD0123	5733.	8.38	46525.	9.79	43626.	15.19
5	MEGUSH8611	5611.	8.38	47341.	9.79	44101.	15.19
6	MEGDD0132	5734.	8.38	48492.	9.79	42720.	15.19
7	MEGDD0131	5236.	8.37	47569.	9.78	42593.	15.22
8	DUP022003	5450.	8.37	48059.	9.79	42060.	15.19
9	MEGUSH8616	5887.	8.37	47482.	9.78	41158.	15.22
10	TB030224	5288.	8.37	43444.	9.79	38577.	15.22
11	TB030220	5489.	8.40	44894.	9.81	41832.	15.22
12							
13							
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17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	100487.	10.11	239201.	14.42	158142.	20.07
	UPPER LIMIT	200974.	10.61	478402.	14.92	316284.	20.57
	LOWER LIMIT	50244.	9.61	119601.	13.92	79071.	19.57
	EPA SAMPLE NO.						
1	WBLK01	129051.	10.07	321373.	14.37	203995.	20.03
2	MEGDIM0117	71067.	10.06	175742.	14.36	115894.	20.01
3	MEGDD0243	91466.	10.06	226637.	14.37	148853.	20.01
4	MEGDD0238	76027.	10.06	187667.	14.37	118993.	20.02
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21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	324856.	24.51	330846.	32.47	364804.	36.41
	UPPER LIMIT	649712.	25.01	661692.	32.97	729608.	36.91
	LOWER LIMIT	162428.	24.01	165423.	31.97	182402.	35.91
	EPA SAMPLE NO.						
1	WBLK01	411442.	24.46	456758.	32.42	571066.	36.37
2	MEGDIM0117	230282.	24.46	257032.	32.41	294572.	36.37
3	MEGDD0243	300186.	24.46	331729.	32.41	376358.	36.37
4	MEGDD0238	247105.	24.46	263548.	32.41	311390.	36.37
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS073 Date Analyzed: 03/17/03
Instrument ID: 5973 B Time Analyzed: 15:59

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	65206.	9.22	178036.	13.51	107594.	19.19
	UPPER LIMIT	130412.	9.72	356072.	14.01	215188.	19.69
	LOWER LIMIT	32603.	8.72	89018.	13.01	53797.	18.69
	EPA SAMPLE NO.						
1	WMSB	58082.	9.16	145034.	13.45	100431.	19.13
2	WBLK03	52014.	9.17	140518.	13.46	99540.	19.14
3	MEGDD014	53807.	9.17	154227.	13.46	107299.	19.14
4	MEGDD0129	55631.	9.17	155222.	13.46	98905.	19.14
5	DUP021803	47919.	9.17	135332.	13.46	91429.	19.14
6	MEGDIM0110	48604.	9.17	137384.	13.46	87940.	19.14
7	MEGUSH8601	65001.	9.17	173590.	13.45	114571.	19.14
8	MEGDD0121	54067.	9.17	148243.	13.45	100950.	19.13
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS073 Date Analyzed: 03/17/03
Instrument ID: 5973 B Time Analyzed: 15:59

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	217182.		23.61		300629.		31.53		468473.		35.47	
	UPPER LIMIT	434364.		24.11		601258.		32.03		936946.		35.97	
	LOWER LIMIT	108591.		23.11		150315.		31.03		234237.		34.97	
	EPA SAMPLE NO.												
1	WMSB	169967.		23.55		205185.		31.47		295073.		35.40	
2	WBLK03	187305.		23.56		206298.		31.47		293304.		35.40	
3	MEGDD014	202885.		23.56		262365.		31.47		388026.		35.40	
4	MEGDD0129	181043.		23.56		196250.		31.47		343732.		35.40	
5	DUP021803	167421.		23.56		195633.		31.47		381582.		35.40	
6	MEGDIM0110	154983.		23.56		197957.		31.47		385331.		35.40	
7	MEGUSH8601	214523.		23.56		252161.		31.47		401430.		35.40	
8	MEGDD0121	188322.		23.56		224173.		31.47		352601.		35.40	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS074 Date Analyzed: 03/18/03
Instrument ID: 5973 B Time Analyzed: 18:39

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	70859.		9.16		186040.		13.44		111672.		19.12	
	UPPER LIMIT	141718.		9.66		372080.		13.94		223344.		19.62	
	LOWER LIMIT	35430.		8.66		93020.		12.94		55836.		18.62	
	EPA SAMPLE NO.												
1	WBLK02	63473.		9.17		159731.		13.44		104469.		19.12	
2	MEGDD0123	53861.		9.17		157346.		13.44		101555.		19.12	
3	MEGDD0115	66159.		9.15		180301.		13.44		112176.		19.12	
4	MEGDIM0128	59161.		9.17		168747.		13.44		108857.		19.12	
5	MEGDIM0128 MS	64688.		9.16		167704.		13.44		104397.		19.12	
6	MEGDIM0128 MSD	56097.		9.17		143454.		13.44		101874.		19.12	
7	MEGUSH8611	56467.		9.14		153390.		13.43		95509.		19.12	
8	MEGCD0131	48233.		9.16		137988.		13.44		89315.		19.12	
9	DUP022003	50971.		9.17		132691.		13.44		99377.		19.12	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS074 Date Analyzed: 03/18/03
Instrument ID: 5973 B Time Analyzed: 18:39

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	215062.		23.55		275311.		31.47		403294.		35.40	
	UPPER LIMIT	430124.		24.05		550622.		31.97		806588.		35.90	
	LOWER LIMIT	107531.		23.05		137656.		30.97		201647.		34.90	
	EPA SAMPLE NO.												
1	WBLK02	178234.		23.55		194576.		31.46		320024.		35.40	
2	MEGDD0123	190138.		23.55		220564.		31.47		354347.		35.40	
3	MEGDD0115	210667.		23.55		242406.		31.47		352753.		35.40	
4	MEGDIM0128	214925.		23.54		238012.		31.47		374601.		35.40	
5	MEGDIM0128 MS	192043.		23.54		249583.		31.46		378776.		35.40	
6	MEGDIM0128 MSD	183177.		23.54		216801.		31.46		345194.		35.40	
7	MEGUSH8611	177871.		23.54		298429.		31.47		409237.		35.40	
8	MEGCD0131	160835.		23.54		224536.		31.46		340441.		35.39	
9	DUP022003	182701.		23.54		206692.		31.45		372113.		35.40	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS075 Date Analyzed: 03/19/03
Instrument ID: 5973 B Time Analyzed: 09:35

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	71405.	9.12	197149.	13.39	126590.	19.07
	UPPER LIMIT	142810.	9.62	394298.	13.89	253180.	19.57
	LOWER LIMIT	35703.	8.62	98575.	12.89	63295.	18.57
	EPA SAMPLE NO.						
1	MEGUSH8616	54887.	9.07	147060.	13.35	103947.	19.04
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
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RT LOWER LIMIT = - .50 minutes of internal standard RT

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8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS075 Date Analyzed: 03/19/03
Instrument ID: 5973 B Time Analyzed: 09:35

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	243086.		23.49		254537.		31.41		440087.		35.34	
	UPPER LIMIT	486172.		23.99		509074.		31.91		880174.		35.84	
	LOWER LIMIT	121543.		22.99		127269.		30.91		220044.		34.84	
	EPA SAMPLE NO.												
1	MEGUSH8616	202521.		23.46		266785.		31.37		377449.		35.30	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS080 Date Analyzed: 03/24/03
Instrument ID: 5973 B Time Analyzed: 12:39

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	96926.		8.56		206498.		12.79		117787.		18.51	
	UPPER LIMIT	193852.		9.06		412996.		13.29		235574.		19.01	
	LOWER LIMIT	48463.		8.06		103249.		12.29		58894.		18.01	
	EPA SAMPLE NO.												
1	MEGDSH0121	76381.		8.53		180241.		12.77		109357.		18.49	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS080 Date Analyzed: 03/24/03
Instrument ID: 5973 B Time Analyzed: 12:39

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	181143.	22.92	146326.	30.81	181635.	34.74
	UPPER LIMIT	362286.	23.42	292652.	31.31	363270.	35.24
	LOWER LIMIT	90572.	22.42	73163.	30.31	90818.	34.24
	EPA SAMPLE NO.						
1	MEGDSH0121	174389.	22.91	136553.	30.80	198438.	34.72
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

PACKAGE

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Case Narrative

Client: URS Consultants, Inc. – NYSEG Mechanicville

Case: URS 0307

SDG: MEGCD0131

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MEGDIM0117	030218J-01	02/18/03	16:17	Water
MEGDD0243	030218J-02	02/18/03	16:17	Water
MEGDD0238	030218J-03	02/18/03	16:17	Water
MEGDD014	030218J-04	02/18/03	16:17	Water
MEGDD0129	030218J-05	02/18/03	16:17	Water
DUP021803	030218J-06	02/18/03	16:17	Water
TB030218	030218J-07	02/18/03	16:17	Water
MEGDIM0110	030220G-01	02/20/03	12:16	Water
MEGUSH8601	030220G-02	02/20/03	12:16	Water
MEGDD0121	030220G-03	02/20/03	12:16	Water
MEGDSH0121	030220G-04	02/20/03	12:16	Water
MEGDD0123	030220G-05	02/20/03	12:16	Water
MEGDD0115	030220G-06	02/20/03	12:16	Water
MEGDIM0128	030220G-07	02/20/03	12:16	Water
TB030220	030220G-08	02/20/03	12:16	Water
MEGUSH8611	030224C-01	02/24/03	16:35	Water
MEGDD0132	030224C-02	02/24/03	16:35	Water
MEGCD0131	030224C-03	02/24/03	16:35	Water
DUP022003	030224C-04	02/24/03	16:35	Water
MEGUSH8616	030224C-05	02/24/03	16:35	Water
TB030224	030224C-06	02/24/03	16:35	Water

Initially this project was received as a routine analysis. On 2/26/03 the samples were requested to have a NYSDEC ASP Category B data package supplied. At this time some of the analyses had been extracted and/or completed.

Volatile Organics

1) The samples were analyzed using EPA Method 8260 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %RSD for the compound Bromomethane in the initial calibration analyzed on 2/21/03 was outside the criteria established by the method. The %RSD for this compound was 25.3 %. The RRF for the compound Trichloroethene in the initial calibration analyzed on 2/21/03 was outside the required limits. The RRF for this compound was 0.283. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for these compounds.

3) The %D for the compound 1,2-Dichloroethane in the continuing calibration analyzed on 2/26/03 was outside the criteria established by the method. The %D for this compound was 27.2 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

4) Sample MEGDIM0128 (AES sample number 030220G-07) was used for the matrix spike and matrix spike duplicate analysis. All recoveries were within required limits.

5) The surrogate recovery for 1,2-Dichloroethane-d4 on sample MEGDD014 (AES sample number 030218J-04) was outside required limits. The recovery was just above the specified limits. This sample was not re-analyzed.

6) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed for Polynuclear Aromatic Hydrocarbons only using EPA Method 8270 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The RRF for the compound N-Nitroso-di-n-propylamine in the initial calibration analyzed on 12/17/02 was outside the required limits. The RRF for this compound was 0.494. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % or the specified RRF as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Terphenyl-d14 in the continuing calibration analyzed on 2/28/03 was outside the criteria established by the method. The %D for this compound was 25.9 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

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4) The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 3/18/03 was outside the required limits. The RRF for this compound was 0.472. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D's for the compounds Pyrene and Terphenyl-d14 in the continuing calibration analyzed on 3/24/03 were outside the criteria established by the method. The %D's for these compounds were 32.1 % and 37.9 %, respectively. The RRF for the compound N-Nitroso-di-n-propylamine in the continuing calibration analyzed on 3/24/03 was outside the required limits. The RRF for this compound was 0.404. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

6) Sample MEGDIM0128 (AES sample number 030220G-07) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within required limits.

7) The surrogate recovery for Nitrobenzene-d5 on sample MEGDSH0121 (AES sample number 030220G-04) was outside required limits. According to the protocol, one base/neutral surrogate may be outside specified limits with no further action necessary.

Inorganics – Total Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) The digested spike recoveries for the elements Antimony, Arsenic, Lead, Nickel, Selenium and Silver for sample MEGDIM0110 (AES sample number 030220G-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recovery for Antimony was within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

3) The digested spike recoveries for the elements Arsenic, Lead, Mercury and Selenium for sample MEGUSH8611 (AES sample number 030224C-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recoveries for Lead and Selenium were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

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4) The elements Chromium, Iron and Zinc for sample MEGDIM0110 (AES sample number 030220G-01) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol for the water samples. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

5) The %RPD recovery for Lead between sample MEGDIM0110 (AES sample number 030220G-01) and the duplicate sample was outside of the required 20 % acceptance limit. The results for this element are flagged with an "*" as required by the protocol.

Inorganics – Filtered Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) The digested spike recoveries for the elements Arsenic, Lead, Selenium and Silver for sample MEGDIM0110 filtered (AES sample number 030220G-01) were outside the required 75-125 % limits. A post digestion spike was performed and all recoveries were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

3) The digested spike recovery for the element Mercury for sample MEGUSH9601 filtered (AES sample number 030220G-02) was outside the required 75-125 % limits. The results for this element are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

4) The digested spike recoveries for the elements Arsenic and Mercury for sample MEGUSH8611 (AES sample number 030224C-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recovery for Arsenic was within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

Conventionals

1) Samples MEGDD0121 and MEGDIM0128 (AES sample numbers 030220G-03 and 030220G-07) were used for the Cyanide and Phenols matrix spike and duplicate analysis. All recoveries were within required limits.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 4/10/03

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Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
URS	646 Plank Road, Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Eriko Fujita	M'VILLE MGP SITE	EJL/CM
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309818944.5	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	MEGDIM0117 ✓J01	2/14/03	0830	(A)/P	W		x	7	See Below
002	MEGDD0243 ✓J02	2/13/03	1536	A/(P)	W		x	7	See Below
003	MEGDD0238 ✓J03	2/14/03	1300	(A)/P	W		x	6	See Below
004	MEGDD0114 ✓J04	2/18/03	1030	A/P	W		x	7	See Below
005	MEGDD0129 ✓J05	2/18/03	1130	A/P	W		x	7	See Below
006	DUP 02/18/03 J06	2/18/03	/	A/P	W		x	7	See Below
007	TB 030218 J07	2/18/03	/	A/P	TB		x	1	TCL VOCs 8260
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					

FD

030218 J

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks:
PAH - ~~8260~~ 8270
Total Phenols: 9065/420.1
TCL VOCs: 8260
Cyanide: Total 9012/335.3; Weak acid dissociable SM4500I
Metals: 6010 - RCRA 8 metals
-Samples 750NTU have seperate filtered sample.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Betty Hutton	2/18/03 - 3:00
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	M L	2/18/03 412

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	M'VILLE MGP SITE	EL/CM
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022	3030771945	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
G01	MEGDIM0110	2/18/03	1500 A/P	W		X	7	See Below
G02	MEGUSH8601	2/19/03	1000 A/P	W		X	7	
G03	MEGDD0121	2/19/03	1240 A/P	W		X	7	
G04	MEGDSH0121	2/19/03	1325 A/P	W		X	7	
G05	MEGDD0123	2/19/03	1510 A/P	W		X	7	
G06	MEGDD0115	2/20/03	0900 A/P	W		X	7	
G07	MEGDIM0128	2/20/03	0915 A/P	W		X	6	
	MS 030219	2/20/03	0915 A/P	W		X	6	
	MSD 030219	2/20/03	0915 A/P	W		X	6	
G08	TB 030220	2/20/03	/ A/P	TB W		X	1	TCL VOCs 8260
			A/P					
			A/P					
	030220 G		A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAH 8270
Total Phenols: 9065/420.1 ✓
TCL VOCs: 8260 ✓
Cyanide: Total 9012/335.3 Weak acid dissociable SM4500I ✓
Metals: 6010 - RCRA 8 metals ✓

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
	Betty	2/20/03 0935
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	M L	2/20/03 12 16

Temperature: Ambient or (Chilled)
Notes:

Properly Preserved: (Y) N
Notes:

Received Within Holding Times: (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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CHAIN OF CUSTODY RECORD

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NJ 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	M'VILLE MGP SITE	Eric Lavendusky
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T194#5	EJF

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
030224 (*) C01	MEGUSHB611	2/20/03	1515 A/P	W		X	7	See Below
C02	MEGDD0132	2/21/03	1030 A/P	W		X	5	Phenols, TCL VOCs, Metals, Cyanide
C03	MEGCD0131	2/21/03	1000 A/P	W		X	7	See Below
C04 (*)	DUP-02/20/03	2/20/03	— A/P	W		X	7	See Below
C05	MEGUSHB616	2/24/03	1430 A/P	W		X	6	See Below
C06	TB 030224	2/24/03	/ A/P	TB		X	1	TCL VOCs 8260
			A/P					
* Field Dup			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs (TCL): 8260
PAHs - 8270
Phenols: 9065/420.1
Cyanide: total 9012/335.3, Weak acid dissociable SM4500I
Metals: 6010 - 8 RCRA Metals - @ >50NTU samples have filtered samples.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJF	Betty Sullivan	2/24/03 1535
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	MLP	2/24/03 1535

Temperature: Ambient or (Chilled)
Notes:

Properly Preserved: (Y) N
Notes:

Received Within Holding Times: (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030218 J

Sample # 030218 J01 Client Sample ID MEGDIM0117 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML		2/18/03 17:00				VOA
2	↓		↓				↓
3	ML		2/20/03 11:00		ML	2/25/03 8:00	CN-
4	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals Hg
5	↓	↓	↓	↓	↓	↓	Filt. Hg
6	ML		2.25.03 7:30		ML	2.25.03 8:00	PAH
7	ML	S. Sisko	2/20/03 11:00				PAH
4	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals ICP
5	↓	↓	↓		↓	↓	Filt. Metals

Sample # 030218 J02 Client Sample ID MEGDD0243 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML		2/18/03 17:00				VOA
2	↓		↓				↓
3	ML		2/25/03 11:00		ML	2/25/03 7:00	CN-
4	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals Hg
5	↓	↓	↓	↓	↓	↓	Filt. Hg
6	ML		2.25.03 7:30		ML	2.25.03 8:00	PAH
7	ML	S. Sisko	2/20/03 11:00				PAH
4	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals ICP
5	↓	↓	↓	↓	↓	↓	Filt. Metals

Sample # 030218 J03 Client Sample ID MEGDD0238 # Bottles: 6

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML		2/18/03 17:00				VOA
2	↓		↓				↓
3	ML		2/25/03 11:00		ML	2/25/03 7:00	CN-
4	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals Hg
5	ML		2.25.03 7:30		ML	2.25.03 8:00	PAH
6	ML	S. Sisko	2/20/03 11:00				PAH
4	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals ICP

Sample # 030218 J04 Client Sample ID MEGDD014 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1							
2	ML		2.25.03 7:30		ML	2.25.03 8:00	PAH
3	ML		2/18/03 17:00				VOA
4	↓	↓	↓				↓
5	ML		2/20/03 9:00		ML	2/20/03 11:00	Metals Hg

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030218 J

Sample # 030218 J04 Client Sample ID MEGDD014 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
6	M L	Mark Cook	2/25/03 1100	Mark Cook	M L	2/25/03 1700	CN -
7	M L	S. Sada	2/24/03 1100				PAH
5	M L	S Rich	2/24/03 9:00	S Rich	M L	2/24/03 11:00	Metals Hg

Sample # 030218 J05 Client Sample ID MEGDD0129 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M L	A Jamison	2/18/03 1700				VOA
2	↓	↓	↓				↓
3	M L	Mark Cook	2/25/03 1100	Mark Cook	M L	2/25/03 1700	CN
4	M L	S Rich	2/24/03 9:00	S Rich	M L	2/24/03 11:00	Metals Hg
5	↓	↓	↓	↓	↓	↓	Bulk Asb
6	M L	Kim	2.25.03 730	Kim	M L	2.25.03 800	Phenols
7	M L	S Sada	2/24/03 1100				PAH
4	M L	S Rich	2/24/03 9:00	S Rich	M L	2/24/03 11:00	Metals TCLP
5	↓	↓	↓	↓	↓	↓	Pest Mon

Sample # 030218 J06 Client Sample ID DUP 02/18/03 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M L	S Rich	2/24/03 9:00	S Rich	M L	2/24/03 11:00	Metals Hg
2	↓	↓	↓	↓	↓	↓	↓
3	M L	A Jamison	2/18/03 1700				VOA
4	↓	↓	↓				↓
5	M L	Mark Cook	2/25/03 1100	Mark Cook	M L	2/25/03 1700	CN -
6	M L	Kim	2.25.03 730	Kim	M L	2.25.03 800	Phenols
7	M L	S Sada	2/24/03 1100				PAH
1	M L	S Rich	2/24/03 9:00	S Rich	M L	2/24/03 11:00	Metals TCLP
2	↓	↓	↓				↓

Sample # 030218 J07 Client Sample ID TB 030218 # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	M L	A Jamison	2/18/03 1700				VOA

***** End Chain of Custody Form *****

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030220 G

Sample # 030220 G01 Client Sample ID MEGDIM0110 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/20/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	2/26/03 1100	[illegible]	ML	2/26/03 1700	CN-
4	ML	[illegible]	2/21/03 9:00	[illegible]	ML	2/21/03 11:00	Metals-Hg
5	ML	[illegible]	2/21/03 9:00	[illegible]	ML	2/21/03 11:00	Metals-Filt Hg
6	ML	[illegible]	2·26·03 830	[illegible]	ML	2·26·03 830	PAH 01
7	ML	[illegible]	2/24/03 1100				PAH
4	ML	[illegible]	3/3/03 9:00	[illegible]	ML	3/3/03 11:00	Metals-Hg
5	ML	[illegible]	3/3/03 9:00	[illegible]	ML	3/3/03 11:00	Metals Filt

Sample # 030220 G02 Client Sample ID MEGUSH8601 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/20/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	2/26/03 1100	[illegible]	ML	2/26/03 1700	CN-
4	ML	[illegible]	2/21/03 9:00	[illegible]	ML	2/21/03 11:00	Metals-Hg
5	ML	[illegible]	2/21/03 9:00	[illegible]	ML	2/21/03 11:00	Filt Hg
6	ML	[illegible]	3·3·03 745	[illegible]	ML	3·3·03 815	PAH 01
7	ML	[illegible]	2/24/03 1100				PAH
4	ML	[illegible]	3/3/03 9:00	[illegible]	ML	3/3/03 11:00	Metals-Hg
5	↓	↓	↓	↓	↓	↓	Filt Metals

Sample # 030220 G03 Client Sample ID MEGDD0121 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/20/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	2/26/03 1100	[illegible]	ML	2/26/03 1700	CN-
4	ML	[illegible]	2/21/03 9:00	[illegible]	ML	2/21/03 11:00	Metals-Hg
5	↓	↓	2/21/03 9:00	[illegible]	ML	↓	Filt Hg
6	ML	[illegible]	3·3·03 745	[illegible]	ML	3·3·03 815	PAH 01
7	ML	[illegible]	2/24/03 1100				PAH
4	ML	[illegible]	3/3/03 9:00	[illegible]	ML	3/3/03 11:00	Metals-Hg
5	↓	↓	↓	↓	↓	↓	Filt Metals

Sample # 030220 G04 Client Sample ID MEGDSH0121 # Bottles: 7

Bottle	Out Relinquished	Out Received	Out Date/Time	Back Relinquished	Back Received	Back Date/Time	Analysis
1	ML	[illegible]	2/20/03 16:00				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	3·3·03 745	[illegible]	ML	3·3·03 815	PAH 01
4	ML	[illegible]	2/21/03 9:00	[illegible]	ML	2/21/03 11:00	Metals-Hg

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030220 G

Sample # 030220 G04 Client Sample ID MEGDSH0121 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
5	ML	S. Fitch	2/24/03 9:00	S. Fitch	ML	2/4/03 11:00	Metals Hg
6							
7	ML	S. Sala	2/24/03 1100				PAH
7	ML	Mark Cuff	2/26/03 1100	Mark Cuff	ML	2/26/03 1700	CN -
4	ML	S. Fitch	3/3/03 9:00	S. Fitch	ML	3/3/03 11:00	Metals Hg
5	↓	↓	↓	↓	ML	↓	Hg Metals

Sample # 030220 G05 Client Sample ID MEGDD0123 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	A. Jamieson	2/20/03 1600				VOA
2	↓	↓	↓				↓
3	ML	S. Fitch	2/21/03 9:00	S. Fitch	ML	2/21/03 11:00	Metals Hg
4	↓	↓	↓			↓	Hg Metals
5	ML	Mark Cuff	2/26/03 1100	Mark Cuff	ML	2/26/03 1700	CN -
6	ML	[illegible]	3/3/03 745	[illegible]	ML	3/3/03 815	Phenols
7	ML	S. Sala	2/24/03 1100				PAH
3	ML	S. Fitch	3/3/03 9:00	S. Fitch	ML	3/3/03 11:00	Metals Hg
4	↓	↓	↓	↓	↓	↓	Hg Metals

Sample # 030220 G06 Client Sample ID MEGDD0115 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	A. Jamieson	2/20/03 1600				VOA
2	↓	↓	↓				↓
3	ML	Mark Cuff	2/26/03 1100	Mark Cuff	ML	2/26/03 1700	CN -
4	ML	S. Fitch	2/21/03 9:00	S. Fitch	ML	2/21/03 11:00	Metals Hg
5	↓	↓	↓	↓	↓	↓	Hg Metals
6	ML	[illegible]	3/3/03 745	[illegible]	ML	3/3/03 815	Phenols
7	ML	S. Sala	2/24/03 1100				PAH
4	ML	S. Fitch	3/3/03 9:00	S. Fitch	ML	3/3/03 11:00	Metals Hg
5	↓	↓	↓	↓	ML	↓	Hg Metals

Sample # 030220 G07 Client Sample ID MEGDIM0128 # Bottles: 18

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	A. Jamieson	2/20/03 1600				VOA
2	↓	↓	↓				↓
3	↓	↓	↓				↓
4	↓	↓	↓				↓
5	↓	↓	↓				↓
6	↓	↓	↓				↓
7	ML	S. Sala	2/24/03 1100				PAH
8	↓	↓	↓				

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030220 G

Sample # 030220 G07 Client Sample ID **MEGDIM0128** # Bottles: 18

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
9	ML	S.Sidy	2/24/03 11:00				PAH
10	ML	Stadl	2/24/03 9:00	Stadl	ML	3/3/03 11:00	Metals 14
11	"	"	3/3/03 "	"	"	3/3/03	~~Bit Hg~~ Metals
12	ML	Hinn	3.3.03 7:45	Hinn	ML	3.3.03 8:45	
13							PCBs
14							
15							
16							
17							
18							

Sample # 030220 G08 Client Sample ID **Trip Blank** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[signature]	2/23/03 16:00				VOA

***** End Chain of Custody Form *****

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030224 C

Sample # 030224 C01 Client Sample ID MEGUSH8611 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/24/03 17:00				VOA
2	↓	[illegible]	2/26/03 1100	[illegible]	ML	2/26/03 1700	CN
3	ML	[illegible]	2/25/03 9:00	[illegible]	ML	2/25/03 11:00	Metals-H
4	ML	[illegible]	2/26/03 9:00	[illegible]	ML	3.5.03 1130	H-Tot. Pest.
5	ML	[illegible]	3.5.03 1100	[illegible]	ML		Phenol
6	ML	[illegible]	2/26/03 1200	[illegible]	ML		PAH
7	ML	[illegible]	3/3/03 9:00	[illegible]	ML	3/3/03 11:00	Metals
4	ML	[illegible]	↓	[illegible]	↓	↓	Tot. Met.
5	↓	↓		↓			
6							

Sample # 030224 C02 Client Sample ID MEGDD0132 # Bottles: 5

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/24/03 17:00				VOA
2	↓	[illegible]	2/26/03 1100	[illegible]	ML	2/26/03 1700	CN
3	ML	[illegible]	2/25/03 9:00	[illegible]	ML	2/25/03 11:00	Metals-H
4	ML	[illegible]	3/3/03 9:00	[illegible]	ML	3/3/03 11:00	Tot. Hg
5	↓	↓		↓	↓		Metals
4	ML	[illegible]	↓	[illegible]	ML	3/3/03 11:00	Tot. Metals
5	↓	↓		↓	↓		Phenol
6	ML	[illegible]	3.5.03 1100	[illegible]	ML	3.5.03 1130	PAH

Sample # 030224 C03 Client Sample ID MEGCD0131 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/24/03 17:00				VOA
2	↓	[illegible]	3/3/03 1100	[illegible]	ML	3/3/03 1700	CN
3	ML	[illegible]					
4							
5							
6	ML	[illegible]	3.5.03 1100	[illegible]	ML	3.5.03 1130	Phenol
7	ML	S. Sach	2/26/03 1200				PAH

Sample # 030224 C04 Client Sample ID DUP-02/20/03 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/24/03 17:00				VOA
2	↓	[illegible]	3/3/03 1400	[illegible]	ML	3/3/03 1700	CN
3	ML	[illegible]	3/25/03 9:00	[illegible]	ML	2/25/03 11:00	Hg
4	ML	[illegible]	↓	[illegible]	↓	↓	Tot. Hg
5	↓	↓		↓			Phenol
6	ML	[illegible]	3.5.03 1100	[illegible]	ML	3.5.03 1130	

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030224 C

Sample # 030224 C04 Client Sample ID DUP-02/20/03 # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
7	ML	S.Sala	2/26/03 12:00				PAH
4	ML		3/3/03 9:00		ML	3/3/03 11:00	Metals
5	↓	↓	↓	↓	↓	↓	Sulfide

Sample # 030224 C05 Client Sample ID MEGUSH8616 # Bottles: 6

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML		2/24/03 17:00				VOA
2	↓	↓	↓				↓
3	ML		3/3/03 11:00		ML	3/3/03 11:00	CN
4	ML		3/25/03 9:00		ML	3/25/03 11:30	NO3 NO2
5	ML		3.5.03 11:00		ML	3.5.03 11:30	Anions
6	ML	S.Sala	2/24/03 12:00				PAH
4	ML		3/3/03 9:00		ML	3/3/03 11:00	Metals

Sample # 030224 C06 Client Sample ID TB 030224 # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML		2/24/03 17:00				VOA

***** End Chain of Custody Form *****

VOLATILE ORGANICS

ANALYSIS

QC

SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	VBLK01	96	98	110		0
2	MEGDIM0117	108	111	110		0
3	MEGDD0243	99	108	113		0
4	MEGDD0238	106	112	101		0
5	MEGDD014	104	115	115 *		1
6	TB030218	101	102	99		0
7	MEGDIM0110	103	114	111		0
8	MEGUSH8601	102	110	110		0
9	MEGDD0121	108	115	109		0
10	MEGDIM0128	99	105	110		0
11	MEGDIM0128 MS	102	108	109		0
12	MEGDIM0128 MSD	103	109	96		0
13	VMSB	104	108	114		0
14	MEGDD0129	106	110	98		0
15	DUP021803	99	100	109		0
16	VBLK02	97	95	85		0
17	MEGSH0121	94	97	94		0
18	MEGDD0115	90	94	106		0
19	MEGDD0123	94	93	96		0
20	MEGUSH8611	94	91	98		0
21	MEGDD0132	99	93	96		0
22	MEGDD0131	102	93	104		0
23	DUP022003	99	98	98		0
24	MEGUSH8616	98	93	92		0
25	TB030224	102	96	99		0
26	TB030220	98	93	93		0
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: MEGDIM0128

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	0.	37.	74	61-145
Trichloroethene	50.	0.	39.	78	71-120
Benzene	50.	1.	45.	88	76-127
Toluene	50.	0.	49.	98	76-125
Chlorobenzene	50.	0.	47.	94	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	35.	70	6	14	61-145
Trichloroethene	50.	41.	82	5	14	71-120
Benzene	50.	50.	98	11	11	76-127
Toluene	50.	51.	102	4	13	76-125
Chlorobenzene	50.	50.	100	6	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3A

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,1 Dichloroethene	50	0	37	74	61-145
Trichloroethene	50	0	44	89	71-120
Benzene	50	0	46	91	76-127
Toluene	50	0	50	100	76-125
Chlorobenzene	50	0	49	97	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

_____

FORM III VOA

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CB082 Lab Sample ID: VBLK01

Date Analyzed: 02/26/03 Time Analyzed: 10:16

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGDIM0117	MEGDIM0117	C0571	11:14
2	MEGDD0243	MEGDD0243	C0572	11:41
3	MEGDD0238	MEGDD0238	C0573	12:08
4	MEGDD014	MEGDD014	C0574	12:35
5	TB030218	TB030218	C0577	13:56
6	MEGDIM0110	MEGDIM0110	C0578	14:23
7	MEGUSH8601	MEGUSH8601	C0579	14:50
8	MEGDD0121	MEGDD0121	C0580	15:17
9	MEGDIM0128	MEGDIM0128	C0584	17:05
10	MEGDIM0128 MS	MEGDIM0128 MS	C0586	17:59
11	MEGDIM0128 MSD	MEGDIM0128 MSD	C0587	18:26
12	VMSB	VMSB	C0588	18:53
13	MEGDD0129	MEGDD0129	C0589	19:20
14	DUP021803	DUP021803	C0590	19:48
15				
16				
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28				
29				
30				

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CB083 Lab Sample ID: VBLK02

Date Analyzed: 02/27/03 Time Analyzed: 11:02

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

MECL

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGSH0121	MEGSH0121	C0593	11:29
2	MEGDD0115	MEGDD0115	C0595	12:23
3	MEGDD0123	MEGDD0123	C0596	12:50
4	MEGUSH8611	MEGUSH8611	C0597	13:17
5	MEGDD0132	MEGDD0132	C0598	13:44
6	MEGDD0131	MEGDD0131	C0599	14:11
7	DUP022003	DUP022003	C0600	14:38
8	MEGUSH8616	MEGUSH8616	C0601	15:05
9	TB030224	TB030224	C0602	15:32
10	TB030220	TB030220	C0609	18:41
11				
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COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CT073 BFB Injection Date: 02/21/03

Instrument ID.: H5970 C BFB Injection Time: 08:28

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.7
75	30.0 - 60.0% of mass 95	44.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	67.2
175	5.0 - 9.0 % of mass 174	5.9 (8.8)1
176	95.0 - 101.0% of mass 174	63.9 (95.1)1
177	5.0 - 9.0% of mass 176	5.0 (7.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS073	02/21/03	08:54
2	VSTD010	VSTD010	CS074	02/21/03	09:25
3	VSTD020	VSTD020	CS075	02/21/03	09:52
4	VSTD100	VSTD100	CS076	02/21/03	10:20
5	VSTD200	VSTD200	CS077	02/21/03	10:47
6					
7					
8					
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10					
11					
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15					
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18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CT082 BFB Injection Date: 02/26/03

Instrument ID.: H5970 C BFB Injection Time: 09:26

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.1
75	30.0 - 60.0% of mass 95	51.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.8
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	55.8
175	5.0 - 9.0 % of mass 174	5.0 (9.0)1
176	95.0 - 101.0% of mass 174	54.6 (97.8)1
177	5.0 - 9.0% of mass 176	2.9 (5.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS082	02/26/03	09:49
2	VBLK01	VBLK01	CB082	02/26/03	10:16
3	MEGDIM0117	MEGDIM0117	C0571	02/26/03	11:14
4	MEGDD0243	MEGDD0243	C0572	02/26/03	11:41
5	MEGDD0238	MEGDD0238	C0573	02/26/03	12:08
6	MEGDD014	MEGDD014	C0574	02/26/03	12:35
7	TB030218	TB030218	C0577	02/26/03	13:56
8	MEGDIM0110	MEGDIM0110	C0578	02/26/03	14:23
9	MEGUSH8601	MEGUSH8601	C0579	02/26/03	14:50
10	MEGDD0121	MEGDD0121	C0580	02/26/03	15:17
11	MEGDIM0128	MEGDIM0128	C0584	02/26/03	17:05
12	MEGDIM0128 MS	MEGDIM0128 MS	C0586	02/26/03	17:59
13	MEGDIM0128 MSD	MEGDIM0128 MSD	C0587	02/26/03	18:26
14	VMSB	VMSB	C0588	02/26/03	18:53
15	MEGDD0129	MEGDD0129	C0589	02/26/03	19:20
16	DUP021803	DUP021803	C0590	02/26/03	19:48
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: CT084 BFB Injection Date: 02/27/03

Instrument ID.: H5970 C BFB Injection Time: 10:05

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.9
75	30.0 - 60.0% of mass 95	48.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	50.6
175	5.0 - 9.0 % of mass 174	4.4 (8.7)1
176	95.0 - 101.0% of mass 174	50.0 (98.8)1
177	5.0 - 9.0% of mass 176	3.0 (6.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS084	02/27/03	10:35
2	VBLK02	VBLK02	CB083	02/27/03	11:02
3	MEGSH0121	MEGSH0121	C0593	02/27/03	11:29
4	MEGDD0115	MEGDD0115	C0595	02/27/03	12:23
5	MEGDD0123	MEGDD0123	C0596	02/27/03	12:50
6	MEGUSH8611	MEGUSH8611	C0597	02/27/03	13:17
7	MEGDD0132	MEGDD0132	C0598	02/27/03	13:44
8	MEGDD0131	MEGDD0131	C0599	02/27/03	14:11
9	DUP022003	DUP022003	C0600	02/27/03	14:38
10	MEGUSH8616	MEGUSH8616	C0601	02/27/03	15:05
11	TB030224	TB030224	C0602	02/27/03	15:32
12	TB030220	TB030220	C0609	02/27/03	18:41
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

AMK 6/24/03

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): CS082 Date Analyzed: 02/26/03
Instrument ID: H5970 C Time Analyzed: 09:49
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	5335.		8.37		43304.		9.78		38699.		15.22	
	UPPER LIMIT	10670.		8.87		86608.		10.28		77398.		15.72	
	LOWER LIMIT	2668.		7.87		21652.		9.28		19350.		14.72	
	EPA SAMPLE NO.												
1	VBLK01	4027.		8.38		37062.		9.80		29958.		15.24	
2	MEGDIM0117	4530.		8.36		37084.		9.82		31072.		15.21	
3	MEGDD0243	4540.		8.40		36210.		9.81		33105.		15.25	
4	MEGDD0238	4484.		8.39		35484.		9.80		30378.		15.24	
5	MEGDD014	4629.		8.40		38582.		9.82		32880.		15.25	
6	TB030218	4704.		8.34		36013.		9.76		33608.		15.19	
7	MEGDIM0110	4953.		8.33		40860.		9.75		37329.		15.19	
8	MEGUSH8601	4458.		8.33		31911.		9.78		29222.		15.18	
9	MEGDD0121	5393.		8.33		42185.		9.75		36876.		15.19	
10	MEGDIM0128	5523.		8.33		45722.		9.78		41731.		15.18	
11	MEGDIM0128 MS	5503.		8.37		47123.		9.78		40513.		15.19	
12	MEGDIM0128 MSD	6054.		8.33		44884.		9.78		40966.		15.18	
13	VMSB	5252.		8.33		43276.		9.78		40069.		15.19	
14	MEGDD0129	5451.		8.37		39054.		9.78		36525.		15.18	
15	DUP021803	5074.		8.33		40743.		9.78		40147.		15.18	
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): CS084 Date Analyzed: 02/27/03
Instrument ID: H5970 C Time Analyzed: 10:35
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	5559.	8.38	48925.	9.79	41031.	15.19
	UPPER LIMIT	11118.	8.88	97850.	10.29	82062.	15.69
	LOWER LIMIT	2780.	7.88	24463.	9.29	20516.	14.69
	EPA SAMPLE NO.						
1	VBLK02	5065.	8.37	37991.	9.79	34630.	15.19
2	MEGSH0121	5771.	8.37	46507.	9.78	43928.	15.18
3	MEGDD0115	5449.	8.37	46119.	9.79	43610.	15.19
4	MEGDD0123	5733.	8.38	46525.	9.79	43626.	15.19
5	MEGUSH8611	5611.	8.38	47341.	9.79	44101.	15.19
6	MEGDD0132	5734.	8.38	48492.	9.79	42720.	15.19
7	MEGDD0131	5236.	8.37	47569.	9.78	42593.	15.22
8	DUP022003	5450.	8.37	48059.	9.79	42060.	15.19
9	MEGUSH8616	5887.	8.37	47482.	9.78	41158.	15.22
10	TB030224	5288.	8.37	43444.	9.79	38577.	15.22
11	TB030220	5489.	8.40	44894.	9.81	41832.	15.22
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Volatile Organics IDL

Date Performed: 1/8/2003

Parameter	Conc 1 CIDL1	Conc 2 CIDL2	Conc 3 CIDL3	Conc 4 CIDL4	Conc 5 CIDL5	Conc 6 CIDL6	Conc 7 CIDL7	SD	IDL
Chloromethane	17.43	18.52	20.71	21.76	20.76	17.17	22.57	2.138	6.719
Bromomethane	19.27	22.02	18.72	18.16	21.84	22.81	22.14	1.914	6.016
Vinyl Chloride	17.24	17.13	18.58	19.39	20.25	20.13	19.69	1.303	4.096
Chloroethane	19.55	19.40	21.35	18.36	18.49	19.45	19.78	0.986	3.099
Methylene Chloride	21.78	20.77	21.45	21.47	21.19	20.91	21.78	0.398	1.250
Acetone	20.84	21.04	18.81	22.10	19.48	18.47	21.02	1.343	4.221
Trichlorofluoromethane	17.61	19.46	18.66	17.74	20.62	19.21	19.70	1.081	3.396
Carbon Disulfide	18.71	17.50	15.52	17.83	18.80	16.84	16.07	1.255	3.944
1,1-Dichloroethene	21.92	22.08		21.12	21.80	19.63	22.07	0.953	3.208
1,1-Dichloroethane	19.29	18.30	19.22	20.40	18.39	18.18	22.14	1.430	4.494
trans-1,2-Dichloroethene	17.67	14.01	16.44	15.95	18.00	17.42	14.71	1.524	4.790
cis-1,2-Dichloroethene	20.85	19.30	18.84	21.45	19.58	21.09	19.84	0.993	3.122
Chloroform	22.68	20.94	21.27	21.15	21.78	22.40	20.61	0.769	2.416
1,2 Dichloroethane	21.48	20.07	19.68	22.03	20.81	21.75	18.56	1.256	3.949
2-Butanone	23.52	19.32	23.50	19.84	21.16	17.61	22.01	2.210	6.946
1,1,1-Trichloroethane	21.30	20.60	19.88	19.85	20.91	19.67	21.55	0.754	2.368
Carbon Tetrachloride	20.09	20.94	20.13	20.21	20.56	20.61	20.79	0.336	1.057
Vinyl Acetate	18.99	19.55	18.54	19.36	17.16	19.28	19.14	0.815	2.563
Bromodichloromethane	21.20	21.47	19.38	19.74	21.25	18.53	20.89	1.133	3.561
1,2-Dichloropropane	20.33	20.70	19.76	19.87	20.16	18.61	19.49	0.674	2.118
cis-1,3-Dichloropropene	18.82	18.33	18.41	16.78	19.44	16.35	18.27	1.102	3.463
Trichloroethene	19.24	20.23	18.00	17.91	20.64	18.25	20.07	1.147	3.606
Dibromochloromethane	21.41	20.70	19.14	19.63	22.23	19.75	21.11	1.108	3.484
1,1,2-Trichloroethane	23.57	23.70	21.80	21.57	23.24	21.08	22.57	1.042	3.273
Benzene	19.54	19.38	19.16	18.63	20.47	18.26	19.82	0.736	2.313
trans-1,3-Dichloropropene	20.71	19.84	19.60	17.89	21.04	18.20	19.56	1.171	3.681
2-Chloroethyl vinyl ether	20.33	20.70	19.76	19.87	20.16	18.61	19.49	0.674	2.118
Bromoform	22.82	24.38	21.85	20.33	23.91	20.78	23.43	1.559	4.899
2-Hexanone	22.83	21.62	21.93	19.61	20.18	19.47	18.76	1.505	4.731
4-Methyl-2-pentanone	19.13	18.53	17.80	18.22	18.74	18.89	17.72	0.540	1.699
Tetrachloroethene	21.74	18.77	19.72	18.23	20.00	19.12	18.39	1.211	3.806
1,1,2,2-Tetrachloroethane	23.80	22.20	20.17	20.58	20.49	21.10		1.379	4.639
Toluene	18.29	18.46	17.66	18.23	19.95	18.00	18.20	0.730	2.293
Chlorobenzene	19.60	19.88	18.59	19.11	20.91	19.11	19.59	0.738	2.321
Ethylbenzene	19.57	17.19	18.09	17.33	19.07	17.28	17.23	0.985	3.097
Styrene	21.12	19.32	19.32	20.37	18.89	19.86	18.58	0.882	2.771
m&p-Xylene	39.79	37.89	40.31	40.88	38.08	40.43	38.78	1.199	3.767
o-Xylene	20.76	18.81	18.70	20.13	19.03	18.97	19.87	0.789	2.479
1,3-Dichlorobenzene	19.56	20.80	19.79	19.94	22.42	20.28	20.24	0.963	3.026
1,4-Dichlorobenzene	19.64	20.67	19.28	20.63	22.10	18.32	19.39	1.231	3.870
1,2-Dichlorobenzene	23.31	20.35	20.99	20.24	19.86	19.51	19.69	1.307	4.107
Dichlorodifluoromethane	19.77	17.31	18.82	19.98	18.43	20.92	17.80	1.284	4.036

SAMPLE

DATA

1A

EPA SAMPLE NO.

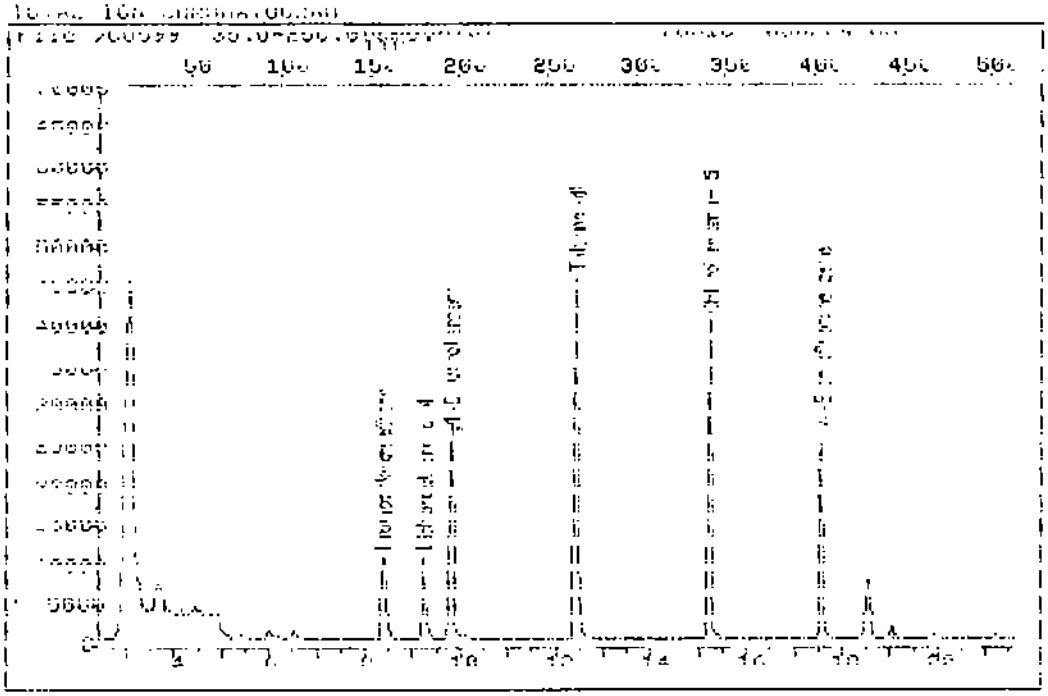
VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGCD0131

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGCD0131
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0599
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03



Data File: >L0???:04 Quant Output File: "L0???:Q1
Name: (Default) Instrument ID: 001
Misc: 20UTC 05\24 1.2

Id File: L0??C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 05\24 16:02 Last Anal Time: **\27 ...:2

Operator ID: MARIE
Quant Time : 05\27 14:..
Injected at: **\27 14:11

Operator ID: Data Dir: Users Rep / ant (..): (..22 ..:..)
Output File: C:\...99::01 Injected at: **/22 14:11
Data File: ...99::04 Dilution Factor: 1.00 .l
Name: Mrs.Doll 1 Instrument ID: 2lml C
Misc: ...lC ..1822+..3

ID File: [DS710::M1
Title: HP ..0A Concentration Calibration Standard .l
Last Calibration: 9/01/1 10:10 Last Meal Time: */*/22 10:59

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	Bromochloromethane	..37	1.. .0	... 26	99.000	ng	..
2)	1,1-Dichloroethane-d4	9.2%	65.0	19:02	9..20	ng	8%
3)	1,4-Difluorobenzene	...8	11....	4..69	...000	ng	9%
4)	Chlorobenzene-d5	15.2%	112.0	41.9%	9..000	ng	91
5)	Toluene -8	12....	98..	2.. 2	..83	ng	
6)	Bromofluorobenzene	12.5%	9%.0	22%71	8..4%	ng	9%

* = Compound is (..)

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

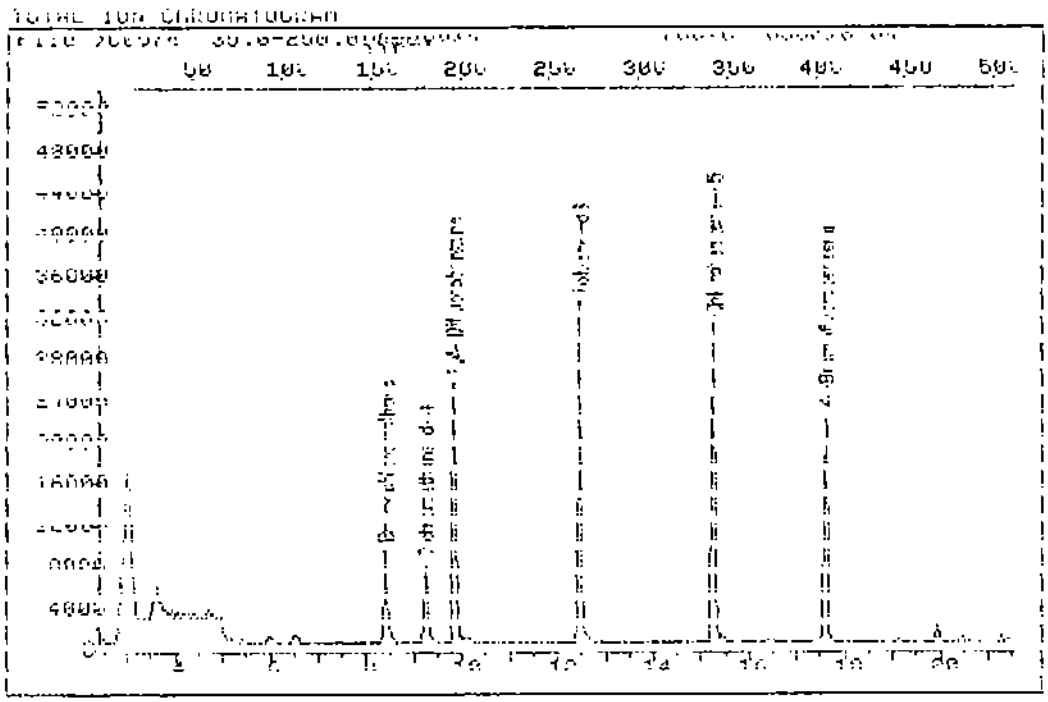
EPA SAMPLE NO.

MEGDD014

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD014
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0574
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03



Data File: 21JUN24:104 Quant Output File: 21JUN24:Q1
Name: MPIS0014 Instrument ID: 5001 1
Misc: 20UL, 050218.34

Id File: 1059LL::MT
Title: HP 5DB Continuing Calibration Standard
Last Calibration: 05JUL21 10:13 Last Qcal Time: 24JUN26 07:09

Operator ID: MASTER
Quant Time : 05JUN26 12:46
Injected at: 24JUN26 12:35

Operator ID: MARIE Quant rev: 7 Quant Time: 8x0226 12:34
Output File: ^D:B524::DJ Injected at: **0226 12:59
Data File: ^D:B524::D4 Dilution Factor: 1.000
Name: MB50D014 Instrument ID: 2000 C
Misc: 2000C 890218 J4

ID File: ID591C::MT
Title: HP 598 Continuing Calibration Standard
Last Calibration: 890131 10:03 Last Qual Time: **0226 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	d
1)	*Bromochloromethane	6.40	128.0	46278	98.00	ug/L	--
2)	1,2-Dichloroethane-d4	9.22	65.0	19970	97.38	ug/L	9
3)	*1,4-Difluorobenzene	10.82	114.0	36082	98.00	ug/L	--
4)	*Chlorobenzene-d5	15.25	117.0	32880	98.00	ug/L	9
5)	Toluene d-8	13.56	98.0	29193	97.98	ug/L	9
6)	Bromofluorobenzene	17.68	95.0	22839	97.29	ug/L	9

* Compound is (s)D

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VOLATILE ORGANICS ANALYSIS DATA SHEET

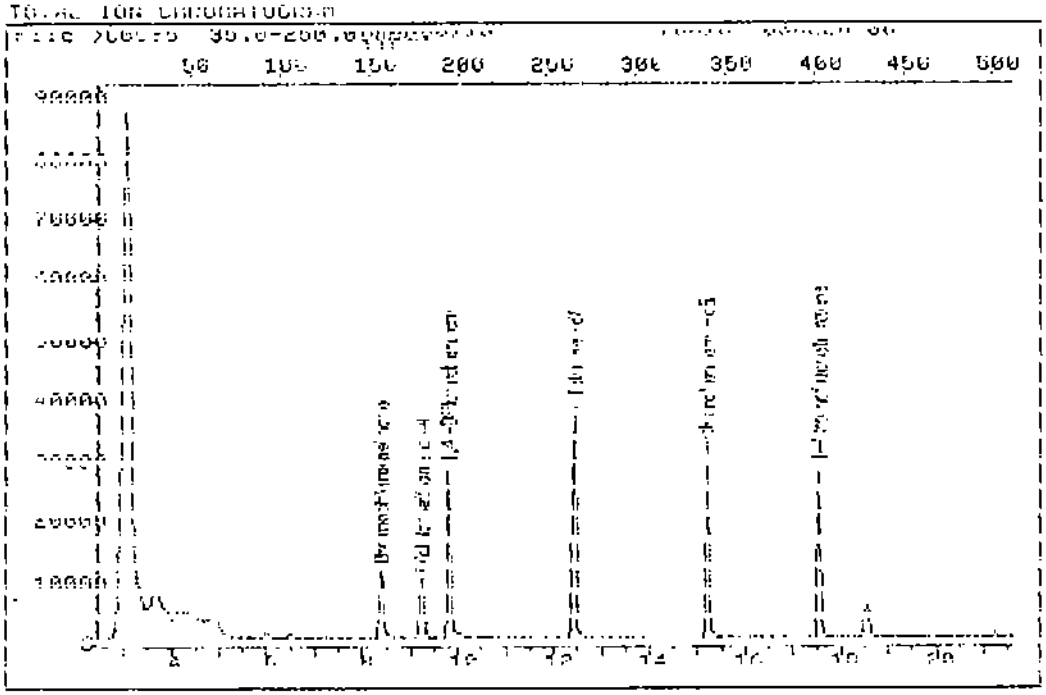
EPA SAMPLE NO.

MEGDD0115

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0115
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0595
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	~~U~~ SJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/4/03



Data File: >[illegible]:D4 Quant Output File: ^[illegible]:Q1
Name: MB[illegible]:15 Environment ID: [illegible]
Misc: 20UIC 03022U 6A

IJ File: [illegible]:MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: [illegible] Last Acal Time: **:22 [illegible]

Operator ID: MASTER
Quant Time : 03/22 12:46
Injected at: **0322 12:23

Operator ID: MARIE
Output File: ^C0599::W1
Data File: >C0599::D4
Name: MF60D0119
Misc: 2000C 930220 W6

Quant Rev: 7 Quant Time: 930222 12:00
Injection at: **0222 12:23
Dilution Factor: 1.0000
Instrument ID: 2000 C

ID File: ID591C::M1
Title: RP VOA Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qcal Time: **0222 10:59

	Compound	%T.	Mean	Area	Conc	Units	Q
13	*Bromochloromethane	8.37	100.0	5449	50.00	ug	
20)	1,2-Dichloroethane-d4	9.23	69.0	20299	53.03	UG	8
23)	*1,4-Difluorobenzene	9.79	114.0	46109	50.00	ug	
32)	*Chlorobenzene-d5	19.19	117.0	42610	50.00	UG	9
44)	Toluene d-8	12.43	98.0	66209	47.08	ug	
49)	Bromofluorobenzene	17.53	95.0	28291	46.94	UG	9

* Compound is 100

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VOLATILE ORGANICS ANALYSIS DATA SHEET

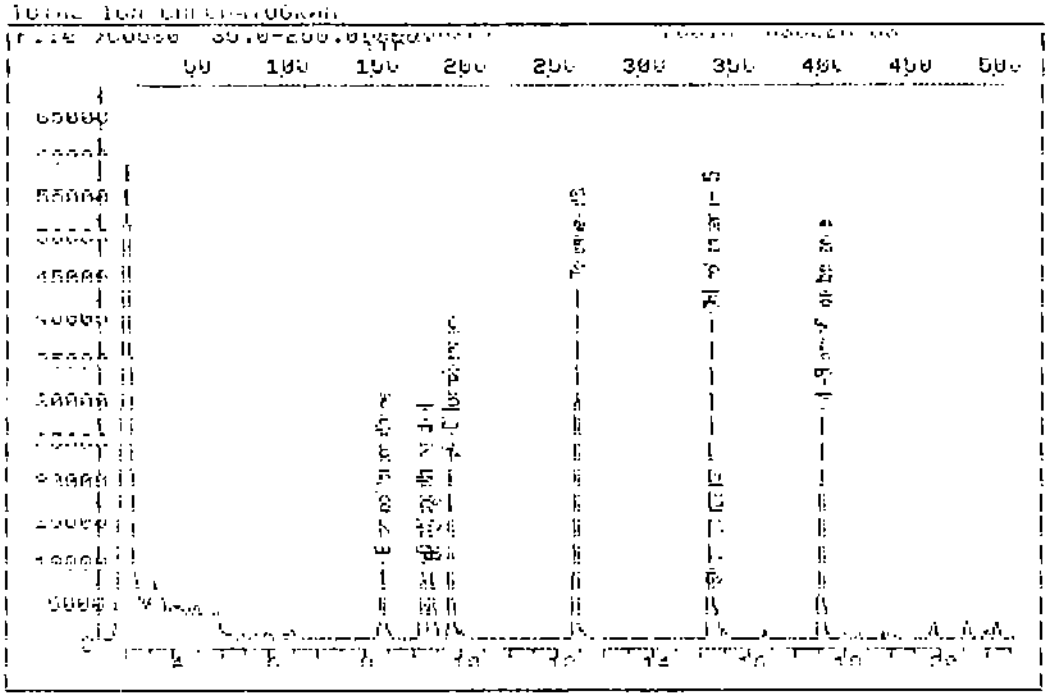
EPA SAMPLE NO.

MEGDD0121

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0121
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0580
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U SA
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SA
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	11.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U SA
108-10-1	4-Methyl-2-Pentanone	10.	U SA
591-78-6	2-Hexanone	10.	U SA
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U SA
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	4.	J
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U SA
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03



Data File: [illegible]
Name: [illegible]
Mixed: [illegible]

Background File: [illegible]
Instrument ID: 003

ID File: [illegible]
Title: HP 8064 Continuing Calibration Standard
Last Calibration: [illegible]

Operator ID: [illegible]
Count Time: [illegible]
Injected at: [illegible]

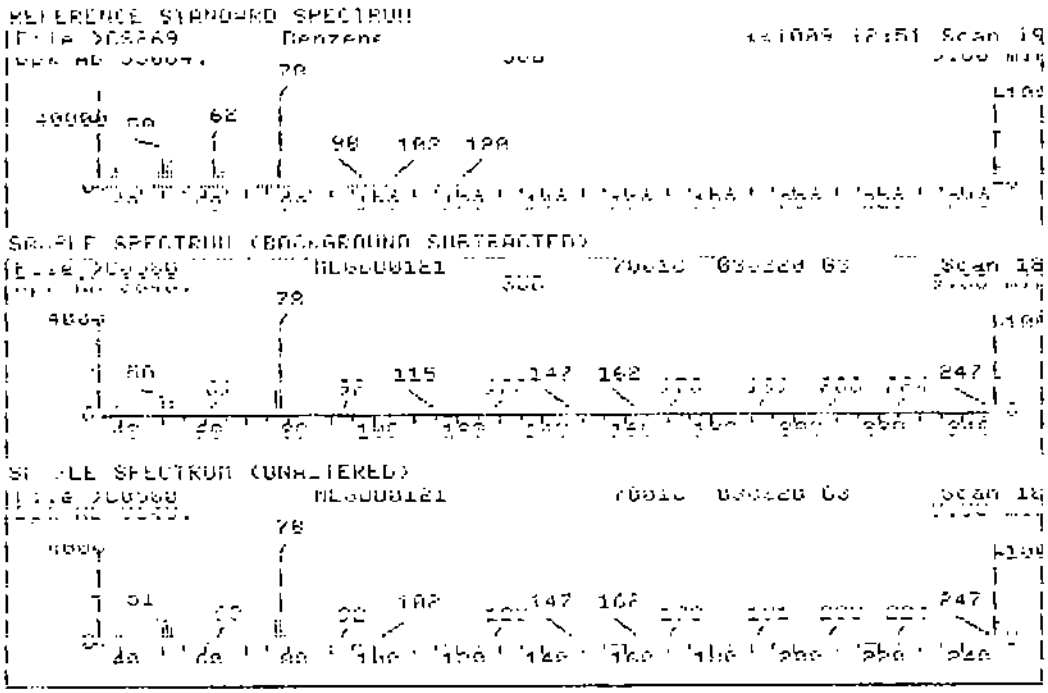
QuanT Report

Operator ID: DAVID Quant Rev: 2 Quant Time: 940226 09:2
Output File: C:\5988\1\DJ Injected at: 940226 19:12
Data File: C:\5988\1\04 Dilution Factor: 1.000 0
Name: Mrs0004121 Instrument ID: 2000 C.
Misc: 2 ml/L 940220 65

ID File: ID491L.M
Title: HP 5988 Continuing Calibration Standard
Last Calibration: 930129 10:09 Last Quan Time: 940226 09:49

	Compound	R.T.	% Ion	Area	Conc	Units	
1)	*Bromochloromethane	8.32	98.0	9999	50.00	ug/L	
28)	1,2-Dichloroethane-d4	9.19	85.0	12206	94.61	ug/L	8
22)	1,4-Difluorobenzene	9.25	94.0	42169	50.00	ug/L	
33)	Benzene	9.98	78.0	19908	10.28	ug/L	9
32)	Chlorobenzene-d5	14.19	11.0	30026	50.00	ug/L	
43)	Toluene d-8	12.39	98.0	64002	54.02	ug/L	9
44)	Chlorobenzene	14.26	112.0	2263	4.22	ug/L	
49)	Bromofluorobenzene	17.53	95.0	25618	52.29	ug/L	6

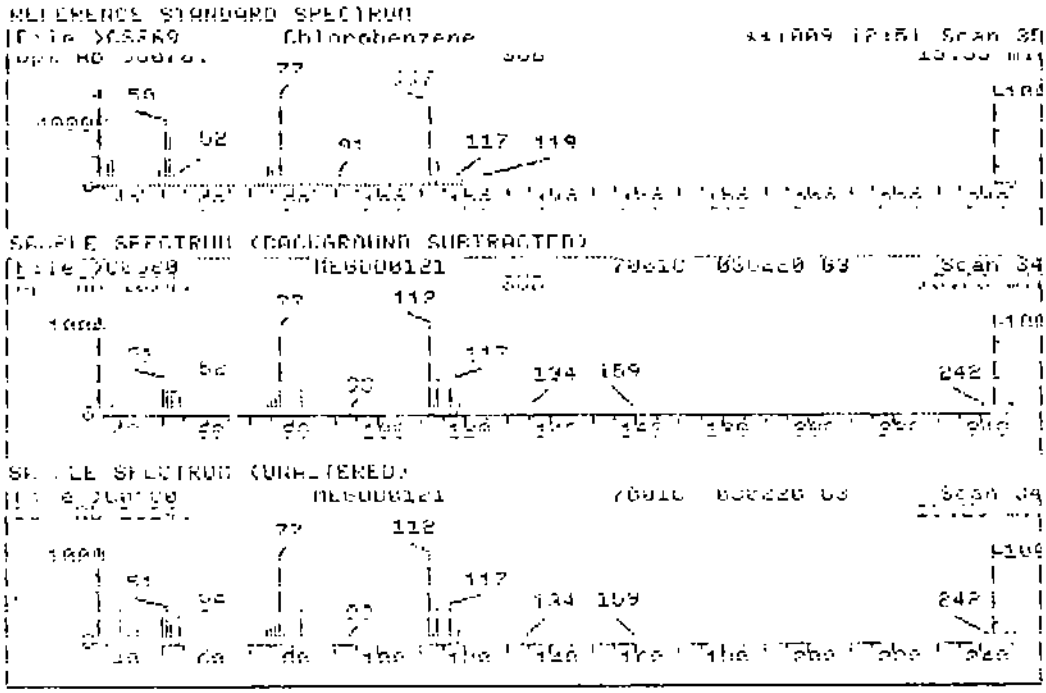
* Compound is 5510



Data File: 2L0588[::04
Name: MF6UUU121
Misc: 2UUUC UJU22U 69
Quant Time: 03...26 15..39
Injected at: **0226 15:17
Last Cal Time: **0226 09:49

Quant Output File: 2L0588[::QT
Instrument ID: .U01 C.
Quant RT File: ..059[..:: .C
Last Calibration: 0501?1 10:03

Compound No : 33
Compound Name : Benzene
Scan Number : 185
Retention Time: 9.38 min.
Quant Ion : 78.0
Area : 19? 4
Concentration : 10.28 UG
M-Value : 98



Data File: 21.D\SB0::D4
Name: MBSUU0121
Mean: 21UU11. 0\\220 63
Quant Time: d.\0226 \9:59
Injected at: **\0226 \9:17
Last Local Time: **\0226 09:49

Quant Output File: 21.D\SB0::DU
Instrument ID: 2UU1 1.

Quant ID File: 2U9\1::: .
Last Calibration: 0\UU121 10:09

Compound No : 44
Compound Name : Chlorobenze n
Scan Number : 349
Retention Time: 1\.26 mi .
Quant Ion : 112.0
Area : 3Rn.>
Concentration : 4.22 UG
q-Value : 87

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

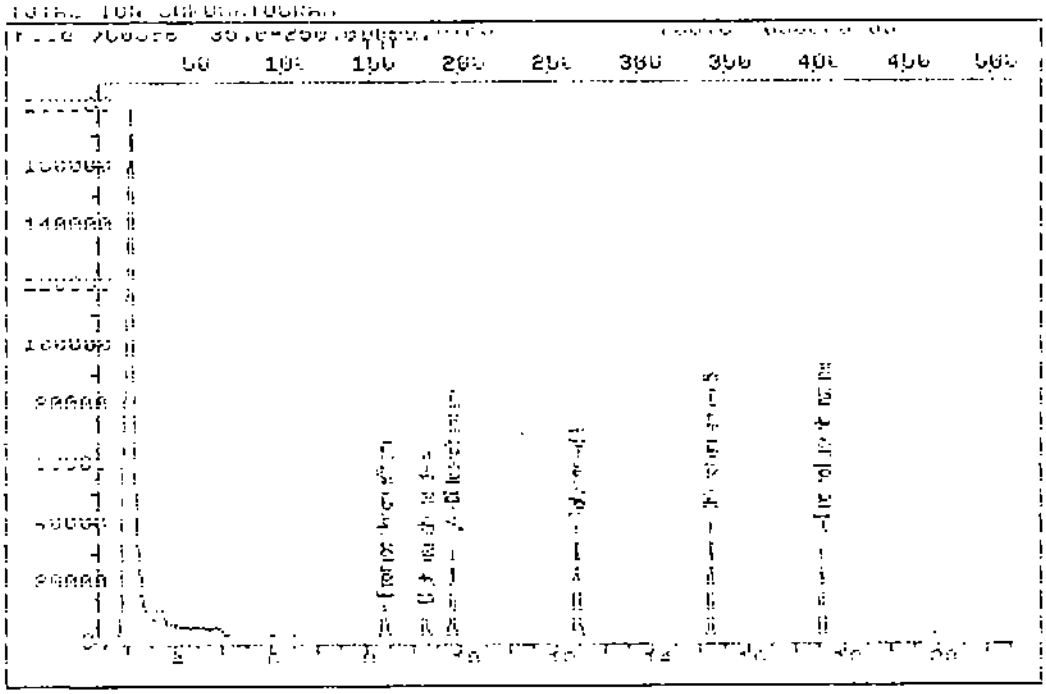
EPA SAMPLE NO.

MEGDD0123

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0123
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0596
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	~~U~~ 5J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/4/03



Data File: [illegible]
Name: [illegible]
Misc: [illegible]

Quant Output File: [illegible]
Instrument ID: [illegible]

ID File: [illegible]
Title: HP 6890 Continuing Calibration Standard
Last Calibration: [illegible]
Last Anal Time: [illegible]

Operator ID: [illegible]
Quant Time: [illegible]
Injected at: [illegible]

Quant Report Page 1

Operator ID: MARTF
Output File: ^D0596::07
Data File: ^D0596::04
Name: MFA00123
Date: 20-JUL-1990 09

Quant Rev: 2 Quant Time: 8/27/90 12:2
Injected At: **8/22 12:50
Dilution Factor: 1.000
Instrument ID: 2001 C

ID File: ID0910::01
Title: HP 0/8 Continuing Calibration Standard
Last Calibration: 03/01/91 10:09 Last Quant Time: **8/22 10:35

	Compound	A.T.	R.T.	Area	Conc	Units	Q
1)	*Bromochloromethane	1.38	12.11	2.25	50.00	ug	
2)	1,2-Dichloroethane-d4	9.22	69.0	19548	48.02	UG	2
29)	*1,4-Difluorobenzene	9.29	114.1	46425	50.00	ug	
32)	*Chlorobenzene-d5	14.19	117.1	47426	50.00	UG	9
49)	Toluene-d8	11.40	98.0	69221	46.40	ug	
51)	Bromofluorobenzene	12.54	95.0	28548	46.92	UG	2

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

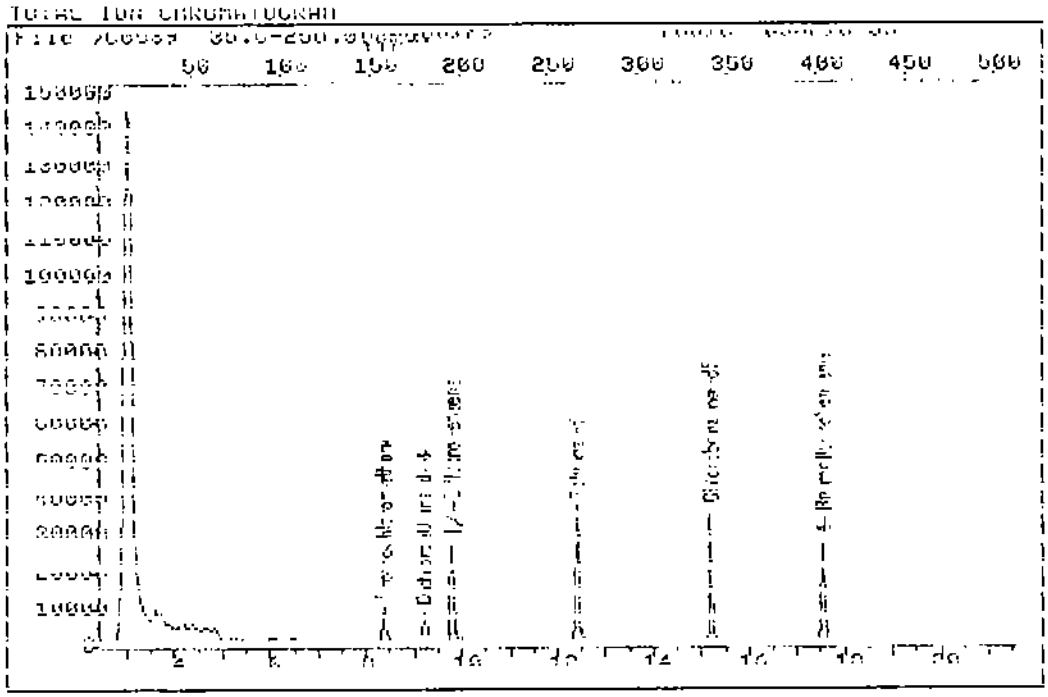
EPA SAMPLE NO.

MEGDD0129

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0129
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0589
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	J
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	J
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	J
108-10-1	4-Methyl-2-Pentanone	10.	U	J
591-78-6	2-Hexanone	10.	U	J
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	J
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	J
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMK 6/24/03



Data File: >LDS89::D4 Quant Output File: >LDS89::Q1
Name: DFS0001Z9 Instrument ID: 2001 1
Misc: 2001L 93\218 09

Id File: LDS91L::MT
Title: HP 5D8 Continuing Calibration Standard
Last Calibration: 93\131 10:03 Last Seal Time: **\226 09:47

Operator ID: MGR:K
Sample Time : 93\226 19:00
Injected at: **\226 19:20

GRANT REPORT

Operator ID: MARIE
Output File: ^C0989::W1
Data File: ^C0989::D4
Name: MFIS0001129
Misc: 2000C 030216 J5

Grant Rev: 2 Grant Time: 03/02/26 19:[illegible]
Injected at: **/02/26 19:20
Dilution Factor: 1.0000
Instrument ID: 7000 C

ID File: ID:9[illegible]::M1
Title: HP 5973 Continuing Calibration Standard
Last Calibration: 03/01/31 10:03 Last Qual Time: **/02/26 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	Fl
1)	*Bromochloromethane	7.37	128.0	7891	50.00	ug	
2)	1,2-Dichloroethane-d4	9.19	65.0	19996	48.80	06	80
23)	*1,4-Difluorobenzene	9.78	114.0	37[illegible]4	[illegible]1.00	46	
32)	*Chlorobenzene-d5	15.18	117.0	36[illegible]25	50.00	06	91
45)	Toluene-d8	17.39	98.0	6[illegible]9	[illegible]1.98	06	
49)	Bromofluorobenzene	17.53	95.0	24418	51.19	06	2

* Compound is [illegible]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

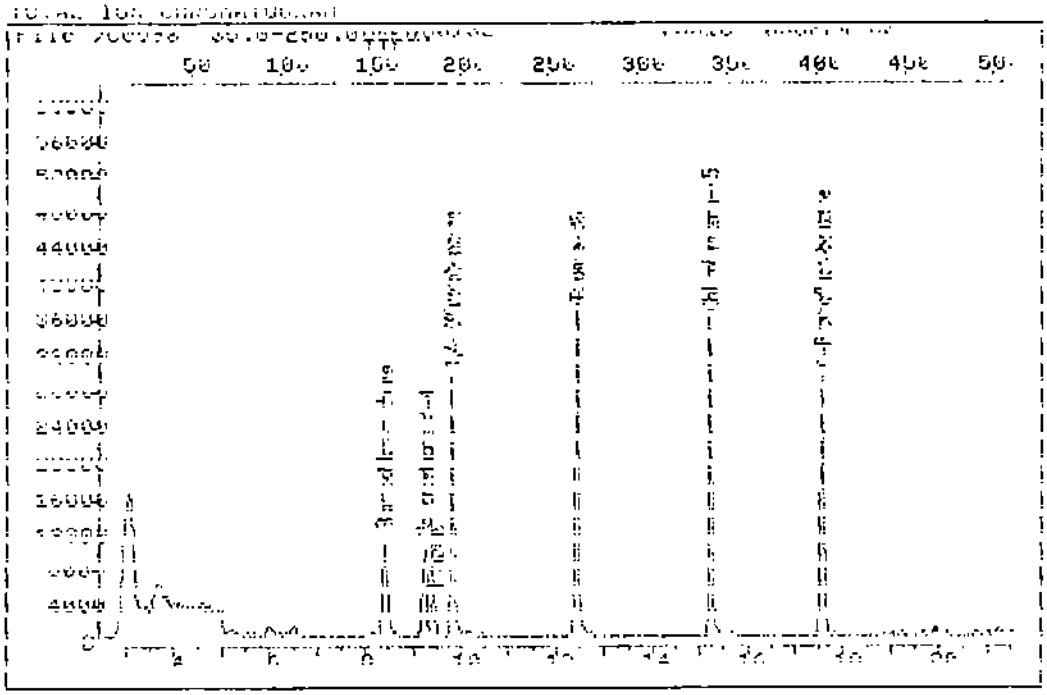
EPA SAMPLE NO.

MEGDD0132

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0132
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0598
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	4.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/4/03



Data File: 2[illegible]04 Quant Output File: [illegible]
Name: [illegible]52 Instrument ID: 001
Mass: 2[illegible] [illegible]224 [illegible]

Id File: [illegible]
Title: HP 5[illegible] Continuing Calibration Standard
Last Calibration: [illegible] Last mod Time: [illegible]

Operator ID: MeNIF
Acqmt Time: [illegible]
Injection At: **0922 16:44

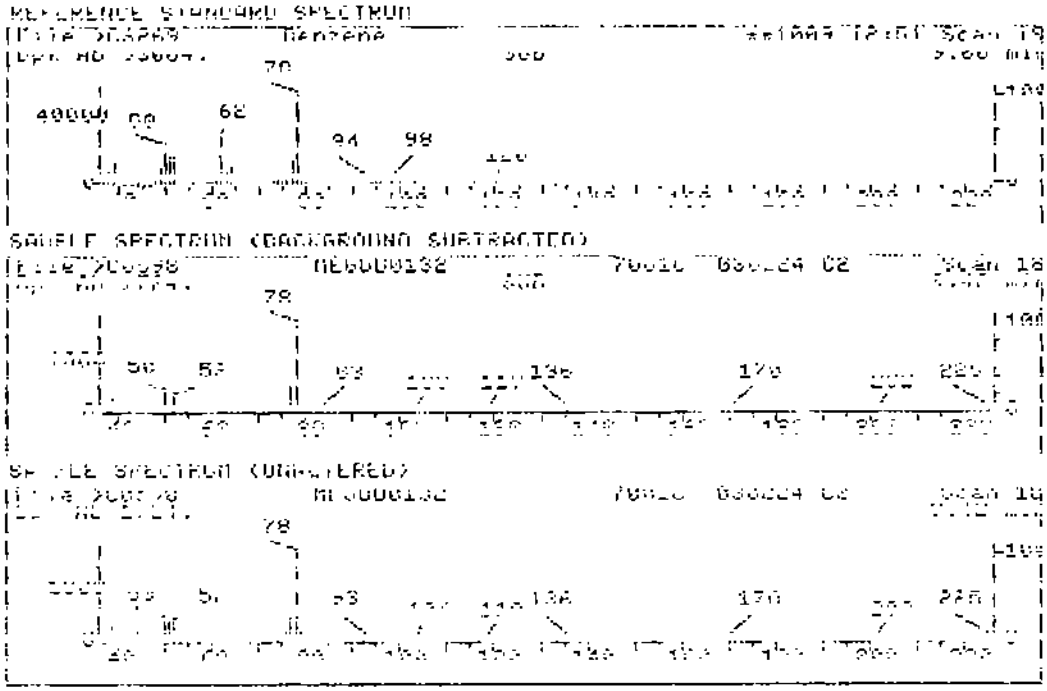
Quant Report

Operator ID: [illegible]
Quant Rest: 2
Acquired Time: [illegible]
Output File: [illegible]
Injected at: [illegible]
Data File: [illegible]
Dilution Factor: [illegible]
Name: [illegible]
Instrument ID: [illegible]
Misc: [illegible]

ID File: [illegible]
Title: [illegible]
Last Calibration: [illegible]
Last Qcal Time: [illegible]

	Compound	R.T.	[illegible]	Area	Conc	Units	[illegible]
1)	*Dichlorodifluoromethane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
2)	1,2-Dichloroethane-d4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3)	1,4-Difluorobenzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
4)	Benzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5)	*Chlorobenzene-d5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6)	Toluene-d8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7)	Bromofluorobenzene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

* Compound is [illegible]



Data File: 210998:104
Method: Benzene
Mixed: 20ml, 03:224 LV
Sample Name: 020922 Benz06
Injected at: 220922 13:04
Last Calibration: 020121 10:10

Command No : 99
Command Name : Benzene
Scan Number : 104
Retention Time: 9.47 mins.
Quantitation : 28.0
Area : 92.6
Concentration : 4.44 ppb
Purity : 87

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

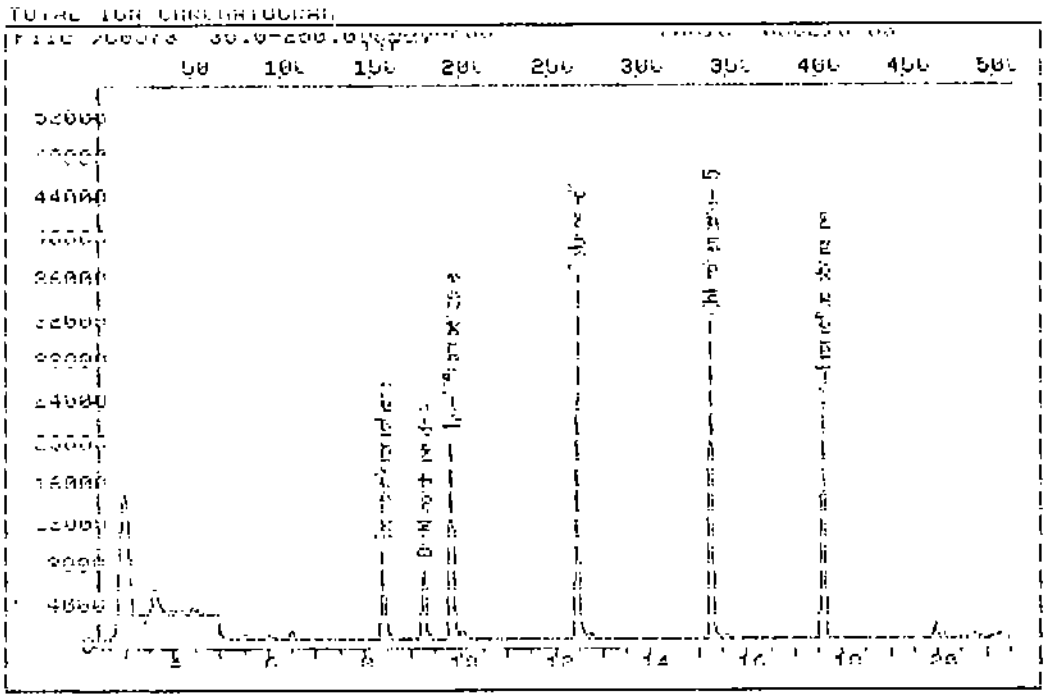
EPA SAMPLE NO.

MEGDD0238

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0238
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0573
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	U SS
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	U SS
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	U SS
108-10-1	4-Methyl-2-Pentanone	10.	U	U SS
591-78-6	2-Hexanone	10.	U	U SS
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	U SS
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	U SS
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMK 6/24/03



Data File: >L0923::04 Quant Output File: ^L0923::Q1
Name: DFS0U0728 Instrument ID: .0001 1.
Misc: 20UUC 950218 33

ID File: U0591L::MT
Title: 40' VOA Continuing Calibration Standard
Last Calibration: 920131 10:03 Last Spcl Time: *50226 05:47

Operator ID: MIKE
Quant Time : 950226 12:47
Injected at: *50226 12:08

Operator ID: DAVIE Quant Rev: 7 Acquired Time: 96/03/26 09:47
Output File: ^C:\DATA\032696\Q0104.RES Injected at: 96/03/26 12:08
Data File: ^C:\DATA\032696\0104.D Dilution Factor: 1.0000
Name: MB960326 Instrument ID: 5971A
Misc: 5971A 960318.M

ID File: ID5971C.M
Title: HP 5971A Continuing Calibration Standard
Last Calibration: 960131 10:03 Last Qcal Time: 96/03/26 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	5.39	128.0	5864	50.00	ug/L	
2)	1,2-Dichloroethane-d4	9.24	65.0	13620	50.92	ug/L	8
3)	1,4-Difluorobenzene	9.80	114.0	39584	50.00	ug/L	
4)	*Chlorobenzene-d5	15.24	117.0	30578	50.00	ug/L	9
5)	Toluene-d8	12.45	98.0	24461	49.09	ug/L	
6)	Bromofluorobenzene	17.58	95.0	28701	50.21	ug/L	7

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

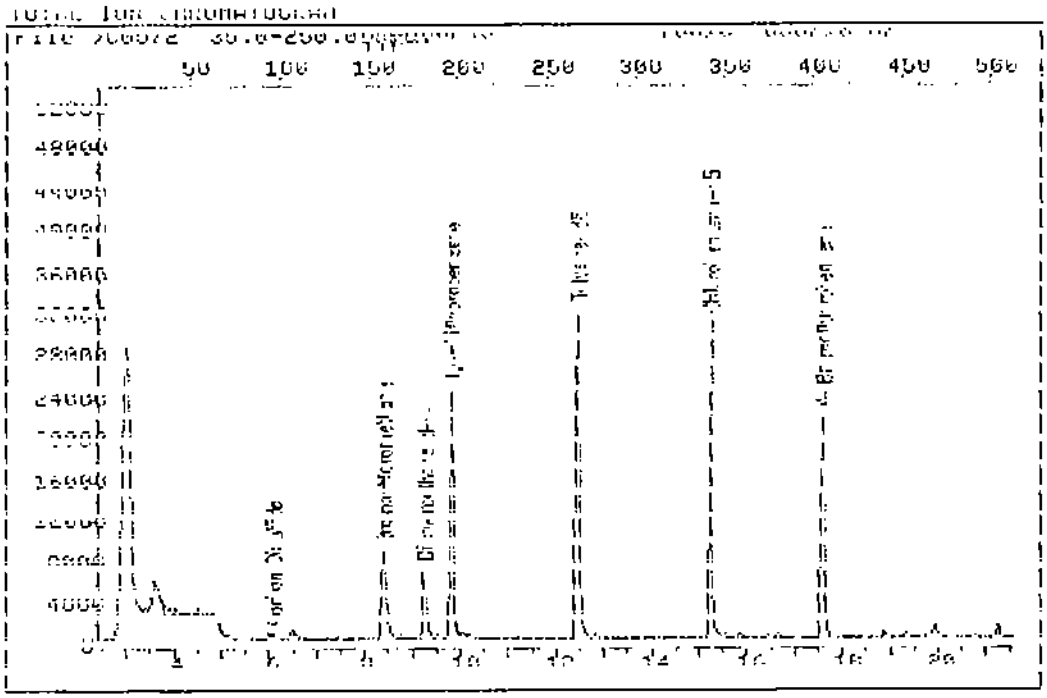
EPA SAMPLE NO.

MEGDD0243

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0243
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0572
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	2.	J
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/4/03



Data File: >C0522::04 Quant Output File: ^C0522::QT
Name: METH0743 Instrument ID: 7801
Misc: 20000 050218 02

Id File: 05910::MF
Title: HP 000 Continuing Calibration Standard
Last Calibration: 05.31 10:15 Last Cal Time: *.0226 05: 9

Operator ID: MARIE
Quant Time : 050226 12:21
Injected At: *50226 11:41

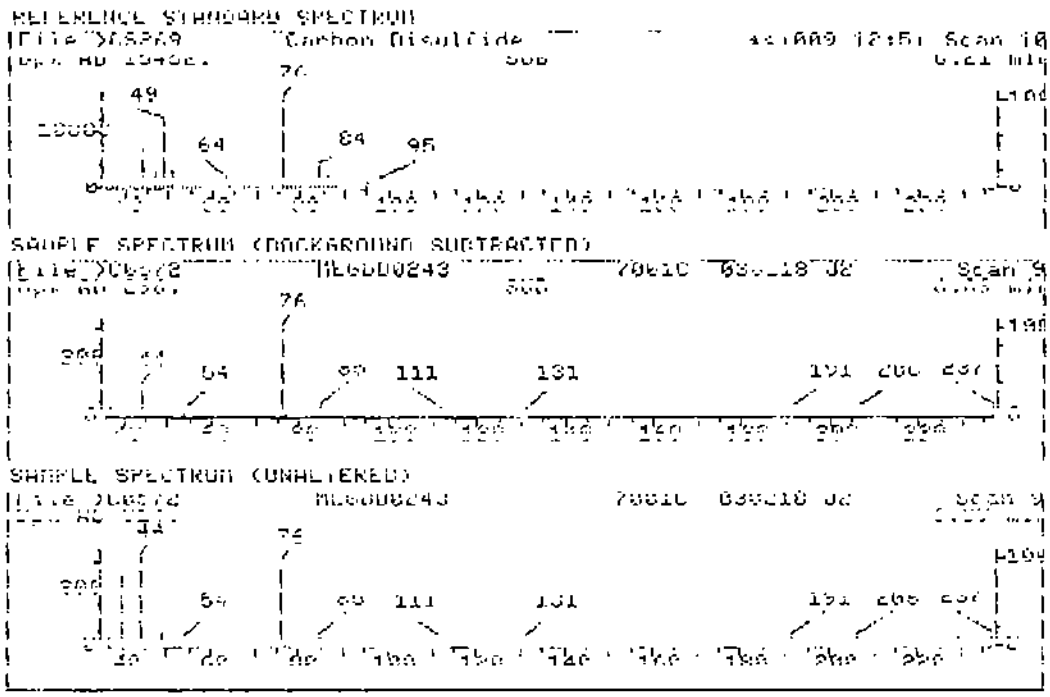
QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 7 Quant Time: 930226 12:1
Output File: ^C0522::Q1 Injected at: **0226 11:41
Data File: ^C0522::D4 Dilution Factor: 1.00000
Name: MLHOD0243 Instrument ID: 7001 C
Misc: 7001C 930218 J2

ID File: IDS91C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qcal Time: **0226 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.41	128.0	4****M	50.00	UG	
15)	Carbon Disulfide	6.09	76.0	2184	1.26	UG	100
20)	1,2-Dichloroethane-d4	9.25	65.0	1944	50.47	UG	
22)	*1,4-Difluorobenzene	9.81	114.0	36210	50.00	UG	99
32)	*Chlorobenzene-d5	10.25	117.0	3****5	50.00	UG	
46)	Toluene d-8	12.46	98.0	52160	49.36	UG	97
49)	Bromofluorobenzene	12.59	95.0	21723	50.13	UG	

* Compound is ISTD



Data File: 210922::04 Quant Output File: ^C09221:01
Name: MFIA000243 Instrument ID: 1001 1.
Misc: 70010 090218 JZ
Event Time: 09:226 10:21 Quant ID File: 10591111:11
Injected at: **0226 11:41 Last Calibration: 020131 10:02
Last Anal Time: **0226 09:49

Compound No : 13
Compound Name : Carbon Disulfide
Scan Number : 92
Retention Time: 6.09 min.
Quant Ion : 76.0
Area : 2164
Concentration : 1.26 UG
q-value : 100

1A

EPA SAMPLE NO.

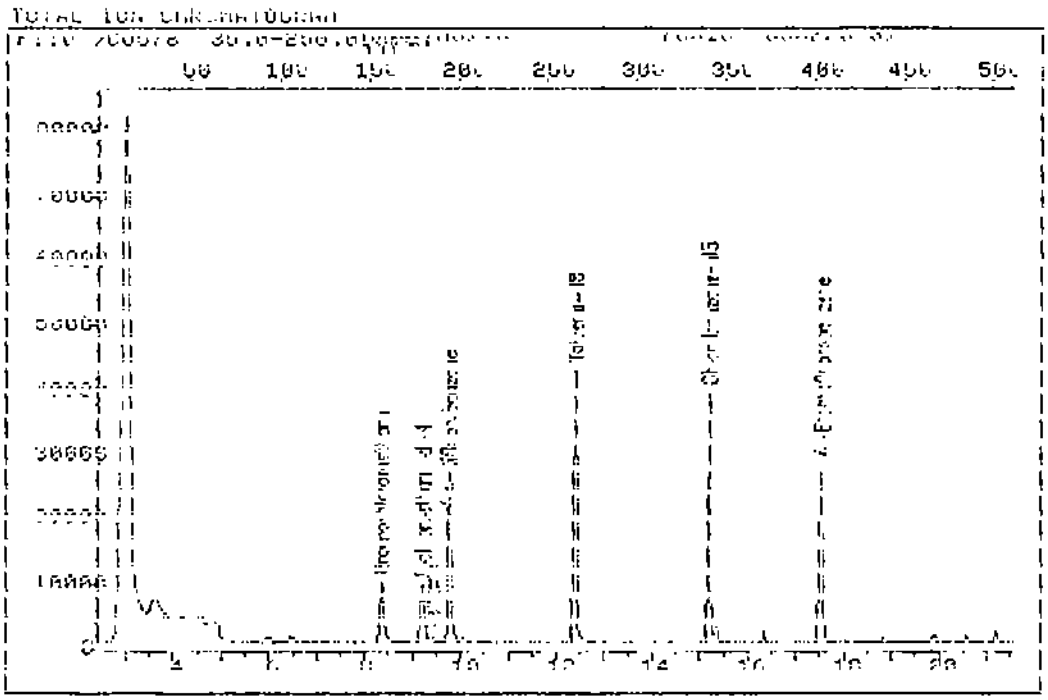
VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0110

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0110
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0578
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane		10.	U
74-83-9	Bromomethane		10.	U
75-01-4	Vinyl Chloride		10.	U
75-00-3	Chloroethane		10.	U
75-09-2	Methylene Chloride		5.	U
67-64-1	Acetone		10.	U
75-15-0	Carbon Disulfide		5.	U
75-35-4	1,1-Dichloroethene		5.	U
75-34-3	1,1-Dichloroethane		5.	U CJ
156-60-5	1,2-Dichloroethene-trans		5.	U
67-66-3	Chloroform		5.	U
107-06-2	1,2-Dichloroethane		5.	U CJ
78-93-3	2-Butanone		10.	U
71-55-6	1,1,1-Trichloroethane		5.	U
56-23-5	Carbon Tetrachloride		5.	U
75-27-4	Bromodichloromethane		5.	U
78-87-5	1,2-Dichloropropane		5.	U
10061-01-5	cis-1,3-Dichloropropene		5.	U
79-01-6	Trichloroethene		5.	U
124-48-1	Dibromochloromethane		5.	U
79-00-5	1,1,2-Trichloroethane		5.	U
71-43-2	Benzene		1.	J
10061-02-6	trans-1,3-Dichloropropene		5.	U
75-25-2	Bromoform		5.	U CJ
108-10-1	4-Methyl-2-Pentanone		10.	U CJ
591-78-6	2-Hexanone		10.	U CJ
127-18-4	Tetrachloroethene		5.	U
79-34-5	1,1,2,2-Tetrachloroethane		5.	U CJ
108-88-3	Toluene		5.	U
108-90-7	Chlorobenzene		5.	U
100-41-4	Ethylbenzene		5.	U
100-42-5	Styrene		5.	U
156-59-2	1,2-Dichloroethene-cis		5.	U CJ
106-42-3	m,p-Xylenes		5.	U
95-47-6	o-Xylene		5.	U

AMK 6/24/03



Data File: >C:\DATA\28\04 Quant Output File: ^C:\DATA\28\Q1
Name: METHOMYL 10 Instrument ID: 7681 1.
Misc: 20UG 930226 G1

Id File: C:\HPCHEM\1\METHODS\MT
Title: HP 6890 Continuing Calibration Standard
Last Calibration: 930151 10:09 Last Qcal Time: **0226 09:1*

Operator ID: MARIE
Quant Time: 930226 14:46
Injected at: **0226 14:23

Quant Report

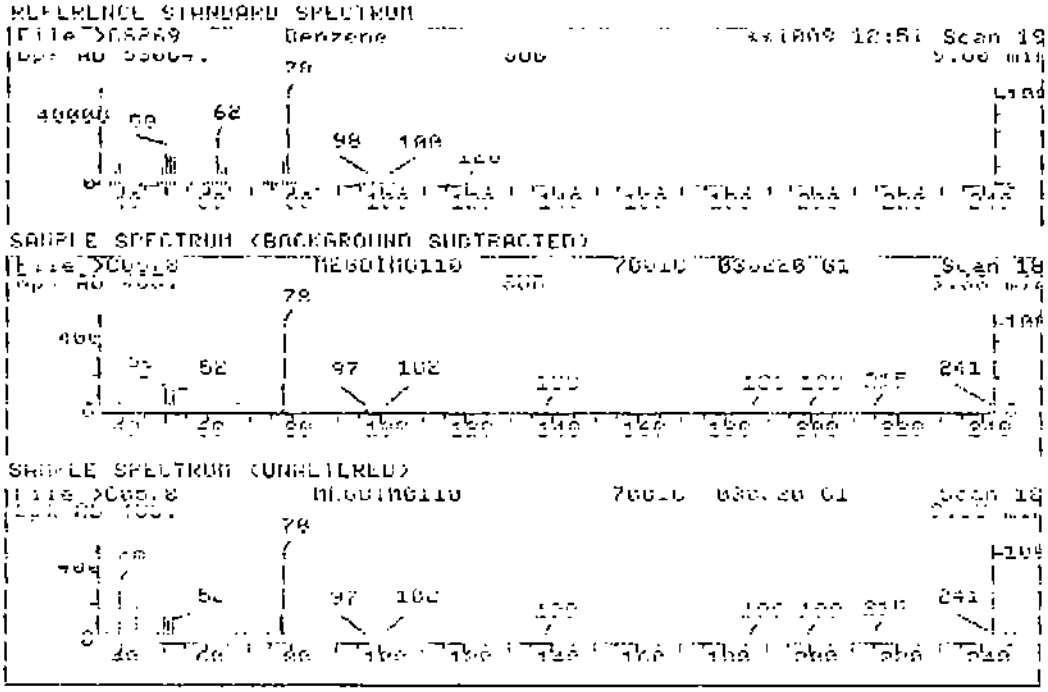
Operator ID: [illegible]
Output File: ^C0928::01
Data File: 21:0928::04
Name: MF4501100110
Misc: 2001C 920928 61

Quant Rev: 2 Quant Time: 920926 14:5
Injected at: **0926 14:22
Dilution Factor: 1.0000
Instrument ID: 2001 C

ID File: ID591C::MT
Title: HP GMA Continuing Calibration Standard
Last Calibration: 830131 16:03 Last Quant Time: **0926 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	Q
(1)	Bromochloromethane	8.32	128.0	42 2	[illegible]0	ug	
20)	1,2-Dichloroethane-d4	9.19	65.0	16493	95.38	Ub	8
23)	1,4-Difluorobenzene	9.29	114.0	41864	[illegible]0	ug	
33)	Benzene	9.38	78.0	2628	1.90	Ub	8
37)	Chlorobenzene-d5	10.19	117.0	37339	96.30	ug	
49)	Toluene d-8	12.39	98.0	62622	91.61	Ub	9
49)	Bromofluorobenzene	1 .25	95.0	[illegible]42	96.22	ug	

* Compound is ISTD



Data File: >L09Z8::D4
Name: MEGDING110
Misc: 20UIL 03U/Z0 61
Quant Time: 0?:.26 1=.46
Injection at: **U/Z6 14:?3
Last Qcal Time: **U/Z6 09:49

Quant Output File: QL09Z8::DJ
Instrument ID: .301 L
Quant ID File: L05911::Cf
Last Calibration: 05U131 10:U3

Compound No : 33
Compound Name : Benzene
Scan Number : 189
Retention Time: 9.38 min.
Quant Ion : 78.0
Area : 2e78
Concentration : 1.50 UG
Qvalue : 8U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

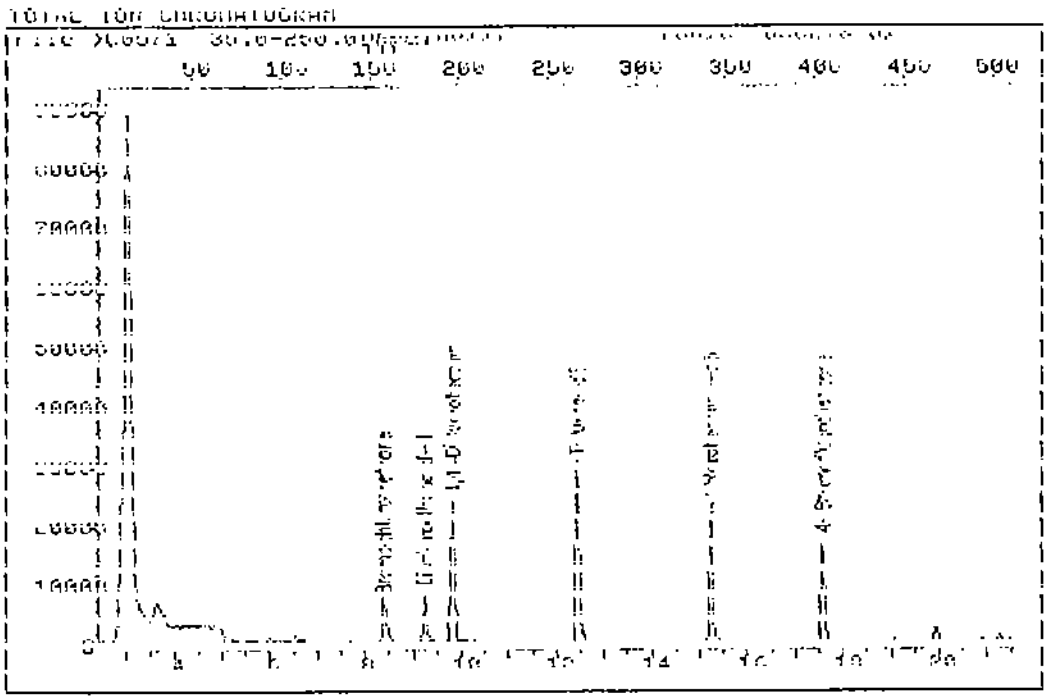
EPA SAMPLE NO.

MEGDIM0117

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0117
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0571
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U CC
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U CC
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U CC
108-10-1	4-Methyl-2-Pentanone	10.	U CC
591-78-6	2-Hexanone	10.	U CC
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U CC
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U CC
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/4/03



Data File: >C0521::D4 Quant Output File: >C0521::MT
Name: CHROMATOGRAM Instrument ID: 0001 1.
Misc: 20UIC 930218 J1

Id File: 10591C::MT
Title: HP 5890 Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Anal Time: 930226 09:49

Operator ID: MARIE
Quant Time : 930226 12:30
Injected at: 930226 11:14

Operator ID: RHKTF
Output File: ?C0521:1Q1
Data File: 21:052:1:04
Name: MFISDTM0117
Misc: 2000 L 050218 J1

Quant Method: ? Quant Time: 05/26/05 1
Injected at: 05/26 11:14
Dilution Factor: 1.000
Instrument ID: 2000 L

ID File: 10591C::MT
Title: HP 5973 Continuing Calibration Standard
Last Calibration: 050131 10:03 Last Qcal Time: 05/26 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	6.96	128.0	42911	50.000	ug/L	
2)	1,4-Dichlorobutane-d4	9.27	66.0	14929	54.811	UG/L	86
3)	*1,4-Difluorobenzene	9.87	114.0	32104	50.000	ug/L	
32)	*Chlorobenzene-d5	15.21	117.0	31022	50.000	UG/L	91
43)	Toluene-d8	13.42	98.0	24422	52.241	ug/L	
45)	Bromofluorobenzene	17.96	95.0	20974	54.688	UG/L	99

* Compound is ISTD

1A

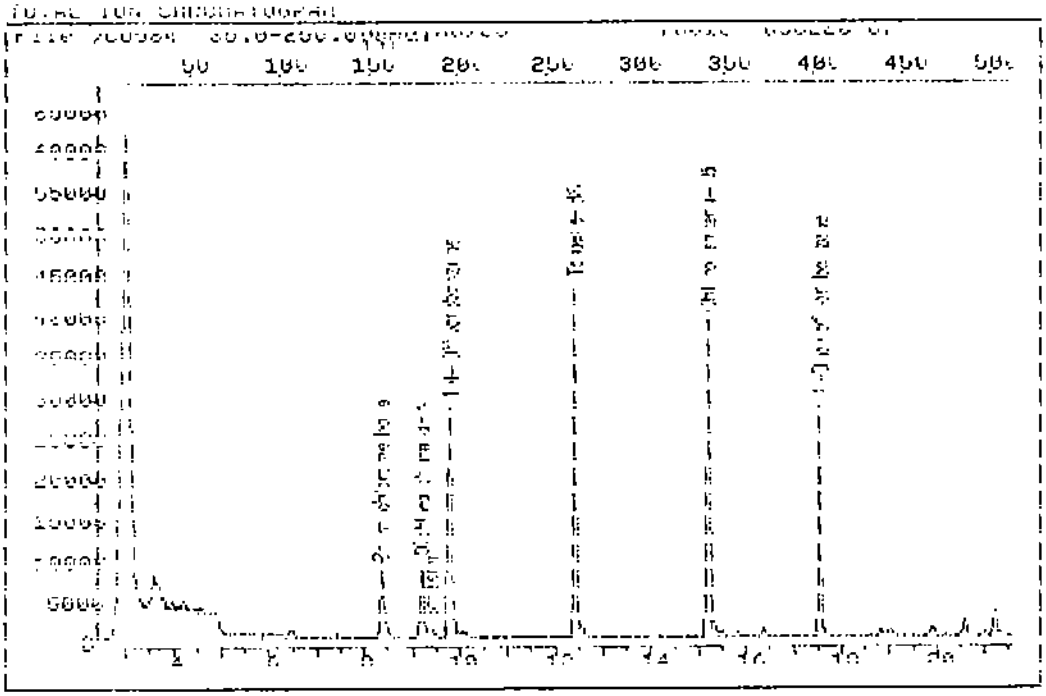
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0584
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane		10.	U
74-83-9	Bromomethane		10.	U
75-01-4	Vinyl Chloride		10.	U
75-00-3	Chloroethane		10.	U
75-09-2	Methylene Chloride		5.	U
67-64-1	Acetone		10.	U
75-15-0	Carbon Disulfide		5.	U
75-35-4	1,1-Dichloroethene		5.	U
75-34-3	1,1-Dichloroethane		5.	U GS
156-60-5	1,2-Dichloroethene-trans		5.	U
67-66-3	Chloroform		5.	U
107-06-2	1,2-Dichloroethane		5.	U GS
78-93-3	2-Butanone		10.	U
71-55-6	1,1,1-Trichloroethane		5.	U
56-23-5	Carbon Tetrachloride		5.	U
75-27-4	Bromodichloromethane		5.	U
78-87-5	1,2-Dichloropropane		5.	U
10061-01-5	cis-1,3-Dichloropropene		5.	U
79-01-6	Trichloroethene		5.	U
124-48-1	Dibromochloromethane		5.	U
79-00-5	1,1,2-Trichloroethane		5.	U
71-43-2	Benzene		1.	J
10061-02-6	trans-1,3-Dichloropropene		5.	U
75-25-2	Bromoform		5.	U GS
108-10-1	4-Methyl-2-Pentanone		10.	U GS
591-78-6	2-Hexanone		10.	U GS
127-18-4	Tetrachloroethene		5.	U
79-34-5	1,1,2,2-Tetrachloroethane		5.	U GS
108-88-3	Toluene		5.	U
108-90-7	Chlorobenzene		5.	U
100-41-4	Ethylbenzene		5.	U
100-42-5	Styrene		5.	U
156-59-2	1,2-Dichloroethene-cis		5.	U GS
106-42-3	m,p-Xylenes		5.	U
95-47-6	o-Xylene		5.	U



Data File: 21.05584:104 Quant Output File: ^C05584:1Q1
Name: Pesticide 28 Instrument ID: 2000 1.
Misc: 20000. 0210221 62

Id File: 05911.:MT
Title: HP 000 Continuing Calibration Standard
Last Calibration: 0xx31 11:12 Last Cal Time: ^ xx26 xx:x9

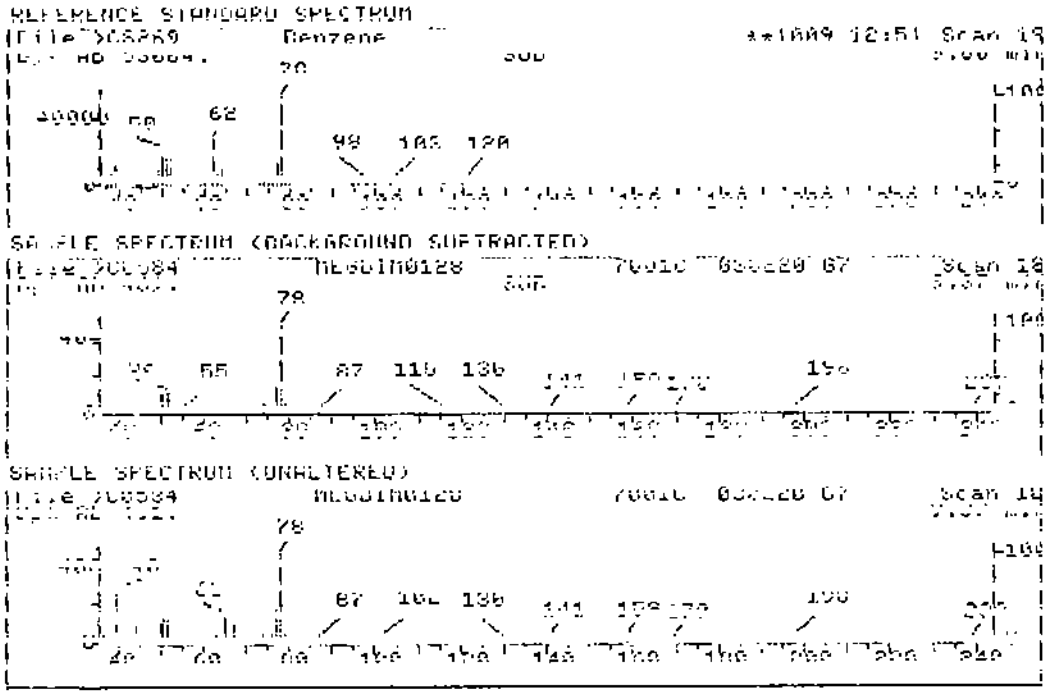
Operator ID: MOCIE
Quant Time : 0910226 12:x7
Injected at: **0226 12:09

Operator ID: MARIE Quant Rmd: Y Quant Time: [illegible]
Output File: C:\5584\Q1 Injected At: 970226 12:09
Data File: C:\5584\D4 Dilution Factor: 1.0000
Name: MS5D100128 Instrument ID: 5971 C
Misc: 5971C 970226 62

Ir File: 05910\M1
Title: 8F 0V8 Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: 970226 09:49

	Compound	R.T.	Q	Conc	Area	Units	Q
17	*Bromochloromethane	6.93	128.0	5925	50.00	ug/L	
20	1,2-Dichloroethane-d4	9.18	65.0	18791	55.08	ug/L	8
23	*1,4-Difluorobenzene	9.28	114.0	45722	50.00	ug/L	
25	Benzene	9.52	78.0	2887	1.47	ug/L	2
32	*Chlorobenzene-d5	15.18	117.0	41[illegible]	50.00	ug/L	
49	Toluene d-8	17.39	98.0	66885	49.27	ug/L	9
59	Bromofluorobenzene	[illegible].93	[illegible].0	26857	52.08	ug/L	[illegible]

* Compound is ISTD



Data File: >C:\5584::D4
Name: Mes\1110\28
Mass: /1111. 0>0220 67
Quant Time: 11:0226 17:27
Injected at: **0226 12:09
Last Qual Time: **0226 09:49

Quant Output File: >C:\5584::Q4
Instrument ID: /1111 1.
Quant ID File: C:\5911::1.
Last Calibration: 0:1131 10:09

Compound No : 3>
Compound Name : benzene
Scan Number : 18>
Retention Time: 9.>2 min.
Quant Ion : 78.0
Area : >>82
Concentration : 1.47 U>
Q-Value : >>

1A

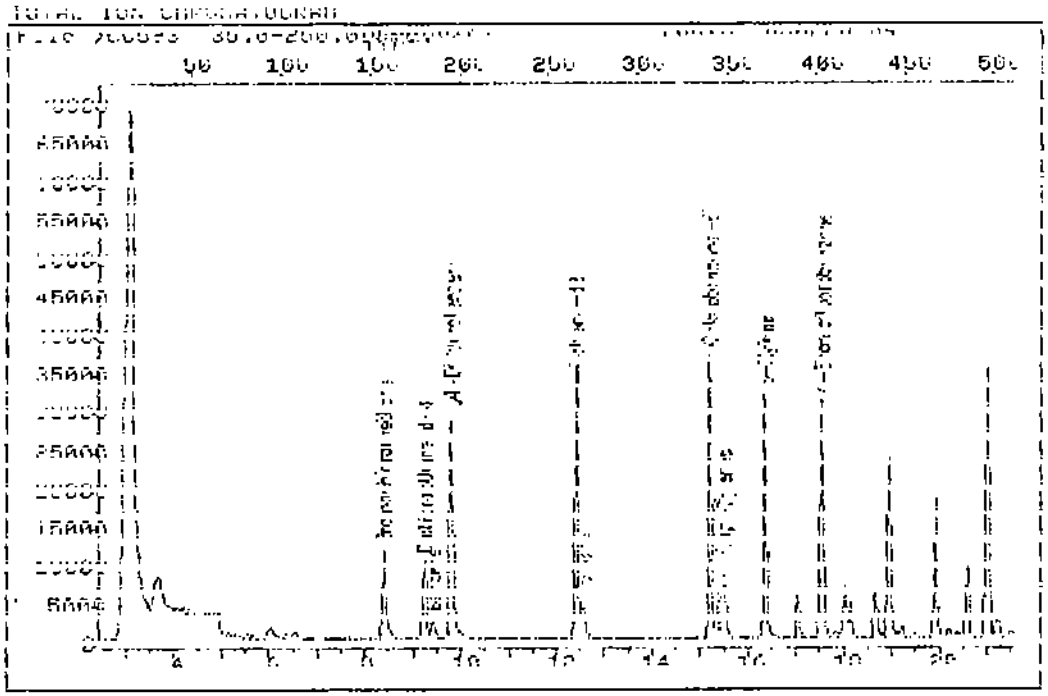
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGSH0121

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGSH0121
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0593
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	2.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	3.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	3.	J
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	7.	
95-47-6	o-Xylene	22.	



Data File: >C:\59?:D4 Quant Output File: C:\59?:QT
Name: MEASHHI?1 Instrument ID: .001 L
Misc: 2HHHC 0?0220 64

Id File: HP59?C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 0?0?31 10:0? Last Anal Time: ?.:22 HH:?

Operator ID: MANIK
Quant Time : 0?0?27 11:?7
Injection at: **0?27 11:?9

Quant Report

Operator ID: [illegible]
Output File: ^C:\...\...:Q1
Data File: ^C:\...\...:D4
Name: MB-[illegible]
Misc: [illegible]

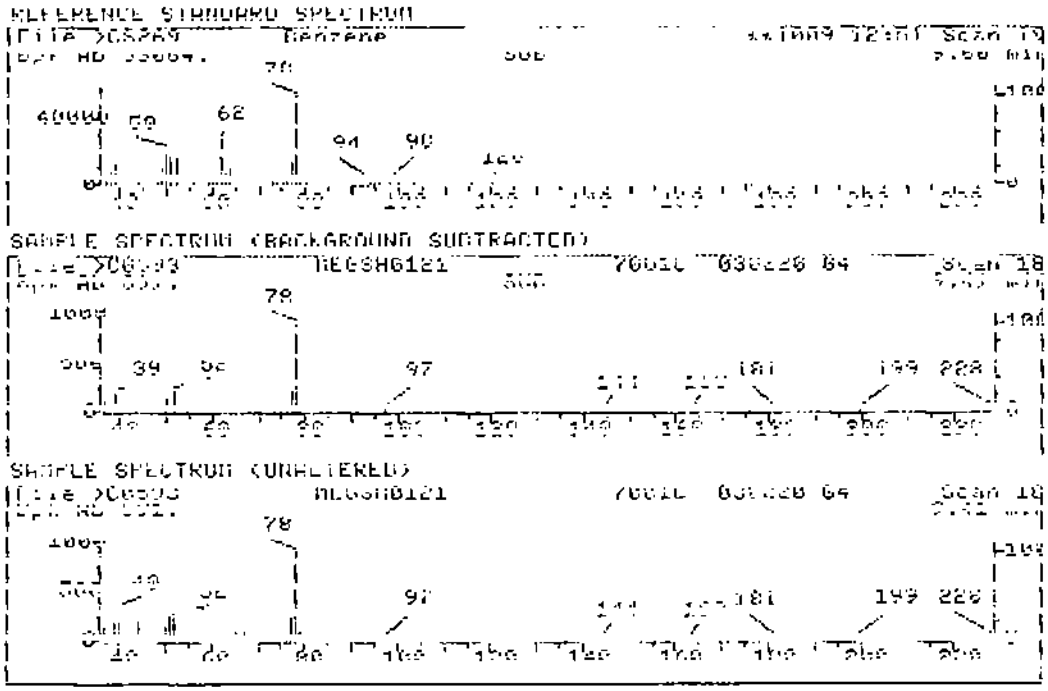
Quant Rpt: [illegible]
Injected at: [illegible]
Dilution Factor: [illegible]
Instrument ID: [illegible]

ID File: ID:\...\...:M1
Title: [illegible]
Last Calibration: [illegible]

Last Quant Time: [illegible]

	Compound	R.T.	M.W.	Area	[illegible]	[illegible]	[illegible]
1)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2)	1,2-Dichloroethane-d4	9.93	67.0	19484	47.02	[illegible]	[illegible]
2)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3)	Benzene	9.41	78.0	4749	2.38	[illegible]	[illegible]
3)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4)	Toluene	12.54	91.0	7566	3.74	[illegible]	[illegible]
4)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4)	Ethylbenzene	15.33	106.0	1966	1.01	[illegible]	[illegible]
4)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4)	o-Xylene	16.34	106.0	16882	22.06	[illegible]	[illegible]
5)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is ISTD

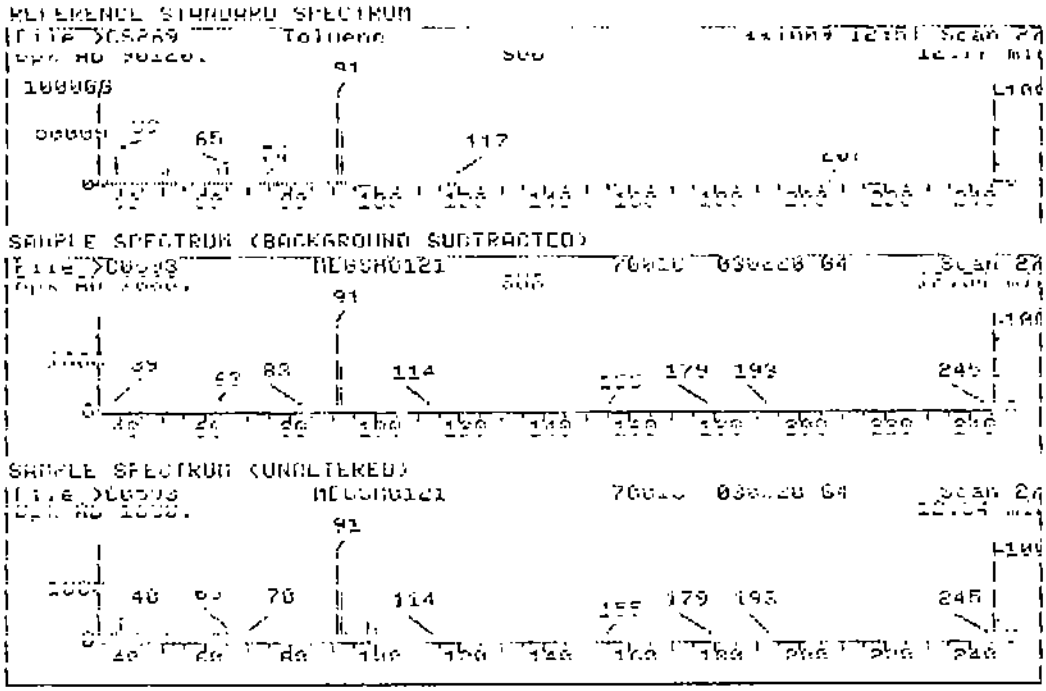


Data File: >C0993::04
Name: HE6SH6121
Misc: 70D1C 031220 64
Quant Time: 03..22 11:12
Injected at: **0227 11:29
Last Cal Time: **0227 11:39

Quant Output File: >C0993::05
Instrument ID: >0001 F.

Quant ID File: >0591::.DF
Last Calibration: 031131 10:03

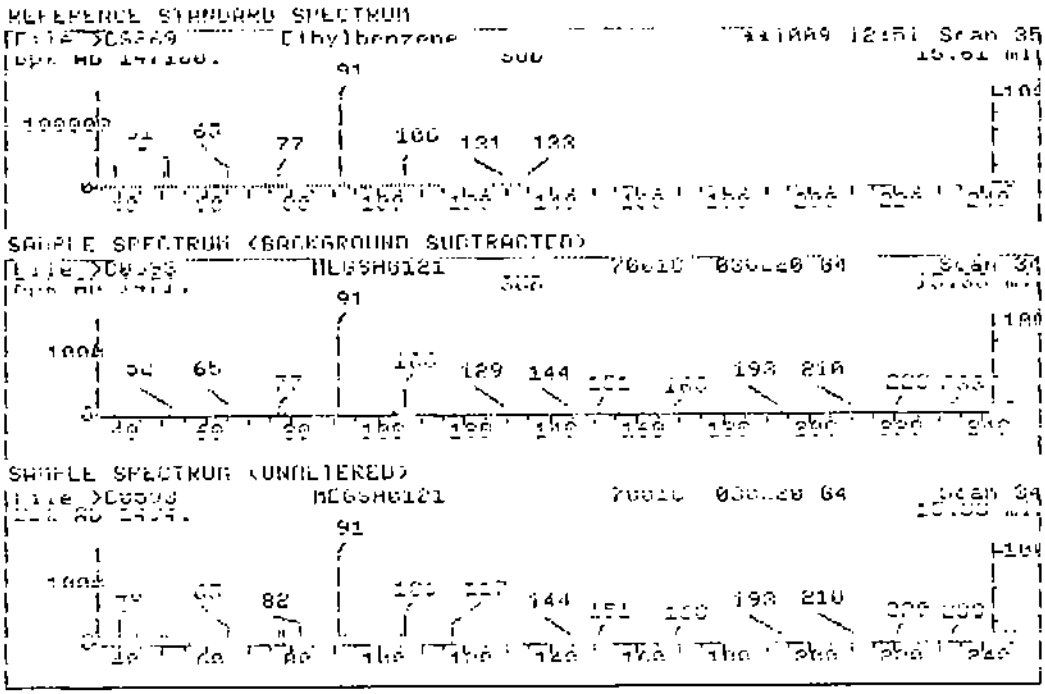
Compound No : 33
Compound Name : Benzene
Scan Number : 186
Retention Time: 9.41 min.
Quant Ion : 78.0
Area : 4942
Concentration : 2.38 UG
q-Value : 97



Data File: >C0>93::D4
Name: MESSHU121
Misc: 2001C 930220 G4
Quant time: 93/02/27 11:32
Injected at: **/02/27 11:29
Last cal time: **/02/27 10:35

Quant Output File: ^C0>93::QT
Instrument ID: >001 L
Quant ID File: >DS91:::::I
Last Calibration: 930131 10:03

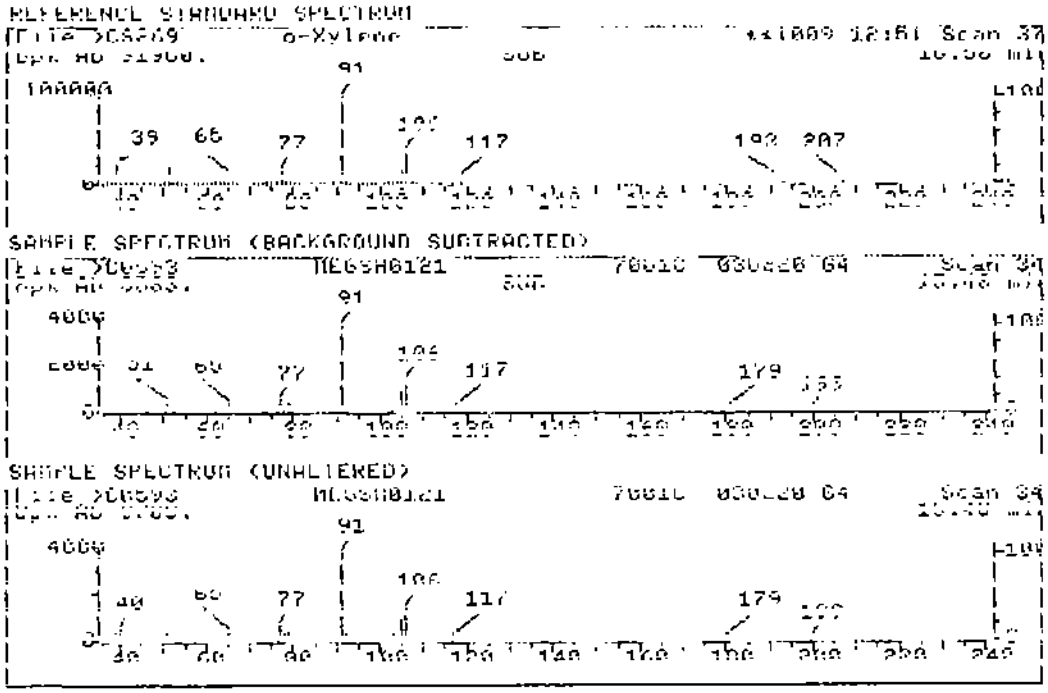
Compound No : 42
Compound Name : Toluene
Scan Number : 220
Retention Time: 12.54 min.
Quant Ion : 91.0
Area : 7.88
Concentration : 3.24 UG
q-Value : 98



Data File: >C0993::D4
Name: MEGSH0121
Misc: 2000C 930920 64
Quant Time: 93/09/27 11:52
Injected at: **/09/22 11:29
Last Qual Time: **/09/22 10:35

Quant Output File: ^C0993::Q1
Instrument ID: 7001 L
Quant ID File: 10S911::Q
Last Calibration: 93/01/31 10:03

Compound No : 45
Compound Name : Ethylbenzene
Scan Number : 345
Retention Time: 19.33 min.
Quant Ion : 106.0
Area : 1966
Concentration : 3.01 UG
q-value : 99

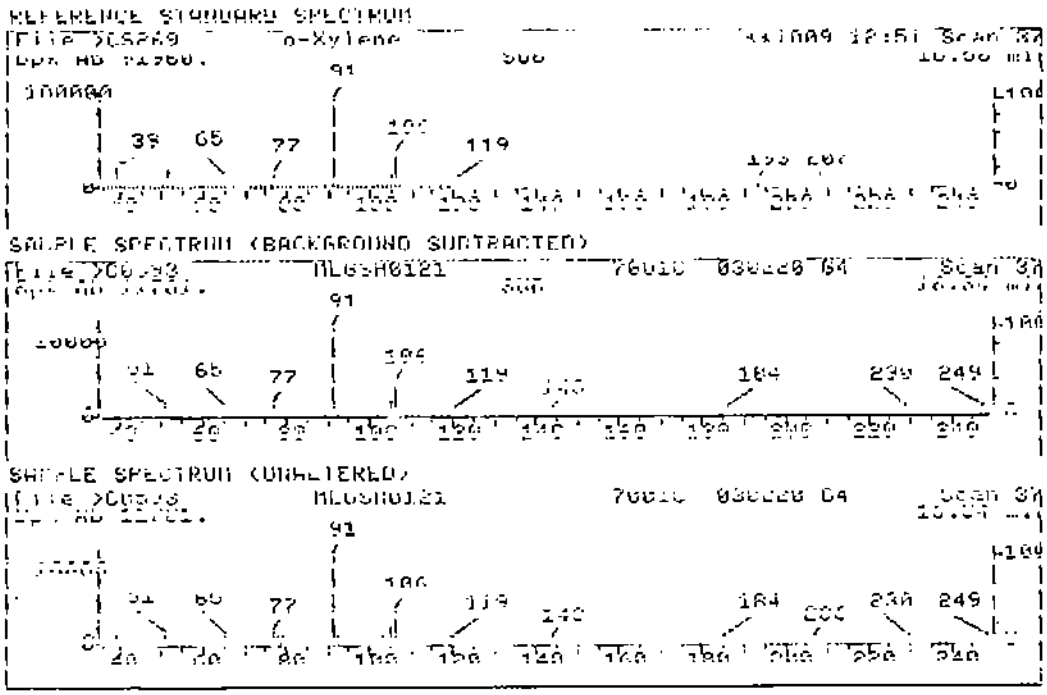


Data File: >C0993::D4
Name: MEGSH0121
Misc: 70010 030220 G4
Quant Time: 030227 11:32
Injected at: **0227 11:29
Last Cal Time: **0227 10:35

Quant Output File: ^C0993::Q1
Instrument ID: [illegible]

Quant ID File: ...S911::C1
Last Calibration: 030131 10:19

Compound No : 42
Compound Name : m,p-Xylenes
Scan Number : 349
Retention Time: 15.48 min.
Quantion : 106.0
Area : 9413
Concentration : 6.94 UG
q-value : 94



Data File: >L:\D293::D4
Name: MEGSHD121
Misc: 70DJC 03D220 64
Quant Time: 0 :227 1 :52
Injected at: **D227 11:29
Last Local Time: **D227 D0:35

Quant Output File: "L:\D293::D4
Instrument ID: H01 1.

Quant ID File: D:\S4IC::.d
Last Calibration: 03D131 10:D3

Compound No : 48
Compound Name : o-Xylene
Scan Number : 327
Retention Time: 16.34 min.
Quant Ion : 106.0
Area : 16842
Concentration : 27.06 Ub
q-value : 89

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

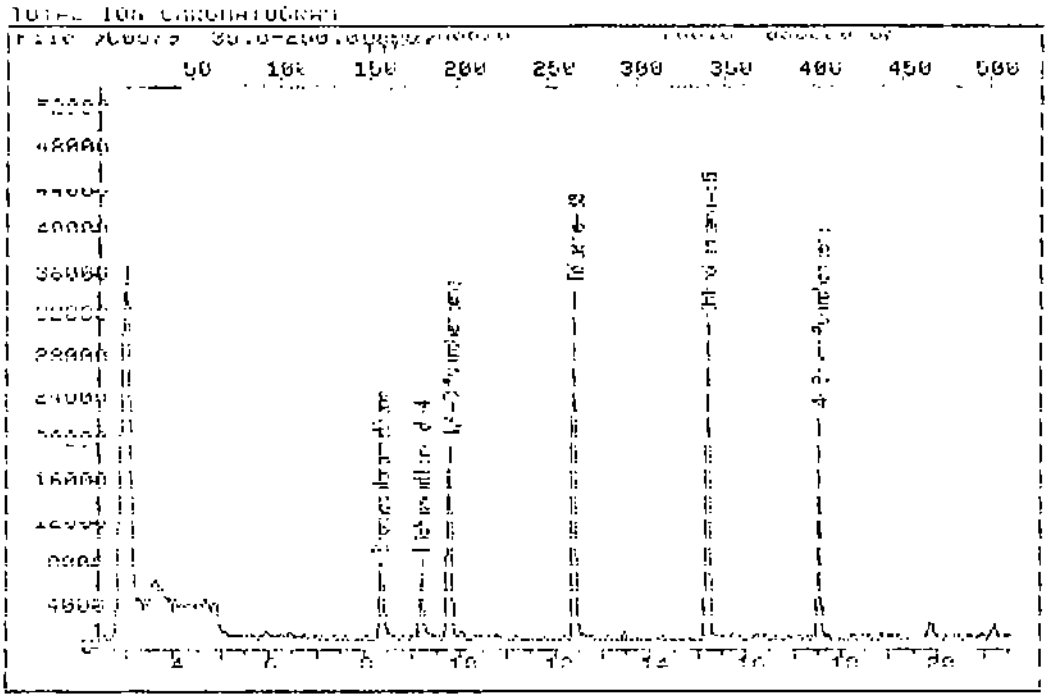
EPA SAMPLE NO.

MEGUSH8601

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8601
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0579
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	U
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	U
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	U
108-10-1	4-Methyl-2-Pentanone	10.	U	U
591-78-6	2-Hexanone	10.	U	U
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	U
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	U
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMK 6/4/03



Data File: >C0979:104 Quant Output File: ^C0979:QT
Name: Pesticide Mix Instrument ID: GC11
Misc: 20ul 030720 SZ

ID File: C059IC::MT
Title: HP 608 Continuing Calibration Standard
Last Calibration: 030121 08:15 Last Anal Time: 030726 09:39

Operator ID: MIKE
Quant Time : 030726 15:2
Injected at: 030726 14:51

Operator ID: [illegible] Quant Rev: 2 Quant Time: 890226 19:[illegible]
Output File: ^C:0529:[illegible] Injected at: **0226 14:50
Data File: ^C:0529:04 Dilution Factor: 1.0000
Name: MBUSHRATIO Instrument ID: 2000 C
Misc: 2000C 890220 W2

ID File: 10597C:[illegible]
Title: HP 5988 Continuing Calibration Standard
Last Calibration: 890131 10:03 Last Quat Time: **0226 09:49

	Compound	R.T.	[illegible] on	Area	Conc	Units	[illegible]
1)	*Bromochloromethane	8.33	128.0	2[illegible]8	50.00	UG	
20)	1,2-Dichloroethane-d4	9.19	65.0	14720	94.9%	UG	8[illegible]
23)	*1,4-Dichlorobenzene	[illegible].78	146.0	51911	50.00	UG	[illegible]
32)	*Chlorobenzene-d5	15.16	117.0	29222	50.00	UG	9[illegible]
43)	Toluene-d8	[illegible].39	98.0	46.25	51.10	UG	[illegible]
49)	Bromofluorobenzene	17.53	95.0	19567	55.23	UG	6[illegible]

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

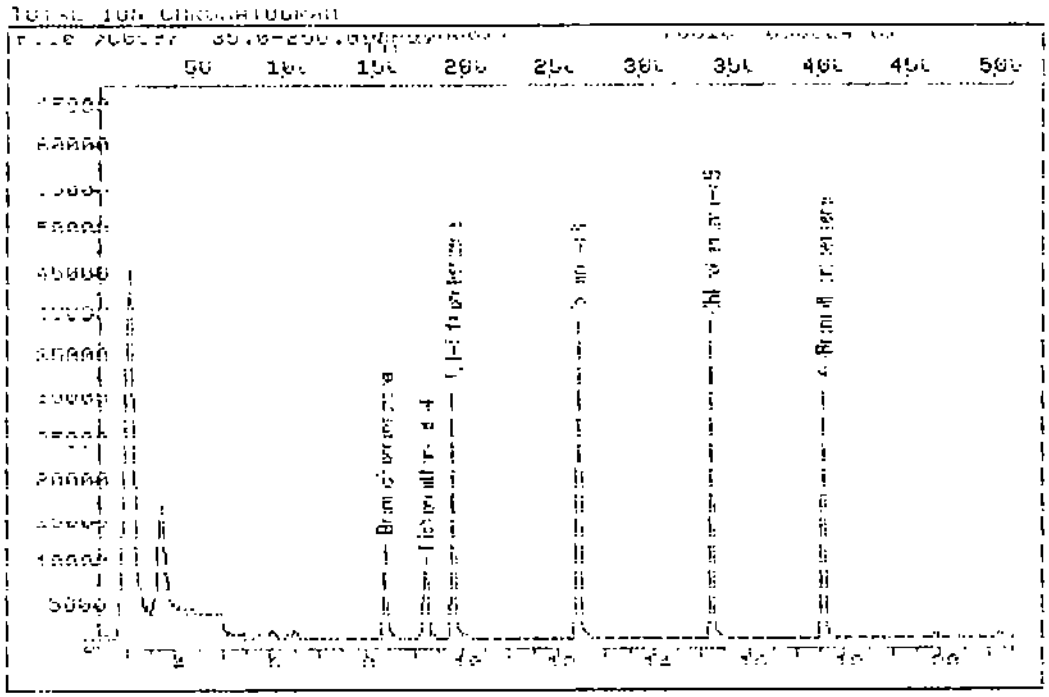
EPA SAMPLE NO.

MEGUSH8611

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8611
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0597
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

Ank 6/4/03



Data File: 21:0922:104 Qrant Output File: ^C:\922:1Q1
Name: MrSt1nd66(1) Instrument ID: .001 ..
Mass: 2000.0 03\0224 1.1

Title: 0S91C:.MT
Title: HP 0N6 Continuing Calibration Standard
Last Calibration: 03\21 1\:\2 Last Anal Time: 1 :22 ..:.

Operator ID: MARIF
Qrant Time : 03\222 13:22
Injected at: **\222 1>:12

Operator ID: MARIE Quant Rev: 2 Quant Time: 8/22/22 9:
Output File: C:\D592\DT Injected at: 8/22/22 12:
Data File: C:\D592\004 Dilution Factor: 1.0000
Name: MB8050601 Instrument ID: 2000 C
Misc: 2000C 050224 L1

ID File: D0591C.M
Title: HP 200A Continuing Calibration Standard
Last Calibration: 05/01/91 08:03 Last Qual Time: 8/8/22 08:5

	Compound	R.T.	Ion	Area	Conc	Units	
1)	Bromochloromethane	8.28	128.0	1e+11	50.000	ug	
2)	1,2-Dichloroethane-d4	9.25	65.0	1e+07	49.218	ug	8
3)	1,4-Difluorobenzene	9.79	114.0	4e+07	50.000	ug	
4)	Chlorobenzene-d5	14.19	117.0	4e+07	50.000	ug	9
5)	Toluene-d8	14.40	98.0	2e+07	46.888	ug	
6)	Bromofluorobenzene	17.54	95.0	2e+07	47.597	ug	8

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

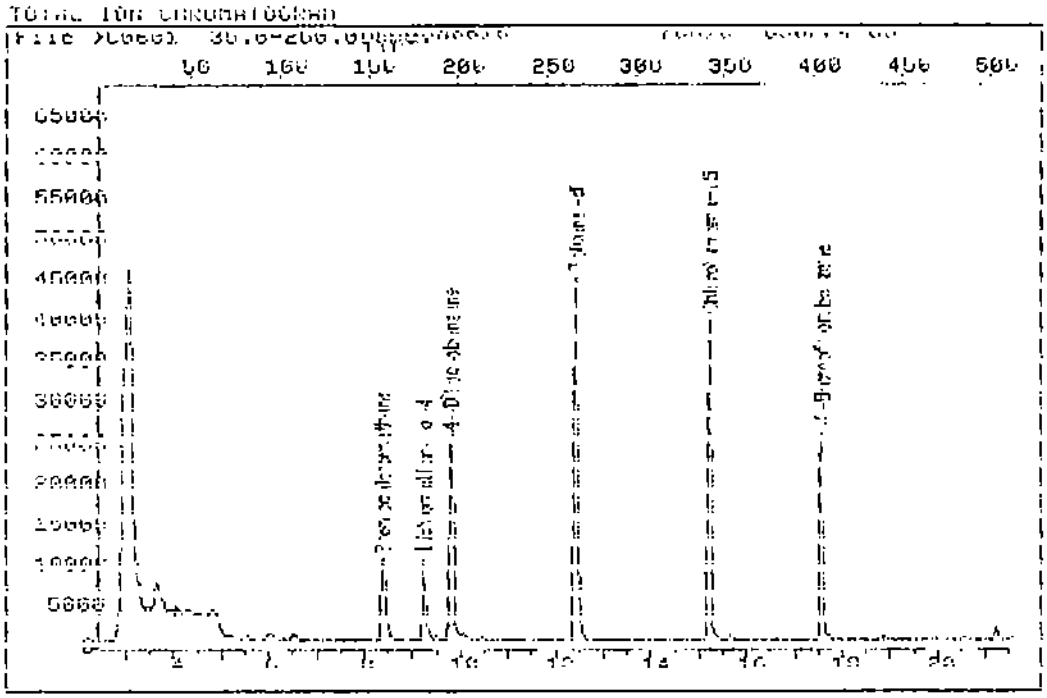
EPA SAMPLE NO.

MEGUSH8616

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8616
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0601
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMS 6/24/03



Data File: >LIBA01::D4 Quant Output File: ^CLIBA01::Q1
Name: MEGUSHRA16 Instrument ID: >001 F.
Misc: 20010 930724 0.9

Id File: DISK1$:[MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qcal Time: *.0227 10:56

Operator ID: MARIE
Quant Time : 930727 19:27
Injected at: **0227 19:09

QUANT REPORT Page 1

Operator ID: FinalE Quant Run: 7 Quant Time: 8:0222 15:27
Output File: ^CHA01::Q1 Injected at: **0227 15:02
Data File: 21.DA01::D4 Dilution Factor: 1.0000
Name: MEGUSH8616 Instrument ID: 7001 C
Misc: 2001C 830224 05

ID File: ID591C::MT
Title: HP 5971A Continuing Calibration Standard
Last Calibration: 03/03/31 10:03 Last Qcal Time: **0227 10:54

	Compound	R.T.	Q Ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.32	128.0	9682	50.00	ug	
2)	1,2-Dichloroethane-d4	9.22	65.0	19020	46.11	Ug	81
3)	*1,4-difluorobenzene	9.78	114.0	47482	50.00	ug	96
3)	*Chlorobenzene-d5	15.27	117.0	41198	50.00	Ug	92
4)	Toluene d-8	11.43	98.0	86792	47.22	ug	96
4)	Bromofluorobenzene	17.97	95.0	26292	46.29	Ug	59

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

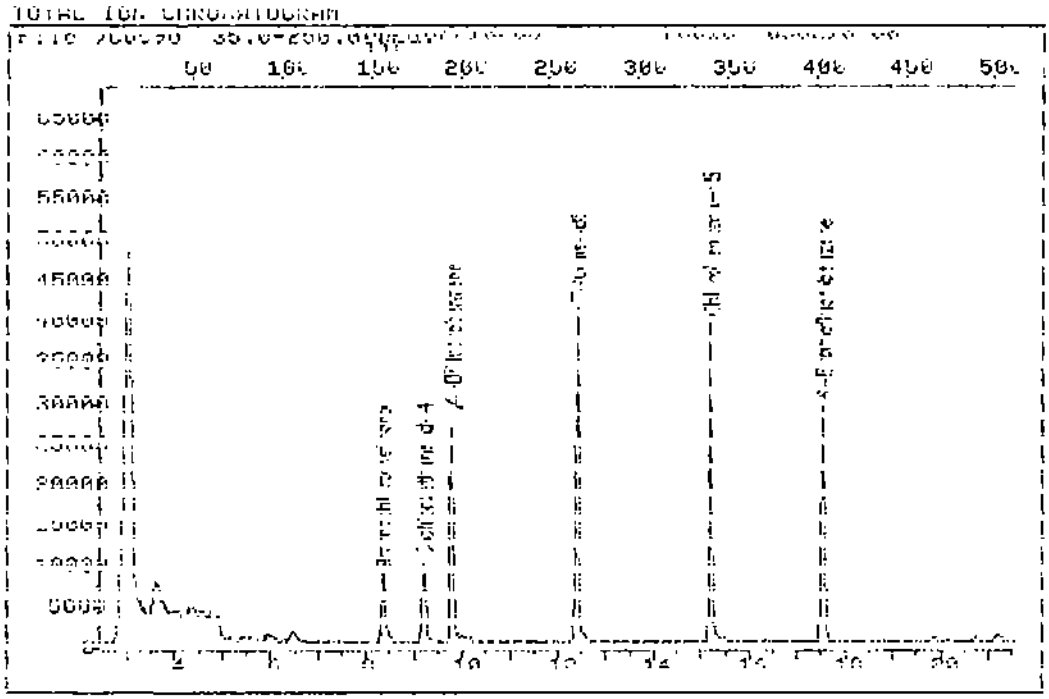
EPA SAMPLE NO.

DUP021803

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: DUP021803
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0590
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	SJ
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	SJ
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	SJ
108-10-1	4-Methyl-2-Pentanone	10.	U	SJ
591-78-6	2-Hexanone	10.	U	SJ
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	SJ
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	SJ
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMK 6/24/03



Data File: 2C0990:104 Quant Output File: "C:\0990:10
Name: DBF-082183 Instrument ID: .100 1.
Misc: 20011 030218 JA

Id File: 0059C::MT
Title: HP V08 Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Quad Time: **:26 .0*: *

Operator ID: MARIE
Quant Time : 030226 20:..
Injected at: **0226 19:48

Operator ID: RestE
Output File: ^D0590::Q1
Data File: ^D0590::D4
Name: DUP-02/18/93
Misc: 2000C 930218 .b

Quant Rev: 2 Acquired Time: 9:0226 20:14
Injected at: **0226 19:48
Dilution Factor: 1.0000
Instrument ID: 2000 C

ID File: ID5910::M1
Title: HP 8240 Monitoring Calibration Standard
Last Calibration: 930131 10:03 Last Quan Time: **0226 09:49

	Compound	R.T.	Mean	Area	Conc	Units	Q
1)	*Bromochloromethane	9.23	126.0	9274	20.00	ug	
2)	1,2-Dichloroethane-d4	9.19	65.0	16595	94.59	Uns	9
3)	*1,4-Dichlorobenzene	9.78	114.0	46143	20.00	ug	
4)	*Chlorobenzene-d5	15.18	117.0	40142	20.00	Uns	9
5)	Toluene-d8	12.59	98.0	64103	49.64	ug	
6)	Bromofluorobenzene	17.93	95.0	24792	49.79	Uns	9

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

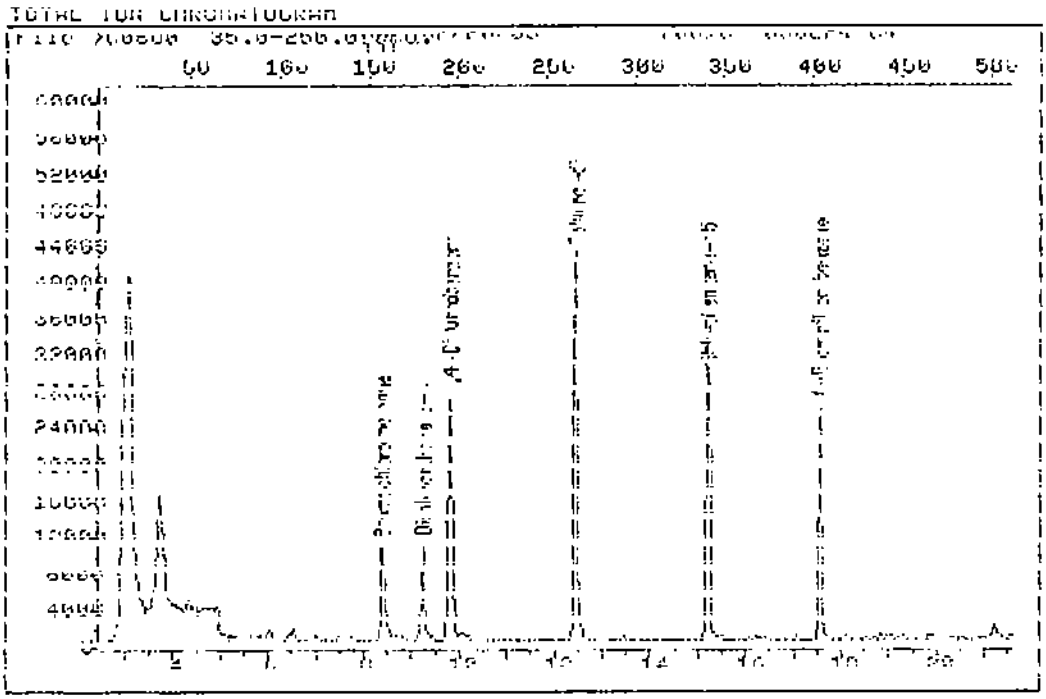
EPA SAMPLE NO.

DUP022003

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: DUP022003
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0600
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/4/03



Data File: >Data001:D4
Name: DDE-02/28/03
Misc: 20001C 030224 D4

Quant Output File: >Data001:Q1
Instrument ID: 2001 C

Id File: 1D5910:MT
Title: HP 0DB Continuing Calibration Standard
Last Calibration: 030151 10:03
Last Anal Time: **0227 10: >

Operator ID: MARIE
Quant Time : 03:/27 15:00
Injection at: **0227 14:38

Operator ID: MARIE Quant Rev: 2 Quant Time: 02/22 /97:0
Output File: %DATA00::Q1 Injected at: **0222 14:58
Data File: %DATA00::D4 Dilution Factor: 1.000 0
Name: DDP-02/20/03 Instrument ID: Finn C
Misc: %001C 0%0224 L4

ID File: ID8%1C::M1
Title: HP 5971 Continuing Calibration Standard
Last Calibration: 95/01/31 10:03 Last Qual Time: **0222 10:5%

	Compound	R.T.	Q	Im	Area	Conc	Units	%
1)	*Bromochloromethane	8.32	128.0		9%0d	50.00	uG	
2%)	1,2-Dichloroethane-d4	9.23	65.0		18%94	48.6%	UG	9
2%)	*1,4-Difluorobenzene	9.79	114.0		88%9	50.00	UG	
3%)	*Chlorobenzene-d5	15.19	117.0		42%6%	50.00	UG	9.
45)	Toluene d-8	12.43	98.0		2%4%	49.24	uG	
47)	Bromofluorobenzene	12.54	95.0		28%8	48.2%	UG	9

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

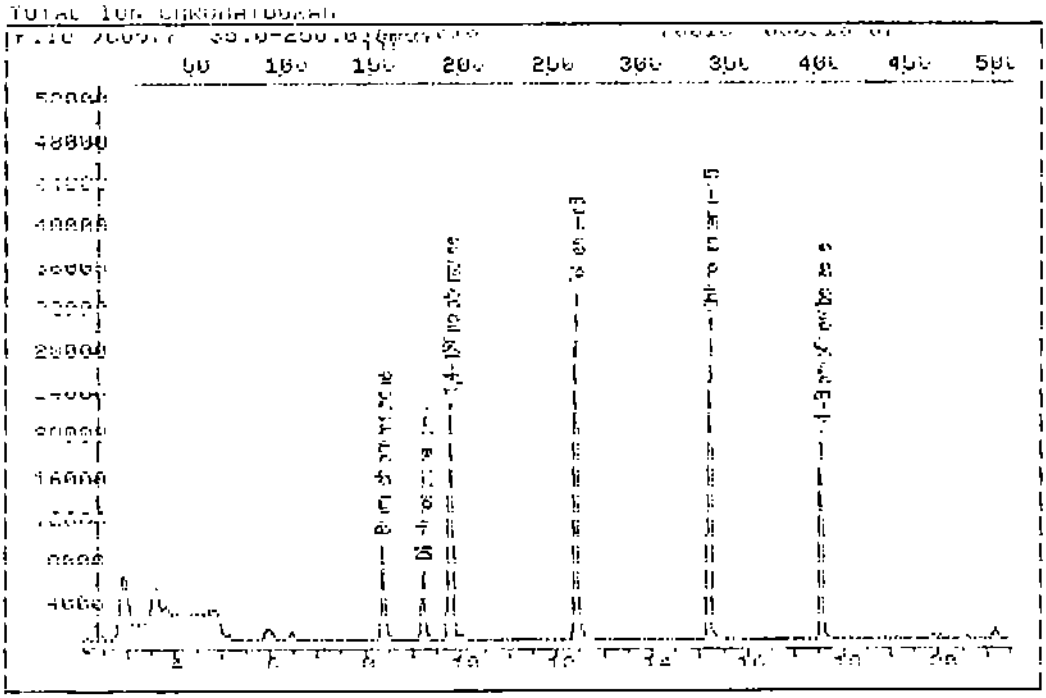
EPA SAMPLE NO.

TB030218

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030218
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0577
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	5J
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	5J
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	5J
108-10-1	4-Methyl-2-Pentanone	10.	U	5J
591-78-6	2-Hexanone	10.	U	5J
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	5J
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	5J
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

Ahmk 6/4/03



Data File: >C0922::04 Quant Output File: >C0922::Q1
Name: CRL92718 Instrument ID: >1001 ..
Misc: >0010 090218 32

LC File: C0911.::MT
Title: HP 006 Continuing Calibration Standard
Last Calibration: 0?<:51 10:10 Last Anal Time: **:*26 **:**

Operator ID: MARIE
Quant Time : 090226 14:?
Injected at: **0226 13:56

QUANT REPORT Page 1

Operator ID: BARIE Quant Rev: 7 Quant Time: 88/8/26 14: 7
Output File: ^C:\5972\1\Q\ Injected at: **/8/26 13:56
Data File: ^C:\5972\1\D4 Dilution Factor: 1.000 0
Name: TB030718 Instrument ID: 5971 1
Misc: 5ml@C 030718 .17

ID File: C:\5971\1\M\
Title: HP 5MB Continuing Calibration Standard
Last Calibration: 93/1/31 10:03 Last Qcal Time: **/8/26 09:49

	Compound	R.T.	Mass	Area	Conc	Units	Q
1)	*Bromochloromethane	8.24	128.0	4 04	50.000	ug	
2)	1,2-Dichloroethane-d4	9.21	65.0	1 9 7 8	49.47	ug	8
3)	*1,4-Difluorobenzene	9.76	114.0	56 5 3	50.000	ug	
4)	*Chlorobenzene-d5	15.19	117.0	3 2 6 8	50.000	ug	9
5)	Toluene-d8	12.40	98.0	5 4 4 4	50.50	ug	
6)	Bromofluorobenzene	17.54	95.0	21789	51.03	ug	9

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

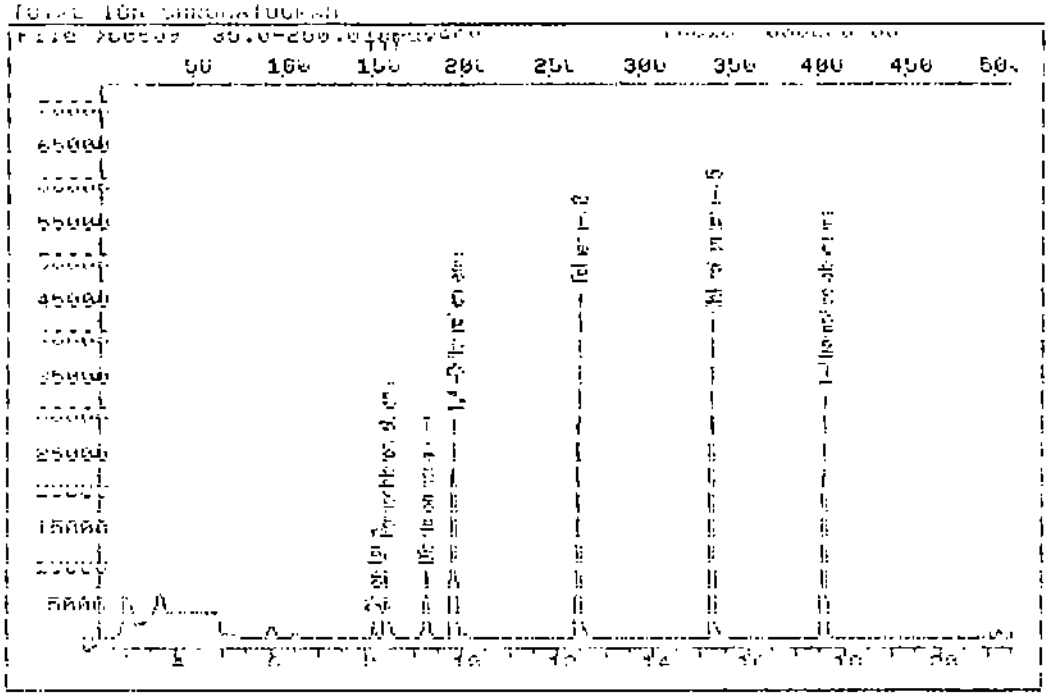
EPA SAMPLE NO.

TB030220

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030220
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0609
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	~~U~~ UJ
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	7.	
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMS 6/24/03



Data File: %1:DATA19:[DA
Name: 1B0130220
Mass: 20011. 0130220 68

Quant Output File: %1:DATA19:[Q
Instrument ID: .001 1.

ID File: 0059[1.]:MT
Title: HP 5988 Continuing Calibration Standard
Last Calibration: 03/11/31 10:03 Last Acal Time: 4 /27 ::>

Operator ID: MASTER
Quant Time : 030/22 19:[illegible]
Injected at: **0/22 18:41

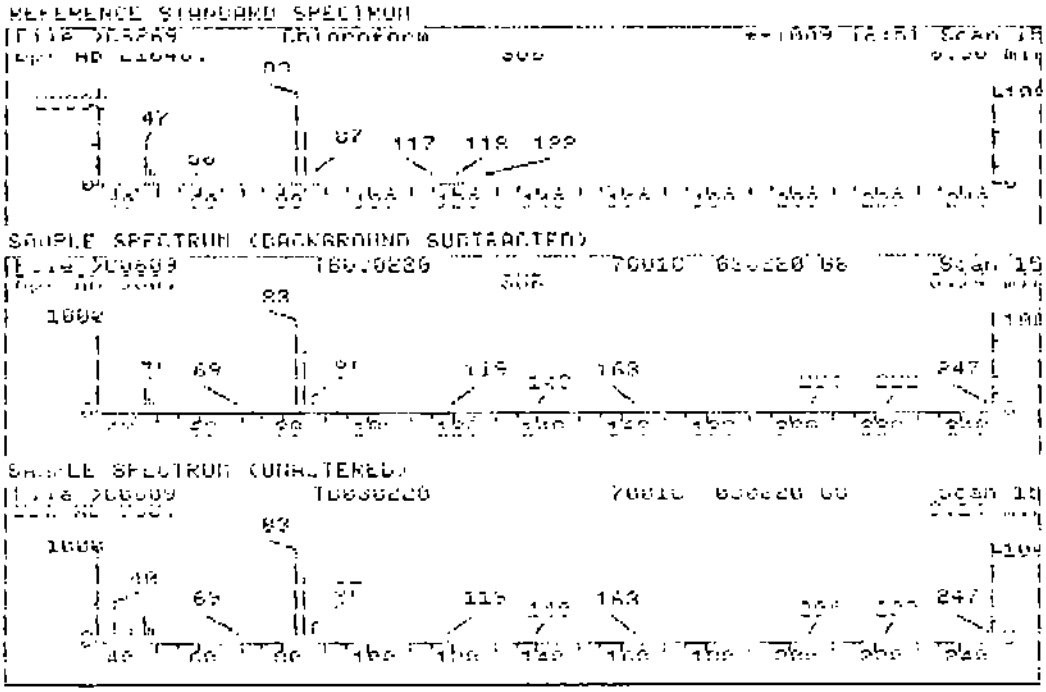
Operator ID: DARIE
Output File: ^D:U609::Q1
Data File: ^D:U609::D4
Name: TRU30220
Misc: 2U::C 830220 U8

Quant Rev: 7 Quant Time: 8 0227 19:34
Injected at: **0227 18:41
Dilution Factor: 1.000 0
Instrument ID: 2UUI C

ID File: ID591C::MT
Title: HP V0A Continuing Calibration Standard
Last Calibration: 0208130 10:03 Last Qual Time: **0227 10:39

	Compound	R.T.	Mean	Area	Conc	Units	Q
1)	*Bromochloromethane	8.40	128.8	9669	50.00	uG	
17)	Chloroform	8.14	83.8	9266	2.18	UG	9
20)	1,2-Dichloroethane-d4	8.22	98.0	18001	48.68	uG	
23)	*1,4-Difluorobenzene	9.81	114.0	44894	50.00	UG	9
32)	*Chlorobenzene-d5	13.22	117.0	41832	50.00	uG	
46)	Toluene d-8	12.42	98.0	69737	48.09	UG	9
49)	Bromofluorobenzene	14.96	95.0	37201	46.41	uG	9

* Compound is ISTD



Data File: [illegible]
Name: [illegible]
Misc: [illegible]
Quant Time: [illegible]
Injected at: [illegible]
Last Cal Time: [illegible]

Quant Output File: [illegible]
Instrument ID: [illegible]
Quant ID File: [illegible]
Last Calibration: [illegible]

Compound No : 19
Compound Name : [illegible]
Scan Number : 192
Retention Time: [illegible]
Quantion : [illegible]
Area : [illegible]
Concentration : [illegible]
q-Value : [illegible]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

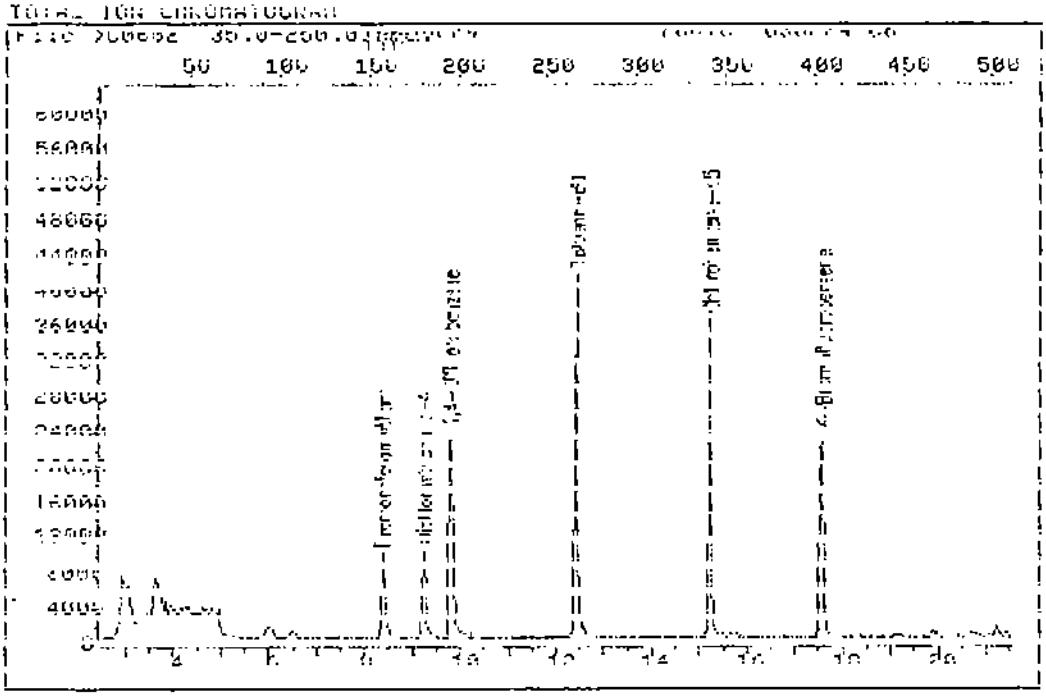
EPA SAMPLE NO.

TB030224

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030224
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0602
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U GS
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03



Data File: >Disk02::04 Quant Output File: >Disk02::04
Name: 1991124 Instrument ID: 7000 1
Misc: 7001C 891124 Cn

Id File: 1059[1.::MT
Title: HP 5971 Continuing Calibration Standard
Last Calibration: 891031 18:03 Last Opal Time: [illegible]

Operator ID: MGEIE
Quant Time : 891122 19:24
Injected at: 891122 19:32

Operator ID: MARIE Quant Rev: 7 Quant Time: 930227 19:14
Output File: ^CHA02::Q1 Injected at: **0227 19:32
Data File: ^CHA02::D4 Dilution Factor: 1.0000
Name: TH030224 Instrument ID: 7001 C
Misc: 7001C 930224 C6

ID File: ID5970C::M1
Title: HP 5970 Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qual Time: **0222 10:36

	Compound	R.T.	Q min	Area	Conc	Units	Q
1)	*Bromochloromethane	8.32	128.0	5.48	50.00	UG	
20)	1,2-Dichloroethane-d4	9.23	65.0	18206	49.28	UG	8
23)	*1,4-Difluorobenzene	9.29	114.0	4 544	50.00	UG	
32)	*Chlorobenzene-d5	15.22	117.0	36277	50.00	UG	8
43)	Toluene d-8	12.43	96.0	66 10	50.92	UG	
49)	Bromofluorobenzene	17.67	95.0	26097	46.10	UG	9

* Compound is ISTD

STANDARDS

DATA

6A

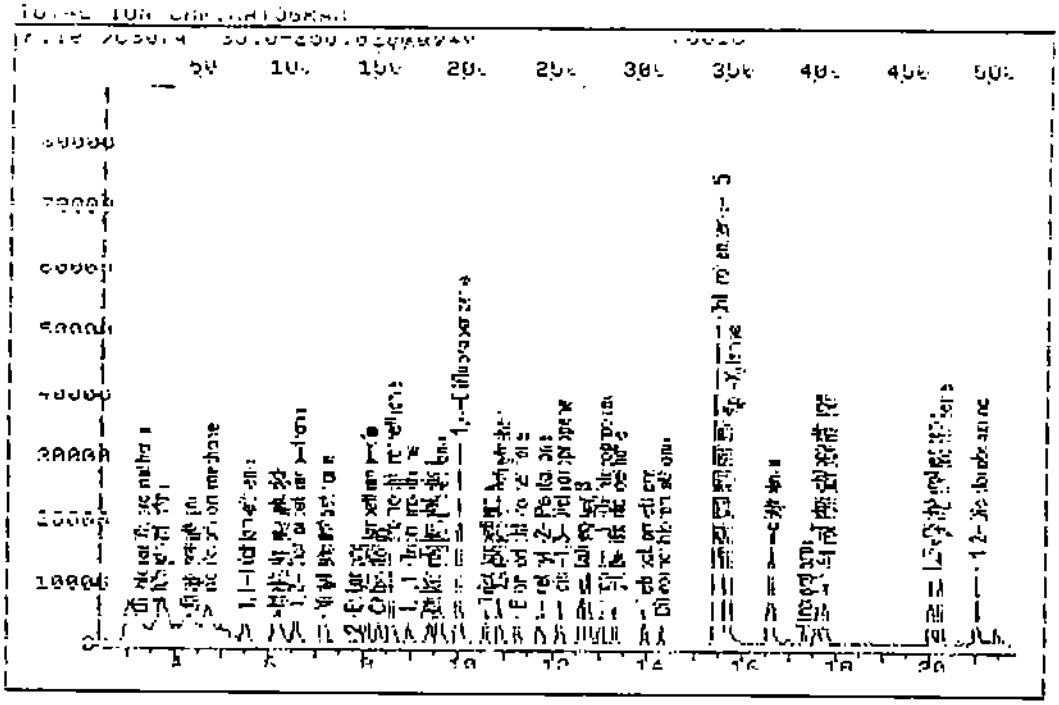
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Instrument ID: H5970 C Calibration Date(s): 02/21/03 02/21/03
Heated Purge: (Y/N) N Calibration Times: 08:54 10:47
GC Column: RTX502.2 ID: .32 (mm)

LAB FILE ID: RRF010= CS074 RRF020= CS075
RRF050= CS073 RRF100= CS076 RRF200= CS077

COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	9.596	8.156	8.091	7.874	6.479	8.039	13.8
* Bromomethane	5.409	2.868	4.234	4.467	3.195	4.034	25.3*
* Vinyl Chloride	10.267	9.246	9.708	8.902	7.910	9.206	9.6*
Chloroethane	3.904	3.077	2.953	2.847	2.385	3.033	18.2
Methylene Chloride	5.803	4.587	4.290	4.279	4.310	4.654	14.1
Acetone	1.091	.635	1.787	.843	1.226	1.116	39.3
Carbon Disulfide	15.309	15.794	15.466	16.837	16.453	15.971	4.1
* 1,1-Dichloroethene	3.282	3.578	3.146	3.358	2.988	3.270	6.8*
* 1,1-Dichloroethane	8.903	9.453	9.383	10.070	10.650	9.692	7.0*
1,2-Dichloroethene-trans	3.763	3.428	3.480	3.853	3.714	3.647	5.1
* Chloroform	7.447	7.513	7.619	8.232	8.655	7.893	6.7*
* 1,2-Dichloroethane	5.965	5.783	5.605	5.790	6.801	5.989	7.9*
2-Butanone	1.509	1.613	1.406	1.291	1.830	1.530	13.5
* 1,1,1-Trichloroethane	.584	.554	.546	.552	.586	.564	3.4*
* Carbon Tetrachloride	.416	.384	.386	.387	.401	.395	3.4*
* Bromodichloromethane	.643	.670	.564	.636	.661	.635	6.6*
1,2-Dichloropropane	.698	.681	.589	.646	.671	.657	6.5
* cis-1,3-Dichloropropene	.837	.805	.813	.922	.987	.873	9.1*
* Trichloroethene	.302	.263	.272	.285	.294	.283	5.6*
* Dibromochloromethane	.292	.288	.228	.284	.294	.277	10.0*
* 1,1,2-Trichloroethane	.397	.375	.310	.371	.373	.365	8.9*
* Benzene	2.282	2.290	2.346	2.438	2.545	2.380	4.7*
* trans-1,3-Dichloropropene	.798	.805	.730	.840	.902	.815	7.7*
* Bromoform	.190	.196	.174	.197	.185	.188	4.8*
4-Methyl-2-Pentanone	.655	.613	.774	.676	.746	.693	9.5
2-Hexanone	.258	.244	.292	.249	.271	.263	7.4
* Tetrachloroethene	.233	.237	.268	.253	.244	.247	5.6*
* 1,1,2,2-Tetrachloroethane	.745	.634	.733	.648	.620	.676	8.6*
* Toluene	2.361	2.490	2.664	2.739	2.896	2.630	8.0*
* Chlorobenzene	1.279	1.230	1.337	1.339	1.383	1.314	4.5*
* Ethylbenzene	.668	.710	.779	.791	.919	.773	12.4*
* Styrene	1.461	1.539	1.769	1.756	2.020	1.709	12.9*
Toluene d-8	1.581	1.589	1.736	1.671	1.747	1.665	4.7
* Bromofluorobenzene	.783	.715	.827	.743	.766	.767	5.5*
1,2-Dichloroethane-d4	4.573	3.664	3.893	4.056	4.844	4.206	11.6
1,2-Dichloroethene-cis	7.159	7.388	7.431	8.189	8.674	7.768	8.2
m,p-Xylenes	.795	.850	.954	.943	1.117	.932	13.2
* o-Xylene	.801	.850	.916	.872	.898	.867	5.1*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.



Data File: >CS074::04 Quant Output File: ^CS074::QT
Name: VSTD0110 Instrument ID: [illegible]
Misc: 20010

Id File: [illegible]
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Cal Time: <none>

Operator ID: MARIE
Quant Time : 030221 10:00
Injected at: **0221 09:25

Operator ID: DAVIE Quant Rev: 7 Quant Time: 030221 10:00
Output File: ^CS074::QT Injected at: **0221 09:25
Data File: >CS074::D4 Dilution Factor: 1.000000
Name: VSTD010 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.55	128.0	6954	50.00	UG	9
2)	Chloromethane	3.63	50.0	13308	10.85	UG	98
3)	Bromomethane	4.26	94.0	7911	11.22	UG	9
4)	Vinyl Chloride	3.66	62.0	14238	10.28	UG	99
5)	Chloroethane	4.34	64.0	5414	11.39	UG	9
6)	Methylene Chloride	6.13	84.0	8047	11.50	UG	6
8)	Acetone	4.34	43.0	1913	5.12	UG	9
12)	Trichlorofluoromethane	4.71	101.0	15375	10.64	UG	9
13)	Carbon Disulfide	6.24	76.0	21750	9.95	UG	1
14)	1,1-Dichloroethene	5.49	96.0	4551	10.21	UG	6
15)	1,1-Dichloroethane	7.17	63.0	12946	9.74	UG	9
16)	1,2-Dichloroethene-trans	6.57	96.0	5218	10.39	UG	71
18)	1,2-Dichloroethene-cis	8.06	61.0	9598	9.81	UG	9
19)	Chloroform	8.29	83.0	10328	9.89	UG	96
20)	1,2-Dichloroethane-d4	9.40	65.0	6542	10.80	UG	9
21)	1,2-Dichloroethane	9.55	62.0	8272	10.31	UG	84
22)	2-Butanone	7.76	43.0	2093	10.35	UG	1
23)	*1,4-Difluorobenzene	9.96	114.0	57767	50.00	UG	99
24)	1,1,1-Trichloroethane	8.92	97.0	6751	10.34	UG	9
25)	Carbon Tetrachloride	9.33	117.0	4804	10.37	UG	84
26)	Vinyl Acetate	7.13	43.0	17488	10.39	UG	90
27)	Bromodichloromethane	11.27	83.0	7433	10.66	UG	99
28)	1,2-Dichloropropane	10.86	63.0	8883	10.85	UG	94
29)	cis-1,3-Dichloropropene	12.16	75.0	9671	10.15	UG	81
30)	Trichloroethene	10.56	130.0	3485	10.52	UG	9
31)	Dibromochloromethane	14.32	129.0	3378	11.23	UG	91
32)	1,1,2-Trichloroethane	13.35	97.0	4987	11.23	UG	9
33)	Benzene	9.59	78.0	26361	9.86	UG	97
34)	trans-1,3-Dichloropropene	13.05	75.0	9918	10.45	UG	9
35)	2-Chloroethylvinylether	10.86	63.0	8063	10.85	UG	91
36)	Bromoform	12.30	173.0	2196	10.43	UG	9
37)	*Chlorobenzene-d5	15.44	117.0	54595	50.00	UG	94
38)	2-Hexanone	12.31	43.0	28979M	8.85	UG	
39)	4-Methyl-2-Pentanone	11.75	43.0	7156	9.17	UG	59
40)	Tetrachloroethene	13.95	164.0	7542	9.30	UG	9
41)	1,1,2,2-Tetrachloroethane	17.60	83.0	8136	10.08	UG	89
42)	Toluene	12.76	91.0	25078	9.40	UG	9
43)	Toluene d-8	12.61	98.0	17966	9.53	UG	96
44)	Chlorobenzene	15.51	112.0	17660	9.78	UG	9
45)	Ethylbenzene	15.59	106.0	7298	9.24	UG	83

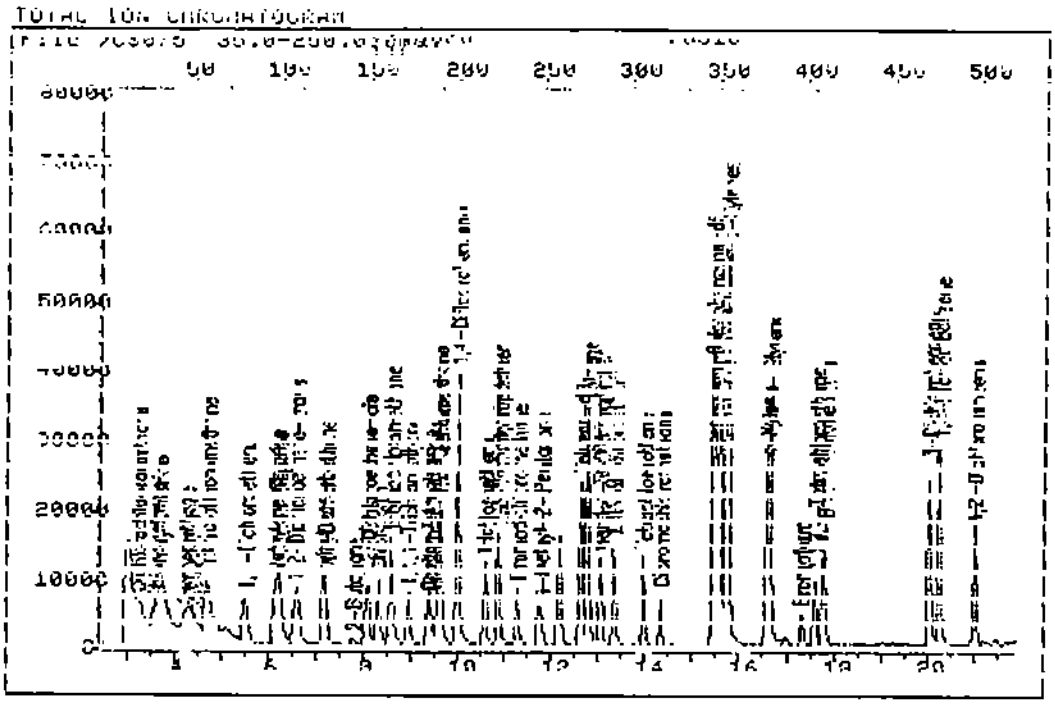
Operator ID: MARIE
Output File: ^CS074::QT
Data File: >CS074::04
Name: VSTD010
Misc: 7001C

Quant Rev: 7 Quant Time: 030221 10:00
Injected at: *030221 09:59
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: 00C91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Cal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.63	104.0	15952	9.05	UG	88
47)	m,p-Xylenes	15.73	106.0	17391	18.18	UG	88
48)	o-Xylene	16.59	106.0	8751	9.33	UG	89
49)	Bromofluorobenzene	17.78	95.0	8551	9.23	UG	92
50)	1,3-Dichlorobenzene	20.02	146.0	9238M	8.70	UG	98
51)	1,4-Dichlorobenzene	20.24	146.0	9655	9.09	UG	96
52)	1,2-Dichlorobenzene	21.02	146.0	9219	9.44	UG	90
53)	Dichlorodifluoromethane	3.25	85.0	12849	8.82	UG	91

* Compound is ISTD



Data File: >CS075::D4 Quant Output File: ^CS075::QT
Name: VSTD020 Instrument ID: >1101 C
Misc: 7001C

Id File: 1DC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Ical Time: <none>

Operator ID: MARIE
Quant Time : 030221 10:15
Injected at: **0221 09:52

Operator ID: MARIE Quant Run: 2 Quant Time: 03/221 10:49
Output File: DC$U29::QT Injected at: **0221 09:52
Data File: DC$U29::04 Dilution Factor: 1.00000
Name: US100221 Instrument ID: 7890 C.
Misc: 7890C

ID File: ID0910C::MT
Title: HP 00A Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.56	128.0	7475	50.00	UG	84
2)	Chloromethane	3.60	50.0	24379	18.44	UG	75
3)	Bromomethane	4.24	94.0	8672	11.90	UG	47
4)	Vinyl Chloride	3.68	62.0	27637	18.51	UG	87
5)	Chloroethane	4.35	64.0	9197	17.95	UG	78
6)	Methylene Chloride	6.14	84.0	13711	18.18	UG	80
8)	Acetone	4.42	43.0	1858	5.96	UG	66
12)	Trichlorofluoromethane	4.68	101.0	30023	19.27	UG	93
13)	Carbon Disulfide	6.21	76.0	47210	20.53	UG	100
14)	1,1-Dichloroethene	5.50	96.0	10699	22.27	UG	59
15)	1,1-Dichloroethane	7.18	63.0	28758	20.68	UG	95
16)	1,2-Dichloroethene-trans	6.59	96.0	10247	18.93	UG	86
18)	1,2-Dichloroethene-cis	8.07	61.0	22065	20.26	UG	91
19)	Chloroform	8.30	83.0	22458	19.95	UG	90
20)	1,2-Dichloroethane-d4	9.41	65.0	10953	17.51	UG	87
21)	1,2-Dichloroethane	9.56	62.0	17287	19.99	UG	99
22)	2-Butanone	7.78	43.0	4825	22.14	UG	100
23)	*1,4-Difluorobenzene	9.97	114.0	62320	50.00	UG	95
24)	1,1,1-Trichloroethane	8.93	97.0	13816	19.61	UG	91
25)	Carbon Tetrachloride	9.34	117.0	9563	19.13	UG	86
26)	Vinyl Acetate	7.14	43.0	24861	18.86	UG	81
27)	Bromodichloromethane	11.28	83.0	16708	22.21	UG	86
28)	1,2-Dichloropropane	10.87	63.0	16923	21.17	UG	97
29)	cis-1,3-Dichloropropene	13.03	75.0	20068	19.52	UG	92
30)	Trichloroethene	10.57	130.0	6545	18.32	UG	82
31)	Dibromochloromethane	14.33	129.0	7191	22.16	UG	99
32)	1,1,2-Trichloroethane	13.33	97.0	9509	21.23	UG	92
33)	Benzene	9.60	78.0	57086	19.79	UG	96
34)	trans-1,3-Dichloropropene	13.03	75.0	20088	21.08	UG	94
35)	2-Chloroethylvinylether	10.87	63.0	16973	21.17	UG	93
36)	Bromoform	12.31	173.0	4878	21.47	UG	99
37)	*Chlorobenzene-d5	15.41	117.0	56316	50.00	UG	92
38)	2-Hexanone	13.33	43.0	5488	16.69	UG	77
39)	4-Methyl-2-Pentanone	11.76	43.0	13809	17.15	UG	97
40)	Tetrachloroethene	13.96	164.0	5147	16.96	UG	78
41)	1,1,2,2-Tetrachloroethane	12.61	83.0	14282	17.16	UG	92
42)	Toluene	12.77	91.0	56002	19.62	UG	94
43)	Toluene d-8	12.62	98.0	39787	19.16	UG	96
44)	Chlorobenzene	15.49	112.0	27216	18.81	UG	99
45)	Ethylbenzene	15.60	106.0	16803	19.64	UG	86

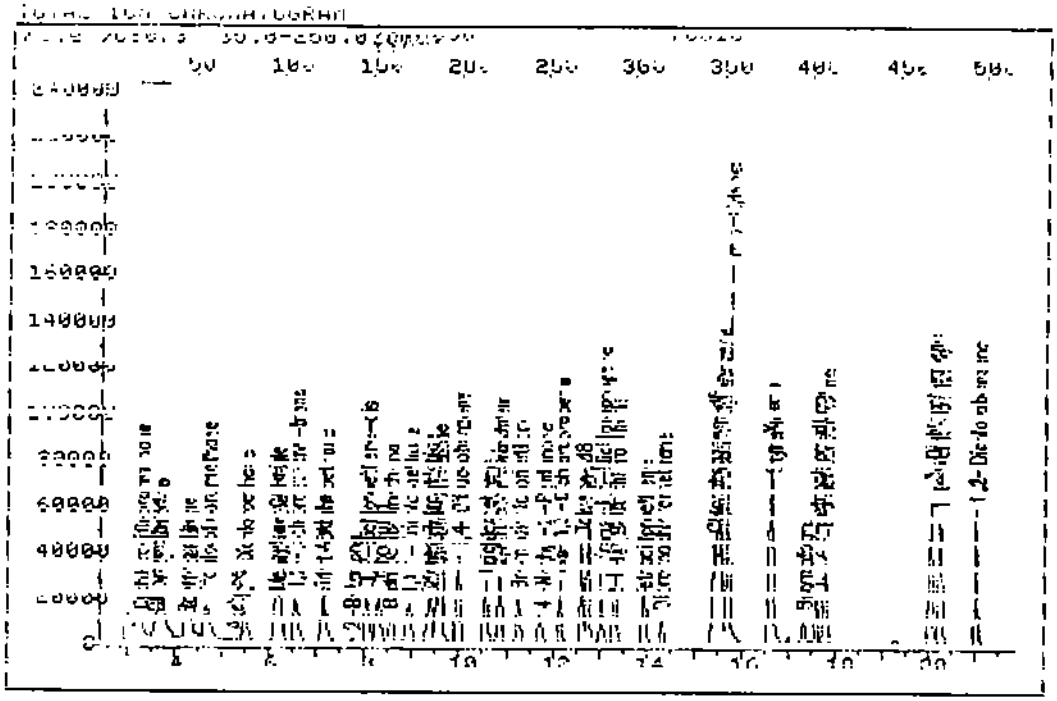
Operator ID: MRKE
Output File: C:\HP5973\DATA\0511\0221\1015\0221F05.D
Data File: C:\HP5973\DATA\0511\0221\1015\0221F05.D
Name: VSTD020
Misc: 20UG

Quant Rev: 7 Quant Time: 05/02/21 10:15
Injected at: 05/02/21 09:42
Dilution Factor: 1.00000
Instrument ID: 5973 C.

ID File: C:\HP5973\DATA\0511\0221\1015\0221C91.D
Title: HP VOA Continuing Calibration Standard
Last Calibration: 05/02/21 09:58 Last Qual Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.64	104.0	34673	19.06	UG	91
47)	m,p-Xylenes	15.71	106.0	58287	38.88	UG	94
48)	o-Xylene	16.57	106.0	19145	19.79	UG	99
49)	Bromofluorobenzene	17.79	95.0	16105	17.76	UG	94
50)	1,3-Dichlorobenzene	20.03	146.0	16404M	14.97	UG	93
51)	1,4-Dichlorobenzene	20.25	146.0	18588	16.96	UG	94
52)	1,2-Dichlorobenzene	21.00	146.0	15579	15.47	UG	99
53)	Dichlorodifluoromethane	5.23	85.0	23847	16.92	UG	92

* Compound is ISTD



Data File: >CS073::D4 Quant Output File: >CS073::QT
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

Id File: >7001C::CT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Cal Time: <none>

Operator ID: MARIE
Quant Time : 030221 09:07
Injected at: **0221 08:54

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 09:59
Output File: ^CSH23::QT Injected at: **0221 08:54
Data File: ^CSH23::D4 Dilution Factor: 1.000000
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

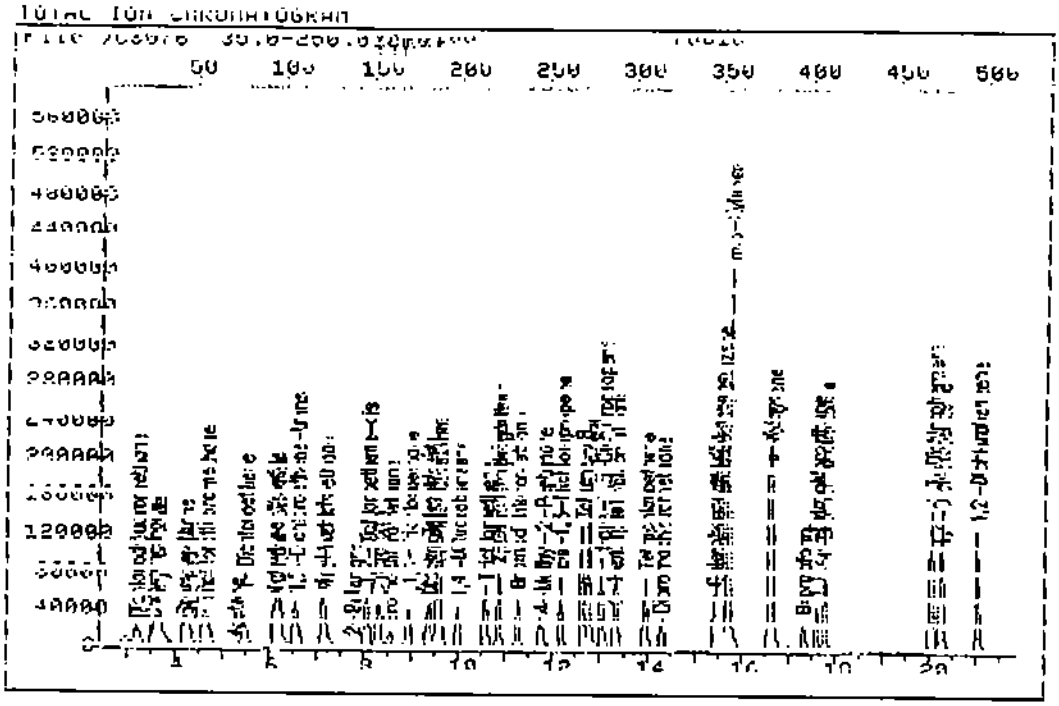
	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.52	128.0	6759	50.00	UG	
2)	Chloromethane	3.60	50.0	54689	45.75	UG	8
3)	Bromomethane	4.24	94.0	28615	43.91	UG	
4)	Vinyl Chloride	3.68	62.0	69615	48.60	UG	9
5)	Chloroethane	4.31	64.0	19760	43.07	UG	
6)	Methylene Chloride	6.14	84.0	28999	47.51	UG	7
8)	Acetone	5.28	43.0	12879	41.96	UG	
12)	Trichlorofluoromethane	4.69	101.0	65973	46.82	UG	8
13)	Carbon Disulfide	6.22	76.0	104933	50.26	UG	
14)	1,1-Dichloroethene	5.47	96.0	21262	48.94	UG	5
15)	1,1-Dichloroethane	7.15	63.0	63420	51.31	UG	
16)	1,2-Dichloroethene-trans	6.55	96.0	23518	48.05	UG	8
18)	1,2-Dichloroethene-cis	8.04	61.0	50229	50.93	UG	
19)	Chloroform	8.30	83.0	51498	50.57	UG	9
20)	1,2-Dichloroethane-d4	9.38	65.0	26315	45.99	UG	
21)	1,2-Dichloroethane	9.53	62.0	37887	48.45	UG	9
22)	2-Butanone	7.74	43.0	9504	48.23	UG	
23)	*1,4-Difluorobenzene	9.98	114.0	59572	50.00	UG	9
24)	1,1,1-Trichloroethane	8.93	97.0	32532	48.31	UG	
25)	Carbon Tetrachloride	9.34	117.0	23012	48.16	UG	9
26)	Vinyl Acetate	7.11	43.0	60967	48.07	UG	
27)	Bromodichloromethane	11.24	83.0	33597	46.71	UG	8
28)	1,2-Dichloropropane	10.83	63.0	39176	45.76	UG	
29)	cis-1,3-Dichloropropene	12.14	75.0	48410	49.26	UG	8
30)	Trichloroethene	10.57	130.0	16479	47.38	UG	
31)	Dibromochloromethane	14.30	129.0	13599	43.84	UG	8
32)	1,1,2-Trichloroethane	13.33	97.0	18488	49.87	UG	
33)	Benzene	9.57	78.0	139762	50.70	UG	9
34)	trans-1,3-Dichloropropene	13.03	75.0	43408	47.77	UG	
35)	2-Chloroethylvinylether	10.83	63.0	35076	45.76	UG	9
36)	Bromoform	17.32	173.0	10391	47.85	UG	
37)	*Chlorobenzene-d5	15.42	117.0	42841	50.00	UG	9
38)	2-Hexanone	15.29	43.0	12508	50.00	UG	
39)	4-Methyl-2-Pentanone	11.77	43.0	33159	54.15	UG	9
40)	Tetrachloroethene	12.93	164.0	11428	53.51	UG	
41)	1,1,2,2-Tetrachloroethane	17.58	83.0	31391	49.58	UG	9
42)	Toluene	12.23	91.0	114117	53.01	UG	
43)	Toluene d-8	12.62	98.0	74362	52.33	UG	9
44)	Chlorobenzene	15.49	112.0	52464	51.12	UG	
45)	Ethylbenzene	15.57	106.0	33357	53.81	UG	8

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 09:59
Output File: >CS073::QT Injected at: **0221 08:14
Data File: >CS073::04 Dilution Factor: 1.000000
Name: VSTD050 Instrument ID: 7000 C
Misc: 7001C

ID File: 00C91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Cal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.65	104.0	75775	54.77	UG	97
47)	m,p-Xylenes	15.72	106.0	81741	109.12	UG	[illegible]
48)	o-Xylene	16.57	106.0	39250	53.34	UG	84
49)	Bromofluorobenzene	17.76	95.0	35421	51.56	UG	[illegible]
50)	1,3-Dichlorobenzene	20.04	146.0	42823M	51.38	UG	98
51)	1,4-Dichlorobenzene	20.22	146.0	45466	54.55	UG	[illegible]
52)	1,2-Dichlorobenzene	21.01	146.0	40424	52.78	UG	99
53)	Dichlorodifluoromethane	7.27	85.0	59955	55.91	UG	[illegible]

* Compound is ISTD



Data File: >CS076::D4
Name: VSTD100
Misc: 7001C

Quant Output File: ^CS076::QT
Instrument ID: 7001 C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58
Last Ncal Time: <none>

Operator ID: MARIE
Quant Time : 030221 10:45
Injected at: **0221 10:20

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 10:45
Output File: ^CS076::QT Injected at: **0221 10:20
Data File: ^CS076::04 Dilution Factor: 1.0000
Name: VSTD100 Instrument ID: 7000 C
Misc: 7000LC

ID File: ID.V1C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.53	128.0	7719	50.00	UG	85
2)	Chloromethane	3.53	50.0	121562	89.04	UG	89
3)	Bromomethane	4.20	94.0	68?n2	92.65	UG	.8
4)	Vinyl Chloride	3.64	62.0	137428	89.13	UG	92
5)	Chloroethane	4.32	64.0	43?47	83.03	UG	82
6)	Methylene Chloride	6.11	84.0	66064	84.80	UG	72
8)	Acetone	5.29	43.0	130?UM	39.60	UG	?0
12)	Trichlorofluoromethane	4.65	101.0	155664	96.73	UG	86
13)	Carbon Disulfide	6.18	76.0	259922	109.42	UG	100
14)	1,1-Dichloroethene	5.47	96.0	51845	104.50	UG	67
15)	1,1-Dichloroethane	7.15	63.0	155468	110.15	UG	?4
16)	1,2-Dichloroethene-trans	6.55	96.0	59488	106.41	UG	82
18)	1,2-Dichloroethene-cis	8.04	61.0	126416	112.25	UG	?9
19)	Chloroform	8.27	83.0	127082	109.27	UG	99
20)	1,2-Dichloroethane-d4	9.39	65.0	62624	95.82	UG	83
21)	1,2-Dichloroethane	9.53	62.0	89387	100.09	UG	98
22)	2-Butanone	7.75	43.0	19924	88.54	UG	100
23)	*1,4-Difluorobenzene	9.98	114.0	72019	50.00	UG	99
24)	1,1,1-Trichloroethane	8.94	97.0	79442	97.58	UG	86
25)	Carbon Tetrachloride	9.35	117.0	55750	96.51	UG	98
26)	Vinyl Acetate	7.11	43.0	125153	82.17	UG	?9
27)	Bromodichloromethane	11.25	83.0	91640	105.39	UG	93
28)	1,2-Dichloropropane	10.84	63.0	93022	100.38	UG	?9
29)	cis-1,3-Dichloropropene	12.14	75.0	132755	111.74	UG	84
30)	Trichloroethene	10.58	130.0	41112	99.58	UG	?2
31)	Dibromochloromethane	14.30	129.0	40862	108.97	UG	96
32)	1,1,2-Trichloroethane	13.34	97.0	53447	104.91	UG	89
33)	Benzene	9.57	78.0	351204	105.38	UG	96
34)	trans-1,3-Dichloropropane	13.04	75.0	12?999	109.99	UG	?0
35)	2-Chloroethylvinylether	10.84	63.0	93022	100.38	UG	96
36)	Bromoform	17.32	173.0	28?11	107.85	UG	?5
37)	*Chlorobenzene-d5	15.42	117.0	62432	50.00	UG	94
38)	2-Hexanone	13.50	43.0	31?n?M	85.20	UG	
39)	4-Methyl-2-Pentanone	11.77	43.0	84411	94.59	UG	96
40)	Tetrachloroethane	15.97	164.0	31979	101.02	UG	89
41)	1,1,2,2-Tetrachloroethane	17.58	83.0	8?971	87.76	UG	96
42)	Toluene	12.78	91.0	349?72	109.03	UG	?8
43)	Toluene d-8	12.63	98.0	208654	100.76	UG	97
44)	Chlorobenzene	15.50	112.0	167?52	102.41	UG	?7
45)	Ethylbenzene	15.57	106.0	98735	109.29	UG	89

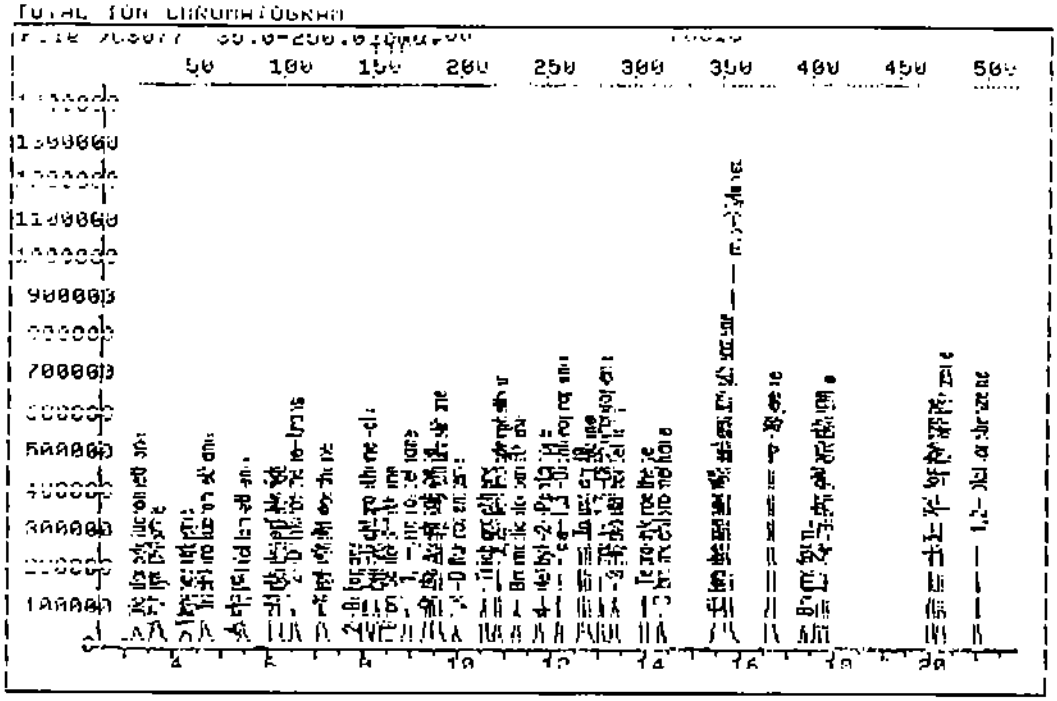
Operator ID: MARIE
Output File: >CS076::QT
Data File: >CS076::D4
Name: VSTD100
Misc: 7001C

Quant Rev: 7 Quant Time: 030221 10:43
Injected at: **0221 10:20
Dilution Factor: 1.00000
Instrument ID: 7001 C.

ID File: IDT91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.69	104.0	219280	108.75	UG	97
47)	m,p-Xylenes	15.72	106.0	235430	215.67	UG	96
48)	o-Xylene	16.58	106.0	108904	101.56	UG	89
49)	Bromofluorobenzene	17.77	95.0	92803	92.33	UG	91
50)	1,3-Dichlorobenzene	20.04	146.0	98733M	81.29	UG	98
51)	1,4-Dichlorobenzene	20.23	146.0	102401	86.42	UG	89
52)	1,2-Dichlorobenzene	21.01	146.0	92342	87.73	UG	96
53)	Dichlorodifluoromethane	9.20	85.0	108399	69.37	UG	98

* Compound is ISTD



Data File: >CS077::D4 Quant Output File: ^CS077::QT
Name: VSTD200 Instrument ID: >001 C
Misc: 7001C

Id File: IDC91C::mf
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qual Time: **0221 10:.0

Operator ID: MARIE
Quant Time : 030221 11:09
Injected at: **0221 10:47

Operator ID: DAVIE Quant Rev: 7 Quant Time: 030221 11:09
Output File: ^CS077::QT Injected at: **0221 10:47
Data File: ^CS077::04 Dilution Factor: 1.00000
Name: VSTD200 Instrument ID: 7001 C
Misc: 7001C

ID File: ID091C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: **0221 10:20

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.54	128.0	7902	50.00	UG	81
2)	Chloromethane	3.55	50.0	204783	146.52	UG	89
3)	Bromomethane	4.22	94.0	100976	132.52	UG	98
4)	Vinyl Chloride	3.62	62.0	250020	158.40	UG	94
5)	Chloroethane	4.29	64.0	75574	139.11	UG	84
6)	Methylene Chloride	6.08	84.0	136239	170.82	UG	68
8)	Acetone	5.26	43.0	38742M	119.12	UG	81
12)	Trichlorofluoromethane	4.67	101.0	281553	170.91	UG	99
13)	Carbon Disulfide	6.20	76.0	520036	213.85	UG	100
14)	1,1-Dichloroethene	5.45	96.0	94441	186.95	UG	69
15)	1,1-Dichloroethane	7.16	63.0	336628	232.97	UG	99
16)	1,2-Dichloroethene-trans	6.53	96.0	117389	205.13	UG	86
17)	Acetonitrile	7.09	41.0	4156	128.28	UG	96
18)	1,2-Dichloroethene-cis	8.06	61.0	274155	237.79	UG	73
19)	Chloroform	8.28	83.0	273554	229.77	UG	96
20)	1,2-Dichloroethane-d4	9.40	65.0	153102	228.85	UG	77
21)	1,2-Dichloroethane	9.55	62.0	214981	235.14	UG	95
22)	2-Butanone	7.76	43.0	57837	251.06	UG	100
23)	*1,4-Difluorobenzene	9.96	114.0	77103	50.00	UG	95
24)	1,1,1-Trichloroethane	8.92	97.0	180593	207.20	UG	89
25)	Carbon Tetrachloride	9.33	117.0	123615	199.88	UG	91
26)	Vinyl Acetate	7.09	43.0	341603	209.49	UG	81
27)	Bromodichloromethane	11.27	83.0	203775	218.90	UG	89
28)	1,2-Dichloropropane	10.86	63.0	206862	208.51	UG	95
29)	cis-1,3-Dichloropropene	12.16	75.0	304910	239.40	UG	98
30)	Trichloroethene	10.56	130.0	90678	205.16	UG	92
31)	Dibromochloromethane	14.32	129.0	91729	226.13	UG	92
32)	1,1,2-Trichloroethane	13.35	97.0	114949	210.76	UG	91
33)	Benzene	9.59	78.0	784773	219.99	UG	94
34)	trans-1,3-Dichloropropene	13.05	75.0	278261	236.26	UG	90
35)	2-Chloroethylvinylether	10.86	63.0	20000?	208.51	UG	92
36)	Bromoform	17.34	173.0	57088	219.13	UG	99
37)	*Chlorobenzene-d5	15.44	117.0	67?96	50.00	UG	92
38)	2-Hexanone	13.32	43.0	72789M	189.34	UG	94
39)	4-Methyl-2-Pentanone	11.79	43.0	20?93	208.66	UG	96
40)	Tetrachloroethene	13.95	164.0	65542	194.62	UG	97
41)	1,1,2,2-Tetrachloroethane	17.60	83.0	166?49	163.76	UG	92
42)	Toluene	12.76	91.0	779130	231.56	UG	97
43)	Toluene d-8	12.61	98.0	469?41	210.65	UG	98
44)	Chlorobenzene	15.51	112.0	329106	211.52	UG	98

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 11:09
Dataout File: >>.S077::DT Injected at: **.*21 10:.?
Data File: >>.S077::D4 Dilution Factor: 1.00000
Name: UST+200 Instrument ID: 7000 C.
Misc: 7001C

ID File: 1D091C::MT
Title: HP 00A Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: **0221 10:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Ethylbenzene	15.59	106.0	247240	254.05	UG	9(
46)	Styrene	16.63	104.0	543545	250.23	UG	94
47)	m,p-Xylenes	15.74	106.0	601053	511.10	UG	64
48)	o-Xylene	16.60	106.0	241520	209.07	UG	8A
49)	Bromofluorobenzene	17.79	95.0	206144	190.38	UG	69
50)	1,3-Dichlorobenzene	20.02	146.0	202466	158.86	UG	7A
51)	1,4-Dichlorobenzene	20.25	146.0	226775	173.31	UG	86
52)	1,2-Dichlorobenzene	21.03	146.0	188710	156.94	UG	7(
53)	Dichlorodifluoromethane	3.21	85.0	249855	148.42	UG	99

* Compound is ISTD

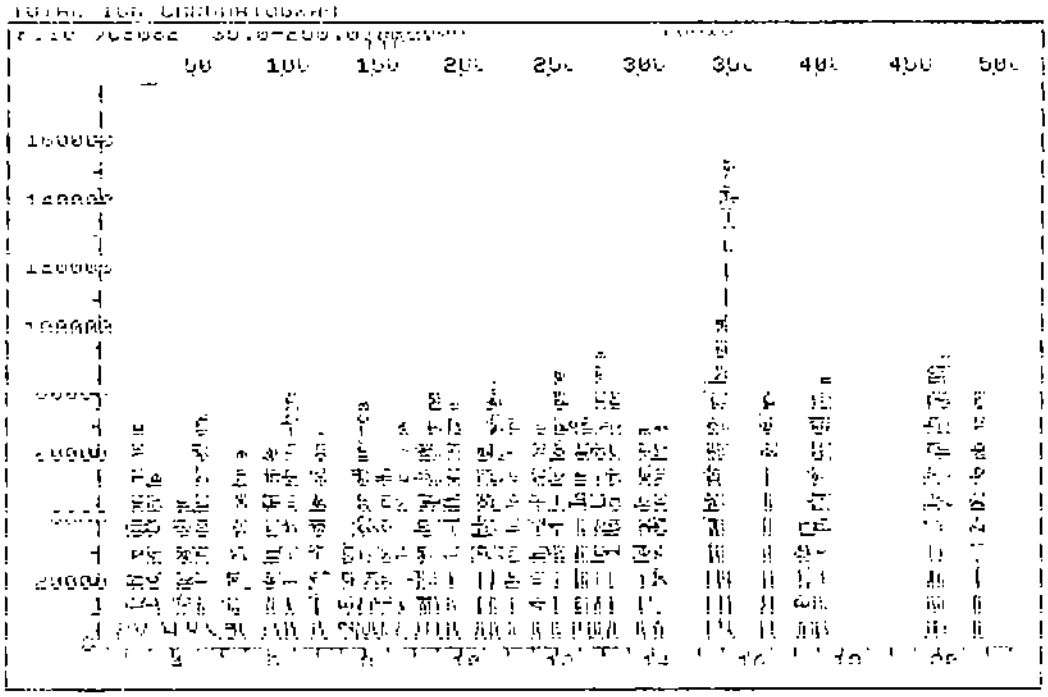
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Instrument ID: H5970 C Calibration Date: 02/26/03 Time: 09:49
Lab File ID: CS082 Init. Calib. Date(s): 02/21/03 02/21/03
Heated Purge: (Y/N) N Init. Calib. Times: 8:54 10:47
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	8.039	7.153		11.0	
Bromomethane	4.034	4.010	.100	.6	25.0
Vinyl Chloride	9.206	8.851	.100	3.9	25.0
Chloroethane	3.033	2.890		4.7	
Methylene Chloride	4.654	3.950		15.1	
Acetone	1.116	1.290		-15.6	
Carbon Disulfide	15.971	13.637		14.6	
1,1-Dichloroethene	3.270	2.935	.100	10.2	25.0
1,1-Dichloroethane	9.692	7.400	.200	23.6	25.0
1,2-Dichloroethene-trans	3.647	3.412		6.4	
Chloroform	7.893	6.472	.200	18.0	25.0
1,2-Dichloroethane	5.989	4.358	.100	27.2	25.0
2-Butanone	1.530	1.287		15.9	
1,1,1-Trichloroethane	.564	.564	.100	.0	25.0
Carbon Tetrachloride	.395	.440	.100	-11.4	25.0
Bromodichloromethane	.635	.590	.200	7.1	25.0
1,2-Dichloropropane	.657	.560		14.8	
cis-1,3-Dichloropropene	.873	.847	.200	3.0	25.0
Trichloroethene	.283	.327	.300	-15.5	25.0
Dibromochloromethane	.277	.295	.100	-6.5	25.0
1,1,2-Trichloroethane	.365	.363	.100	.5	25.0
Benzene	2.380	2.144	.500	9.9	25.0
trans-1,3-Dichloropropene	.815	.693	.100	15.0	25.0
Bromoform	.188	.148	.100	21.3	25.0
4-Methyl-2-Pentanone	.693	.523		24.5	
2-Hexanone	.263	.176		33.1	
Tetrachloroethene	.247	.239	.200	3.2	25.0
1,1,2,2-Tetrachloroethane	.676	.532	.500	21.3	25.0
Toluene	2.630	2.363	.400	10.2	25.0
Chlorobenzene	1.314	1.227	.500	6.6	25.0
Ethylbenzene	.773	.722	.100	6.6	25.0
Styrene	1.709	1.543	.300	9.7	25.0
Toluene d-8	1.665	1.627		2.3	
Bromofluorobenzene	.767	.606	.200	21.0	25.0
1,2-Dichloroethane-d4	4.206	3.006		28.5	
1,2-Dichloroethene-cis	7.768	5.771		25.7	
m,p-Xylenes	.932	.877		5.9	
o-Xylene	.867	.787	.010	9.2	25.0

All other compounds must meet a minimum RRF of .010.



Data File: [illegible] Count Output File: [illegible]
Name: [illegible] Instrument ID: [illegible]
Time: [illegible]

ID File: [illegible]
Title: HP DNA Confirming Calibration Standard
Last Calibration: [illegible] Last Level Used: [illegible]

Operator ID: [illegible]
Count Time: [illegible]
Injected at: [illegible]

Operator ID: RESTEK
Data File: 210882::04
Name: 05100950
Test: 260MS

Quant Rev: 7 Acquired on: 8-AUG-26 10:1
Output File: 210882::01 Injected at: 8/10/26 09:49
Dilution Factor: 1.000 a
Instrument ID: 7001 C

ID File: 100911::01
Title: HP 5MS Continuing Calibration Standard
Last Calibration: 090721 11:51 Last Qual Time: <none>

	Compound	RT	MW	Area	Conc	Units	Q
1)	*Bromochloromethane	6.32	128.0	22 M	50.00	ug	
2)	Chloromethane	3.49	50.0	38161M	44.49	UG	99
3)	Bromomethane	4.12	94.0	27996	49.20	ug	
4)	Vinyl Chloride	3.56	62.0	42218	48.07	UG	92
5)	Chloroethane	4.19	64.0	19418	47.64	ug	
6)	Methylene Chloride	5.98	84.0	21024	42.44	UG	85
8)	Acetone	4.17	42.0	6881	52.26	ug	
12)	Trichlorofluoromethane	6.52	101.0	52216	48.42	UG	91
13)	Carbon disulfide	6.86	76.0	71173	42.69	ug	
14)	1,1-Dichloroethene	6.52	96.0	15658	44.87	UG	61
15)	1,1-Dichloroethane	6.99	63.0	9949	50.18	ug	
16)	1,2-Dichloroethene-trans	6.59	96.0	18701	46.22	UG	81
18)	1,2-Dichloroethene-cis	7.48	97.0	31489	52.19	ug	2
19)	Chloroform	8.11	83.0	34530	41.01	UG	99
20)	1,2-Dichloroethane-d4	8.23	65.0	16 29	55.24	ug	99
21)	1,2-Dichloroethane	8.32	62.0	23252	36.39	UG	98
24)	2-Pentanone	8.99	43.0	6016	41.16	ug	
25)	*1,4-Difluorobenzene	9.28	114.0	43304	50.00	UG	99
26)	1,1,1-Trichloroethane	8.24	97.0	24427	50.30	ug	2
27)	Carbon Tetrachloride	9.19	117.0	19866	55.25	UG	81
28)	Vinyl Acetate	8.35	43.0	26173	41.63	ug	2
29)	Bromodichloromethane	11.09	83.0	25565	46.49	UG	92
30)	1,2-Dichloropropane	10.68	63.0	24252	47.60	ug	
31)	cis-1,3-Dichloropropene	11.98	75.0	36696	48.55	UG	95
32)	Trichloroethene	11.38	130.0	14142	52.21	ug	
33)	Dibromochloromethane	14.11	129.0	12791	53.23	UG	92
34)	1,1,2-Trichloroethane	11.14	97.0	15133	49.75	ug	0
35)	Benzene	9.41	78.0	92859	49.04	UG	94
36)	trans-1,3-Dichloropropene	12.84	75.0	29511	47.49	ug	
37)	2-Chloroethylvinylether	10.68	63.0	24252	42.68	UG	94
38)	Bromoform	17.12	173.0	8429	59.41	ug	99
39)	*Fluorobenzene-d5	10.22	112.0	38699	50.00	UG	88
40)	2-Hexanone	13.14	43.0	60175	55.57	ug	92
41)	4-Methyl-2-Pentanone	11.97	43.0	20192	52.22	UG	94
42)	Tetrachloroethene	15.22	164.0	7256	47.43	ug	2
43)	1,1,2,2-Tetrachloroethane	17.38	83.0	21999	39.32	UG	99
44)	Toluene	11.98	91.0	97478	44.92	ug	97
45)	Toluene d-8	12.45	98.0	62945	46.80	UG	99
46)	Chlorobenzene	13.90	112.0	47184	46.20	ug	96
47)	Ethylbenzene	15.32	106.0	27992	46.66	UG	91

Operator ID: MIKE Quant Rev: 2 Quant Time: 020226 10:11
Output File: 15082%.sqT Injected At: 2/ 0226 09:5?
Data File: %15082%::04 Dilution Factor: 1.000000
Name: US-08%0 Instrument ID: 5971 1.
Misc: 20000.

SQ File: 100911::10
Title: 8? 0U8 Continuing Calibration Standard
Last Calibration: 020221 11:51 Last Qual Time: <none>

	Compound	R.T.	Quant	Area	Conc	Units	Q
46)	Styrene	16.47	104.0	99?0%	45.14	UG	??
47)	m,p-Xylenes	16.?2	106.0	6?.66?	?4.14	UG	?
48)	o-Xylene	16.?6	106.0	?0?47	4?.?8	UG	8?
49)	Bromofluorobenzene	1?.?2	??.0	?1.?2	??.5?	UG	??
50)	1,3-Dichlorobenzene	19.80	146.0	22?63	?4.48	UG	9?
51)	1,4-Dichlorobenzene	20.02	146.0	2?1?8	?1.89	UG	
52)	1,2-Dichlorobenzene	20.?2	146.0	20?15	?1.?1	UG	??
53)	Dibromofluoromethane	14.15	111.0	?6614	4?.?9	UG	?

? Compound is ISTD

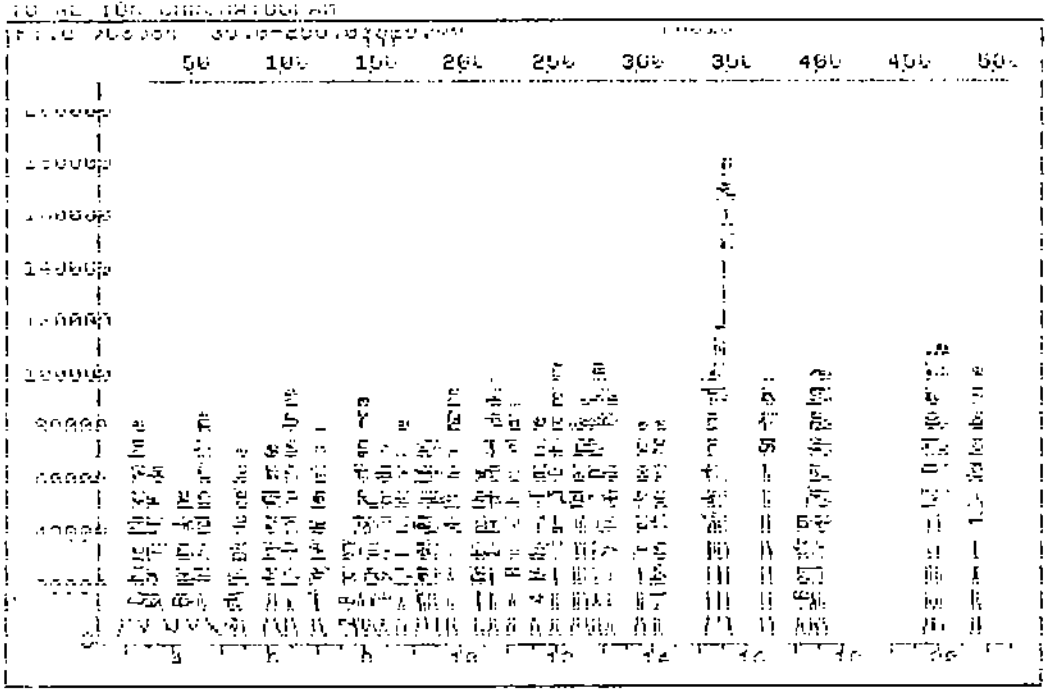
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Instrument ID: H5970 C Calibration Date: 02/27/03 Time: 10:35
Lab File ID: CS084 Init. Calib. Date(s): 02/21/03 02/21/03
Heated Purge: (Y/N) N Init. Calib. Times: 8:54 10:47
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	8.039	8.436		-4.9	
Bromomethane	4.034	3.934	.100	2.5	25.0
Vinyl Chloride	9.206	10.413	.100	-13.1	25.0
Chloroethane	3.033	3.200		-5.5	
Methylene Chloride	4.654	4.241		8.9	
Acetone	1.116	.822		26.3	
Carbon Disulfide	15.971	14.512		9.1	
1,1-Dichloroethene	3.270	2.885	.100	11.8	25.0
1,1-Dichloroethane	9.692	8.678	.200	10.5	25.0
1,2-Dichloroethene-trans	3.647	3.666		-.5	
Chloroform	7.893	7.312	.200	7.4	25.0
1,2-Dichloroethane	5.989	5.152	.100	14.0	25.0
2-Butanone	1.530	1.300		15.0	
1,1,1-Trichloroethane	.564	.557	.100	1.2	25.0
Carbon Tetrachloride	.395	.391	.100	1.0	25.0
Bromodichloromethane	.635	.620	.200	2.4	25.0
1,2-Dichloropropane	.657	.597		9.1	
cis-1,3-Dichloropropene	.873	.887	.200	-1.6	25.0
Trichloroethene	.283	.300	.300	-6.0	25.0
Dibromochloromethane	.277	.279	.100	-.7	25.0
1,1,2-Trichloroethane	.365	.358	.100	1.9	25.0
Benzene	2.380	2.139	.500	10.1	25.0
trans-1,3-Dichloropropene	.815	.777	.100	4.7	25.0
Bromoform	.188	.172	.100	8.5	25.0
4-Methyl-2-Pentanone	.693	.663		4.3	
2-Hexanone	.263	.295		-12.2	
Tetrachloroethene	.247	.211	.200	14.6	25.0
1,1,2,2-Tetrachloroethane	.676	.687	.500	-1.6	25.0
Toluene	2.630	2.670	.400	-1.5	25.0
Chlorobenzene	1.314	1.298	.500	1.2	25.0
Ethylbenzene	.773	.751	.100	2.8	25.0
Styrene	1.709	1.630	.300	4.6	25.0
Toluene d-8	1.665	1.698		-2.0	
Bromofluorobenzene	.767	.703	.200	8.3	25.0
1,2-Dichloroethane-d4	4.206	3.513		16.5	
1,2-Dichloroethene-cis	7.768	7.200		7.3	
m,p-Xylenes	.932	.940		-.9	
o-Xylene	.867	.871	.010	-.5	25.0

All other compounds must meet a minimum RRF of .010.



Data File: [illegible] Quant Output File: [illegible]
Name: [illegible] Instrument ID: [illegible]
Meas: [illegible]

Id File: [illegible]
Title: HP 9000 Continuing Calibration Standard
Last Calibration: [illegible] Last Cal [illegible]

Operator ID: MARIE
Quant Time: [illegible]
Injected at: [illegible]

Operator ID: GeRik Count Rev: 2 Run Time: 8:xx:27 xx: *
Output File: %SUBD4:[Q] Injected at: **10/22 10:xx
Data File: %SUBD4:[D4] Duration Factor: 1.0000
Name: 05:DBFB Instrument ID: 7001 [...
Misc: 7001C

ID File: [DEFAULT.ID]
Title: HP 5971 Continuing Calibration Standard
Last Calibration: 09/21 11:51 Last Qual Time: <none>

	Compound	R.T.	Q Ion	Area	Conc	Units	I
1)	*Bromochloromethane	8.28	128.0	9,x29	98.88	ng	
2)	Dichloromethane	3.49	98.0	46898	97.47	UNs	8x
3)	Bromomethane	4.13	94.0	21662	48.2x	ng	
4)	Vinyl Chloride	3.68	62.0	52888	96.9x	UNs	9
5)	Chloroethane	4.24	64.0	12x71	97.26	ng	
6)	Methylene Chloride	5.99	84.0	23527	49.52	UNs	2x
8)	Acetone	5.12	43.0	4 .1	98.83	ng	
10)	Trichlorofluoromethane	6.92	101.0	62762	96.26	UNs	9x
11)	Carbon Disulfide	6.12	76.0	8xx.4	95.43	ng	
12)	1,1-Dichloroethene	6.96	96.0	16026	44.10	UNs	6x
13)	1,1-Dichloroethane	7.38	63.0	98.x8	44.27	ng	
14)	1,2-Dichloroethene-trans	8.48	96.0	21382	98.2x	UNs	8x
15)	1,2-Dichloroethene-cis	7.89	61.0	48827	98.99	ng	
16)	Chloroform	8.11	83.0	41x48	46.32	UNs	9x
17)	1,2-Dichloroethane-d4	9.23	67.0	19526	41.25	ng	
21)	1,2-Dichloroethane	9.34	62.0	28639	43.11	UNs	9x
22)	2-Butanone	7.59	43.0	2777	47.49	ng	
23)	*1,4-Difluorobenzene	9.29	114.0	48925	98.00	UNs	9x
24)	1,1,1-Trichloroethane	8.25	97.0	22762	49.34	ng	
25)	Carbon Tetrachloride	9.16	117.0	19128	49.98	UNs	8x
26)	Vinyl Acetate	7.96	43.0	88122	48.28	ng	x
27)	Bromodichloromethane	11.06	83.0	31529	48.82	UNs	9x
28)	1,2-Dichloropropane	11.65	63.0	29198	49.43	ng	
29)	cis-1,3-Dichloropropene	11.95	75.0	45588	98.88	UNs	9x
30)	Trichloroethene	10.55	130.0	14x34	53.82	ng	
31)	Dibromochloromethane	14.13	129.0	13659	98.52	UNs	9x
32)	1,1,2-Trichloroethane	12.11	97.0	12x27	49.83	ng	
33)	Benzene	9.42	78.0	104629	44.94	UNs	9x
34)	trans-1,3-Dichloropropene	12.61	75.0	36x32	47.69	ng	
35)	2-Chloroethylvinylether	10.69	63.0	29198	4x.43	UNs	9x
36)	Bromoform	17.18	173.0	8x91	49.24	ng	
37)	*Chlorobenzene-d5	15.19	117.0	41831	98.88	UNs	9x
38)	2-Hexanone	13.11	43.0	12 x3	98.19	ng	
39)	4-Methyl-2-Pentanone	11.98	43.0	22186	47.82	UNs	6x
40)	Tetrachloroethene	13.24	164.0	8.39	49.28	ng	
41)	1,1,2,2-Tetrachloroethane	12.36	83.0	28189	98.81	UNs	9x
42)	Toluene	12.59	91.0	109x4	96.26	ng	
43)	Toluene-d8	12.40	98.0	62666	91.88	UNs	9x
44)	Chlorobenzene	15.27	112.0	52x.1	49.47	ng	
45)	Ethylbenzene	15.34	106.0	30799	48.53	UNs	9x

Operator ID: MSCIF Quant Rev: 2 Quant Time: 030222 10:52
Output File: 21S084:DAT Injected at: 4:27 on 2
Data File: 21S084:D4 Dilution Factor: 1.000000
Name: 05ug/ml Instrument ID: 2000 C
Misc: 2000C

ID File: cs010D:.i
Title: HP 5890 Continuing Calibration Standard
Last Calibration: 030221 11:51 Last Cal File: S000.D

	Compound	R.T.	Q ion	Area	Conc	Units	q
40)	Styrene	16.99	104.0	60021	47.68	ug	8
42)	m,p-Xylenes	17.49	106.0	22113	100.43	ug	
43	o-Xylene	18.55	106.0	35746	50.21	ug	8
44)	Bromofluorobenzene	19.24	95.0	35662	50.49	ug	
50)	1,3-Dichlorobenzene	19.78	146.0	26262	39.42	ug	9
51)	1,4-Dichlorobenzene	20.00	146.0	26092	39.35	ug	9
52)	1,2-Dichlorobenzene	20.29	146.0	24912	38.22	ug	9
53)	Dichlorodifluoromethane	4.19	85.0	46093	97.38	ug	9

* Compound is (50)

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): CS082 Date Analyzed: 02/26/03
Instrument ID: H5970 C Time Analyzed: 09:49
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	5335.		8.37		43304.		9.78		38699.		15.22	
	UPPER LIMIT	10670.		8.87		86608.		10.28		77398.		15.72	
	LOWER LIMIT	2668.		7.87		21652.		9.28		19350.		14.72	
	EPA SAMPLE NO.												
1	VBLK01	4027.		8.38		37062.		9.80		29958.		15.24	
2	MEGDIM0117	4530.		8.36		37084.		9.82		31072.		15.21	
3	MEGDD0243	4540.		8.40		36210.		9.81		33105.		15.25	
4	MEGDD0238	4484.		8.39		35484.		9.80		30378.		15.24	
5	MEGDD014	4629.		8.40		38582.		9.82		32880.		15.25	
6	TB030218	4704.		8.34		36013.		9.76		33608.		15.19	
7	MEGDIM0110	4953.		8.33		40860.		9.75		37329.		15.19	
8	MEGUSH8601	4458.		8.33		31911.		9.78		29222.		15.18	
9	MEGDD0121	5393.		8.33		42185.		9.75		36876.		15.19	
10	MEGDIM0128	5523.		8.33		45722.		9.78		41731.		15.18	
11	MEGDIM0128 MS	5503.		8.37		47123.		9.78		40513.		15.19	
12	MEGDIM0128 MSD	6054.		8.33		44884.		9.78		40966.		15.18	
13	VMSB	5252.		8.33		43276.		9.78		40069.		15.19	
14	MEGDD0129	5451.		8.37		39054.		9.78		36525.		15.18	
15	DUP021803	5074.		8.33		40743.		9.78		40147.		15.18	
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): CS084 Date Analyzed: 02/27/03
Instrument ID: H5970 C Time Analyzed: 10:35
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	5559.		8.38		48925.		9.79		41031.		15.19	
	UPPER LIMIT	11118.		8.88		97850.		10.29		82062.		15.69	
	LOWER LIMIT	2780.		7.88		24463.		9.29		20516.		14.69	
	EPA SAMPLE NO.												
1	VBLK02	5065.		8.37		37991.		9.79		34630.		15.19	
2	MEGSH0121	5771.		8.37		46507.		9.78		43928.		15.18	
3	MEGDD0115	5449.		8.37		46119.		9.79		43610.		15.19	
4	MEGDD0123	5733.		8.38		46525.		9.79		43626.		15.19	
5	MEGUSH8611	5611.		8.38		47341.		9.79		44101.		15.19	
6	MEGDD0132	5734.		8.38		48492.		9.79		42720.		15.19	
7	MEGDD0131	5236.		8.37		47569.		9.78		42593.		15.22	
8	DUP022003	5450.		8.37		48059.		9.79		42060.		15.19	
9	MEGUSH8616	5887.		8.37		47482.		9.78		41158.		15.22	
10	TB030224	5288.		8.37		43444.		9.79		38577.		15.22	
11	TB030220	5489.		8.40		44894.		9.81		41832.		15.22	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

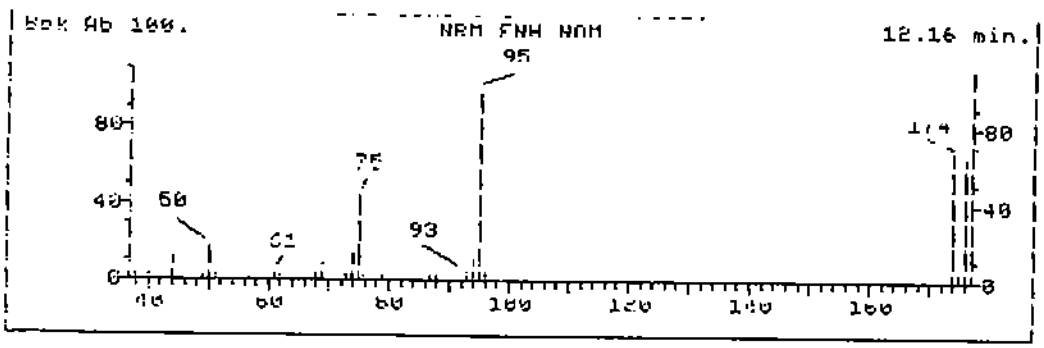
AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

MS data file header from : >CT073::D4

Sample: AFB >UNG (ND Operator: M[illegible]E FEB. 2ND, 2003 8: 4
Misc : 70111C
Sys. #: 1 MS model: 70 SW/HW rev.: L.F ALS # : 0 Equip ID: 70111 C
Method File: MEIHCT Tuning File: MT2003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	70.	270.	270.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	.1	0.0	.2	0.0



RAW QC

DATA

>CT073 BFR SONG INT 70VIC
152 NRM ENH NOM

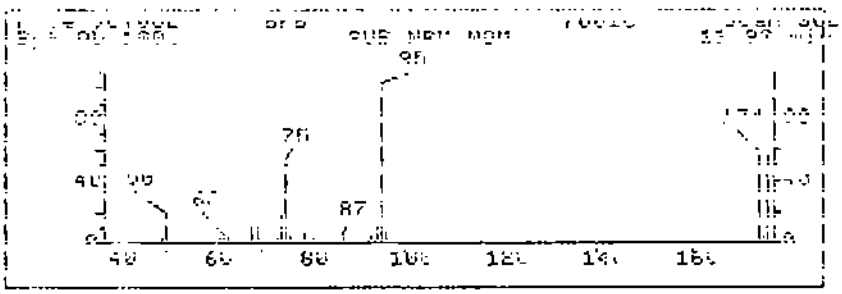
File: >CT073 Scan #: 152 Retn. time: 12.16

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	2.489	50.95	3.494	68.95	9.623	80.90	1.864	96.00	6.147
38.00	1.921	57.00	1.321	72.95	3.065	86.85	2.047	173.90	67.212
39.90	4.670	61.00	3.229	73.90	13.389	87.85	2.129	174.90	5.921
44.00	11.696	62.00	2.553	75.00	44.629	92.90	2.275	175.90	63.914
48.95	2.262	63.00	1.877	75.90	2.591	94.00	10.205	176.90	4.960
49.95	16.662	67.95	5.876	78.90	1.952	95.00	100.000		

MS data file header from : >L1082::D4

Sample: BR3 Operator: MERCK [illegible] 03 [illegible]
Misc : 20uL.
Sys. #: 1 MS model: 20 Sw/HW rev.: 1F A/S #: 0 Equip ID: 20uL
Method file: METHL.T Tuning file: DEF.U03 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	20.	20.	220.	0.	0.
Chromatographic times, min. :	3.0	35.0	35.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	1	0.0	2	0.0



>1.1082 BPR PHENIC
-02 SUB NRM NRM

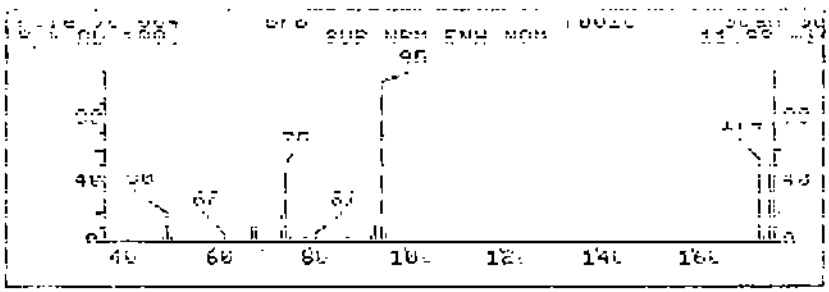
File: >1.1082 Scan #: 302 Retn. time: 11.93

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.90	5.516	62.00	3.648	74.00	18.681	85.05	3.733	95.20	8.004
37.90	1.815	62.70	3.802	75.00	51.588	87.85	2.296	129.90	55.252
39.00	2.213	63.00	3.910	76.00	5.000	91.95	2.160	130.20	5.000
49.05	3.527	67.95	11.638	78.90	5.266	93.00	4.289	129.90	54.631
49.95	12.043	68.95	13.629	80.20	3.959	94.00	12.246	130.20	7.3 3
61.00	3.150	72.95	3.132	86.85	4.822	95.00	100.000		

MS data file header from : 21.DB84:D4

Sample: mrB Operator: Mass E MS, MSF, XXX, B3 [illegible]
Misc : 20mif,
Sys. #: 1 MS model: 20 SwRM rev.: U1 ALS #: 0 Comp ID: 20mi [illegible]
Method file: METHOT Tuning file: MIX003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperature :	<0.	<20.	>20.	0.	0.
Chromatographic times, min. :	3.0	3>.0	3>.0	0.0	0.0
Chromatographic rate, deg/min:	<.0	.1	0.0	.2	0.0



21.0884 BPB 20000.
201 SUB 1KM ENH 10M

File: 21.0884 Scan #: 301 Retn. time: 11.92

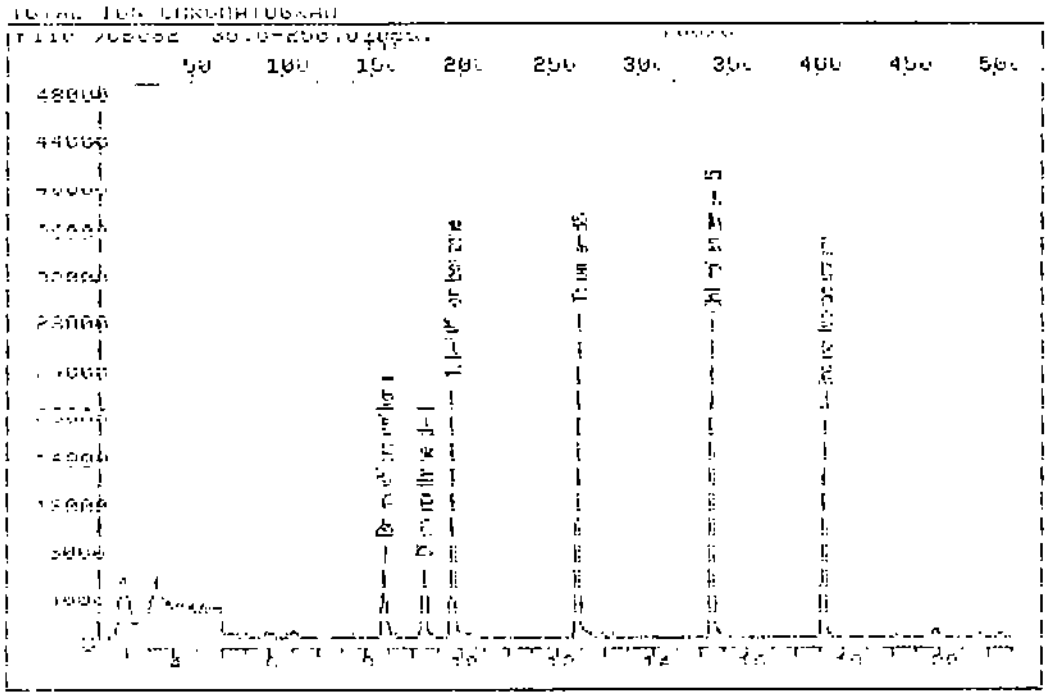
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	z	Abs.
57.00	4.583	67.00	9.502	79.00	48.207	82.95	9.491	122.81	5.6
38.10	3.232	67.98	1.922	78.80	4.019	93.00	4.821	124.80	4.988
48.99	3.174	67.95	9.953	78.80	9.425	93.91	11.719	125.81	98.1
58.05	16.884	68.95	9.616	81.00	3.920	95.00	100.000	126.80	2.982
58.99	3.295	72.91	16.266	86.85	9.590	95.91	6.192		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: VBLK01
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB082
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data Point: [illegible] Report Output Date: [illegible]
Issue: Gold Instrument ID: [illegible]
Diesel: [illegible]

ID [illegible]
Title: HP 8608 Continuing Calibration Standard
Last Calibration: [illegible] Last Cal Name: [illegible]

Operator ID: MANIE
Report Name: [illegible]
Injected at: **/**/26 10:16

Operator ID: [illegible] Quant Rev: [illegible] Acquired at: [illegible]
Output File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: [illegible]
Name: Unk Instrument ID: [illegible]
Misc: [illegible]

ID File: [illegible]
Title: HP 5988 Continuing Calibration Standard
Last Calibration: 890131 10:03 Last Qual Time: 891226 09:49

	Compound	RT	RRT	Area	Conc	Units	Q
1)	*Bromochloromethane	6.38	1.000	44074	50.000	ug	
2)	1,2-Dichloroethane-d4	9.218	69.0	19309	54.992	ug	9
3)	1,4-Difluorobenzene	9.608	114.0	3[illegible]62	50.000	ug	
4)	Chlorobenzene-d5	15.24	117.0	29958	50.000	ug	9
5)	Toluene-d8	15.46	98.0	46[illegible]	[illegible]5	ug	
6)	Bromofluorobenzene	17.68	95.0	12866	49.19	ug	9

* = Compound is [illegible]

1A

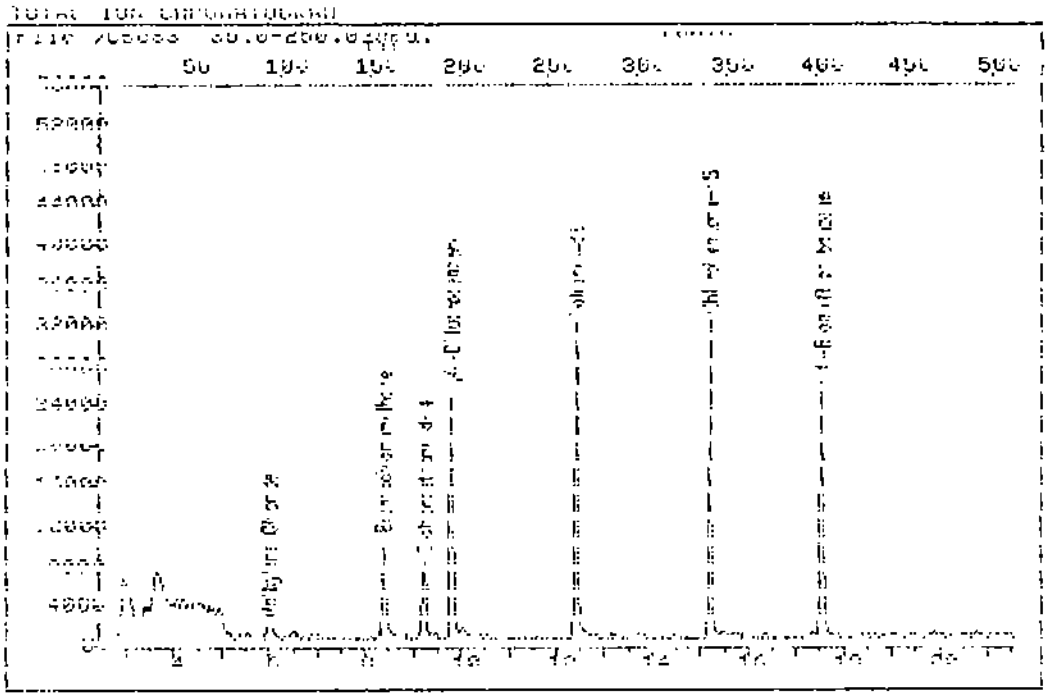
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK02

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: VBLK02
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB083
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >LBRA9:[04
Name: SMILK
Mass: 20011.

Quant Output File: [LBRA9:[QU
Instrument ID: GCMS

DJ Print: [GCMS]C:[]
Title: HP VOA Continuing Calibration Standard
Last Calibration: 8/20/21 16:02 Last Quad Time: 8/ 22 :01 9

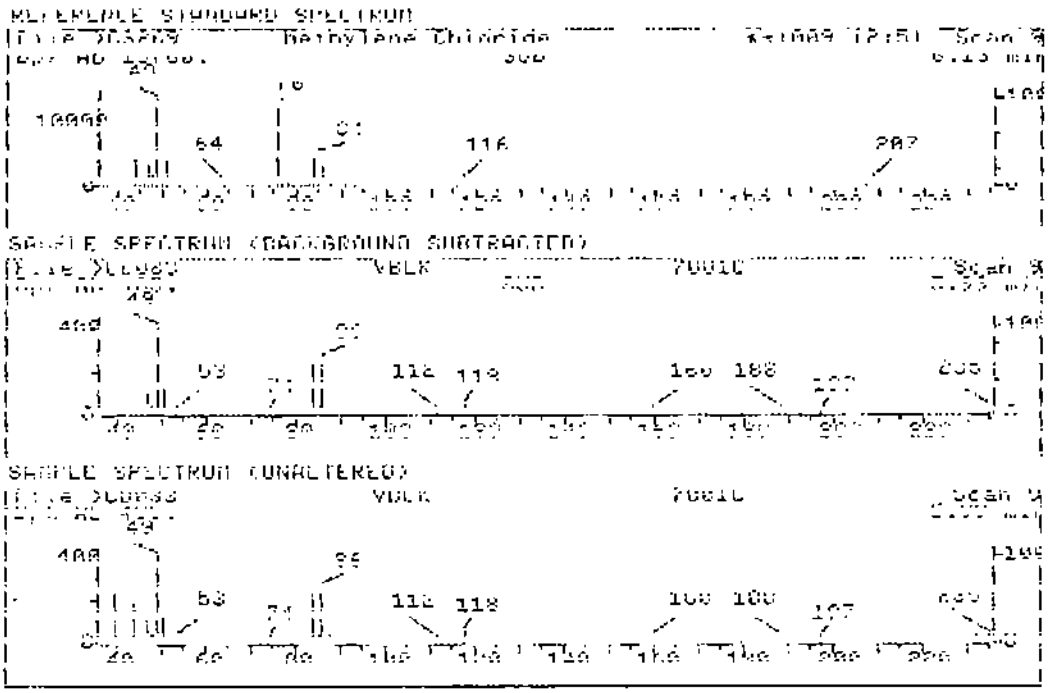
Operator ID: MARIE
Quant Time : 8/ /22 1 :1 9
Injected At: 8/8/22 1 :07

Operator ID: DARIE Quant Rev: 2 Quant Time: 8...722 ..: 2
Output File: ^CE0883::DJ Injected at: **0722 11:07
Data File: ^1.E0883::004 Dilution Factor: 1.000
Name: VBLK Instrument ID: 2000 C
Misc: 2000C

ID File: ID591.:::M1
Title: HP 591 Continuing Calibration Standard
Last Calibration: 0/0/80 10:03 Last Qcal Time: **0722 10:2?

	Compound	R.T.	Ig con	Area	Conc	Units	I
1)	*Dichlorodifluoromethane	5.32	120.0	?000	50.00	ug	
6)	Methylene Chloride	5.99	84.0	1829	4.28	UG	?
20)	1,2-Dichloroethane-d4	?.?3	65.0	????4	42.25	ug	
21)	*1,4-Difluorobenzene	9.29	114.0	32991	50.00	UG	9
22)	*Chlorobenzene-d5	15.19	117.0	3?..28	50.00	UG	-
43)	Toluene d-8	12.39	98.0	?2861	48.54	UG	9.
49)	Bromofluorobenzene	13.??	95.0	?..2	4?.22	ug	

* Compound is ISTD



Data File: >CHAR2::DA
Name: JOLK
Misc: 20010
Quant Time: 930922 11:29
Injected at: 930922 11:07
Last Qual Time: 930922 10:39

Quant Output File: ^CHAR2::[]
Instrument ID: [illegible]
Quant ID File: [illegible]
Last Calibration: [illegible]

Component No : 6
Compound Name : Methylene Chloride
Scan Number : 94
Retention Time: 9.99 min.
Quant Ion : [illegible]0
Area : 1899
Concentration : 9.98 [illegible]
q-value : 59

1A

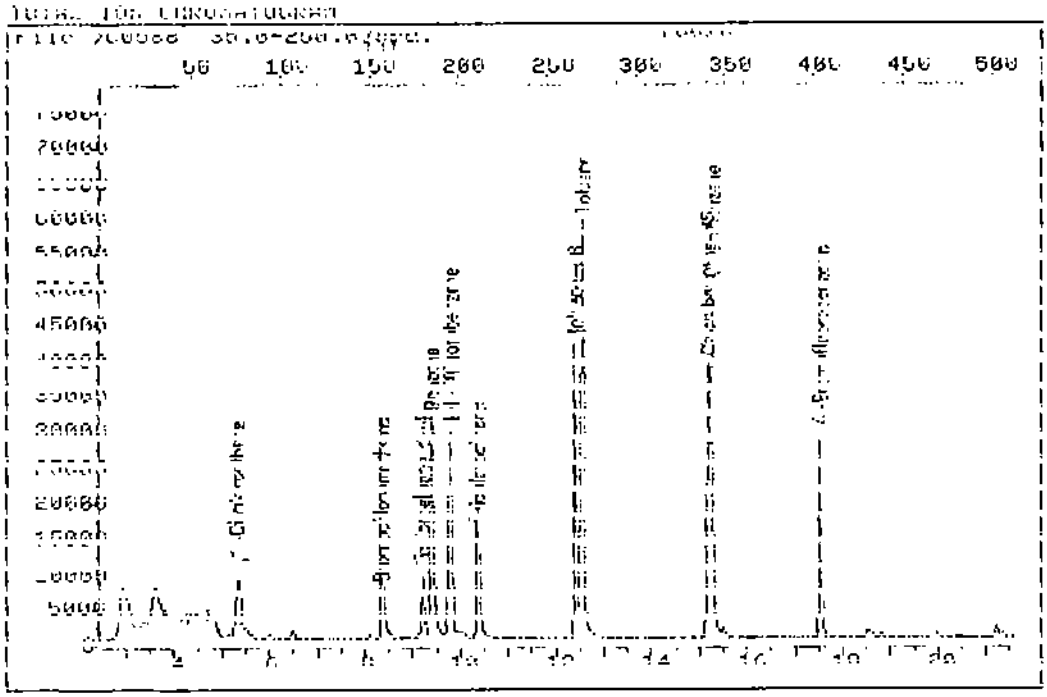
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VMSB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: VMSB
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0588
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	37.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	44.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	46.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	50.	
108-90-7	Chlorobenzene	49.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >C:\DATA\...:D4 Quant Output File: ^C:\DATA\...:RQ1
Name: Std8 Instrument ID: 200L 1
Misc: 200ug/L

Id File: C:\DATA\...:ID1
Title: HP 5890 Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qual Time: **0226 09:09

Operator ID: MARIE
Quant Time: 930226 19:16
Injection at: **0226 18:53

Operator ID: GERIE
Output File: ^C:\5788\:QT
Data File: 21:\5788\:D4
Name: UMSR
Misc: 20010

Quant Rev: 2 Quant Time: 89/10/26 19:16
Injected at: **/10/26 18:22
Dilution Factor: 1.0000
Instrument ID: 2000 C.

ID File: 10:\5788\:MT
Title: HP 5890 Continuing Calibration Standard
Last Calibration: 89/10/31 10:09 Last Qual Time: **/10/26 09:49

	Compound	RT	Resp	Area	Conc	Units	IS
13)	*Bromochloromethane	8.33	128.0	5[illegible]M	50.00	ug/L	
14)	1,1-Dichloropropene	9.91	96.0	11460	32.12	ug/L	6
15)	1,2-Dichloropropane-d4	9.19	67.0	18[illegible]2	97.15	ug/L	
16)	*1,4-Difluorobenzene	9.78	114.0	49226	50.00	ug/L	9
18)	Trichloroethene	10.34	130.0	12[illegible]7	44.49	ug/L	
19)	Benzene	9.97	78.0	34549	45.61	ug/L	9
22)	Dibromomethane-d5	10.19	77.0	41[illegible]9	50.00	ug/L	
23)	Toluene	12.54	91.0	94216	50.00	ug/L	9
24)	Toluene d-8	12.59	98.0	62[illegible]80	92.08	ug/L	
26)	Chlorobenzene	15.26	112.0	47767	48.52	ug/L	9
29)	Bromofluorobenzene	16.23	95.0	26[illegible]41	94.02	ug/L	

* Compound is ISTD

1A

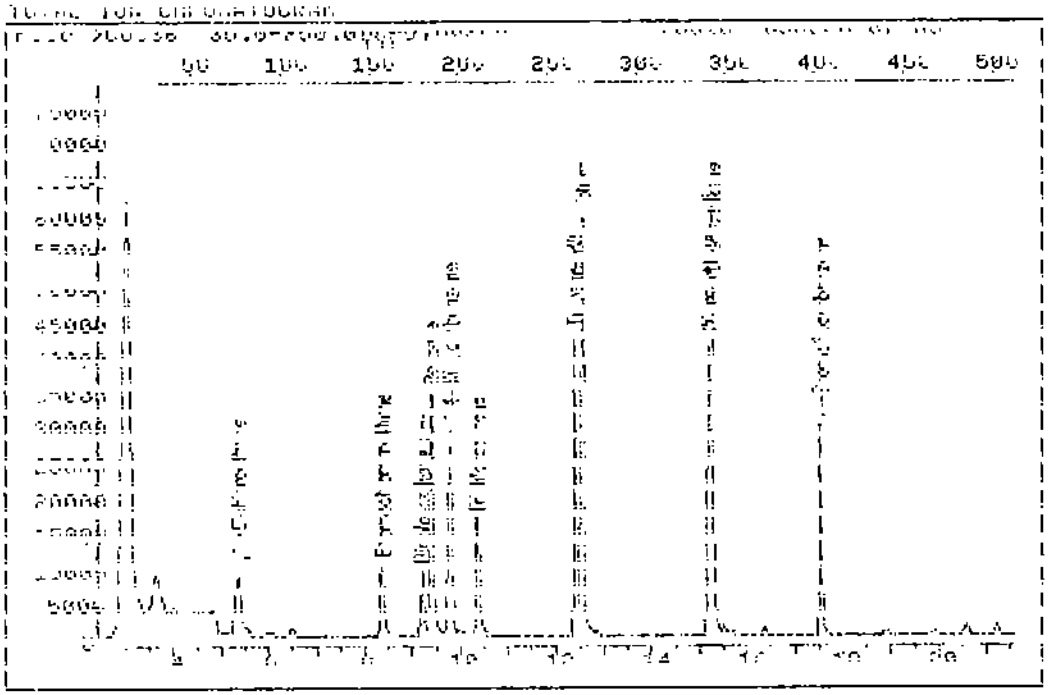
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128 MS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128 MS
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0586
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	37.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	39.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	45.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	49.	
108-90-7	Chlorobenzene	47.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: [illegible] Quant Output File: [illegible]
Name: [illegible] Instrument ID: 001
Misc: [illegible]

ID File: [illegible]
Title: HP 900 Continuing Calibration Standard
Last Calibration: [illegible] Last Cal [illegible]

Operator ID: Mistr
Acquired Time: [illegible]
Injection at: [illegible]

Operator ID: [illegible]
Output File: ^C0986:[0]
Data File: [illegible]
Name: [illegible]
Date: [illegible]

Quant Rev: [illegible]
Injected at: **0226 12:59
Dilution Factor: 1.000
Instrument ID: [illegible]

ID File: [illegible]
Title: [illegible]
Last Calibration: 950131 10:03
Last Quan Time: **0226 09:49

	Compound	R.T.	Conc	Area	Ratio	Qual	
1)	[illegible]	8.32	28.0	[illegible]	[illegible]	m	
3)*	1,1-Dichloroethene	9.39	96.0	128291	31.24	Uis	
26)	1,2-[illegible]	.19	[illegible]	[illegible]	24.84	m	
27)	*1,4-Difluorobenzene	9.78	114.0	42123	91.00	Uis	8
31)	[illegible]	11.24	[illegible]	1 [illegible]	[illegible]	m	
33)	Benzene	9.32	28.0	91238	44.65	Uis	9
37)	[illegible]	13.19	[illegible]	[illegible]	[illegible]	m	
40)	Toluene	12.94	91.0	95661	48.22	Uis	9
43)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	m	[illegible]
44)	Chlorobenzene	15.26	112.0	47108	41.38	Uis	9
49)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	m	[illegible]

* Compound is ISTD

1A

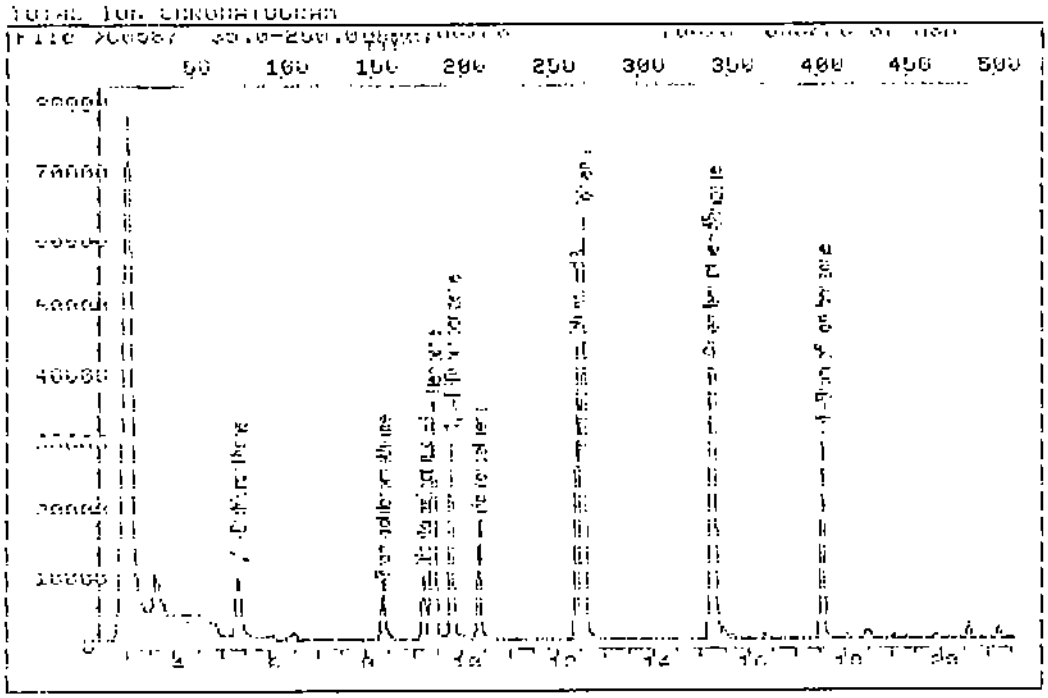
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128 MSD

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128 MSD
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0587
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	35.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	41.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	50.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	51.	
108-90-7	Chlorobenzene	50.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: [illegible]
Name: [illegible]
Misc: [illegible]

Report Output File: [illegible]
Instrument ID: [illegible]

Id File: [illegible]
Title: HP UOM Continuing Calibration Standard
Last Calibration: [illegible]
Last Cal Time: [illegible]

Operator ID: [illegible]
Count Time : [illegible]
Injected at: [illegible]

Operator ID: CarlE Quant Rev: 2 Acquired Time: 930226 16:57
Data File: >:\DATA\87:\04 Dilution Factor: 1.0000
Name: MeSOlMIX28 Instrument ID: 2000 C
Misc: 2000C 930226 02 MSD

ID File: ID5V1C:MI
Title: HP 5971 Continuing Calibration Standard
Last Calibration: 930131 10:03 Last Qcal Time: 930226 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.33	128.0	60254	50.00	ug	
14)	1,1-Dichloroethene	9.31	96.0	124000	34.89	UG	71
20)	1,2-Dichloroethane-d4	10.19	65.0	17426	42.90	ug	
23)	*1,4-Difluorobenzene	9.28	114.0	448864	50.00	UG	9
28)	Trichloroethene	10.34	130.0	12714	41.51	ug	
33)	Benzene	9.52	78.0	99432	49.23	UG	9
37)	*Chlorobenzene-d5	15.18	117.0	418766	50.00	ug	
42)	Toluene	12.54	91.0	99642	51.48	UG	9
43)	Toluene d-8	12.49	98.0	86714	51.55	ug	
44)	Chlorobenzene	15.26	112.0	49867	49.60	UG	9
49)	Bromofluorobenzene	17.53	95.0	72131	54.43	ug	

* Compound is ISTD

CLP

SAMPLE CALCULATIONS FOR VOLATILE ORGANICS:

1) RRF of Benzene from the VSTD050 analyzed on 2/26/03:

$$= \frac{\text{area of Benzene in std.}}{\text{area of internal std}} \quad \mathbf{X} \quad \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{92859}{43304} \times \frac{50}{50} = 2.144$$

2) Amount of Benzene in sample MEGDD0121 (AES sample number 030220G-03):

$$\text{ug/L} = \frac{\text{area of Benzene in sample}}{\text{area of internal standard in sample}} \times \frac{\text{amount of internal std. (ng)}}{\text{(ml of sample purged)(RRF)}}$$

$$= \frac{19508}{42185} \times \frac{(250)}{(5.0)(2.144)} = 10.8 \text{ ug/L}$$

which is reported as 11 ug/L on the Form I for Volatile Organics

3) Calculation of spike recovery for Benzene in sample MEGDIM0128 MS:

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Benzene} = \frac{(44.7 - 1.5)}{50.0} \times 100 = 86.4\ \%$$

SEMI-VOLATILE

ORGANICS ANALYSIS

QC

SUMMARY

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	TOT OUT
1	WBLK01	60	66	63	25	59	65	0
2	MEGDIM0117	47	58	56	N/A	N/A	N/A	0
3	MEGDD0243	48	59	60	N/A	N/A	N/A	0
4	MEGDD0238	52	65	63	N/A	N/A	N/A	0
5	WMSB	60	69	94	29	48	79	0
6	WBLK03	44	51	76	12	40	54	0
7	MEGDD014	46	62	75	N/A	N/A	N/A	0
8	MEGDD0129	44	69	84	N/A	N/A	N/A	0
9	DUP021803	39	67	78	N/A	N/A	N/A	0
10	MEGDIM0110	77	99	112	N/A	N/A	N/A	0
11	MEGUSH8601	47	61	78	N/A	N/A	N/A	0
12	MEGDD0121	46	67	86	N/A	N/A	N/A	0
13	WBLK02	42	57	70	16	37	55	0
14	MEGDD0123	50	79	95	N/A	N/A	N/A	0
15	MEGDD0115	54	81	88	N/A	N/A	N/A	0
16	MEGDIM0128	36	52	65	N/A	N/A	N/A	0
17	MEGDIM0128 MS	64	84	79	N/A	N/A	N/A	0
18	MEGDIM0128 MSD	64	74	86	N/A	N/A	N/A	0
19	MEGUSH8611	53	78	64	N/A	N/A	N/A	0
20	MEGCD0131	46	75	66	N/A	N/A	N/A	0
21	DUP022003	38	51	63	N/A	N/A	N/A	0
22	MEGUSH8616	35	57	49	N/A	N/A	N/A	0
23	MEGDSH0121	32 *	60	59	N/A	N/A	N/A	1
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-110)
S5 (2FP) = 2-Fluorophenol	(21-110)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: MEGDIM0128

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,4-Dichlorobenzene	25.	0.	15.	60	36- 97
n-Nitroso-di-n-propylam	25.	0.	16.	64	41-116
1,2,4-Trichlorobenzene	25.	0.	16.	64	39- 98
Acenaphthene	25.	0.	19.	76	46-118
2,4-Dinitrotoluene	25.	0.	14.	56	24- 96
Pyrene	25.	0.	17.	68	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	28.	17.	61	13	28	36- 97
n-Nitroso-di-n-propylam	28.	18.	64	12	38	41-116
1,2,4-Trichlorobenzene	28.	17.	61	6	28	39- 98
Acenaphthene	28.	18.	64	5	31	46-118
2,4-Dinitrotoluene	28.	13.	46	7	38	24- 96
Pyrene	28.	20.	71	16	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

3C

WATER SEMI-VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,4 Dichlorobenzene	25	0	16	63	36-97
N-Nitroso-di-n-propylamine	25	0	14	57	41-116
1,2,4 Trichlorobenzene	25	0	15	61	39-98
Acenaphthene	25	0	15	60	46-118
2,4 Dinitrotoluene	25	0	12	48	24-96
Pyrene	25	0	22	87	26-127

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 6 outside limits

Comments: _____

FORM III SV-1

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: B0477 Lab Sample ID: WBLK 2/20/03

Instrument ID: 5973 B Date Extracted: 02/20/03

Matrix: (soil/water) WATER Date Analyzed: 02/28/03

Level: (low/med) LOW Time Analyzed: 14:23

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDIM0117	MEGDIM0117	B0479	02/28/03
2	MEGDD0243	MEGDD0243	B0480	02/28/03
3	MEGDD0238	MEGDD0238	B0481	02/28/03
4	MEGDD014	MEGDD014	B0539	03/17/03
5	MEGDD0129	MEGDD0129	B0540	03/17/03
6	DUP021803	DUP021803	B0541	03/17/03
7				
8				
9				
10				
11				
12				
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: B0562 Lab Sample ID: WBLK 2/24/03

Instrument ID: 5973 B Date Extracted: 02/24/03

Matrix: (soil/water) WATER Date Analyzed: 03/18/03

Level: (low/med) LOW Time Analyzed: 19:37

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	WMSB	WMSB 2/24/03	B0537	03/17/03
2	MEGDIM0110	MEGDIM0110	B0542	03/17/03
3	MEGUSH8601	MEGUSH8601	B0543	03/17/03
4	MEGDD0121	MEGDD0121	B0544	03/17/03
5	MEGDD0123	MEGDD0123	B0563	03/18/03
6	MEGDD0115	MEGDD0115	B0564	03/18/03
7	MEGDIM018	MEGDIM0128	B0565	03/18/03
8	MEGDIM0128 MS	MEGDIM0128MS	B0566	03/18/03
9	MEGDIM0128 MSD	MEGDIM0128MSD	B0567	03/19/03
10	MEGDSH0121	MEGDSH0121	B0595	03/24/03
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: B0538 Lab Sample ID: WBLK 2/26/03

Instrument ID: 5973 B Date Extracted: 02/26/03

Matrix: (soil/water) WATER Date Analyzed: 03/17/03

Level: (low/med) LOW Time Analyzed: 18:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGUSH8611	MEGUSH8611	B0568	03/19/03
2	MEGCD0131	MEGCD0131	B0569	03/19/03
3	DUP022003	DUP022003	B0570	03/19/03
4	MEGUSH8616	MEGUSH8616	B0579	03/19/03
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: BT489 DFTPP Injection Date: 12/17/02

Instrument ID.: 5973 B DFTPP Injection Time: 09:41

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	38.9
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	38.3
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	51.5
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.4
275	10.0 - 30.0% of mass 198	21.9
365	Greater than 0.75% of mass 198	2.50
441	Present, but less than mass 443	8.8
442	40.0 - 110.0% of mass 198	57.8
443	15.0 - 23.0% of mass 442	11.2 (19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD020	SSTD020	BS490	12/17/02	11:20
2	SSTD080	SSTD080	BS491	12/17/02	12:14
3	SSTD120	SSTD120	BS492	12/17/02	13:08
4	SSTD160	SSTD160	BS493	12/17/02	14:01
5	SSTD050	SSTD050	BS494	12/17/02	14:56
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: BT047 DFTPP Injection Date: 02/28/03

Instrument ID.: 5973 B DFTPP Injection Time: 10:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.2
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	35.3
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	47.9
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	25.0
365	Greater than 0.75% of mass 198	2.92
441	Present, but less than mass 443	11.0
442	40.0 - 110.0% of mass 198	75.3
443	15.0 - 23.0% of mass 442	17.0 (22.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS047	02/28/03	10:25
2	WBLK01	WBLK 2/20/03	B0477	02/28/03	14:23
3	MEGDIM0117	MEGDIM0117	B0479	02/28/03	16:09
4	MEGDD0243	MEGDD0243	B0480	02/28/03	17:02
5	MEGDD0238	MEGDD0238	B0481	02/28/03	17:55
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: BT073 DFTPP Injection Date: 03/17/03

Instrument ID.: 5973 B DFTPP Injection Time: 15:35

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.7
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	42.5
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	54.3
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.6
275	10.0 - 30.0% of mass 198	20.4
365	Greater than 0.75% of mass 198	1.89
441	Present, but less than mass 443	9.3
442	40.0 - 110.0% of mass 198	65.4
443	15.0 - 23.0% of mass 442	14.6 (22.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS073	03/17/03	15:59
2	WMSB	WMSB 2/24/03	B0537	03/17/03	17:48
3	WBLK03	WBLK 2/26/03	B0538	03/17/03	18:38
4	MEGDD014	MEGDD014	B0539	03/17/03	19:27
5	MEGDD0129	MEGDD0129	B0540	03/17/03	20:17
6	DUP021803	DUP021803	B0541	03/17/03	21:07
7	MEGDIM0110	MEGDIM0110	B0542	03/17/03	21:57
8	MEGUSH8601	MEGUSH8601	B0543	03/17/03	22:47
9	MEGDD0121	MEGDD0121	B0544	03/17/03	23:38
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: BT074 DFTPP Injection Date: 03/18/03

Instrument ID.: 5973 B DFTPP Injection Time: 18:13

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	34.4
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	42.5
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	57.0
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 0.75% of mass 198	1.40
441	Present, but less than mass 443	9.1
442	40.0 - 110.0% of mass 198	54.4
443	15.0 - 23.0% of mass 442	11.4 (21.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS074	03/18/03	18:39
2	WBLK02	WBLK 2/24/03	B0562	03/18/03	19:37
3	MEGDD0123	MEGDD0123	B0563	03/18/03	20:36
4	MEGDD0115	MEGDD0115	B0564	03/18/03	21:40
5	MEGDIM0128	MEGDIM0128	B0565	03/18/03	22:44
6	MEGDIM0128 MS	MEGDIM0128 MS	B0566	03/18/03	23:47
7	MEGDIM0128 MSD	MEGDIM0128 MSD	B0567	03/19/03	00:50
8	MEGUSH8611	MEGUSH8611	B0568	03/19/03	02:01
9	MEGCD0131	MEGCD0131	B0569	03/19/03	03:07
10	DUP022003	DUP022003	B0570	03/19/03	04:16
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: BT075 DFTPP Injection Date: 03/19/03

Instrument ID.: 5973 B DFTPP Injection Time: 09:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.3
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	39.5
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	55.5
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.0
275	10.0 - 30.0% of mass 198	20.9
365	Greater than 0.75% of mass 198	1.94
441	Present, but less than mass 443	6.8
442	40.0 - 110.0% of mass 198	47.8
443	15.0 - 23.0% of mass 442	10.6 (22.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS075	03/19/03	09:35
2	MEGUSH8616	MEGUSH8616	B0579	03/19/03	17:07
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Lab File ID: BT080 DFTPP Injection Date: 03/24/03

Instrument ID.: 5973 B DFTPP Injection Time: 12:12

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.9
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	39.3
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	53.1
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	18.4
365	Greater than 0.75% of mass 198	1.71
441	Present, but less than mass 443	7.5
442	40.0 - 110.0% of mass 198	60.0
443	15.0 - 23.0% of mass 442	12.5 (20.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	BS080	03/24/03	12:39
2	MEGDSH0121	MEGDSH0121	B0595	03/24/03	13:31
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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	100487.	10.11	239201.	14.42	158142.	20.07
	UPPER LIMIT	200974.	10.61	478402.	14.92	316284.	20.57
	LOWER LIMIT	50244.	9.61	119601.	13.92	79071.	19.57
	EPA SAMPLE NO.						
1	WBLK01	129051.	10.07	321373.	14.37	203995.	20.03
2	MEGDIM0117	71067.	10.06	175742.	14.36	115894.	20.01
3	MEGDD0243	91466.	10.06	226637.	14.37	148853.	20.01
4	MEGDD0238	76027.	10.06	187667.	14.37	118993.	20.02
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	324856.	24.51	330846.	32.47	364804.	36.41
	UPPER LIMIT	649712.	25.01	661692.	32.97	729608.	36.91
	LOWER LIMIT	162428.	24.01	165423.	31.97	182402.	35.91
	EPA SAMPLE NO.						
1	WBLK01	411442.	24.46	456758.	32.42	571066.	36.37
2	MEGDIM0117	230282.	24.46	257032.	32.41	294572.	36.37
3	MEGDD0243	300186.	24.46	331729.	32.41	376358.	36.37
4	MEGDD0238	247105.	24.46	263548.	32.41	311390.	36.37
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS073 Date Analyzed: 03/17/03
Instrument ID: 5973 B Time Analyzed: 15:59

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	65206.	9.22	178036.	13.51	107594.	19.19
	UPPER LIMIT	130412.	9.72	356072.	14.01	215188.	19.69
	LOWER LIMIT	32603.	8.72	89018.	13.01	53797.	18.69
	EPA SAMPLE NO.						
1	WMSB	58082.	9.16	145034.	13.45	100431.	19.13
2	WBLK03	52014.	9.17	140518.	13.46	99540.	19.14
3	MEGDD014	53807.	9.17	154227.	13.46	107299.	19.14
4	MEGDD0129	55631.	9.17	155222.	13.46	98905.	19.14
5	DUP021803	47919.	9.17	135332.	13.46	91429.	19.14
6	MEGDIM0110	48604.	9.17	137384.	13.46	87940.	19.14
7	MEGUSH8601	65001.	9.17	173590.	13.45	114571.	19.14
8	MEGDD0121	54067.	9.17	148243.	13.45	100950.	19.13
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS073 Date Analyzed: 03/17/03
Instrument ID: 5973 B Time Analyzed: 15:59

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	217182.	23.61	300629.	31.53	468473.	35.47
	UPPER LIMIT	434364.	24.11	601258.	32.03	936946.	35.97
	LOWER LIMIT	108591.	23.11	150315.	31.03	234237.	34.97
	EPA SAMPLE NO.						
1	WMSB	169967.	23.55	205185.	31.47	295073.	35.40
2	WBLK03	187305.	23.56	206298.	31.47	293304.	35.40
3	MEGDD014	202885.	23.56	262365.	31.47	388026.	35.40
4	MEGDD0129	181043.	23.56	196250.	31.47	343732.	35.40
5	DUP021803	167421.	23.56	195633.	31.47	381582.	35.40
6	MEGDIM0110	154983.	23.56	197957.	31.47	385331.	35.40
7	MEGUSH8601	214523.	23.56	252161.	31.47	401430.	35.40
8	MEGDD0121	188322.	23.56	224173.	31.47	352601.	35.40
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS074 Date Analyzed: 03/18/03
Instrument ID: 5973 B Time Analyzed: 18:39

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	70859.	9.16	186040.	13.44	111672.	19.12
	UPPER LIMIT	141718.	9.66	372080.	13.94	223344.	19.62
	LOWER LIMIT	35430.	8.66	93020.	12.94	55836.	18.62
	EPA SAMPLE NO.						
1	WBLK02	63473.	9.17	159731.	13.44	104469.	19.12
2	MEGDD0123	53861.	9.17	157346.	13.44	101555.	19.12
3	MEGDD0115	66159.	9.15	180301.	13.44	112176.	19.12
4	MEGDIM0128	59161.	9.17	168747.	13.44	108857.	19.12
5	MEGDIM0128 MS	64688.	9.16	167704.	13.44	104397.	19.12
6	MEGDIM0128 MSD	56097.	9.17	143454.	13.44	101874.	19.12
7	MEGUSH8611	56467.	9.14	153390.	13.43	95509.	19.12
8	MEGCD0131	48233.	9.16	137988.	13.44	89315.	19.12
9	DUP022003	50971.	9.17	132691.	13.44	99377.	19.12
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS074 Date Analyzed: 03/18/03
Instrument ID: 5973 B Time Analyzed: 18:39

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	215062.		23.55		275311.		31.47		403294.		35.40	
	UPPER LIMIT	430124.		24.05		550622.		31.97		806588.		35.90	
	LOWER LIMIT	107531.		23.05		137656.		30.97		201647.		34.90	
	EPA SAMPLE NO.												
1	WBLK02	178234.		23.55		194576.		31.46		320024.		35.40	
2	MEGDD0123	190138.		23.55		220564.		31.47		354347.		35.40	
3	MEGDD0115	210667.		23.55		242406.		31.47		352753.		35.40	
4	MEGDIM0128	214925.		23.54		238012.		31.47		374601.		35.40	
5	MEGDIM0128 MS	192043.		23.54		249583.		31.46		378776.		35.40	
6	MEGDIM0128 MSD	183177.		23.54		216801.		31.46		345194.		35.40	
7	MEGUSH8611	177871.		23.54		298429.		31.47		409237.		35.40	
8	MEGCD0131	160835.		23.54		224536.		31.46		340441.		35.39	
9	DUP022003	182701.		23.54		206692.		31.45		372113.		35.40	
10													
11													
12													
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16													
17													
18													
19													
20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS075 Date Analyzed: 03/19/03
Instrument ID: 5973 B Time Analyzed: 09:35

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	71405.		9.12		197149.		13.39		126590.		19.07	
	UPPER LIMIT	142810.		9.62		394298.		13.89		253180.		19.57	
	LOWER LIMIT	35703.		8.62		98575.		12.89		63295.		18.57	
	EPA SAMPLE NO.												
1	MEGUSH8616	54887.		9.07		147060.		13.35		103947.		19.04	
2													
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21													
22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS075 Date Analyzed: 03/19/03
Instrument ID: 5973 B Time Analyzed: 09:35

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	243086.	23.49	254537.	31.41	440087.	35.34
	UPPER LIMIT	486172.	23.99	509074.	31.91	880174.	35.84
	LOWER LIMIT	121543.	22.99	127269.	30.91	220044.	34.84
	EPA SAMPLE NO.						
1	MEGUSH8616	202521.	23.46	266785.	31.37	377449.	35.30
2							
3							
4							
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19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS080 Date Analyzed: 03/24/03
Instrument ID: 5973 B Time Analyzed: 12:39

	EPA SAMPLE NO.	IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	96926.		8.56		206498.		12.79		117787.		18.51	
	UPPER LIMIT	193852.		9.06		412996.		13.29		235574.		19.01	
	LOWER LIMIT	48463.		8.06		103249.		12.29		58894.		18.01	
1	MEGDSH0121	76381.		8.53		180241.		12.77		109357.		18.49	
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22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS080 Date Analyzed: 03/24/03
Instrument ID: 5973 B Time Analyzed: 12:39

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	181143.	22.92	146326.	30.81	181635.	34.74
	UPPER LIMIT	362286.	23.42	292652.	31.31	363270.	35.24
	LOWER LIMIT	90572.	22.42	73163.	30.31	90818.	34.24
	EPA SAMPLE NO.						
1	MEGDSH0121	174389.	22.91	136553.	30.80	198438.	34.72
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Semi-Volatile Method Detection Limits

Date Performed: 2/5/2003

Parameter	Conc 1 BMDL1	Conc 2 BMDL2	Conc 3 BMDL3	Conc 4 BMDL4	Conc 5 BMDL5	Conc 6 BMDL6	Conc 7 BMDL7	SD	MDL
Pyridine	4.08	6.10	4.20	8.63	7.35	4.01	4.07	1.895	5.957
N-Nitroso-di-methylamine	13.37	15.57	14.14	14.60	13.94	17.60	15.88	1.446	4.543
Analine	10.94	13.62	11.97	15.56	13.60	14.69	13.25	1.556	4.892
Phenol	13.27	17.62	16.03	16.25	15.49	17.59	16.63	1.484	4.665
bis(2-chloroethyl) ether	23.36	26.27	24.34	23.44	22.12	27.13	23.61	1.767	5.554
2-Chlorophenol	27.62	32.18	28.87	29.48	27.42	32.92	29.43	2.116	6.649
1,3 Dichlorobenzene	15.21	17.19	15.38	16.39	14.15	17.89	17.44	1.370	4.305
1,4 Dichlorobenzene	15.72	17.75	15.84	16.79	14.52	18.19	17.65	1.333	4.189
Benzyl Alcohol	22.38	27.14	25.14	23.19	22.48	25.75	22.54	1.910	6.003
1,2 Dichlorobenzene	15.90	17.91	16.26	17.21	15.02	18.51	17.90	1.267	3.981
2-Methylphenol	21.32	23.99	22.77	21.94	20.71	24.68	22.53	1.410	4.432
2,2'-oxybis (1-chloropropane)	22.25	25.72	23.77	23.33	21.87	25.34	23.43	1.439	4.524
4-Methylphenol	18.19	20.95	19.15	19.32	17.43	20.44	19.57	1.214	3.816
N-Nitroso-di-n-propylamine	23.67	27.34	25.85	24.89	23.77	26.52	24.96	1.368	4.300
Hexachloroethane	14.14	15.85	13.60	15.09	12.71	16.57	16.46	1.485	4.666
Nitrobenzene	22.17	26.03	24.53	23.45	22.68	26.26	23.54	1.584	4.978
Isophorone	25.66	28.71	27.27	26.59	25.27	27.97	26.25	1.240	3.897
2-Nitrophenol	31.63	36.32	33.68	33.81	31.99	38.06	33.98	2.286	7.185
2,4 Dimethylphenol	26.39	31.38	26.78	28.43	26.20	28.59	26.64	1.860	5.847
bis(2-chloroethoxy)methane	23.66	26.78	25.37	25.21	23.64	26.82	25.17	1.288	4.047
2,4 Dichlorophenol	29.82	34.21	30.58	31.30	30.18	34.13	31.45	1.804	5.669
1,2,4 Trichlorobenzene	17.25	19.40	17.70	18.21	16.55	19.53	18.98	1.132	3.557
Naphthalene	21.60	24.26	23.40	22.43	21.72	24.68	23.22	1.192	3.747
Benzoic Acid			3.99		3.37	3.56	3.10	0.374	1.700
4-Chloroanaline	21.76	25.18	23.29	25.34	23.57	24.90	24.41	1.281	4.026
Hexachlorobutadiene	14.84	16.49	14.07	15.64	13.66	16.99	17.32	1.435	4.511
4-Chloro-3-methylphenol	30.61	37.86	33.80	32.35	32.59	36.29	32.25	2.541	7.985
2-Methylnaphthalene	23.78	26.94	25.06	24.33	23.85	26.38	24.98	1.219	3.832
Hexachlorocyclopentadiene	12.78	15.28	13.75	14.39	13.24	15.56	16.38	1.316	4.135
2,4,6 Trichlorophenol	33.65	39.71	37.02	36.18	35.77	38.20	35.62	1.955	6.145
2,4,5 Trichlorophenol	25.34	29.36	27.93	26.29	26.37	26.81	26.03	1.352	4.248
2-Chlorenaphthalene	21.74	24.97	23.37	23.91	22.33	24.17	23.37	1.097	3.448
2-Nitroaniline	24.28	29.02	27.85	25.58	25.80	27.11	24.60	1.741	5.473
Dimethylphthalene	19.70	22.59	20.21	19.95	18.17	23.40	21.98	1.850	5.814
Acenaphthylene	25.99	29.59	28.51	27.45	26.40	28.00	26.24	1.336	4.198
2,6 Dinitrotoluene	28.30	32.47	31.10	29.90	28.80	30.25	29.21	1.434	4.507
3-Nitroaniline	26.63	30.89	29.29	27.52	27.39	28.81	27.33	1.478	4.645
Acenaphthene	26.35	30.15	28.61	27.80	26.76	27.99	26.53	1.353	4.253

Semi-Volatile Method Detection Limits

Date Performed: **2/5/2003**

Parameter	Conc 1 BMDL1	Conc 2 BMDL2	Conc 3 BMDL3	Conc 4 BMDL4	Conc 5 BMDL5	Conc 6 BMDL6	Conc 7 BMDL7	SD	MDL
2,4 Dinitrophenol	16.76	25.26	23.85	23.24	23.54	25.33	23.41	2.907	9.136
4-Nitrophenol	6.78	10.96	7.16	8.86	6.69	8.44	8.18	1.499	4.710
Dibenzofuran	28.47	32.38	30.35	29.29	28.48	30.51	28.49	1.466	4.607
2,4 Dinitrotoluene	25.64	29.62	28.13	27.36	26.13	28.03	26.83	1.348	4.235
Diethylphthalate	25.70	29.60	27.15	26.29	25.56	27.82	27.64	1.417	4.454
Fluorene	26.85	30.71	29.15	28.37	27.17	28.45	27.70	1.309	4.115
4-Chlorophenyl phenylether	25.23	29.31	26.33	26.74	26.81	27.36	27.31	1.241	3.902
4-Nitroaniline	26.73	33.42	31.81	29.26	27.98	29.10	29.71	2.259	7.100
4,6-Dinitro-2-methylphenol	32.67	40.53	36.88	36.01	36.45	38.79	35.51	2.492	7.833
N-Nitrosodi-n-phenylamine	28.59	31.26	29.42	29.62	28.26	29.86	27.29	1.278	4.018
Azobenzene	24.05	28.05	24.72	25.46	24.78	25.89	24.68	1.320	4.148
4-Bromophenyl phenylether	26.09	30.09	27.53	27.65	26.70	28.32	25.15	1.603	5.039
Hexachlorobenzene	28.01	31.36	29.26	29.14	28.07	29.42	26.14	1.607	5.050
Pentachlorophenol	30.49	36.70	34.07	32.40	32.89	35.24	32.18	2.079	6.535
Phenanthrene	27.84	31.51	29.74	28.86	28.23	28.97	26.81	1.497	4.705
Anthracene	26.92	30.68	29.31	28.49	24.41	28.92	26.45	2.095	6.586
Benzidine	49.64	49.87	50.04	50.38	50.11	49.88	49.49	0.297	0.934
Carbazole	33.40	38.92	36.52	35.25	34.53	35.38	32.95	2.013	6.328
Di-n-butylphthalate	28.86	32.64	30.56	29.66	28.41	30.38	28.23	1.543	4.848
Fluoranthene	27.51	31.29	29.48	28.59	27.15	28.74	26.57	1.599	5.024
Pyrene	27.00	30.02	29.33	28.82	27.33	27.21	26.22	1.400	4.401
Butylbenzylphthalate	27.47	30.49	28.81	28.54	27.07	29.51	27.21	1.280	4.022
Benzo(a)anthracene	27.21	30.44	29.61	28.89	27.25	28.67	26.42	1.448	4.552
3,3'-Dichlorobenzidine	31.40	34.12	33.43	33.99	31.08	33.98	29.05	1.958	6.154
Chrysene	28.08	31.45	30.32	29.94	28.04	29.74	27.17	1.520	4.777
bis(2-ethylhexyl) phthalate	28.12	31.71	29.99	29.22	27.82	29.54	27.21	1.527	4.798
Di-n-octylphthalate	26.59	29.97	28.93	27.52	27.26	27.56	25.47	1.476	4.638
Benzo(b)fluoranthene	26.85	30.46	29.05	27.92	27.73	26.84	25.20	1.693	5.321
Benzo(k)fluoranthene	27.14	31.40	29.52	28.65	28.14	29.40	27.57	1.435	4.511
Benzo(a)pyrene	26.73	30.16	29.51	28.26	27.16	28.21	25.92	1.511	4.750
Indeno(1,2,3-cd)pyrene	25.69	30.17	28.12	28.54	26.24	27.27	24.78	1.849	5.810
Dibenz(a,h)anthracene	25.10	28.34	26.84	27.30	25.29	26.54	24.55	1.356	4.262
Benzo(g,h,i)perylene	26.79	30.03	28.75	28.94	27.09	27.45	26.18	1.378	4.330

SAMPLE

DATA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCD0131

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGCD0131

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0569

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

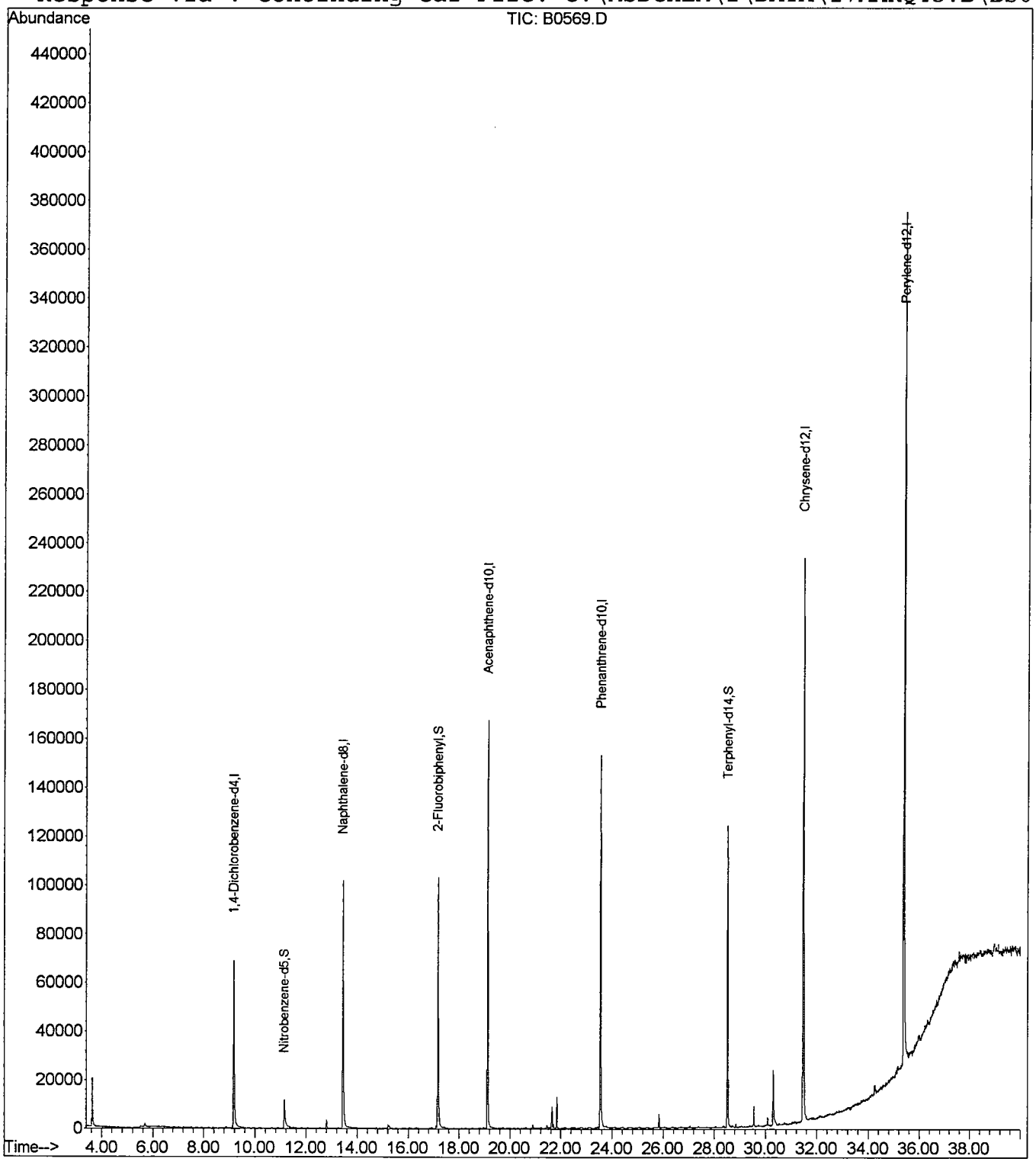
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0569.D Vial: 10
Acq On : 19 Mar 2003 3:07 am Operator:
Sample : MEGCD0131 Inst : gcms b
Misc : GCMS-B 030224C03 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 15:34 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0569.D Vial: 10
Acq On : 19 Mar 2003 3:07 am Operator:
Sample : MEGCD0131 Inst : gcms b
Misc : GCMS-B 030224C03 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:56:21 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.16	152	48233	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	137988	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	89315	40.00	ug	0.00
56) Phenanthrene-d10	23.54	188	160835	40.00	ug	0.00
70) Chrysene-d12	31.46	240	224536	40.00	ug	-0.01
78) Perylene-d12	35.39	264	340441	40.00	ug	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.14	82	31341	23.00	ug	0.01
40) 2-Fluorobiphenyl	17.16	172	116829	37.20	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	115460	32.83	ug	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD014

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0539

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

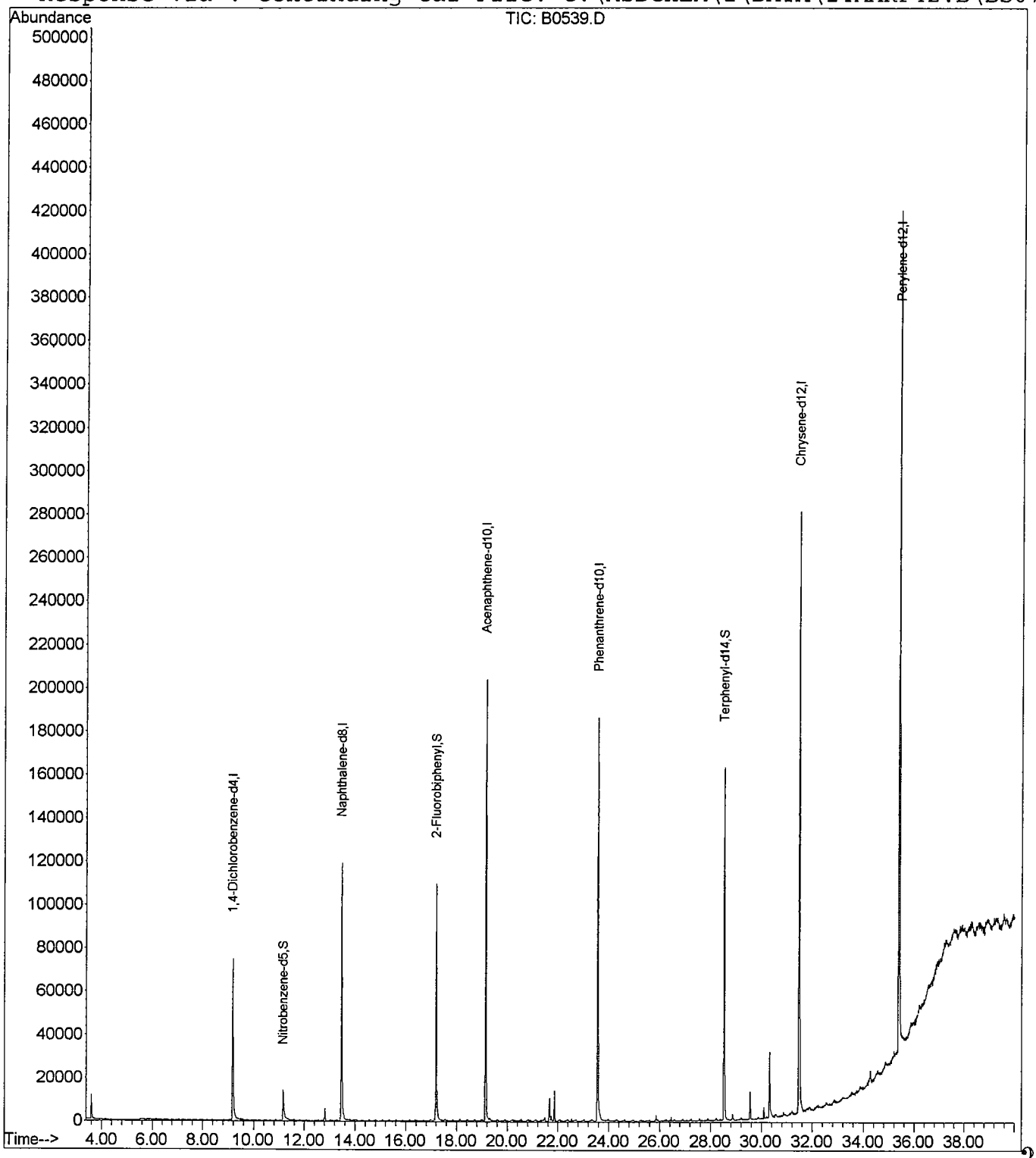
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0539.D Vial: 4
Acq On : 17 Mar 2003 7:27 pm Operator:
Sample : MEGDD014 Inst : gcms b
Misc : GCMS-B 030218J04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 10:40 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0539.D Vial: 4
Acq On : 17 Mar 2003 7:27 pm Operator:
Sample : MEGDD014 Inst : gcms b
Misc : GCMS-B 030218J04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:33 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	53807	40.00	ug	-0.04
21) Naphthalene-d8	13.46	136	154227	40.00	ug	-0.05
36) Acenaphthene-d10	19.14	164	107299	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	202885	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	262365	40.00	ug	-0.06
78) Perylene-d12	35.40	264	388026	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0d	0.00	ug	
22) Nitrobenzene-d5	11.15	82	35512	22.98	ug	-0.05
40) 2-Fluorobiphenyl	17.19	172	121024	30.86	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.53	244	155453	37.47	ug	-0.05

Target Compounds Qvalue

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0115

Sample wt/vol: 850.0 (g/mL) ML Lab File ID: B0564

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

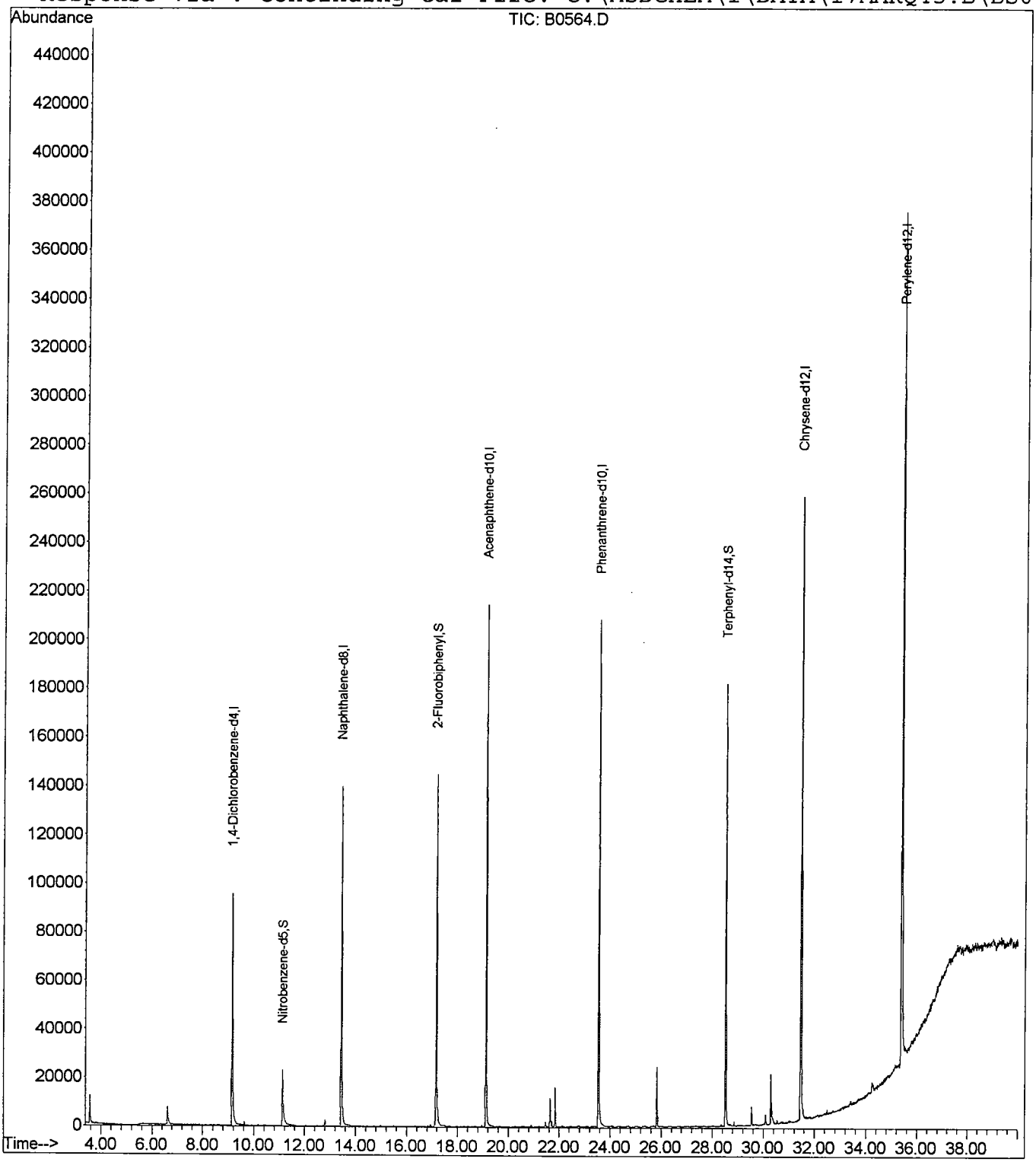
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0564.D Vial: 5
Acq On : 18 Mar 2003 9:40 pm Operator:
Sample : MEGDD0115 Inst : gcms b
Misc : GCMS-B 030220G06 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:18 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0564.D Vial: 5
Acq On : 18 Mar 2003 9:40 pm Operator:
Sample : MEGDD0115 Inst : gcms b
Misc : GCMS-B 030220G06 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:55:57 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.15	152	66159	40.00	ug	-0.01
21) Naphthalene-d8	13.44	136	180301	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	112176	40.00	ug	0.00
56) Phenanthrene-d10	23.55	188	210667	40.00	ug	0.00
70) Chrysene-d12	31.47	240	242406	40.00	ug	0.00
78) Perylene-d12	35.40	264	352753	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.13	82	48402	27.19	ug	0.00
40) 2-Fluorobiphenyl	17.17	172	159674	40.48	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	167502	44.11	ug	0.00

Target Compounds Qvalue

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0121

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: B0544

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

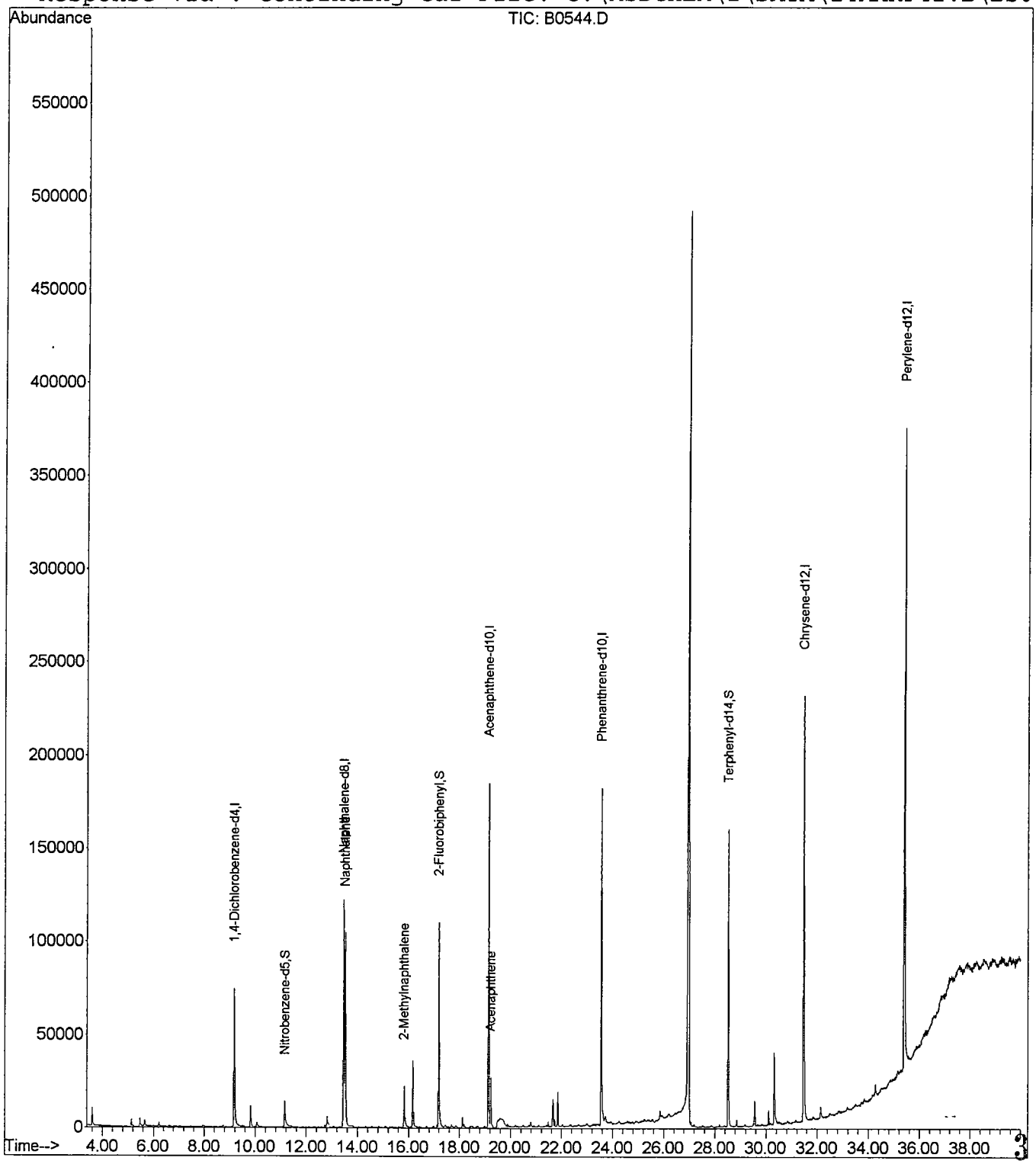
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	23.	
91-57-6	2-Methylnaphthalene	5.	
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	3.	J
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0544.D Vial: 9
Acq On : 17 Mar 2003 11:38 pm Operator:
Sample : MEGDD0121 Inst : gcms b
Misc : GCMS-B 030220G03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 11:04 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 10:58:08 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



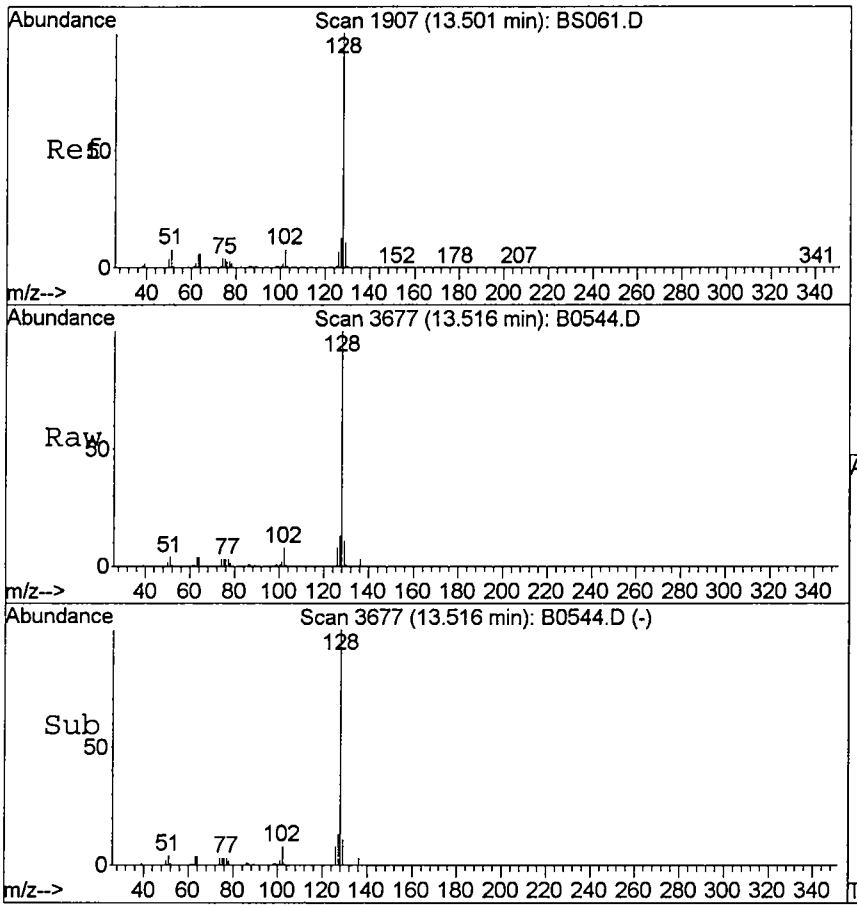
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0544.D Vial: 9
Acq On : 17 Mar 2003 11:38 pm Operator:
Sample : MEGDD0121 Inst : gcms b
Misc : GCMS-B 030220G03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:56 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	54067	40.00	ug	-0.05
21) Naphthalene-d8	13.45	136	148243	40.00	ug	-0.06
36) Acenaphthene-d10	19.13	164	100950	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	188322	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	224173	40.00	ug	-0.06
78) Perylene-d12	35.40	264	352601	40.00	ug	-0.07
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.15	82	34283	23.08	ug	-0.05
40) 2-Fluorobiphenyl	17.18	172	122884	33.30	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	151711	42.80	ug	-0.06
Target Compounds						Qvalue
30) Naphthalene	13.52	128	162859	44.36	ug	94
35) 2-Methylnaphthalene	15.84	142	39075	10.18	ug	58
47) Acenaphthene	19.23	153	38052	6.33	ug	48

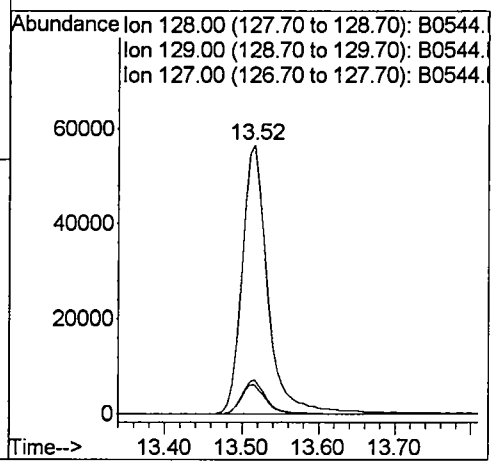
(#) = qualifier out of range (m) = manual integration
B0544.D ME1125.M Mon Mar 24 11:05:13 2003 GCMSB Page 1

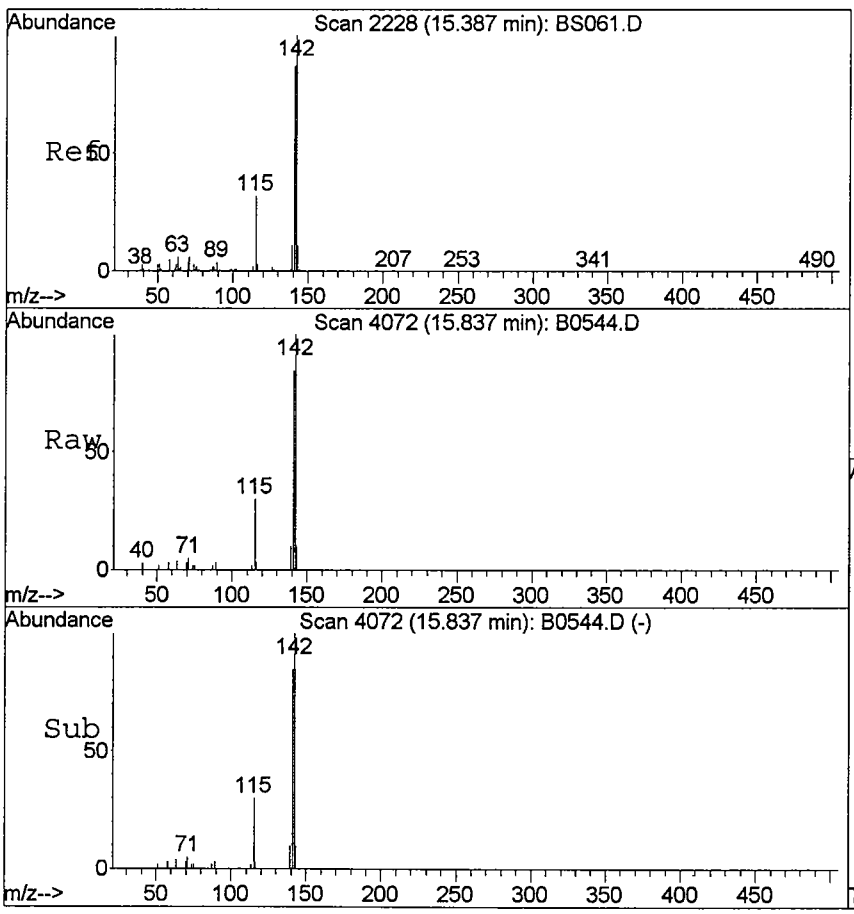


#30
Naphthalene
Concen: 44.36 ug
RT: 13.52 min Scan# 3677
Delta R.T. -0.05 min
Lab File: B0544.D
Acq: 17 Mar 2003 11:38 pm

Tgt Ion:128 Resp: 162859

Ion	Ratio	Lower	Upper
128	100		
129	8.7	8.6	12.8
127	9.8	10.0	15.0#

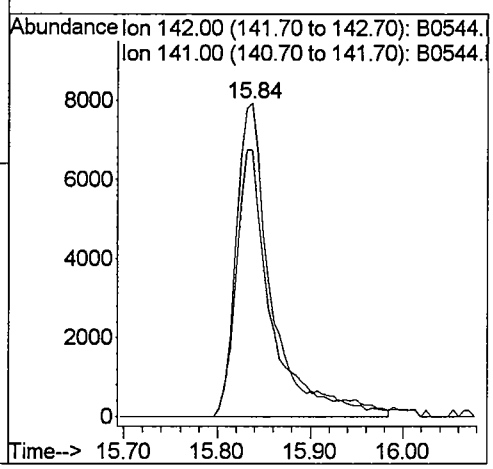


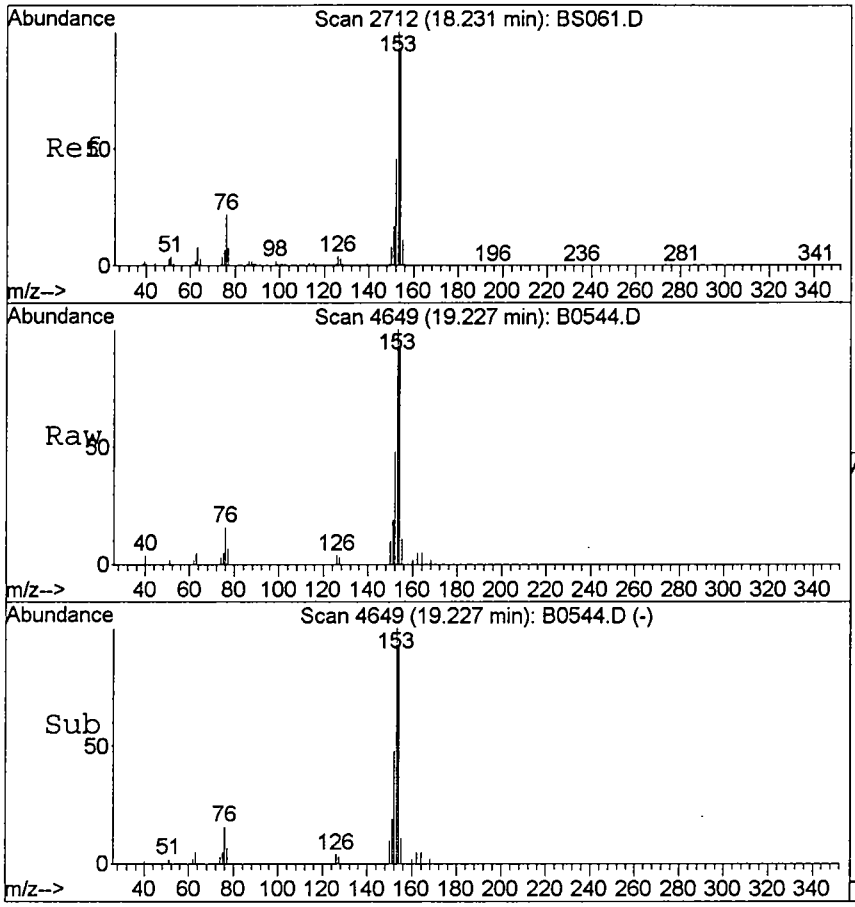


#35
2-Methylnaphthalene
Concen: 10.18 ug
RT: 15.84 min Scan# 4072
Delta R.T. -0.05 min
Lab File: B0544.D
Acq: 17 Mar 2003 11:38 pm

Tgt Ion:142 Resp: 39075

Ion	Ratio	Lower	Upper
142	100		
141	45.3	66.4	99.6#

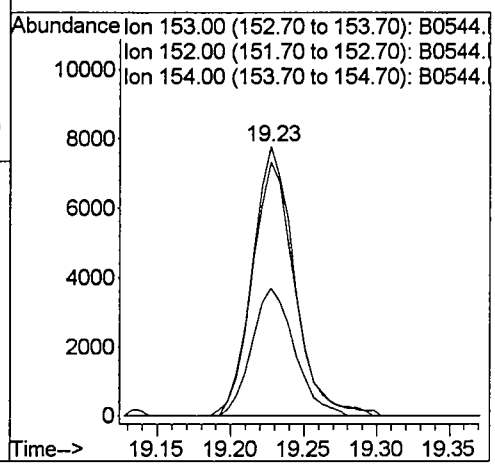




#47
Acenaphthene
Concen: 6.33 ug
RT: 19.23 min Scan# 4649
Delta R.T. -0.05 min
Lab File: B0544.D
Acq: 17 Mar 2003 11:38 pm

Tgt Ion:153 Resp: 38052

Ion	Ratio	Lower	Upper
153	100		
152	19.8	38.1	57.1#
154	39.0	75.8	113.6#



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0123

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0123

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0563

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

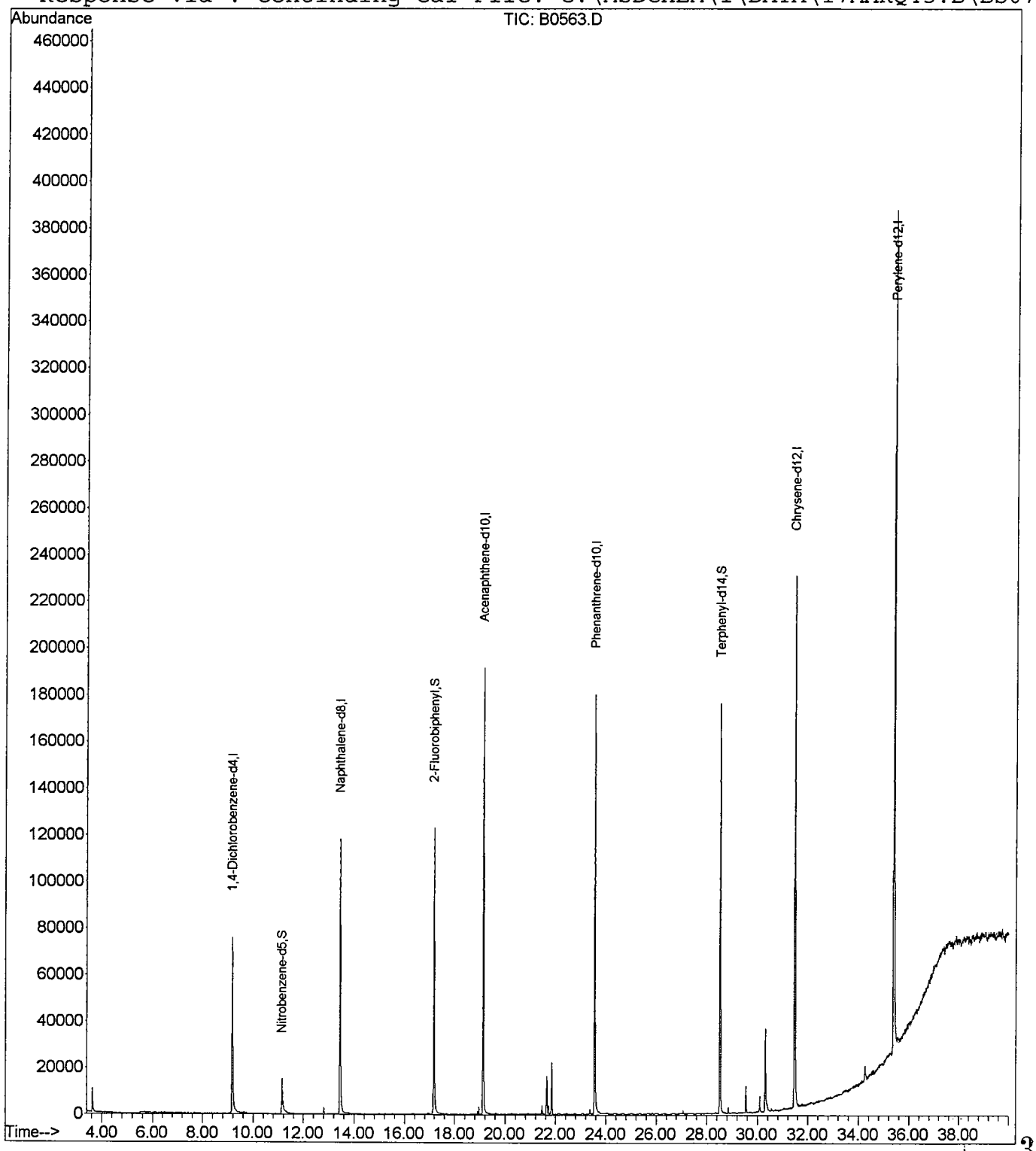
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0563.D Vial: 4
Acq On : 18 Mar 2003 8:36 pm Operator:
Sample : MEGDD0123 Inst : gcms b
Misc : GCMS-B 030220G05 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:17 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0563.D Vial: 4
Acq On : 18 Mar 2003 8:36 pm Operator:
Sample : MEGDD0123 Inst : gcms b
Misc : GCMS-B 030220G05 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:55:52 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	53861	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	157346	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	101555	40.00	ug	0.00
56) Phenanthrene-d10	23.55	188	190138	40.00	ug	0.00
70) Chrysene-d12	31.47	240	220564	40.00	ug	0.00
78) Perylene-d12	35.40	264	354347	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0d	0.00	ug	
22) Nitrobenzene-d5	11.14	82	38796	24.97	ug	0.01
40) 2-Fluorobiphenyl	17.17	172	140850	39.45	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	164211	47.53	ug	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0129

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0540

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

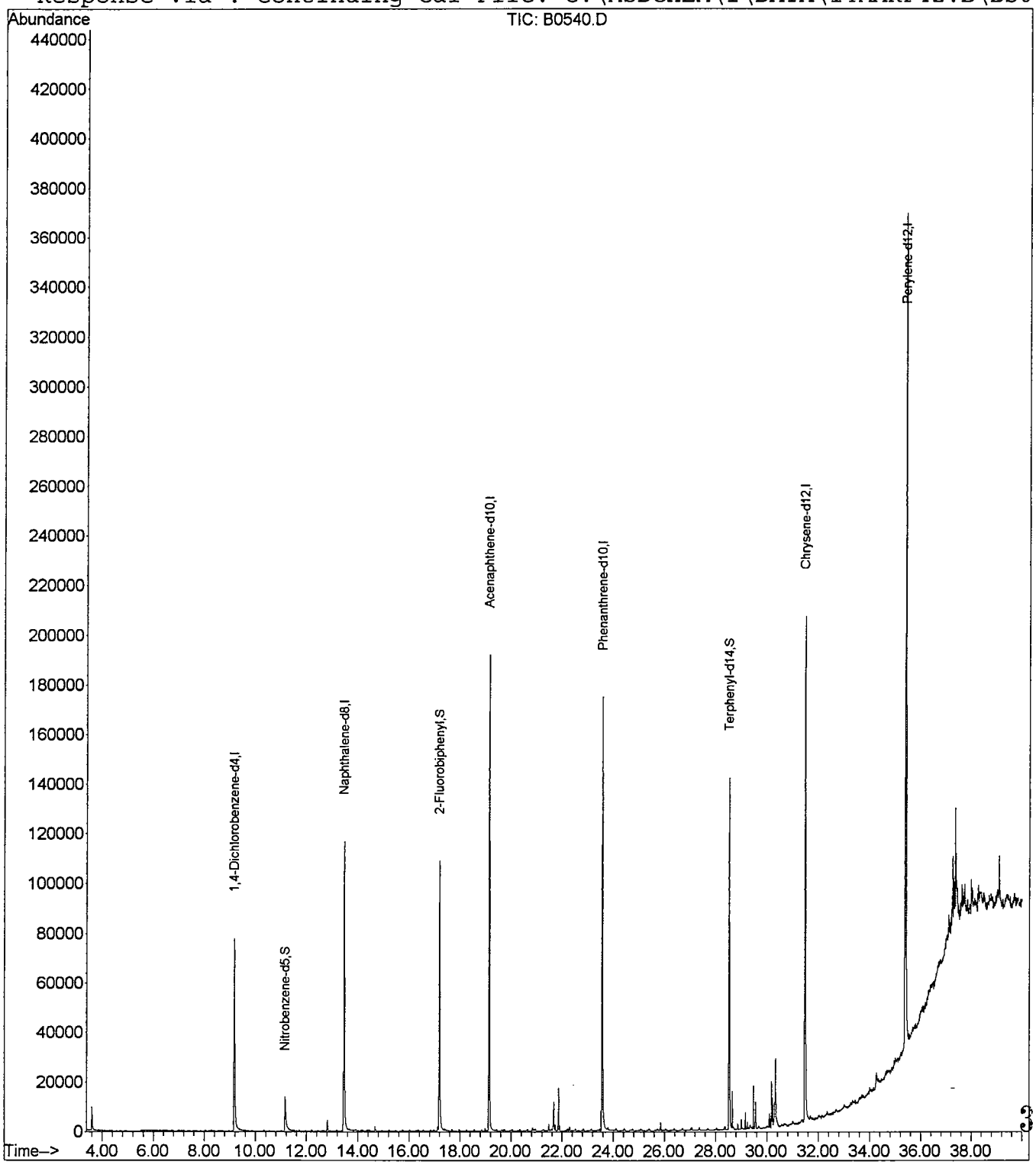
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0540.D Vial: 5
Acq On : 17 Mar 2003 8:17 pm Operator:
Sample : MEGDD0129 Inst : gcms b
Misc : GCMS-B 030218J05 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 10:42 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



359

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0540.D Vial: 5
Acq On : 17 Mar 2003 8:17 pm Operator:
Sample : MEGDD0129 Inst : gcms b
Misc : GCMS-B 030218J05 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:38 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	55631	40.00	ug	-0.05
21) Naphthalene-d8	13.46	136	155222	40.00	ug	-0.05
36) Acenaphthene-d10	19.14	164	98905	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	181043	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	196250	40.00	ug	-0.06
78) Perylene-d12	35.40	264	343732	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0d	0.00	ug	
22) Nitrobenzene-d5	11.15	82	34214	22.00	ug	-0.05
40) 2-Fluorobiphenyl	17.19	172	124493	34.44	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.53	244	130711	42.12	ug	-0.05

Target Compounds Qvalue

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0238

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0238

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0481

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	
91-57-6	2-Methylnaphthalene	3.	J
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	2.	J
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	.7	J
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

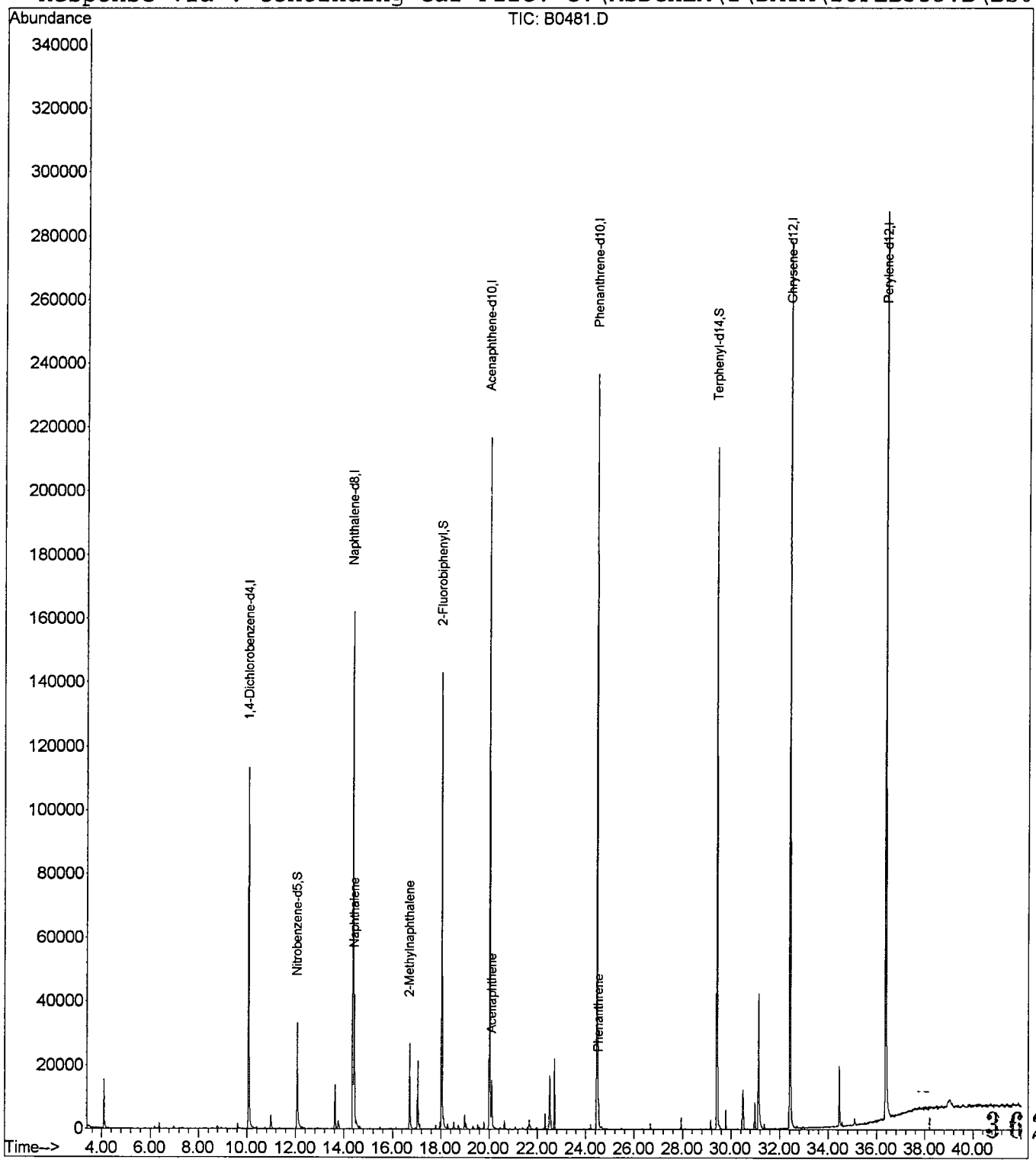
(1) - Cannot be separated from diphenylamine

AMK 6/26/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0481.D Vial: 10
Acq On : 28 Feb 2003 5:55 pm Operator:
Sample : MEGDD0238 Inst : gcms b
Misc : GCMS-B 030218J03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 15:26 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



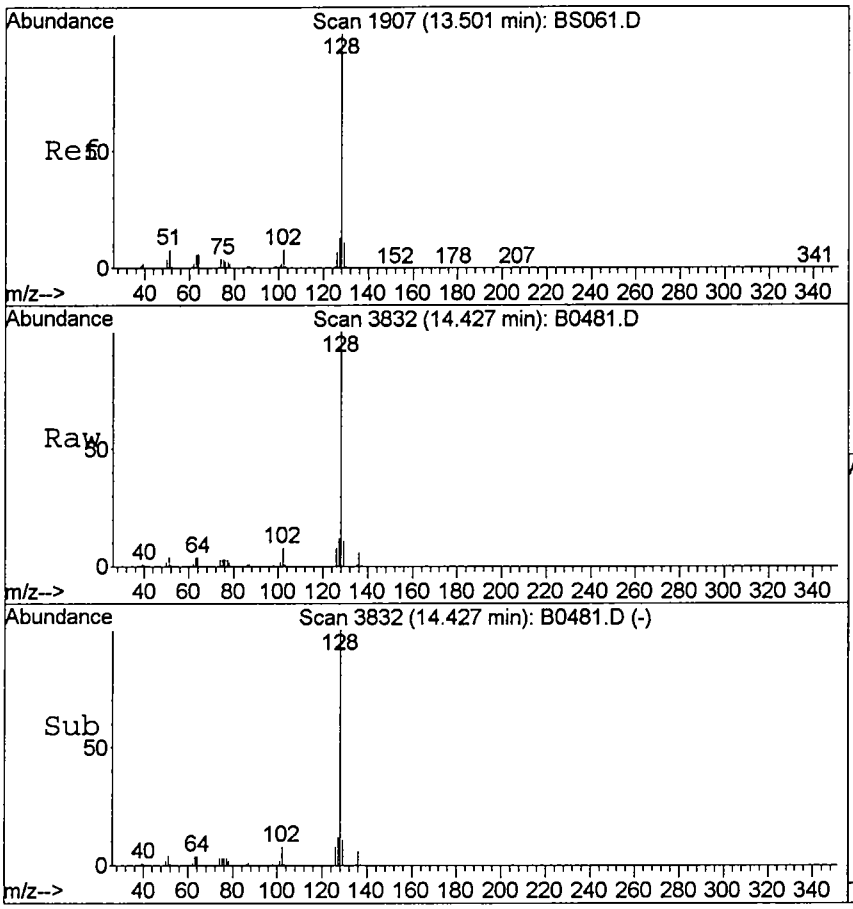
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0481.D Vial: 10
Acq On : 28 Feb 2003 5:55 pm Operator:
Sample : MEGDD0238 Inst : gcms b
Misc : GCMS-B 030218J03 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:03:12 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	76027	40.00	ug	-0.05
21) Naphthalene-d8	14.37	136	187667	40.00	ug	-0.05
36) Acenaphthene-d10	20.02	164	118993	40.00	ug	-0.05
56) Phenanthrene-d10	24.46	188	247105	40.00	ug	-0.05
70) Chrysene-d12	32.41	240	263548	40.00	ug	-0.05
78) Perylene-d12	36.37	264	311390	40.00	ug	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.07	82	61639	25.79	ug	-0.05
40) 2-Fluorobiphenyl	18.03	172	155173	32.57	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.42	244	194789	31.50	ug	-0.04
Target Compounds						Qvalue
30) Naphthalene	14.43	128	60964	11.04	ug	94
35) 2-Methylnaphthalene	16.71	142	38465	5.99	ug	58
47) Acenaphthene	20.11	153	21361	2.80	ug	48
64) Phenanthrene	24.52	178	8926	1.22	ug	88

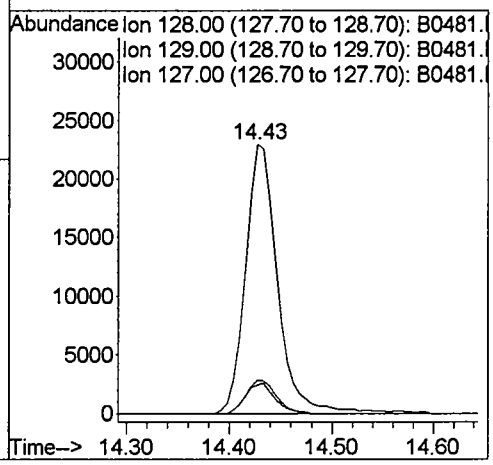
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B0481.D ME1125.M Fri Mar 21 15:26:26 2003 GCMSB Page 1

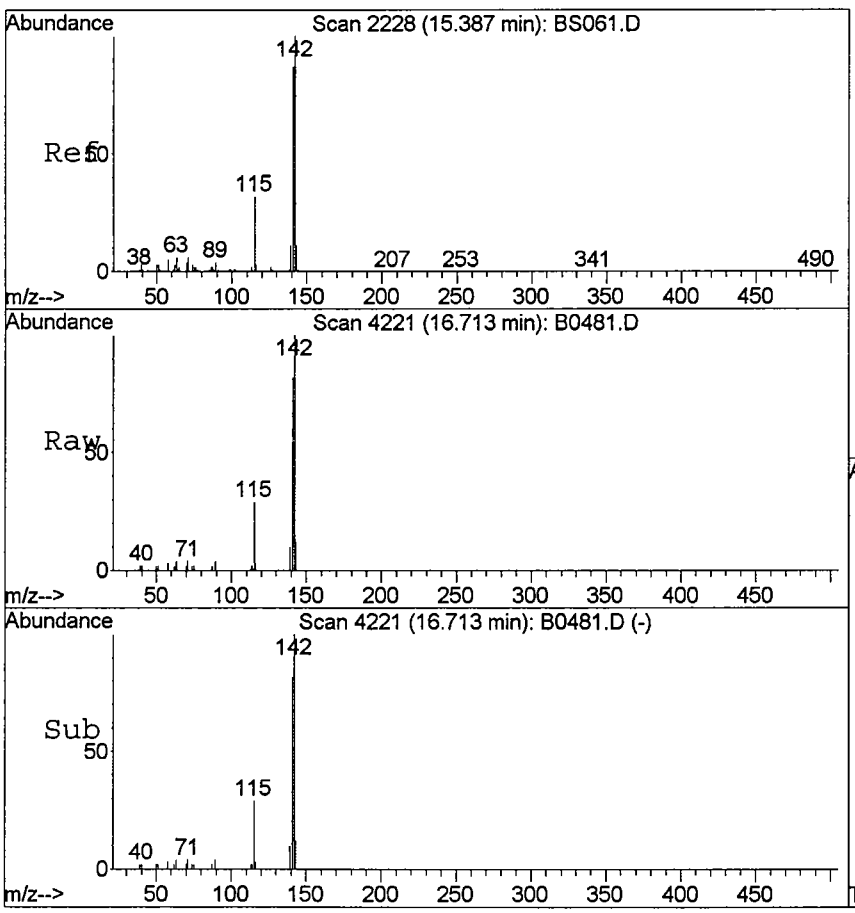


#30
Naphthalene
Concen: 11.04 ug
RT: 14.43 min Scan# 3832
Delta R.T. -0.05 min
Lab File: B0481.D
Acq: 28 Feb 2003 5:55 pm

Tgt Ion:128 Resp: 60964

Ion	Ratio	Lower	Upper
128	100		
129	8.5	8.6	12.8#
127	9.7	10.0	15.0#

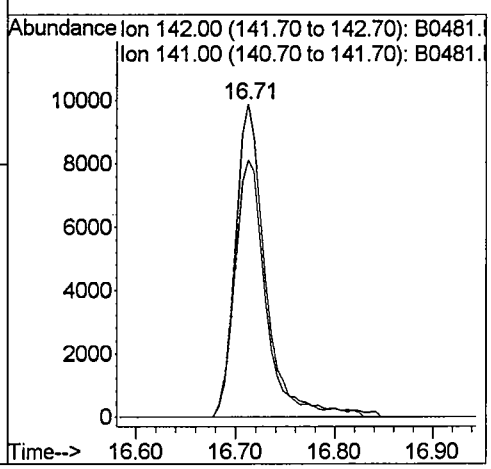


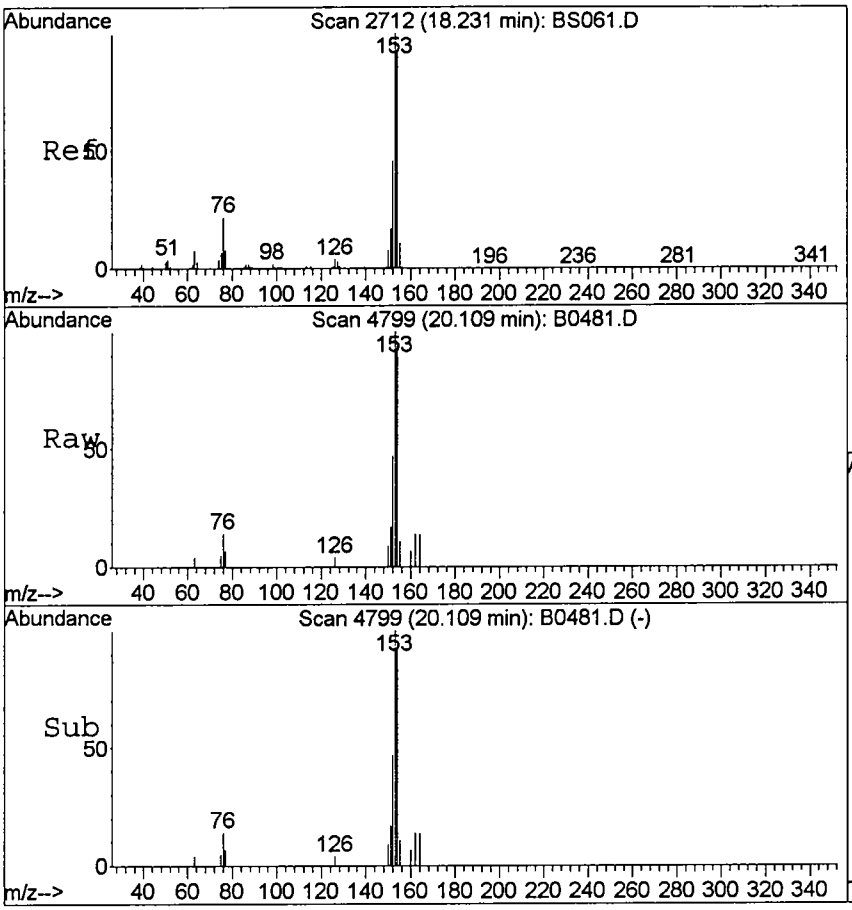


#35
2-Methylnaphthalene
Concen: 5.99 ug
RT: 16.71 min Scan# 4221
Delta R.T. -0.05 min
Lab File: B0481.D
Acq: 28 Feb 2003 5:55 pm

Tgt Ion:142 Resp: 38465

Ion	Ratio	Lower	Upper
142	100		
141	45.1	66.4	99.6#

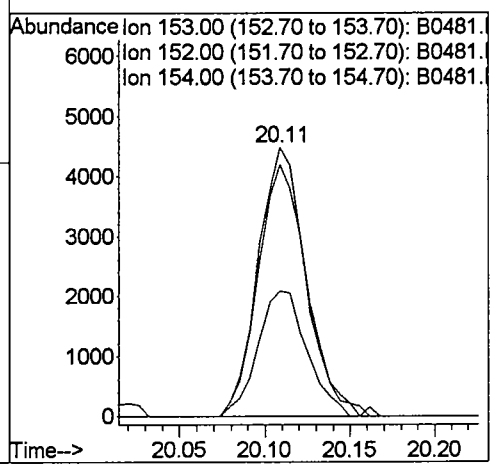


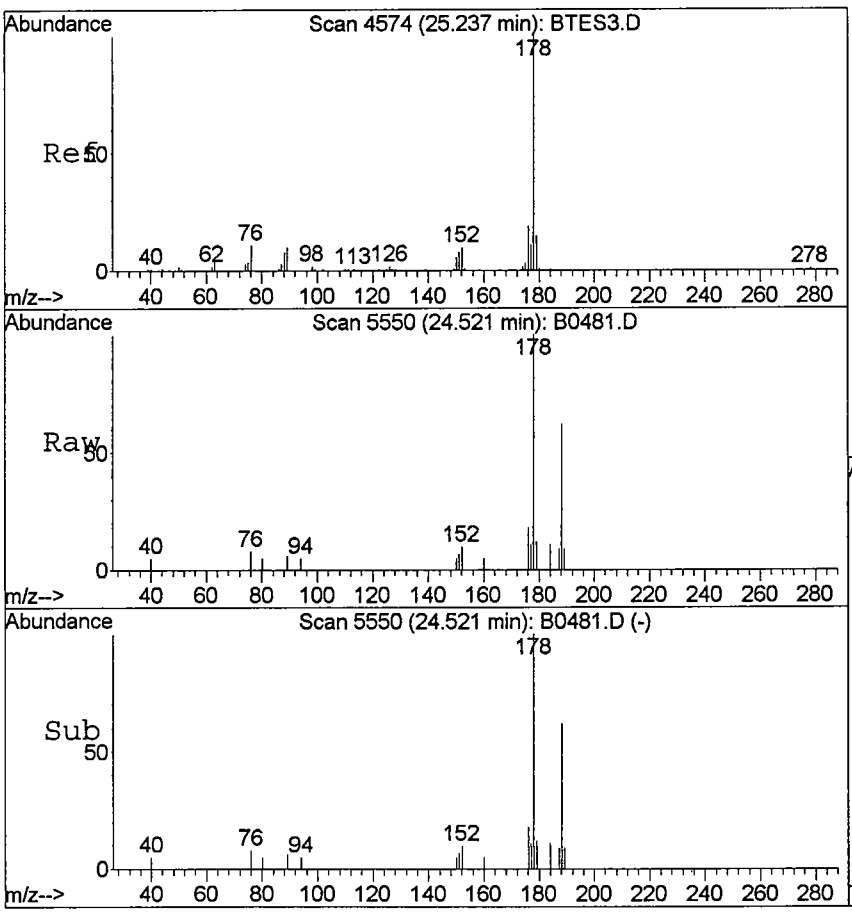


#47
Acenaphthene
Concen: 2.80 ug
RT: 20.11 min Scan# 4799
Delta R.T. -0.05 min
Lab File: B0481.D
Acq: 28 Feb 2003 5:55 pm

Tgt Ion:153 Resp: 21361

Ion	Ratio	Lower	Upper
153	100		
152	19.7	38.1	57.1#
154	38.9	75.8	113.6#

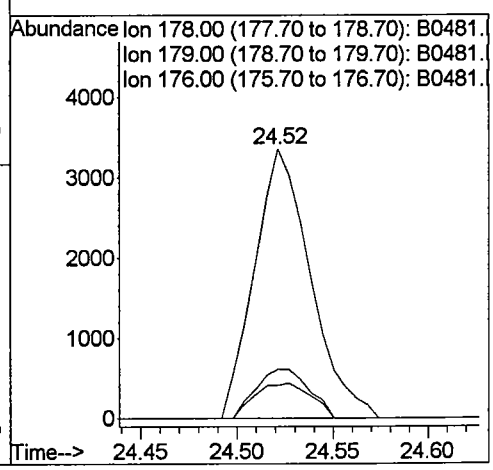




#64
Phenanthrene
Concen: 1.22 ug
RT: 24.52 min Scan# 5550
Delta R.T. -0.05 min
Lab File: B0481.D
Acq: 28 Feb 2003 5:55 pm

Tgt Ion:178 Resp: 8926

Ion	Ratio	Lower	Upper
178	100		
179	10.1	12.2	18.4#
176	13.3	14.7	22.1#



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0243

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0243

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0480

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

55

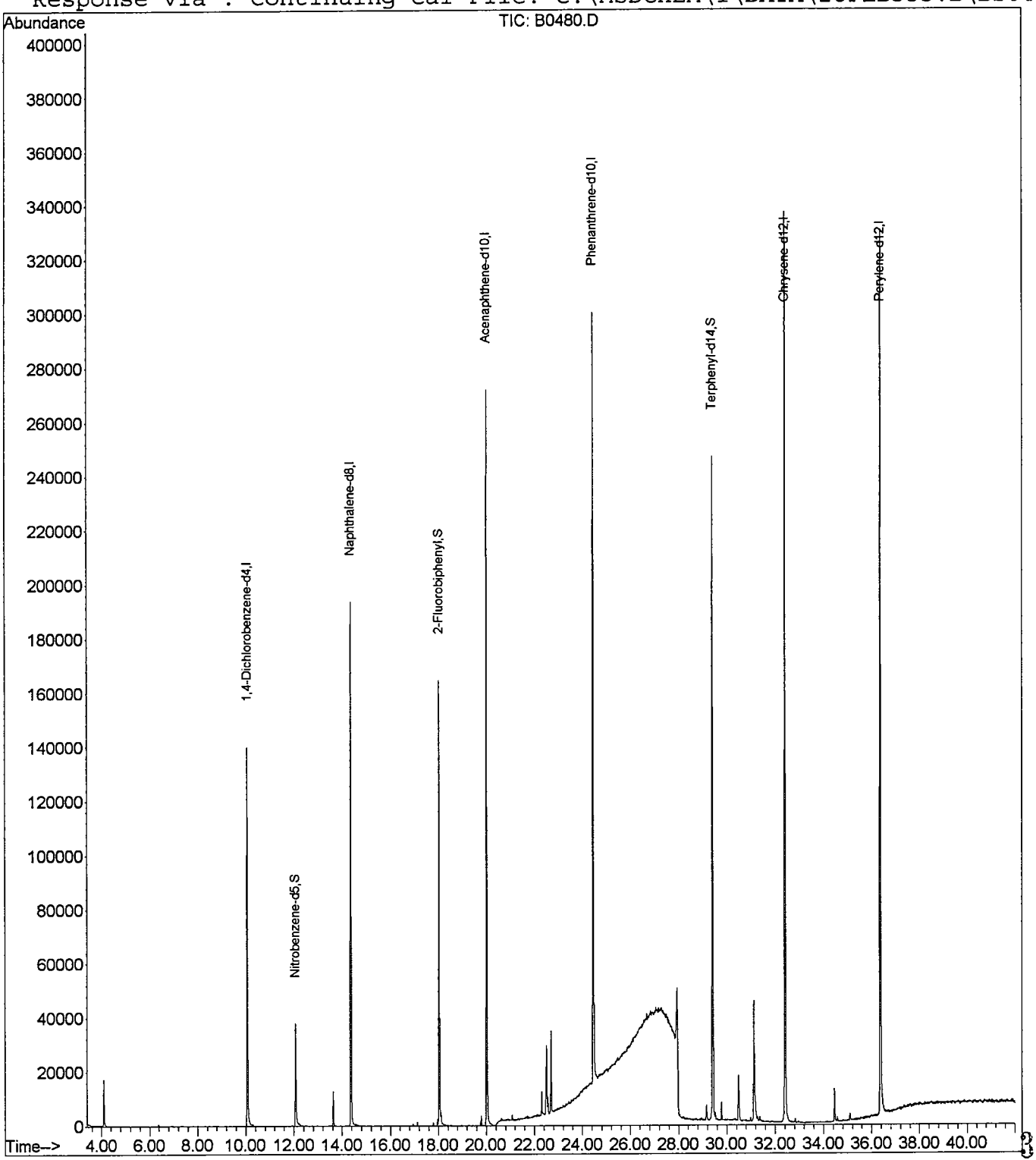
(1) - Cannot be separated from diphenylamine

AMK 6/26/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0480.D Vial: 9
Acq On : 28 Feb 2003 5:02 pm Operator:
Sample : MEGDD0243 Inst : gcms b
Misc : GCMS-B 030218J02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 15:23 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0480.D Vial: 9
Acq On : 28 Feb 2003 5:02 pm Operator:
Sample : MEGDD0243 Inst : gcms b
Misc : GCMS-B 030218J02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:03:07 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	91466	40.00	ug	-0.05
21) Naphthalene-d8	14.37	136	226637	40.00	ug	-0.05
36) Acenaphthene-d10	20.01	164	148853	40.00	ug	-0.05
56) Phenanthrene-d10	24.46	188	300186	40.00	ug	-0.05
70) Chrysene-d12	32.41	240	331729	40.00	ug	-0.05
78) Perylene-d12	36.37	264	376358	40.00	ug	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.07	82	69513	24.08	ug	-0.06
40) 2-Fluorobiphenyl	18.03	172	176745	29.66	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.42	244	234226	30.10	ug	-0.04

Target Compounds Qvalue

368

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0110

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0110

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0542

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

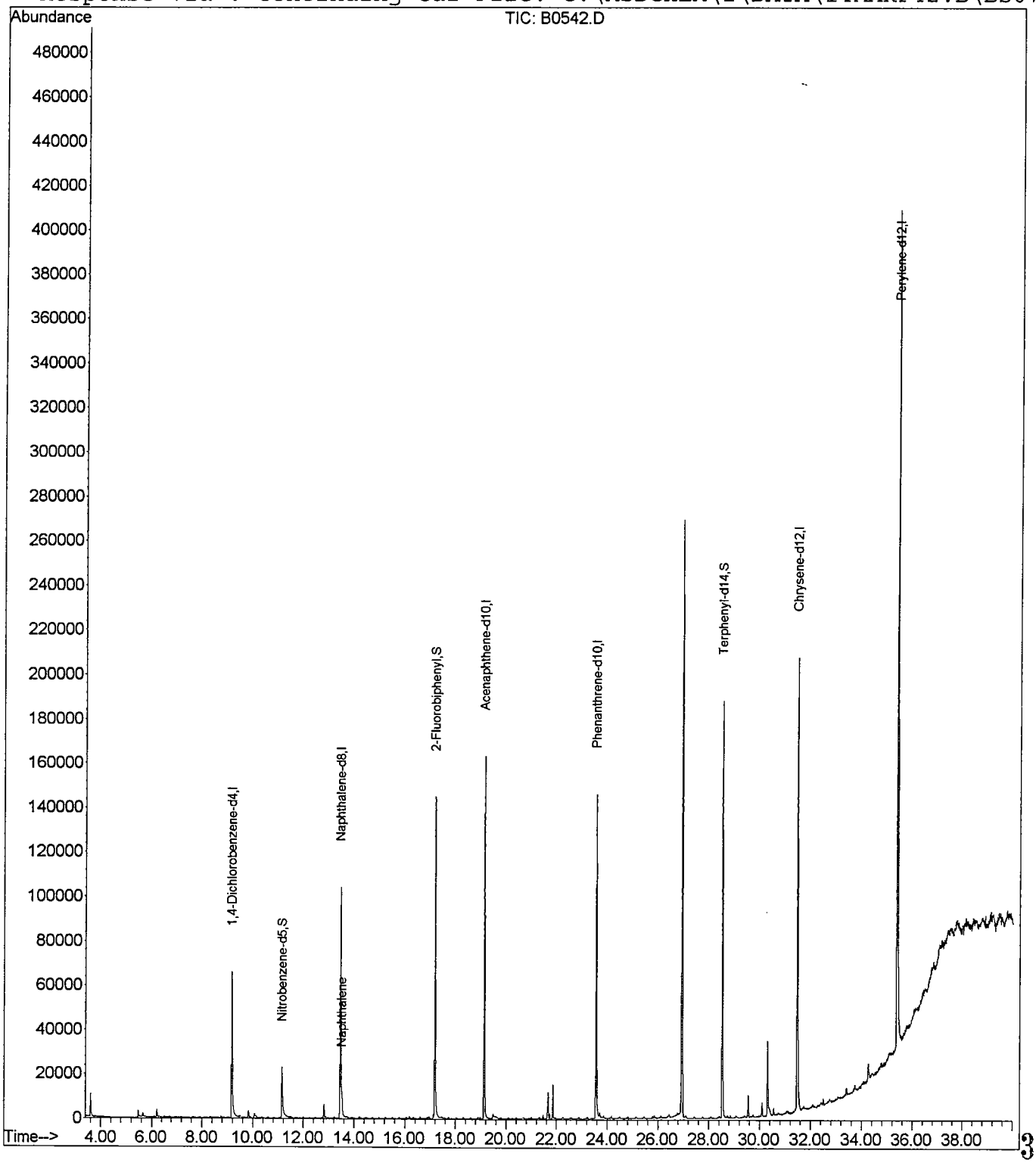
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	3.	J
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0542.D Vial: 7
Acq On : 17 Mar 2003 9:57 pm Operator:
Sample : MEGDIM0110 Inst : gcms b
Misc : GCMS-B 030220G01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 11:00 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 10:58:08 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



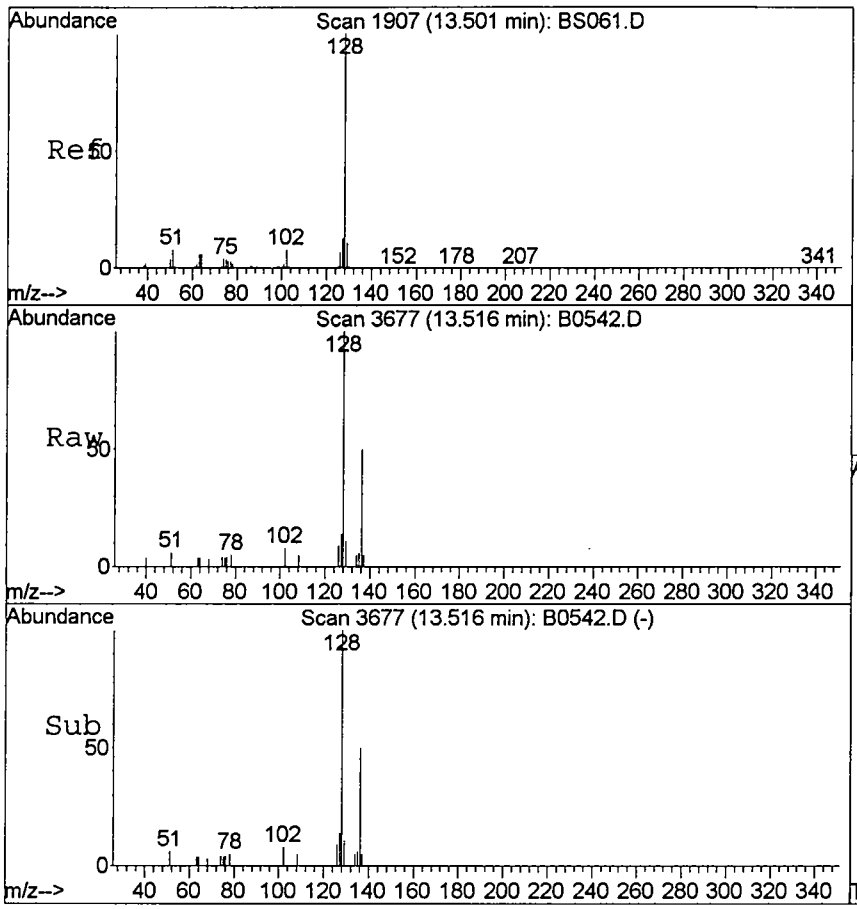
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0542.D Vial: 7
Acq On : 17 Mar 2003 9:57 pm Operator:
Sample : MEGDIM0110 Inst : gcms b
Misc : GCMS-B 030220G01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:47 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	48604	40.00	ug	-0.05
21) Naphthalene-d8	13.46	136	137384	40.00	ug	-0.05
36) Acenaphthene-d10	19.14	164	87940	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	154983	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	197957	40.00	ug	-0.06
78) Perylene-d12	35.40	264	385331	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0d	0.00	ug	
22) Nitrobenzene-d5	11.15	82	52666	38.26	ug	-0.05
40) 2-Fluorobiphenyl	17.18	172	159284	49.55	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.53	244	175638	56.11	ug	-0.05
Target Compounds						Qvalue
30) Naphthalene	13.52	128	16350	4.81	ug	91

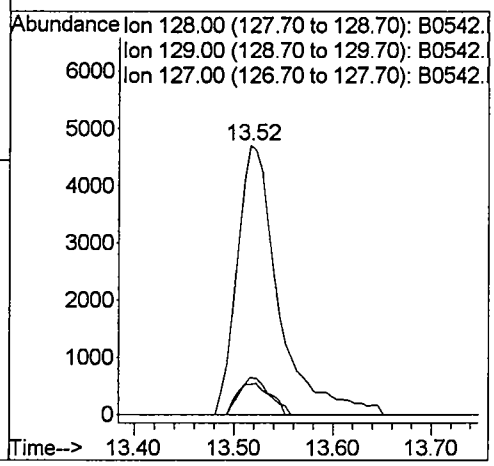
(#) = qualifier out of range (m) = manual integration
B0542.D ME1125.M Mon Mar 24 11:00:54 2003 GCMSB Page 1



#30
Naphthalene
Concen: 4.81 ug
RT: 13.52 min Scan# 3677
Delta R.T. -0.05 min
Lab File: B0542.D
Acq: 17 Mar 2003 9:57 pm

Tgt Ion:128 Resp: 16350

Ion	Ratio	Lower	Upper
128	100		
129	7.7	8.6	12.8#
127	8.6	10.0	15.0#



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0117

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0117

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0479

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
84-74-2	Di-n-butylphthalate	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

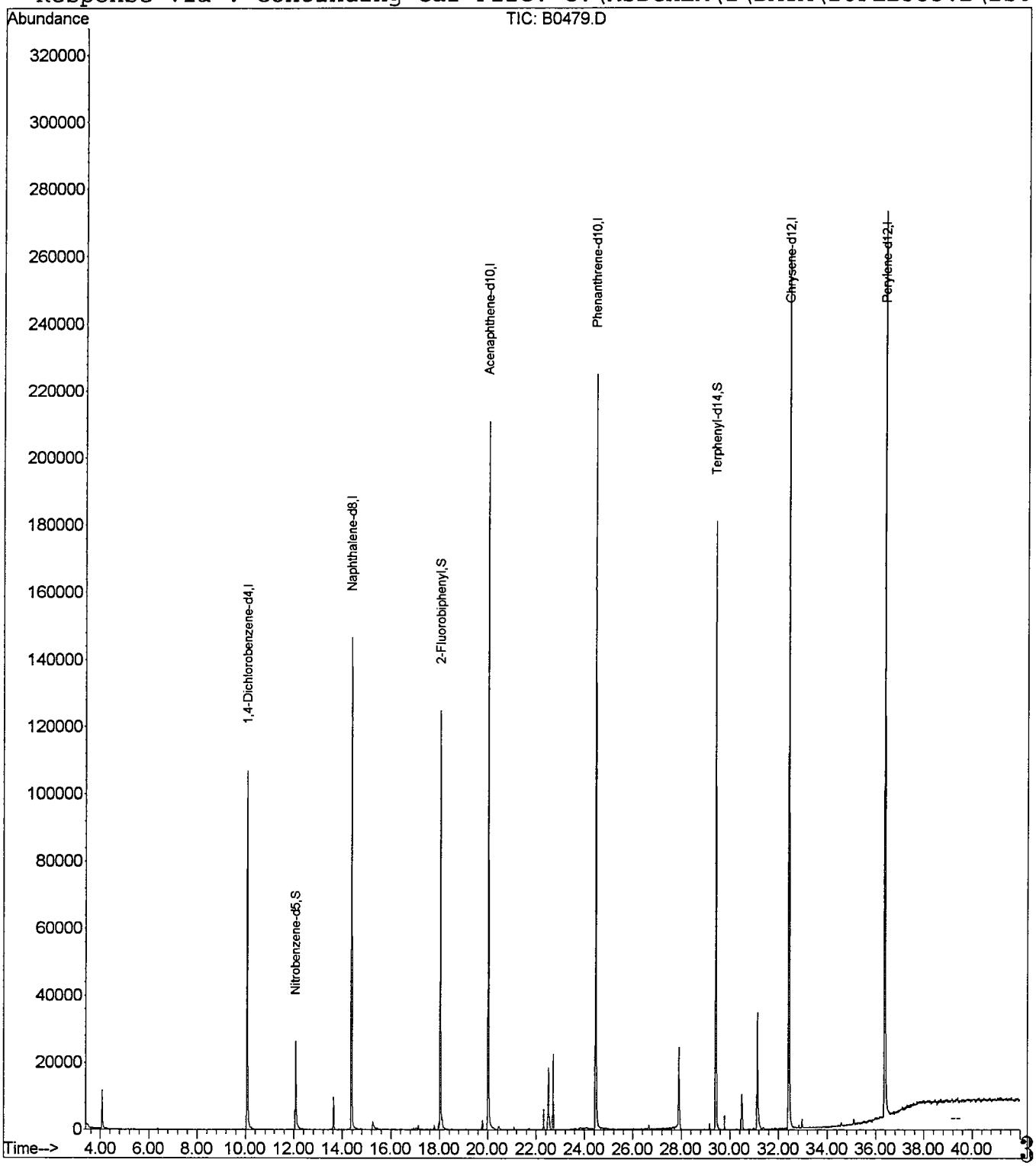
FORM I SV-1 3/90

Amk 6/26/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0479.D Vial: 8
Acq On : 28 Feb 2003 4:09 pm Operator:
Sample : MEGDIM0117 Inst : gcms b
Misc : GCMS-B 030218J01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 15:22 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0479.D Vial: 8
Acq On : 28 Feb 2003 4:09 pm Operator:
Sample : MEGDIM0117 Inst : gcms b
Misc : GCMS-B 030218J01 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:03:02 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	71067	40.00	ug	-0.05
21) Naphthalene-d8	14.36	136	175742	40.00	ug	-0.06
36) Acenaphthene-d10	20.01	164	115894	40.00	ug	-0.05
56) Phenanthrene-d10	24.46	188	230282	40.00	ug	-0.05
70) Chrysene-d12	32.41	240	257032	40.00	ug	-0.05
78) Perylene-d12	36.37	264	294572	40.00	ug	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.07	82	52390	23.41	ug	-0.05
40) 2-Fluorobiphenyl	18.03	172	134810	29.06	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	29.42	244	169751	28.15	ug	-0.04

Target Compounds Qvalue

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0565

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

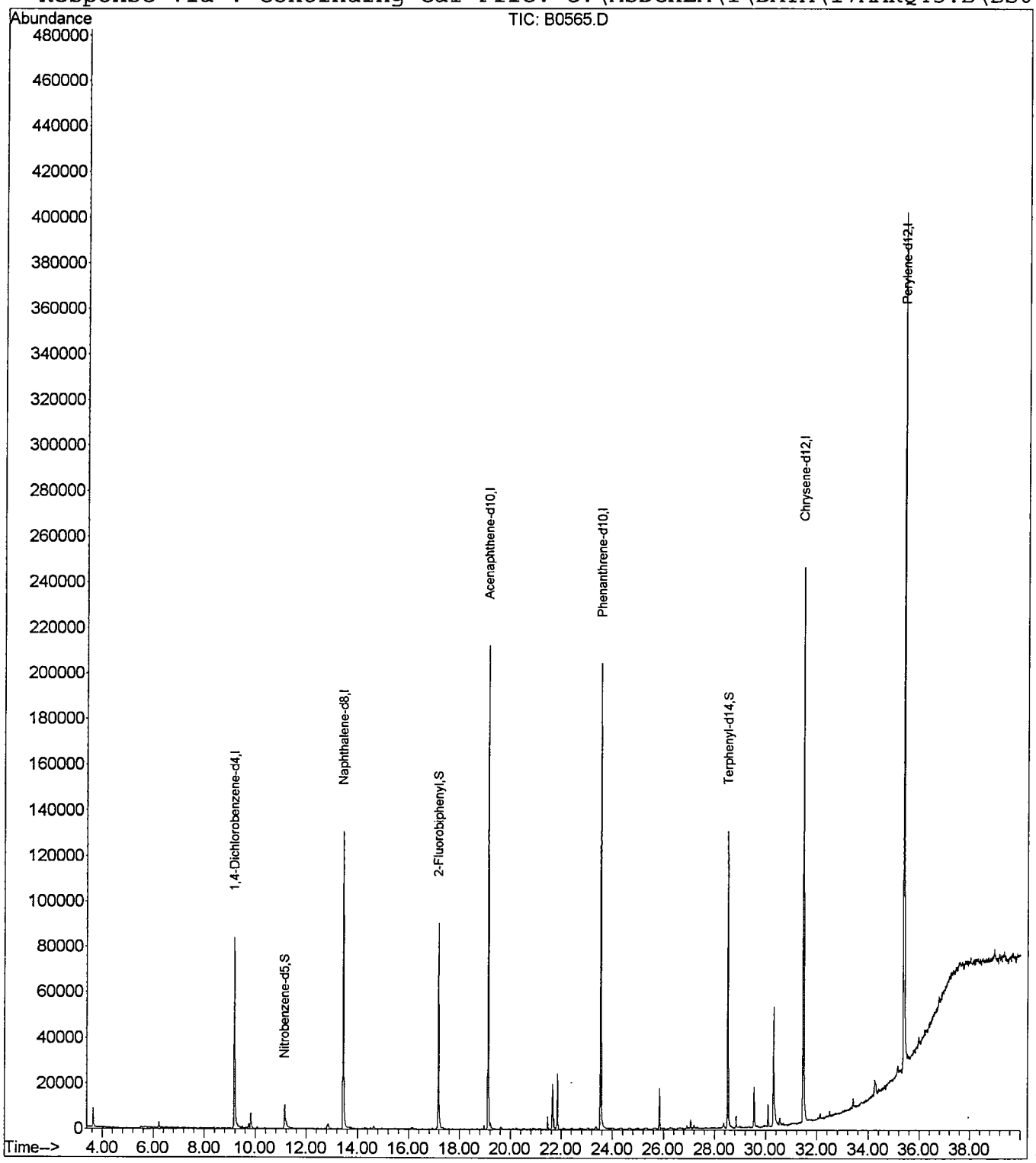
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0565.D Vial: 6
Acq On : 18 Mar 2003 10:44 pm Operator:
Sample : MEGDIM0128 Inst : gcms b
Misc : GCMS-B 030220G07 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:23 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0565.D Vial: 6
Acq On : 18 Mar 2003 10:44 pm Operator:
Sample : MEGDIM0128 Inst : gcms b
Misc : GCMS-B 030220G07 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:56:02 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	59161	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	168747	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	108857	40.00	ug	0.00
56) Phenanthrene-d10	23.54	188	214925	40.00	ug	0.00
70) Chrysene-d12	31.47	240	238012	40.00	ug	0.00
78) Perylene-d12	35.40	264	374601	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.14	82	30017m	18.01	ug	0.01
40) 2-Fluorobiphenyl	17.17	172	100082	26.15	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	121419	32.57	ug	0.00

Target Compounds Qvalue

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDSH0121

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDSH0121

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0595

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/24/03

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	180.	
91-57-6	2-Methylnaphthalene	20.	
208-96-8	Acenaphthylene	20.	U
83-32-9	Acenaphthene	4.	U
132-64-9	Dibenzofuran	20.	U
86-73-7	Fluorene	20.	U
85-01-8	Phenanthrene	20.	U
120-12-7	Anthracene	20.	U
86-74-8	Carbazole	20.	U
206-44-0	Fluoranthene	20.	U
129-00-0	Pyrene	20.	U
56-55-3	Benzo(a)anthracene	20.	U
218-01-9	Chrysene	20.	U
205-99-2	Benzo(b)fluoranthene	20.	U
207-08-9	Benzo(k)fluoranthene	20.	U
50-32-8	Benzo(a)pyrene	20.	U
193-39-5	Indeno(1,2,3-cd)pyrene	20.	U
53-70-3	Dibenzo(a,h)anthracene	20.	U
191-24-2	Benzo(g,h,i)perylene	20.	U

(1) - Cannot be separated from diphenylamine

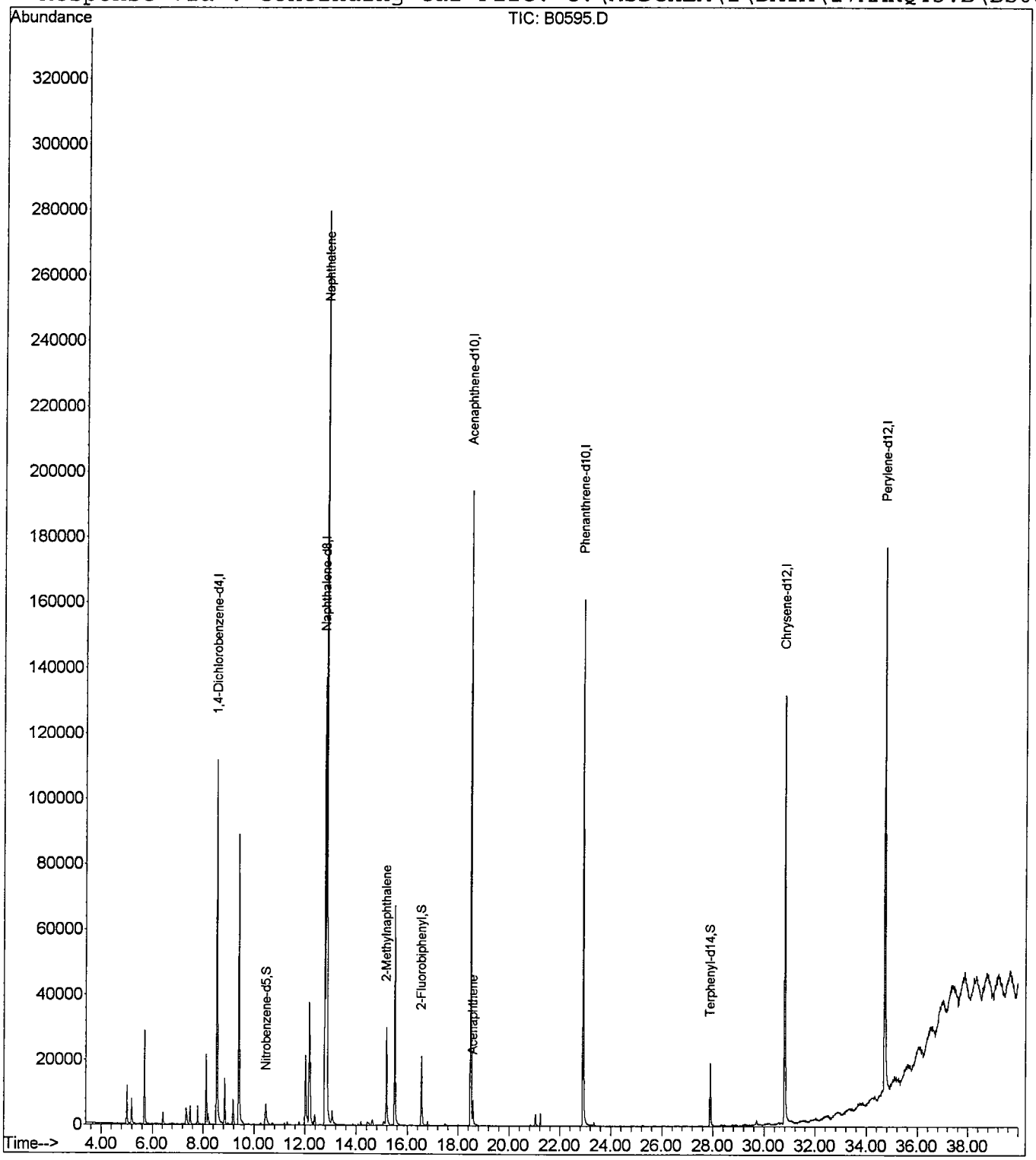
FORM I SV-1 3/90

AMK 4/5/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0595.D Vial: 1
Acq On : 24 Mar 2003 1:31 pm Operator:
Sample : MEGDSH0121 1/4 Inst : gcms b
Misc : GCMS-B 030220G04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 14:56 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS080.D



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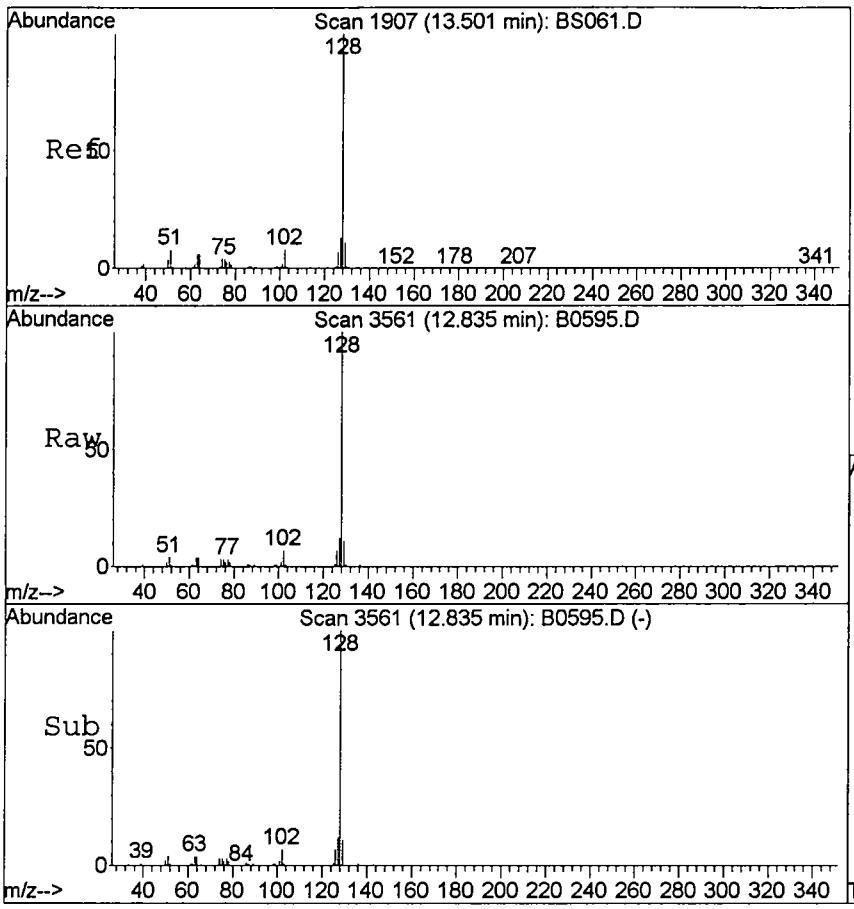
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0595.D Vial: 1
Acq On : 24 Mar 2003 1:31 pm Operator:
Sample : MEGDSH0121 1/4 Inst : gcms b
Misc : GCMS-B 030220G04 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 14:40:36 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS080.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.53	152	76381	40.00	ug	-0.02
21) Naphthalene-d8	12.77	136	180241	40.00	ug	-0.02
36) Acenaphthene-d10	18.49	164	109357	40.00	ug	-0.02
56) Phenanthrene-d10	22.91	188	174389	40.00	ug	-0.02
70) Chrysene-d12	30.80	240	136553	40.00	ug	-0.02
78) Perylene-d12	34.72	264	198438	40.00	ug	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	10.48	82	8006m	4.00	ug	0.00
40) 2-Fluorobiphenyl	16.56	172	31924	7.44	ug	-0.02
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	27.89	244	26083	7.44	ug	-0.02
Target Compounds						Qvalue
30) Naphthalene	12.83	128	427342	87.91	ug	95
35) 2-Methylnaphthalene	15.18	142	49571	10.22	ug	58
47) Acenaphthene	18.59	153	11359	2.00	ug	48

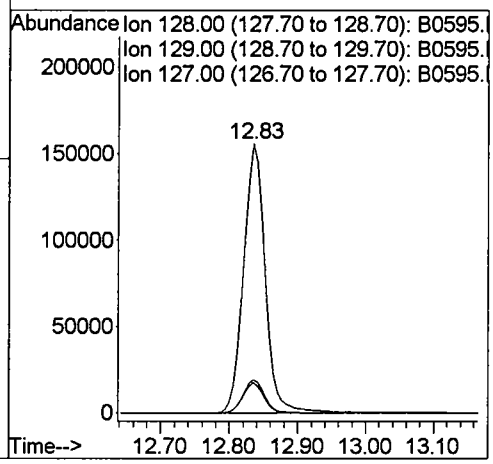
(#) = qualifier out of range (m) = manual integration

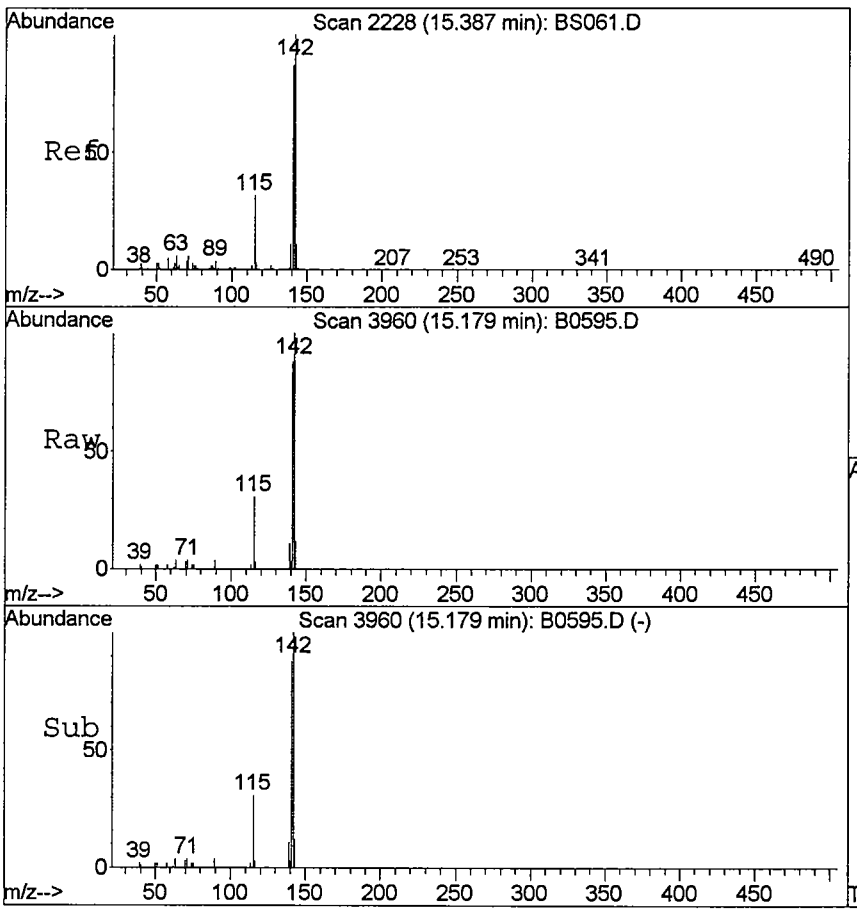


#30
Naphthalene
Concen: 87.91 ug
RT: 12.83 min Scan# 3561
Delta R.T. -0.02 min
Lab File: B0595.D
Acq: 24 Mar 2003 1:31 pm

Tgt Ion:128 Resp: 427342

Ion	Ratio	Lower	Upper
128	100		
129	9.0	8.6	12.8
127	10.1	10.0	15.0

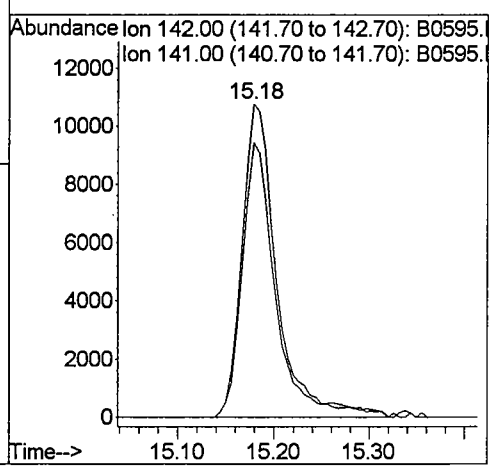


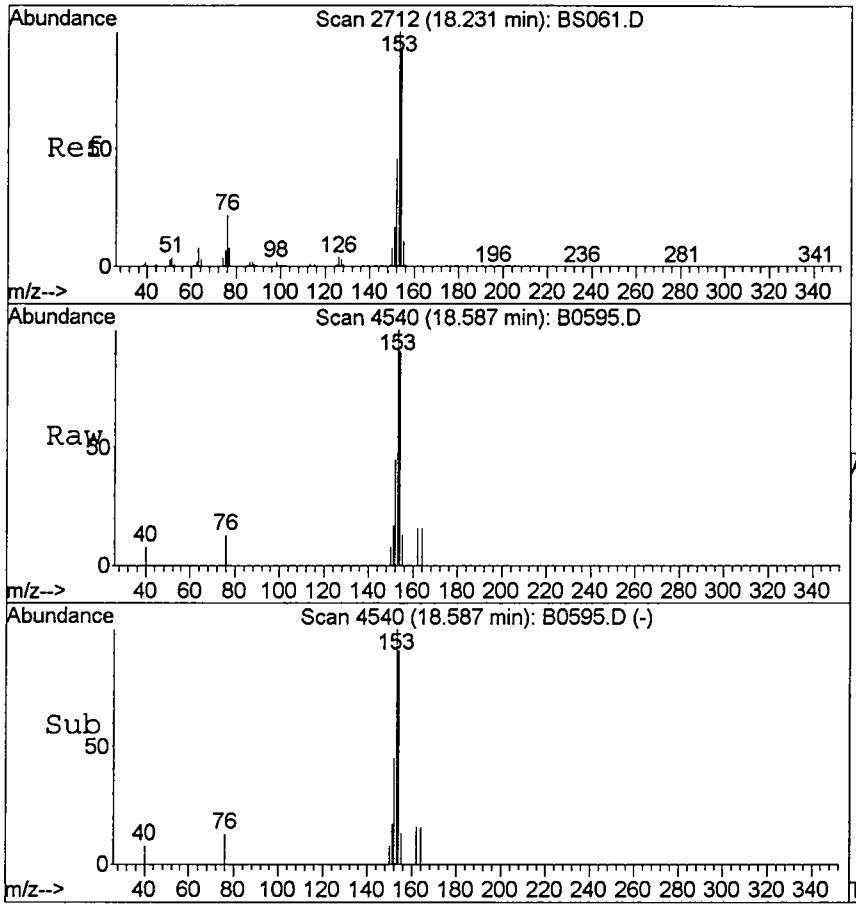


#35
2-Methylnaphthalene
Concen: 10.22 ug
RT: 15.18 min Scan# 3960
Delta R.T. -0.02 min
Lab File: B0595.D
Acq: 24 Mar 2003 1:31 pm

Tgt Ion:142 Resp: 49571

Ion	Ratio	Lower	Upper
142	100		
141	45.2	66.4	99.6#

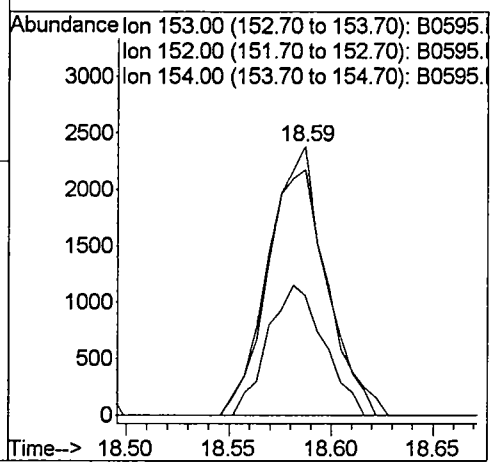




#47
Acenaphthene
Concen: 2.00 ug
RT: 18.59 min Scan# 4540
Delta R.T. -0.02 min
Lab File: B0595.D
Acq: 24 Mar 2003 1:31 pm

Tgt Ion:153 Resp: 11359

Ion	Ratio	Lower	Upper
153	100		
152	19.4	38.1	57.1#
154	39.8	75.8	113.6#



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8601

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0543

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

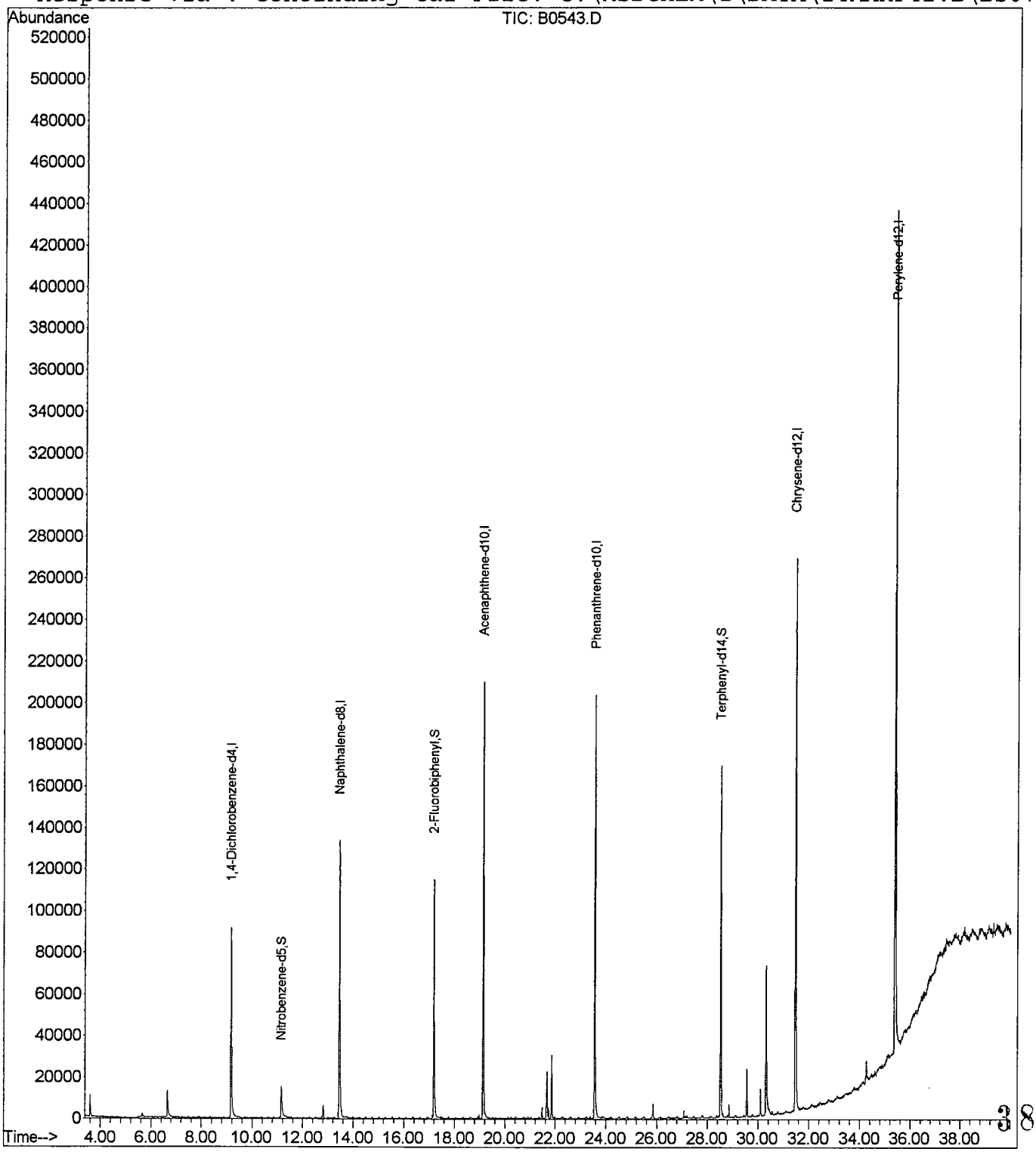
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0543.D Vial: 8
Acq On : 17 Mar 2003 10:47 pm Operator:
Sample : MEGUSH8601 Inst : gcms b
Misc : GCMS-B 030220G02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 11:02 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 10:58:08 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0543.D Vial: 8
Acq On : 17 Mar 2003 10:47 pm Operator:
Sample : MEGUSH8601 Inst : gcms b
Misc : GCMS-B 030220G02 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:51 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	65001	40.00	ug	-0.05
21) Naphthalene-d8	13.45	136	173590	40.00	ug	-0.06
36) Acenaphthene-d10	19.14	164	114571	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	214523	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	252161	40.00	ug	-0.06
78) Perylene-d12	35.40	264	401430	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.15	82	41027	23.59	ug	-0.05
40) 2-Fluorobiphenyl	17.18	172	127529	30.45	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.53	244	155437	38.98	ug	-0.05
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8611

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0568

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

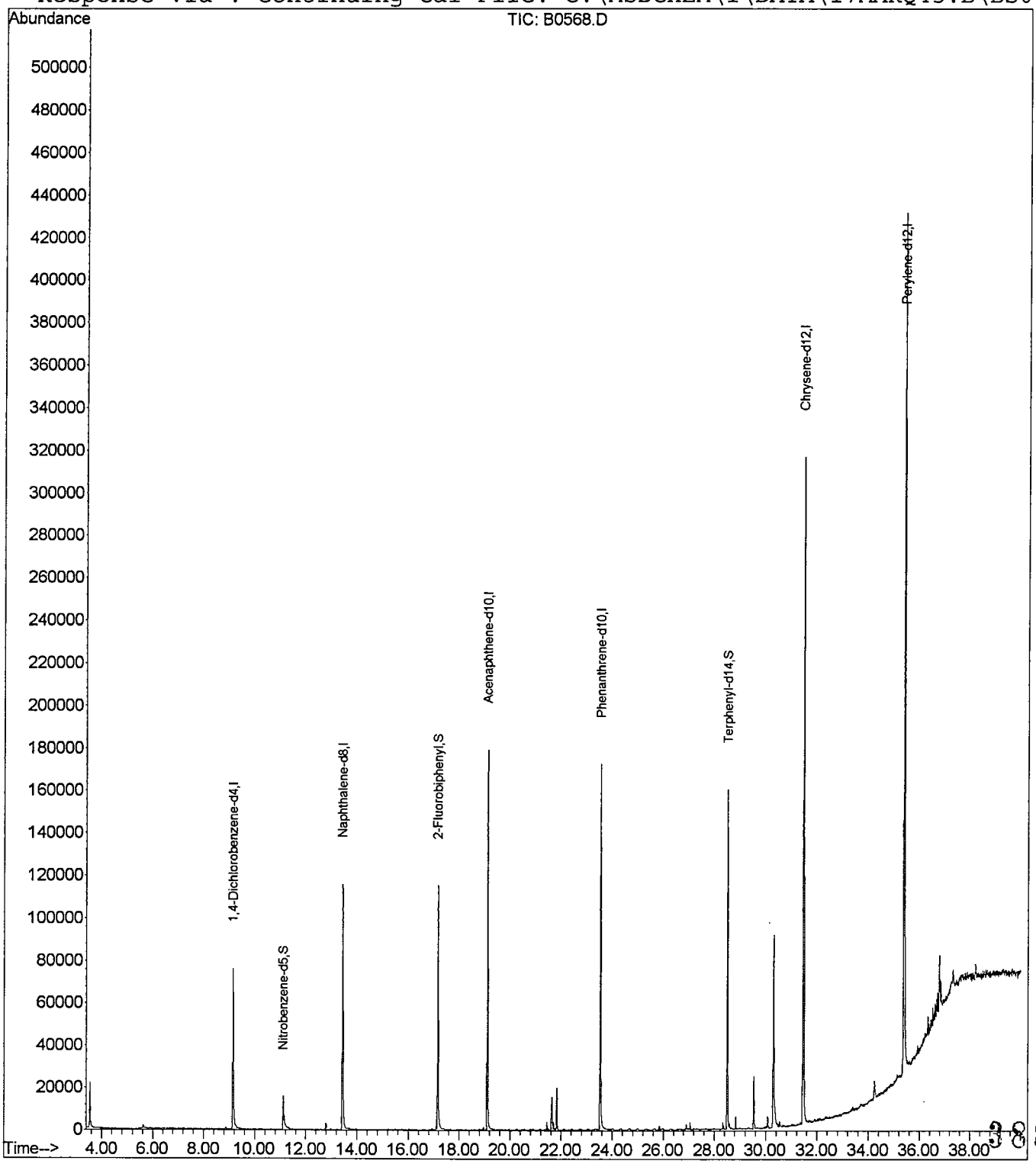
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0568.D Vial: 9
Acq On : 19 Mar 2003 2:01 am Operator:
Sample : MEGUSH8611 Inst : gcms b
Misc : GCMS-B 030224C01 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:28 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0568.D Vial: 9
Acq On : 19 Mar 2003 2:01 am Operator:
Sample : MEGUSH8611 Inst : gcms b
Misc : GCMS-B 030224C01 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:56:17 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.14	152	56467	40.00	ug	-0.02
21) Naphthalene-d8	13.43	136	153390	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	95509	40.00	ug	0.00
56) Phenanthrene-d10	23.54	188	177871	40.00	ug	0.00
70) Chrysene-d12	31.47	240	298429	40.00	ug	0.00
78) Perylene-d12	35.40	264	409237	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.13	82	39808	26.28	ug	0.00
40) 2-Fluorobiphenyl	17.16	172	131307	39.10	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.51	244	149305	31.94	ug	-0.01

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8616

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8616

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: B0579

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

55
55

(1) - Cannot be separated from diphenylamine

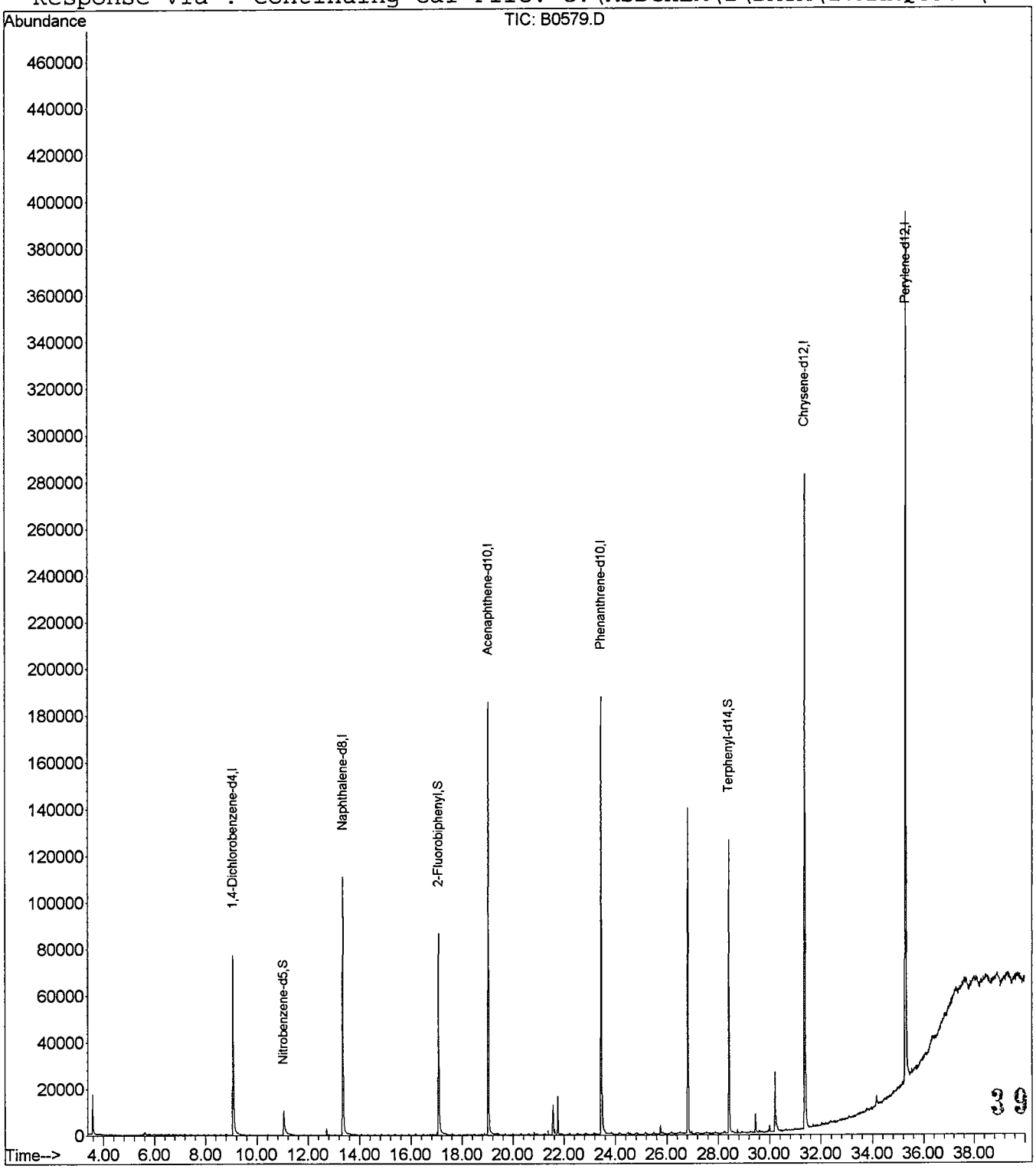
FORM I SV-1 3/90

AMK 4/5/03

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0579.D Vial: 9
Acq On : 19 Mar 2003 5:07 pm Operator:
Sample : MEGUSH8616 Inst : gcms b
Misc : GCMS-B 030224C05 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 15:39 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS075.D



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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0579.D Vial: 9
Acq On : 19 Mar 2003 5:07 pm Operator:
Sample : MEGUSH8616 Inst : gcms b
Misc : GCMS-B 030224C05 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 20 08:58:49 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 16:58:15 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS075.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.07	152	54887	40.00	ug	-0.04
21) Naphthalene-d8	13.35	136	147060	40.00	ug	-0.04
36) Acenaphthene-d10	19.04	164	103947	40.00	ug	-0.04
56) Phenanthrene-d10	23.46	188	202521	40.00	ug	-0.04
70) Chrysene-d12	31.37	240	266785	40.00	ug	-0.04
78) Perylene-d12	35.30	264	377449	40.00	ug	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0d	0.00	ug	
22) Nitrobenzene-d5	11.05	82	27609	17.64	ug	-0.03
40) 2-Fluorobiphenyl	17.09	172	104568	28.73	ug	-0.04
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.43	244	113665	24.46	ug	-0.04

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: DUP021803

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: B0541

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

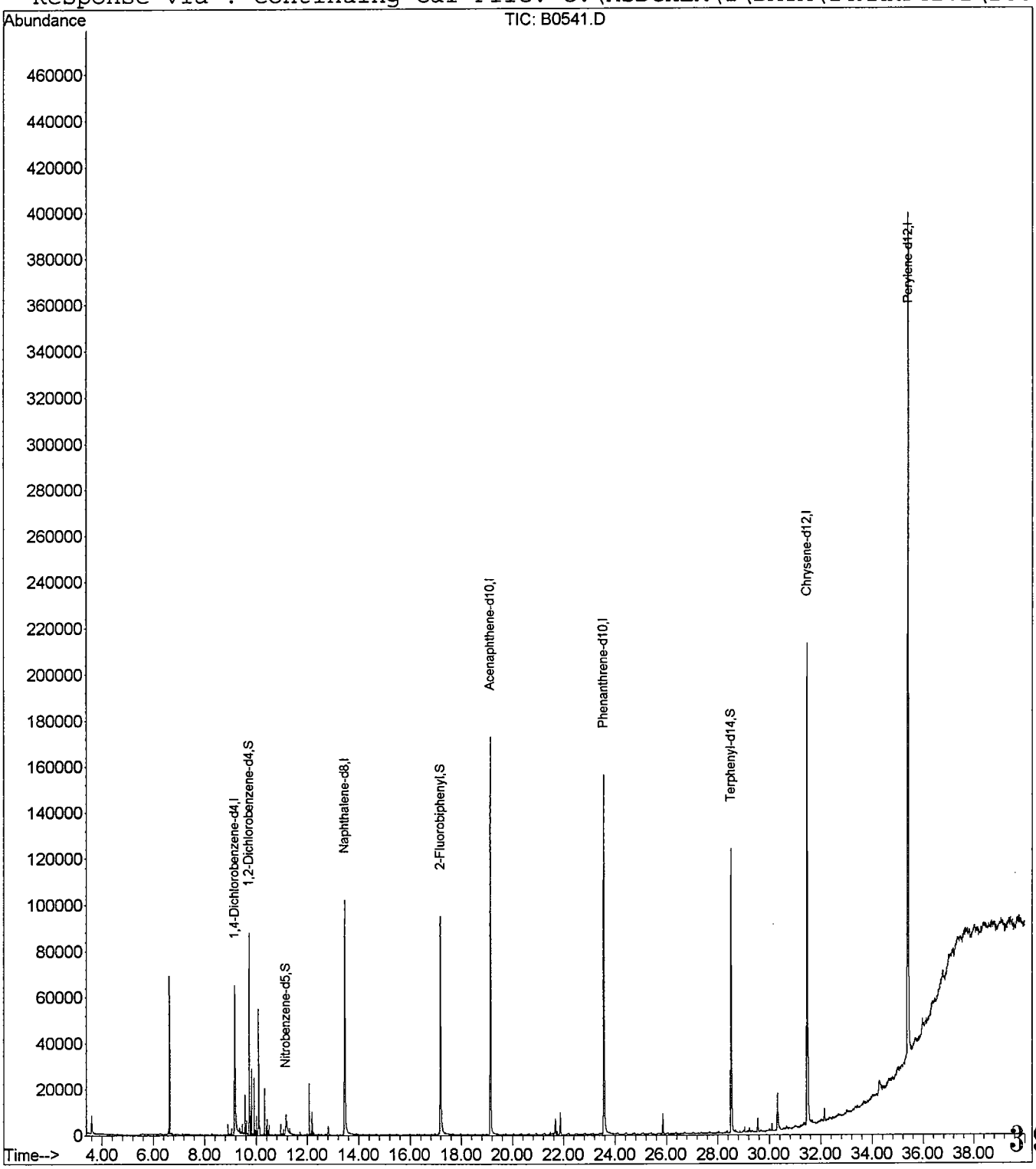
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0541.D Vial: 6
Acq On : 17 Mar 2003 9:07 pm Operator:
Sample : DUP021803 Inst : gcms b
Misc : GCMS-B 030218J06 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 10:45 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0541.D Vial: 6
Acq On : 17 Mar 2003 9:07 pm Operator:
Sample : DUP021803 Inst : gcms b
Misc : GCMS-B 030218J06 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:42 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	47919	40.00	ug	-0.05
21) Naphthalene-d8	13.46	136	135332	40.00	ug	-0.05
36) Acenaphthene-d10	19.14	164	91429	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	167421	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	195633	40.00	ug	-0.06
78) Perylene-d12	35.40	264	381582	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	9.73	152	350	0.57	ug	-0.07
22) Nitrobenzene-d5	11.16	82	26453	19.51	ug	-0.04
40) 2-Fluorobiphenyl	17.19	172	111590	33.39	ug	-0.05
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	120646	39.00	ug	-0.06

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: DUP022003

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0570

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

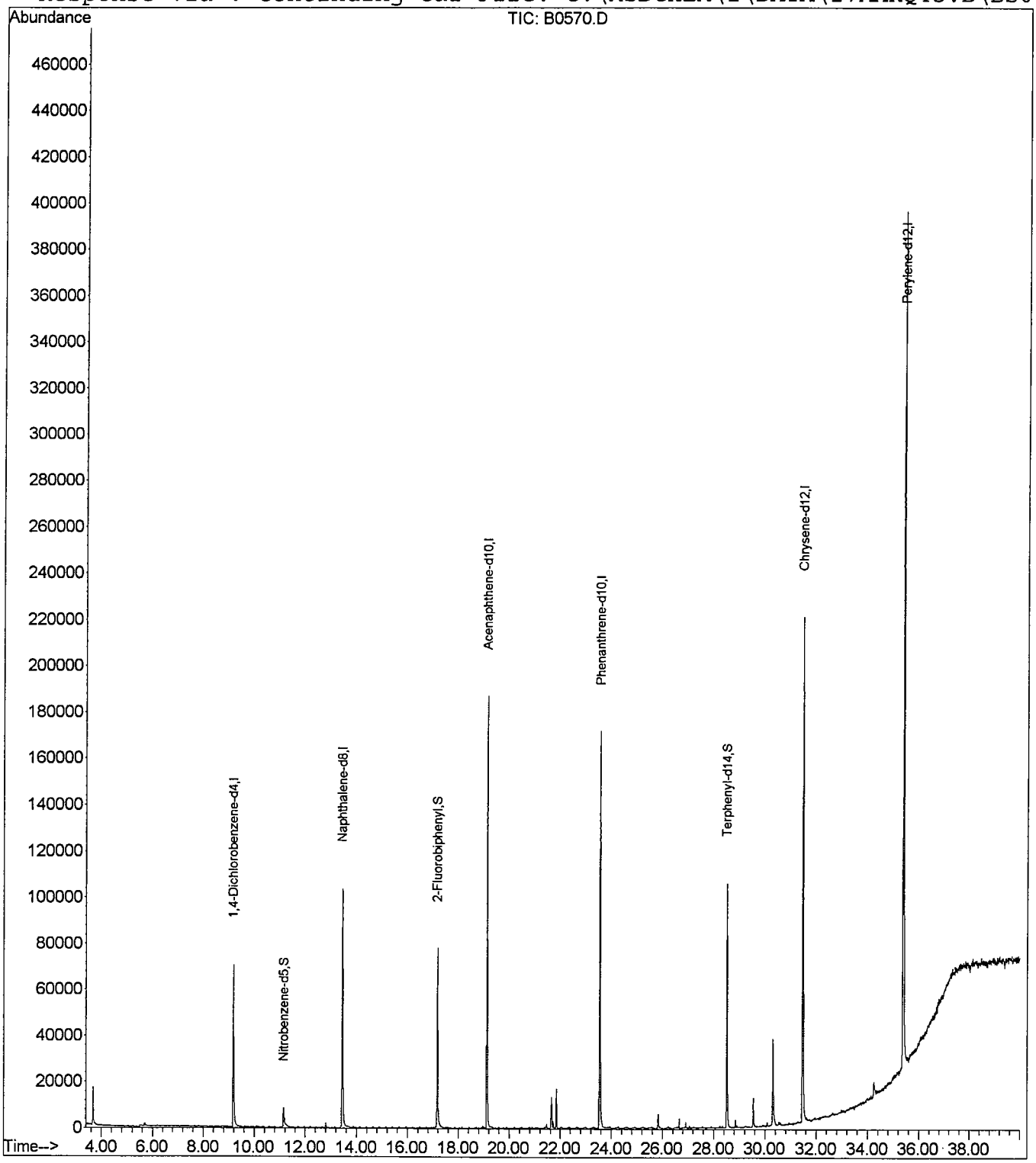
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0570.D Vial: 11
Acq On : 19 Mar 2003 4:16 am Operator:
Sample : DUP022003 Inst : gcms b
Misc : GCMS-B 030224 C04 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 15:36 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0570.D Vial: 11
Acq On : 19 Mar 2003 4:16 am Operator:
Sample : DUP022003 Inst : gcms b
Misc : GCMS-B 030224 C04 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:56:25 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	50971	40.00	ug	0.01
21) Naphthalene-d8	13.44	136	132691	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	99377	40.00	ug	0.00
56) Phenanthrene-d10	23.54	188	182701	40.00	ug	0.00
70) Chrysene-d12	31.45	240	206692	40.00	ug	-0.02
78) Perylene-d12	35.40	264	372113	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.15	82	24601	18.78	ug	0.02
40) 2-Fluorobiphenyl	17.17	172	89497	25.61	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.51	244	102559	31.68	ug	-0.01

Target Compounds Qvalue

STANDARDS

DATA

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Instrument ID: 5973 B Calibration Date(s): 12/17/02 12/17/02

Calibration Times: 11:20 14:01

LAB FILE ID: RRF020= BS490 RRF050= BS494
RRF080= BS491 RRF120= BS492 RRF160= BS493

COMPOUND	RRF020	RRF050	RRF080	RRF120	RRF160	$\overline{RRF}$	% RSD
1,4-Dichlorobenzene *	1.701	1.629	1.623	1.536	1.509	1.599	4.8*
n-Nitroso-di-n-propylamine *	.554	.498	.540	.416	.460	.494	11.6*
1,2,4-Trichlorobenzene *	.704	.711	.668	.680	.650	.683	3.7*
Naphthalene *	1.148	1.102	1.068	1.031	1.019	1.074	4.9*
2-Methylnaphthalene *	1.232	1.145	1.148	1.038	1.058	1.124	6.9*
Acenaphthylene *	2.191	2.197	2.117	2.028	2.011	2.109	4.1*
Acenaphthene *	2.538	2.448	2.338	2.244	2.211	2.356	5.8*
Dibenzofuran *	2.024	1.957	1.914	1.829	1.836	1.912	4.3*
2,4-Dinitrotoluene *	.420	.446	.499	.447	.476	.458	6.7*
Fluorene *	2.444	2.300	2.280	2.080	2.118	2.244	6.6*
Phenanthrene *	1.190	1.162	1.114	1.074	1.059	1.120	5.0*
Anthracene *	1.194	1.184	1.122	1.092	1.085	1.135	4.5*
Fluoranthene *	1.096	1.055	1.052	.982	1.013	1.040	4.2*
Pyrene *	1.114	1.061	1.034	.981	.974	1.033	5.6*
Benzo(a)anthracene *	1.300	1.330	1.266	1.265	1.237	1.280	2.8*
Chrysene *	1.346	1.351	1.276	1.239	1.212	1.285	4.9*
Benzo(b)fluoranthene *	.854	.930	.902	.914	.879	.896	3.3*
Benzo(k)fluoranthene *	1.040	1.045	.981	.931	.931	.986	5.7*
Benzo(a)pyrene *	.915	.898	.914	.892	.872	.898	2.0*
Indeno(1,2,3-cd)pyrene *	.965	.868	1.099	.981	1.120	1.006	10.3*
Dibenzo(a,h)anthracene *	.964	.943	1.138	.971	1.077	1.018	8.3*
Benzo(g,h,i)perylene *	1.302	1.124	1.352	1.122	1.289	1.238	8.7*
Nitrobenzene-d5	.483	.495	.491	.495	.476	.488	1.7
2-Fluorobiphenyl *	1.620	1.648	1.469	1.551	1.469	1.551	5.3*
Terphenyl-d14 *	.784	.777	.729	.720	.717	.745	4.4*
Phenol-d5 *	1.027	1.008	1.104	.977	1.010	1.025	4.6*
2-Fluorophenol *	.558	.665	.644	.735	.671	.655	9.8*
2,4,6-Tribromophenol	.273	.309	.294	.303	.303	.296	4.8

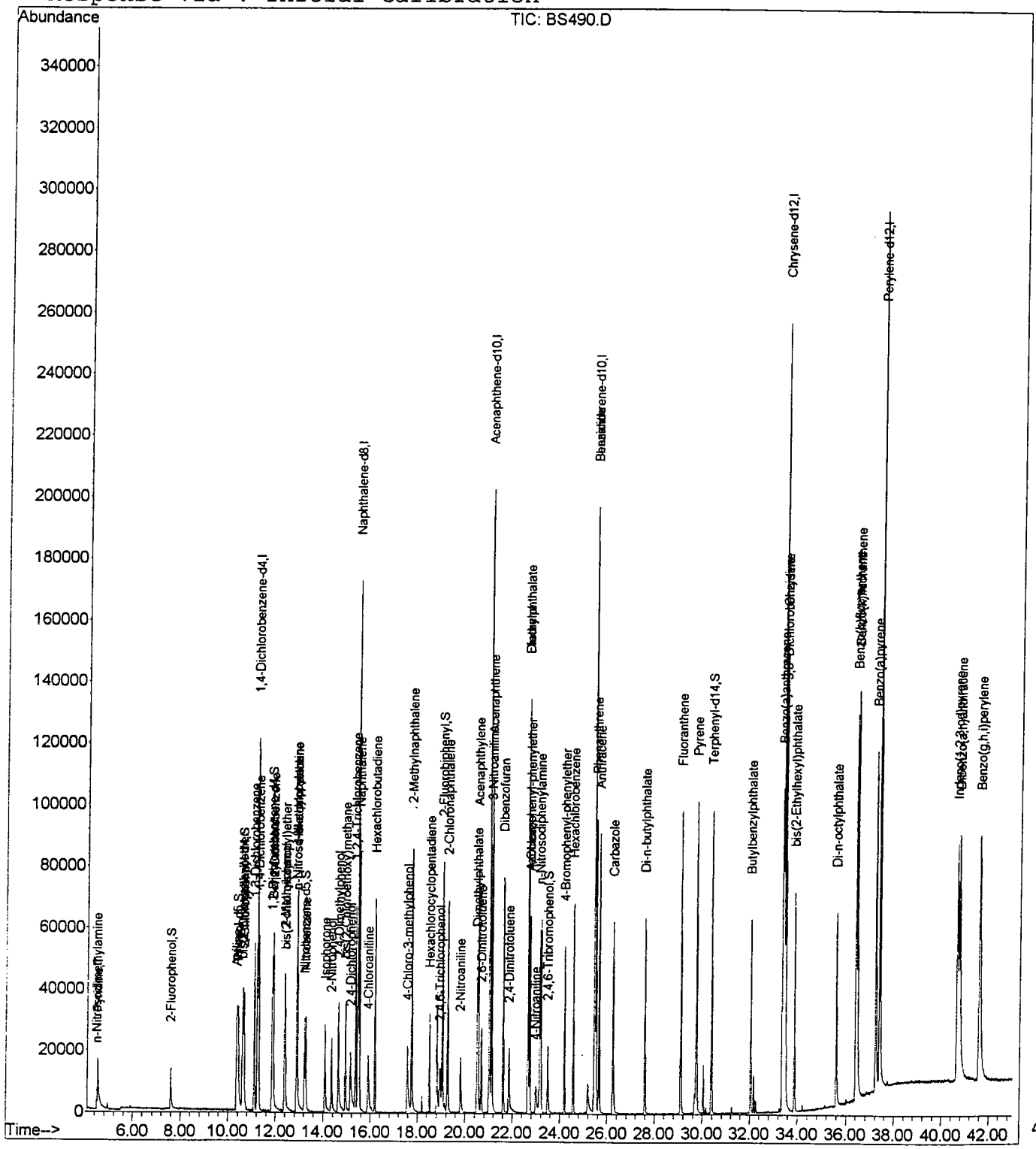
(1) Cannot be separated from Diphenylamine

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:57 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:27 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	81174m	40.00	ug		0.00
21) Naphthalene-d8	15.46	136	210100	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	113792	40.00	ug		0.00
56) Phenanthrene-d10	25.45	188	219290	40.00	ug		0.00
70) Chrysene-d12	33.41	240	256073	40.00	ug		0.00
78) Perylene-d12	37.40	264	339472	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.59	112	22650	17.05	ug		0.00
3) Phenol-d5	10.38	99	41677	20.03	ug		0.00
8) 2-Chlorophenol-d4	10.62	132	28142	20.28	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	22793	21.80	ug		0.00
22) Nitrobenzene-d5	13.22	82	50688	19.77	ug		0.00
40) 2-Fluorobiphenyl	19.03	172	92147	20.88	ug		0.00
59) 2,4,6-Tribromophenol	23.48	330	29913	18.41	ug		0.01
72) Terphenyl-d14	30.37	244	100398	21.04	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.52	79	29291m	17.99	ug		
5) n-Nitrosodimethylamine	4.49	74	11424	17.56	ug		100
6) Aniline	10.36	93	40860	22.53	ug	#	82
7) Phenol	10.42	94	55218	20.83	ug		81
9) bis(2-Chloroethyl)ether	10.59	93	51447	31.89	ug		65
10) 2-Chlorophenol	10.67	128	54637	20.44	ug		70
11) 1,3-Dichlorobenzene	11.10	146	68370	21.30	ug		68
12) 1,4-Dichlorobenzene	11.28	146	69022	21.27	ug		69
13) Benzyl alcohol	11.88	108	25510m	15.17	ug		
15) 1,2-Dichlorobenzene	11.89	146	64521	21.77	ug		68
16) 2-Methylphenol	12.38	108	46564	21.50	ug		59
17) bis(2-chloroisopropyl)ethe	12.41	45	49897	22.65	ug		82
18) 4-Methylphenol	12.89	108	53542	21.51	ug		39
19) n-Nitroso-di-n-propylamine	12.88	70	22493	22.44	ug		70
20) Hexachloroethane	12.91	117	34654	21.12	ug		51
23) Nitrobenzene	13.27	77	44648	20.26	ug		69
24) Isophorone	14.07	82	46277	17.17	ug		97
25) 2-Nitrophenol	14.34	139	27311	17.74	ug		69
26) 2,4-Dimethylphenol	14.63	107	67574	18.57	ug		49
27) bis(2-Chloroethoxy)methane	14.93	93	45713	19.93	ug		83
28) 2,4-Dichlorophenol	15.14	162	53109	18.00	ug		61
29) 1,2,4-Trichlorobenzene	15.36	180	73958	20.63	ug		51
30) Naphthalene	15.52	128	120587	21.38	ug		94
32) 4-Chloroaniline	15.90	127	38626	17.20	ug		90

402

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:27 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33) Hexachlorobutadiene	16.18	225	44991	19.73 ug		54
34) 4-Chloro-3-methylphenol	17.56	107	30074	18.70 ug		87
35) 2-Methylnaphthalene	17.75	142	129451	21.92 ug		57
37) Hexachlorocyclopentadiene	18.50	237	23081	13.69 ug		68
38) 2,4,6-Trichlorophenol	18.93	196	36537	16.97 ug		50
39) 2,4,5-Trichlorophenol	18.93	196	36537	16.97 ug		52
41) 2-Chloronaphthalene	19.26	162	100939	20.97 ug	#	22
42) 2-Nitroaniline	19.79	65	35046	18.44 ug		35
43) Dimethylphthalate	20.50	163	67863	20.13 ug		96
44) Acenaphthylene	20.54	152	124654	20.78 ug		90
45) 2,6-Dinitrotoluene	20.68	165	19977	19.02 ug		68
46) 3-Nitroaniline	21.10	138	25765	19.93 ug		45
47) Acenaphthene	21.12	153	144383	21.54 ug		48
50) Dibenzofuran	21.61	168	115132	21.17 ug		79
51) 2,4-Dinitrotoluene	21.86	165	23883	18.35 ug		56
52) Diethylphthalate	22.66	149	73225	20.77 ug		90
53) Fluorene	22.65	166	139082	21.78 ug		54
54) 4-Chlorophenyl-phenylether	22.74	204	59592	20.85 ug		68
55) 4-Nitroaniline	22.99	138	22466	23.83 ug		66
58) n-Nitrosodiphenylamine	23.15	169	72482	20.57 ug		70
60) Azobenzene	22.74	77	9542	21.29 ug	#	85
61) 4-Bromophenyl-phenylether	24.19	248	54296	19.97 ug		40
62) Hexachlorobenzene	24.56	284	40595	20.67 ug		65
64) Phenanthrene	25.51	178	130480	21.26 ug		89
65) Anthracene	25.65	178	130902	21.03 ug		90
66) Benzidine	25.46	184	27025	51.45 ug	#	30
67) Carbazole	26.24	167	86857	23.11 ug		95
68) Di-n-butylphthalate	27.58	149	96299	19.84 ug		97
69) Fluoranthene	29.10	202	120188	21.08 ug		90
71) Pyrene	29.74	202	142656	21.57 ug		87
73) Butylbenzylphthalate	32.04	149	68834	19.09 ug		60
74) Benzo(a)anthracene	33.36	228	166435	20.32 ug		85
75) 3,3'-Dichlorobenzidine	33.46	252	71314	20.73 ug		68
76) Chrysene	33.48	228	172398	20.96 ug		86
77) bis(2-Ethylhexyl)phthalate	33.86	149	74503	18.62 ug		88
79) Di-n-octylphthalate	35.60	149	95981	16.96 ug		95
80) Benzo(b)fluoranthene	36.40	252	144951	18.47 ug		85
81) Benzo(k)fluoranthene	36.47	252	176501	21.10 ug		83
82) Benzo(a)pyrene	37.24	252	155278	20.37 ug		82
83) Indeno(1,2,3-cd)pyrene	40.66	276	163749	19.17 ug		77
84) Dibenzo(a,h)anthracene	40.76	278	163572	18.93 ug		80

403

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS490.D Vial: 3
Acq On : 17 Dec 2002 11:20 am Operator:
Sample : SSTD020 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:27 2002 Quant Results File: ME1125.RES

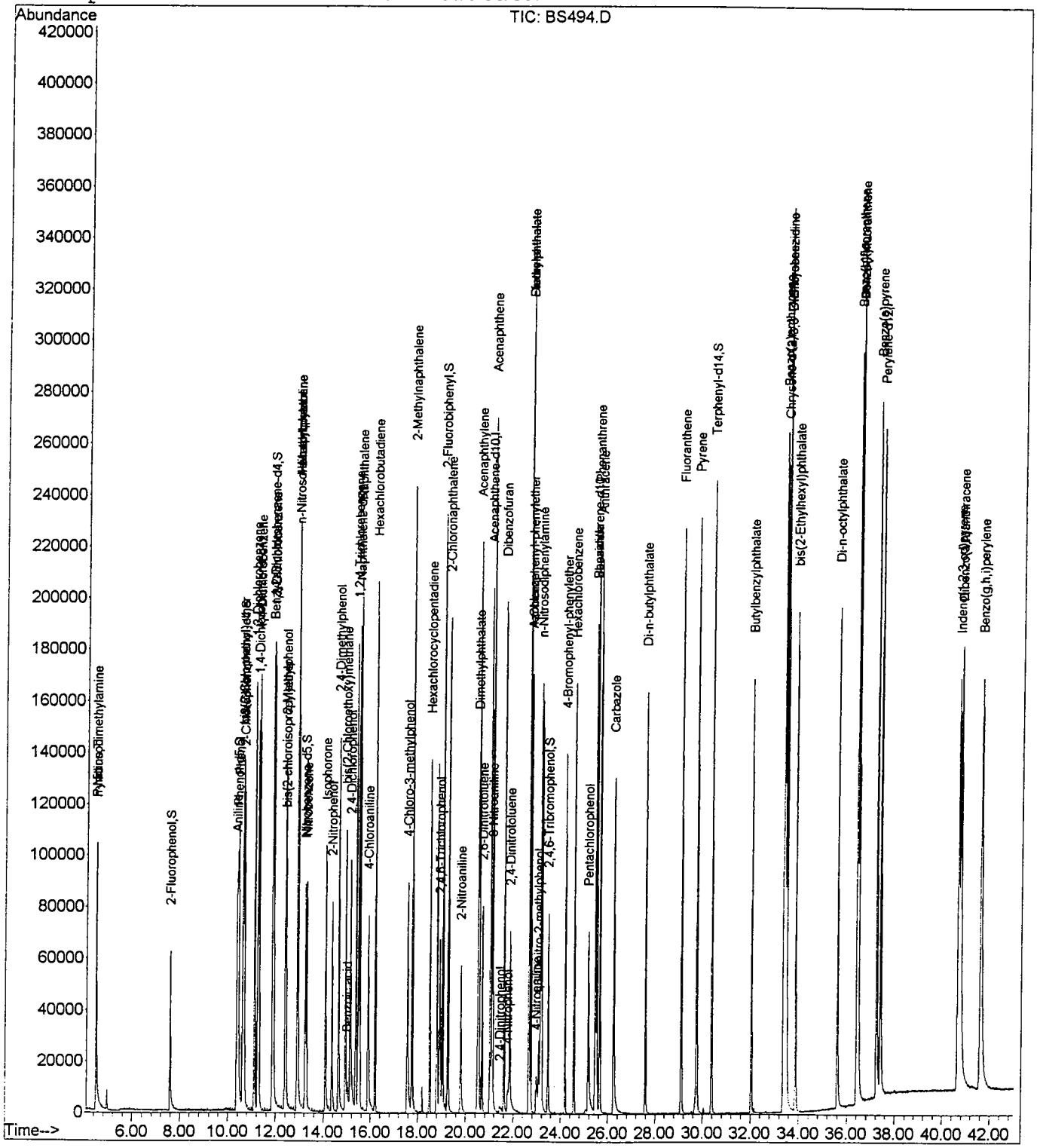
Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Benzo(g,h,i)perylene	41.62	276	220987	21.04	ug	72

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:54 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



405

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:53:05 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	101327	40.00	ug		0.00
21) Naphthalene-d8	15.47	136	227154	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	115595	40.00	ug		0.00
56) Phenanthrene-d10	25.45	188	204909	40.00	ug		0.00
70) Chrysene-d12	33.41	240	241660	40.00	ug		0.00
78) Perylene-d12	37.39	264	311494	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.59	112	84238	50.78	ug		0.00
3) Phenol-d5	10.39	99	127613	49.14	ug		0.00
8) 2-Chlorophenol-d4	10.63	132	87806	50.68	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	66085	50.64	ug		0.00
22) Nitrobenzene-d5	13.22	82	140588	50.73	ug		0.00
40) 2-Fluorobiphenyl	19.03	172	238055	53.10	ug		0.00
59) 2,4,6-Tribromophenol	23.47	330	79207	52.16	ug		0.00
72) Terphenyl-d14	30.37	244	234637	52.11	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.48	79	93860	46.19	ug		93
5) n-Nitrosodimethylamine	4.48	74	38388	47.26	ug		100
6) Aniline	10.36	93	105802	46.75	ug	#	85
7) Phenol	10.43	94	161044	48.66	ug		79
9) bis(2-Chloroethyl)ether	10.60	93	147864	73.43	ug		67
10) 2-Chlorophenol	10.67	128	169672	50.86	ug		70
11) 1,3-Dichlorobenzene	11.10	146	204434	51.02	ug		68
12) 1,4-Dichlorobenzene	11.28	146	206268	50.91	ug		69
13) Benzyl alcohol	11.87	108	103848	49.46	ug		31
15) 1,2-Dichlorobenzene	11.90	146	187264	50.63	ug		68
16) 2-Methylphenol	12.38	108	133367	49.33	ug		59
17) bis(2-chloroisopropyl)ethe	12.41	45	139928	50.89	ug		82
18) 4-Methylphenol	12.89	108	155038	49.89	ug		40
19) n-Nitroso-di-n-propylamine	12.88	70	63132	50.47	ug		70
20) Hexachloroethane	12.91	117	106993	52.25	ug		51
23) Nitrobenzene	13.28	77	120884	50.73	ug		70
24) Isophorone	14.07	82	151821	52.12	ug		97
25) 2-Nitrophenol	14.34	139	85344	51.28	ug		69
26) 2,4-Dimethylphenol	14.63	107	205357	52.21	ug		48
27) bis(2-Chloroethoxy)methane	14.93	93	130447	52.59	ug		84
28) 2,4-Dichlorophenol	15.13	162	161302	50.56	ug		62
29) 1,2,4-Trichlorobenzene	15.37	180	201742	52.05	ug		51
30) Naphthalene	15.53	128	313016	51.33	ug		94
31) Benzoic acid	15.01	105	25622	35.00	ug	#	46

406

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:53:05 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	15.89	127	121933	50.22	ug		86
33)	Hexachlorobutadiene	16.18	225	128927	52.29	ug		54
34)	4-Chloro-3-methylphenol	17.55	107	84198	48.41	ug		92
35)	2-Methylnaphthalene	17.75	142	325118	50.91	ug		58
37)	Hexachlorocyclopentadiene	18.50	237	92148	53.79	ug		68
38)	2,4,6-Trichlorophenol	18.91	196	106438	48.66	ug		52
39)	2,4,5-Trichlorophenol	18.91	196	106438	48.66	ug		54
41)	2-Chloronaphthalene	19.26	162	256056	52.37	ug	#	22
42)	2-Nitroaniline	19.79	65	94010	48.70	ug		36
43)	Dimethylphthalate	20.50	163	176360	51.49	ug		97
44)	Acenaphthylene	20.54	152	317494	52.09	ug		90
45)	2,6-Dinitrotoluene	20.68	165	53394	50.05	ug		68
46)	3-Nitroaniline	21.09	138	64401	49.04	ug		44
47)	Acenaphthene	21.12	153	353748	51.96	ug		48
48)	2,4-Dinitrophenol	21.44	184	8493m	18.52	ug		
49)	4-Nitrophenol	21.78	109	39590m	30.15	ug		
50)	Dibenzofuran	21.61	168	282828	51.19	ug		79
51)	2,4-Dinitrotoluene	21.85	165	64435	48.73	ug		56
52)	Diethylphthalate	22.66	149	184726	51.57	ug		89
53)	Fluorene	22.65	166	332350	51.24	ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	149129	51.36	ug		68
55)	4-Nitroaniline	22.98	138	44273	46.22	ug		63
57)	4,6-Dinitro-2-methylphenol	23.06	198	29025	37.92	ug	#	100
58)	n-Nitrosodiphenylamine	23.14	169	176339	53.55	ug		70
60)	Azobenzene	22.74	77	22835	54.53	ug	#	86
61)	4-Bromophenyl-phenylether	24.19	248	135801	53.44	ug		40
62)	Hexachlorobenzene	24.56	284	94990	51.75	ug		65
63)	Pentachlorophenol	25.16	266	99982	54.17	ug		53
64)	Phenanthrene	25.51	178	297569	51.88	ug		90
65)	Anthracene	25.65	178	303244	52.14	ug		90
66)	Benzidine	25.45	184	25422	51.80	ug	#	34
67)	Carbazole	26.23	167	188810	53.75	ug		95
68)	Di-n-butylphthalate	27.58	149	239319	52.78	ug		98
69)	Fluoranthene	29.09	202	270310	50.75	ug		90
71)	Pyrene	29.74	202	320546	51.36	ug		87
73)	Butylbenzylphthalate	32.03	149	176725	51.93	ug		60
74)	Benzo(a)anthracene	33.36	228	401623	51.95	ug		85
75)	3,3'-Dichlorobenzidine	33.46	252	176587	54.41	ug		68
76)	Chrysene	33.48	228	408173	52.59	ug		86
77)	bis(2-Ethylhexyl)phthalate	33.86	149	198670	52.62	ug		88
79)	Di-n-octylphthalate	35.60	149	282608	54.43	ug		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS494.D Vial: 2
Acq On : 17 Dec 2002 2:56 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:53:05 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

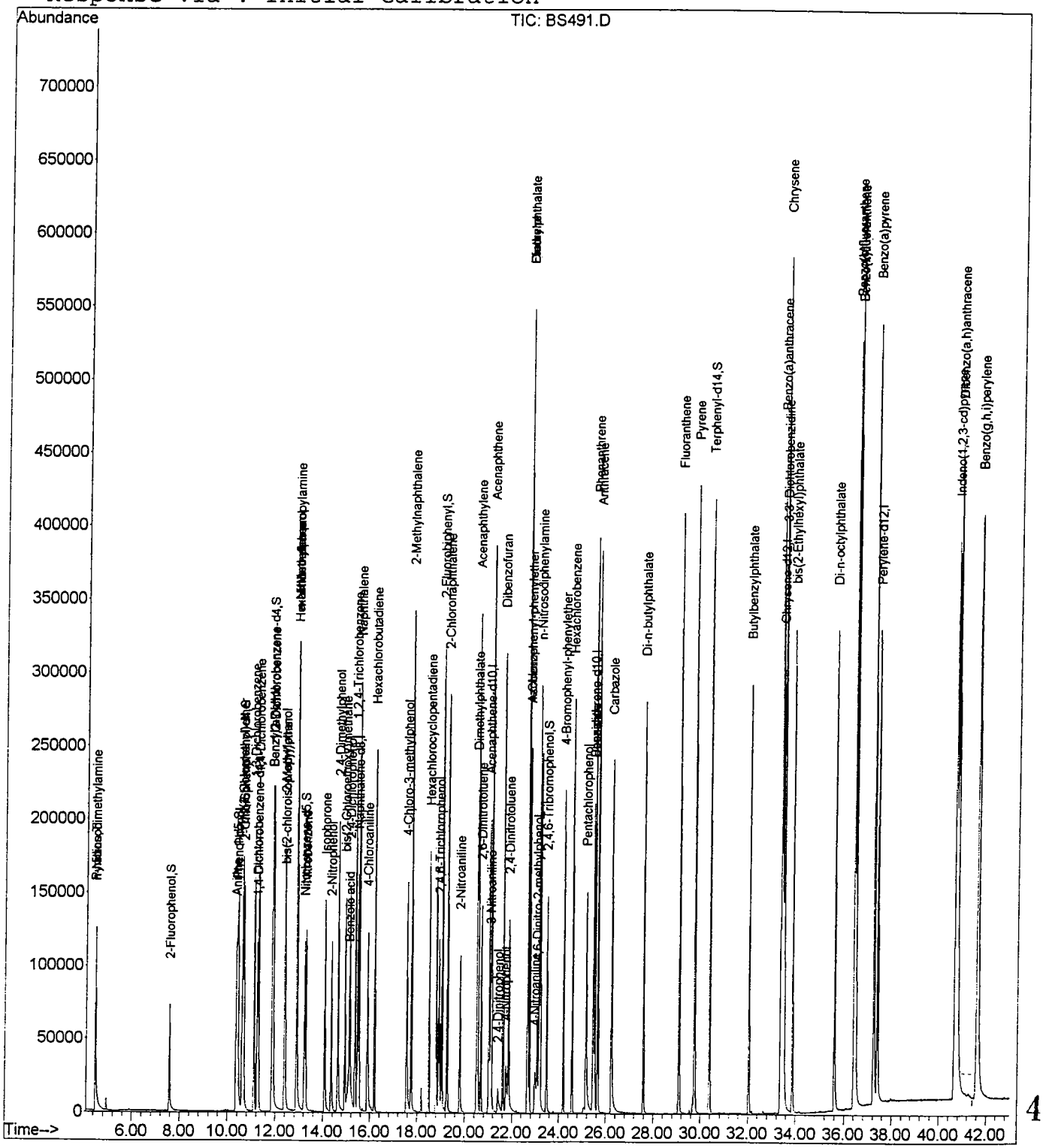
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	Benzo(b)fluoranthene	36.41	252	361968	50.28	ug	84
81)	Benzo(k)fluoranthene	36.47	252	406819	53.01	ug	84
82)	Benzo(a)pyrene	37.24	252	349572	49.98	ug	82
83)	Indeno(1,2,3-cd)pyrene	40.67	276	338091	43.14	ug	78
84)	Dibenzo(a,h)anthracene	40.76	278	367117	46.29	ug	78
85)	Benzo(g,h,i)perylene	41.62	276	437822	45.42	ug	72

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:52 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:38 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	76861	40.00	ug		0.00
21) Naphthalene-d8	15.46	136	195471	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	113438	40.00	ug		0.00
56) Phenanthrene-d10	25.45	188	227889	40.00	ug		0.00
70) Chrysene-d12	33.42	240	277689	40.00	ug		0.00
78) Perylene-d12	37.40	264	373244	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.58	112	99011	78.69	ug		0.00
3) Phenol-d5	10.39	99	169659	86.13	ug		0.00
8) 2-Chlorophenol-d4	10.62	132	109851	83.59	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	80671	81.49	ug		0.00
22) Nitrobenzene-d5	13.22	82	191972	80.50	ug		0.00
40) 2-Fluorobiphenyl	19.04	172	333369	75.77	ug		0.00
59) 2,4,6-Tribromophenol	23.47	330	134030	79.36	ug		0.00
72) Terphenyl-d14	30.37	244	404653	78.21	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.47	79	119092	77.26	ug		92
5) n-Nitrosodimethylamine	4.48	74	49355	80.11	ug		100
6) Aniline	10.36	93	144536	84.19	ug	#	83
7) Phenol	10.43	94	218277	86.95	ug		80
9) bis(2-Chloroethyl)ether	10.60	93	182982	119.80	ug		67
10) 2-Chlorophenol	10.67	128	211007	83.39	ug		70
11) 1,3-Dichlorobenzene	11.10	146	243320	80.06	ug		68
12) 1,4-Dichlorobenzene	11.28	146	249423	81.16	ug		69
13) Benzyl alcohol	11.87	108	140965	88.50	ug		33
15) 1,2-Dichlorobenzene	11.89	146	230219	82.05	ug		68
16) 2-Methylphenol	12.38	108	177774	86.68	ug		58
17) bis(2-chloroisopropyl)ethe	12.41	45	169809	81.41	ug		82
18) 4-Methylphenol	12.89	108	211290	89.64	ug		41
19) n-Nitroso-di-n-propylamine	12.88	70	83078	87.55	ug		69
20) Hexachloroethane	12.91	117	123510	79.51	ug		51
23) Nitrobenzene	13.28	77	164563	80.25	ug		70
24) Isophorone	14.07	82	213860	85.31	ug		97
25) 2-Nitrophenol	14.34	139	118164	82.50	ug		69
26) 2,4-Dimethylphenol	14.63	107	274522	81.10	ug		48
27) bis(2-Chloroethoxy)methane	14.93	93	168924	79.14	ug		84
28) 2,4-Dichlorophenol	15.13	162	230496	83.95	ug		63
29) 1,2,4-Trichlorobenzene	15.37	180	260996	78.25	ug		51
30) Naphthalene	15.53	128	417641	79.59	ug		94
31) Benzoic acid	15.10	105	52614	83.52	ug	#	49

410

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:38 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32)	4-Chloroaniline	15.88	127	179835	86.07 ug		86
33)	Hexachlorobutadiene	16.19	225	159331	75.09 ug		54
34)	4-Chloro-3-methylphenol	17.55	107	131152	87.63 ug		92
35)	2-Methylnaphthalene	17.75	142	448968	81.70 ug		59
37)	Hexachlorocyclopentadiene	18.50	237	122731	73.00 ug		68
38)	2,4,6-Trichlorophenol	18.90	196	178062	82.95 ug		50
39)	2,4,5-Trichlorophenol	18.90	196	178062	82.95 ug		52
41)	2-Chloronaphthalene	19.26	162	372013	77.54 ug	#	22
42)	2-Nitroaniline	19.79	65	162462	85.76 ug		36
43)	Dimethylphthalate	20.50	163	270778	80.56 ug		97
44)	Acenaphthylene	20.54	152	480345	80.31 ug		90
45)	2,6-Dinitrotoluene	20.68	165	86991	83.09 ug		68
46)	3-Nitroaniline	21.08	138	112352	87.18 ug		45
47)	Acenaphthene	21.13	153	530543	79.41 ug		48
48)	2,4-Dinitrophenol	21.40	184	34136	75.84 ug		56
49)	4-Nitrophenol	21.74	109	79854	61.97 ug		84
50)	Dibenzofuran	21.61	168	434157	80.07 ug		80
51)	2,4-Dinitrotoluene	21.85	165	113275	87.29 ug	#	56
52)	Diethylphthalate	22.66	149	283967	80.78 ug		89
53)	Fluorene	22.65	166	517236	81.26 ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	225529	79.14 ug		68
55)	4-Nitroaniline	22.97	138	98948	105.27 ug		66
57)	4,6-Dinitro-2-methylphenol	23.06	198	66482	78.10 ug	#	100
58)	n-Nitrosodiphenylamine	23.15	169	287157	78.41 ug		70
60)	Azobenzene	22.74	77	34738	74.59 ug	#	85
61)	4-Bromophenyl-phenylether	24.19	248	215522	76.26 ug		40
62)	Hexachlorobenzene	24.57	284	159681	78.23 ug		65
63)	Pentachlorophenol	25.15	266	172459	84.01 ug		54
64)	Phenanthrene	25.52	178	507589	79.57 ug		90
65)	Anthracene	25.65	178	511227	79.04 ug		91
66)	Benzidine	25.46	184	28108	51.49 ug	#	31
67)	Carbazole	26.23	167	329525	84.36 ug		96
68)	Di-n-butylphthalate	27.58	149	396312	78.59 ug		98
69)	Fluoranthene	29.10	202	479597	80.96 ug		90
71)	Pyrene	29.75	202	574488	80.11 ug		87
73)	Butylbenzylphthalate	32.04	149	305873	78.22 ug		60
74)	Benzo(a)anthracene	33.36	228	703357	79.18 ug		85
75)	3,3'-Dichlorobenzidine	33.46	252	275092	73.76 ug		68
76)	Chrysene	33.49	228	708450	79.43 ug		86
77)	bis(2-Ethylhexyl)phthalate	33.86	149	323170	74.49 ug		88
79)	Di-n-octylphthalate	35.60	149	453669	72.92 ug		96

411

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS491.D Vial: 4
Acq On : 17 Dec 2002 12:14 pm Operator:
Sample : SSTD080 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:38 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

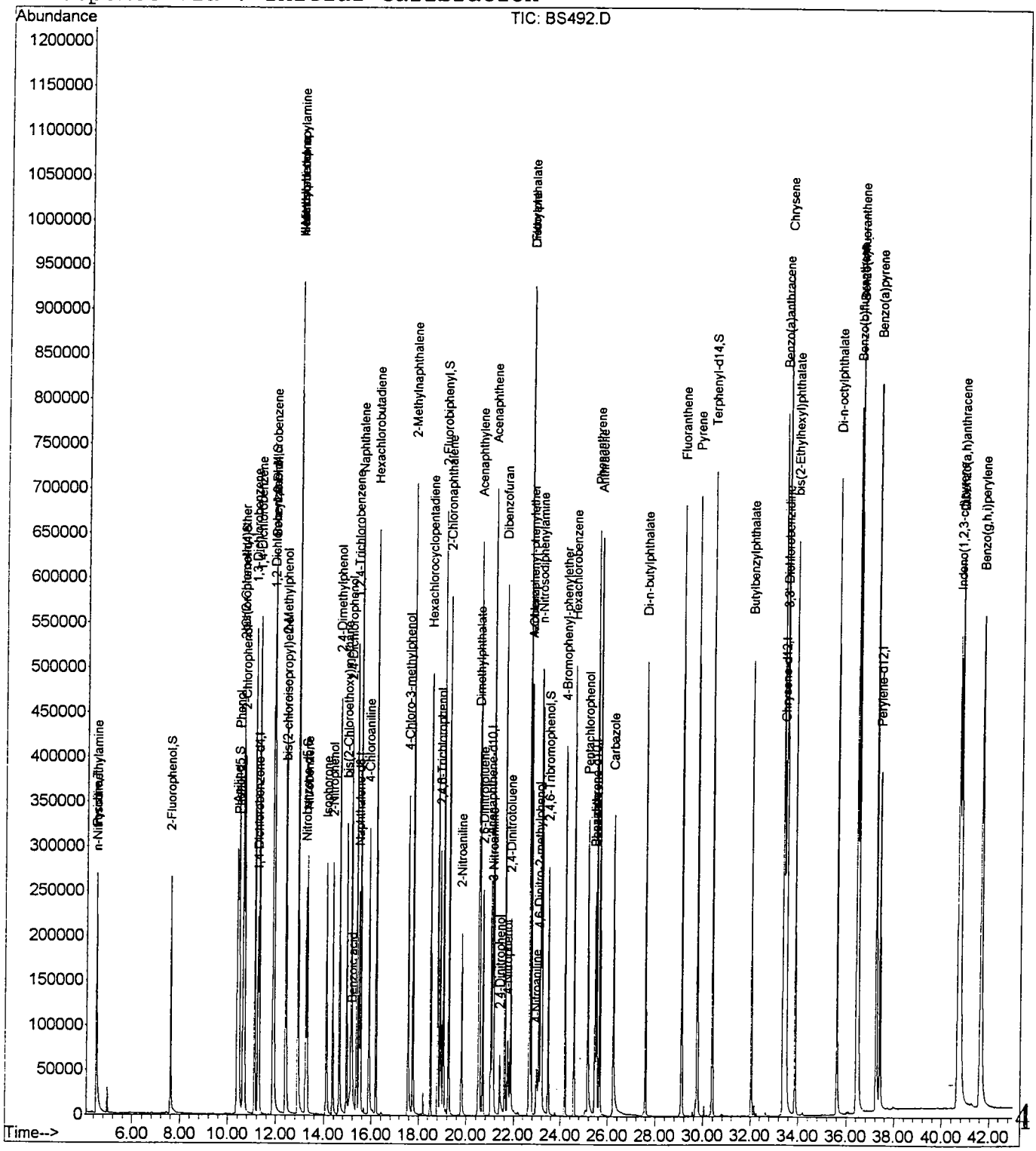
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	Benzo(b)fluoranthene	36.41	252	673342	78.05 ug	85
81)	Benzo(k)fluoranthene	36.48	252	732204	79.62 ug	83
82)	Benzo(a)pyrene	37.25	252	682310	81.42 ug	82
83)	Indeno(1,2,3-cd)pyrene	40.69	276	820236	87.34 ug	77
84)	Dibenzo(a,h)anthracene	40.77	278	849292	89.37 ug	78
85)	Benzo(g,h,i)perylene	41.65	276	1009362	87.39 ug	72

412

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:52 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:47 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.24	152	144752	40.00	ug		0.02
21) Naphthalene-d8	15.47	136	302994	40.00	ug		0.01
36) Acenaphthene-d10	21.03	164	151131	40.00	ug		0.00
56) Phenanthrene-d10	25.46	188	274404	40.00	ug		0.00
70) Chrysene-d12	33.42	240	327013	40.00	ug		0.01
78) Perylene-d12	37.41	264	423598	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.60	112	319301	134.75	ug		0.02
3) Phenol-d5	10.42	99	424466	114.42	ug		0.03
8) 2-Chlorophenol-d4	10.64	132	284754	115.06	ug		0.02
14) 1,2-Dichlorobenzene-d4	11.87	152	210369	112.83	ug		0.02
22) Nitrobenzene-d5	13.23	82	450251	121.80	ug		0.02
40) 2-Fluorobiphenyl	19.05	172	703332	119.99	ug		0.01
59) 2,4,6-Tribromophenol	23.48	330	249436	122.65	ug		0.00
72) Terphenyl-d14	30.38	244	706694	115.98	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.49	79	325872	112.25	ug		92
5) n-Nitrosodimethylamine	4.51	74	136660	117.78	ug		100
6) Aniline	10.37	93	366192	113.26	ug	#	86
7) Phenol	10.46	94	524804	111.00	ug		79
9) bis(2-Chloroethyl)ether	10.62	93	451084	156.81	ug		68
10) 2-Chlorophenol	10.69	128	552982	116.03	ug		70
11) 1,3-Dichlorobenzene	11.11	146	662683	115.78	ug		68
12) 1,4-Dichlorobenzene	11.30	146	666801	115.21	ug		69
13) Benzyl alcohol	11.89	108	370071	123.37	ug		32
15) 1,2-Dichlorobenzene	11.91	146	591890	112.01	ug		68
16) 2-Methylphenol	12.39	108	415715	107.63	ug		58
17) bis(2-chloroisopropyl)ethe	12.42	45	426182	108.49	ug		83
18) 4-Methylphenol	12.91	108	452425	101.92	ug		41
19) n-Nitroso-di-n-propylamine	12.91	70	180529	101.02	ug		69
20) Hexachloroethane	12.91	117	337402	115.34	ug		52
23) Nitrobenzene	13.29	77	379460	119.38	ug		70
24) Isophorone	14.09	82	469279	120.77	ug		99
25) 2-Nitrophenol	14.36	139	277331	124.92	ug		70
26) 2,4-Dimethylphenol	14.64	107	633221	120.69	ug		48
27) bis(2-Chloroethoxy)methane	14.94	93	392406	118.61	ug		84
28) 2,4-Dichlorophenol	15.14	162	520695	122.35	ug		62
29) 1,2,4-Trichlorobenzene	15.37	180	618385	119.61	ug		51
30) Naphthalene	15.54	128	937433	115.25	ug		95
31) Benzoic acid	15.20	105	118920	121.78	ug	#	10

414

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:47 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
32)	4-Chloroaniline	15.89	127	395491	122.11 ug		87
33)	Hexachlorobutadiene	16.19	225	416937	126.77 ug		54
34)	4-Chloro-3-methylphenol	17.55	107	266749	114.99 ug		92
35)	2-Methylnaphthalene	17.76	142	943864	110.81 ug		59
37)	Hexachlorocyclopentadiene	18.50	237	344457	153.78 ug		68
38)	2,4,6-Trichlorophenol	18.90	196	367922	128.65 ug		50
39)	2,4,5-Trichlorophenol	18.90	196	367922	128.65 ug		52
41)	2-Chloronaphthalene	19.26	162	759007	118.74 ug	#	22
42)	2-Nitroaniline	19.79	65	302668	119.93 ug		36
43)	Dimethylphthalate	20.51	163	522992	116.79 ug		97
44)	Acenaphthylene	20.55	152	919610	115.41 ug		90
45)	2,6-Dinitrotoluene	20.70	165	166096	119.08 ug		68
46)	3-Nitroaniline	21.09	138	192035	111.85 ug		45
47)	Acenaphthene	21.13	153	1017612	114.32 ug		48
48)	2,4-Dinitrophenol	21.40	184	90666	151.19 ug		56
49)	4-Nitrophenol	21.74	109	178886	104.20 ug		81
50)	Dibenzofuran	21.62	168	829215	114.79 ug		80
51)	2,4-Dinitrotoluene	21.87	165	202750	117.27 ug	#	56
52)	Diethylphthalate	22.68	149	525917	112.29 ug		89
53)	Fluorene	22.66	166	942922	111.20 ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	442976	116.68 ug		69
55)	4-Nitroaniline	22.98	138	164257	131.17 ug		62
57)	4,6-Dinitro-2-methylphenol	23.07	198	134922	131.63 ug	#	100
58)	n-Nitrosodiphenylamine	23.15	169	516586	117.14 ug		69
60)	Azobenzene	22.74	77	66409	118.42 ug	#	86
61)	4-Bromophenyl-phenylether	24.19	248	411796	121.02 ug		40
62)	Hexachlorobenzene	24.57	284	288831	117.51 ug		65
63)	Pentachlorophenol	25.15	266	319981	129.45 ug		54
64)	Phenanthrene	25.53	178	884453	115.15 ug		90
65)	Anthracene	25.66	178	899022	115.44 ug		90
66)	Benzidine	25.46	184	33918	51.61 ug	#	31
67)	Carbazole	26.23	167	504076	107.17 ug		96
68)	Di-n-butylphthalate	27.58	149	702601	115.70 ug		98
69)	Fluoranthene	29.10	202	808537	113.35 ug		90
71)	Pyrene	29.76	202	962512	113.98 ug		87
73)	Butylbenzylphthalate	32.04	149	558627	121.30 ug		60
74)	Benzo(a)anthracene	33.38	228	1241207	118.65 ug		86
75)	3,3'-Dichlorobenzidine	33.46	252	510544	116.24 ug		67
76)	Chrysene	33.51	228	1215286	115.70 ug		86
77)	bis(2-Ethylhexyl)phthalate	33.87	149	652296	127.67 ug		88
79)	Di-n-octylphthalate	35.60	149	954802	135.22 ug		96

(#) = qualifier out of range (m) = manual integration

415

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS492.D Vial: 5
Acq On : 17 Dec 2002 1:08 pm Operator:
Sample : SSTD120 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:47 2002 Quant Results File: ME1125.RES

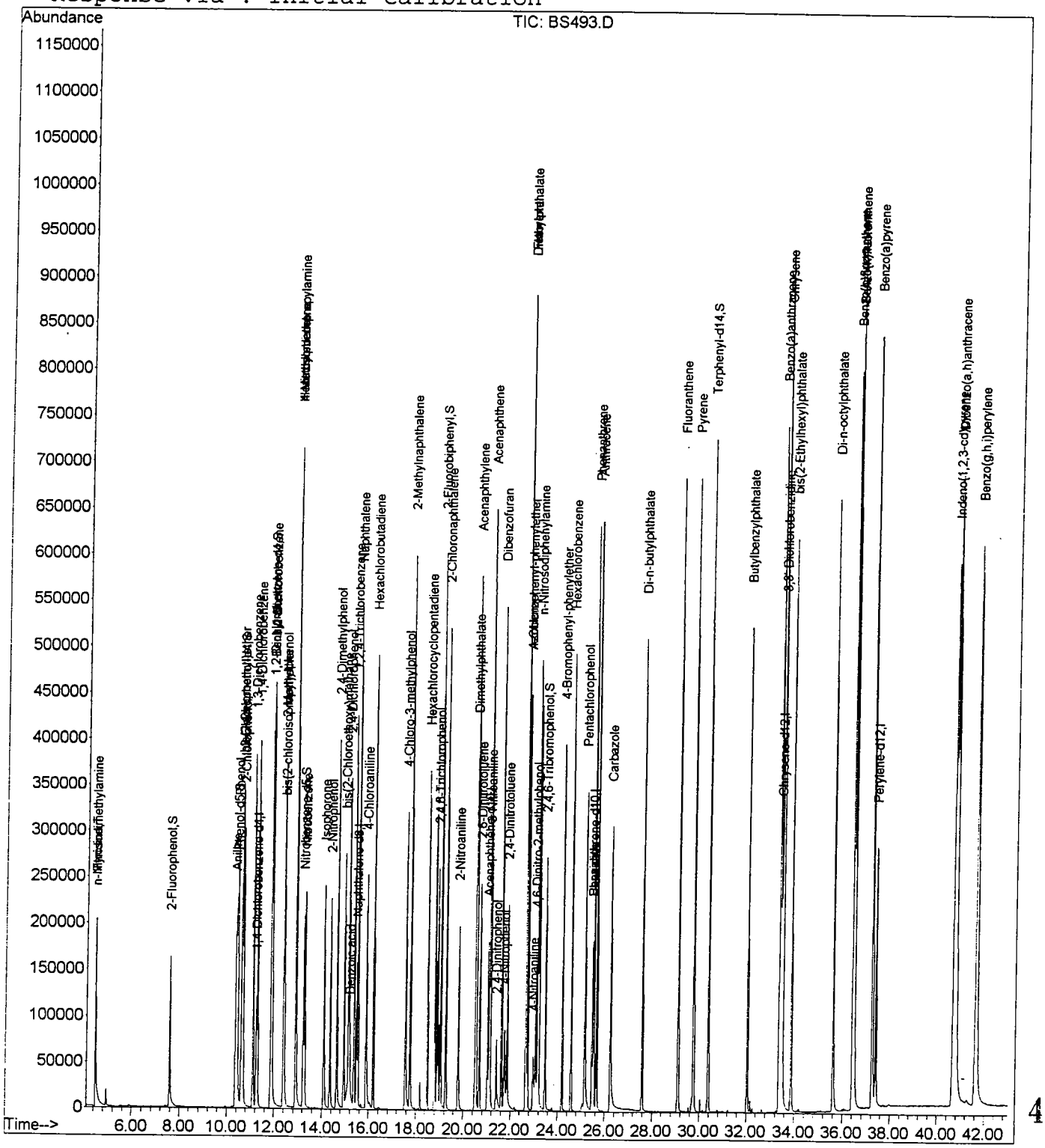
Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	Benzo(b)fluoranthene	36.43	252	1161857	118.67 ug	84
81)	Benzo(k)fluoranthene	36.50	252	1183261	113.37 ug	84
82)	Benzo(a)pyrene	37.26	252	1133736	119.21 ug	82
83)	Indeno(1,2,3-cd)pyrene	40.71	276	1246140	116.91 ug	77
84)	Dibenzo(a,h)anthracene	40.80	278	1233873	114.41 ug	77
85)	Benzo(g,h,i)perylene	41.67	276	1425639	108.76 ug	72

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 16:52 2002 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 25 13:14:27 2003
Response via : Initial Calibration



417

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:59 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	11.23	152	80791	40.00	ug		0.00
21) Naphthalene-d8	15.47	136	189404	40.00	ug		0.00
36) Acenaphthene-d10	21.03	164	104240	40.00	ug		0.00
56) Phenanthrene-d10	25.46	188	201307	40.00	ug		0.00
70) Chrysene-d12	33.42	240	245149	40.00	ug		0.01
78) Perylene-d12	37.40	264	323230	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	7.58	112	217003	164.08	ug		0.00
3) Phenol-d5	10.40	99	326410	157.65	ug		0.02
8) 2-Chlorophenol-d4	10.63	132	214099	155.00	ug		0.00
14) 1,2-Dichlorobenzene-d4	11.85	152	156248	150.15	ug		0.00
22) Nitrobenzene-d5	13.22	82	360639	156.07	ug		0.01
40) 2-Fluorobiphenyl	19.04	172	612595	151.52	ug		0.00
59) 2,4,6-Tribromophenol	23.48	330	244069	163.59	ug		0.00
72) Terphenyl-d14	30.38	244	702715	153.84	ug		0.00
Target Compounds							Qvalue
4) Pyridine	4.46	79	237163	146.37	ug		93
5) n-Nitrosodimethylamine	4.48	74	94260	145.55	ug		100
6) Aniline	10.36	93	272057	150.75	ug	#	86
7) Phenol	10.44	94	411080	155.78	ug		79
9) bis(2-Chloroethyl)ether	10.60	93	352217	219.38	ug		67
10) 2-Chlorophenol	10.67	128	404871	152.21	ug		69
11) 1,3-Dichlorobenzene	11.10	146	484979	151.81	ug		68
12) 1,4-Dichlorobenzene	11.28	146	487766	151.00	ug		70
13) Benzyl alcohol	11.88	108	299518	178.90	ug		32
15) 1,2-Dichlorobenzene	11.90	146	443423	150.35	ug		68
16) 2-Methylphenol	12.38	108	330449	153.29	ug		58
17) bis(2-chloroisopropyl)ethe	12.41	45	325571	148.49	ug		83
18) 4-Methylphenol	12.90	108	379383	153.12	ug		40
19) n-Nitroso-di-n-propylamine	12.89	70	148778	149.16	ug		69
20) Hexachloroethane	12.91	117	246527	150.99	ug		52
23) Nitrobenzene	13.28	77	309794	155.92	ug		70
24) Isophorone	14.08	82	398827	164.19	ug		98
25) 2-Nitrophenol	14.35	139	225438	162.44	ug		70
26) 2,4-Dimethylphenol	14.64	107	528761	161.22	ug		48
27) bis(2-Chloroethoxy)methane	14.94	93	322342	155.86	ug		84
28) 2,4-Dichlorophenol	15.13	162	434151	163.20	ug		62
29) 1,2,4-Trichlorobenzene	15.37	180	492558	152.41	ug		51
30) Naphthalene	15.53	128	772056	151.85	ug		94
31) Benzoic acid	15.19	105	116191	190.35	ug	#	10

418

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:59 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	15.89	127	337679	166.78	ug		86
33)	Hexachlorobutadiene	16.19	225	319956	155.63	ug		54
34)	4-Chloro-3-methylphenol	17.55	107	242076	166.93	ug		93
35)	2-Methylnaphthalene	17.76	142	801821	150.59	ug		59
37)	Hexachlorocyclopentadiene	18.50	237	258550	167.35	ug		68
38)	2,4,6-Trichlorophenol	18.90	196	337556	171.12	ug		51
39)	2,4,5-Trichlorophenol	18.90	196	337556	171.12	ug		53
41)	2-Chloronaphthalene	19.26	162	666743	151.23	ug	#	22
42)	2-Nitroaniline	19.79	65	287535	165.18	ug		36
43)	Dimethylphthalate	20.51	163	486169	157.40	ug		97
44)	Acenaphthylene	20.55	152	838623	152.59	ug		90
45)	2,6-Dinitrotoluene	20.69	165	156570	162.74	ug		68
46)	3-Nitroaniline	21.10	138	178347	150.60	ug		45
47)	Acenaphthene	21.13	153	921917	150.16	ug		48
48)	2,4-Dinitrophenol	21.40	184	94091	227.48	ug		55
49)	4-Nitrophenol	21.74	109	178615	150.85	ug		80
50)	Dibenzofuran	21.62	168	765559	153.65	ug		80
51)	2,4-Dinitrotoluene	21.87	165	198357	166.34	ug	#	56
52)	Diethylphthalate	22.68	149	509037	157.58	ug		89
53)	Fluorene	22.66	166	883023	150.97	ug		54
54)	4-Chlorophenyl-phenylether	22.74	204	405905	155.01	ug		69
55)	4-Nitroaniline	22.97	138	159245	184.37	ug		63
57)	4,6-Dinitro-2-methylphenol	23.07	198	140571	186.94	ug	#	100
58)	n-Nitrosodiphenylamine	23.15	169	488789	151.09	ug		70
60)	Azobenzene	22.74	77	60919	148.08	ug	#	87
61)	4-Bromophenyl-phenylether	24.19	248	387832	155.36	ug		40
62)	Hexachlorobenzene	24.57	284	281127	155.91	ug		65
63)	Pentachlorophenol	25.15	266	328329	181.07	ug		54
64)	Phenanthrene	25.53	178	852340	151.26	ug		90
65)	Anthracene	25.66	178	873479	152.88	ug		90
66)	Benzidine	25.46	184	24513	50.84	ug	#	29
67)	Carbazole	26.23	167	453884	131.53	ug		96
68)	Di-n-butylphthalate	27.58	149	716834	160.91	ug		98
69)	Fluoranthene	29.10	202	815584	155.86	ug		90
71)	Pyrene	29.76	202	955107	150.87	ug		87
73)	Butylbenzylphthalate	32.04	149	562586	162.96	ug		60
74)	Benzo(a)anthracene	33.38	228	1213017	154.67	ug		86
75)	3,3'-Dichlorobenzidine	33.46	252	518667	157.52	ug		67
76)	Chrysene	33.51	228	1188185	150.90	ug		86
77)	bis(2-Ethylhexyl)phthalate	33.87	149	625934	163.43	ug		88
79)	Di-n-octylphthalate	35.60	149	883594	164.00	ug		96

419

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BS493.D Vial: 6
Acq On : 17 Dec 2002 2:01 pm Operator:
Sample : SSTD160 Inst : gcms b
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 17 15:52:59 2002 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Dec 17 15:52:17 2002
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	Benzo(b)fluoranthene	36.43	252	1135895	152.04 ug	84
81)	Benzo(k)fluoranthene	36.50	252	1203882	151.16 ug	83
82)	Benzo(a)pyrene	37.26	252	1126918	155.28 ug	82
83)	Indeno(1,2,3-cd)pyrene	40.71	276	1448148	178.05 ug	76
84)	Dibenzo(a,h)anthracene	40.80	278	1392114	169.17 ug	78
85)	Benzo(g,h,i)perylene	41.68	276	1666156	166.57 ug	72

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Instrument ID: 5973 B Calibration Date: 02/28/03 Time: 10:25

Lab File ID: BS047 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.652	.500	-3.3	25.0
n-Nitroso-di-n-propylamine	.494	.547	.500	-10.7	25.0
1,2,4-Trichlorobenzene	.683	.818	.200	-19.8	25.0
Naphthalene	1.074	1.177	.700	-9.6	25.0
2-Methylnaphthalene	1.124	1.369	.400	-21.8	25.0
Acenaphthylene	2.109	2.273	1.300	-7.8	25.0
Acenaphthene	2.356	2.561	.800	-8.7	25.0
Dibenzofuran	1.912	2.179	.800	-14.0	25.0
2,4-Dinitrotoluene	.458	.570	.200	-24.5	25.0
Fluorene	2.244	2.578	.900	-14.9	25.0
Phenanthrene	1.120	1.185	.700	-5.8	25.0
Anthracene	1.135	1.196	.700	-5.4	25.0
Fluoranthene	1.040	1.097	.600	-5.5	25.0
Pyrene	1.033	1.195	.600	-15.7	25.0
Benzo(a)anthracene	1.280	1.450	.800	-13.3	25.0
Chrysene	1.285	1.408	.700	-9.6	25.0
Benzo(b)fluoranthene	.896	1.043	.700	-16.4	25.0
Benzo(k)fluoranthene	.986	1.126	.700	-14.2	25.0
Benzo(a)pyrene	.898	.991	.700	-10.4	25.0
Indeno(1,2,3-cd)pyrene	1.006	1.002	.500	.4	25.0
Dibenzo(a,h)anthracene	1.018	1.039	.400	-2.1	25.0
Benzo(g,h,i)perylene	1.238	1.169	.500	5.6	25.0
Nitrobenzene-d5	.488	.509		-4.3	
2-Fluorobiphenyl	1.551	1.601	.700	-3.2	25.0
Terphenyl-d14	.745	.938	.500	-25.9	25.0
Phenol-d5	1.025	1.144	.800	-11.6	25.0
2-Fluorophenol	.655	.651	.600	.6	25.0
2,4,6-Tribromophenol	.296	.404		-36.5	

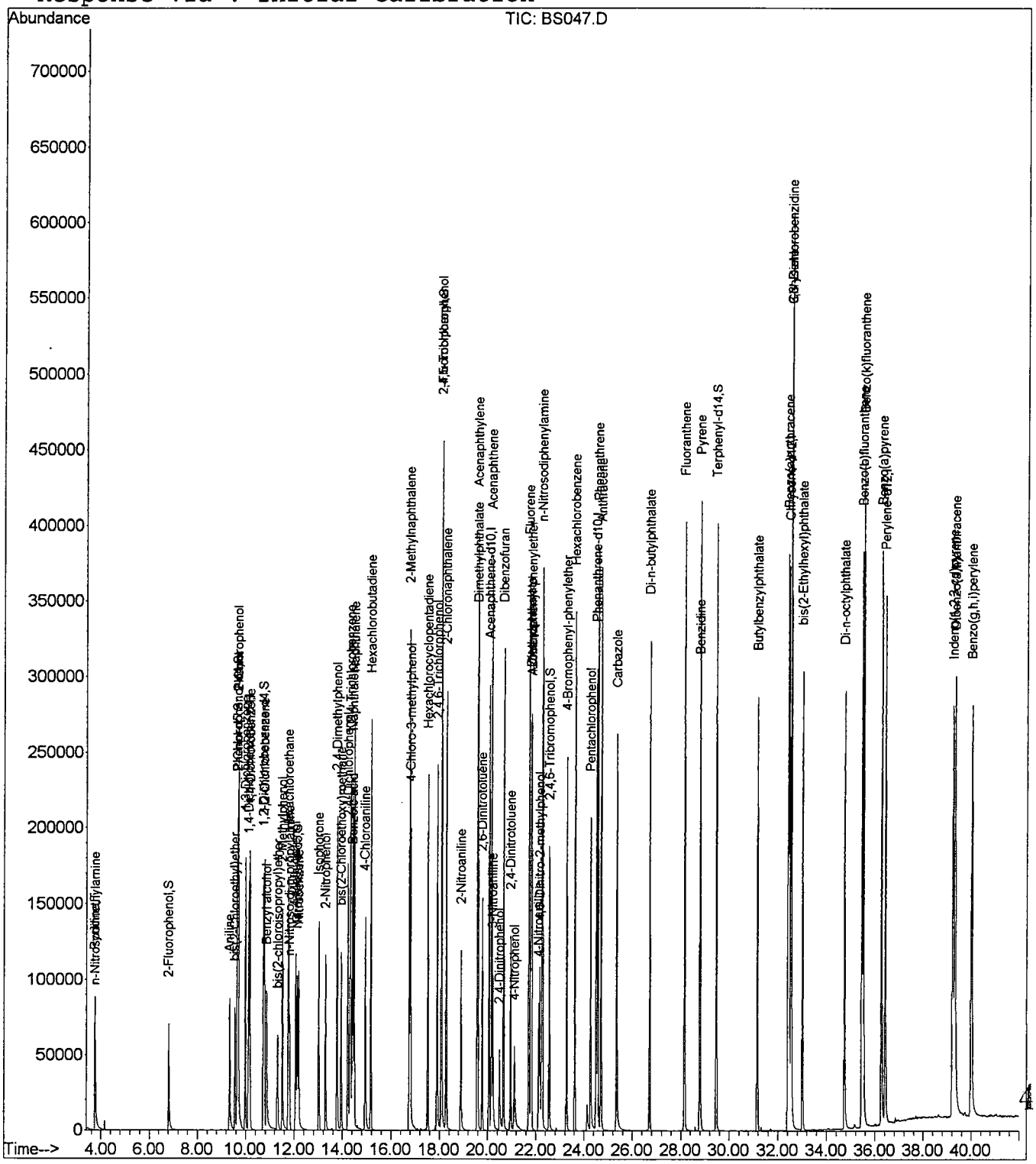
(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of .010.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21 2003 Quant Results File: ME1125.RES

Method : C:\MSDchem\1\methods\envdef.m (Chemstation Integrator)
Title :
Last Update :
Response via : Initial Calibration



422

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:21:23 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.11	152	100487	40.00	ug		0.00
21) Naphthalene-d8	14.42	136	239201	40.00	ug		0.00
36) Acenaphthene-d10	20.07	164	158142	40.00	ug		0.00
56) Phenanthrene-d10	24.51	188	324856	40.00	ug		0.00
70) Chrysene-d12	32.46	240	330846	40.00	ug		0.00
78) Perylene-d12	36.41	264	364804	40.00	ug		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	6.81	112	81806	49.73	ug		0.00
3) Phenol-d5	9.64	99	143683	55.79	ug		0.00
8) 2-Chlorophenol-d4	9.63	132	91385	53.19	ug		0.09
14) 1,2-Dichlorobenzene-d4	10.72	152	69453	53.66	ug		0.00
22) Nitrobenzene-d5	12.12	82	152326	52.20	ug		-0.02
40) 2-Fluorobiphenyl	18.09	172	316545	51.61	ug		0.00
59) 2,4,6-Tribromophenol	22.55	330	164003	68.12	ug		0.02
72) Terphenyl-d14	29.46	244	388095	62.96	ug		0.00
Target Compounds							Qvalue
4) Pyridine	3.74	79	95988	51.33	ug		99
5) n-Nitrosodimethylamine	3.77	74	31928	42.03	ug		100
6) Aniline	9.33	93	94822	42.24	ug		90
7) Phenol	9.67	94	183680	55.96	ug		74
9) bis(2-Chloroethyl)ether	9.54	93	132485	45.83	ug		65
10) 2-Chlorophenol	9.67	128	175652	53.09	ug		70
11) 1,3-Dichlorobenzene	9.98	146	206229	51.90	ug		68
12) 1,4-Dichlorobenzene	10.17	146	207567	51.66	ug		70
13) Benzyl alcohol	10.85	108	129081	61.99	ug		33
15) 1,2-Dichlorobenzene	10.76	146	199040	54.26	ug		68
16) 2-Methylphenol	11.51	108	144015	53.71	ug		54
17) bis(2-chloroisopropyl)ethe	11.31	45	129342	47.43	ug		86
18) 4-Methylphenol	12.05	108	170983	55.48	ug		39
19) n-Nitroso-di-n-propylamine	11.80	70	68698	55.37	ug		70
20) Hexachloroethane	11.76	117	121504	59.83	ug		52
23) Nitrobenzene	12.18	77	133450	53.18	ug		70
24) Isophorone	13.02	82	176020	57.38	ug		99
25) 2-Nitrophenol	13.29	139	105289	60.07	ug		70
26) 2,4-Dimethylphenol	13.77	107	241305	58.26	ug		47
27) bis(2-Chloroethoxy)methane	13.94	93	136117	52.11	ug		83
28) 2,4-Dichlorophenol	14.22	162	202172	60.18	ug		62
29) 1,2,4-Trichlorobenzene	14.33	180	244645	59.94	ug		51
30) Naphthalene	14.48	128	351815	54.79	ug		95
31) Benzoic acid	14.44	105	52142	68.52	ug	#	57

423

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:21:23 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	14.94	127	154194	60.30	ug		87
33)	Hexachlorobutadiene	15.17	225	168902	65.05	ug		54
34)	4-Chloro-3-methylphenol	16.81	107	120772	65.94	ug		93
35)	2-Methylnaphthalene	16.76	142	409306	60.87	ug		60
37)	Hexachlorocyclopentadiene	17.52	237	157704	67.29	ug		68
38)	2,4,6-Trichlorophenol	17.91	196	210945	70.49	ug		51
39)	2,4,5-Trichlorophenol	18.08	196	172728	57.72	ug		52
41)	2-Chloronaphthalene	18.28	162	351808	52.60	ug	#	23
42)	2-Nitroaniline	18.89	65	145795	55.21	ug		36
43)	Dimethylphthalate	19.60	163	266944	56.97	ug		96
44)	Acenaphthylene	19.57	152	449265	53.88	ug		90
45)	2,6-Dinitrotoluene	19.78	165	90056	61.70	ug		68
46)	3-Nitroaniline	20.22	138	106645	60.08	ug		44
47)	Acenaphthene	20.16	153	506337	54.36	ug		48
48)	2,4-Dinitrophenol	20.49	184	56762	90.46	ug		56
49)	4-Nitrophenol	21.11	109	94746	66.16	ug		81
50)	Dibenzofuran	20.66	168	430668	56.98	ug		81
51)	2,4-Dinitrotoluene	20.95	165	112688	62.29	ug	#	56
52)	Diethylphthalate	21.79	149	306631	62.57	ug		90
53)	Fluorene	21.71	166	509604	57.43	ug		54
54)	4-Chlorophenyl-phenylether	21.82	204	236402	59.51	ug		69
55)	4-Nitroaniline	22.12	138	97146	65.30	ug		69
57)	4,6-Dinitro-2-methylphenol	22.17	198	94771	78.10	ug	#	100
58)	n-Nitrosodiphenylamine	22.26	169	282159	54.05	ug		70
60)	Azobenzene	21.82	77	38321	57.72	ug	#	87
61)	4-Bromophenyl-phenylether	23.27	248	237237	58.89	ug		40
62)	Hexachlorobenzene	23.62	284	183173	62.95	ug		64
63)	Pentachlorophenol	24.26	266	170746	53.73	ug		54
64)	Phenanthrene	24.57	178	481373	52.94	ug		90
65)	Anthracene	24.70	178	485766	52.69	ug		90
66)	Benzidine	28.77	184	16665	21.42	ug	#	89
67)	Carbazole	25.35	167	301806	54.20	ug		96
68)	Di-n-butylphthalate	26.71	149	424445	59.04	ug		98
69)	Fluoranthene	28.15	202	445565	52.77	ug		86
71)	Pyrene	28.79	202	494233	57.85	ug		83
73)	Butylbenzylphthalate	31.15	149	301276	64.66	ug		59
74)	Benzo(a)anthracene	32.41	228	599774	56.67	ug		85
75)	3,3'-Dichlorobenzidine	32.55	252	283894	63.89	ug		67
76)	Chrysene	32.54	228	582099	54.78	ug		84
77)	bis(2-Ethylhexyl)phthalate	33.01	149	328885	63.63	ug		87
79)	Di-n-octylphthalate	34.74	149	419975	69.06	ug		96

424

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D Vial: 2
Acq On : 28 Feb 2003 10:25 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 28 11:21:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:21:23 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	Benzo(b)fluoranthene	35.45	252	475824	58.25	ug	98
81)	Benzo(k)fluoranthene	35.51	252	513330	57.11	ug	98
82)	Benzo(a)pyrene	36.26	252	452023	55.19	ug	78
83)	Indeno(1,2,3-cd)pyrene	39.23	276	456857	49.77	ug	73
84)	Dibenzo(a,h)anthracene	39.32	278	473861	51.02	ug	75
85)	Benzo(g,h,i)perylene	40.02	276	533234	47.23	ug	67

425

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Instrument ID: 5973 B Calibration Date: 03/17/03 Time: 15:59

Lab File ID: BS073 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.464	.500	8.4	25.0
n-Nitroso-di-n-propylamine	.494	.511	.500	-3.4	25.0
1,2,4-Trichlorobenzene	.683	.655	.200	4.1	25.0
Naphthalene	1.074	.991	.700	7.7	25.0
2-Methylnaphthalene	1.124	1.036	.400	7.8	25.0
Acenaphthylene	2.109	2.092	1.300	.8	25.0
Acenaphthene	2.356	2.380	.800	-1.0	25.0
Dibenzofuran	1.912	1.777	.800	7.1	25.0
2,4-Dinitrotoluene	.458	.451	.200	1.5	25.0
Fluorene	2.244	2.361	.900	-5.2	25.0
Phenanthrene	1.120	1.127	.700	-.6	25.0
Anthracene	1.135	1.015	.700	10.6	25.0
Fluoranthene	1.040	1.016	.600	2.3	25.0
Pyrene	1.033	.852	.600	17.5	25.0
Benzo(a)anthracene	1.280	1.166	.800	8.9	25.0
Chrysene	1.285	1.270	.700	1.2	25.0
Benzo(b)fluoranthene	.896	.868	.700	3.1	25.0
Benzo(k)fluoranthene	.986	.963	.700	2.3	25.0
Benzo(a)pyrene	.898	.888	.700	1.1	25.0
Indeno(1,2,3-cd)pyrene	1.006	.893	.500	11.2	25.0
Dibenzo(a,h)anthracene	1.018	.852	.400	16.3	25.0
Benzo(g,h,i)perylene	1.238	1.002	.500	19.1	25.0
Nitrobenzene-d5	.488	.401		17.8	
2-Fluorobiphenyl	1.551	1.462	.700	5.7	25.0
Terphenyl-d14	.745	.633	.500	15.0	25.0
Phenol-d5	1.025	1.040	.800	-1.5	25.0
2-Fluorophenol	.655	.586	.600	10.5	25.0
2,4,6-Tribromophenol	.296	.317		-7.1	

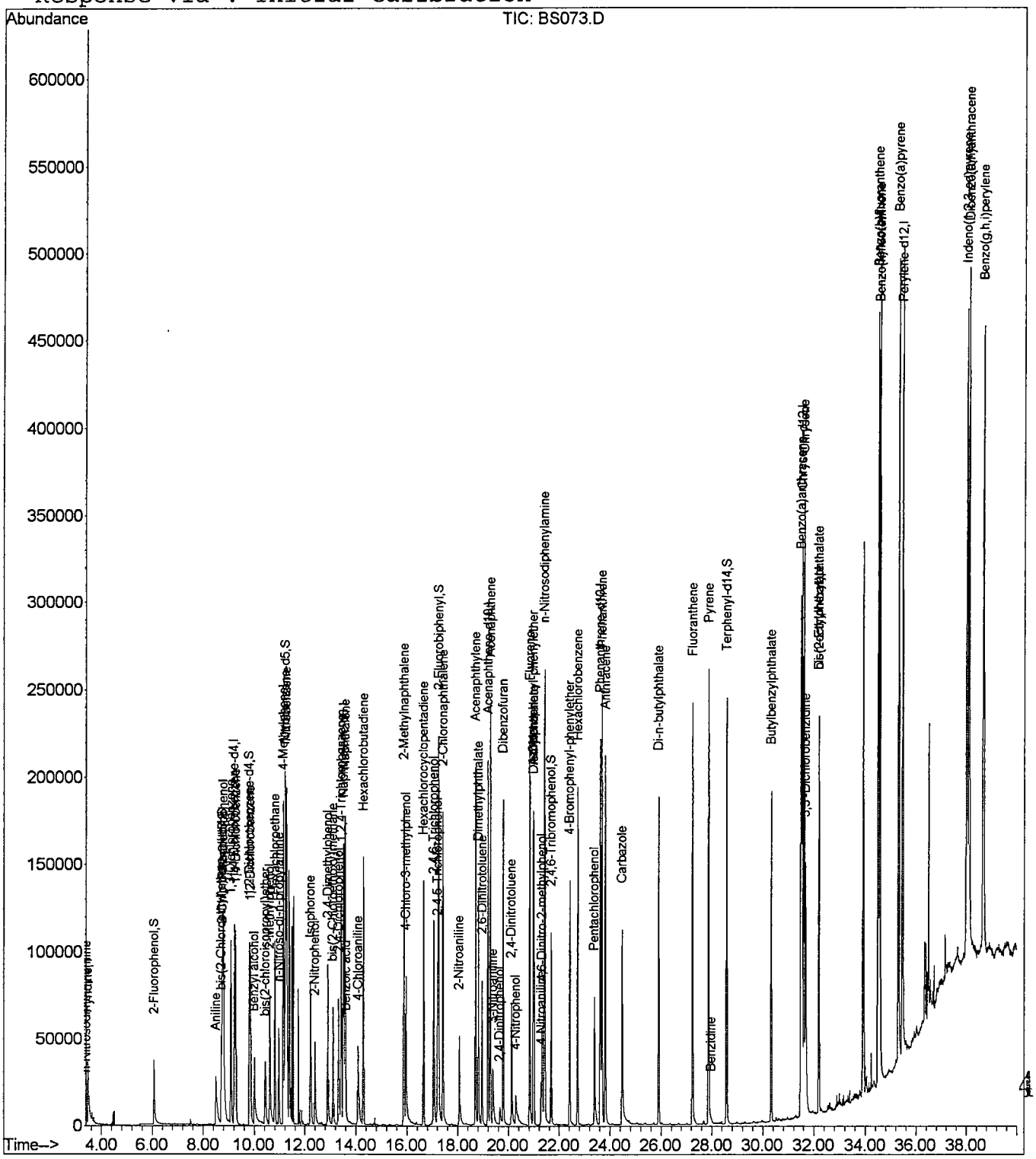
(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D Vial: 1
Acq On : 17 Mar 2003 3:59 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : gcms-b Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 17 17:19 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Initial Calibration



427

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D Vial: 1
Acq On : 17 Mar 2003 3:59 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : gcms-b Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 17 16:44:57 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 17 16:44:51 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.22	152	65206	40.00	ug	0.00
21) Naphthalene-d8	13.51	136	178036	40.00	ug	0.00
36) Acenaphthene-d10	19.19	164	107594	40.00	ug	0.00
56) Phenanthrene-d10	23.61	188	217182	40.00	ug	0.00
70) Chrysene-d12	31.53	240	300629	40.00	ug	0.00
78) Perylene-d12	35.47	264	468473	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.07	112	47769	44.75	ug	0.00
3) Phenol-d5	8.77	99	84752	50.72	ug	0.00
8) 2-Chlorophenol-d4	8.75	132	58913	52.84	ug	0.00
14) 1,2-Dichlorobenzene-d4	9.80	152	41483	49.39	ug	0.00
22) Nitrobenzene-d5	11.20	82	89191	41.06	ug	-0.08
40) 2-Fluorobiphenyl	17.24	172	196644	47.12	ug	0.01
59) 2,4,6-Tribromophenol	21.67	330	86029	53.45	ug	-0.07
72) Terphenyl-d14	28.58	244	237690	42.43	ug	-0.01
Target Compounds						Qvalue
4) Pyridine	3.46	79	58148m	47.92	ug	
5) n-Nitrosodimethylamine	3.39	74	8312m	16.86	ug	
6) Aniline	8.49	93	52518	36.06	ug	100
7) Phenol	8.80	94	89454	42.00	ug	76
9) bis(2-Chloroethyl)ether	8.70	93	77695	41.42	ug	69
10) 2-Chlorophenol	8.79	128	96764	45.07	ug	81
11) 1,3-Dichlorobenzene	9.09	146	119634	46.40	ug	68
12) 1,4-Dichlorobenzene	9.26	146	119289	45.76	ug	69
13) Benzyl alcohol	10.00	108	61133	45.24	ug	40
15) 1,2-Dichlorobenzene	9.84	146	117613	49.41	ug	69
16) 2-Methylphenol	10.61	108	85155	48.94	ug	59
17) bis(2-chloroisopropyl)ethe	10.42	45	77520	43.81	ug	67
18) 4-Methylphenol	11.15	108	94683	47.35	ug	37
19) n-Nitroso-di-n-propylamine	10.96	70	41666	51.76	ug	78
20) Hexachloroethane	10.81	117	72730	55.19	ug	39
23) Nitrobenzene	11.25	77	81769	43.78	ug	69
24) Isophorone	12.21	82	105798	46.34	ug	97
25) 2-Nitrophenol	12.38	139	49912m	38.26	ug	
26) 2,4-Dimethylphenol	12.89	107	115929	37.60	ug	47
27) bis(2-Chloroethoxy)methane	13.10	93	79924	41.11	ug	83
28) 2,4-Dichlorophenol	13.32	162	96892	38.75	ug	62
29) 1,2,4-Trichlorobenzene	13.42	180	145690	47.96	ug	51
30) Naphthalene	13.57	128	220473	46.13	ug	95
31) Benzoic acid	13.60	105	27730	48.96	ug	# 45

428

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D Vial: 1
Acq On : 17 Mar 2003 3:59 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : gcms-b Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 17 16:44:57 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 17 16:44:51 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
32)	4-Chloroaniline	14.09	127	75600	39.72	ug		86
33)	Hexachlorobutadiene	14.29	225	97865	50.64	ug		54
34)	4-Chloro-3-methylphenol	15.97	107	56165	41.20	ug		94
35)	2-Methylnaphthalene	15.88	142	230537	46.06	ug		59
37)	Hexachlorocyclopentadiene	16.65	237	94953	59.55	ug		68
38)	2,4,6-Trichlorophenol	17.05	196	104410	51.28	ug		50
39)	2,4,5-Trichlorophenol	17.19	196	94659	46.49	ug		50
41)	2-Chloronaphthalene	17.41	162	211522	46.48	ug	#	22
42)	2-Nitroaniline	18.05	65	73779	41.06	ug		36
43)	Dimethylphthalate	18.81	163	158561	49.73	ug		96
44)	Acenaphthylene	18.69	152	281370	49.60	ug		90
45)	2,6-Dinitrotoluene	18.95	165	49794	50.14	ug		71
46)	3-Nitroaniline	19.38	138	46606	38.59	ug		43
47)	Acenaphthene	19.28	153	320153	50.52	ug		48
48)	2,4-Dinitrophenol	19.66	184	9271	21.72	ug		50
49)	4-Nitrophenol	20.28	109	36828	37.80	ug		85
50)	Dibenzofuran	19.79	168	238956	46.46	ug		81
51)	2,4-Dinitrotoluene	20.11	165	60639	49.27	ug		59
52)	Diethylphthalate	21.00	149	175905	52.76	ug		88
53)	Fluorene	20.83	166	317585	52.61	ug		54
54)	4-Chlorophenyl-phenylether	20.97	204	135589	50.17	ug		69
55)	4-Nitroaniline	21.28	138	43655m	43.13	ug		
57)	4,6-Dinitro-2-methylphenol	21.31	198	38368	47.30	ug	#	100
58)	n-Nitrosodiphenylamine	21.41	169	159994	45.84	ug		70
60)	Azobenzene	20.97	77	24282	54.71	ug	#	86
61)	4-Bromophenyl-phenylether	22.41	248	135114	50.17	ug		40
62)	Hexachlorobenzene	22.72	284	103968	53.44	ug		65
63)	Pentachlorophenol	23.39	266	62226m	29.29	ug		
64)	Phenanthrene	23.67	178	305857	50.31	ug		90
65)	Anthracene	23.81	178	275658	44.72	ug		90
66)	Benzidine	27.96	184	8221m	15.80	ug		
67)	Carbazole	24.47	167	144052	38.69	ug		97
68)	Di-n-butylphthalate	25.91	149	271298	56.45	ug		98
69)	Fluoranthene	27.24	202	275828	48.86	ug		96
71)	Pyrene	27.86	202	320246	41.25	ug		100
73)	Butylbenzylphthalate	30.32	149	206401	48.75	ug		64
74)	Benzo(a)anthracene	31.48	228	438082	45.55	ug		85
75)	3,3'-Dichlorobenzidine	31.67	252	176576	43.73	ug		65
76)	Chrysene	31.61	228	477275	49.43	ug		84
77)	bis(2-Ethylhexyl)phthalate	32.18	149	247668	52.73	ug		84
79)	Di-n-octylphthalate	32.18	149	198091	25.37	ug		97

429

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D Vial: 1
Acq On : 17 Mar 2003 3:59 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : gcms-b Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 17 16:44:57 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 17 16:44:51 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
80)	Benzo(b)fluoranthene	34.50	252	508493	48.47	ug	97
81)	Benzo(k)fluoranthene	34.57	252	563941	48.86	ug	97
82)	Benzo(a)pyrene	35.31	252	519934	49.43	ug	97
83)	Indeno(1,2,3-cd)pyrene	38.01	276	522855	44.36	ug	93
84)	Dibenzo(a,h)anthracene	38.09	278	498939	41.83	ug	96
85)	Benzo(g,h,i)perylene	38.68	276	586849	40.48	ug	92

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Instrument ID: 5973 B Calibration Date: 03/18/03 Time: 18:39

Lab File ID: BS074 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.520	.500	4.9	25.0
n-Nitroso-di-n-propylamine	.494	.472	.500	4.5	25.0
1,2,4-Trichlorobenzene	.683	.649	.200	5.0	25.0
Naphthalene	1.074	1.015	.700	5.5	25.0
2-Methylnaphthalene	1.124	1.004	.400	10.7	25.0
Acenaphthylene	2.109	2.029	1.300	3.8	25.0
Acenaphthene	2.356	2.286	.800	3.0	25.0
Dibenzofuran	1.912	1.792	.800	6.3	25.0
2,4-Dinitrotoluene	.458	.433	.200	5.5	25.0
Fluorene	2.244	2.276	.900	-1.4	25.0
Phenanthrene	1.120	1.113	.700	.6	25.0
Anthracene	1.135	1.161	.700	-2.3	25.0
Fluoranthene	1.040	.982	.600	5.6	25.0
Pyrene	1.033	.957	.600	7.4	25.0
Benzo(a)anthracene	1.280	1.188	.800	7.2	25.0
Chrysene	1.285	1.175	.700	8.6	25.0
Benzo(b)fluoranthene	.896	.873	.700	2.6	25.0
Benzo(k)fluoranthene	.986	.981	.700	.5	25.0
Benzo(a)pyrene	.898	.876	.700	2.4	25.0
Indeno(1,2,3-cd)pyrene	1.006	1.022	.500	-1.6	25.0
Dibenzo(a,h)anthracene	1.018	.971	.400	4.6	25.0
Benzo(g,h,i)perylene	1.238	1.196	.500	3.4	25.0
Nitrobenzene-d5	.488	.395		19.1	
2-Fluorobiphenyl	1.551	1.403	.700	9.5	25.0
Terphenyl-d14	.745	.627	.500	15.8	25.0
Phenol-d5	1.025	1.033	.800	-.8	25.0
2-Fluorophenol	.655	.580	.600	11.5	25.0
2,4,6-Tribromophenol	.296	.306		-3.4	

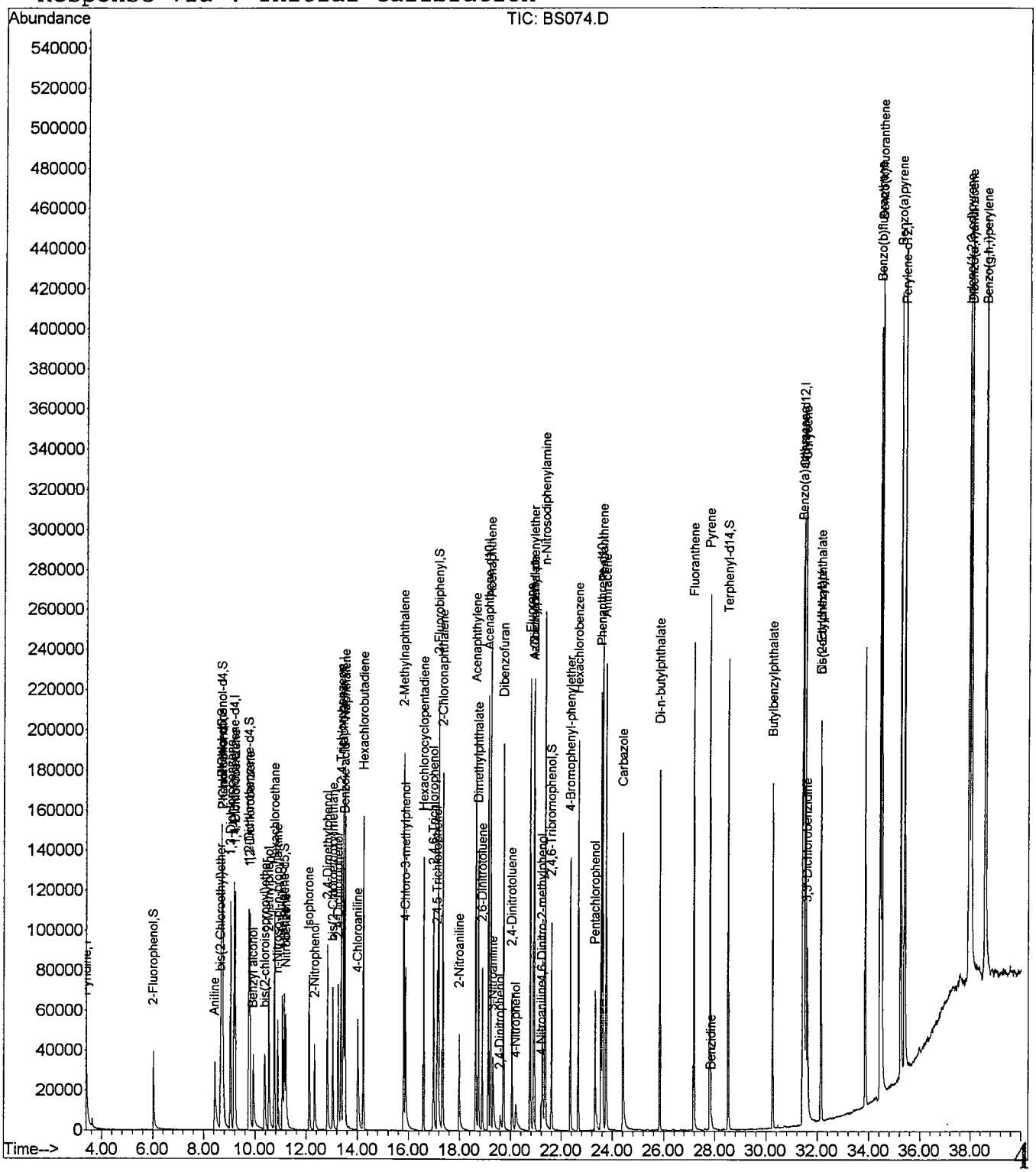
(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D Vial: 2
Acq On : 18 Mar 2003 6:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 9:41 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D Vial: 2
Acq On : 18 Mar 2003 6:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 09:40:51 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.16	152	70859	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	186040	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	111672	40.00	ug	0.00
56) Phenanthrene-d10	23.55	188	215062	40.00	ug	0.00
70) Chrysene-d12	31.47	240	275311	40.00	ug	0.00
78) Perylene-d12	35.40	264	403294	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.02	112	51343	44.26	ug	0.00
3) Phenol-d5	8.69	99	91467	50.37	ug	0.00
8) 2-Chlorophenol-d4	8.68	132	62326	51.45	ug	0.00
14) 1,2-Dichlorobenzene-d4	9.74	152	43835	48.03	ug	0.00
22) Nitrobenzene-d5	11.13	82	91854	40.47	ug	0.00
40) 2-Fluorobiphenyl	17.17	172	195788	45.20	ug	0.00
59) 2,4,6-Tribromophenol	21.61	330	82242	51.60	ug	0.00
72) Terphenyl-d14	28.52	244	215938	42.10	ug	0.00
Target Compounds						Qvalue
4) Pyridine	3.40	79	53759	40.77	ug	93
6) Aniline	8.43	93	60681	38.34	ug	100
7) Phenol	8.72	94	95026	41.06	ug	78
9) bis(2-Chloroethyl)ether	8.65	93	80461	39.47	ug	69
10) 2-Chlorophenol	8.72	128	103163	44.22	ug	80
11) 1,3-Dichlorobenzene	9.03	146	128914	46.01	ug	68
12) 1,4-Dichlorobenzene	9.21	146	134647	47.53	ug	69
13) Benzyl alcohol	9.93	108	59959	40.83	ug	39
15) 1,2-Dichlorobenzene	9.79	146	126408	48.87	ug	69
16) 2-Methylphenol	10.53	108	91076	48.17	ug	59
17) bis(2-chloroisopropyl)ethe	10.37	45	82406	42.85	ug	66
18) 4-Methylphenol	11.06	108	98894	45.51	ug	39
19) n-Nitroso-di-n-propylamine	10.88	70	41822	47.81	ug	76
20) Hexachloroethane	10.75	117	77070	53.82	ug	39
23) Nitrobenzene	11.19	77	81331	41.67	ug	70
24) Isophorone	12.11	82	102584	43.00	ug	96
25) 2-Nitrophenol	12.32	139	46660	34.23	ug	69
26) 2,4-Dimethylphenol	12.82	107	119448	37.08	ug	48
27) bis(2-Chloroethoxy)methane	13.03	93	86481	42.57	ug	83
28) 2,4-Dichlorophenol	13.23	162	97668	37.38	ug	62
29) 1,2,4-Trichlorobenzene	13.35	180	151010	47.57	ug	51
30) Naphthalene	13.50	128	236154	47.29	ug	94
31) Benzoic acid	13.49	105	19938	33.69	ug	74
32) 4-Chloroaniline	14.00	127	89526	45.02	ug	87

4#3

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D Vial: 2
Acq On : 18 Mar 2003 6:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 09:40:51 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	Hexachlorobutadiene	14.23	225	98374	48.72	ug		54
34)	4-Chloro-3-methylphenol	15.88	107	57117	40.10	ug		93
35)	2-Methylnaphthalene	15.81	142	233473	44.64	ug		59
37)	Hexachlorocyclopentadiene	16.59	237	87495	52.86	ug		67
38)	2,4,6-Trichlorophenol	16.98	196	103604	49.03	ug		52
39)	2,4,5-Trichlorophenol	17.12	196	93203	44.10	ug		49
41)	2-Chloronaphthalene	17.34	162	220871	46.76	ug	#	22
42)	2-Nitroaniline	17.98	65	70979	38.06	ug		36
43)	Dimethylphthalate	18.73	163	167944	50.75	ug		96
44)	Acenaphthylene	18.63	152	283255	48.11	ug		90
45)	2,6-Dinitrotoluene	18.89	165	49145	47.68	ug		70
46)	3-Nitroaniline	19.30	138	52188	41.63	ug		44
47)	Acenaphthene	19.22	153	319070	48.51	ug		48
48)	2,4-Dinitrophenol	19.59	184	9563	21.58	ug		48
49)	4-Nitrophenol	20.20	109	33542	33.17	ug		88
50)	Dibenzofuran	19.72	168	250187	46.87	ug		80
51)	2,4-Dinitrotoluene	20.05	165	60461	47.33	ug		58
52)	Diethylphthalate	20.93	149	188911	54.59	ug		88
53)	Fluorene	20.77	166	317729	50.71	ug		54
54)	4-Chlorophenyl-phenylether	20.90	204	142314	50.73	ug		68
55)	4-Nitroaniline	21.21	138	32779	31.20	ug		69
57)	4,6-Dinitro-2-methylphenol	21.25	198	37679	46.90	ug	#	100
58)	n-Nitrosodiphenylamine	21.34	169	159781	46.23	ug		70
60)	Azobenzene	20.90	77	25656	58.38	ug	#	87
61)	4-Bromophenyl-phenylether	22.35	248	129844	48.69	ug		40
62)	Hexachlorobenzene	22.66	284	100324	52.08	ug		66
63)	Pentachlorophenol	23.32	266	63267m	30.07	ug		
64)	Phenanthrene	23.61	178	299263	49.71	ug		90
65)	Anthracene	23.74	178	312023	51.12	ug		90
66)	Benzidine	27.86	184	8117	15.76	ug	#	79
67)	Carbazole	24.40	167	180700	49.02	ug		97
68)	Di-n-butylphthalate	25.84	149	254278	53.43	ug		98
69)	Fluoranthene	27.17	202	264018	47.23	ug		98
71)	Pyrene	27.80	202	329472	46.34	ug		94
73)	Butylbenzylphthalate	30.26	149	177440	45.77	ug		63
74)	Benzo(a)anthracene	31.42	228	408747	46.41	ug		85
75)	3,3'-Dichlorobenzidine	31.60	252	118338	32.00	ug		66
76)	Chrysene	31.54	228	404267	45.72	ug		84
77)	bis(2-Ethylhexyl)phthalate	32.13	149	218756	50.86	ug		83
79)	Di-n-octylphthalate	32.13	149	177258	26.37	ug		97
80)	Benzo(b)fluoranthene	34.44	252	439926	48.71	ug		95

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(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D Vial: 2
Acq On : 18 Mar 2003 6:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 09:40:51 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Benzo(k)fluoranthene	34.50	252	494730	49.79	ug	94
82)	Benzo(a)pyrene	35.24	252	441662	48.78	ug	100
83)	Indeno(1,2,3-cd)pyrene	37.94	276	515118	50.76	ug	97
84)	Dibenzo(a,h)anthracene	38.02	278	489345	47.66	ug	98
85)	Benzo(g,h,i)perylene	38.59	276	603020	48.32	ug	95

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Instrument ID: 5973 B Calibration Date: 03/19/03 Time: 09:35

Lab File ID: BS075 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

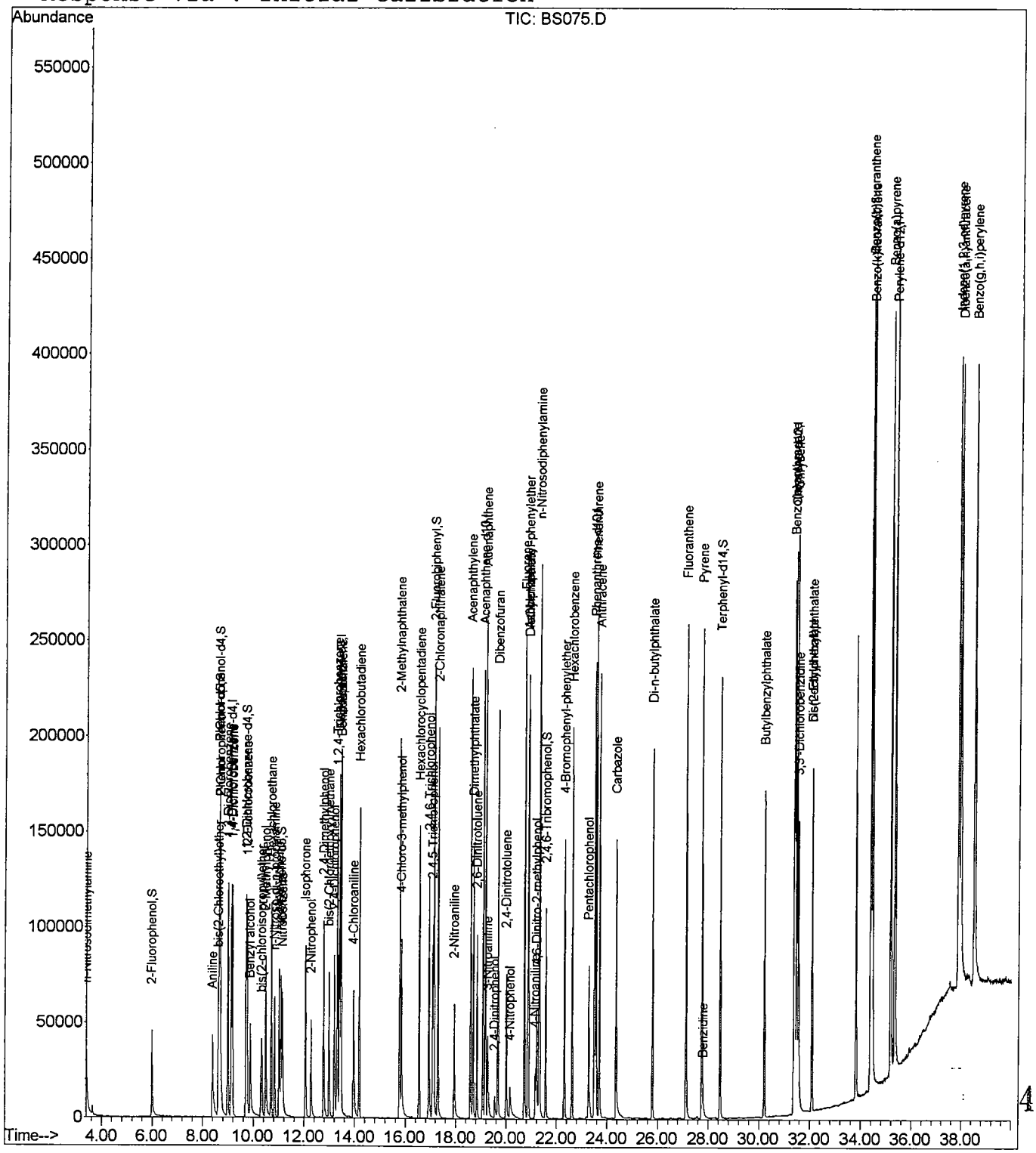
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.553	.500	2.9	25.0
n-Nitroso-di-n-propylamine	.494	.532	.500	-7.7	25.0
1,2,4-Trichlorobenzene	.683	.699	.200	-2.3	25.0
Naphthalene	1.074	1.004	.700	6.5	25.0
2-Methylnaphthalene	1.124	1.011	.400	10.1	25.0
Acenaphthylene	2.109	2.025	1.300	4.0	25.0
Acenaphthene	2.356	2.312	.800	1.9	25.0
Dibenzofuran	1.912	1.766	.800	7.6	25.0
2,4-Dinitrotoluene	.458	.434	.200	5.2	25.0
Fluorene	2.244	2.248	.900	-.2	25.0
Phenanthrene	1.120	1.100	.700	1.8	25.0
Anthracene	1.135	.984	.700	13.3	25.0
Fluoranthene	1.040	.923	.600	11.2	25.0
Pyrene	1.033	.986	.600	4.5	25.0
Benzo(a)anthracene	1.280	1.243	.800	2.9	25.0
Chrysene	1.285	1.283	.700	.2	25.0
Benzo(b)fluoranthene	.896	.888	.700	.9	25.0
Benzo(k)fluoranthene	.986	.909	.700	7.8	25.0
Benzo(a)pyrene	.898	.789	.700	12.1	25.0
Indeno(1,2,3-cd)pyrene	1.006	.824	.500	18.1	25.0
Dibenzo(a,h)anthracene	1.018	.799	.400	21.5	25.0
Benzo(g,h,i)perylene	1.238	.943	.500	23.8	25.0
Nitrobenzene-d5	.488	.426		12.7	
2-Fluorobiphenyl	1.551	1.400	.700	9.7	25.0
Terphenyl-d14	.745	.697	.500	6.4	25.0
Phenol-d5	1.025	1.091	.800	-6.4	25.0
2-Fluorophenol	.655	.651	.600	.6	25.0
2,4,6-Tribromophenol	.296	.295		.3	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS075.D Vial: 2
Acq On : 19 Mar 2003 9:35 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 10:43 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Initial Calibration



437

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS075.D Vial: 2
Acq On : 19 Mar 2003 9:35 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 10:25:42 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:41:44 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.12	152	71405	40.00	ug	-0.05
21) Naphthalene-d8	13.39	136	197149	40.00	ug	-0.05
36) Acenaphthene-d10	19.07	164	126590	40.00	ug	-0.05
56) Phenanthrene-d10	23.49	188	243086	40.00	ug	-0.05
70) Chrysene-d12	31.41	240	254537	40.00	ug	-0.06
78) Perylene-d12	35.34	264	440087	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	5.98	112	58088	49.69	ug	-0.04
3) Phenol-d5	8.64	99	97404	53.23	ug	-0.05
8) 2-Chlorophenol-d4	8.63	132	65613	53.74	ug	-0.05
14) 1,2-Dichlorobenzene-d4	9.70	152	46022	50.04	ug	-0.05
22) Nitrobenzene-d5	11.08	82	104927	43.62	ug	-0.05
40) 2-Fluorobiphenyl	17.12	172	221601	45.13	ug	-0.05
59) 2,4,6-Tribromophenol	21.55	330	89508	49.68	ug	-0.05
72) Terphenyl-d14	28.46	244	221677	46.74	ug	-0.06
Target Compounds						Qvalue
5) n-Nitrosodimethylamine	3.38	74	4864m	9.01	ug	
6) Aniline	8.38	93	65084	40.81	ug	100
7) Phenol	8.67	94	107069	45.91	ug	77
9) bis(2-Chloroethyl)ether	8.61	93	84954	41.35	ug	69
10) 2-Chlorophenol	8.67	128	109525	46.59	ug	80
11) 1,3-Dichlorobenzene	8.99	146	136977	48.51	ug	68
12) 1,4-Dichlorobenzene	9.17	146	138577	48.54	ug	70
13) Benzyl alcohol	9.87	108	72524	49.01	ug	39
15) 1,2-Dichlorobenzene	9.74	146	131863	50.59	ug	69
16) 2-Methylphenol	10.48	108	97543	51.20	ug	62
17) bis(2-chloroisopropyl)ethe	10.31	45	89052	45.96	ug	65
18) 4-Methylphenol	11.01	108	111748	51.03	ug	39
19) n-Nitroso-di-n-propylamine	10.83	70	47514	53.90	ug	75
20) Hexachloroethane	10.70	117	79928	55.39	ug	38
23) Nitrobenzene	11.14	77	91472	44.23	ug	69
24) Isophorone	12.04	82	118923	47.04	ug	96
25) 2-Nitrophenol	12.26	139	55040	38.10	ug	69
26) 2,4-Dimethylphenol	12.76	107	135470	39.68	ug	48
27) bis(2-Chloroethoxy)methane	12.98	93	95112	44.18	ug	83
28) 2,4-Dichlorophenol	13.18	162	107920	38.97	ug	62
29) 1,2,4-Trichlorobenzene	13.30	180	172219	51.20	ug	51
30) Naphthalene	13.45	128	247481	46.76	ug	94
31) Benzoic acid	13.44	105	28695	45.75	ug	# 83
32) 4-Chloroaniline	13.95	127	99024	46.99	ug	86

438

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS075.D Vial: 2
Acq On : 19 Mar 2003 9:35 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 10:25:42 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:41:44 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	Hexachlorobutadiene	14.18	225	105228	49.17	ug		54
34)	4-Chloro-3-methylphenol	15.83	107	63666	42.18	ug		94
35)	2-Methylnaphthalene	15.77	142	249247	44.97	ug		59
37)	Hexachlorocyclopentadiene	16.54	237	100584	53.61	ug		68
38)	2,4,6-Trichlorophenol	16.92	196	109996	45.92	ug		52
39)	2,4,5-Trichlorophenol	17.07	196	113097	47.21	ug		50
41)	2-Chloronaphthalene	17.29	162	245648	45.88	ug	#	23
42)	2-Nitroaniline	17.93	65	83401	39.45	ug		36
43)	Dimethylphthalate	18.69	163	167027	44.53	ug		95
44)	Acenaphthylene	18.58	152	320428	48.01	ug		90
45)	2,6-Dinitrotoluene	18.84	165	58375	49.96	ug		69
46)	3-Nitroaniline	19.26	138	55710	39.20	ug		44
47)	Acenaphthene	19.16	153	365846	49.07	ug		48
48)	2,4-Dinitrophenol	19.54	184	12045	23.98	ug		49
49)	4-Nitrophenol	20.14	109	36131m	31.52	ug		
50)	Dibenzofuran	19.67	168	279451	46.18	ug		80
51)	2,4-Dinitrotoluene	20.00	165	68674	47.42	ug		58
52)	Diethylphthalate	20.87	149	194929	49.69	ug		88
53)	Fluorene	20.71	166	355735	50.08	ug		54
54)	4-Chlorophenyl-phenylether	20.85	204	145508	45.76	ug		68
55)	4-Nitroaniline	21.14	138	43482	36.51	ug		66
57)	4,6-Dinitro-2-methylphenol	21.20	198	40297	44.38	ug	#	100
58)	n-Nitrosodiphenylamine	21.30	169	187051	47.88	ug		70
60)	Azobenzene	20.85	77	26014	52.37	ug	#	85
61)	4-Bromophenyl-phenylether	22.30	248	143766	47.69	ug		40
62)	Hexachlorobenzene	22.61	284	109986	50.51	ug		66
63)	Pentachlorophenol	23.27	266	72964m	30.68	ug		
64)	Phenanthrene	23.56	178	334240	49.12	ug		90
65)	Anthracene	23.69	178	299065	43.35	ug		91
66)	Benzidine	27.80	184	12017	20.64	ug	#	82
67)	Carbazole	24.35	167	170148	40.83	ug		97
68)	Di-n-butylphthalate	25.79	149	285572	53.09	ug		98
69)	Fluoranthene	27.11	202	280606	44.41	ug		98
71)	Pyrene	27.74	202	313855	47.75	ug		94
73)	Butylbenzylphthalate	30.20	149	190801	53.23	ug		64
74)	Benzo(a)anthracene	31.37	228	395627	48.59	ug		85
75)	3,3'-Dichlorobenzidine	31.54	252	180947	52.93	ug		65
76)	Chrysene	31.48	228	408080	49.92	ug		84
77)	bis(2-Ethylhexyl)phthalate	32.08	149	198924	50.02	ug		83
79)	Di-n-octylphthalate	32.08	149	161635	22.03	ug		97
80)	Benzo(b)fluoranthene	34.39	252	488546	49.58	ug		96

439

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS075.D Vial: 2
Acq On : 19 Mar 2003 9:35 am Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 10:25:42 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:41:44 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
81)	Benzo(k)fluoranthene	34.45	252	500190	46.13	ug	92
82)	Benzo(a)pyrene	35.19	252	433934	43.92	ug	99
83)	Indeno(1,2,3-cd)pyrene	37.87	276	453326	40.94	ug	97
84)	Dibenzo(a,h)anthracene	37.96	278	439807m	39.25	ug	
85)	Benzo(g,h,i)perylene	38.52	276	518915	38.10	ug	96

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Instrument ID: 5973 B Calibration Date: 03/24/03 Time: 12:39

Lab File ID: BS080 Init. Calib. Date(s): 12/17/02 12/17/02

Init. Calib. Times: 11:20 14:01

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.599	1.555	.500	2.8	25.0
n-Nitroso-di-n-propylamine	.494	.404	.500	18.2	25.0
1,2,4-Trichlorobenzene	.683	.775	.200	-13.5	25.0
Naphthalene	1.074	1.079	.700	-.5	25.0
2-Methylnaphthalene	1.124	1.076	.400	4.3	25.0
Acenaphthylene	2.109	2.113	1.300	-.2	25.0
Acenaphthene	2.356	2.076	.800	11.9	25.0
Dibenzofuran	1.912	1.847	.800	3.4	25.0
2,4-Dinitrotoluene	.458	.409	.200	10.7	25.0
Fluorene	2.244	1.954	.900	12.9	25.0
Phenanthrene	1.120	1.104	.700	1.4	25.0
Anthracene	1.135	1.252	.700	-10.3	25.0
Fluoranthene	1.040	1.045	.600	-.5	25.0
Pyrene	1.033	1.365	.600	-32.1	25.0
Benzo(a)anthracene	1.280	1.202	.800	6.1	25.0
Chrysene	1.285	1.399	.700	-8.9	25.0
Benzo(b)fluoranthene	.896	.922	.700	-2.9	25.0
Benzo(k)fluoranthene	.986	.978	.700	.8	25.0
Benzo(a)pyrene	.898	.930	.700	-3.6	25.0
Indeno(1,2,3-cd)pyrene	1.006	.888	.500	11.7	25.0
Dibenzo(a,h)anthracene	1.018	1.000	.400	1.8	25.0
Benzo(g,h,i)perylene	1.238	1.253	.500	-1.2	25.0
Nitrobenzene-d5	.488	.445		8.8	
2-Fluorobiphenyl	1.551	1.569	.700	-1.2	25.0
Terphenyl-d14	.745	1.027	.500	-37.9	25.0
Phenol-d5	1.025	.955	.800	6.8	25.0
2-Fluorophenol	.655	.726	.600	-10.8	25.0
2,4,6-Tribromophenol	.296	.367		-24.0	

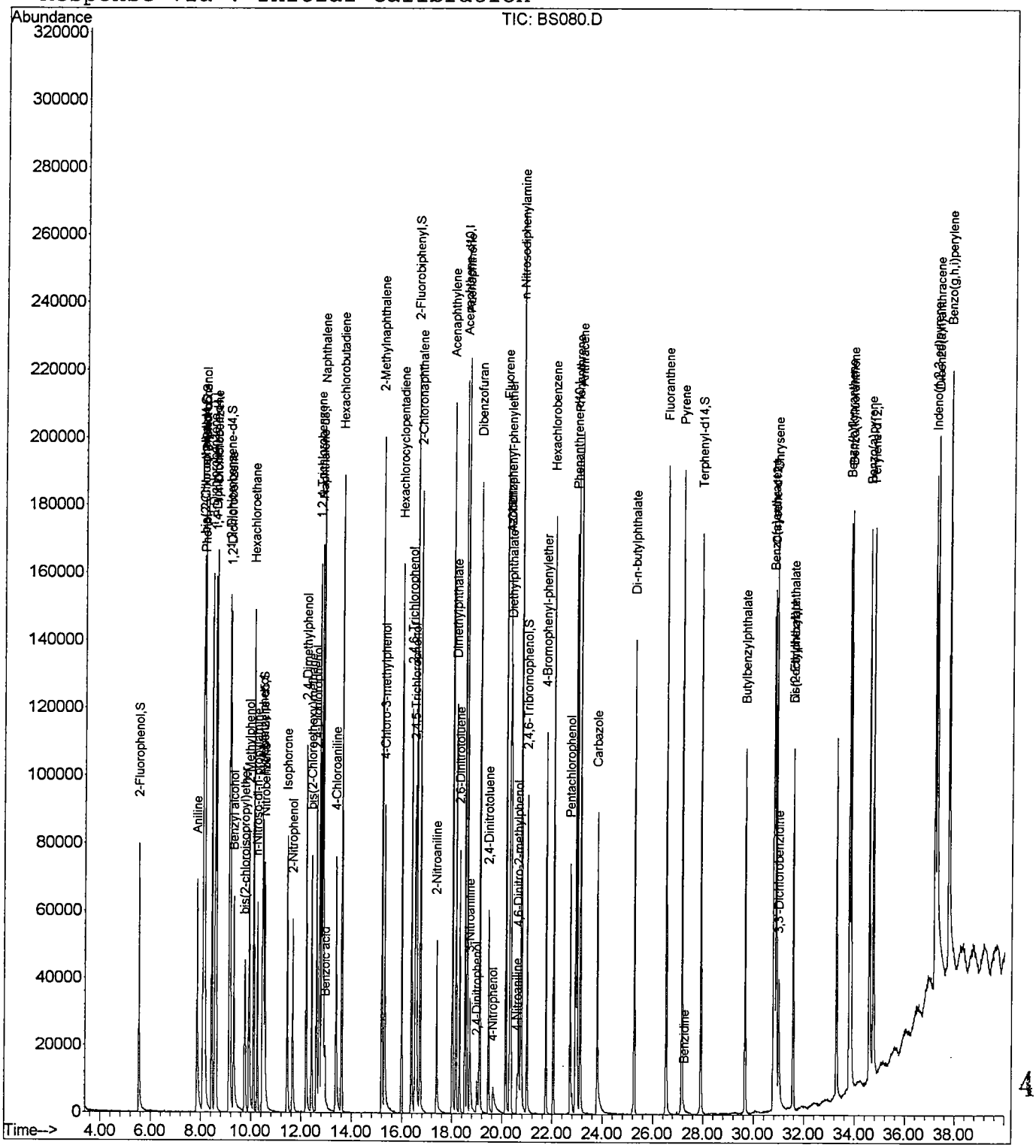
(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of .010.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS080.D Vial: 1
Acq On : 24 Mar 2003 12:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 13:20 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 14:40:24 2003
Response via : Initial Calibration



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Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS080.D Vial: 1
Acq On : 24 Mar 2003 12:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 13:20:17 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.56	152	96926	40.00	ug		-0.07
21) Naphthalene-d8	12.79	136	206498	40.00	ug		-0.07
36) Acenaphthene-d10	18.51	164	117787	40.00	ug		-0.06
56) Phenanthrene-d10	22.92	188	181143	40.00	ug		-0.05
70) Chrysene-d12	30.81	240	146326	40.00	ug		-0.07
78) Perylene-d12	34.74	264	181635	40.00	ug		-0.06
System Monitoring Compounds							
2) 2-Fluorophenol	5.53	112	87938	55.42	ug		-0.14
3) Phenol-d5	8.12	99	115694	46.58	ug		-0.06
8) 2-Chlorophenol-d4	8.09	132	88073	53.15	ug		-0.08
14) 1,2-Dichlorobenzene-d4	9.12	152	63165	50.60	ug		-0.05
22) Nitrobenzene-d5	10.48	82	114763	45.55	ug		-0.17
40) 2-Fluorobiphenyl	16.58	172	230983	50.56	ug		-0.10
59) 2,4,6-Tribromophenol	20.99	330	83103	61.90	ug		-0.09
72) Terphenyl-d14	27.91	244	187927	68.93	ug		-0.08
Target Compounds							Qvalue
6) Aniline	7.85	93	88237	40.76	ug		94
7) Phenol	8.15	94	123843	39.12	ug		76
9) bis(2-Chloroethyl)ether	8.08	93	104050	37.31	ug		68
10) 2-Chlorophenol	8.13	128	139067	43.58	ug		79
11) 1,3-Dichlorobenzene	8.43	146	178544	46.59	ug		68
12) 1,4-Dichlorobenzene	8.60	146	188428	48.62	ug		70
13) Benzyl alcohol	9.30	108	89995	44.81	ug		39
15) 1,2-Dichlorobenzene	9.16	146	176161	49.79	ug		70
16) 2-Methylphenol	9.91	108	115304	44.58	ug		60
17) bis(2-chloroisopropyl)ethe	9.75	45	94469	35.91	ug		66
18) 4-Methylphenol	10.44	108	132306	44.51	ug		40
19) n-Nitroso-di-n-propylamine	10.25	70	48895	40.86	ug		75
20) Hexachloroethane	10.10	117	109703	56.01	ug		39
23) Nitrobenzene	10.54	77	103437	47.75	ug		70
24) Isophorone	11.43	82	121143	45.74	ug		96
25) 2-Nitrophenol	11.65	139	63336	41.86	ug		68
26) 2,4-Dimethylphenol	12.19	107	149316	41.76	ug		48
27) bis(2-Chloroethoxy)methane	12.41	93	98322	43.61	ug		83
28) 2,4-Dichlorophenol	12.59	162	129435	44.63	ug		62
29) 1,2,4-Trichlorobenzene	12.71	180	200075	56.78	ug		51
30) Naphthalene	12.86	128	278455	50.23	ug		94
31) Benzoic acid	12.95	105	37821	57.57	ug	#	46
32) 4-Chloroaniline	13.38	127	110189	49.92	ug		87
33) Hexachlorobutadiene	13.61	225	133535	59.58	ug		54

443

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS080.D Vial: 1
Acq On : 24 Mar 2003 12:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 13:20:17 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	4-Chloro-3-methylphenol	15.31	107	65125	41.19	ug		96
35)	2-Methylnaphthalene	15.20	142	277745	47.84	ug		58
37)	Hexachlorocyclopentadiene	15.99	237	118111	67.66	ug		67
38)	2,4,6-Trichlorophenol	16.38	196	115570	51.85	ug		52
39)	2,4,5-Trichlorophenol	16.52	196	121337	54.44	ug		50
41)	2-Chloronaphthalene	16.72	162	238244	47.82	ug	#	23
42)	2-Nitroaniline	17.38	65	73922	37.58	ug		37
43)	Dimethylphthalate	18.16	163	158772	45.49	ug		95
44)	Acenaphthylene	18.01	152	311079	50.09	ug		90
45)	2,6-Dinitrotoluene	18.30	165	49904	45.90	ug		69
46)	3-Nitroaniline	18.71	138	51452	38.91	ug		42
47)	Acenaphthene	18.60	153	305730	44.07	ug		48
48)	2,4-Dinitrophenol	19.00	184	10593	22.67	ug		46
49)	4-Nitrophenol	19.64	109	21397	20.06	ug		89
50)	Dibenzofuran	19.11	168	271944	48.30	ug		79
51)	2,4-Dinitrotoluene	19.46	165	60165	44.65	ug		56
52)	Diethylphthalate	20.35	149	190536	52.20	ug		87
53)	Fluorene	20.15	166	287704	43.53	ug		54
54)	4-Chlorophenyl-phenylether	20.31	204	148591	50.22	ug		68
55)	4-Nitroaniline	20.60	138	24009	21.67	ug		66
57)	4,6-Dinitro-2-methylphenol	20.65	198	35497	52.46	ug	#	100
58)	n-Nitrosodiphenylamine	20.75	169	162611	55.86	ug		70
60)	Azobenzene	20.31	77	24680	66.67	ug	#	83
61)	4-Bromophenyl-phenylether	21.74	248	117755	52.42	ug		40
62)	Hexachlorobenzene	22.04	284	98956	60.99	ug		66
63)	Pentachlorophenol	22.71	266	70783	39.95	ug		53
64)	Phenanthrene	22.98	178	249882	49.28	ug		90
65)	Anthracene	23.11	178	283444	55.13	ug		91
66)	Benzidine	27.27	184	3708	8.55	ug	#	79
67)	Carbazole	23.79	167	123371	39.73	ug		94
68)	Di-n-butylphthalate	25.26	149	245006	61.12	ug		97
69)	Fluoranthene	26.53	202	236521	50.23	ug		96
71)	Pyrene	27.16	202	249623	66.06	ug		92
73)	Butylbenzylphthalate	29.66	149	140178	68.03	ug		62
74)	Benzo(a)anthracene	30.77	228	219921	46.98	ug		85
75)	3,3'-Dichlorobenzidine	30.98	252	73454	37.37	ug		65
76)	Chrysene	30.88	228	255877	54.44	ug		84
77)	bis(2-Ethylhexyl)phthalate	31.55	149	142636	62.39	ug		82
79)	Di-n-octylphthalate	31.55	149	116651	38.53	ug		97
80)	Benzo(b)fluoranthene	33.78	252	209230	51.44	ug		95
81)	Benzo(k)fluoranthene	33.85	252	222084	49.62	ug		90

444

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BS080.D Vial: 1
Acq On : 24 Mar 2003 12:39 pm Operator:
Sample : SSTD050 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 13:20:17 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Initial Calibration
DataAcq Meth : METHPS

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Benzo(a)pyrene	34.57	252	211178	51.78	ug	95
83)	Indeno(1,2,3-cd)pyrene	37.19	276	201563	44.10	ug	89
84)	Dibenzo(a,h)anthracene	37.28	278	227027	49.09	ug	89
85)	Benzo(g,h,i)perylene	37.76	276	284590	50.63	ug	89

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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	100487.	10.11	239201.	14.42	158142.	20.07
	UPPER LIMIT	200974.	10.61	478402.	14.92	316284.	20.57
	LOWER LIMIT	50244.	9.61	119601.	13.92	79071.	19.57
	EPA SAMPLE NO.						
1	WBLK01	129051.	10.07	321373.	14.37	203995.	20.03
2	MEGDIM0117	71067.	10.06	175742.	14.36	115894.	20.01
3	MEGDD0243	91466.	10.06	226637.	14.37	148853.	20.01
4	MEGDD0238	76027.	10.06	187667.	14.37	118993.	20.02
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS047 Date Analyzed: 02/28/03
Instrument ID: 5973 B Time Analyzed: 10:25

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	324856.		24.51		330846.		32.47		364804.		36.41	
	UPPER LIMIT	649712.		25.01		661692.		32.97		729608.		36.91	
	LOWER LIMIT	162428.		24.01		165423.		31.97		182402.		35.91	
	EPA SAMPLE NO.												
1	WBLK01	411442.		24.46		456758.		32.42		571066.		36.37	
2	MEGDIM0117	230282.		24.46		257032.		32.41		294572.		36.37	
3	MEGDD0243	300186.		24.46		331729.		32.41		376358.		36.37	
4	MEGDD0238	247105.		24.46		263548.		32.41		311390.		36.37	
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS073 Date Analyzed: 03/17/03
Instrument ID: 5973 B Time Analyzed: 15:59

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	65206.		9.22		178036.		13.51		107594.		19.19	
	UPPER LIMIT	130412.		9.72		356072.		14.01		215188.		19.69	
	LOWER LIMIT	32603.		8.72		89018.		13.01		53797.		18.69	
	EPA SAMPLE NO.												
1	WMSB	58082.		9.16		145034.		13.45		100431.		19.13	
2	WBLK03	52014.		9.17		140518.		13.46		99540.		19.14	
3	MEGDD014	53807.		9.17		154227.		13.46		107299.		19.14	
4	MEGDD0129	55631.		9.17		155222.		13.46		98905.		19.14	
5	DUP021803	47919.		9.17		135332.		13.46		91429.		19.14	
6	MEGDIM0110	48604.		9.17		137384.		13.46		87940.		19.14	
7	MEGUSH8601	65001.		9.17		173590.		13.45		114571.		19.14	
8	MEGDD0121	54067.		9.17		148243.		13.45		100950.		19.13	
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22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS073 Date Analyzed: 03/17/03
Instrument ID: 5973 B Time Analyzed: 15:59

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	217182.	23.61	300629.	31.53	468473.	35.47
	UPPER LIMIT	434364.	24.11	601258.	32.03	936946.	35.97
	LOWER LIMIT	108591.	23.11	150315.	31.03	234237.	34.97
	EPA SAMPLE NO.						
1	WMSB	169967.	23.55	205185.	31.47	295073.	35.40
2	WBLK03	187305.	23.56	206298.	31.47	293304.	35.40
3	MEGDD014	202885.	23.56	262365.	31.47	388026.	35.40
4	MEGDD0129	181043.	23.56	196250.	31.47	343732.	35.40
5	DUP021803	167421.	23.56	195633.	31.47	381582.	35.40
6	MEGDIM0110	154983.	23.56	197957.	31.47	385331.	35.40
7	MEGUSH8601	214523.	23.56	252161.	31.47	401430.	35.40
8	MEGDD0121	188322.	23.56	224173.	31.47	352601.	35.40
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS074 Date Analyzed: 03/18/03
Instrument ID: 5973 B Time Analyzed: 18:39

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	70859.		9.16		186040.		13.44		111672.		19.12	
	UPPER LIMIT	141718.		9.66		372080.		13.94		223344.		19.62	
	LOWER LIMIT	35430.		8.66		93020.		12.94		55836.		18.62	
	EPA SAMPLE NO.												
1	WBLK02	63473.		9.17		159731.		13.44		104469.		19.12	
2	MEGDD0123	53861.		9.17		157346.		13.44		101555.		19.12	
3	MEGDD0115	66159.		9.15		180301.		13.44		112176.		19.12	
4	MEGDIM0128	59161.		9.17		168747.		13.44		108857.		19.12	
5	MEGDIM0128 MS	64688.		9.16		167704.		13.44		104397.		19.12	
6	MEGDIM0128 MSD	56097.		9.17		143454.		13.44		101874.		19.12	
7	MEGUSH8611	56467.		9.14		153390.		13.43		95509.		19.12	
8	MEGCD0131	48233.		9.16		137988.		13.44		89315.		19.12	
9	DUP022003	50971.		9.17		132691.		13.44		99377.		19.12	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS074 Date Analyzed: 03/18/03
Instrument ID: 5973 B Time Analyzed: 18:39

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	215062.		23.55		275311.		31.47		403294.		35.40	
	UPPER LIMIT	430124.		24.05		550622.		31.97		806588.		35.90	
	LOWER LIMIT	107531.		23.05		137656.		30.97		201647.		34.90	
	EPA SAMPLE NO.												
1	WBLK02	178234.		23.55		194576.		31.46		320024.		35.40	
2	MEGDD0123	190138.		23.55		220564.		31.47		354347.		35.40	
3	MEGDD0115	210667.		23.55		242406.		31.47		352753.		35.40	
4	MEGDIM0128	214925.		23.54		238012.		31.47		374601.		35.40	
5	MEGDIM0128 MS	192043.		23.54		249583.		31.46		378776.		35.40	
6	MEGDIM0128 MSD	183177.		23.54		216801.		31.46		345194.		35.40	
7	MEGUSH8611	177871.		23.54		298429.		31.47		409237.		35.40	
8	MEGCD0131	160835.		23.54		224536.		31.46		340441.		35.39	
9	DUP022003	182701.		23.54		206692.		31.45		372113.		35.40	
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22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS075 Date Analyzed: 03/19/03
Instrument ID: 5973 B Time Analyzed: 09:35

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	71405.	9.12	197149.	13.39	126590.	19.07
	UPPER LIMIT	142810.	9.62	394298.	13.89	253180.	19.57
	LOWER LIMIT	35703.	8.62	98575.	12.89	63295.	18.57
	EPA SAMPLE NO.						
1	MEGUSH8616	54887.	9.07	147060.	13.35	103947.	19.04
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS075 Date Analyzed: 03/19/03
Instrument ID: 5973 B Time Analyzed: 09:35

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	243086.	23.49	254537.	31.41	440087.	35.34
	UPPER LIMIT	486172.	23.99	509074.	31.91	880174.	35.84
	LOWER LIMIT	121543.	22.99	127269.	30.91	220044.	34.84
	EPA SAMPLE NO.						
1	MEGUSH8616	202521.	23.46	266785.	31.37	377449.	35.30
2							
3							
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS080 Date Analyzed: 03/24/03
Instrument ID: 5973 B Time Analyzed: 12:39

		IS1(DCB) AREA #		IS2(NPT) AREA #		IS3(ANT) AREA #	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	96926.	8.56	206498.	12.79	117787.	18.51
	UPPER LIMIT	193852.	9.06	412996.	13.29	235574.	19.01
	LOWER LIMIT	48463.	8.06	103249.	12.29	58894.	18.01
	EPA SAMPLE NO.						
1	MEGDSH0121	76381.	8.53	180241.	12.77	109357.	18.49
2							
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19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131
Lab File ID (Standard): BS080 Date Analyzed: 03/24/03
Instrument ID: 5973 B Time Analyzed: 12:39

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	181143.		22.92		146326.		30.81		181635.		34.74	
	UPPER LIMIT	362286.		23.42		292652.		31.31		363270.		35.24	
	LOWER LIMIT	90572.		22.42		73163.		30.31		90818.		34.24	
	EPA SAMPLE NO.												
1	MEGDSH0121	174389.		22.91		136553.		30.80		198438.		34.72	
2													
3													
4													
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22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

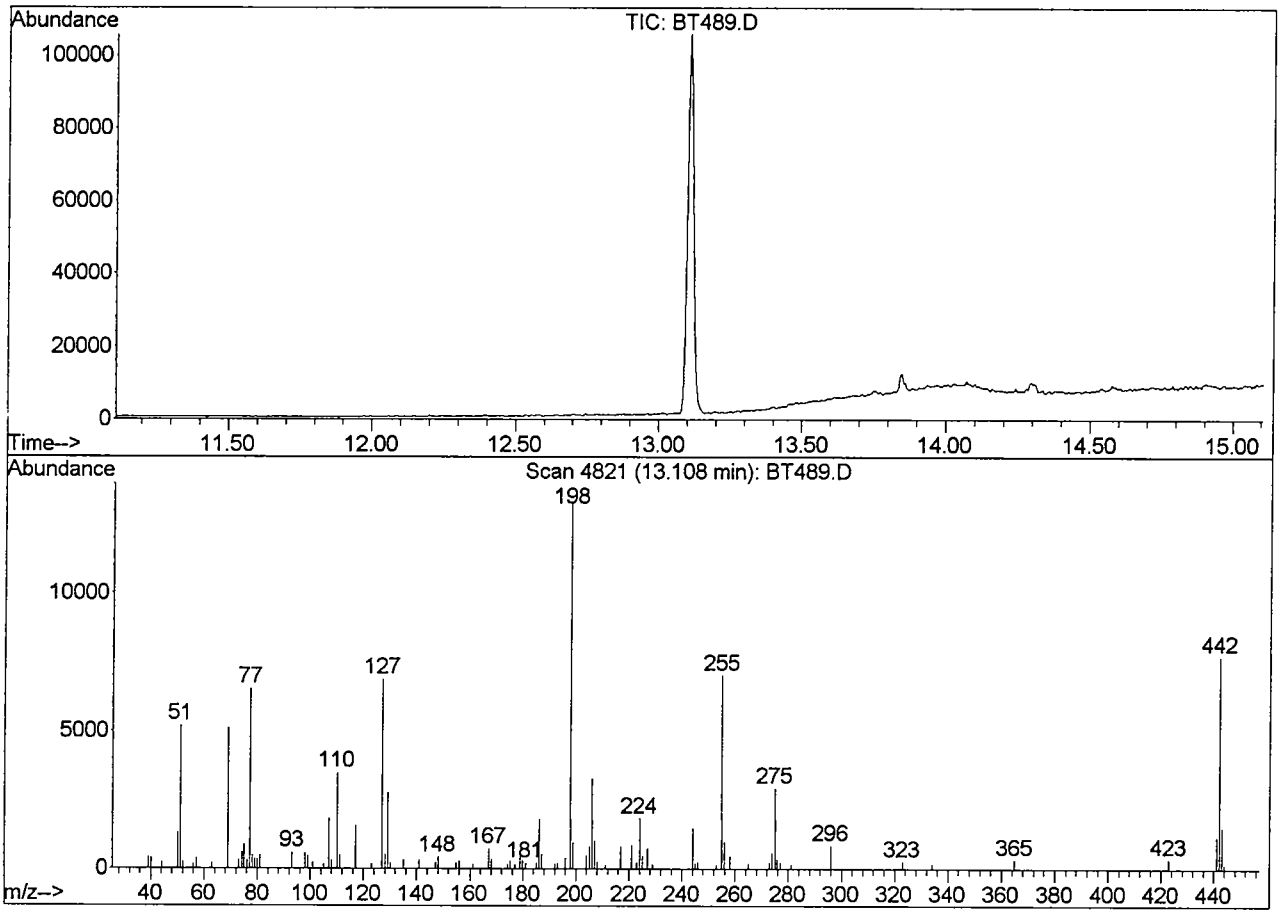
AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

RAW QC

DATA

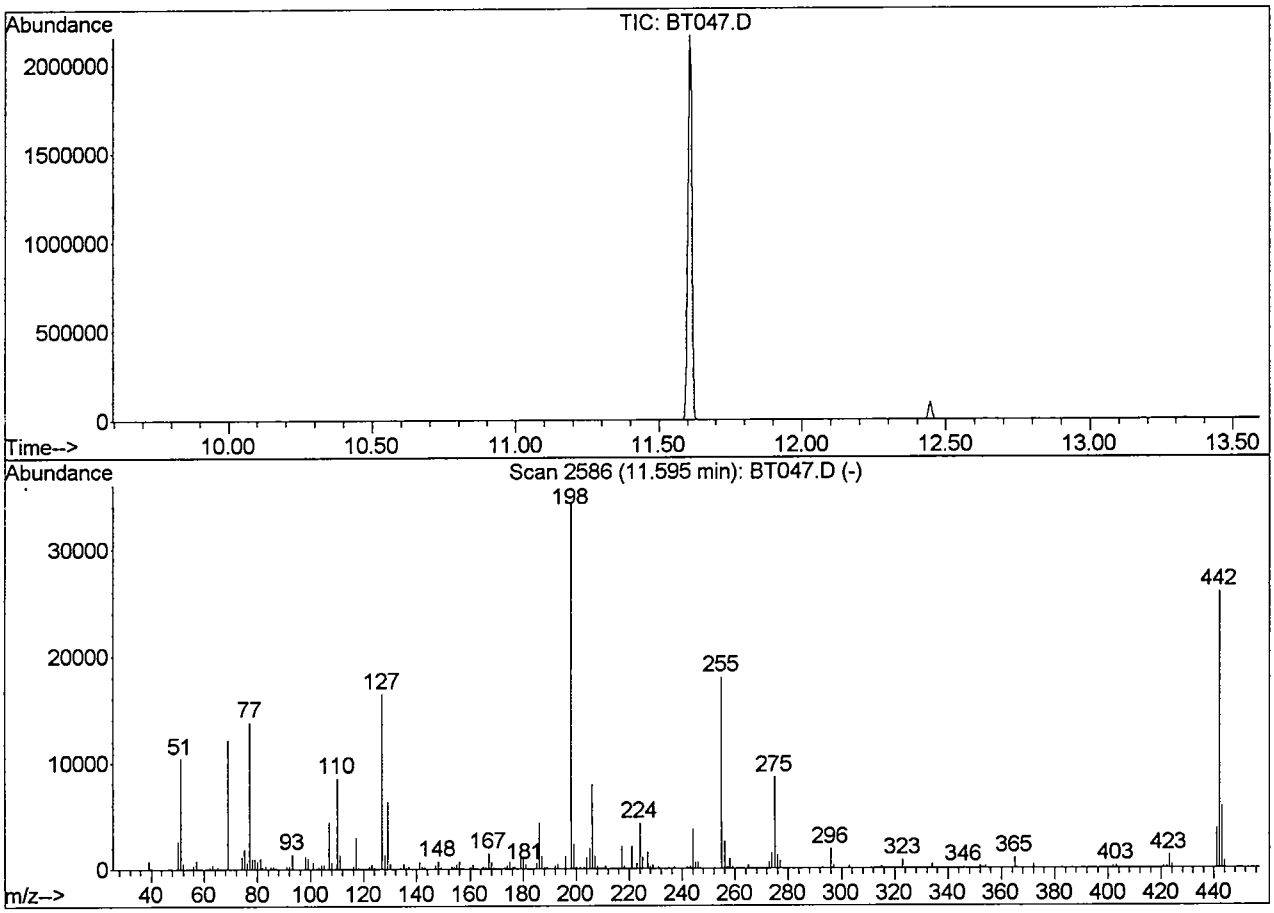
Data File : C:\MSDCHEM\1\DATA\17DECJ29.B\BT489.D Vial: 1
Acq On : 17 Dec 2002 9:41 am Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine



Spectrum Information: Scan 4821

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.9	5183	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.3	5111	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	51.5	6864	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	13337	PASS
199	198	5	9	7.4	985	PASS
275	198	10	30	21.9	2921	PASS
365	198	1	100	2.5	334	PASS
441	443	0.01	100	78.0	1169	PASS
442	198	40	100	57.8	7709	PASS
443	442	17	23	19.4	1499	PASS

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\BT047.D Vial: 1
Acq On : 28 Feb 2003 10:00 am Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: events.e
Method : C:\MSDchem\1\methods\envdef.m (Chemstation Integrator)
Title :

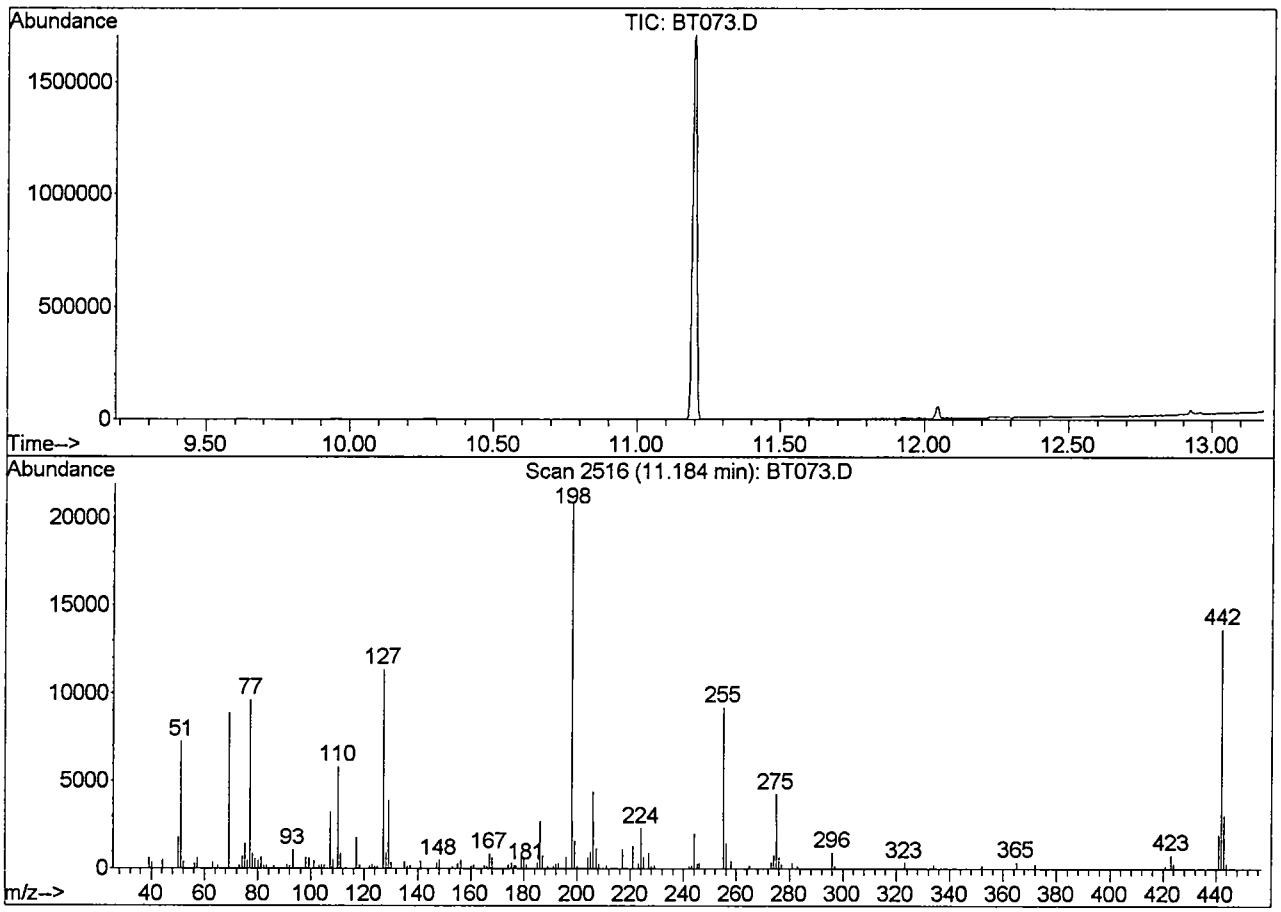


Spectrum Information: Scan 2586

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.2	10391	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.3	12156	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	47.9	16482	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	34398	PASS
199	198	5	9	6.9	2381	PASS
275	198	10	30	25.0	8607	PASS
365	198	1	100	2.9	1003	PASS
441	443	0.01	100	64.5	3775	PASS
442	198	40	100	75.3	25893	PASS
443	442	17	23	22.6	5854	PASS

DFTPP

Data File : C:\MSDCHEM\1\DATA\14MARP42.B\BT073.D Vial: 1
Acq On : 17 Mar 2003 3:35 pm Operator:
Sample : dftpp Inst : gcms b
Misc : gcms-b Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine

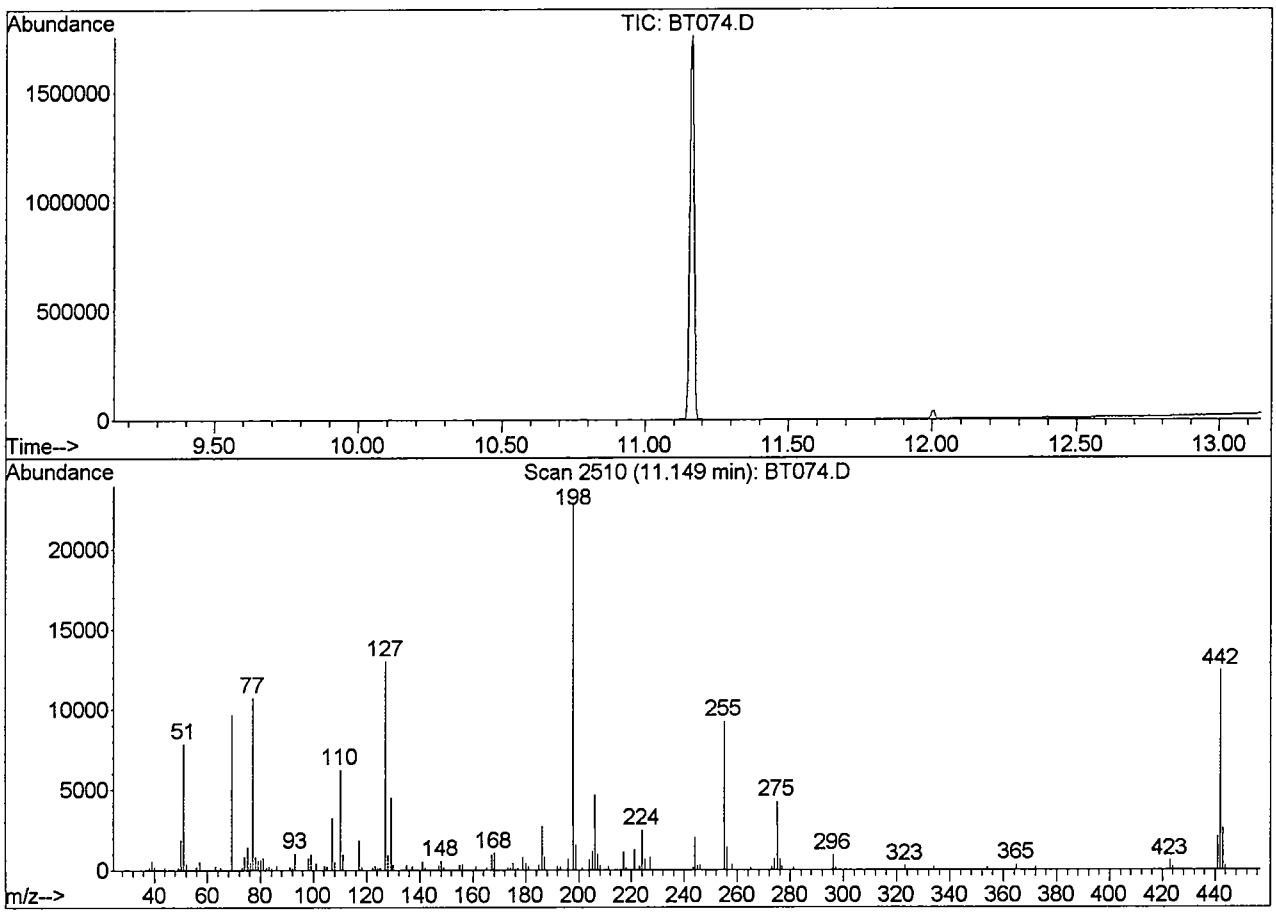


Spectrum Information: Scan 2516

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.7	7264	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.5	8896	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	54.3	11359	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	20920	PASS
199	198	5	9	7.6	1581	PASS
275	198	10	30	20.4	4277	PASS
365	198	1	100	1.9	396	PASS
441	443	0.01	100	63.9	1951	PASS
442	198	40	100	65.4	13681	PASS
443	442	17	23	22.3	3052	PASS

DFTPP

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BT074.D Vial: 1
Acq On : 18 Mar 2003 6:13 pm Operator:
Sample : DFTPP Inst : gcms b
Misc : ERM[DATA]LIST[VDemo]ID[57] Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine

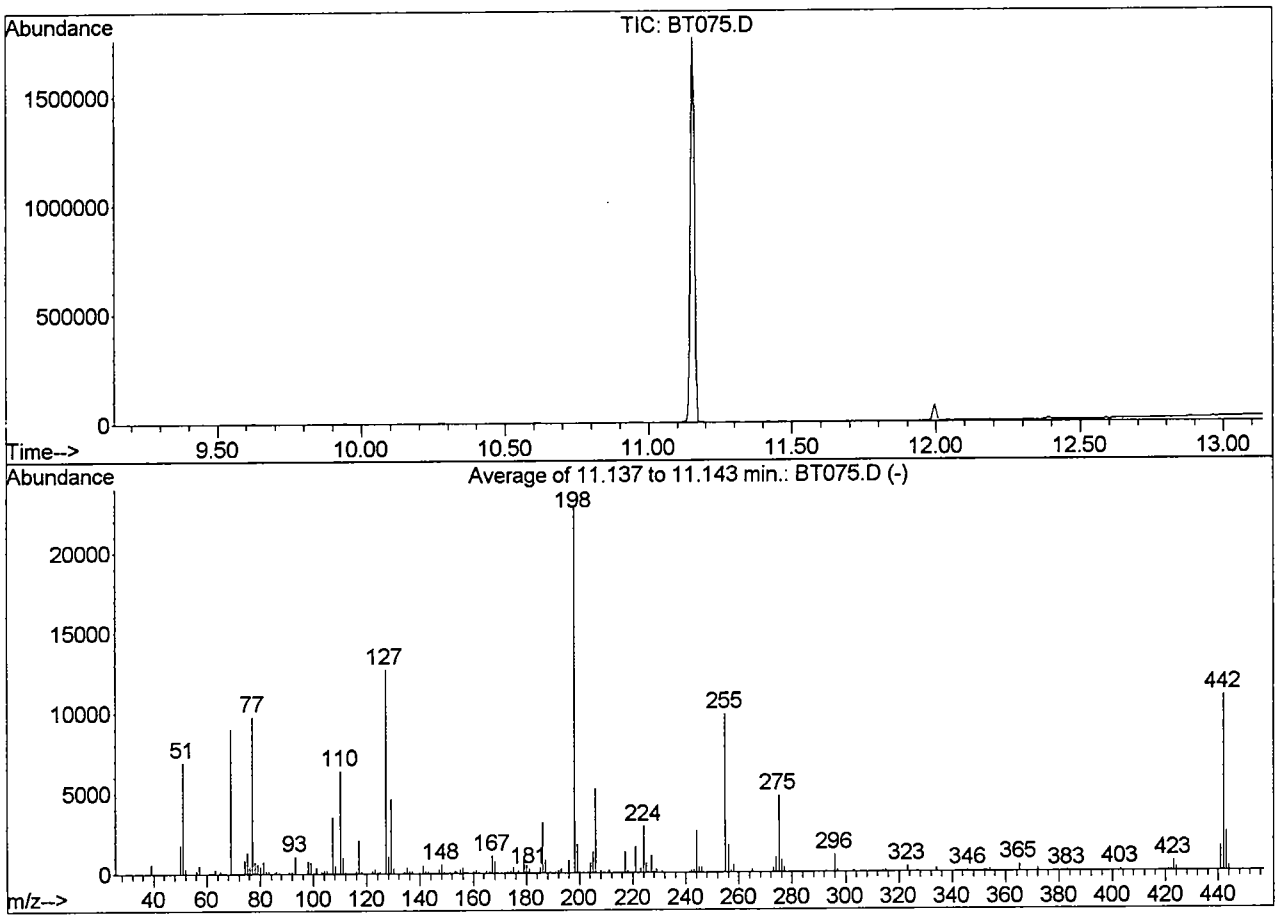


Spectrum Information: Scan 2510

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.4	7857	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.5	9706	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	57.0	13037	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	22856	PASS
199	198	5	9	7.1	1623	PASS
275	198	10	30	18.7	4272	PASS
365	198	1	100	1.4	321	PASS
441	443	0.01	100	79.7	2069	PASS
442	198	40	100	54.4	12435	PASS
443	442	17	23	20.9	2595	PASS

DFTPP

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\BT075.D Vial: 1
Acq On : 19 Mar 2003 9:07 am Operator:
Sample : DFTPP Inst : gcms b
Misc : ERM[DATA]LIST[VDemo]ID[57] Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine

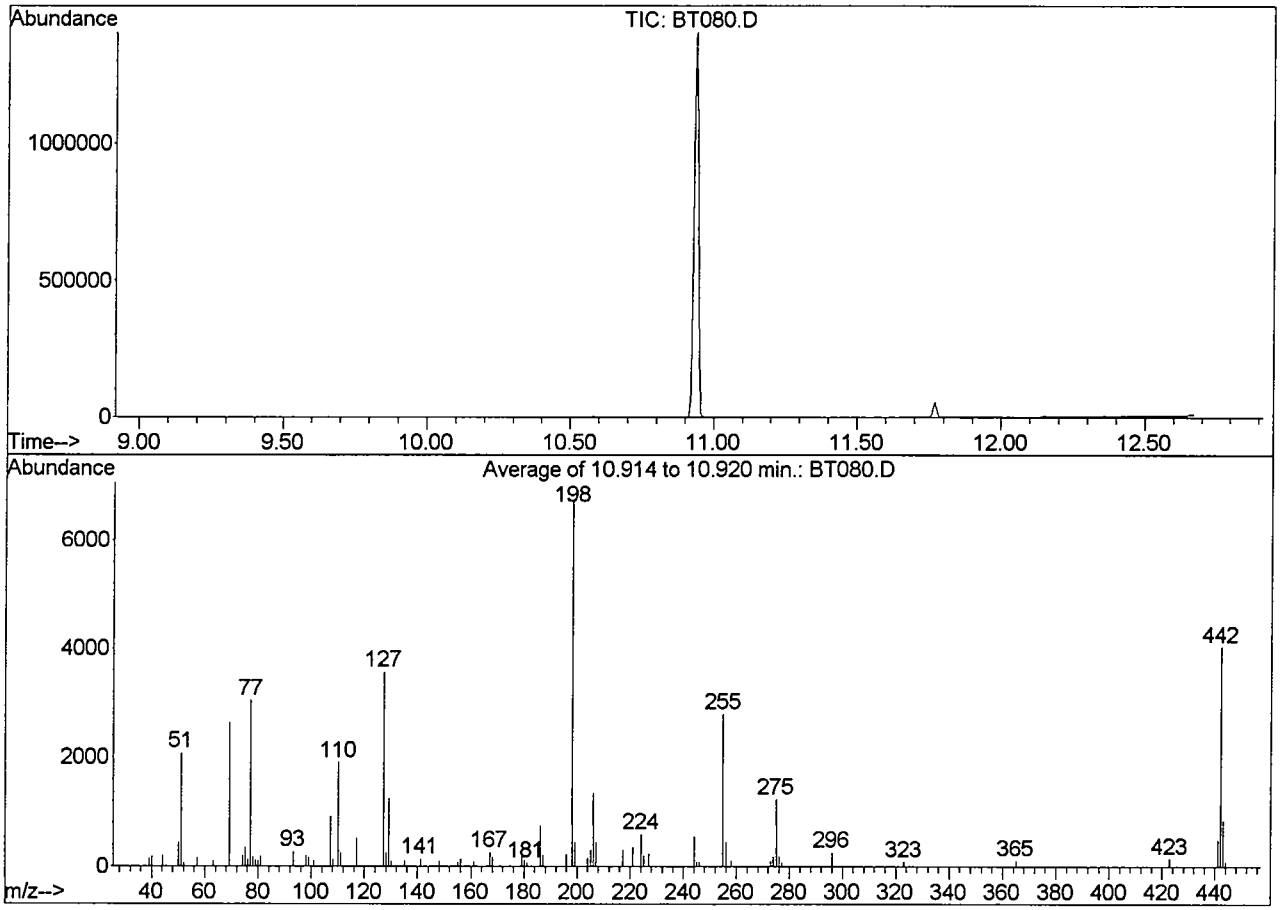


Spectrum Information: Average of 11.137 to 11.143 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.3	6947	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.5	9047	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	55.5	12712	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	22898	PASS
199	198	5	9	8.0	1833	PASS
275	198	10	30	20.9	4777	PASS
365	198	1	100	1.9	444	PASS
441	443	0.01	100	63.6	1550	PASS
442	198	40	100	47.8	10952	PASS
443	442	17	23	22.3	2437	PASS

BT075.D ME1125.M Mon Mar 24 15:37:04 2003 GCMSB

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\Snapshot\BT080.D Vial: 1
Acq On : 24 Mar 2003 12:12 pm Operator:
Sample : DFTPP Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine



Spectrum Information: Average of 10.914 to 10.920 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.9	2078	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	2644	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.1	3575	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	6732	PASS
199	198	5	9	6.8	455	PASS
275	198	10	30	18.4	1236	PASS
365	198	1	100	1.7	115	PASS
441	443	0.01	100	59.5	502	PASS
442	198	40	100	60.0	4038	PASS
443	442	17	23	20.9	844	PASS

BT080.D ME1125.M Mon Mar 24 12:26:31 2003 GCMSB

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/20/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0477

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

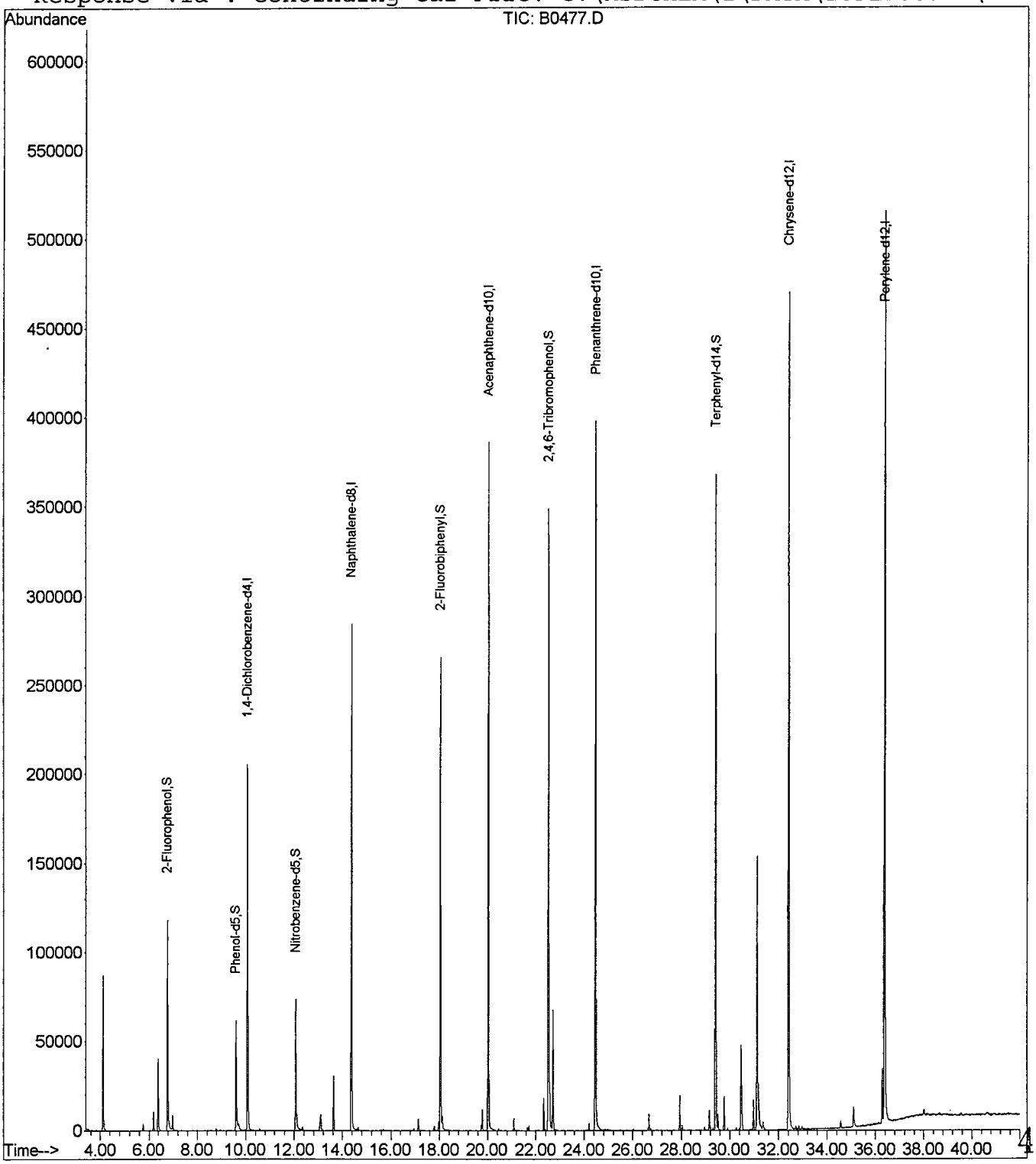
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0477.D Vial: 6
Acq On : 28 Feb 2003 2:23 pm Operator:
Sample : WBLK 2/20/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 21 15:11 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\28FEBJ53.B\B0477.D Vial: 6
Acq On : 28 Feb 2003 2:23 pm Operator:
Sample : WBLK 2/20/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 03 09:02:53 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Fri Feb 28 11:23:34 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\28FEBJ53.B\BS047.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.07	152	129051	40.00	ug	-0.05
21) Naphthalene-d8	14.37	136	321373	40.00	ug	-0.05
36) Acenaphthene-d10	20.03	164	203995	40.00	ug	-0.04
56) Phenanthrene-d10	24.46	188	411442	40.00	ug	-0.05
70) Chrysene-d12	32.42	240	456758	40.00	ug	-0.05
78) Perylene-d12	36.37	264	571066	40.00	ug	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	6.77	112	123032	58.55	ug	-0.04
3) Phenol-d5	9.59	99	94073	25.49	ug	-0.05
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	12.07	82	122054	29.82	ug	-0.05
40) 2-Fluorobiphenyl	18.04	172	271202	33.21	ug	-0.05
59) 2,4,6-Tribromophenol	22.51	330	269938	64.98	ug	-0.04
72) Terphenyl-d14	29.42	244	338857	31.62	ug	-0.04

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK02

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/24/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0562

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

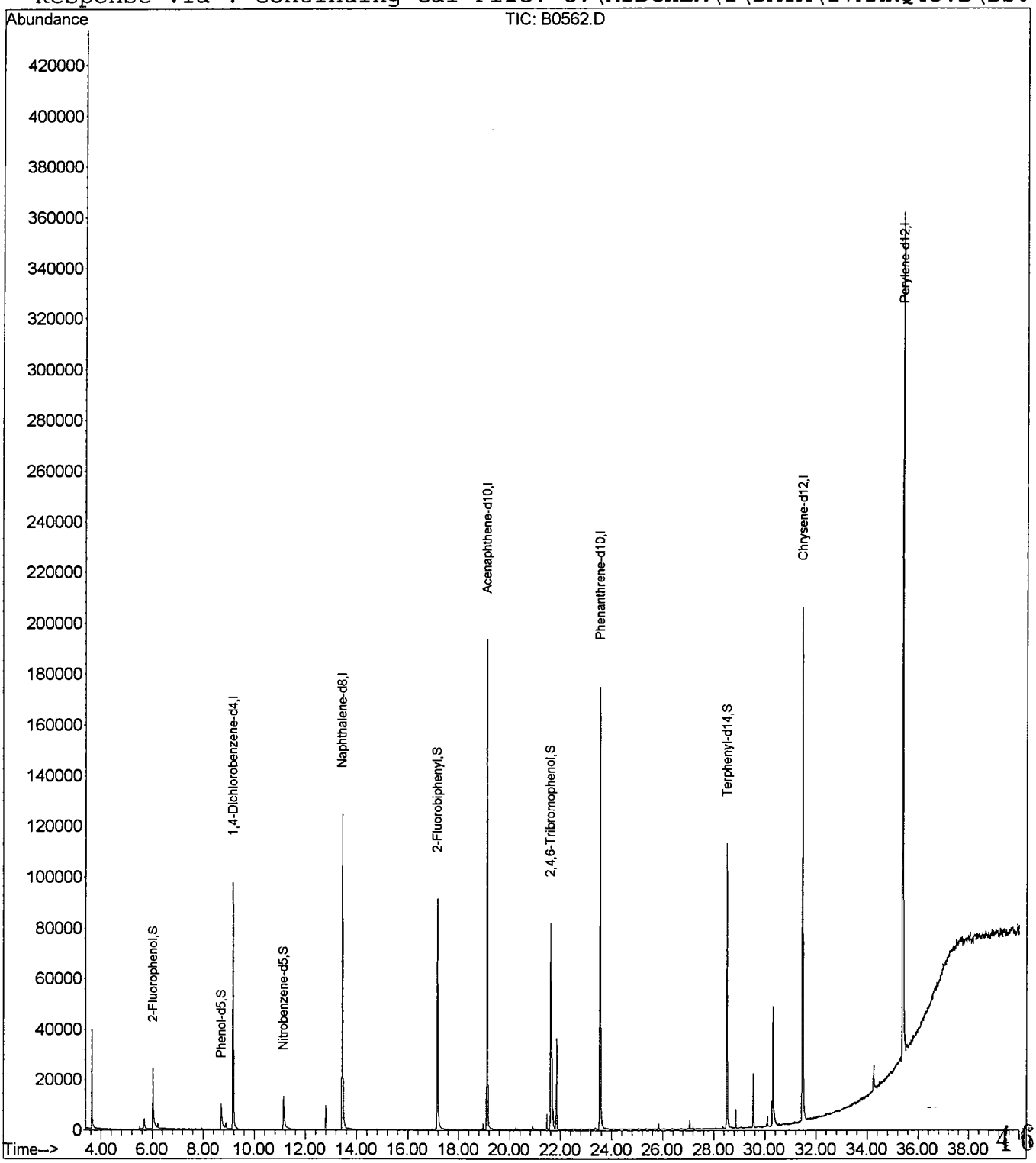
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0562.D Vial: 3
Acq On : 18 Mar 2003 7:37 pm Operator:
Sample : WBLK 2/24/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:15 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0562.D Vial: 3
Acq On : 18 Mar 2003 7:37 pm Operator:
Sample : WBLK 2/24/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:55:48 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	63473	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	159731	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	104469	40.00	ug	0.00
56) Phenanthrene-d10	23.55	188	178234	40.00	ug	0.00
70) Chrysene-d12	31.46	240	194576	40.00	ug	-0.01
78) Perylene-d12	35.40	264	320024	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	6.02	112	33632	36.56	ug	0.00
3) Phenol-d5	8.70	99	25567	15.60	ug	0.01
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.14	82	33323	21.13	ug	0.01
40) 2-Fluorobiphenyl	17.17	172	105243	28.65	ug	0.00
59) 2,4,6-Tribromophenol	21.61	330	74606	55.33	ug	0.00
72) Terphenyl-d14	28.52	244	107175	35.16	ug	0.00

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
B0562.D ME1125.M Mon Mar 24 13:16:13 2003 GCMSB Page 1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WBLK 2/26/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0538

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

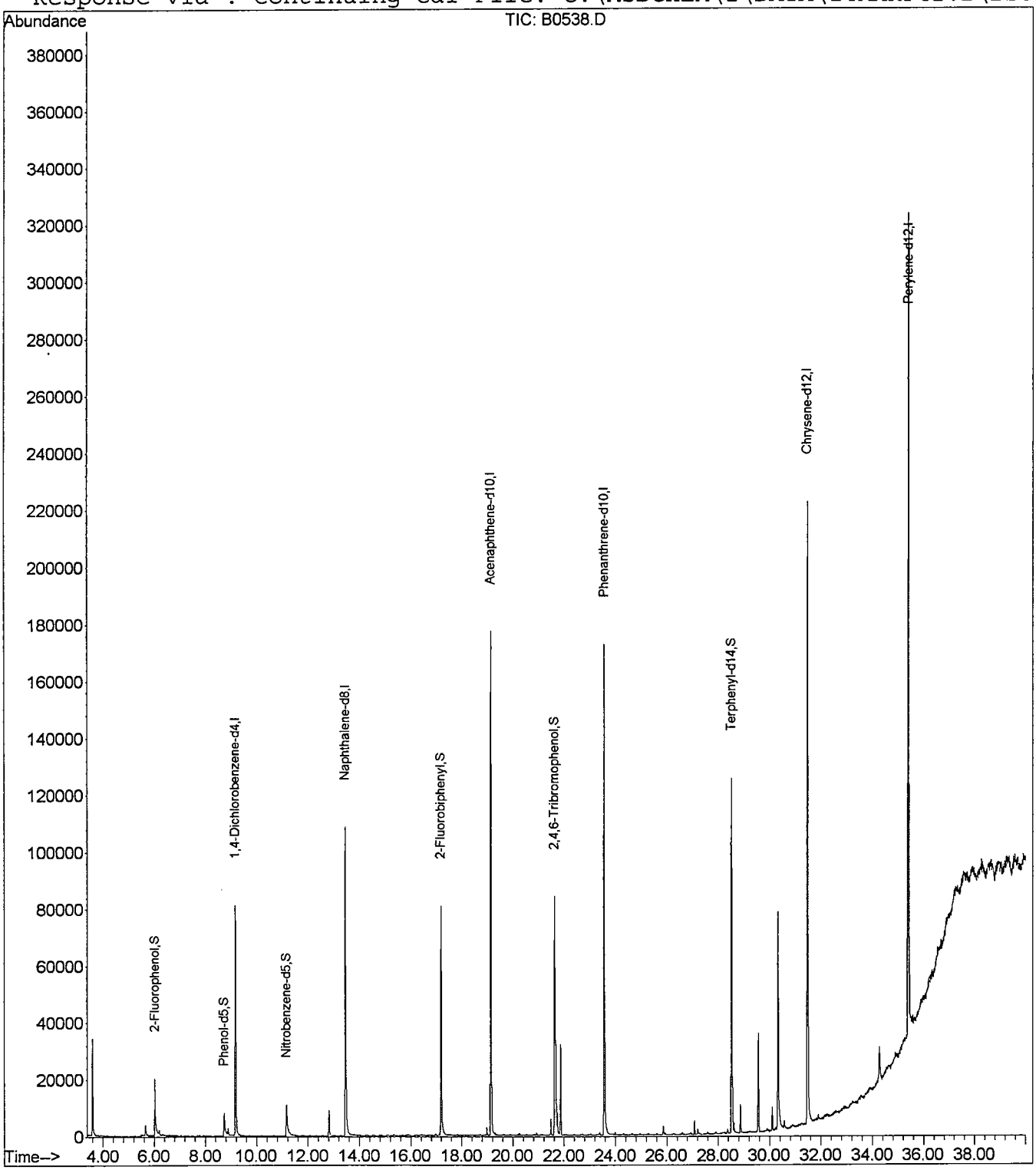
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0538.D Vial: 3
Acq On : 17 Mar 2003 6:38 pm Operator:
Sample : WBLK 2/26/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 10:37 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0538.D Vial: 3
Acq On : 17 Mar 2003 6:38 pm Operator:
Sample : WBLK 2/26/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:29 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	52014	40.00	ug	-0.05
21) Naphthalene-d8	13.46	136	140518	40.00	ug	-0.05
36) Acenaphthene-d10	19.14	164	99540	40.00	ug	-0.05
56) Phenanthrene-d10	23.56	188	187305	40.00	ug	-0.05
70) Chrysene-d12	31.47	240	206298	40.00	ug	-0.06
78) Perylene-d12	35.40	264	293304	40.00	ug	-0.07
System Monitoring Compounds						
2) 2-Fluorophenol	6.02	112	30560	40.10	ug	-0.04
3) Phenol-d5	8.73	99	16373	12.11	ug	-0.04
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.16	82	30781	21.86	ug	-0.04
40) 2-Fluorobiphenyl	17.19	172	92095	25.31	ug	-0.05
59) 2,4,6-Tribromophenol	21.63	330	80273	54.10	ug	-0.04
72) Terphenyl-d14	28.53	244	124139	38.05	ug	-0.05
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMSB

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: WMSB 2/24/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0537

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

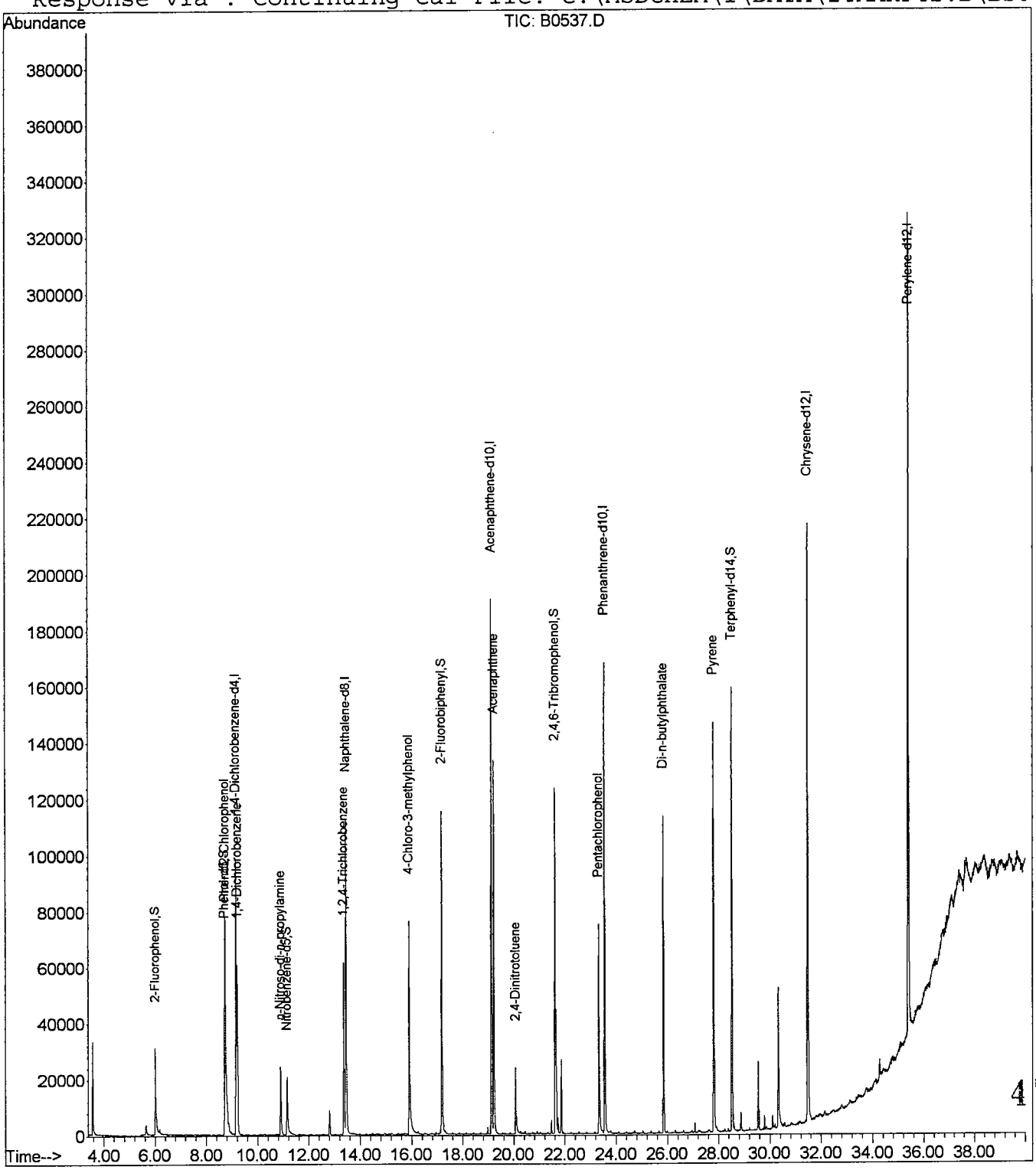
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	15.	
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	22.	
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0537.D Vial: 2
Acq On : 17 Mar 2003 5:48 pm Operator:
Sample : WMSB 2/24/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 24 10:35 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 09:40:45 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0537.D Vial: 2
Acq On : 17 Mar 2003 5:48 pm Operator:
Sample : WMSB 2/24/03 Inst : gcms b
Misc : GCMS-B Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 18 09:02:23 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Tue Mar 18 09:01:58 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\14MARP42.B\BS073.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.16	152	58082	40.00	ug	-0.06
21) Naphthalene-d8	13.45	136	145034	40.00	ug	-0.06
36) Acenaphthene-d10	19.13	164	100431	40.00	ug	-0.06
56) Phenanthrene-d10	23.55	188	169967	40.00	ug	-0.06
70) Chrysene-d12	31.47	240	205185	40.00	ug	-0.06
78) Perylene-d12	35.40	264	295073	40.00	ug	-0.06
System Monitoring Compounds						
2) 2-Fluorophenol	6.01	112	40739	47.87	ug	-0.05
3) Phenol-d5	8.71	99	43366	28.72	ug	-0.06
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.14	82	43451	29.90	ug	-0.06
40) 2-Fluorobiphenyl	17.18	172	127172	34.64	ug	-0.06
59) 2,4,6-Tribromophenol	21.62	330	106259	78.91	ug	-0.05
72) Terphenyl-d14	28.53	244	151718	46.76	ug	-0.05
Target Compounds						Qvalue
7) Phenol	8.75	94	46565	29.22	ug	84
10) 2-Chlorophenol	8.73	128	80955	46.96	ug	81
12) 1,4-Dichlorobenzene	9.20	146	67364	31.70	ug	70
19) n-Nitroso-di-n-propylamine	10.89	70	21080	28.40	ug	76
29) 1,2,4-Trichlorobenzene	13.36	180	72261	30.44	ug	51
34) 4-Chloro-3-methylphenol	15.91	107	57852	63.22	ug	92
47) Acenaphthene	19.22	153	178491	29.86	ug	48
51) 2,4-Dinitrotoluene	20.06	165	27331	24.14	ug	57
63) Pentachlorophenol	23.33	266	66630	68.41	ug	54
68) Di-n-butylphthalate	25.85	149	162649	38.30	ug	98
71) Pyrene	27.81	202	189717	43.40	ug	99

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128 MS

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128 MS

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0566

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

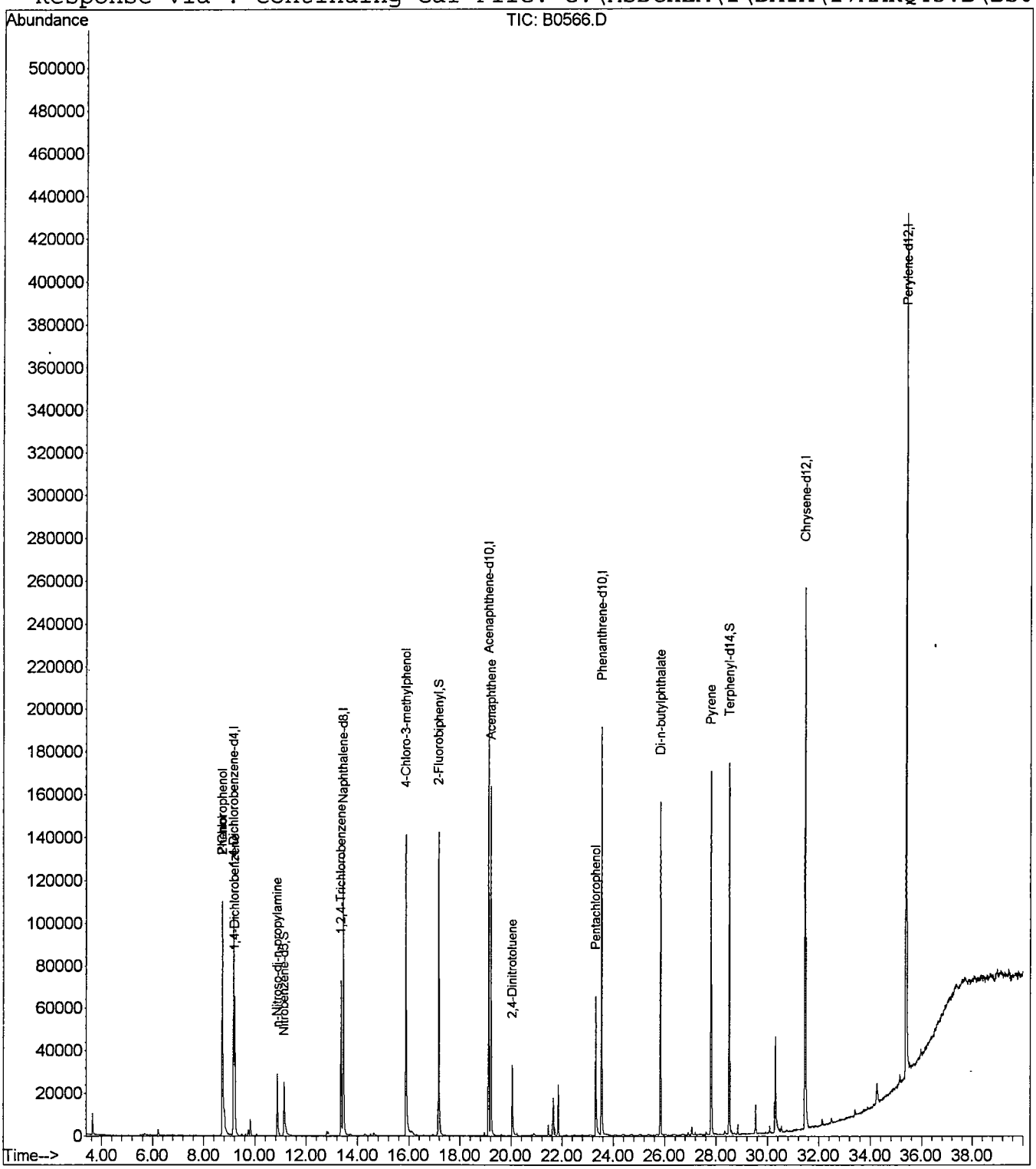
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	19.	
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	17.	
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0566.D Vial: 7
Acq On : 18 Mar 2003 11:47 pm Operator:
Sample : MS Inst : gcms b
Misc : GCMS-B 030220G08 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:25 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0566.D Vial: 7
Acq On : 18 Mar 2003 11:47 pm Operator:
Sample : MS Inst : gcms b
Misc : GCMS-B 030220G08 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:56:07 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.16	152	64688	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	167704	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	104397	40.00	ug	0.00
56) Phenanthrene-d10	23.54	188	192043	40.00	ug	0.00
70) Chrysene-d12	31.46	240	249583	40.00	ug	-0.01
78) Perylene-d12	35.40	264	378776	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0d	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.14	82	53359	32.22	ug	0.00
40) 2-Fluorobiphenyl	17.17	172	154150	41.99	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	155591	39.80	ug	0.00
Target Compounds						Qvalue
7) Phenol	8.72	94	57269	33.01	ug	82
10) 2-Chlorophenol	8.72	128	120485	63.97	ug	79
12) 1,4-Dichlorobenzene	9.22	146	75146	30.57	ug	69
19) n-Nitroso-di-n-propylamine	10.87	70	24615	32.24	ug	76
29) 1,2,4-Trichlorobenzene	13.35	180	84690	31.11	ug	51
34) 4-Chloro-3-methylphenol	15.88	107	98505	90.25	ug	93
47) Acenaphthene	19.21	153	221237	36.90	ug	48
51) 2,4-Dinitrotoluene	20.04	165	33035	27.92	ug	59
63) Pentachlorophenol	23.32	266	59354	53.16	ug	54
68) Di-n-butylphthalate	25.84	149	221195	49.25	ug	97
71) Pyrene	27.79	202	207216	34.66	ug	98

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128 MSD

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128 MSD

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0567

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

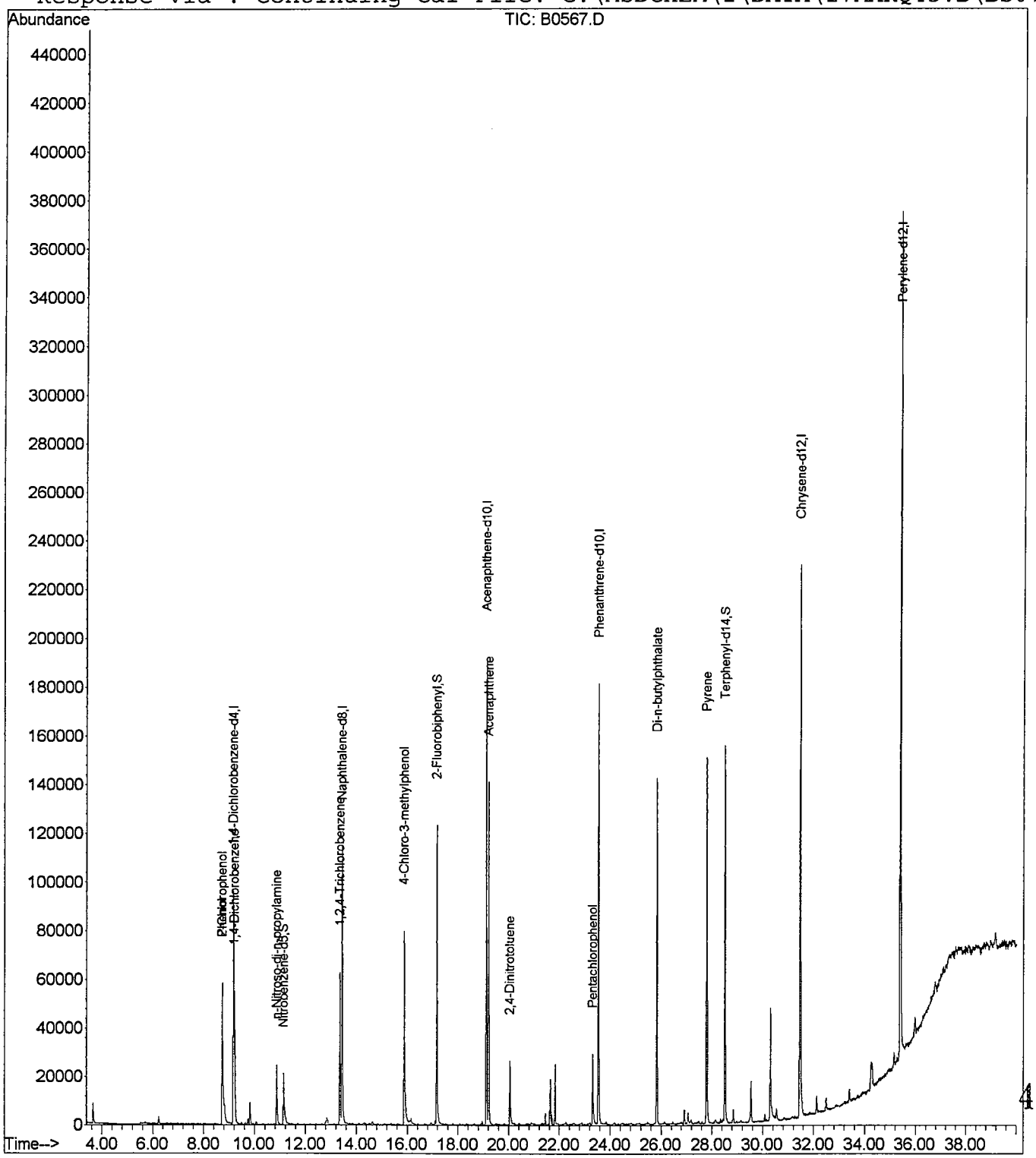
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	18.	
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	20.	
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0567.D Vial: 8
Acq On : 19 Mar 2003 12:50 am Operator:
Sample : MSD Inst : gcms b
Misc : GCMS-B 030220G09 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 24 13:27 2003 Quant Results File: ME1125.RES

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Mon Mar 24 11:10:29 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\17MARQ45.B\B0567.D Vial: 8
Acq On : 19 Mar 2003 12:50 am Operator:
Sample : MSD Inst : gcms b
Misc : GCMS-B 030220G09 Multiplr: 1.00
MS Integration Params: EVENTS2.E
Quant Time: Mar 19 08:56:12 2003 Quant Results File: ME1125.RES

Quant Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine
Last Update : Wed Mar 19 08:55:24 2003
Response via : Continuing Cal File: C:\MSDCHEM\1\DATA\17MARQ45.B\BS074.D
DataAcq Meth : METHPS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.17	152	56097	40.00	ug	0.00
21) Naphthalene-d8	13.44	136	143454	40.00	ug	0.00
36) Acenaphthene-d10	19.12	164	101874	40.00	ug	0.00
56) Phenanthrene-d10	23.54	188	183177	40.00	ug	0.00
70) Chrysene-d12	31.46	240	216801	40.00	ug	-0.01
78) Perylene-d12	35.40	264	345194	40.00	ug	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.00	112	0	0.00	ug	
3) Phenol-d5	0.00	99	0d	0.00	ug	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ug	
14) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ug	
22) Nitrobenzene-d5	11.14	82	45438	32.08	ug	0.00
40) 2-Fluorobiphenyl	17.16	172	131512	36.71	ug	0.00
59) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug	
72) Terphenyl-d14	28.52	244	146805	43.23	ug	0.00
Target Compounds						Qvalue
7) Phenol	8.73	94	31315	20.81	ug	80
10) 2-Chlorophenol	8.73	128	71343	43.68	ug	78
12) 1,4-Dichlorobenzene	9.22	146	64089	30.06	ug	69
19) n-Nitroso-di-n-propylamine	10.87	70	21079	31.83	ug	75
29) 1,2,4-Trichlorobenzene	13.35	180	72880	31.29	ug	51
34) 4-Chloro-3-methylphenol	15.88	107	61247	65.60	ug	93
47) Acenaphthene	19.21	153	184625	31.56	ug	48
51) 2,4-Dinitrotoluene	20.04	165	26942	23.33	ug	61
63) Pentachlorophenol	23.32	266	31918	29.97	ug	53
68) Di-n-butylphthalate	25.84	149	204740	47.79	ug	98
71) Pyrene	27.79	202	187156	36.03	ug	97

480

(#) = qualifier out of range (m) = manual integration

CLP

SAMPLE CALCULATIONS FOR SEMI-VOLATILE ORGANICS:

1) RRF of Naphthalene from the STD050 analyzed on 3/17/03:

$$= \frac{\text{area of Naphthalene in std.}}{\text{area of internal std}} \times \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{220473}{178036} \times \frac{40}{50} = 0.991$$

2) Concentration of Naphthalene in sample MEGDD0121 (AES sample number 030220G-03):

$$\text{ug/L} = \frac{\text{area of Naphthalene in sample}}{\text{area of internal standard in sample}} \times \frac{\{\text{amount of internal std. (ng)}\}\{\text{Vol. extract (ul)}\}(\text{Df})}{\{\text{Vol. extracted (ml)}\}(\text{RRF})\{\text{Vol. injected(uL)}\}}$$

$$= \frac{162859}{148243} \times \frac{(40)(1000)(1)}{(970)(0.991)(2)} = 22.9 \text{ ug/L}$$

which is reported as 23 ug/L on the Form I for Semi-Volatile Organics

3) Calculation of spike recovery for Acenaphthene for MEGDIM0128 Matrix Spike:

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Acenaphthene} = \frac{(18.5 - 0.0)}{25.0} \times 100 = 74.0\ \%$$

Analyst: STAN SAIA | Sodium Sulfate Lot No.: 140308 | B/N Surrogate Lot No.: 030210WBN 021210SBN

Date Extracted: 2/20/03 | NaOH Lot No: 10703 NaOH | Acid Surrogate Lot No.: 021210WACID 021210SACID

Solvent 1 Lot No.: #241 42317 | Acid Lot No.: 021015 H_2SO_4 | B/N Spike Solution Lot No.: 021219WBNsp 030204SBNsp

Solvent 2 Lot No.: 031115 MC/ACE | Internal Standard Lot No.: 020618 ISTD | Acid Spike Solution Lot No.: 021219WAcsp 030204SAcsp

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
	2/20 WBLK	DI	1L	BNA	>11	<2		1ml WBNA	1.0	2/21B	1A
	2/20 WMSB	"	"	"	"	"	1ml WBNsp 1ml WAcsp	"	"	"	2A
URS	030218J1	W	960mls	PAH	—	—		1ml WBN	1.0	2/24A	1A
"	2	"	900mls	"	—	—		"	"	"	2A
"	3	"	"	"	—	—		"	"	"	3A
"	4	"	950mls	"	—	—		"	"	"	4A
"	5	"	960mls	"	—	—		"	"	"	5A
"	6	"	980mls	"	—	—		"	"	"	6A
"	2/20 SBLK	Na_2SO_4	60g	BNA	—	—		1ml SBNA	2.0	2/21A	
"	2/20 SMSB	"	"	"	—	—	1ml SBNsp 1ml SAcsp	"	"	"	"
"	2/20 DOH Soil	S	30g	"	—	—		"	"	2/20C	
MIDWEST	030220E1	"	"	CLP-BNA	—	—		"	"	2/21A	
"	2	"	"	"	—	—		"	"	"	
"	MS	"	"	"	—	—	1ml SBNsp 1ml SAcsp	"	"	"	
"	MSD	"	"	"	—	—	"	"	"	"	

4824

000034

Analyst: STAN SALA | Sodium Sulfate Lot No.: 140308 | B/N Surrogate Lot No.: 030210WBN 021210SBN

Date Extracted: 2/24/05 #242 #243 | NaOH Lot No: 10703 NaOH | Acid Surrogate Lot No.: 021210WACID 021210SACID

Solvent 1 Lot No.: 47317 | Acid Lot No.: 021015 H_2SO_4 | B/N Spike Solution Lot No.: 021219WBNS 030204SBNS

Solvent 2 Lot No.: 03115 MC/ACE | Internal Standard Lot No.: 020618-STD | Acid Spike Solution Lot No.: 021119WACSP 030204SACSP

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
	2/24 WBLK	DI	1L	BNA	>11	<2		1 mL WBNA	1.0	2/25A	1A
	2/24 DOH Baz	L	L	L	L	L	.3 mL Benzsp	1 mL WBNA	.5	2/24B	2A
ASHLAND	030220 D1	W	L	Napthe 625	>11	—		1 mL WBN	1.0	2/25A	3A
URS	03022061	W	950 mls	PAH	—	—		1 mL WBN			4A
	2		900 mls		—	—					5A
	3		920 mls		—	—					6A
	4		1L		—	—					1B
	5		L		—	—				2/25B	2B
	6		850 mls		—	—					3B
	7		1L		—	—					4B
	MS 8		L		—	—	1 mL WBSP 1 mL WACSP				5B
	MSD 9		900 mls		—	—	L				6B
	2/24 WMSB	DI	1L	BNA	>11	<2	L	1 mL WBNA		2/25A	2C
											000036

B/N Surrogate Lot No.: 021225WBN 021210SBN

Analyst: STAN SA/A | Sodium Sulfate Lot No.: 140308 | Acid Surrogate Lot No.: 021210WACID 021210SACID

Date Extracted: 2/26/03 #244 | NaOH Lot No: 10703 N.O.H | B/N Spike Solution Lot No.: 021219WBNsp 030204SBNsp

Solvent 1 Lot No.: 72317 | Acid Lot No.: 021615 H_2SO_4 | Acid Spike Solution Lot No.: 021219WAsp 030204SAsp

Solvent 2 Lot No.: 03115 MC/ACE | Internal Standard Lot No.: 020618 ISTD

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
	2/26 WBLK	DI	1L	BNA	≥11	≤2		1ml WBNA	1.0	2/27A	1A
	2/26 WMSD	"	"	"	"	"	1ml WBNsp, 1ml WAsp	"	"	"	2A
	2/26 FLTR BLK	MC	20mls					5ml Naptha	.5	2/26	
ENVT 1	030219 A1	FLTR	1 FLTR					"	"	"	
"	2	"	"					"	"	"	
URS	030224C1	W	900mls	CCP-PAH	—	—		1ml WBN	1.0	2/27A	2B
	3		960mls		—	—					3A
	4		901mls		—	—					4A 7
	5		970mls		—	—					5A 6
											000033

488

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
MHT	2/28/03	10AM		BT047		✓			
				BS047	qc'd - PAH's				
				BC474	C20212M03		OK	OK	
	120487			475	MC4		OK	OK	
	239201			476	MC5		OK	OK	
	158142			477	MBlk 2/20/03		OK	OK	
	324856			478	MMSB 2/20/03		OK	OK	BN-gard!
	330846			479	030218J01		OK	OK	
	364804			480	2		OK	OK	
		5:55PM		481	3		OK	OK	
				482	4		did not go		inlet pressure not at equil.
				483	5				
				484	6				
				485	C30226A01				
				486	LCS 2/27				
				487	rerun 5D				
MHT	3/3/03			BT048	OK				
				BS048	qc'd. - TCLP				
	85945			BC483	030227C01		OK	OK	
	203580			484	2		OK	OK	
	135329			485	3		OK	OK	
	234578			486	4		OK	OK	
	336720			487	5		OK	OK	
	384657			488	6		OK	OK	
				489	7		✓7.5 VIII	OK	
				490	MBlk 2/28		OK	OK	485

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
				BT066					
				BS066					
LHT	3/			BT068	QA				METHPS/FET
				BS068	10 PPM RHENIUM		9 cal'd	33938	[illegible]
			MB-365	BS033	ACID BLK 3/13		11%	46471	clean
			BA-365	BS034	030312020-002C		12%	57864	40926
		LCS-365		BS035	ACID LCSB 3/13		15%	57864	SPK 20% / 43%
				BS069					
				BS070	pre-hydrazed				METHPS FET3 SPLITLESS 20 19
					BT073				
LHT	3/17/03	3:37		BT071	QA	QA			MDFTPP (2/27)
				BS071	BS073	gcal			METHPS (2/19)
				BS036	CCBLL 2/24				SPLITLESS
		65206		537	LLMSB 2/24		QA	OK	
		178036		538	LLBL 2/26		QA	QA	
		167594		539	030218J04		QA	QA	
		217182		540	J05		QA	QA	
		300629		541	J06		QA	QA	
		468478		542	030220G01		QA	QA	
				543	2		QA	QA	
				544	3		QA	QA	
				545	4		QA	QA	486
				546	5		QA	QA	return to ✓

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
				B0547	030220G06		Ok	Ok	NO 600 µl
				548	G07				per
	3/1	4:24		549	G08		Ok	Ok	
				BT072					
				BS072					
				B0550	030220G09				
				551	030224C01				
				552	C03				
				553	C04				
				554	C05				
				555	wf 50				
	3/18/03			BT074					
				BS074					
				B0556	MC BLK 3/18	✓	could be better		Collections
				57	030311008-002A				
				58	-002A				
				59	030311008-003A	✓			
				60	030311008-001A	✓			
				61	030311008-004A	✓			
		6:13 pm		BT074	Ok				
				BS074	Ok				
				B0562	ULBLK 2/24/03		Ok	Ok	
				563	030220G05		Ok	Ok	
				564	G06		Ok	Ok	

REVIEW _____ DATE _____

Method : C:\MSDCHEM\1\METHODS\ME1125.M (RTE Integrator)
Title : 8270 + pyridine

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks: Surrogate Check	QA/QC Checks: Internal Std Check	Comments
MHT	3/19/03			BT075	0.5 —	✓			
				B5075	gals				
				B0572	030224C05		NG		
	71405			73	C05				
	197149			74	C05				
	126590			75	030220B01				
	243086			76	-C05				
	254537			77	SBLK 3/13				
	440087			78	030312014-001A	✓			
				79	030224C05		OK	CK	
				80	030220B01		OK	CK	can be reprocessed (use 80 to process)
				81	224 B01		OK	CK	
				82	- B02		OK	OK	
				83	221 A01		OK	OK	
				84	225 B01		STOPPED		
				85	B02				
MHT	3/20/03			BT076	OK				
				B5076	LL PYR				MAYBE LL
				77					
				78				47552	QC'd
				B0585	WBLK 3/20/03				
				586	030313A01			29188	
				587	WMSD 3/20/03 - PYR				
				588	STD AGAIN				
				589	↓				
									488

REVIEW DATE

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
				B0590	1PPM-STD	✓		530374	great!
				B0591	UBin 3/18/03	✓	59/75	562995 ✓	
				B0592	030313x01	✓	3.21/3.75	677628 ✓	
				B0593	UMSB 3/18/03	✓	1.95/3.75	478442	
				B0594	030313x01	1/5 ✓	.51x5/3.75	485640	
LHT	3/24/03			B7080	DFTPP	✓			OK
				B8080	8ST00050	✓	qc'd		
				B0595	030220G04	1/4	OK	OK	
	96926			B0596	225B01				
	206498			B0597	225B02				
	117787			B0598	UBin 2/21				
	181143			B0599	BMSB 2/21				
	146326								
	181635								

REVIEW _____ DATE _____

INORGANIC - METALS

ANALYSIS

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ADIRONDACK_ENVIRONMENTAL_ Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
_0218F01_____	_0218F01_____
_0218F01_D____	_0218F01_D___
_0218F01_S____	_0218F01_S___
_DUP021803____	_DUP021803___
_DUP021803_F___	_DUP021803_F_
_DUP021803____	_DUP021803___
_DUP021803F___	_DUP021803F__
_MEGDD0129____	_MEGDD0129___
_MEGDD0129_F___	_MEGDD0129_F_
_MEGDD0129F___	_MEGDD0129F__
_MEGDD014_____	_MEGDD014____
_MEGDD014_F____	_MEGDD014_F__
_MEGDD014F____	_MEGDD014F___
_MEGDD0238____	_MEGDD0238___
_MEGDD0243____	_MEGDD0243___
_MEGDD0243F___	_MEGDD0243F__
_MEGDIM0117____	_MEGDIM0117__
_MEGDIM0117F___	_MEGDIM0117F_
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES_

Were ICP background corrections applied ? Yes/No YES_
If yes - were raw data generated before application of background corrections ? Yes/No NO__

Comments:

_____

_____

_____

_____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Sheryl L. Manfuca Name: Sheryl L. Manfuca

Date: 4/9/03 Title: Inorganics Manager

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ADIRONDACK_ENVIRONMENTAL_ Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
_DUP022003_____	_DUP022003___
_DUP022003F____	_DUP022003F__
_MEGCD0131_____	_MEGCD0131___
_MEGCD0131_F___	_MEGCD0131_F_
_MEGDD0115_____	_MEGDD0115___
_MEGDD0115F____	_MEGDD0115F__
_MEGDD0121_____	_MEGDD0121___
_MEGDD0121F____	_MEGDD0121F__
_MEGDD0123_____	_MEGDD0123___
_MEGDD0123F____	_MEGDD0123F__
_MEGDD0132_____	_MEGDD0132___
_MEGDIM0110____	_MEGDIM0110__
_MEGDIM0110_D__	_MEGDIM0110_D
_MEGDIM0110_F__	_MEGDIM0110_F
_MEGDIM0110_S__	_MEGDIM0110_S
_MEGDIM0110_FD_	_MEGDIM0110_FD
_MEGDIM0110_FS_	_MEGDIM0110_FS
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES_

Were ICP background corrections applied ? Yes/No YES_
If yes - were raw data generated before application of background corrections ? Yes/No NO__

Comments:

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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Sheryl L. MacKinnon Name: Sheryl L. MacKinnon

Date: 4/9/03 Title: Inorganics Manager

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ADIRONDACK_ENVIRONMENTAL_ Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
_MEGDIM0128____	_MEGDIM0128___
_MEGDSH0121____	_MEGDSH0121___
_MEGDSH0121F___	_MEGDSH0121F__
_MEGUSH8601____	_MEGUSH8601___
_MEGUSH8601_D__	_MEGUSH8601_D_
_MEGUSH8601_S__	_MEGUSH8601_S_
_MEGUSH8601F___	_MEGUSH8601F__
_MEGUSH8601FD__	_MEGUSH8601F_D
_MEGUSH8601FS__	_MEGUSH8601F_S
_MEGUSH8611____	_MEGUSH8611___
_MEGUSH8611_D__	_MEGUSH8611_D_
_MEGUSH8611_F___	_MEGUSH8611_F_
_MEGUSH8611_FD_	_MEGUSH8611_FD
_MEGUSH8611_FS_	_MEGUSH8611_FS
_MEGUSH8611_S__	_MEGUSH8611_S_
_____	_____
_____	_____
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES_

Were ICP background corrections applied ? Yes/No YES_
If yes - were raw data generated before application of background corrections ? Yes/No NO__

Comments:

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_____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Sheryl L Manhacci Name: Sheryl L. Manhacci

Date: 4/9/03 Title: Inorganics Manager

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGCD0131

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGCD0131__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	558			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1480			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	~~E~~	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.9	B		P
7439-89-6	Iron	3440		~~E~~ J	P
7439-92-1	Lead	~~7.7~~		~~*N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	178			P
7439-97-6	Mercury	0.13	U	~~N~~ J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	59.0		~~E~~ J	P
7440-42-8	Boron				NR

Amk 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCD0131 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGCD0131_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	151	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	1610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.9	B		P
7439-89-6	Iron	161			P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	85.6			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	63.7			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD014___

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5960			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	786			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	18.8	B		P
7439-89-6	Iron	184000		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	677			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~1.0~~	U	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	J B	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	9.5	B		P
7440-66-6	Zinc	237		J	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD014_F_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	2.3	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	4.3	B		P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	0.30	U		P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U	J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0115__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	138	B		P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	443		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.9	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.8	B		P
7439-89-6	Iron	32700		E J	P
7439-92-1	Lead	1.3	U	~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	234			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	8.5	B	E	P
7440-42-8	Boron				NR

AMK 6/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0115F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.3	B	N J	P
7440-39-3	Barium	700		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	75.8	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3.5	B		P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	10.8	B		P
7440-42-8	Boron				NR

AMK 4/8/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0121

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0121__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1920			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1530			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4	B	~~E~~	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	17.0	B		P
7439-89-6	Iron	13600		~~E~~ J	P
7439-92-1	Lead	1.3	U	~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	505			P
7439-97-6	Mercury	0.13	U	~~N~~ J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	~~E~~	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0121F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	3.5	B	N J	P
7440-39-3	Barium	1390			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	401			P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	463			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	106			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0123

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0123__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3140			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1130			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.1	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	59.0			P
7439-89-6	Iron	21400		E J	P
7439-92-1	Lead	1.3	U	~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	226			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	18.4	B	E	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0123F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0123F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1060			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	NJ	P
7440-39-3	Barium	968			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	28.8			P
7439-89-6	Iron	1990			P
7439-92-1	Lead	1.3	U	NJ	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	32.9			P
7439-97-6	Mercury	0.13	U	NJ	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	NJ	P
7440-22-4	Silver	1.8	U	NJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	52.1			P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0129__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	113000		J	P
7440-36-0	Antimony	~~34.0~~	~~B~~	J	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	UJ	P
7440-39-3	Barium	6290		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	800		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1740		J	P
7439-89-6	Iron	1940000		J	P
7439-92-1	Lead	165		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	9590		J	P
7439-97-6	Mercury	0.30		J	AV
7440-02-0	Nickel	~~157~~		R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	UJ	P
7440-22-4	Silver	~~1.8~~	~~U~~	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	166		J	P
7440-66-6	Zinc	1770		J	P
7440-42-8	Boron				NR

AMK 4/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0129_F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69.6	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	841			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	317		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	19.5			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	136			P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0132

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0132__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	356			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	939			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	7.7	B		P
7439-89-6	Iron	2420		E J	P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	27.4			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0238

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0238__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	583			P
7440-36-0	Antimony	~~2.5~~	~~U~~	R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	R	P
7440-39-3	Barium	163	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.7	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.2	B		P
7439-89-6	Iron	2350		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	31.4			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~3.2~~	~~B~~	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~J~~ R	P
7440-22-4	Silver	~~1.8~~	~~U~~	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	16.5	B		P
7440-42-8	Boron				NR

AMS 6/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0243

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0243__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	1610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	22.8	B		P
7439-89-6	Iron	20500		J	P
7439-92-1	Lead	3.2		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	607			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~14.4~~	~~B~~	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	J R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.4	B		P
7440-66-6	Zinc	57.8		J	P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0243F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0243F_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.3	B	J	P
7440-39-3	Barium	1690			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	35.0	B		P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	208			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	50.5			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0110_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	322000			P
7440-36-0	Antimony	~~15.4~~	B	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	6530			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	782		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1010			P
7439-89-6	Iron	941000		E J	P
7439-92-1	Lead	44.3		~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	11500			P
7439-97-6	Mercury	0.50		N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	501			P
7440-66-6	Zinc	2460		E J	P
7440-42-8	Boron				NR

amk 4/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0110_F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.7	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	286			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.8	B		P
7439-89-6	Iron	811			P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	398			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0117

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0117_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25900			P
7440-36-0	Antimony	~~8.0~~	B	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	3480			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	65.3		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	69.1			P
7439-89-6	Iron	406000		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	7610			P
7439-97-6	Mercury	0.13	B	J	AV
7440-02-0	Nickel	~~58.5~~		R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R B	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	33.1	B		P
7440-66-6	Zinc	268		J	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0117F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0117F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	936			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	676			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3010			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	8.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	167			P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0128_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5730			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	2060			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	19.6		E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	20.6	B		P
7439-89-6	Iron	12900		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	327			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	8.8	B		P
7440-66-6	Zinc	321		E J	P
7440-42-8	Boron				NR

AMK 6/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDSH0121

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH0121_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4450			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	216			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	101		~~E~~ J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	48.5			P
7439-89-6	Iron	6320		~~E~~ J	P
7439-92-1	Lead	10.7		~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3150			P
7439-97-6	Mercury	0.13	U	~~N~~ J	AV
7440-02-0	Nickel	~~41.5~~		~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	6.9	B		P
7440-66-6	Zinc	623		~~E~~ J	P
7440-42-8	Boron				NR

Amk 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH0121F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.5	B	N J	P
7440-39-3	Barium	726			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.2	B		P
7439-89-6	Iron	28.9	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	2850			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	7.9	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	189			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8601_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30800			P
7440-36-0	Antimony	~~3370~~		N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	2610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	201000		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3040			P
7439-89-6	Iron	927000		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	161000			P
7439-97-6	Mercury	0.46		N J	AV
7440-02-0	Nickel	~~21500~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	101			P
7440-66-6	Zinc	786		E J	P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8601F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.6	B	NJ	P
7440-39-3	Barium	687			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.5	B		P
7439-89-6	Iron	11.6	B		P
7439-92-1	Lead	1.3	U	NJ	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	811			P
7439-97-6	Mercury	0.13	U	NJ	AV
7440-02-0	Nickel	223			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	NJ	P
7440-22-4	Silver	1.8	U	NJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	212			P
7440-42-8	Boron				NR

AMK 4/28/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8611_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	986			P
7440-36-0	Antimony	~~11.5~~	B	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	749			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	893		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	112			P
7439-89-6	Iron	8800		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	32600			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1550~~		~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~6.4~~		~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.1	B	J	P
7440-66-6	Zinc	2950		E J	P
7440-42-8	Boron				NR

amk 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8611_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.4	B	N J	P
7440-39-3	Barium	779		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	76.2	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	5900			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	127			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	234		J	P
7440-42-8	Boron				NR

ATMK 4/28/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8616

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8616_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.1	B		P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	441			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.7	B		P
7439-89-6	Iron	719		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	909			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

AMK 6/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP021803

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8100		UJ	P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	894		UJ	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	34.6		UJ	P
7439-89-6	Iron	244000		UJ	P
7439-92-1	Lead	1.3	U	UJ	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	780		UJ	P
7439-97-6	Mercury	0.13	U	UJ	AV
7440-02-0	Nickel	~~1.0~~	U	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R B	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	14.1	B	UJ	P
7440-66-6	Zinc	343		UJ	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP021803_F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	128	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	UJ	P
7440-39-3	Barium	960			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1280		J	P
7439-92-1	Lead	1.3	U	UJ	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	26.3			P
7439-97-6	Mercury	0.13	U	UJ	AV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	139			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP022003

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1160			P
7440-36-0	Antimony	~~10.5~~	B	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	1030			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	873		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	173			P
7439-89-6	Iron	7760		E J	P
7439-92-1	Lead	3.1		*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	53600			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~2550~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~18.5~~		N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	18.8	B	J	P
7440-66-6	Zinc	4300		E J	P
7440-42-8	Boron				NR

Ank 6/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP022003_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	409		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.8	B		P
7439-89-6	Iron	70.7	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	6020			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	129			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	98.7		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	2000.0	2174.68	108.7	2000.0	2133.65	106.7	1975.38	98.8	P
Antimony	2000.0	2126.19	106.3	2000.0	2134.39	106.7	2180.32	109.0	P
Arsenic	2000.0	1998.37	99.9	2000.0	2010.44	100.5	2060.71	103.0	P
Barium	2000.0	2087.71	104.4	2000.0	2086.49	104.3	2107.90	105.4	P
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2033.50	101.7	2000.0	2019.62	101.0	2034.75	101.7	P
Cobalt									
Copper	2000.0	2059.12	103.0	2000.0	2056.48	102.8	2069.95	103.5	P
Iron	2000.0	2019.66	101.0	2000.0	2037.47	101.9	2080.10	104.0	P
Lead	2000.0	2077.41	103.9	2000.0	2083.68	104.2	2161.25	108.1	P
Magnesium									
Manganese	2000.0	1994.89	99.7	2000.0	2009.51	100.5	2048.32	102.4	P
Mercury	2.0	1.98	99.0	2.0	2.00	100.0	2.01	100.5	AV
Nickel	2000.0	2076.08	103.8	2000.0	2060.65	103.0	2119.47	106.0	P
Potassium									
Selenium	2000.0	2084.02	104.2	2000.0	2092.15	104.6	2154.95	107.7	P
Silver	500.0	506.95	101.4	500.0	503.48	100.7	511.10	102.2	P
Sodium									
Thallium									
Vanadium	2000.0	2029.29	101.5	2000.0	2033.46	101.7	2073.21	103.7	P
Zinc	2000.0	2110.29	105.5	2000.0	2117.96	105.9	2165.03	108.3	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2170.22	108.5	2151.21	107.6	P
Antimony				2000.0	2059.89	103.0	2113.61	105.7	P
Arsenic				2000.0	1949.16	97.5	2019.67	101.0	P
Barium				2000.0	2127.78	106.4	2148.30	107.4	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2079.13	104.0	2106.79	105.3	P
Cobalt									
Copper				2000.0	2079.27	104.0	2111.28	105.6	P
Iron				2000.0	1925.98	96.3	1979.94	99.0	P
Lead				2000.0	1844.27	92.2	1924.02	96.2	P
Magnesium									
Manganese				2000.0	2169.52	108.5	1996.40	99.8	P
Mercury									
Nickel				2000.0	1907.38	95.4	1972.84	98.6	P
Potassium									
Selenium				2000.0	1922.70	96.1	1982.50	99.1	P
Silver				500.0	530.62	106.1	539.14	107.8	P
Sodium									
Thallium									
Vanadium				2000.0	2124.78	106.2	2182.04	109.1	P
Zinc				2000.0	1949.38	97.5	2000.88	100.0	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2110.34	105.5	2134.66	106.7	P
Antimony				2000.0	2075.14	103.8	2081.73	104.1	P
Arsenic				2000.0	1977.05	98.9	1988.82	99.4	P
Barium				2000.0	2124.59	106.2	2119.18	106.0	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2065.84	103.3	2069.81	103.5	P
Cobalt									
Copper				2000.0	2083.55	104.2	2075.38	103.8	P
Iron				2000.0	1951.58	97.6	1957.04	97.9	P
Lead				2000.0	1887.96	94.4	2156.47	107.8	P
Magnesium									
Manganese				2000.0	1958.87	97.9	1966.26	98.3	P
Mercury									
Nickel				2000.0	1934.01	96.7	1971.69	98.6	P
Potassium									
Selenium				2000.0	1945.92	97.3	2113.42	105.7	P
Silver				500.0	531.12	106.2	526.58	105.3	P
Sodium									
Thallium									
Vanadium				2000.0	2134.09	106.7	2135.79	106.8	P
Zinc				2000.0	1967.07	98.4	1975.77	98.8	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	2000.0	2151.87	107.6	2000.0	1989.59	99.5	2060.14	103.0	P
Antimony	2000.0	2070.30	103.5	2000.0	2071.57	103.6	2069.90	103.5	P
Arsenic	2000.0	1976.07	98.8	2000.0	1973.01	98.7	1964.28	98.2	P
Barium	2000.0	1988.59	99.4	2000.0	2033.49	101.7	2060.75	103.0	P
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	1973.23	98.7	2000.0	1973.98	98.7	1998.27	99.9	P
Cobalt									
Copper	2000.0	2009.80	100.5	2000.0	2037.26	101.9	2055.26	102.8	P
Iron	2000.0	2010.03	100.5	2000.0	2000.90	100.0	1996.61	99.8	P
Lead	2000.0	2004.97	100.2	2000.0	1989.51	99.5	2135.20	106.8	P
Magnesium									
Manganese	2000.0	1953.03	97.7	2000.0	1963.00	98.2	1973.60	98.7	P
Mercury	2.0	1.95	97.5	2.0	1.95	97.5	1.99	99.5	AV
Nickel	2000.0	2078.85	103.9	2000.0	2067.84	103.4	2063.02	103.2	P
Potassium									
Selenium	2000.0	2103.87	105.2	2000.0	2104.75	105.2	2096.31	104.8	P
Silver	500.0	493.89	98.8	500.0	493.27	98.7	497.62	99.5	P
Sodium									
Thallium									
Vanadium	2000.0	1981.45	99.1	2000.0	1981.34	99.1	1981.13	99.1	P
Zinc	2000.0	2088.34	104.4	2000.0	2077.43	103.9	2074.62	103.7	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2015.48	100.8	2018.19	100.9	P
Antimony				2000.0	2103.99	105.2	2081.38	104.1	P
Arsenic				2000.0	2007.68	100.4	1996.25	99.8	P
Barium				2000.0	2037.36	101.9	2033.05	101.7	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2004.48	100.2	1998.78	99.9	P
Cobalt									
Copper				2000.0	2048.65	102.4	2045.37	102.3	P
Iron				2000.0	2041.86	102.1	2023.90	101.2	P
Lead				2000.0	2173.60	108.7	2149.18	107.5	P
Magnesium									
Manganese				2000.0	1997.80	99.9	1971.75	98.6	P
Mercury				2.0	1.87	93.5	1.97	98.5	AV
Nickel				2000.0	2119.37	106.0	2094.02	104.7	P
Potassium									
Selenium				2000.0	2138.84	106.9	2132.99	106.6	P
Silver				500.0	502.40	100.5	497.35	99.5	P
Sodium									
Thallium									
Vanadium				2000.0	2023.01	101.2	2005.91	100.3	P
Zinc				2000.0	2114.49	105.7	2097.82	104.9	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	1986.11	99.3	2006.98	100.3	P
Antimony				2000.0	2095.26	104.8	2123.19	106.2	P
Arsenic				2000.0	2004.94	100.2	2036.02	101.8	P
Barium				2000.0	2019.34	101.0	2037.84	101.9	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	1998.02	99.9	2023.57	101.2	P
Cobalt									
Copper				2000.0	2043.95	102.2	2062.19	103.1	P
Iron				2000.0	2039.60	102.0	2063.07	103.2	P
Lead				2000.0	2153.68	107.7	2066.92	103.3	P
Magnesium									
Manganese				2000.0	1980.48	99.0	2002.24	100.1	P
Mercury	2.0	2.06	103.0	2.0	2.04	102.0	2.02	101.0	AV
Nickel				2000.0	2111.17	105.6	2154.18	107.7	P
Potassium									
Selenium				2000.0	2143.01	107.2	2168.08	108.4	P
Silver				500.0	500.00	100.0	502.11	100.4	P
Sodium									
Thallium									
Vanadium				2000.0	2012.25	100.6	2035.65	101.8	P
Zinc				2000.0	2111.77	105.6	2141.54	107.1	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	1987.44	99.4			P
Antimony				2000.0	2092.28	104.6			P
Arsenic				2000.0	2007.17	100.4			P
Barium				2000.0	2011.57	100.6			P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	2000.56	100.0			P
Cobalt									
Copper				2000.0	2033.68	101.7			P
Iron				2000.0	2051.33	102.6			P
Lead				2000.0	2040.01	102.0			P
Magnesium									
Manganese				2000.0	1975.47	98.8			P
Mercury				2.0	2.02	101.0			AV
Nickel				2000.0	2111.15	105.6			P
Potassium									
Selenium				2000.0	2143.31	107.2			P
Silver				500.0	500.07	100.0			P
Sodium									
Thallium									
Vanadium				2000.0	2012.14	100.6			P
Zinc				2000.0	2116.86	105.8			P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

AA CRDL Standard Source: _____

ICP CRDL Standard Source: HIGH_PURITY__

ICP 2/28

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	131.67	109.7	128.06	106.7
Arsenic				20.0	19.16	95.8	21.99	110.0
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium				20.0	23.78	118.9	24.68	123.4
Cobalt								
Copper				50.0	46.83	93.7	49.87	99.7
Iron								
Lead				6.0	7.28	121.3	6.22	103.7
Magnesium								
Manganese				30.0	30.14	100.5	29.82	99.4
Mercury								
Nickel				80.0	83.50	104.4	79.37	99.2
Potassium								
Selenium				10.0	7.10	71.0	10.91	109.1
Silver				20.0	17.76	88.8	18.63	93.1
Sodium								
Thallium								
Vanadium				100.0	93.54	93.5	101.73	101.7
Zinc				40.0	42.93	107.3	48.15	120.4

Control Limits: no limits have been established by EPA at this time

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

AA CRDL Standard Source: _____

ICP CRDL Standard Source: HIGH_PURITY__

Concentration Units: ug/L ICP 3B

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	124.64	103.9	126.97	105.8
Arsenic				20.0	17.14	85.7	18.30	91.5
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium				20.0	18.12	90.6	21.47	107.4
Cobalt								
Copper				50.0	46.89	93.8	47.14	94.3
Iron								
Lead				6.0	6.58	109.7	7.54	125.7
Magnesium								
Manganese				30.0	28.71	95.7	29.17	97.2
Mercury								
Nickel				80.0	80.68	100.9	83.46	104.3
Potassium								
Selenium				10.0	9.75	97.5	9.31	93.1
Silver				20.0	19.05	95.2	19.28	96.4
Sodium								
Thallium								
Vanadium				100.0	88.50	88.5	92.50	92.5
Zinc				40.0	41.31	103.3	42.18	105.4

Control Limits: no limits have been established by EPA at this time

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	2.5	B	2.5	U	2.5	U	2.5	U	2.500	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	1.6	B	4.0	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	9.0	B	4.2	B	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.4	U	1.4	U	1.4	U	1.400	U	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	3.405	B	P
Lead	1.3	U	1.3	U	1.3	U	1.3	U	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.1	B	0.1	U					0.130	U	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	1.067	B	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U	12.8	U	12.8	U			P
Antimony			3.7	B	2.5	U	2.5	U			P
Arsenic			3.7	B	2.2	U	2.5	B			P
Barium			4.9	B	5.2	B	5.4	B			P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U	3.6	U	3.6	U			P
Cobalt											
Copper			1.4	U	1.4	U	1.4	U			P
Iron			1.0	U	1.0	U	1.0	U			P
Lead			2.0	B	1.3	U	1.3	U			P
Magnesium											
Manganese			0.3	U	0.3	U	0.3	U			P
Mercury											
Nickel			1.0	U	1.0	U	1.0	U			P
Potassium											
Selenium			2.5	U	2.5	U	2.5	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium											
Thallium											
Vanadium			3.1	U	3.1	U	3.1	U			P
Zinc			0.5	U	0.5	U	0.5	U			P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	12.8	U	12.800	U	P
Antimony	2.5	U	2.5	U	2.5	U	3.8	B	2.500	U	P
Arsenic	2.2	U	2.2	U	2.2	U	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.7	B	1.4	B	1.4	U	1.400	U	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	2.894	B	P
Lead	1.8	B	1.3	U	1.3	U	1.5	B	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.300	U	P
Mercury	0.0	B	0.1	B	0.0	B	0.1	B	0.130	U	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U	12.8	U	12.8	U			P
Antimony			2.5	U	2.5	U	2.5	U			P
Arsenic			2.2	U	2.2	U	2.7	B			P
Barium			0.5	U	0.5	U	0.5	U			P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U	3.6	U	3.6	U			P
Cobalt											
Copper			1.4	U	1.4	U	1.4	U			P
Iron			1.0	U	1.0	U	1.0	U			P
Lead			1.5	B	1.3	U	1.3	U			P
Magnesium											
Manganese			0.3	U	0.3	U	0.3	U			P
Mercury			0.0	U					0.130	U	AV
Nickel			1.0	U	1.0	U	1.0	U			P
Potassium											
Selenium			2.5	U	2.5	U	2.5	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium											
Thallium											
Vanadium			3.1	U	3.1	U	3.1	U			P
Zinc			0.5	U	0.5	U	0.5	U			P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD01

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			12.8	U							P
Antimony			2.5	U							P
Arsenic			2.7	B							P
Barium			0.5	U							P
Beryllium											
Cadmium											
Calcium											
Chromium			3.6	U							P
Cobalt											
Copper			1.4	U							P
Iron			1.0	U							P
Lead			1.3	U							P
Magnesium											
Manganese			0.3	U							P
Mercury	0.0	B	0.0	B	0.1	B	0.0	B			AV
Nickel			1.0	U							P
Potassium											
Selenium			2.5	U							P
Silver			1.8	U							P
Sodium											
Thallium											
Vanadium			3.1	U							P
Zinc			0.5	U							P
Boron											

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

ICP ID Number: IRIS_____ ICS Source: HIGH_PURITY

Concentration Units: ug/L ICP228

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	472534	470734.5	94.1	468102	466364.7	93.3
Antimony								
Arsenic								
Barium		500		491.1	98.2		504.2	100.8
Beryllium								
Cadmium								
Calcium								
Chromium		500		524.7	104.9		521.0	104.2
Cobalt								
Copper		500		469.5	93.9		471.0	94.2
Iron	200000	200000	123590	123153.5	61.6	122816	123242.7	61.6
Lead		1000		956.6	95.7		1045.3	104.5
Magnesium								
Manganese		500		470.9	94.2		510.7	102.1
Mercury								
Nickel		1000		907.1	90.7		934.0	93.4
Potassium								
Selenium								
Silver		1000		1010.8	101.1		1050.8	105.1
Sodium								
Thallium								
Vanadium		500		442.2	88.4		436.7	87.3
Zinc		1000		937.5	93.8		428.7	42.9

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.: MEGCD0131

ICP ID Number: IRIS_____ ICS Source: HIGH_PURITY

Concentration Units: ug/L ICP3P30

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	457269	453982.8	90.8	460168	457707.5	91.5
Antimony								
Arsenic								
Barium		500		477.9	95.6		471.5	94.3
Beryllium								
Cadmium								
Calcium								
Chromium		500		502.0	100.4		492.7	98.5
Cobalt								
Copper		500		447.3	89.5		441.1	88.2
Iron	200000	200000	123208	122686.1	61.3	126225	125471.0	62.7
Lead		1000		916.4	91.6		952.0	95.2
Magnesium								
Manganese		500		456.8	91.4		448.6	89.7
Mercury								
Nickel		1000		883.8	88.4		914.1	91.4
Potassium								
Selenium								
Silver		1000		984.1	98.4		985.9	98.6
Sodium								
Thallium								
Vanadium		500		426.1	85.2		434.6	86.9
Zinc		1000		449.4	44.9		934.6	93.5

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

0218F01 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.7684		0.0291	B	2.00	87.0		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIM0110 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		320842.8430		322228.8750		2000.00	-69.3		P
Antimony	75-125	75.9579		15.3771	B	500.00	12.1	N	P
Arsenic	75-125	2.2000	U	2.2000	U	40.00	0.0	N	P
Barium	75-125	8154.9023		6530.2949		2000.00	81.2		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	968.5664		782.0043		200.00	93.3		P
Cobalt									NR
Copper		1218.5710		1010.5567		250.00	83.2		P
Iron		267780.6250		940953.9100		1000.00	-9999.9		P
Lead	75-125	53.7752		44.2568		20.00	47.6	N	P
Magnesium									NR
Manganese		8596.6074		11497.9820		500.00	-580.3		P
Mercury									NR
Nickel	75-125	84.4760		1.0000	U	500.00	16.9	N	P
Potassium									NR
Selenium	75-125	2.5000	U	2.5000	U	10.00	0.0	N	P
Silver	75-125	1.8000	U	1.8000	U	50.00	0.0	N	P
Sodium									NR
Thallium									NR
Vanadium	75-125	913.3826		500.6099		500.00	82.6		P
Zinc		2866.7685		2456.4351		500.00	82.1		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0110F S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1933.9120		19.7038	B	2000.00	95.7		P
Antimony	75-125	415.6575		2.5000	U	500.00	83.1		P
Arsenic	75-125	27.5098		2.2000	U	40.00	68.8	N	P
Barium	75-125	2226.5410		286.2757		2000.00	97.0		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	202.7257		3.6000	U	200.00	101.4		P
Cobalt									NR
Copper	75-125	248.1586		1.8007	B	250.00	98.5		P
Iron	75-125	1799.0435		810.6653		1000.00	98.8		P
Lead	75-125	14.2594		1.3000	U	20.00	71.3	N	P
Magnesium									NR
Manganese	75-125	867.2140		398.2062		500.00	93.8		P
Mercury									NR
Nickel	75-125	462.5798		1.0000	U	500.00	92.5		P
Potassium									NR
Selenium	75-125	3.0464	B	2.5000	U	10.00	30.5	N	P
Silver	75-125	23.5023		1.8000	U	50.00	47.0	N	P
Sodium									NR
Thallium									NR
Vanadium	75-125	456.2089		3.1000	U	500.00	91.2		P
Zinc	75-125	457.0108		0.5000	U	500.00	91.4		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8601 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	2.0620		0.4597		2.00	80.1		AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8601 FS

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury	75-125	1.4010		0.0279	B	2.00	68.7	N	AV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGUSH8611 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2909.7793		986.1309		2000.00	96.2		P
Antimony	75-125	418.8396		11.4934	B	500.00	81.5		P
Arsenic	75-125	2.2000	U	2.2000	U	40.00	0.0	N	P
Barium	75-125	2686.8137		748.7143		2000.00	96.9		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		1136.9940		892.5408		200.00	122.2		P
Cobalt									NR
Copper	75-125	354.6207		112.4329		250.00	96.9		P
Iron		9682.7930		8797.6836		1000.00	88.5		P
Lead	75-125	14.1904		1.3000	U	20.00	71.0	N	P
Magnesium									NR
Manganese		23590.5781		32582.9780		500.00	-1798.5		P
Mercury	75-125	1.0000		0.0445	B	2.00	47.8	N	AV
Nickel	75-125	1950.5166		1550.3503		500.00	80.0		P
Potassium									NR
Selenium	75-125	13.2600		6.3693		10.00	68.9	N	P
Silver	75-125	40.2120		1.8000	U	50.00	80.4		P
Sodium									NR
Thallium									NR
Vanadium	75-125	452.6183		11.0726	B	500.00	88.3		P
Zinc		3302.9634		2952.9243		500.00	70.0		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGUSH8611 F S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2051.5864		12.8000	U	2000.00	102.6		P
Antimony	75-125	440.5218		2.5000	U	500.00	88.1		P
Arsenic	75-125	30.4161		2.4384	B	40.00	69.9	N	P
Barium	75-125	2873.9145		779.2368		2000.00	104.7		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	213.9018		3.6000	U	200.00	107.0		P
Cobalt									NR
Copper	75-125	264.9052		1.4000	U	250.00	106.0		P
Iron	75-125	1070.1103		76.2012	B	1000.00	99.4		P
Lead	75-125	19.5771		1.3000	U	20.00	97.9		P
Magnesium									NR
Manganese		6768.7188		5900.9790		500.00	173.5		P
Mercury	75-125	0.8729		0.0130	U	2.00	43.6	N	AV
Nickel	75-125	627.5800		126.5838		500.00	100.2		P
Potassium									NR
Selenium	75-125	11.9784		2.5000	U	10.00	119.8		P
Silver	75-125	44.8981		1.8000	U	50.00	89.8		P
Sodium									NR
Thallium									NR
Vanadium	75-125	479.9049		3.1000	U	500.00	96.0		P
Zinc	75-125	786.9419		233.8365		500.00	110.6		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIM0110 A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		323332.38		322228.88		4000.0	27.6		P
Antimony		868.96		15.38	B	1000.0	85.4		P
Arsenic		2.20		2.20	U	80.0	0.0		P
Barium		9786.28		6530.29		4000.0	81.4		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		1222.31		782.00		400.0	110.1		P
Cobalt									NR
Copper		1544.10		1010.56		500.0	106.7		P
Iron		267752.69		940953.91		200000.0	-336.6		P
Lead		69.51		44.26		40.0	63.1		P
Magnesium									NR
Manganese		10561.51		11497.98		10000.0	-9.4		P
Mercury									NR
Nickel		461.89		1.00	U	1000.0	46.2		P
Potassium									NR
Selenium		2.50		2.50	U	20.0	0.0		P
Silver		2.79		1.80	U	100.0	2.8		P
Sodium									NR
Thallium									NR
Vanadium		1444.44		500.61		1000.0	94.4		P
Zinc		3409.33		2456.44		1000.0	95.3		P
Boron									NR

Comments:

U.S. EPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0110F A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3871.09		19.70	B	4000.0	96.3		P
Antimony		821.66		2.50	U	1000.0	82.2		P
Arsenic		71.96		2.20	U	80.0	89.9		P
Barium		4131.53		286.28		4000.0	96.1		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		406.45		3.60	U	400.0	101.6		P
Cobalt									NR
Copper		498.97		1.80	B	500.0	99.4		P
Iron		2766.55		810.67		2000.0	97.8		P
Lead		31.88		1.30	U	40.0	79.7		P
Magnesium									NR
Manganese		1326.18		398.21		1000.0	92.8		P
Mercury									NR
Nickel		939.62		1.00	U	1000.0	94.0		P
Potassium									NR
Selenium		15.14		2.50	U	20.0	75.7		P
Silver		83.82		1.80	U	100.0	83.8		P
Sodium									NR
Thallium									NR
Vanadium		919.29		3.10	U	1000.0	91.9		P
Zinc		957.62		0.50	U	1000.0	95.8		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGUSH8611 A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		4849.99		986.13		4000.0	96.6		P
Antimony		820.34		11.49	B	1000.0	80.9		P
Arsenic		43.38		2.20	U	80.0	54.2		P
Barium		4610.30		748.71		4000.0	96.5		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		1282.62		892.54		400.0	97.5		P
Cobalt									NR
Copper		612.80		112.43		500.0	100.1		P
Iron		10330.47		8797.68		2000.0	76.6		P
Lead		34.17		1.30	U	40.0	85.4		P
Magnesium									NR
Manganese		24115.49		32582.98		10000.0	-84.7		P
Mercury									NR
Nickel		2448.27		1550.35		1000.0	89.8		P
Potassium									NR
Selenium		25.78		6.37		20.0	97.0		P
Silver		81.71		1.80	U	100.0	81.7		P
Sodium									NR
Thallium									NR
Vanadium		913.88		11.07	B	1000.0	90.3		P
Zinc		3811.74		2952.92		1000.0	85.9		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGUSH8611 F A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3960.16		12.80	U	4000.0	99.0		P
Antimony		855.70		2.50	U	1000.0	85.6		P
Arsenic		70.83		2.44	B	80.0	85.5		P
Barium		4723.64		779.24		4000.0	98.6		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		420.97		3.60	U	400.0	105.2		P
Cobalt									NR
Copper		518.11		1.40	U	500.0	103.6		P
Iron		2041.68		76.20	B	2000.0	98.3		P
Lead		36.42		1.30	U	40.0	91.1		P
Magnesium									NR
Manganese		6966.80		5900.98		1000.0	106.6		P
Mercury									NR
Nickel		1126.30		126.58		1000.0	100.0		P
Potassium									NR
Selenium		17.14		2.50	U	20.0	85.7		P
Silver		88.30		1.80	U	100.0	88.3		P
Sodium									NR
Thallium									NR
Vanadium		951.09		3.10	U	1000.0	95.1		P
Zinc		1277.68		233.84		1000.0	104.4		P
Boron									NR

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

0218F01 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP

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DUPLICATES

EPA SAMPLE NO.

MEGDIM0110 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		322228.8750		307755.4370		4.6		P
Antimony	60.0	15.3771	B	13.4845	B	13.1		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium		6530.2949		6212.8174		5.0		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium		782.0043		741.0913		5.4		P
Cobalt								NR
Copper		1010.5567		941.1747		7.1		P
Iron		940953.9100		965516.5000		2.6		P
Lead		44.2568		35.3975		22.2	*	P
Magnesium								NR
Manganese		11497.9820		12582.9000		9.0		P
Mercury								NR
Nickel	40.0	1.0000	U	1.0000	U			P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium		500.6099		476.6815		4.9		P
Zinc		2456.4351		2390.0884		2.7		P
Boron								NR

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO.

MEGDIM0110F D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	19.7038	B	24.5286	B	21.8		P
Antimony	60.0	2.5000	U	2.5000	U			P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	286.2757		288.1596		0.7		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	3.6000	U			P
Cobalt								NR
Copper	25.0	1.8007	B	2.3799	B	27.7		P
Iron		810.6653		830.8408		2.5		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese		398.2062		401.0252		0.7		P
Mercury								NR
Nickel	40.0	1.0000	U	1.0000	U			P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	3.1000	U	3.1000	U			P
Zinc	20.0	0.5000	U	0.5000	U			P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.
MEGUSH8601 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.4597		0.4263		7.5		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGUSH8601 FD

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury	0.2	0.0279	B	0.0130	U	200.0		AV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.
MEGUSH8611 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	986.1309		963.4279		2.3		P
Antimony	60.0	11.4934	B	11.1160	B	3.3		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium	200.0	748.7143		730.4109		2.5		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium		892.5408		853.0939		4.5		P
Cobalt								NR
Copper	25.0	112.4329		108.8427		3.2		P
Iron		8797.6836		8516.3106		3.3		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese		32582.9780		31611.3400		3.0		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel		1550.3503		1499.6748		3.3		P
Potassium								NR
Selenium	5.0	6.3693		5.6659		11.7		P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	11.0726	B	10.4900	B	5.4		P
Zinc		2952.9243		2851.3023		3.5		P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGUSH8611 F D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	12.8000	U	12.8000	U			P
Antimony	60.0	2.5000	U	2.5000	U			P
Arsenic	10.0	2.4384	B	2.2000	U	200.0		P
Barium	200.0	779.2368		802.8721		3.0		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	3.6000	U	3.6000	U			P
Cobalt								NR
Copper	25.0	1.4000	U	5.2203	B	200.0		P
Iron	100.0	76.2012	B	80.9242	B	6.0		P
Lead	3.0	1.3000	U	1.3000	U			P
Magnesium								NR
Manganese		5900.9790		6070.9058		2.8		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel	40.0	126.5838		130.4927		3.0		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	3.1000	U	3.1000	U			P
Zinc		233.8365		245.5197		4.9		P
Boron								NR

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307SAS No.: _____ SDG No.:MEGCD0131

Solid LCS Source: _____

Aqueous LCS Source: HIGH_PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	2166.8	108.3						
Antimony	2000.0	2151.0	107.6						
Arsenic	2000.0	2024.8	101.2						
Barium	2000.0	2094.2	104.7						
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2029.2	101.5						
Cobalt									
Copper	2000.0	2064.6	103.2						
Iron	2000.0	2050.9	102.5						
Lead	2000.0	2109.7	105.5						
Magnesium									
Manganese	2000.0	2018.9	100.9						
Mercury									
Nickel	2000.0	2077.3	103.9						
Potassium									
Selenium	2000.0	2114.4	105.7						
Silver	500.0	509.8	102.0						
Sodium									
Thallium									
Vanadium	2000.0	2041.2	102.1						
Zinc	2000.0	2134.7	106.7						
Boron									

U.S. EPA - CLP
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LABORATORY CONTROL SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307SAS No.: _____ SDG No.:MEGCD0131

Solid LCS Source: _____

Aqueous LCS Source: HIGH_PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	2026.8	101.3						
Antimony	2000.0	2069.7	103.5						
Arsenic	2000.0	1973.8	98.7						
Barium	2000.0	2037.0	101.8						
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	1992.1	99.6						
Cobalt									
Copper	2000.0	2044.0	102.2						
Iron	2000.0	2003.1	100.2						
Lead	2000.0	1988.4	99.4						
Magnesium									
Manganese	2000.0	1962.1	98.1						
Mercury									
Nickel	2000.0	2066.6	103.3						
Potassium									
Selenium	2000.0	2101.3	105.1						
Silver	500.0	496.3	99.3						
Sodium									
Thallium									
Vanadium	2000.0	1986.4	99.3						
Zinc	2000.0	2080.7	104.0						
Boron									

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STANDARD ADDITION RESULTS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: _____ SDG No.:MEGCD0131

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

U.S. EPA - CLP

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MEGDIM0110 L

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	322228.88		349579.84		8.5		P
Antimony	15.38	B	12.50	U	100.0		P
Arsenic	2.20	U	11.00	U			P
Barium	6530.29		7007.66		7.3		P
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium	782.00		597.49		23.6	E	P
Cobalt							NR
Copper	1010.56		1002.35		0.8		P
Iron	940953.91		674905.46		28.3	E	P
Lead	44.26		6.50	U	100.0		P
Magnesium							NR
Manganese	11497.98		11290.94		1.8		P
Mercury							NR
Nickel	1.00	U	5.00	U			P
Potassium							NR
Selenium	2.50	U	12.50	U			P
Silver	1.80	U	9.00	U			P
Sodium							NR
Thallium							NR
Vanadium	500.61		509.94		1.9		P
Zinc	2456.44		2790.57		13.6	E	P

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MEGDIM0110F L

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	19.70	B	64.00	U	100.0		P
Antimony	2.50	U	12.50	U			P
Arsenic	2.20	U	11.00	U			P
Barium	286.28		264.84	B	7.5		P
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium	3.60	U	18.00	U			P
Cobalt							NR
Copper	1.80	B	9.62	B	434.4		P
Iron	810.67		801.56		1.1		P
Lead	1.30	U	6.50	U			P
Magnesium							NR
Manganese	398.21		390.52		1.9		P
Mercury							NR
Nickel	1.00	U	5.00	U			P
Potassium							NR
Selenium	2.50	U	12.50	U			P
Silver	1.80	U	9.00	U			P
Sodium							NR
Thallium							NR
Vanadium	3.10	U	15.50	U			P
Zinc	0.50	U	2.50	U			P

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MEGUSH8611 L

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	986.13		950.38	B	3.6		P
Antimony	11.49	B	12.50	U	100.0		P
Arsenic	2.20	U	11.00	U			P
Barium	748.71		717.32	B	4.2		P
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium	892.54		841.36		5.7		P
Cobalt							NR
Copper	112.43		112.92	B	0.4		P
Iron	8797.68		9629.87		9.5		P
Lead	1.30	U	6.63	B			P
Magnesium							NR
Manganese	32582.98		29703.74		8.8		P
Mercury							NR
Nickel	1550.35		1637.36		5.6		P
Potassium							NR
Selenium	6.37		12.50	U	100.0		P
Silver	1.80	U	9.00	U			P
Sodium							NR
Thallium							NR
Vanadium	11.07	B	15.50	U	100.0		P
Zinc	2952.92		3184.40		7.8		P

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MEGUSH8611 F L

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.:MEGCD01

Matrix (soil/water): WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	12.80	U	64.00	U			P
Antimony	2.50	U	12.50	U			P
Arsenic	2.44	B	11.00	U	100.0		P
Barium	779.24		724.57	B	7.0		P
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium	3.60	U	18.00	U			P
Cobalt							NR
Copper	1.40	U	7.23	B			P
Iron	76.20	B	72.79	B	4.5		P
Lead	1.30	U	6.50	U			P
Magnesium							NR
Manganese	5900.98		6422.02		8.8		P
Mercury							NR
Nickel	126.58		134.95	B	6.6		P
Potassium							NR
Selenium	2.50	U	12.50	U			P
Silver	1.80	U	9.00	U			P
Sodium							NR
Thallium							NR
Vanadium	3.10	U	15.50	U			P
Zinc	233.84		253.14		8.3		P

U.S. EPA - CLP
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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

ICP ID Number: IRIS_____ Date: 10/26/02

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-round	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	12.8	P
Antimony	206.83		60	2.5	P
Arsenic	193.76		10	2.2	P
Barium	493.41		200	0.5	P
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium	357.87		10	3.6	P
Cobalt			50		NR
Copper	324.75		25	1.4	P
Iron	259.94		100	1.0	P
Lead	220.35		3	1.3	P
Magnesium			5000		NR
Manganese	257.61		15	0.3	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium			5000		NR
Selenium	196.09		5	2.5	P
Silver	328.07		10	1.8	P
Sodium			5000		NR
Thallium			10		NR
Vanadium	292.40		50	3.1	P
Zinc	213.86		20	0.5	P

Comments:

U.S. EPA - CLP

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

ICP ID Number: _____ Date: 10/26/02

Flame AA ID Number: PE-FIMS____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-round	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.13	AV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

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_____

_____

_____

U.S. EPA - CLP
11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.: MEGC

ICP ID Number:IRIS_____ Date: 11/04/02

Analyte	Wave-length (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	_
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.83	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	193.76	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium						
Cadmium						
Calcium						
Chromium	357.87	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt						
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium						
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium						
Selenium	196.09	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium						
Thallium						
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

U.S. EPA - CLP
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ICP LINEAR RANGES (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0307 SAS No.: _____ SDG No.:MEGCD0131

ICP ID Number:IRIS_____ Date: 11/04/02

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	60.00	500000	P
Antimony	60.00	50000	P
Arsenic	60.00	50000	P
Barium	60.00	10000	P
Beryllium			NR
Cadmium			NR
Calcium			NR
Chromium	60.00	5000	P
Cobalt			NR
Copper	60.00	100000	P
Iron	60.00	80000	P
Lead	60.00	200000	P
Magnesium			NR
Manganese	60.00	10000	P
Mercury			NR
Nickel	60.00	500000	P
Potassium			NR
Selenium	60.00	10000	P
Silver	60.00	50000	P
Sodium			NR
Thallium			NR
Vanadium	60.00	50000	P
Zinc	60.00	20000	P

Comments:

_____

_____

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_____

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0307 SAS No.:_____ SDG No.: MEGCD0131

Method: P__

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_DUP021803___	____02/26/03___	_____	_____100_____
_DUP021803_F_	____02/26/03___	_____	_____100_____
_LCSW_____	____02/26/03___	_____	_____100_____
_MEGDD0129___	____02/26/03___	_____	_____100_____
_MEGDD0129_F_	____02/26/03___	_____	_____100_____
_MEGDD014____	____02/26/03___	_____	_____100_____
_MEGDD014_F__	____02/26/03___	_____	_____100_____
_MEGDD0238___	____02/26/03___	_____	_____100_____
_MEGDD0243___	____02/26/03___	_____	_____100_____
_MEGDD0243F__	____02/26/03___	_____	_____100_____
_MEGDIM0117__	____02/26/03___	_____	_____100_____
MEGDIM0117F	____02/26/03___	_____	_____100_____
_PBW_____	____02/26/03___	_____	_____100_____

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0307 SAS No.:_____ SDG No.: MEGCD0131

Method: P__

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_DUP022003___	____03/03/03___	_____	_____100____
_DUP022003_F_	____03/03/03___	_____	_____100____
_LCSW_____	____03/03/03___	_____	_____100____
_MEGCD0131___	____03/03/03___	_____	_____100____
_MEGCD0131_F_	____03/03/03___	_____	_____100____
_MEGDD0115___	____03/03/03___	_____	_____100____
_MEGDD0115F__	____03/03/03___	_____	_____100____
_MEGDD0121___	____03/03/03___	_____	_____100____
_MEGDD0121F__	____03/03/03___	_____	_____100____
_MEGDD0123___	____03/03/03___	_____	_____100____
_MEGDD0123F__	____03/03/03___	_____	_____100____
_MEGDD0132___	____03/03/03___	_____	_____100____
_MEGDIM0110__	____03/03/03___	_____	_____100____
_MEGDIM0110_D	____03/03/03___	_____	_____100____
_MEGDIM0110_F	____03/03/03___	_____	_____100____
_MEGDIM0110_S	____03/03/03___	_____	_____100____
_MEGDIM0110F_DUP__03/03/03___		_____	_____100____
_MEGDIM0110F_SPK__03/03/03___		_____	_____100____
_MEGDIM0128__	____03/03/03___	_____	_____100____
_MEGDSH0121__	____03/03/03___	_____	_____100____
MEGDSH0121F	____03/03/03___	_____	_____100____
_MEGUSH8601__	____03/03/03___	_____	_____100____
MEGUSH8601F	____03/03/03___	_____	_____100____
_MEGUSH8611__	____03/03/03___	_____	_____100____
_MEGUSH8611_DUP___03/03/03___		_____	_____100____
_MEGUSH8611_F	____03/03/03___	_____	_____100____
_MEGUSH8611_F_DU__03/03/03___		_____	_____100____
_MEGUSH8611_F_SP__03/03/03___		_____	_____100____
_MEGUSH8611_SPK___03/03/03___		_____	_____100____
_MEGUSH8616__	____03/03/03___	_____	_____100____
_PBW_____	____03/03/03___	_____	_____100____
_____	_____	_____	_____
_____	_____	_____	_____

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0307 SAS No.:_____ SDG No.: MEGCD0131

Method: AV_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_0218F01_____	____02/20/03___	_____	_____100____
_0218F01_D___	____02/20/03___	_____	_____100____
_0218F01_S___	____02/20/03___	_____	_____100____
_DUP021803___	____02/20/03___	_____	_____100____
_DUP021803F__	____02/20/03___	_____	_____100____
_MEGDD0129___	____02/20/03___	_____	_____100____
_MEGDD0129F__	____02/20/03___	_____	_____100____
_MEGDD014____	____02/20/03___	_____	_____100____
_MEGDD014F___	____02/20/03___	_____	_____100____
_MEGDD0238___	____02/20/03___	_____	_____100____
_MEGDD0243___	____02/20/03___	_____	_____100____
_MEGDD0243F__	____02/20/03___	_____	_____100____
_MEGDIM0117__	____02/20/03___	_____	_____100____
MEGDIM0117F	____02/20/03___	_____	_____100____
_PBW_____	____02/20/03___	_____	_____100____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0307 SAS No.:_____ SDG No.: MEGCD0131

Method: AV_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_MEGDD0115___	____02/21/03___	_____	_____100____
_MEGDD0115F__	____02/21/03___	_____	_____100____
_MEGDD0121___	____02/21/03___	_____	_____100____
_MEGDD0121F__	____02/21/03___	_____	_____100____
_MEGDD0123___	____02/21/03___	_____	_____100____
_MEGDD0123F__	____02/21/03___	_____	_____100____
_MEGDIM0110__	____02/21/03___	_____	_____100____
MEGDIM0110F	____02/21/03___	_____	_____100____
_MEGDIM0128__	____02/21/03___	_____	_____100____
_MEGDSH0121__	____02/21/03___	_____	_____100____
MEGDSH0121F	____02/21/03___	_____	_____100____
_MEGUSH8601__	____02/21/03___	_____	_____100____
_MEGUSH8601_D	____02/21/03___	_____	_____100____
_MEGUSH8601_S	____02/21/03___	_____	_____100____
MEGUSH8601F	____02/21/03___	_____	_____100____
_MEGUSH8601FD	____02/21/03___	_____	_____100____
_MEGUSH8601FS	____02/21/03___	_____	_____100____
_PBW_____	____02/21/03___	_____	_____100____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0307 SAS No.:_____ SDG No.: MEGCD0131

Method: AV_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_DUP02003____	____02/25/03___	_____	_____100____
_DUP022003F__	____02/25/03___	_____	_____100____
_MEGCD0131___	____02/25/03___	_____	_____100____
_MEGCD0131F__	____02/25/03___	_____	_____100____
_MEGDD0132___	____02/25/03___	_____	_____100____
_MEGUSH8611__	____02/25/03___	_____	_____100____
_MEGUSH8611_D	____02/25/03___	_____	_____100____
_MEGUSH8611_S	____02/25/03___	_____	_____100____
MEGUSH8611F	____02/25/03___	_____	_____100____
_MEGUSH8611FD	____02/25/03___	_____	_____100____
_MEGUSH8611FS	____02/25/03___	_____	_____100____
_MEGUSH8616__	____02/25/03___	_____	_____100____
_PBW_____	____02/25/03___	_____	_____100____

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/28/03 End Date: 02/28/03

EPA Sample No.	D/F	Time	% R	Analytes																												
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B					
S0	1.00	0943		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
S0	1.00	0947		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
S	1.00	0951													X						X											
S	1.00	0958					X							X			X															
S	1.00	1002																	X							X						
S	1.00	1007		X																												
S	1.00	1010			X																											
S0	1.00	1020																			X											
S2.4032	1.00	1023																			X											
ICV	1.00	1026		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
ICB	1.00	1030		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
CRI	1.00	1034			X	X					X		X		X		X		X		X	X			X	X						
ICSAB	1.00	1048		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
ICSA	1.00	1054		X										X																		
CCV	1.00	1058		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
CCB	1.00	1101		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
PBW	1.00	1118		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
ZZZZZZ	1.00	1125																														
MEGDIM0117	1.00	1130		X	X	X	X				X		X		X				X		X	X			X	X						
MEGDD0243	1.00	1135		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
MEGDD0238	1.00	1139		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
MEGDD014	1.00	1145		X	X	X	X				X		X		X		X		X		X	X			X	X						
MEGDD0129	1.00	1149		X	X	X	X				X		X		X				X		X	X			X	X						
DUP_2/18/03	1.00	1156		X	X	X	X				X		X		X		X		X		X	X			X	X						
MEGDIM0117	10.00	1201												X			X															
MEGDD014	10.00	1205												X																		
CCV	1.00	1214		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
CCB	1.00	1218		X	X	X	X				X		X	X	X		X		X		X	X			X	X						
MEGDD0129	10.00	1221															X															
MEGDD0129	100.00	1225												X																		

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/28/03 End Date: 02/28/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
DUP_2/18/03	10.00	1230																								
DUP_2/18/03	20.00	1236												X												
MEGDIM0117F	1.00	1240		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0243F	1.00	1244		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD014_F	1.00	1251		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0129_F	1.00	1258		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
DUP_2/18/03	1.00	1302		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ	1.00	1306																								
CCV	1.00	1312		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1325		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ	1.00	1349																								
ZZZZZZ	1.00	1354																								
ZZZZZZ	1.00	1358																								
ZZZZZZ	1.00	1403																								
ZZZZZZ	10.00	1407																								
ZZZZZZ	100.00	1411																								
ZZZZZZ	1.00	1419																								
ZZZZZZ	1.00	1423																								
ZZZZZZ	1.00	1428																								
ZZZZZZ	1.00	1432																								
CCV	1.00	1440		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1453		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ	1.00	1546																								
ZZZZZZ	1.00	1551																								
ZZZZZZ	1.00	1554																								
ZZZZZZ	1.00	1559																								
ZZZZZZ	1.00	1602																								
ZZZZZZ	1.00	1605																								

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:02/28/03 End Date: 02/28/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ZZZZZZ	1.00	1610																								
ZZZZZZ	1.00	1614																								
ZZZZZZ	1.00	1617																								
CCV	1.00	1623		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1626		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1633			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1644		X										X													
ICSAB	1.00	1651		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1700		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1703		X	X	X	X				X		X	X	X		X		X		X	X			X	X	

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:03/03/03 End Date: 03/03/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
S0	1.00	1057		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
S	1.00	1101					X								X						X						
S175.0596	1.00	1105					X							X			X										
S	1.00	1112																									
S	1.00	1117		X															X						X	
S496.6918	1.00	1121			X																						
ICV	1.00	1126		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ICB	1.00	1129		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1133			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1149		X										X													
ICSAB	1.00	1159		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1205		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1209		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
PBW	1.00	1215		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
LCSW	1.00	1221		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8611	1.00	1225		X	X	X	X				X		X	X	X				X		X	X			X	X	
MEGUSH8611_D	1.00	1234		X	X	X	X				X		X	X	X				X		X	X			X	X	
MEGUSH8611_10	.00	1244															X										
MEGUSH8611_S	1.00	1249		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8611_L	1.00	1257		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8611_A	1.00	1306		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0132	1.00	1314		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1324		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1328		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGCD0131	1.00	1332		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
DUP022003	1.00	1335		X	X	X	X				X		X	X	X				X		X	X			X	X	
DUP022003	10.00	1341															X										

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:03/03/03 End Date: 03/03/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
MEGUSH8616__1.00_		1347		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8611_F1.00_		1351		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
ZZZZZZ__	___1.00_	1355																										
ZZZZZZ__	___1.00_	1400																										
MEGUSH8611_F1.00_		1404		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8611_F1.00_		1408		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGCD0131_F_1.00_		1419		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV_____	___1.00_	1424		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB_____	___1.00_	1427		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110__1.00_		1507		X	X	X	X				X		X		X				X		X	X			X	X	
MEGDIM0110_10.00_		1512															X										
MEGDIM0110_20.00_		1517																										
MEGDIM0110100.00_		1525												X														
MEGDIM0110_D1.00_		1529		X	X	X	X				X		X		X				X		X	X			X	X	
MEGDIM0110_10.00_		1534															X										
MEGDIM0110100.00_		1538												X														
MEGDIM0110_S1.00_		1542		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110_L1.00_		1550		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110_A1.00_		1553		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV_____	___1.00_	1604		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB_____	___1.00_	1607		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
DUP022003___1.00_		1611		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8601__1.00_		1615		X	X	X	X								X						X	X			X	X	
MEGUSH8601_10.00_		1619											X						X								
MEGUSH8601100.00_		1623									X			X			X										
MEGDD0121___1.00_		1627		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDSH0121__1.00_		1631		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0123___1.00_		1635		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0115___1.00_		1640		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0128__1.00_		1644		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110_F1.00_		1649		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
_____	_____	____	_____																									

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:03/03/03 End Date: 03/03/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
CCV	1.00	1654		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1657		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110F	1.00	1701		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110F	1.00	1704		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110F	1.00	1708		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0110F	1.00	1712		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUSH8601F	1.00	1718		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0121F	1.00	1722		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDSH0121F	1.00	1726		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0123F	1.00	1729		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0115F	1.00	1733		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1742		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1749		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1755			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1759		X										X													
ICSAB	1.00	1806		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1810		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1817		X	X	X	X				X		X	X	X		X		X		X	X			X	X	

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:PE-FIMS_____ Method: AV

Start Date:02/20/03 End Date: 02/20/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ICV	1.00	1029																X								
ICB	1.00	1031																X								
PBW	1.00	1032																X								
0218F01	1.00	1035																X								
0218F01_D	1.00	1037																X								
0218F01_S	1.00	1039																X								
MEGDIM0117	1.00	1040																X								
MEGDD0243	1.00	1042																X								
MEGDD0238	1.00	1044																X								
MEGDD014	1.00	1046																X								
MEGDD0129	1.00	1048																X								
CCV	1.00	1049																X								
CCB	1.00	1051																X								
DUP021803	1.00	1053																X								
MEGDIM0117F	1.00	1054																X								
MEGDD0243F	1.00	1056																X								
MEGDD014F	1.00	1058																X								
MEGDD0129F	1.00	1059																X								
DUP021803F	1.00	1101																X								
CCV	1.00	1110																X								
CCB	1.00	1112																X								

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:PE-FIMS_____ Method: AV

Start Date:02/21/03 End Date: 02/21/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ICV	1.00	1411																X								
ICB	1.00	1412																X								
CCV	1.00	1431																X								
CCB	1.00	1433																X								
PBW	1.00	1445																X								
MEGDIM0110	1.00	1446																X								
MEGDIM0110F	1.00	1448																X								
MEGUSH8601	1.00	1450																X								
MEGUSH8601_D	1.00	1451																X								
MEGUSH8601_S	1.00	1453																X								
CCV	1.00	1455																X								
CCB	1.00	1457																X								
MEGUSH8601F	1.00	1458																X								
MEGUSH8601FD	1.00	1500																X								
MEGUSH8601FS	1.00	1502																X								
MEGDD0121	1.00	1503																X								
MEGDD0121F	1.00	1505																X								
MEGDSH0121	1.00	1507																X								
MEGDSH0121F	1.00	1509																X								
MEGDD0123	1.00	1510																X								
MEGDD0123F	1.00	1512																X								
MEGDD0115	1.00	1514																X								
CCV	1.00	1515																X								
CCB	1.00	1517																X								
MEGDD0115F	1.00	1519																X								
MEGDIM0128	1.00	1520																X								
CCV	1.00	1538																X								
CCB	1.00	1540																X								

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0307 SAS No.:_____ SDG No.: MEGCD01

Instrument ID Number:PE-FIMS_____ Method: AV

Start Date:02/25/03 End Date: 02/25/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ICV	1.00	1703																X								
ICB	1.00	1705																X								
PBW	1.00	1724																X								
CCV	1.00	1726																X								
CCB	1.00	1727																X								
MEGUSH8611	1.00	1729																X								
MEGUSH8611_D	1.00	1731																X								
MEGUSH8611_S	1.00	1732																X								
MEGUSH8611F	1.00	1734																X								
MEGUSH8611FD	1.00	1736																X								
MEGUSH8611FS	1.00	1738																X								
MEGDD0132	1.00	1739																X								
MEGCD0131	1.00	1741																X								
MEGCD0131F	1.00	1743																X								
DUP02003	1.00	1744																X								
CCV	1.00	1746																X								
CCB	1.00	1748																X								
DUP022003F	1.00	1750																X								
MEGUSH8616	1.00	1751																X								
CCV	1.00	1803																X								
CCB	1.00	1805																X								

RAW QC

DATA

Method: SHER Sample Name: Blank Operator:
Comment:
Run Time: 02/28/03 09:47 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0304	.4926	.0395	-.0025
Stddev	.0196	.0312	.0035	.0166
%RSD	64.27	6.340	8.831	671.9
#1	.0443	.5147	.0370	.0093
#2	.0166	.4705	.0419	-.0142

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.422	4.401	.6490	.0355
Stddev	.008	.066	.0138	.0022
%RSD	.3344	1.496	2.126	6.157
#1	2.416	4.447	.6393	.0370
#2	2.428	4.354	.6588	.0339

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0374	.0580	.0660	-.0332
Stddev	.0372	.0227	.0305	.0117
%RSD	99.53	39.12	46.25	35.34
#1	-.0111	.0740	.0444	-.0415
#2	-.0637	.0419	.0876	-.0249

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2214	.3938	.0333	.0093
Stddev	.0392	.0136	.0087	.0166
%RSD	17.69	3.441	26.20	179.1
#1	.1937	.4034	.0395	.0210
#2	.2491	.3843	.0271	-.0025

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4623	-42.18	-.0028	-.0179
Stddev	.0939	.08	.0548	.0166
%RSD	20.31	.1884	1983.	92.65
#1	.5287	-42.24	-.0415	-.0062
#2	.3959	-42.13	.0360	-.0296

Sample Name: Blank Run Time: 02/28/03 09:47

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0210	-28.19	.0068	.0154
Stddev	.0087	.11	.0052	.0044
%RSD	41.60	.3732	77.16	28.29
#1	.0271	-28.26	.0105	.0185
#2	.0148	-28.11	.0031	.0123

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0108	.0210	-.0167	.0927
Stddev	.0074	.0009	.0017	.0059
%RSD	68.69	4.167	10.47	6.317
#1	-.0160	.0216	-.0154	.0969
#2	-.0056	.0204	-.0179	.0886

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0077	.0125	.1314	-.0262
Stddev	.0048	.0215	.0131	.0144
%RSD	62.22	172.9	9.952	54.91
#1	.0043	.0277	.1221	-.0364
#2	.0111	-.0028	.1406	-.0160

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0166	-.0308	-.0111	4.860
Stddev	.0352	.0105	.0039	.031
%RSD	212.2	33.95	35.37	.6286
#1	.0415	-.0382	-.0083	4.882
#2	-.0083	-.0234	-.0138	4.838

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	Cts/S	Cts/S	Cts/S
Avg	.1092	.0626	-.0526
Stddev	.0035	.0109	.0352
%RSD	3.189	17.41	66.98
#1	.1067	.0549	-.0775
#2	.1116	.0703	-.0277

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 02/28/03 09:51 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B_2496	Cd2288	Pb2203	Se1960
Line	249.678 {135}	228.802 {147}	220.353 {152}	196.090 {171}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	15.06	77.86	11.34	2.210
Stddev	.05	.07	.01	.001
%RSD	.3201	.0841	.1264	.0549
#1	15.02	77.82	11.33	2.209
#2	15.09	77.91	11.35	2.211

Elem	Tl1908
Line	190.864 {176}
Units	Cts/S
Avg	5.307
Stddev	.012
%RSD	.2345
#1	5.316
#2	5.298

Method: SHER Sample Name: 200.7-2 Operator:
Comment:
Run Time: 02/28/03 09:58 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	790.4	747.0	243.5	27.03
Stddev	2.9	.5	.2	.06
%RSD	.3644	.0715	.0805	.2293
#1	792.4	747.3	243.7	26.98
#2	788.3	746.6	243.4	27.07

Elem	Fe2599	Mn2576	Sr3464
Line	259.940 {129}	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S	Cts/S
Avg	1964.	769.2	143.5
Stddev	1.	1.3	.1
%RSD	.0561	.1693	.0770
#1	1965.	768.2	143.6
#2	1963.	770.1	143.4

Method: SHER Sample Name: 200.7 Operator:
Comment:
Run Time: 02/28/03 10:02 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	As1937	Cr3578	Li6103
Line	328.068 {102}	193.759 {173}	357.869 { 94}	610.362 { 55}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.614	12.22	27.55	99.34
Stddev	.067	.05	.29	.12
%RSD	.6929	.4434	1.067	.1258
#1	9.661	12.18	27.76	99.43
#2	9.567	12.26	27.34	99.25

Elem	Sn1899	V_2924	V_3102
Line	189.989 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S
Avg	26.62	25.29	38.42
Stddev	.06	.09	.26
%RSD	.2073	.3561	.6741
#1	26.58	25.36	38.24
#2	26.65	25.23	38.61

Analysis Report 02/28/03 10:10:11 pa

Method: SHER Sample Name: 200.7-1 Operator:
Comment:
Run Time: 02/28/03 10:07 Type: Std Mode: IR Corr.Fact: 1.0000

Elem	Al3082	Ca3179	K_7664	Mg38
Line	308.215 {109}	317.933 {105}	766.490 { 44}	383.826 { 8
Units	Cts/S	Cts/S	Cts/S	Cts
Avg	29.92	98.04	649.7	47.
Stddev	.08	.16	3.8	.
%RSD	.2752	.1621	.5806	.01
#1	29.86	98.15	647.0	47.
#2	29.98	97.92	652.4	47.

Elem	Na5889	Ni2316	Zn2138
Line	588.995 { 57}	231.604 {145}	213.856 {157}
Units	Cts/S	Cts/S	Cts/S
Avg	3333.	381.4	1072.
Stddev	2.	.8	1.
%RSD	.0732	.2090	.0621
#1	3332.	380.8	1072.
#2	3335.	382.0	1072.

Method: SHER Sample Name: 200.7-4 Operator:
Comment:
Run Time: 02/28/03 10:10 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 {166}	206.833 {162}	336.121 {100}
Units	Cts/S	Cts/S	Cts/S
Avg	486.5	81.27	559.1
Stddev	.7	.21	6.1
%RSD	.1489	.2539	1.088
#1	486.0	81.12	563.4
#2	487.0	81.42	554.8

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0192	0.0304	1.0000000	02/28/03 10:05:54
Al3082	0.0029	0.4926	1.0000000	02/28/03 10:10:11
As1937	0.0061	0.0395	1.0000000	02/28/03 10:05:54
Au2427	-0.0003	-0.0025	-1.0000000	02/28/03 09:49:32
B_2496	0.0632	2.4218	1.0000000	02/28/03 09:54:16
Ba4934	0.7860	4.4005	1.0000000	02/28/03 10:01:20
Be3130	0.7463	0.6490	1.0000000	02/28/03 10:01:20
Bi1902	0.0084	0.0355	1.0000000	02/28/03 09:49:32
Ca3179	0.0098	-0.0374	1.0000000	02/28/03 10:10:11
Cd2288	0.1556	0.0580	1.0000000	02/28/03 09:54:16
Co2286	0.1217	0.0660	1.0000000	02/28/03 10:01:20
Cr3578	0.0138	-0.0332	1.0000000	02/28/03 10:05:54
Cu3247	0.0268	0.2214	1.0000000	02/28/03 10:01:20
Fe2599	0.1963	0.3938	1.0000000	02/28/03 10:01:20
Ge2068	0.0052	0.0333	1.0000000	02/28/03 09:49:32
In2306	0.0102	0.0093	1.0000000	02/28/03 09:49:32
K_7664	0.0649	0.4623	1.0000000	02/28/03 10:10:11
Li6103	0.0708	-42.1841	1.0000000	02/28/03 10:05:54
Mg3838	0.0047	-0.0028	1.0000000	02/28/03 10:10:11
Mn2576	0.7692	-0.0179	1.0000000	02/28/03 10:01:20
Mo2020	0.0486	0.0210	1.0000000	02/28/03 10:13:38
Na5889	0.3361	-28.1855	1.0000000	02/28/03 10:10:11
Ni2316	0.0763	0.0068	1.0000000	02/28/03 10:10:11
Os1898	-0.0003	0.0154	-1.0000000	02/28/03 09:49:32
Pb2203	0.0113	-0.0108	1.0000000	02/28/03 09:54:16
Sb2068	0.0081	0.0210	1.0000000	02/28/03 10:13:38
Se1960	0.0045	-0.0167	1.0000000	02/28/03 09:54:16
Si2881	0.0035	0.0927	1.0000000	02/28/03 09:49:32
Sn1899	0.0133	0.0077	1.0000000	02/28/03 10:05:54
Sr3464	0.0144	0.0125	1.0000000	02/28/03 10:01:20
Ta2400	0.0000	0.1314	-1.0000000	02/28/03 09:49:32
Te2142	0.0061	-0.0262	1.0000000	02/28/03 09:49:32
Ti3361	0.0559	0.0166	1.0000000	02/28/03 10:13:38
Tl1908	0.0053	-0.0308	1.0000000	02/28/03 09:54:16
V_2924	0.0127	-0.0111	1.0000000	02/28/03 10:05:54
V_3102	0.0168	4.8599	1.0000000	02/28/03 10:05:54
W_2397	0.0000	0.1092	-1.0000000	02/28/03 09:49:32
Zn2138	0.2144	0.0626	1.0000000	02/28/03 10:10:11
Zr3391	0.0422	-0.0526	1.0000000	02/28/03 09:49:32

Method: SHER Sample Name: Blank Operator:
Comment:
Run Time: 02/28/03 10:20 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Se1960
Line	196.090 {171}
Units	Cts/S
Avg	.0136
Stddev	.0017
%RSD	12.86
#1	.0148
#2	.0123

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 02/28/03 10:23 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Se1960
Line	196.090 {171}
Units	Cts/S
Avg	2.403
Stddev	.021
%RSD	.8798
#1	2.388
#2	2.418

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0192	0.0304	1.0000000	02/28/03 10:05:54
Al3082	0.0029	0.4926	1.0000000	02/28/03 10:10:11
As1937	0.0061	0.0395	1.0000000	02/28/03 10:05:54
Au2427	-0.0003	-0.0025	-1.0000000	02/28/03 09:49:32
B_2496	0.0632	2.4218	1.0000000	02/28/03 09:54:16
Ba4934	0.7860	4.4005	1.0000000	02/28/03 10:01:20
Be3130	0.7463	0.6490	1.0000000	02/28/03 10:01:20
Bi1902	0.0084	0.0355	1.0000000	02/28/03 09:49:32
Ca3179	0.0098	-0.0374	1.0000000	02/28/03 10:10:11
Cd2288	0.1556	0.0580	1.0000000	02/28/03 09:54:16
Co2286	0.1217	0.0660	1.0000000	02/28/03 10:01:20
Cr3578	0.0138	-0.0332	1.0000000	02/28/03 10:05:54
Cu3247	0.0268	0.2214	1.0000000	02/28/03 10:01:20
Fe2599	0.1963	0.3938	1.0000000	02/28/03 10:01:20
Ge2068	0.0052	0.0333	1.0000000	02/28/03 09:49:32
In2306	0.0102	0.0093	1.0000000	02/28/03 09:49:32
K_7664	0.0649	0.4623	1.0000000	02/28/03 10:10:11
Li6103	0.0708	-42.1841	1.0000000	02/28/03 10:05:54
Mg3838	0.0047	-0.0028	1.0000000	02/28/03 10:10:11
Mn2576	0.7692	-0.0179	1.0000000	02/28/03 10:01:20
Mo2020	0.0486	0.0210	1.0000000	02/28/03 10:13:38
Na5889	0.3361	-28.1855	1.0000000	02/28/03 10:10:11
Ni2316	0.0763	0.0068	1.0000000	02/28/03 10:10:11
Os1898	-0.0003	0.0154	-1.0000000	02/28/03 09:49:32
Pb2203	0.0113	-0.0108	1.0000000	02/28/03 09:54:16
Sb2068	0.0081	0.0210	1.0000000	02/28/03 10:13:38
Se1960	0.0048	0.0136	1.0000000	02/28/03 10:26:28
Si2881	0.0035	0.0927	1.0000000	02/28/03 09:49:32
Sn1899	0.0133	0.0077	1.0000000	02/28/03 10:05:54
Sr3464	0.0144	0.0125	1.0000000	02/28/03 10:01:20
Ta2400	0.0000	0.1314	-1.0000000	02/28/03 09:49:32
Te2142	0.0061	-0.0262	1.0000000	02/28/03 09:49:32
Ti3361	0.0559	0.0166	1.0000000	02/28/03 10:13:38
Tl1908	0.0053	-0.0308	1.0000000	02/28/03 09:54:16
V_2924	0.0127	-0.0111	1.0000000	02/28/03 10:05:54
V_3102	0.0168	4.8599	1.0000000	02/28/03 10:05:54
W_2397	0.0000	0.1092	-1.0000000	02/28/03 09:49:32
Zn2138	0.2144	0.0626	1.0000000	02/28/03 10:10:11
Zr3391	0.0422	-0.0526	1.0000000	02/28/03 09:49:32

Method: SHER Sample Name: ICV-1 Operator:
Comment:
Run Time: 02/28/03 10:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	507.0	2175.	1998.	3904.
Stddev	2.5	3.	14.	139.
%RSD	.4855	.1362	.7216	3.554
#1	508.7	2177.	1988.	3806.
#2	505.2	2173.	2009.	4002.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2171.	2088.	2050.	2.160
Stddev	14.	6.	11.	1.034
%RSD	.6257	.2705	.5220	47.90
#1	2162.	2084.	2042.	1.428
#2	2181.	2092.	2057.	2.891

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2019.	2098.	2003.	2034.
Stddev	24.	8.	9.	14.
%RSD	1.207	.4034	.4524	.6907
#1	2002.	2092.	1997.	2024.
#2	2036.	2104.	2009.	2043.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2059.	2020.	<.0000	<.0000
Stddev	11.	8.	1.512	1.115
%RSD	.5529	.3862	.8226	3.423
#1	2051.	2014.	< .0000	< .0000
#2	2067.	2025.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9577.	2012.	2038.	1995.
Stddev	39.	3.	13.	7.
%RSD	.4100	.1672	.6277	.3547
#1	9549.	2009.	2029.	1990.
#2	9605.	2014.	2047.	2000.

Sample Name: ICV-1 Run Time: 02/28/03 10:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2079.	2057.	2076.	419.1
Stddev	56.	9.	7.	1.3
%RSD	2.716	.4399	.3482	.2996
#1	2039.	2051.	2071.	418.2
#2	2119.	2063.	2081.	420.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2077.	2126.	2084.	6788.
Stddev	9.	15.	10.	63.
%RSD	.4506	.7091	.4812	.9243
#1	2071.	2116.	2077.	6744.
#2	2084.	2137.	2091.	6832.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2022.	2072.	27350.	<.0000
Stddev	10.	12.	4351.	3.051
%RSD	.5087	.5989	15.91	1.079
#1	2015.	2063.	30430.	< .0000
#2	2029.	2081.	24280.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2026.	2029.	1886.
Stddev	.3156	6.	4.	36.
%RSD	12.86	.2899	.2074	1.919
#1	<.0000	2022.	2032.	1860.
#2	<.0000	2030.	2026.	1911.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1040000.	2110.	<.0000
Stddev	4030.	8.	.2789
%RSD	.3874	.3957	9.633
#1	1037000.	2104.	<.0000
#2	1043000.	2116.	<.0000

Method: SHER Sample Name: ICB-1 Operator:
Comment:
Run Time: 02/28/03 10:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	5.512
Stddev	.3064	2.779	.6454	67.02
%RSD	38.58	16.64	101.0	1216.
#1	<.0000	< .0000	<.0000	< .0000
#2	<.0000	< .0000	<.0000	52.90

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	7.487	.3471	.0705	<.0000
Stddev	.779	.0326	.0394	.2584
%RSD	10.40	9.392	55.85	365700.
#1	8.038	.3702	.0983	.1827
#2	6.937	.3241	.0427	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0059	.1064	.6015
Stddev	4.989	.0925	.0430	2.554
%RSD	589.3	1559.	40.39	424.6
#1	< .0000	.0713	.1368	< .0000
#2	2.681	<.0000	.0760	2.408

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.6714	.3707	<.0000	<.0000
Stddev	1.534	.4686	1.513	1.458
%RSD	228.4	126.4	42.42	104.5
#1	1.756	.7020	< .0000	< .0000
#2	< .0000	.0393	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1.066	10.18	4.085	.0088
Stddev	.844	6.23	2.476	.0363
%RSD	79.13	61.15	60.63	411.5
#1	.4698	14.58	5.836	.0345
#2	1.663	5.779	2.334	<.0000

Sample Name: ICB-1 Run Time: 02/28/03 10:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	6.510	<.0000	.1294	23.13
Stddev	4.581	.1420	.0915	27.67
%RSD	70.36	8.296	70.71	119.7
#1	9.750	<.0000	.0647	3.560
#2	3.271	<.0000	.1941	42.69

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.087	2.543	<.0000	3.168
Stddev	.039	.912	.1826	5.038
%RSD	3.574	35.88	3.724	159.0
#1	1.059	3.188	<.0000	< .0000
#2	1.114	1.898	<.0000	6.731

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4868	<.0000	845.2	<.0000
Stddev	1.049	.9547	1594.	.8515
%RSD	215.5	55.00	188.6	113.1
#1	1.229	<.0000	1972.	<.0000
#2	< .0000	<.0000	< .000	<.0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.6301	.8169	1.547	.9447
%RSD	70.71	37.21	88.38	35.98
#1	<.0000	<.0000	< .0000	<.0000
#2	<.0000	<.0000	< .0000	<.0000

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1158.	<.0000	<.0000
Stddev	1478.	.0447	1.114
%RSD	127.6	621.8	565.3
#1	113.3	.0244	< .0000
#2	2203.	<.0000	.5905

Method: SHER Sample Name: CRI-1 Operator:
Comment:
Run Time: 02/28/03 10:34 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	17.76	<.0000	19.16	140.0
Stddev	.01	.0788	2.44	32.7
%RSD	.0300	.3464	12.72	23.37
#1	17.77	<.0000	17.44	163.1
#2	17.76	<.0000	20.88	116.8

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	.2338	.8622	9.609	.6580
Stddev	.5695	.0242	.029	.9819
%RSD	243.6	2.806	.3030	149.2
#1	.6365	.8793	9.629	1.352
#2	<.0000	.8451	9.588	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	10.77	99.49	23.78
Stddev	1.594	.02	.24	2.12
%RSD	36.44	.1653	.2395	8.927
#1	< .0000	10.76	99.32	22.28
#2	< .0000	10.79	99.66	25.28

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	46.83	.7775	<.0000	<.0000
Stddev	1.11	.0753	1.512	1.243
%RSD	2.371	9.683	9.151	124.3
#1	47.62	.8307	< .0000	< .0000
#2	46.05	.7243	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	7.323	<.0000	30.14
Stddev	.3903	6.255	9.492	.01
%RSD	37.40	85.41	216.8	.0391
#1	<.0000	11.75	2.334	30.13
#2	<.0000	2.900	< .0000	30.15

Sample Name: CRI-1 Run Time: 02/28/03 10:34

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.504	<.0000	83.50	<.0000
Stddev	.063	.0707	.28	.0051
%RSD	2.517	2.011	.3377	.0359
#1	2.459	<.0000	83.30	<.0000
#2	2.549	<.0000	83.70	<.0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	7.277	131.7	7.098	<.0000
Stddev	.462	.4	.913	14.01
%RSD	6.346	.2945	12.87	443.1
#1	6.950	131.4	6.452	6.743
#2	7.603	131.9	7.744	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1.253	<.0000	<.0000
Stddev	.3606	4.910	264.7	.5693
%RSD	777.6	391.7	565.1	4.556
#1	.2086	< .0000	< .0000	<.0000
#2	<.0000	4.725	140.3	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	19.07	93.54	174.2
Stddev	.3149	1.80	.13	2.6
%RSD	28.27	9.422	.1381	1.480
#1	<.0000	20.34	93.45	176.0
#2	<.0000	17.80	93.63	172.3

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	55880.	42.93	<.0000
Stddev	156.	.08	1.857
%RSD	.2788	.1796	940.4
#1	55990.	42.88	< .0000
#2	55760.	42.99	1.115

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 02/28/03 10:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	471800.	<.0000	133700.
Stddev	.3071	388.	2.059	382.
%RSD	1.762	.0822	.1635	.2862
#1	<.0000	471500.	< .0000	133400.
#2	<.0000	472000.	< .0000	133900.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0760	5.195
Stddev	.7371	.1248	.0131	.569
%RSD	.1821	9.535	17.30	10.96
#1	<.0000	<.0000	.0667	5.597
#2	<.0000	<.0000	.0853	4.792

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	395400.	<.0000	<.0000	<.0000
Stddev	1473.	.2495	.1362	4.148
%RSD	.3726	46.12	46.36	23.09
#1	394300.	<.0000	<.0000	< .0000
#2	396400.	<.0000	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	123400.	.8938	<.0000
Stddev	.8780	196.	1.262	2.447
%RSD	3.033	.1584	141.2	4.846
#1	<.0000	123300.	1.786	< .0000
#2	<.0000	123600.	.0017	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	461200.	<.0000
Stddev	1.601	18.19	1396.	.0391
%RSD	20.46	.6270	.3027	4.241
#1	< .0000	< .0000	460300.	<.0000
#2	< .0000	< .0000	462200.	<.0000

Sample Name: ICSA-1 Run Time: 02/28/03 10:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	56.63	<.0000	1636.
Stddev	.3675	.29	1.067	21.
%RSD	6.940	.5053	.3219	1.311
#1	<.0000	56.83	< .0000	1651.
#2	<.0000	56.43	< .0000	1621.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.4586	<.0000	40.11
Stddev	1.295	1.820	1.099	13.46
%RSD	.5346	396.8	.3835	33.56
#1	< .0000	< .0000	< .0000	49.63
#2	< .0000	1.745	< .0000	30.59

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.551	9.470	749900.	9.788
Stddev	.295	.957	2290.	.710
%RSD	11.56	10.10	.3053	7.256
#1	2.342	8.794	751500.	10.29
#2	2.759	10.15	748300.	9.286

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.9472	.4911	1.085	4.793
%RSD	5.239	5.244	12.22	17.15
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	35.71	1.575
Stddev	711.3	.17	.465
%RSD	.4085	.4630	29.51
#1	< .0000	35.59	1.247
#2	< .0000	35.82	1.904

Method: SHER Sample Name: ICSAB-1 Operator:
Comment:
Run Time: 02/28/03 10:48 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1011.	470700.	<.0000	139600.
Stddev	1.	283.	2.216	199.
%RSD	.1081	.0601	.1756	.1428
#1	1010.	470500.	< .0000	139700.
#2	1012.	470900.	< .0000	139500.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	491.1	439.2	6.805
Stddev	1.175	.8	.5	2.845
%RSD	.2813	.1643	.1247	41.81
#1	< .0000	490.6	438.8	4.793
#2	< .0000	491.7	439.6	8.817

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	394500.	914.0	465.8	524.7
Stddev	97.	1.6	.3	6.3
%RSD	.0245	.1725	.0648	1.196
#1	394500.	915.2	465.6	520.3
#2	394600.	912.9	466.0	529.1

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	469.5	123200.	1.251	<.0000
Stddev	.5	174.	1.766	.8148
%RSD	.0968	.1412	141.1	1.490
#1	469.9	123000.	2.500	<.0000
#2	469.2	123300.	.0028	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	459500.	470.9
Stddev	1.118	30.65	570.	.3
%RSD	59.18	1.083	.1241	.0667
#1	< .0000	< .0000	459100.	470.7
#2	< .0000	< .0000	459900.	471.2

Sample Name: ICSAB-1 Run Time: 02/28/03 10:48

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	52.94	907.1	1829.
Stddev	.2511	.01	2.1	44.
%RSD	4.714	.0201	.2272	2.409
#1	<.0000	52.95	905.7	1797.
#2	<.0000	52.93	908.6	1860.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	956.6	<.0000	<.0000	17.50
Stddev	.1	.2108	2.745	5.05
%RSD	.0090	58.29	.9291	28.84
#1	956.6	<.0000	< .0000	13.93
#2	956.7	<.0000	< .0000	21.07

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.090	13.14	754800.	<.0000
Stddev	2.230	3.14	7206.	5.538
%RSD	204.6	23.92	.9547	10.56
#1	2.667	15.36	759900.	< .0000
#2	< .0000	10.92	749700.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	442.2	414.4
Stddev	.1046	3.433	1.7	2.3
%RSD	.5345	17.17	.3823	.5583
#1	<.0000	< .0000	441.0	412.8
#2	<.0000	< .0000	443.4	416.1

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	937.5	.7208
Stddev	3597.	.6	.3719
%RSD	82.58	.0619	51.60
#1	< .000	937.1	.4578
#2	< .000	938.0	.9838

Method: SHER Sample Name: CCV-1 Operator:
Comment:
Run Time: 02/28/03 10:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	503.5	2134.	2010.	3846.
Stddev	2.9	4.	5.	37.
%RSD	.5697	.1696	.2421	.9732
#1	501.5	2131.	2007.	3819.
#2	505.5	2136.	2014.	3872.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2170.	2086.	2048.	2.233
Stddev	18.	1.	5.	1.448
%RSD	.8235	.0408	.2245	64.86
#1	2157.	2087.	2051.	1.209
#2	2183.	2086.	2045.	3.257

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2030.	2103.	2012.	2020.
Stddev	10.	8.	10.	16.
%RSD	.5031	.3885	.4822	.7810
#1	2023.	2097.	2005.	2031.
#2	2037.	2109.	2019.	2008.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2056.	2037.	<.0000	<.0000
Stddev	4.	15.	1.429	.5147
%RSD	.1806	.7141	.8157	1.466
#1	2059.	2027.	< .0000	<.0000
#2	2054.	2048.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9597.	2036.	2030.	2010.
Stddev	1.	.	5.	10.
%RSD	.0111	.0087	.2656	.5204
#1	9598.	2036.	2026.	2002.
#2	9596.	2036.	2034.	2017.

Sample Name: CCV-1 Run Time: 02/28/03 10:58

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2064.	2069.	2061.	398.6
Stddev	21.	2.	10.	42.8
%RSD	1.018	.0894	.4676	10.73
#1	2050.	2067.	2054.	368.4
#2	2079.	2070.	2067.	428.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2084.	2134.	2092.	6793.
Stddev	14.	13.	18.	17.
%RSD	.6508	.6165	.8641	.2469
#1	2074.	2125.	2079.	6805.
#2	2093.	2144.	2105.	6781.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2032.	2067.	29520.	<.0000
Stddev	12.	6.	33.	1.278
%RSD	.5747	.3033	.1126	.4566
#1	2024.	2071.	29490.	< .0000
#2	2040.	2062.	29540.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2035.	2033.	1873.
Stddev	.4209	10.	.	8.
%RSD	17.68	.4902	.0084	.4189
#1	<.0000	2028.	2033.	1867.
#2	<.0000	2042.	2034.	1878.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1032000.	2118.	<.0000
Stddev	920.	11.	.1859
%RSD	.0892	.5158	4.790
#1	1031000.	2110.	<.0000
#2	1032000.	2126.	<.0000

Method: SHER Sample Name: CCB-1 Operator:
Comment:
Run Time: 02/28/03 11:01 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.099	41.88
Stddev	1.736	13.40	.771	3.12
%RSD	343.6	42.56	70.18	7.443
#1	.7222	< .0000	.5536	39.67
#2	< .0000	< .0000	1.644	44.08

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.179	.3668	.0372	<.0000
Stddev	1.277	.0102	.0131	.3102
%RSD	108.3	2.770	35.36	22.93
#1	2.082	.3596	.0279	<.0000
#2	.2763	.3740	.0465	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0158	.1874	9.030
Stddev	5.188	.0056	.1719	.000
%RSD	216.3	35.44	91.74	.0036
#1	< .0000	.0119	.3090	9.030
#2	1.270	.0198	.0658	9.030

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.2071	.7554	<.0000	<.0000
Stddev	.2923	.1555	1.597	.1286
%RSD	141.1	20.58	50.69	5.810
#1	.0004	.8653	< .0000	<.0000
#2	.4139	.6455	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.9176	13.01	<.0000	.0265
Stddev	.2108	.31	1.238	.0125
%RSD	22.97	2.399	15.71	47.14
#1	1.067	12.79	< .0000	.0353
#2	.7686	13.23	< .0000	.0176

Sample Name: CCB-1 Run Time: 02/28/03 11:01

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	6.263	<.0000	.0162	29.35
Stddev	5.038	1.144	.3774	46.54
%RSD	80.44	51.48	2332.	158.5
#1	9.826	< .0000	<.0000	< .0000
#2	2.700	< .0000	.2830	62.26

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.0266	1.291	<.0000	<.0000
Stddev	.8453	1.288	.7297	.5607
%RSD	3176.	99.82	10.28	17.72
#1	.6243	2.202	<.0000	<.0000
#2	<.0000	.3797	<.0000	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.9503	<.0000	<.0000	2.208
Stddev	.1311	.5455	730.4	.497
%RSD	13.80	29.77	103.8	22.50
#1	.8576	<.0000	< .0000	2.560
#2	1.043	<.0000	< .0000	1.857

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.7657	<.0000
Stddev	.2100	2.288	.4641	2.323
%RSD	47.15	82.51	60.61	22.41
#1	<.0000	< .0000	.4375	< .0000
#2	<.0000	< .0000	1.094	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	311.3	.0582	.9842
Stddev	1079.	.0135	.1856
%RSD	346.5	23.15	18.86
#1	< .000	.0487	.8530
#2	1074.	.0677	1.115

Method: SHER Sample Name: PB Operator:
Comment:
Run Time: 02/28/03 11:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.6127	8.225	1.012	14.03
%RSD	35.36	37.22	71.99	14.63
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	10.71	.0604	.0094	.6216
Stddev	2.16	.2043	.0000	1.655
%RSD	20.14	338.2	.2633	266.2
#1	12.24	<.0000	.0093	1.792
#2	9.189	.2049	.0094	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1784	.0811	<.0000
Stddev	.5988	.0056	.2508	1.703
%RSD	42.43	3.167	309.4	71800.
#1	<.0000	.1824	.2584	1.202
#2	<.0000	.1744	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	3.405	.7725	<.0000
Stddev	.1458	.024	.2527	.7287
%RSD	23.56	.7050	32.71	800.6
#1	<.0000	3.388	.9512	<.0000
#2	<.0000	3.422	.5938	.4243

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	13.75	.2909	.1119
Stddev	.5125	2.51	1.238	.0493
%RSD	39.43	18.22	425.6	44.09
#1	<.0000	15.52	< .0000	.0770
#2	<.0000	11.98	1.166	.1467

Sample Name: PB Run Time: 02/28/03 11:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.6593	5.027	.4286	7.116
Stddev	.4123	.889	.0687	10.07
%RSD	62.54	17.68	16.02	141.5
#1	.3677	4.399	.4771	< .0000
#2	.9508	5.656	.3800	14.23

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.6835	<.0000	2.774
Stddev	.8456	.6443	.9122	.001
%RSD	162.9	94.26	15.37	.0300
#1	<.0000	1.139	<.0000	2.774
#2	.0787	.2279	<.0000	2.775

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.6753	234.7	<.0000
Stddev	.5901	1.091	598.3	.4254
%RSD	2550.	161.6	254.9	17.30
#1	.3941	< .0000	< .0000	<.0000
#2	<.0000	1.447	657.8	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.0001	<.0000	2.516	<.0000
Stddev	.2101	.0006	1.083	3.856
%RSD	266300.	.0320	43.04	32.78
#1	<.0000	<.0000	1.750	< .0000
#2	.1486	<.0000	3.282	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	1.067	1.312
Stddev	840.0	.066	.093
%RSD	20.51	6.166	7.072
#1	< .0000	1.020	1.247
#2	< .0000	1.113	1.378

Method: SHER Sample Name: LCS Operator:
Comment:
Run Time: 02/28/03 11:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	509.8	2167.	2025.	3923.
Stddev	.9	14.	4.	22.
%RSD	.1799	.6461	.2176	.5566
#1	509.1	2157.	2022.	3907.
#2	510.4	2177.	2028.	3938.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2171.	2094.	2064.	1.831
Stddev	8.	14.	7.	3.155
%RSD	.3781	.6669	.3443	172.4
#1	2165.	2084.	2059.	4.062
#2	2176.	2104.	2069.	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2045.	2123.	2029.	2029.
Stddev	7.	4.	3.	11.
%RSD	.3316	.1734	.1527	.5246
#1	2041.	2120.	2027.	2022.
#2	2050.	2125.	2032.	2037.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2065.	2051.	<.0000	<.0000
Stddev	14.	4.	.3366	1.415
%RSD	.7008	.1865	.1909	4.270
#1	2054.	2048.	<.0000	< .0000
#2	2075.	2054.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9601.	2037.	2052.	2019.
Stddev	53.	4.	7.	3.
%RSD	.5522	.2062	.3217	.1696
#1	9563.	2034.	2047.	2016.
#2	9638.	2040.	2057.	2021.

Sample Name: LCS Run Time: 02/28/03 11:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2078.	2070.	2077.	377.3
Stddev	16.	5.	5.	10.1
%RSD	.7553	.2396	.2171	2.669
#1	2067.	2067.	2074.	370.2
#2	2089.	2074.	2081.	384.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2110.	2151.	2114.	6873.
Stddev	2.	7.	3.	43.
%RSD	.1129	.3346	.1426	.6196
#1	2108.	2146.	2112.	6843.
#2	2111.	2156.	2117.	6903.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2057.	2092.	30530.	<.0000
Stddev	5.	1.	1461.	.0707
%RSD	.2615	.0516	4.787	.0248
#1	2054.	2091.	31560.	<.0000
#2	2061.	2092.	29490.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2044.	2041.	1823.
Stddev	.8417	1.	9.	31.
%RSD	33.28	.0319	.4245	1.691
#1	<.0000	2045.	2035.	1801.
#2	<.0000	2044.	2047.	1845.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1041000.	2135.	<.0000
Stddev	3076.	4.	.2789
%RSD	.2956	.2057	6.057
#1	1043000.	2132.	<.0000
#2	1039000.	2138.	<.0000

Method: SHER Sample Name: MEGDIM0117 Operator:
Comment:
Run Time: 02/28/03 11:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	25940.	<.0000	264000.
Stddev	.1001	26.	3.962	717.
%RSD	.2558	.1019	.3792	.2716
#1	<.0000	25920.	< .0000	263500.
#2	<.0000	25960.	< .0000	264500.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	3484.	2.190	8.159
Stddev	3.370	1.	.061	1.656
%RSD	.5817	.0334	2.767	20.30
#1	< .0000	3483.	2.233	9.330
#2	< .0000	3485.	2.147	6.988

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	251400.	<.0000	30.46	65.29
Stddev	643.	.3700	.56	4.32
%RSD	.2558	.9828	1.851	6.618
#1	250900.	<.0000	30.07	62.23
#2	251800.	<.0000	30.86	68.34

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	69.07	201800.	<.0000	<.0000
Stddev	1.69	1311.	6.308	3.893
%RSD	2.443	.6496	36.97	2.829
#1	70.26	200900.	< .0000	< .0000
#2	67.88	202700.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	21520.	1614.	72880.	5472.
Stddev	84.	11.	14.	30.
%RSD	.3894	.6790	.0196	.5564
#1	21460.	1606.	72870.	5450.
#2	21580.	1622.	72890.	5493.

Sample Name: MEGDIM0117 Run Time: 02/28/03 11:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	11.47	135100.	58.48	3549.
Stddev	2.32	60.	.05	25.
%RSD	20.26	.0448	.0900	.7016
#1	13.12	135000.	58.44	3531.
#2	9.831	135100.	58.51	3566.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	7.955	<.0000	28120.
Stddev	.0637	1.344	4.247	3.
%RSD	.0400	16.89	.7357	.0119
#1	<.0000	8.905	< .0000	28120.
#2	<.0000	7.004	< .0000	28110.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.111	6866.	1640000.	28.42
Stddev	1.443	23.	10800.	2.63
%RSD	68.38	.3304	.6586	9.252
#1	3.131	6850.	1632000.	30.28
#2	1.090	6882.	1648000.	26.56

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	110.9	1.616	33.10	77.57
Stddev	.1	.981	.62	.49
%RSD	.1008	60.69	1.868	.6304
#1	111.0	2.309	32.66	77.92
#2	110.9	.9224	33.53	77.23

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	267.7	2.956
Stddev	2174.	2.0	.558
%RSD	.7093	.7481	18.87
#1	< .000	266.3	2.562
#2	< .000	269.1	3.351

Method: SHER Sample Name: MEGDD0243 Operator:
Comment:
Run Time: 02/28/03 11:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	12820.	<.0000	22170.
Stddev	.2047	18.	2.133	116.
%RSD	5.902	.1381	1.988	.5220
#1	<.0000	12810.	< .0000	22080.
#2	<.0000	12830.	< .0000	22250.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	255.6	1615.	1.783	<.0000
Stddev	.2	3.	.058	.0517
%RSD	.0638	.2009	3.251	3.538
#1	255.5	1617.	1.824	<.0000
#2	255.7	1612.	1.742	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	111700.	<.0000	7.715	11.19
Stddev	1251.	.3783	.007	4.22
%RSD	1.120	2.043	.0913	37.66
#1	110800.	<.0000	7.720	8.213
#2	112600.	<.0000	7.710	14.17

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	22.77	20540.	1.013	<.0000
Stddev	1.46	80.	1.261	2.960
%RSD	6.415	.3884	124.5	10.26
#1	21.74	20480.	1.905	< .0000
#2	23.81	20600.	.1215	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	17540.	988.9	32360.	606.9
Stddev	79.	17.5	5.	2.2
%RSD	.4512	1.774	.0144	.3688
#1	17480.	976.5	32370.	605.3
#2	17590.	1001.	32360.	608.4

Sample Name: MEGDD0243 Run Time: 02/28/03 11:35

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	8.042	93690.	14.37	317.7
Stddev	.305	411.	.29	26.4
%RSD	3.790	.4391	1.992	8.318
#1	8.258	93400.	14.16	336.3
#2	7.826	93980.	14.57	299.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	3.217	<.0000	<.0000	16670.
Stddev	.067	1.558	1.642	15.
%RSD	2.075	89.76	4.239	.0875
#1	3.264	< .0000	< .0000	16680.
#2	3.169	< .0000	< .0000	16660.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.971	4779.	116900.	<.0000
Stddev	.066	9.	1895.	2.485
%RSD	3.330	.1905	1.621	103.0
#1	1.925	4772.	115500.	< .0000
#2	2.018	4785.	118200.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	183.3	<.0000	11.40	20.40
Stddev	1.8	1.635	.62	2.08
%RSD	.9693	33.65	5.446	10.21
#1	182.0	< .0000	11.83	18.92
#2	184.5	< .0000	10.96	21.87

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	57.79	<.0000
Stddev	2837.	.37	.8370
%RSD	10.78	.6335	63.53
#1	< .000	57.53	<.0000
#2	< .000	58.05	<.0000

Method: SHER Sample Name: MEGDD0238 Operator:
Comment:
Run Time: 02/28/03 11:39 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	582.5	<.0000	2735.
Stddev	1.535	28.0	1.320	34.
%RSD	54.47	4.802	11.55	1.245
#1	< .0000	562.8	< .0000	2759.
#2	< .0000	602.3	< .0000	2710.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	113.5	163.2	.0595	.0753
Stddev	1.8	.4	.0104	.4652
%RSD	1.547	.2219	17.44	618.1
#1	112.2	163.5	.0522	.4042
#2	114.7	163.0	.0669	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	25590.	<.0000	1.019	6.728
Stddev	97.	.1964	.143	2.142
%RSD	.3772	15.72	14.05	31.84
#1	25520.	<.0000	1.120	8.243
#2	25660.	<.0000	.9179	5.214

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	4.209	2352.	<.0000	<.0000
Stddev	.364	14.	.6732	1.673
%RSD	8.652	.5803	29.83	69.83
#1	3.952	2342.	<.0000	< .0000
#2	4.467	2362.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9224.	623.3	5539.	31.36
Stddev	4.	.4	22.	.16
%RSD	.0481	.0706	.3897	.5183
#1	9221.	622.9	5524.	31.25
#2	9227.	623.6	5555.	31.48

Sample Name: MEGDD0238 Run Time: 02/28/03 11:39

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	11.36	52470.	3.171	105.9
Stddev	.24	382.	.103	1.3
%RSD	2.122	.7283	3.257	1.183
#1	11.53	52200.	3.098	106.8
#2	11.19	52740.	3.244	105.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2583.
Stddev	.5650	.5906	2.190	2.
%RSD	13.98	102.4	33.21	.0732
#1	<.0000	<.0000	< .0000	2582.
#2	<.0000	<.0000	< .0000	2585.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3018	384.0	14740.	<.0000
Stddev	.3937	1.3	464.	.9950
%RSD	130.4	.3424	3.150	27.89
#1	.0235	383.0	15070.	<.0000
#2	.5802	384.9	14420.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.978	<.0000	.1077	<.0000
Stddev	.421	.6533	.1549	1.440
%RSD	14.15	56.37	143.8	12.99
#1	3.276	<.0000	.2173	< .0000
#2	2.680	<.0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	16.52	<.0000
Stddev	2800.	.12	.2793
%RSD	46.68	.6984	35.26
#1	< .000	16.44	<.0000
#2	< .000	16.60	<.0000

Method: SHER Sample Name: MEGDD014 Operator:
Comment:
Run Time: 02/28/03 11:45 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	5960.	<.0000	142900.
Stddev	1.227	40.	3.287	1086.
%RSD	6.380	.6727	.4940	.7597
#1	< .0000	5932.	< .0000	142200.
#2	< .0000	5989.	< .0000	143700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	516.3	786.0	.5219	2.489
Stddev	3.3	1.5	.0079	.258
%RSD	.6356	.1910	1.514	10.37
#1	514.0	784.9	.5274	2.307
#2	518.6	787.0	.5163	2.672

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	13760.	<.0000	6.509	<.0000
Stddev	103.	.0062	.265	2.239
%RSD	.7496	.0621	4.068	19.86
#1	13690.	<.0000	6.322	< .0000
#2	13840.	<.0000	6.696	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	18.84	130900.	<.0000	<.0000
Stddev	1.46	1243.	2.607	1.241
%RSD	7.766	.9497	35.66	2.264
#1	19.88	130000.	< .0000	< .0000
#2	17.81	131700.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14730.	4437.	5400.	677.0
Stddev	60.	37.	4.	4.3
%RSD	.4102	.8234	.0780	.6290
#1	14680.	4411.	5403.	674.0
#2	14770.	4463.	5397.	680.0

Sample Name: MEGDD014 Run Time: 02/28/03 11:45

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	141000.	<.0000	1771.
Stddev	.0180	272.	.2970	15.
%RSD	2.114	.1930	3.667	.8469
#1	<.0000	140800.	<.0000	1760.
#2	<.0000	141200.	<.0000	1781.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.779	<.0000	8992.
Stddev	.8128	.482	1.750	3.
%RSD	.7064	27.13	.6628	.0360
#1	<.0000	1.437	< .0000	8989.
#2	<.0000	2.120	< .0000	8994.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.1627	1062.	847600.	11.75
Stddev	.7216	.	2075.	1.49
%RSD	443.6	.0115	.2448	12.70
#1	.6729	1062.	846200.	12.80
#2	<.0000	1062.	849100.	10.69

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	28.35	<.0000	9.533	22.78
Stddev	.53	.3265	1.705	2.22
%RSD	1.857	15.67	17.89	9.763
#1	28.72	<.0000	10.74	24.35
#2	27.98	<.0000	8.327	21.21

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	236.6	<.0000
Stddev	827.3	.8	.0930
%RSD	.4421	.3329	10.07
#1	< .0000	236.0	<.0000
#2	< .0000	237.2	<.0000

Method: SHER Sample Name: MEGDD0129 Operator:
Comment:
Run Time: 02/28/03 11:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	113500.	<.0000	126700.
Stddev	1.228	318.	12.90	935.
%RSD	.8785	.2797	.7835	.7379
#1	< .0000	113300.	< .0000	127400.
#2	< .0000	113700.	< .0000	126100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	6294.	7.880	52.89
Stddev	3.121	6.	.005	.67
%RSD	5.391	.0940	.0666	1.272
#1	< .0000	6290.	7.884	52.41
#2	< .0000	6299.	7.877	53.37

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	137600.	<.0000	85.86	800.3
Stddev	597.	.2693	.35	3.1
%RSD	.4343	.3709	.4093	.3840
#1	137200.	<.0000	85.62	798.1
#2	138000.	<.0000	86.11	802.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1739.	276100.	<.0000	<.0000
Stddev	4.	1276.	6.222	.8998
%RSD	.2566	.4621	9.619	.2232
#1	1736.	275200.	< .0000	<.0000
#2	1743.	277000.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	50040.	8534.	71570.	6929.
Stddev	158.	34.	112.	17.
%RSD	.3162	.4038	.1566	.2410
#1	49930.	8510.	71490.	6917.
#2	50150.	8559.	71650.	6941.

Sample Name: MEGDD0129 Run Time: 02/28/03 11:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	173300.	157.0	12800.
Stddev	.1794	783.	.6	33.
%RSD	3.617	.4520	.4011	.2558
#1	<.0000	173800.	156.5	12780.
#2	<.0000	172700.	157.4	12820.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	165.2	34.03	<.0000	57970.
Stddev	1.9	1.94	12.43	140.
%RSD	1.160	5.694	.5802	.2420
#1	166.6	35.40	< .0000	57870.
#2	163.9	32.66	< .0000	58070.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	6.633	4813.	2608000.	102.8
Stddev	.951	9.	206.	.7
%RSD	14.34	.1845	.0079	.6912
#1	7.305	4819.	2608000.	102.3
#2	5.960	4807.	2608000.	103.3

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	231.8	11.90	166.4	348.9
Stddev	1.4	2.78	4.3	.2
%RSD	.5903	23.35	2.609	.0669
#1	230.8	9.940	169.4	349.0
#2	232.7	13.87	163.3	348.7

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	1774.	1.773
Stddev	8735.	7.	1.860
%RSD	1.509	.3994	104.9
#1	< .000	1769.	.4578
#2	< .000	1779.	3.088

Method: SHER Sample Name: DUP 2/18/03 Operator:
Comment:
Run Time: 02/28/03 11:56 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	8098.	<.0000	162700.
Stddev	.2050	78.	10.30	1571.
%RSD	1.020	.9653	1.400	.9651
#1	<.0000	8043.	< .0000	161600.
#2	<.0000	8153.	< .0000	163900.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	451.9	893.5	.6315	1.173
Stddev	5.7	5.5	.0368	.982
%RSD	1.257	.6130	5.831	83.77
#1	447.9	889.7	.6575	.4780
#2	455.9	897.4	.6054	1.867

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	16160.	<.0000	8.420	<.0000
Stddev	184.	.0130	.142	2.719
%RSD	1.140	.1156	1.693	206.2
#1	16030.	<.0000	8.319	.6040
#2	16290.	<.0000	8.521	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	34.62	142900.	<.0000	<.0000
Stddev	1.98	1684.	1.261	1.238
%RSD	5.708	1.179	17.54	1.977
#1	36.02	141700.	< .0000	< .0000
#2	33.22	144100.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	15390.	4421.	6446.	779.9
Stddev	95.	57.	32.	7.9
%RSD	.6168	1.280	.4979	1.007
#1	15320.	4381.	6423.	774.3
#2	15460.	4461.	6468.	785.4

Sample Name: DUP 2/18/03 Run Time: 02/28/03 11:56

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	142200.	<.0000	1953.
Stddev	.1075	777.	.0680	31.
%RSD	7.571	.5464	.9651	1.602
#1	<.0000	141600.	<.0000	1931.
#2	<.0000	142700.	<.0000	1975.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.318	<.0000	11390.
Stddev	.2996	.428	3.079	35.
%RSD	.2450	18.46	1.049	.3079
#1	<.0000	2.016	< .0000	11360.
#2	<.0000	2.621	< .0000	11410.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.8584	1136.	971300.	12.70
Stddev	.5902	11.	2249.	2.56
%RSD	68.76	.9716	.2315	20.12
#1	.4410	1128.	972900.	10.89
#2	1.276	1144.	969700.	14.51

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	35.86	2.772	14.14	24.10
Stddev	.00	.654	3.87	1.28
%RSD	.0025	23.61	27.41	5.300
#1	35.86	2.309	11.40	23.20
#2	35.86	3.235	16.87	25.01

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	343.4	<.0000
Stddev	1978.	2.3	1.302
%RSD	.9604	.6599	651.8
#1	< .000	341.8	.7207
#2	< .000	345.0	< .0000

Method: SHER Sample Name: MEGDIM0117 1/10 Operator:
Comment:
Run Time: 02/28/03 12:01 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2578.	<.0000	44990.
Stddev	1.024	10.	.1703	202.
%RSD	16.47	.3845	.0844	.4495
#1	< .0000	2585.	<.0000	45140.
#2	< .0000	2571.	<.0000	44850.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	367.3	.2809	<.0000
Stddev	.4287	1.2	.0397	.2586
%RSD	.4563	.3403	14.12	59.16
#1	<.0000	368.2	.3089	<.0000
#2	<.0000	366.4	.2528	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	29410.	<.0000	4.309	<.0000
Stddev	35.	.0253	.323	1.674
%RSD	.1201	.5369	7.485	63.69
#1	29390.	<.0000	4.537	< .0000
#2	29440.	<.0000	4.081	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.815	40580.	<.0000	<.0000
Stddev	.442	61.	.8408	1.801
%RSD	7.601	.1510	23.59	10.88
#1	6.127	40620.	<.0000	< .0000
#2	5.502	40530.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1309.	114.2	8032.	761.0
Stddev	6.	1.8	5.	2.2
%RSD	.4408	1.592	.0669	.2867
#1	1313.	112.9	8028.	762.5
#2	1305.	115.5	8036.	759.4

Sample Name: MEGDIM0117 1/10 Run Time: 02/28/03 12:01

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.9578	27150.	7.750	514.3
Stddev	.1166	240.	.309	5.0
%RSD	12.17	.8835	3.985	.9796
#1	.8754	26990.	7.968	510.7
#2	1.040	27320.	7.532	517.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1548	<.0000	3039.
Stddev	.4868	.4835	2.648	9.
%RSD	1.450	312.3	3.650	.2931
#1	<.0000	<.0000	< .0000	3033.
#2	<.0000	.4967	< .0000	3045.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.6032	756.9	238200.	2.659
Stddev	.3607	1.8	1326.	.710
%RSD	59.80	.2373	.5567	26.70
#1	.8583	758.2	239200.	2.157
#2	.3481	755.7	237300.	3.161

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	9.677	<.0000	4.274	13.50
Stddev	.634	1.635	1.395	1.11
%RSD	6.548	141.1	32.64	8.258
#1	10.13	< .0000	3.287	14.28
#2	9.229	< .0000	5.260	12.71

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	33.92	<.0000
Stddev	120.6	.00	.1865
%RSD	.1963	.0041	21.73
#1	< .0000	33.92	<.0000
#2	< .0000	33.93	<.0000

Method: SHER Sample Name: MEGDD014 1/10 Operator:
Comment:
Run Time: 02/28/03 12:05 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	569.7	<.0000	19190.
Stddev	2.045	.0	1.640	45.
%RSD	74.49	.0032	1.789	.2369
#1	< .0000	569.7	< .0000	19160.
#2	< .0000	569.7	< .0000	19230.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	49.49	81.77	.0402	<.0000
Stddev	.71	.33	.0159	.3621
%RSD	1.440	.4080	39.49	22.52
#1	48.99	81.53	.0514	<.0000
#2	49.99	82.00	.0290	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1473.	<.0000	1.085	.3991
Stddev	9.	.0589	.280	.0089
%RSD	.5987	5.113	25.77	2.224
#1	1466.	<.0000	.8873	.4054
#2	1479.	<.0000	1.283	.3928

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.252	18420.	<.0000	<.0000
Stddev	.876	13.	2.355	1.416
%RSD	70.00	.0708	90.10	19.21
#1	.6321	18410.	< .0000	< .0000
#2	1.871	18430.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	888.1	374.6	596.7	77.73
Stddev	5.1	7.4	14.0	.07
%RSD	.5742	1.988	2.343	.0962
#1	884.5	369.3	586.8	77.68
#2	891.7	379.9	606.6	77.78

Sample Name: MEGDD014 1/10 Run Time: 02/28/03 12:05

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	30780.	<.0000	178.8
Stddev	.2332	136.	.2403	6.3
%RSD	184.1	.4417	37.13	3.519
#1	<.0000	30880.	<.0000	174.4
#2	.0383	30690.	<.0000	183.3

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.7527	<.0000	943.1
Stddev	.8184	.6444	.5482	7.7
%RSD	5.076	85.61	1.718	.8199
#1	<.0000	1.208	<.0000	937.7
#2	<.0000	.2970	<.0000	948.6

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	107.8	108500.	2.408
Stddev	.0328	.1	1726.	4.474
%RSD	8.845	.1147	1.590	185.8
#1	<.0000	107.7	109800.	< .0000
#2	<.0000	107.8	107300.	5.571

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.529	.1129	2.299	<.0000
Stddev	.631	.4906	1.084	2.485
%RSD	24.97	434.5	47.16	17.68
#1	2.975	.4598	1.532	< .0000
#2	2.082	<.0000	3.065	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	26.71	<.0000
Stddev	4716.	.04	1.580
%RSD	17.56	.1645	1187.
#1	< .000	26.68	.9839
#2	< .000	26.74	< .0000

Method: SHER Sample Name: CCV-2 Operator:
Comment:
Run Time: 02/28/03 12:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	511.1	1975.	2061.	4067.
Stddev	1.0	3.	5.	23.
%RSD	.1878	.1712	.2619	.5747
#1	511.8	1973.	2057.	4051.
#2	510.4	1978.	2065.	4084.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2197.	2108.	2097.	2.306
Stddev	8.	4.	5.	.414
%RSD	.3430	.1688	.2580	17.94
#1	2192.	2110.	2101.	2.599
#2	2202.	2105.	2093.	2.013

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2099.	2149.	2068.	2035.
Stddev	4.	5.	6.	2.
%RSD	.1695	.2095	.2758	.1126
#1	2102.	2146.	2064.	2036.
#2	2097.	2152.	2072.	2033.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2070.	2080.	<.0000	<.0000
Stddev	.	7.	5.382	.5576
%RSD	.0076	.3592	2.970	1.763
#1	2070.	2075.	< .0000	<.0000
#2	2070.	2085.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9663.	2096.	2057.	2048.
Stddev	6.	4.	1.	7.
%RSD	.0673	.1929	.0679	.3657
#1	9667.	2093.	2058.	2043.
#2	9658.	2099.	2056.	2054.

Sample Name: CCV-2 Run Time: 02/28/03 12:14

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2176.	2102.	2119.	389.7
Stddev	9.	6.	5.	17.6
%RSD	.4086	.2737	.2555	4.521
#1	2170.	2106.	2116.	402.2
#2	2182.	2098.	2123.	377.3

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2161.	2180.	2155.	6946.
Stddev	11.	1.	7.	12.
%RSD	.4975	.0465	.3259	.1691
#1	2154.	2180.	2150.	6954.
#2	2169.	2181.	2160.	6938.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2109.	2143.	24280.	<.0000
Stddev	5.	1.	3720.	3.054
%RSD	.2547	.0498	15.32	1.048
#1	2106.	2143.	26910.	< .0000
#2	2113.	2144.	21650.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2083.	2073.	1824.
Stddev	.2102	3.	5.	10.
%RSD	6.729	.1410	.2391	.5212
#1	<.0000	2081.	2070.	1831.
#2	<.0000	2085.	2077.	1818.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1067000.	2165.	<.0000
Stddev	7397.	7.	2.324
%RSD	.6930	.3174	55.20
#1	1073000.	2160.	< .0000
#2	1062000.	2170.	< .0000

Method: SHER Sample Name: CCB-2 Operator:
Comment:
Run Time: 02/28/03 12:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	30.86
Stddev	1.124	.6608	1.073	56.11
%RSD	81.92	1.240	35.48	181.8
#1	< .0000	<.0000	< .0000	70.54
#2	< .0000	<.0000	< .0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1.559	.0170	.8410
Stddev	1.317	.264	.0210	1.034
%RSD	20.17	16.93	123.3	123.0
#1	< .0000	1.746	.0318	.1097
#2	< .0000	1.372	.0022	1.572

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0713	.2736	4.214
Stddev	4.391	.0504	.1075	3.407
%RSD	207.3	70.68	39.29	80.84
#1	< .0000	.1070	.1976	1.805
#2	.9869	.0357	.3496	6.623

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.6912	<.0000	<.0000
Stddev	1.680	.0599	.5881	.5573
%RSD	3448.	8.664	197.9	96.76
#1	< .0000	.7336	.1187	<.0000
#2	1.139	.6489	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.4294	17.15	<.0000	.0221
Stddev	.2413	.23	3.716	.0142
%RSD	56.19	1.337	141.4	64.28
#1	.6000	17.31	< .0000	.0321
#2	.2588	16.99	< .0000	.0120

Sample Name: CCB-2 Run Time: 02/28/03 12:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	4.019	1.942	.4043	.8886
Stddev	2.116	.715	.3545	6.291
%RSD	52.64	36.83	87.68	708.0
#1	5.515	1.436	.6550	5.337
#2	2.523	2.448	.1537	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.0810	1.937	<.0000	<.0000
Stddev	.2306	3.382	1.369	.5597
%RSD	284.8	174.6	30.75	23.65
#1	.2440	4.328	< .0000	<.0000
#2	<.0000	< .0000	< .0000	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2782	<.0000	<.0000	<.0000
Stddev	.9507	.8185	630.3	.2132
%RSD	341.7	852.5	52.64	10.11
#1	.9504	<.0000	< .0000	<.0000
#2	<.0000	.4828	< .0000	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.094	<.0000
Stddev	.8404	.1632	3.095	3.037
%RSD	94.30	15.69	282.9	18.53
#1	<.0000	<.0000	3.282	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1525.	<.0000	<.0000
Stddev	1199.	.0322	.2785
%RSD	78.60	57.19	53850.
#1	2373.	<.0000	.1964
#2	677.5	<.0000	<.0000

Method: SHER Sample Name: MEGDD0129 1/10 Operator:
Comment:
Run Time: 02/28/03 12:21 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	11550.	<.0000	129700.
Stddev	.0049	12.	3.674	339.
%RSD	.0287	.1004	.5920	.2617
#1	<.0000	11560.	< .0000	129500.
#2	<.0000	11540.	< .0000	129900.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	669.5	.8381	1.063
Stddev	.7576	.5	.0231	.621
%RSD	.4059	.0751	2.758	58.40
#1	<.0000	669.8	.8218	1.501
#2	<.0000	669.1	.8545	.6238

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	15780.	<.0000	11.73	24.65
Stddev	14.	.1994	.22	.49
%RSD	.0886	2.287	1.898	1.984
#1	15790.	<.0000	11.57	25.00
#2	15770.	<.0000	11.89	24.30

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	162.7	119800.	<.0000	<.0000
Stddev	2.0	766.	4.036	1.117
%RSD	1.203	.6392	29.27	2.413
#1	164.1	119200.	< .0000	< .0000
#2	161.3	120300.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	3132.	729.9	7966.	958.7
Stddev	6.	4.5	2.	4.0
%RSD	.1908	.6170	.0256	.4194
#1	3136.	726.7	7964.	955.9
#2	3128.	733.0	7967.	961.5

Sample Name: MEGDD0129 1/10 Run Time: 02/28/03 12:21

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	54340.	16.07	1554.
Stddev	.3767	138.	.07	40.
%RSD	64.58	.2549	.4303	2.595
#1	<.0000	54250.	16.03	1525.
#2	<.0000	54440.	16.12	1582.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.776	<.0000	6375.
Stddev	1.833	.537	1.650	12.
%RSD	3.711	11.25	.7154	.1813
#1	< .0000	4.396	< .0000	6383.
#2	< .0000	5.156	< .0000	6367.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.044	537.4	768600.	9.287
Stddev	.000	2.4	2515.	1.136
%RSD	.0055	.4385	.3273	12.23
#1	1.044	539.1	766900.	10.09
#2	1.044	535.7	770400.	8.484

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	22.40	3.928	18.85	44.76
Stddev	.32	.327	.01	1.98
%RSD	1.441	8.326	.0301	4.413
#1	22.63	4.159	18.86	46.16
#2	22.17	3.697	18.85	43.37

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	191.7	.0630
Stddev	234.2	.6	.3716
%RSD	.1414	.3167	589.6
#1	< .0000	191.2	.3258
#2	< .0000	192.1	<.0000

Method: SHER Sample Name: MEGDD0129 1/100 Operator:
Comment:
Run Time: 02/28/03 12:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1301.	<.0000	20250.
Stddev	1.638	1.	1.270	67.
%RSD	75.55	.1014	1.276	.3307
#1	< .0000	1302.	< .0000	20300.
#2	< .0000	1301.	< .0000	20210.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	82.82	.0726	.2944
Stddev	.1243	.19	.0180	.5690
%RSD	.3455	.2321	24.75	193.3
#1	<.0000	82.95	.0853	<.0000
#2	<.0000	82.68	.0599	.6967

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1968.	<.0000	1.936	4.967
Stddev	.	.0196	.208	1.294
%RSD	.0159	1.728	10.73	26.04
#1	1968.	<.0000	2.083	5.882
#2	1968.	<.0000	1.790	4.052

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	18.28	19370.	<.0000	<.0000
Stddev	1.52	33.	2.607	.9435
%RSD	8.339	.1723	400.2	10.44
#1	19.36	19340.	< .0000	<.0000
#2	17.21	19390.	1.192	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	242.7	169.4	990.1	133.4
Stddev	2.4	.2	9.9	.1
%RSD	1.005	.1466	.9993	.0463
#1	241.0	169.6	997.1	133.3
#2	244.4	169.2	983.1	133.4

Sample Name: MEGDD0129 1/100 Run Time: 02/28/03 12:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.0129	6839.	2.103	197.5
Stddev	.4485	32.	.332	12.6
%RSD	3487.	.4691	15.77	6.371
#1	.3300	6816.	1.869	206.4
#2	<.0000	6861.	2.338	188.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.4385	<.0000	759.1
Stddev	.9332	1.504	2.191	3.7
%RSD	9.071	342.9	6.650	.4903
#1	<.0000	1.502	< .0000	756.5
#2	<.0000	< .0000	< .0000	761.8

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	64.95	112100.	.8518
Stddev	.2624	2.02	1096.	.8521
%RSD	125.9	3.111	.9771	100.0
#1	<.0000	66.38	112900.	1.454
#2	<.0000	63.52	111400.	.2493

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.085	.9225	3.835	<.0000
Stddev	.420	.3270	.464	.1236
%RSD	20.15	35.44	12.09	.7793
#1	2.382	.6913	4.163	<.0000
#2	1.788	1.154	3.507	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	25.59	<.0000
Stddev	1079.	.06	1.303
%RSD	3.769	.2167	649.7
#1	< .000	25.55	.7207
#2	< .000	25.63	< .0000

Method: SHER Sample Name: DUP 2/18/03 1/10 Operator:
Comment:
Run Time: 02/28/03 12:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	846.0	<.0000	24190.
Stddev	1.431	24.9	.9184	153.
%RSD	49.52	2.947	.7865	.6331
#1	< .0000	828.4	<.0000	24080.
#2	< .0000	863.6	<.0000	24300.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	58.10	103.8	.0660	<.0000
Stddev	.28	.1	.0370	.9829
%RSD	.4734	.1370	56.00	134.7
#1	58.30	103.7	.0399	<.0000
#2	57.91	103.9	.0922	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1941.	<.0000	1.070	.3988
Stddev	18.	.0393	.272	5.567
%RSD	.9078	2.358	25.46	1396.
#1	1929.	<.0000	1.262	4.335
#2	1954.	<.0000	.8772	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2.542	22940.	<.0000	<.0000
Stddev	1.245	49.	4.036	1.030
%RSD	48.97	.2150	486.7	11.47
#1	1.662	22900.	< .0000	< .0000
#2	3.423	22970.	2.025	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1051.	422.7	803.7	99.69
Stddev	.	.5	11.0	.43
%RSD	.0030	.1216	1.365	.4338
#1	1051.	422.4	811.5	99.38
#2	1051.	423.1	796.0	99.99

Sample Name: DUP 2/18/03 1/10 Run Time: 02/28/03 12:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.2222	34420.	<.0000	252.7
Stddev	.0269	163.	.1716	32.7
%RSD	12.10	.4728	19.64	12.95
#1	.2412	34300.	<.0000	229.6
#2	.2032	34530.	<.0000	275.8

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.3312	<.0000	1334.
Stddev	2.227	.0540	4.383	15.
%RSD	10.69	16.31	10.91	1.158
#1	< .0000	.3694	< .0000	1323.
#2	< .0000	.2930	< .0000	1345.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	130.1	137900.	<.0000
Stddev	.1640	3.2	234.	.7101
%RSD	118.1	2.436	.1697	465.1
#1	<.0000	127.9	137800.	<.0000
#2	<.0000	132.4	138100.	.3494

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	3.346	<.0000	1.313	<.0000
Stddev	1.578	.9811	1.858	.6468
%RSD	47.16	35.32	141.5	4.534
#1	2.230	<.0000	2.627	<.0000
#2	4.462	<.0000	< .0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	43.27	1.181
Stddev	559.0	.07	1.765
%RSD	1.759	.1609	149.5
#1	< .0000	43.23	2.429
#2	< .0000	43.32	< .0000

Method: SHER Sample Name: DUP 2/18/03 1/20 Operator:
Comment:
Run Time: 02/28/03 12:36 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	416.8	<.0000	12660.
Stddev	.9210	9.2	.7075	63.
%RSD	85.14	2.214	1.144	.4978
#1	<.0000	423.3	<.0000	12610.
#2	<.0000	410.3	<.0000	12700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	24.51	53.60	<.0000	<.0000
Stddev	.64	.11	.0209	.2584
%RSD	2.630	.1971	142.3	29.51
#1	24.06	53.67	.0001	<.0000
#2	24.97	53.52	<.0000	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	982.8	<.0000	.9837	<.0000
Stddev	9.4	.0617	.0214	1.688
%RSD	.9558	8.100	2.175	2259.
#1	976.2	<.0000	.9686	< .0000
#2	989.5	<.0000	.9988	1.119

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.2265	12180.	<.0000	<.0000
Stddev	.2911	33.	3.027	1.158
%RSD	128.5	.2734	70.76	27.08
#1	.4323	12160.	< .0000	< .0000
#2	.0207	12210.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	458.2	285.8	414.8	51.52
Stddev	1.5	2.9	15.8	.17
%RSD	.3365	1.011	3.810	.3287
#1	457.1	287.9	403.6	51.40
#2	459.3	283.8	426.0	51.64

Sample Name: DUP 2/18/03 1/20 Run Time: 02/28/03 12:36

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	17650.	<.0000	145.9
Stddev	.2511	87.	.0457	22.6
%RSD	283.5	.4902	6.351	15.52
#1	<.0000	17590.	<.0000	129.9
#2	.0890	17710.	<.0000	161.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0335	<.0000	658.8
Stddev	1.989	2.632	1.733	2.9
%RSD	17.07	7849.	8.742	.4464
#1	< .0000	1.894	< .0000	656.7
#2	< .0000	< .0000	< .0000	660.9

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.6729	68.15	74610.	<.0000
Stddev	.3279	3.57	759.	.2844
%RSD	48.73	5.235	1.018	543.3
#1	.4410	65.62	74070.	<.0000
#2	.9047	70.67	75150.	.1487

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1.043	<.0000	5.151	<.0000
Stddev	.421	1.962	1.395	1.573
%RSD	40.40	421.7	27.08	8.704
#1	.7450	< .0000	6.137	< .0000
#2	1.341	.9223	4.165	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	22.24	.5232
Stddev	81.84	.17	.0929
%RSD	.4730	.7650	17.75
#1	< .0000	22.12	.4575
#2	< .0000	22.36	.5889

Method: SHER Sample Name: MEGDIM0117F Operator:
Comment:
Run Time: 02/28/03 12:40 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.573	3278.
Stddev	3.376	1.251	1.847	45.
%RSD	150.8	6.138	117.4	1.379
#1	< .0000	< .0000	.2670	3246.
#2	.1478	< .0000	2.879	3310.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	350.0	936.4	.1782	.7333
Stddev	2.0	2.7	.0053	.0517
%RSD	.5616	.2895	2.958	7.052
#1	348.6	934.5	.1819	.6967
#2	351.4	938.3	.1744	.7699

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	198600.	<.0000	1.693	4.415
Stddev	2057.	.1261	.136	1.704
%RSD	1.036	1.133	8.043	38.59
#1	197100.	<.0000	1.597	3.210
#2	200000.	<.0000	1.789	5.620

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	675.7	3.927	<.0000
Stddev	.9510	3.4	.336	.9434
%RSD	144.8	.5102	8.564	3.174
#1	.0159	673.3	3.689	<.0000
#2	<.0000	678.2	4.165	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14320.	1721.	51000.	3014.
Stddev	69.	24.	157.	32.
%RSD	.4807	1.403	.3075	1.048
#1	14270.	1704.	50890.	2991.
#2	14370.	1738.	51110.	3036.

Sample Name: MEGDIM0117F Run Time: 02/28/03 12:40

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.4949	131500.	8.672	96.97
Stddev	.0179	320.	.057	8.81
%RSD	3.626	.2429	.6603	9.083
#1	.5076	131300.	8.713	90.75
#2	.4822	131700.	8.632	103.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	3875.
Stddev	1.156	1.450	.8217	2.
%RSD	28.00	69.47	14.98	.0420
#1	< .0000	< .0000	<.0000	3874.
#2	< .0000	< .0000	<.0000	3876.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.6728	6225.	3730.	<.0000
Stddev	1.049	58.	698.	.5680
%RSD	156.0	.9336	18.70	25.12
#1	< .0000	6184.	3237.	<.0000
#2	1.415	6266.	4223.	<.0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.3444	2.519	<.0000
Stddev	.3158	2.452	1.085	.5883
%RSD	4.202	712.0	43.07	19.64
#1	<.0000	< .0000	3.286	<.0000
#2	<.0000	2.079	1.752	<.0000

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	167.0	<.0000
Stddev	2798.	2.4	.1860
%RSD	68.67	1.429	18.81
#1	< .000	165.3	<.0000
#2	< .000	168.7	<.0000

Method: SHER Sample Name: MEGDD0243F Operator:
Comment:
Run Time: 02/28/03 12:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.8605	3.579	1091.
Stddev	2.046	2.671	.711	52.
%RSD	177.3	310.5	19.86	4.723
#1	< .0000	< .0000	3.077	1054.
#2	.2925	2.749	4.082	1127.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	390.0	1684.	.2766	.0388
Stddev	3.4	1.	.0131	2.690
%RSD	.8619	.0500	4.750	6938.
#1	387.6	1684.	.2859	< .0000
#2	392.3	1685.	.2673	1.941

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	103800.	<.0000	.8519	6.307
Stddev	1059.	.0300	.1793	2.986
%RSD	1.020	.1493	21.04	47.34
#1	103100.	<.0000	.7251	8.419
#2	104600.	<.0000	.9787	4.196

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.9985	34.90	3.928	<.0000
Stddev	.8046	.52	.504	.6426
%RSD	80.59	1.482	12.83	3.514
#1	1.567	34.54	4.284	<.0000
#2	.4295	35.27	3.571	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	8474.	726.0	25320.	205.7
Stddev	24.	17.8	68.	2.0
%RSD	.2869	2.450	.2691	.9703
#1	8457.	713.4	25270.	204.2
#2	8491.	738.5	25370.	207.1

Sample Name: MEGDD0243F Run Time: 02/28/03 12:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.368	81130.	.7605	88.97
Stddev	.206	260.	.2174	.00
%RSD	6.130	.3202	28.59	.0022
#1	3.222	80940.	.6068	88.97
#2	3.514	81310.	.9143	88.97

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4740.
Stddev	.6914	.3760	.9132	30.
%RSD	16.50	28.31	15.38	.6388
#1	<.0000	<.0000	<.0000	4718.
#2	<.0000	<.0000	<.0000	4761.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4467.	229.6	1.002
Stddev	.4592	29.	3255.	2.343
%RSD	220.3	.6420	1418.	233.8
#1	<.0000	4447.	2532.	< .0000
#2	.1163	4487.	< .000	2.659

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.0000	.0003	2.325	2.454
%RSD	.0002	.0289	141.3	26.95
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	49.92	<.0000
Stddev	40.46	.69	.0000
%RSD	3.034	1.377	.0009
#1	< .0000	49.44	<.0000
#2	< .0000	50.41	<.0000

Method: SHER Sample Name: MEGDD0243F Operator:
Comment:
Run Time: 02/28/03 12:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1798	4.339	1085.
Stddev	2.251	3.634	.364	59.
%RSD	173.3	2021.	8.394	5.465
#1	.2925	2.749	4.082	1127.
#2	< .0000	< .0000	4.597	1043.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	391.9	1687.	.2785	.6972
Stddev	.6	2.	.0158	1.759
%RSD	.1515	.1453	5.664	252.3
#1	392.3	1685.	.2673	1.941
#2	391.5	1688.	.2896	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	104700.	<.0000	.9229	4.196
Stddev	135.	.1212	.0789	.000
%RSD	.1292	.6063	8.550	.0052
#1	104600.	<.0000	.9787	4.196
#2	104700.	<.0000	.8671	4.196

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.2744	35.01	4.403	<.0000
Stddev	.2194	.37	1.177	.4295
%RSD	79.95	1.044	26.73	2.450
#1	.4295	35.27	3.571	<.0000
#2	.1193	34.75	5.236	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	8494.	747.1	25350.	207.8
Stddev	4.	12.1	24.	1.1
%RSD	.0432	1.617	.0954	.5171
#1	8491.	738.5	25370.	207.1
#2	8496.	755.6	25330.	208.6

Sample Name: MEGDD0243F Run Time: 02/28/03 12:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.273	81350.	.7767	86.30
Stddev	.341	59.	.1945	3.78
%RSD	10.42	.0726	25.05	4.376
#1	3.514	81310.	.9143	88.97
#2	3.032	81390.	.6392	83.63

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4734.
Stddev	.4234	.8056	.4567	39.
%RSD	12.45	78.67	7.294	.8168
#1	<.0000	<.0000	<.0000	4761.
#2	<.0000	<.0000	<.0000	4706.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4481.	<.0000	.0984
Stddev	.9840	8.	498.6	3.621
%RSD	169.8	.1882	28.99	3682.
#1	.1163	4487.	< .0000	2.659
#2	<.0000	4475.	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.9847	<.0000
Stddev	.5261	.3272	1.395	4.676
%RSD	22.82	46.97	141.7	62.03
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	1.971	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	50.52	<.0000
Stddev	2358.	.15	.1860
%RSD	77.83	.3015	18.81
#1	< .000	50.41	<.0000
#2	< .000	50.62	<.0000

Method: SHER Sample Name: MEGDD014 F Operator:
Comment:
Run Time: 02/28/03 12:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1.233	605.1	<.0000	1357.
Stddev	1.330	15.8	.8673	70.
%RSD	107.9	2.619	11.14	5.170
#1	2.173	616.3	<.0000	1308.
#2	.2925	593.9	<.0000	1407.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1587.	976.8	.1893	<.0000
Stddev	34.	1.0	.0157	.6207
%RSD	2.116	.0978	8.317	155.0
#1	1563.	977.5	.2004	.0383
#2	1611.	976.2	.1782	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	5633.	<.0000	.5781	4.966
Stddev	37.	.4346	.2365	.445
%RSD	.6583	3.461	40.92	8.970
#1	5607.	<.0000	.4108	5.281
#2	5660.	<.0000	.7453	4.651

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	1265.	1.905	<.0000
Stddev	1.536	32.	.841	1.758
%RSD	143.5	2.504	44.13	36.02
#1	.0157	1243.	1.311	< .0000
#2	< .0000	1288.	2.500	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	19940.	8912.	2201.	9.142
Stddev	2.	21.	2.	.191
%RSD	.0078	.2330	.0769	2.085
#1	19930.	8897.	2200.	9.007
#2	19940.	8926.	2202.	9.277

Sample Name: MEGDD014 F Run Time: 02/28/03 12:54

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	8.220	162700.	1.950	55.15
Stddev	.251	1135.	.046	17.62
%RSD	3.055	.6978	2.347	31.94
#1	8.042	161900.	1.917	42.69
#2	8.397	163500.	1.982	67.61

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.081	<.0000	2242.
Stddev	.7955	1.772	1.735	29.
%RSD	81.05	85.17	28.84	1.300
#1	<.0000	.8278	< .0000	2262.
#2	<.0000	3.334	< .0000	2221.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.8119	1164.	5890.	1.555
Stddev	1.049	4.	1959.	3.550
%RSD	129.3	.3538	33.27	228.4
#1	.0698	1161.	7276.	4.065
#2	1.554	1167.	4505.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	3.944	<.0000	<.0000	5.184
Stddev	.105	1.962	2.945	5.603
%RSD	2.670	24.24	2648.	108.1
#1	3.869	< .0000	< .0000	9.146
#2	4.018	< .0000	1.971	1.222

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	62.10	<.0000
Stddev	1559.	1.73	.3719
%RSD	8.823	2.791	33.20
#1	< .000	60.87	<.0000
#2	< .000	63.32	<.0000

Method: SHER Sample Name: MEGDD0129 F Operator:
Comment:
Run Time: 02/28/03 12:58 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	69.55	<.0000	416.8
Stddev	.6138	5.33	.4195	28.1
%RSD	142.5	7.669	33.92	6.731
#1	<.0000	73.33	<.0000	436.6
#2	.0031	65.78	<.0000	397.0

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1101.	841.2	.1521	.7702
Stddev	14.	1.1	.0368	2.586
%RSD	1.244	.1323	24.18	335.8
#1	1091.	840.4	.1782	2.599
#2	1111.	841.9	.1261	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	5965.	<.0000	.7809	2.218
Stddev	86.	.0109	.0359	1.704
%RSD	1.434	.1040	4.596	76.83
#1	5905.	<.0000	.7556	1.013
#2	6026.	<.0000	.8063	3.422

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.8433	317.1	4.582	<.0000
Stddev	.5851	3.5	1.093	1.158
%RSD	69.39	1.109	23.85	35.69
#1	.4295	314.6	5.354	< .0000
#2	1.257	319.6	3.809	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	12020.	4533.	1844.	19.54
Stddev	31.	55.	2.	.24
%RSD	.2546	1.203	.1124	1.252
#1	11990.	4495.	1845.	19.37
#2	12040.	4572.	1843.	19.71

Sample Name: MEGDD0129 F Run Time: 02/28/03 12:58

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.4569	141400.	1.723	24.01
Stddev	.3588	304.	.343	11.33
%RSD	78.54	.2153	19.91	47.18
#1	.2032	141200.	1.966	16.00
#2	.7106	141600.	1.481	32.01

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.2498	2.089	<.0000	2702.
Stddev	.8430	.698	1.096	17.
%RSD	337.5	33.41	35.35	.6433
#1	<.0000	2.582	< .0000	2690.
#2	.8459	1.595	< .0000	2714.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	893.0	441.1	<.0000
Stddev	.0656	15.3	1362.	1.704
%RSD	25.75	1.713	308.8	225.6
#1	<.0000	882.2	1404.	.4499
#2	<.0000	903.8	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2104	1.145	2.170	2.219
%RSD	47.21	965.9	164.8	29.75
#1	<.0000	.6909	.2175	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	136.3	.6550
Stddev	2239.	1.4	.4649
%RSD	59.93	1.047	70.98
#1	< .000	135.2	.9838
#2	< .000	137.3	.3263

Method: SHER Sample Name: DUP 2/18/03 F Operator:
Comment:
Run Time: 02/28/03 13:02 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.0755	128.1	<.0000	1397.
Stddev	.3068	20.0	.8074	36.
%RSD	406.1	15.62	14.73	2.558
#1	.2925	142.2	<.0000	1372.
#2	<.0000	113.9	<.0000	1422.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1089.	959.7	.1485	1.538
Stddev	4.	.4	.0577	.879
%RSD	.4117	.0392	38.88	57.13
#1	1085.	959.9	.1893	.9169
#2	1092.	959.4	.1077	2.160

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	5841.	<.0000	.6542	<.0000
Stddev	46.	.0746	.2869	5.539
%RSD	.7877	.5993	43.85	1176.
#1	5809.	<.0000	.8571	< .0000
#2	5874.	<.0000	.4514	3.446

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	1280.	.1816	<.0000
Stddev	.2189	9.	.0848	.1719
%RSD	25.36	.7027	46.69	3.881
#1	<.0000	1274.	.2416	<.0000
#2	<.0000	1286.	.1217	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	11680.	4422.	1782.	26.29
Stddev	12.	31.	8.	.16
%RSD	.1038	.6931	.4336	.6099
#1	11690.	4400.	1788.	26.18
#2	11670.	4443.	1777.	26.41

Sample Name: DUP 2/18/03 F Run Time: 02/28/03 13:02

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.4061	141800.	1.521	48.92
Stddev	.0358	517.	.149	33.98
%RSD	8.814	.3649	9.769	69.46
#1	.3808	141400.	1.416	72.95
#2	.4315	142200.	1.626	24.90

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.329	<.0000	2493.
Stddev	1.776	.483	2.375	12.
%RSD	64.96	36.38	31.70	.4651
#1	< .0000	1.671	< .0000	2502.
#2	< .0000	.9868	< .0000	2485.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.021	875.8	5702.	<.0000
Stddev	.229	8.4	698.	.6385
%RSD	22.48	.9590	12.24	28.87
#1	.8585	869.8	5208.	<.0000
#2	1.183	881.7	6196.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.8191	2.541	.5463	<.0000
Stddev	.9471	.327	1.085	.5639
%RSD	115.6	12.86	198.6	5.329
#1	.1494	2.772	< .0000	<.0000
#2	1.489	2.310	1.313	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	139.0	.5892
Stddev	2919.	1.1	.0000
%RSD	85.23	.8184	.0075
#1	< .000	138.2	.5893
#2	< .000	139.8	.5892

Method: SHER Sample Name: MEGDD0239 Operator:
Comment:
Run Time: 02/28/03 13:06 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	47040.	<.0000	63630.
Stddev	1.125	176.	4.309	446.
%RSD	12.86	.3744	1.174	.7015
#1	< .0000	46910.	< .0000	63320.
#2	< .0000	47160.	< .0000	63950.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	596.5	1789.	5.098	.8066
Stddev	3.5	1.	.047	1.086
%RSD	.5785	.0351	.9267	134.7
#1	594.0	1788.	5.131	.0384
#2	598.9	1789.	5.064	1.575

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	49480.	<.0000	23.27	67.86
Stddev	254.	.4880	.06	5.85
%RSD	.5132	2.182	.2780	8.621
#1	49300.	<.0000	23.22	71.99
#2	49660.	<.0000	23.31	63.72

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	68.29	63320.	<.0000	<.0000
Stddev	.29	511.	1.850	.6865
%RSD	.4295	.8073	155.9	2.058
#1	68.08	62960.	< .0000	<.0000
#2	68.50	63680.	.1217	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	30850.	4295.	30150.	732.2
Stddev	92.	7.	33.	6.8
%RSD	.2998	.1633	.1079	.9244
#1	30780.	4290.	30120.	727.5
#2	30920.	4300.	30170.	737.0

Sample Name: MEGDD0239 Run Time: 02/28/03 13:06

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	7.351	141400.	61.42	839.1
Stddev	.045	322.	1.00	66.7
%RSD	.6108	.2273	1.621	7.949
#1	7.319	141200.	60.71	792.0
#2	7.383	141700.	62.12	886.3

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.317	<.0000	41680.
Stddev	1.390	.427	5.939	174.
%RSD	4.590	32.43	5.601	.4181
#1	< .0000	1.015	< .0000	41560.
#2	< .0000	1.619	< .0000	41800.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.180	2573.	380100.	<.0000
Stddev	.623	7.	3689.	2.627
%RSD	28.58	.2876	.9706	201.0
#1	1.740	2567.	377500.	.5505
#2	2.621	2578.	382700.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	123.6	<.0000	65.75	111.3
Stddev	.9	1.471	4.65	.7
%RSD	.7654	22.32	7.072	.6269
#1	124.2	< .0000	62.46	111.8
#2	122.9	< .0000	69.04	110.8

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	126.2	1.970
Stddev	5994.	1.2	1.023
%RSD	7.662	.9162	51.92
#1	< .000	125.4	2.693
#2	< .000	127.1	1.247

Method: SHER Sample Name: CCV-3 Operator:
Comment:
Run Time: 02/28/03 13:12 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	530.6	2170.	1949.	4534.
Stddev	3.2	3.	1.	12.
%RSD	.5941	.1575	.0558	.2753
#1	532.8	2173.	1948.	4542.
#2	528.4	2168.	1950.	4525.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1911.	2128.	1886.	1.465
Stddev	2.	6.	1.	.776
%RSD	.1169	.2897	.0323	52.97
#1	1909.	2132.	1886.	.9162
#2	1912.	2123.	1887.	2.013

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1900.	2034.	1977.	2079.
Stddev	10.	6.	3.	10.
%RSD	.5016	.2781	.1519	.4886
#1	1906.	2038.	1979.	2086.
#2	1893.	2030.	1975.	2072.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2079.	1926.	<.0000	<.0000
Stddev	8.	2.	1.430	.7292
%RSD	.3939	.1282	.6885	2.026
#1	2085.	1928.	< .0000	<.0000
#2	2073.	1924.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9827.	2325.	2143.	2170.
Stddev	75.	13.	.	4.
%RSD	.7629	.5456	.0036	.1651
#1	9880.	2334.	2143.	2172.
#2	9774.	2316.	2143.	2167.

Sample Name: CCV-3 Run Time: 02/28/03 13:12

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2026.	2124.	1907.	455.6
Stddev	2.	11.	1.	.0
%RSD	.0981	.5280	.0700	.0002
#1	2024.	2132.	1906.	455.6
#2	2027.	2116.	1908.	455.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1844.	2060.	1923.	7324.
Stddev	3.	.	5.	46.
%RSD	.1551	.0080	.2420	.6244
#1	1842.	2060.	1919.	7357.
#2	1846.	2060.	1926.	7292.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2364.	2368.	23410.	<.0000
Stddev	2.	1.	166.	.4255
%RSD	.0737	.0541	.7093	.1328
#1	2365.	2369.	23530.	<.0000
#2	2363.	2367.	23290.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1975.	2125.	1692.
Stddev	.8419	2.	9.	1.
%RSD	18.86	.0868	.4195	.0510
#1	<.0000	1974.	2131.	1692.
#2	<.0000	1976.	2118.	1691.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1194000.	1949.	<.0000
Stddev	5274.	.	.0927
%RSD	.4416	.0115	1.762
#1	1191000.	1949.	<.0000
#2	1198000.	1950.	<.0000

Method: SHER Sample Name: CCB-3 Operator:
Comment:
Run Time: 02/28/03 13:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.001	39.69
Stddev	1.021	2.599	.213	9.36
%RSD	44.19	9.688	21.24	23.57
#1	< .0000	< .0000	.8509	46.31
#2	< .0000	< .0000	1.152	33.08

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4.038	1.227	1.867
Stddev	1.657	.182	.008	.414
%RSD	12.67	4.512	.6769	22.17
#1	< .0000	4.167	1.221	1.574
#2	< .0000	3.909	1.233	2.159

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1.694	.0735	.1877	1.506
Stddev	1.795	.1430	.1075	2.696
%RSD	106.0	194.6	57.28	179.0
#1	.4244	.1746	.1117	< .0000
#2	2.963	<.0000	.2637	3.412

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	<.0000	.5370	<.0000
Stddev	1.312	.2266	.9248	.0429
%RSD	141.1	38.92	172.2	8.317
#1	< .0000	<.0000	<.0000	<.0000
#2	< .0000	<.0000	1.191	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.4260	38.22	<.0000	.0100
Stddev	.9060	4.21	14.03	.0153
%RSD	212.7	11.01	400.5	152.9
#1	<.0000	41.20	6.418	.0208
#2	1.067	35.25	< .0000	<.0000

Sample Name: CCB-3 Run Time: 02/28/03 13:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.9958	<.0000	.0445	1.765
Stddev	1.103	4.197	.1887	25.17
%RSD	110.8	16.74	424.0	1426.
#1	1.776	< .0000	<.0000	< .0000
#2	.2157	< .0000	.1780	19.56

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.017	<.0000	<.0000	5.935
Stddev	.600	2.739	1.917	4.472
%RSD	59.00	153.6	27.76	75.34
#1	.5927	.1531	< .0000	9.097
#2	1.441	< .0000	< .0000	2.773

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.7422	.6749	<.0000	.0489
Stddev	.7542	.8178	2623.	3.550
%RSD	101.6	121.2	259.0	7264.
#1	1.276	1.253	< .000	< .0000
#2	.2089	.0966	842.0	2.559

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.0001	<.0000
Stddev	.7348	.7356	.0002	1.804
%RSD	47.13	36.33	183.2	6.449
#1	<.0000	<.0000	.0002	< .0000
#2	<.0000	<.0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	.0267	<.0000
Stddev	1838.	.0691	.5562
%RSD	170.7	258.8	40.37
#1	222.8	<.0000	<.0000
#2	< .000	.0756	<.0000

Method: SHER Sample Name: CCV-4 Operator:
Comment:
Run Time: 02/28/03 14:40 Type: Unk Mode: CONC Corr.Fact: 1.000000

Run Status: User Aborted

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	539.1	2151.	2020.	4738.
Stddev	.7	14.	5.	114.
%RSD	.1317	.6652	.2645	2.403
#1	539.6	2161.	2023.	4657.
#2	538.6	2141.	2016.	4818.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1954.	2148.	1941.	3.184
Stddev	6.	9.	3.	1.138
%RSD	.3091	.4232	.1803	35.74
#1	1958.	2155.	1943.	3.988
#2	1950.	2142.	1938.	2.379

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1985.	2093.	2047.	2107.
Stddev	7.	.	2.	.
%RSD	.3615	.0075	.1145	.0011
#1	1990.	2093.	2049.	2107.
#2	1980.	2093.	2045.	2107.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2111.	1980.	<.0000	<.0000
Stddev	5.	.	3.783	1.029
%RSD	.2449	.0016	1.809	2.737
#1	2115.	1980.	< .0000	< .0000
#2	2108.	1980.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10080.	2454.	1943.	1996.
Stddev	9.	17.	4.	4.
%RSD	.0904	.6760	.1904	.1959
#1	10070.	2443.	1946.	1999.
#2	10080.	2466.	1941.	1994.

Sample Name: CCV-4 Run Time: 02/28/03 14:40

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2082.	1835.	1973.	437.8
Stddev	3.	2.	5.	30.2
%RSD	.1494	.1269	.2361	6.899
#1	2085.	1834.	1976.	416.4
#2	2080.	1837.	1970.	459.1

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1924.	2114.	1982.	7515.
Stddev	1.	.	1.	11.
%RSD	.0377	.0071	.0282	.1407
#1	1924.	2114.	1982.	7522.
#2	1925.	2114.	1983.	7507.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2466.	2450.	25170.	<.0000
Stddev	6.	3.	996.	1.205
%RSD	.2282	.1405	3.958	.3688
#1	2470.	2447.	25880.	< .0000
#2	2462.	2452.	24470.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2040.	2182.	1731.
Stddev	1.578	1.	8.	1.
%RSD	37.22	.0726	.3611	.0823
#1	< .0000	2039.	2188.	1730.
#2	< .0000	2041.	2176.	1732.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1232000.	2001.	<.0000
Stddev	12020.	4.	.1859
%RSD	.9758	.2044	4.218
#1	1241000.	2004.	<.0000
#2	1224000.	1998.	<.0000

Method: SHER Sample Name: CCB-4 Operator:
Comment:
Run Time: 02/28/03 14:53 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	3.746	<.0000
Stddev	.3063	5.122	.634	1.559
%RSD	60.58	13.43	16.93	8.322
#1	<.0000	< .0000	4.194	< .0000
#2	<.0000	< .0000	3.297	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4.922	1.188	1.830
Stddev	3.105	.451	.000	1.706
%RSD	51.85	9.161	.0051	93.26
#1	< .0000	4.603	1.188	3.036
#2	< .0000	5.241	1.188	.6232

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1686	.3321	1.505
Stddev	.5987	.2271	.0107	.426
%RSD	14.15	134.7	3.220	28.30
#1	<.0000	.3292	.3397	1.204
#2	<.0000	.0080	.3246	1.806

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.2850	<.0000	<.0000
Stddev	1.095	.6398	1.345	2.401
%RSD	78.46	224.5	39.04	88.00
#1	< .0000	.7374	< .0000	< .0000
#2	< .0000	<.0000	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.6807	54.14	6.709	.0208
Stddev	.7840	4.02	6.189	.0749
%RSD	115.2	7.426	92.24	359.2
#1	.1264	51.30	2.333	.0738
#2	1.235	56.99	11.09	<.0000

Sample Name: CCB-4 Run Time: 02/28/03 14:53

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	15.49	<.0000	.0202	32.02
Stddev	12.89	.6426	.3260	7.55
%RSD	83.18	2.002	1611.	23.58
#1	24.60	<.0000	.2508	37.36
#2	6.380	<.0000	<.0000	26.68

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.995	3.684	<.0000	2.764
Stddev	.092	5.315	1.369	.001
%RSD	4.595	144.3	32.65	.0314
#1	2.060	7.443	< .0000	2.764
#2	1.930	< .0000	< .0000	2.765

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units.	ppb	ppb	ppb	ppm
Avg	1.832	1.542	<.0000	<.0000
Stddev	1.180	.409	1528.	1.633
%RSD	64.43	26.52	63.73	270.6
#1	2.667	1.253	< .000	.5512
#2	.9973	1.832	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2100	.7363	2.474	1.391
%RSD	10.88	16.54	377.2	5.163
#1	<.0000	<.0000	1.094	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	986.1	.0034	.0658
Stddev	1558.	.0306	.3712
%RSD	158.0	911.7	563.7
#1	< .000	.0250	.3283
#2	2088.	<.0000	<.0000

Method: SHER Sample Name: CCV-5 Operator:
Comment:
Run Time: 02/28/03 16:23 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	531.1	2110.	1977.	4566.
Stddev	1.2	9.	5.	139.
%RSD	.2281	.4355	.2483	3.039
#1	530.3	2117.	1974.	4467.
#2	532.0	2104.	1981.	4664.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1918.	2125.	1911.	2.891
Stddev	10.	.	4.	1.448
%RSD	.5358	.0235	.2048	50.09
#1	1910.	2125.	1913.	1.867
#2	1925.	2124.	1908.	3.915

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1948.	2061.	2012.	2066.
Stddev	1.	18.	8.	2.
%RSD	.0646	.8599	.4073	.1206
#1	1949.	2048.	2006.	2064.
#2	1947.	2073.	2017.	2068.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2084.	1952.	<.0000	<.0000
Stddev	4.	9.	.8407	1.287
%RSD	.1715	.4594	.4282	3.483
#1	2086.	1945.	<.0000	< .0000
#2	2081.	1958.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9893.	2397.	1904.	1959.
Stddev	16.	3.	5.	7.
%RSD	.1627	.1179	.2636	.3692
#1	9905.	2399.	1908.	1954.
#2	9882.	2395.	1900.	1964.

Sample Name: CCV-5 Run Time: 02/28/03 16:23

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2041.	2215.	1934.	469.8
Stddev	11.	7.	9.	2.5
%RSD	.5324	.3150	.4667	.5357
#1	2034.	2220.	1928.	468.0
#2	2049.	2210.	1940.	471.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1888.	2075.	1946.	7402.
Stddev	7.	16.	10.	25.
%RSD	.3796	.7530	.4926	.3380
#1	1883.	2064.	1939.	7385.
#2	1893.	2086.	1953.	7420.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2414.	2401.	19680.	<.0000
Stddev	13.	3.	4982.	.0708
%RSD	.5475	.1449	25.32	.0222
#1	2404.	2399.	23200.	<.0000
#2	2423.	2404.	16150.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1999.	2134.	1749.
Stddev	1.052	6.	13.	8.
%RSD	27.20	.3189	.5913	.4775
#1	< .0000	1994.	2143.	1743.
#2	< .0000	2003.	2125.	1755.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1196000.	1967.	<.0000
Stddev	4835.	9.	.3721
%RSD	.4043	.4769	6.816
#1	1193000.	1960.	<.0000
#2	1199000.	1974.	<.0000

Method: SHER Sample Name: CCB-5 Operator:
Comment:
Run Time: 02/28/03 16:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.918	122.4
Stddev	.9187	.0911	2.367	10.9
%RSD	41.05	.2647	123.4	8.927
#1	<.0000	<.0000	.2446	114.6
#2	<.0000	<.0000	3.591	130.1

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	5.227	1.138	1.940
Stddev	2.712	.133	.087	.518
%RSD	51.44	2.542	7.628	26.69
#1	< .0000	5.133	1.200	1.574
#2	< .0000	5.321	1.077	2.306

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1270	.5070	2.408
Stddev	.5977	.1514	.0216	.851
%RSD	35.33	119.2	4.255	35.34
#1	<.0000	.2340	.4917	3.009
#2	<.0000	.0199	.5222	1.806

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.3180	<.0000	<.0000
Stddev	1.240	.4998	1.766	1.286
%RSD	95.97	157.2	60.66	1062.
#1	< .0000	.6714	< .0000	.7886
#2	< .0000	<.0000	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.2336	53.79	1.459	.0052
Stddev	.3930	5.33	6.190	.0391
%RSD	168.3	9.916	424.4	752.0
#1	.5115	50.02	5.835	.0329
#2	<.0000	57.56	< .0000	<.0000

Sample Name: CCB-5 Run Time: 02/28/03 16:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	10.53	<.0000	<.0000	8.884
Stddev	8.29	.7170	.1201	12.58
%RSD	78.71	2.567	44.33	141.7
#1	16.39	<.0000	<.0000	17.78
#2	4.668	<.0000	<.0000	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.2985	2.089	<.0000	2.371
Stddev	.6454	1.449	4.108	3.923
%RSD	216.3	69.37	76.70	165.4
#1	.7549	3.114	< .0000	5.145
#2	<.0000	1.064	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.6494	<.0000	<.0000	<.0000
Stddev	1.016	2.455	1960.	2.414
%RSD	156.5	101.8	93.65	123.2
#1	1.368	< .0000	< .000	< .0000
#2	< .0000	< .0000	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.2102	.2447	.7735	.6607
%RSD	12.87	14.59	101.1	2.548
#1	<.0000	<.0000	<.0000	<.0000
#2	<.0000	<.0000	<.0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1466.	<.0000	<.0000
Stddev	1438.	.0791	.1858
%RSD	98.07	183.4	40.47
#1	449.5	.0128	<.0000
#2	2483.	<.0000	<.0000

Method: SHER Sample Name: CRI-2 Operator:
Comment:
Run Time: 02/28/03 16:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	18.63	<.0000	21.99	227.1
Stddev	.61	5.742	2.79	21.8
%RSD	3.268	12.85	12.67	9.614
#1	18.20	< .0000	20.02	211.7
#2	19.06	< .0000	23.96	242.5

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	5.742	10.43	2.049
Stddev	.0200	.114	.02	1.293
%RSD	.1502	1.990	.2051	63.09
#1	<.0000	5.823	10.41	2.963
#2	<.0000	5.662	10.44	1.135

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	10.50	100.7	24.68
Stddev	1.196	.04	.0	.86
%RSD	56.52	.4034	.0030	3.467
#1	< .0000	10.47	100.7	25.29
#2	< .0000	10.53	100.7	24.08

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	49.87	.0540	<.0000	.2731
Stddev	.74	.0601	1.345	.1287
%RSD	1.487	111.3	9.123	47.12
#1	50.40	.0115	< .0000	.3640
#2	49.35	.0964	< .0000	.1821

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.7043	52.37	<.0000	29.82
Stddev	.9934	.11	4.951	.03
%RSD	141.0	.2025	77.11	.0883
#1	.0019	52.29	< .0000	29.83
#2	1.407	52.44	< .0000	29.80

Sample Name: CRI-2 Run Time: 02/28/03 16:33

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.023	<.0000	79.37	9.775
Stddev	.296	1.106	.19	6.290
%RSD	14.63	3.323	.2408	64.35
#1	2.232	< .0000	79.23	5.327
#2	1.814	< .0000	79.50	14.22

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	6.225	128.1	10.91	<.0000
Stddev	.231	.5	1.37	5.043
%RSD	3.707	.3804	12.55	91.03
#1	6.061	127.7	11.88	< .0000
#2	6.388	128.4	9.942	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.6030	.3859	<.0000	<.0000
Stddev	.3607	.1366	2723.	2.839
%RSD	59.81	35.39	82.77	17.51
#1	.8581	.4825	< .000	< .0000
#2	.3480	.2893	< .000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	15.14	101.7	162.1
Stddev	1.365	2.45	2.5	1.9
%RSD	167.1	16.20	2.414	1.169
#1	< .0000	13.41	99.99	160.7
#2	.1485	16.87	103.5	163.4

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	63150.	48.15	<.0000
Stddev	2836.	.06	.3710
%RSD	4.490	.1148	564.3
#1	65160.	48.11	.1966
#2	61140.	48.19	<.0000

Method: SHER Sample Name: ICSA-2 Operator:
Comment:
Run Time: 02/28/03 16:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	468100.	<.0000	161300.
Stddev	.8191	1659.	4.992	265.
%RSD	4.494	.3545	.4229	.1645
#1	<.0000	466900.	< .0000	161500.
#2	<.0000	469300.	< .0000	161100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4.549	1.070	3.695
Stddev	.5698	.137	.095	2.587
%RSD	.1319	3.006	8.833	70.00
#1	<.0000	4.646	1.137	5.524
#2	<.0000	4.452	1.003	1.866

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	382700.	<.0000	.0433	<.0000
Stddev	1870.	.0252	.0107	4.057
%RSD	.4886	4.632	24.75	7.376
#1	381400.	<.0000	.0357	< .0000
#2	384100.	<.0000	.0508	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	122800.	<.0000	<.0000
Stddev	.1473	348.	.4208	2.320
%RSD	.4467	.2832	64.52	3.981
#1	<.0000	122600.	<.0000	< .0000
#2	<.0000	123100.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	432800.	<.0000
Stddev	.3625	38.57	201.	.0172
%RSD	6.444	1.223	.0464	.7804
#1	<.0000	< .0000	432600.	<.0000
#2	<.0000	< .0000	432900.	<.0000

Sample Name: ICSA-2 Run Time: 02/28/03 16:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	71.48	<.0000	2041.
Stddev	.2955	2.12	.1522	25.
%RSD	4.740	2.961	.5256	1.241
#1	<.0000	69.98	<.0000	2059.
#2	<.0000	72.98	<.0000	2023.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	40.90
Stddev	1.799	4.051	11.24	4.49
%RSD	.6119	72.29	3.803	10.98
#1	< .0000	< .0000	< .0000	37.73
#2	< .0000	< .0000	< .0000	44.08

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3481	9.663	921600.	5.169
Stddev	1.836	.136	4256.	5.680
%RSD	527.6	1.409	.4618	109.9
#1	1.647	9.759	924600.	1.153
#2	< .0000	9.566	918500.	9.185

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.8409	5.638	3.411	1.763
%RSD	4.671	44.14	9.209	3.163
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	1.049
Stddev	1782.	.2462	1.023
%RSD	.9163	.0599	97.45
#1	< .000	<.0000	1.773
#2	< .000	<.0000	.3263

Method: SHER Sample Name: ICSAB-2 Operator:
Comment:
Run Time: 02/28/03 16:51 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1051.	466400.	<.0000	166300.
Stddev	4.	225.	.8023	549.
%RSD	.3846	.0483	.0680	.3303
#1	1054.	466500.	<.0000	165900.
#2	1048.	466200.	<.0000	166700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	504.2	430.8	3.806
Stddev	.5815	.5	.6	.776
%RSD	.1302	.1018	.1378	20.39
#1	<.0000	503.8	431.2	4.354
#2	<.0000	504.5	430.3	3.257

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	382900.	912.8	484.0	521.0
Stddev	143.	2.6	.5	9.1
%RSD	.0374	.2878	.1114	1.742
#1	382800.	910.9	483.6	514.6
#2	383000.	914.7	484.4	527.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	471.0	123200.	4.224	<.0000
Stddev	1.2	149.	3.616	1.244
%RSD	.2534	.1208	85.60	1.984
#1	470.1	123300.	1.667	< .0000
#2	471.8	123100.	6.781	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	431100.	510.7
Stddev	1.057	32.70	1145.	.2
%RSD	41.79	1.085	.2657	.0368
#1	< .0000	< .0000	430300.	510.8
#2	< .0000	< .0000	431900.	510.6

Sample Name: ICSAB-2 Run Time: 02/28/03 16:51

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	55.29	934.0	2299.
Stddev	.4305	3.65	2.4	3.
%RSD	7.146	6.606	.2612	.1091
#1	<.0000	57.87	932.3	2301.
#2	<.0000	52.71	935.8	2298.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1045.	<.0000	<.0000	25.83
Stddev	4.	3.380	1.921	13.46
%RSD	.3434	60.59	.6107	52.11
#1	1043.	< .0000	< .0000	35.35
#2	1048.	< .0000	< .0000	16.31

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3249	10.44	938600.	<.0000
Stddev	.0328	2.87	4620.	1.420
%RSD	10.09	27.50	.4922	2.375
#1	.3481	8.407	935300.	< .0000
#2	.3017	12.47	941900.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	436.7	383.0
Stddev	.6304	1.962	4.5	6.7
%RSD	3.234	8.278	1.034	1.761
#1	<.0000	< .0000	433.5	387.8
#2	<.0000	< .0000	439.9	378.3

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	428.7	1.838
Stddev	3877.	1.9	.279
%RSD	60.93	.4498	15.17
#1	< .000	427.4	1.641
#2	< .000	430.1	2.036

Method: SHER Sample Name: CCV-6 Operator:
Comment:
Run Time: 02/28/03 17:00 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	526.6	2135.	1989.	4617.
Stddev	3.6	7.	2.	65.
%RSD	.6867	.3402	.0956	1.418
#1	524.0	2130.	1987.	4571.
#2	529.1	2140.	1990.	4664.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1928.	2119.	1912.	3.037
Stddev	9.	.	3.	.310
%RSD	.4467	.0067	.1325	10.22
#1	1922.	2119.	1910.	2.818
#2	1934.	2119.	1913.	3.257

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1948.	2059.	2018.	2070.
Stddev	8.	3.	4.	7.
%RSD	.4070	.1286	.1836	.3569
#1	1942.	2057.	2016.	2065.
#2	1953.	2060.	2021.	2075.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2075.	1957.	<.0000	<.0000
Stddev	4.	3.	1.092	.1718
%RSD	.1794	.1546	.5332	.4575
#1	2073.	1955.	< .0000	<.0000
#2	2078.	1959.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9908.	2409.	1915.	1966.
Stddev	54.	5.	11.	6.
%RSD	.5445	.2158	.5762	.3143
#1	9946.	2413.	1923.	1962.
#2	9870.	2405.	1908.	1971.

Sample Name: CCV-6 Run Time: 02/28/03 17:00

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2051.	2216.	1972.	462.7
Stddev	6.	3.	6.	42.8
%RSD	.3039	.1164	.3094	9.248
#1	2047.	2215.	1967.	492.9
#2	2056.	2218.	1976.	432.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2156.	2082.	2113.	7422.
Stddev	1.	4.	3.	14.
%RSD	.0583	.1930	.1551	.1822
#1	2156.	2079.	2111.	7431.
#2	2157.	2085.	2116.	7412.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2427.	2411.	25410.	<.0000
Stddev	1.	4.	2059.	2.555
%RSD	.0374	.1860	8.104	.7935
#1	2426.	2414.	23950.	< .0000
#2	2427.	2407.	26860.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2008.	2136.	1724.
Stddev	.7363	7.	4.	27.
%RSD	18.68	.3416	.2099	1.560
#1	<.0000	2003.	2133.	1705.
#2	<.0000	2013.	2139.	1743.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1202000.	1976.	<.0000
Stddev	9067.	4.	1.302
%RSD	.7541	.2245	32.45
#1	1196000.	1973.	< .0000
#2	1209000.	1979.	< .0000

Method: SHER Sample Name: CCB-6 Operator:
Comment:
Run Time: 02/28/03 17:03 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.527	77.17
Stddev	2.757	3.136	.219	31.19
%RSD	181.9	8.999	8.665	40.41
#1	< .0000	< .0000	2.372	99.22
#2	.4338	< .0000	2.682	55.12

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	5.440	1.133	.9883
Stddev	.4780	.345	.016	3.827
%RSD	6.111	6.334	1.413	387.2
#1	<.0000	5.684	1.122	< .0000
#2	<.0000	5.197	1.145	3.694

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1091	.4765	1.806
Stddev	1.197	.0925	.6020	3.406
%RSD	94.21	84.81	126.3	188.6
#1	< .0000	.1745	.0508	4.214
#2	< .0000	.0437	.9022	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	<.0000	<.0000	.1214
Stddev	1.241	.1268	1.849	.5147
%RSD	45.35	4780.	390.0	423.9
#1	< .0000	.0870	< .0000	.4853
#2	< .0000	<.0000	.8335	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	54.87	<.0000	<.0000
Stddev	.6022	1.13	8.669	.0306
%RSD	157.4	2.055	228.4	123.1
#1	.0433	55.66	2.334	<.0000
#2	<.0000	54.07	< .0000	<.0000

Sample Name: CCB-6 Run Time: 02/28/03 17:03

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.126	<.0000	.2386	21.34
Stddev	1.480	.7360	.0858	2.52
%RSD	47.34	3.177	35.95	11.78
#1	4.173	<.0000	.1780	23.12
#2	2.080	<.0000	.2993	19.56

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.178	.0660	<.0000
Stddev	.8071	.161	1.917	5.043
%RSD	106.0	13.68	2904.	640.6
#1	<.0000	1.292	< .0000	< .0000
#2	<.0000	1.064	1.421	2.779

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.0004	<.0000	<.0000
Stddev	.3607	1.773	298.2	1.846
%RSD	111.2	464000.	13.08	3606.
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	1.254	< .0000	1.254

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.750	<.0000
Stddev	.4200	1.472	4.641	1.203
%RSD	28.28	66.97	265.2	4.199
#1	<.0000	< .0000	5.032	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	360.2	.0088	.8349
%RSD	140.3	15.90	48.92
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: Blank Operator:
Comment:
Run Time: 03/03/03 10:57 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0305	.4657	.0438	-.0268
Stddev	.0157	.0314	.0017	.0406
%RSD	51.42	6.740	3.986	151.2
#1	.0194	.4878	.0450	.0019
#2	.0416	.4435	.0426	-.0555

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.186	4.672	1.093	.0487
Stddev	.179	.068	.033	.0079
%RSD	4.275	1.463	3.053	16.11
#1	4.313	4.623	1.117	.0432
#2	4.060	4.720	1.070	.0543

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0596	.0376	.1629	-.0333
Stddev	.0216	.0253	.0262	.0000
%RSD	36.17	67.23	16.07	.0061
#1	-.0443	.0197	.1444	-.0333
#2	-.0748	.0555	.1814	-.0333

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2495	.3406	.0358	.0071
Stddev	.0784	.0210	.0079	.0031
%RSD	31.43	6.152	21.95	43.04
#1	.3049	.3554	.0413	.0049
#2	.1940	.3258	.0302	.0093

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4491	-48.82	-.0499	.0703
Stddev	.1059	.17	.0510	.0105
%RSD	23.58	.3395	102.1	14.88
#1	.5240	-48.71	-.0139	.0629
#2	.3742	-48.94	-.0859	.0777

Sample Name: Blank Run Time: 03/03/03 10:57

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4097	-53.73	.0216	-.0046
Stddev	.1876	.89	.0375	.0074
%RSD	45.79	1.654	173.7	160.3
#1	.5423	-54.36	.0481	.0006
#2	.2770	-53.10	-.0049	-.0099

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0071	.0472	.0244	.1469
Stddev	.0179	.0039	.0013	.0588
%RSD	252.1	8.316	5.370	40.02
#1	-.0197	.0444	.0234	.1053
#2	.0056	.0500	.0253	.1885

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0056	.0222	.2530	-.0210
Stddev	.0157	.0039	.0192	.0140
%RSD	282.8	17.67	7.590	66.55
#1	-.0167	.0194	.2665	-.0111
#2	.0056	.0249	.2394	-.0308

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0416	-.0561	.0000	4.309
Stddev	.0706	.0026	.016	.006
%RSD	169.7	4.664	2923000.	.1307
#1	-.0083	-.0580	-.0111	4.305
#2	.0915	-.0543	.0111	4.313

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	Cts/S	Cts/S	Cts/S
Avg	.0432	.0521	.0249
Stddev	.0000	.0048	.0902
%RSD	.0031	9.204	361.4
#1	.0432	.0487	-.0388
#2	.0432	.0555	.0887

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 03/03/03 11:01 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B_2496	Cd2288	Pb2203	Se1960
Line	249.678 {135}	228.802 {147}	220.353 {152}	196.090 {171}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.78	90.00	14.35	2.873
Stddev	.14	.35	.09	.007
%RSD	.9482	.3908	.6025	.2405
#1	14.88	90.25	14.41	2.878
#2	14.68	89.75	14.29	2.868

Elem	Tl1908
Line	190.864 {176}
Units	Cts/S
Avg	6.378
Stddev	.009
%RSD	.1480
#1	6.384
#2	6.371

Method: SHER Sample Name: 200.7-2 Operator:
Comment:
Run Time: 03/03/03 11:05 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	578.1	633.5	291.4	24.17
Stddev	1.9	.4	1.9	.10
%RSD	.3282	.0663	.6676	.4132
#1	576.7	633.2	290.0	24.10
#2	579.4	633.8	292.8	24.24

Elem	Fe2599	Mn2576	Sr3464
Line	259.940 {129}	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S	Cts/S
Avg	2218.	844.2	175.1
Stddev	.	.4	.4
%RSD	.0032	.0473	.2112
#1	2218.	844.4	174.8
#2	2218.	843.9	175.3

Method: SHER Sample Name: 200.7 Operator:
Comment:
Run Time: 03/03/03 11:12 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	As1937	Cr3578	Li6103
Line	328.068 {102}	193.759 {173}	357.869 { 94}	610.362 { 55}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.24	14.20	32.50	115.8
Stddev	.00	.05	.25	.6
%RSD	.0221	.3450	.7813	.4779
#1	10.24	14.16	32.68	115.4
#2	10.23	14.23	32.32	116.2

Elem	Sn1899	V_2924	V_3102
Line	189.989 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S
Avg	33.40	28.55	36.12
Stddev	.15	.01	.47
%RSD	.4541	.0235	1.289
#1	33.29	28.55	35.79
#2	33.51	28.54	36.44

Method: SHER Sample Name: 200.7-1 Operator:
Comment:
Run Time: 03/03/03 11:17 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ca3179	K_7664	Mg3838
Line	308.215 {109}	317.933 {105}	766.490 { 44}	383.826 { 87}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	32.44	116.6	666.4	50.37
Stddev	.19	.3	.1	.06
%RSD	.5943	.2459	.0193	.1110
#1	32.31	116.4	666.5	50.33
#2	32.58	116.8	666.3	50.41

Elem	Na5889	Ni2316	Zn2138
Line	588.995 { 57}	231.604 {145}	213.856 {157}
Units	Cts/S	Cts/S	Cts/S
Avg	3682.	448.4	1228.
Stddev	16.	.2	1.
%RSD	.4286	.0539	.0418
#1	3671.	448.6	1229.
#2	3693.	448.2	1228.

Method: SHER Sample Name: 200.7-4 Operator:
Comment:
Run Time: 03/03/03 11:21 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 {166}	206.833 {162}	336.121 {100}
Units	Cts/S	Cts/S	Cts/S
Avg	511.8	89.87	496.7
Stddev	2.1	.11	5.5
%RSD	.4088	.1225	1.103
#1	510.3	89.79	500.6
#2	513.2	89.95	492.8

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0204	0.0305	1.0000000	03/03/03 11:15:30
Al3082	0.0032	0.4657	1.0000000	03/03/03 11:20:55
As1937	0.0071	0.0438	1.0000000	03/03/03 11:15:30
Au2427	-0.0003	-0.0268	-1.0000000	03/03/03 11:00:53
B_2496	0.0530	4.1862	1.0000000	03/03/03 11:04:30
Ba4934	0.5734	4.6718	1.0000000	03/03/03 11:08:04
Be3130	0.6324	1.0935	1.0000000	03/03/03 11:08:04
Bi1902	0.0084	0.0487	1.0000000	03/03/03 11:00:53
Ca3179	0.0117	-0.0596	1.0000000	03/03/03 11:20:55
Cd2288	0.1799	0.0376	1.0000000	03/03/03 11:04:30
Co2286	0.1456	0.1629	1.0000000	03/03/03 11:08:04
Cr3578	0.0163	-0.0333	1.0000000	03/03/03 11:15:30
Cu3247	0.0239	0.2495	1.0000000	03/03/03 11:08:04
Fe2599	0.2218	0.3406	1.0000000	03/03/03 11:08:04
Ge2068	0.0052	0.0358	1.0000000	03/03/03 11:00:53
In2306	0.0102	0.0071	1.0000000	03/03/03 11:00:53
K_7664	0.0666	0.4491	1.0000000	03/03/03 11:20:55
Li6103	0.0823	-48.8245	1.0000000	03/03/03 11:15:30
Mg3838	0.0050	-0.0499	1.0000000	03/03/03 11:20:55
Mn2576	0.8441	0.0703	1.0000000	03/03/03 11:08:04
Mo2020	0.0511	0.4097	1.0000000	03/03/03 11:24:50
Na5889	0.3736	-53.7333	1.0000000	03/03/03 11:20:55
Ni2316	0.0897	0.0216	1.0000000	03/03/03 11:20:55
Os1898	-0.0003	-0.0046	-1.0000000	03/03/03 11:00:53
Pb2203	0.0144	-0.0071	1.0000000	03/03/03 11:04:30
Sb2068	0.0090	0.0472	1.0000000	03/03/03 11:24:50
Se1960	0.0057	0.0244	1.0000000	03/03/03 11:04:30
Si2881	0.0035	0.1469	1.0000000	03/03/03 11:00:53
Sn1899	0.0167	-0.0056	1.0000000	03/03/03 11:15:30
Sr3464	0.0175	0.0222	1.0000000	03/03/03 11:08:04
Ta2400	0.0000	0.2530	-1.0000000	03/03/03 11:00:53
Te2142	0.0061	-0.0210	1.0000000	03/03/03 11:00:53
Ti3361	0.0497	0.0416	1.0000000	03/03/03 11:24:50
Tl1908	0.0064	-0.0561	1.0000000	03/03/03 11:04:30
V_2924	0.0143	0.0000	1.0000000	03/03/03 11:15:30
V_3102	0.0159	4.3087	1.0000000	03/03/03 11:15:30
W_2397	0.0000	0.0432	-1.0000000	03/03/03 11:00:53
Zn2138	0.2457	0.0521	1.0000000	03/03/03 11:20:55
Zr3391	0.0422	0.0249	1.0000000	03/03/03 11:00:53

Method: SHER Sample Name: ICV-1 Operator: IYF-33

Comment:

Run Time: 03/03/03 11:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	493.9	2152.	1976.	4681.
Stddev	1.8	7.	2.	43.
%RSD	.3703	.3244	.1240	.9154
#1	495.2	2157.	1974.	4712.
#2	492.6	2147.	1978.	4651.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2150.	1989.	1955.	<.0000
Stddev	8.	9.	9.	.0517
%RSD	.3719	.4692	.4456	28.39
#1	2155.	1995.	1961.	<.0000
#2	2144.	1982.	1949.	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2041.	1962.	1948.	1973.
Stddev	6.	.	3.	2.
%RSD	.2793	.0090	.1753	.0926
#1	2037.	1962.	1945.	1975.
#2	2045.	1962.	1950.	1972.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2010.	2010.	<.0000	<.0000
Stddev	1.	5.	.1682	1.287
%RSD	.0701	.2343	.5590	2.986
#1	2011.	2007.	<.0000	< .0000
#2	2009.	2013.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9838.	2006.	2018.	1953.
Stddev	10.	12.	8.	2.
%RSD	.1017	.6215	.3847	.1005
#1	9845.	1998.	2012.	1954.
#2	9831.	2015.	2023.	1952.

Sample Name: ICV-1 Run Time: 03/03/03 11:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2091.	2127.	2079.	547.1
Stddev	14.	11.	5.	7.8
%RSD	.6669	.5247	.2204	1.421
#1	2101.	2119.	2076.	552.6
#2	2081.	2135.	2082.	541.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2005.	2070.	2104.	5693.
Stddev	6.	5.	4.	15.
%RSD	.3059	.2605	.1856	.2672
#1	2001.	2074.	2101.	5704.
#2	2009.	2066.	2107.	5683.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1979.	2021.	10670.	<.0000
Stddev	3.	3.	673.	5.965
%RSD	.1372	.1504	6.304	7.951
#1	1977.	2023.	10200.	< .0000
#2	1981.	2019.	11150.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.178	1944.	1981.	2159.
Stddev	.000	1.	4.	37.
%RSD	.0009	.0698	.2210	1.701
#1	2.178	1945.	1978.	2133.
#2	2.178	1943.	1985.	2184.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	553900.	2088.	<.0000
Stddev	20810.	4.	.3721
%RSD	3.757	.2122	7.348
#1	568600.	2085.	<.0000
#2	539200.	2091.	<.0000

Method: SHER Sample Name: ICB-1 Operator:
Comment:
Run Time: 03/03/03 11:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1.154	<.0000	<.0000	57.23
Stddev	1.055	9.682	.6918	79.34
%RSD	91.46	109.9	124.2	138.6
#1	.4077	< .0000	<.0000	1.126
#2	1.900	< .0000	<.0000	113.3

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0897	<.0000
Stddev	2.338	.5172	.0428	1.293
%RSD	7.368	42.52	47.70	186.2
#1	< .0000	<.0000	.0594	< .0000
#2	< .0000	<.0000	.1199	.2198

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1097	<.0000	3.066
Stddev	1.011	.0873	.0479	4.337
%RSD	34.04	79.54	94.29	141.4
#1	< .0000	.1715	<.0000	< .0000
#2	< .0000	.0480	<.0000	6.133

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.9837	.3158	<.0000	<.0000
Stddev	.4134	.1947	3.027	1.887
%RSD	42.02	61.65	424.4	113.1
#1	1.276	.4535	< .0000	< .0000
#2	.6914	.1781	1.427	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	23.02	3.022	.0011
Stddev	3.210	3.38	8.164	.0295
%RSD	252.8	14.69	270.1	2684.
#1	1.000	20.62	< .0000	.0219
#2	< .0000	25.41	8.795	<.0000

Sample Name: ICB-1 Run Time: 03/03/03 11:29

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	8.247	16.97	<.0000	4.582
Stddev	9.769	1.27	.0243	10.37
%RSD	118.4	7.515	30.74	226.2
#1	15.15	16.07	<.0000	< .0000
#2	1.340	17.87	<.0000	11.91

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.826	<.0000	<.0000	<.0000
Stddev	.973	1.797	.9952	2.234
%RSD	53.26	1311.	27.03	31.25
#1	1.138	1.133	<.0000	< .0000
#2	2.514	< .0000	<.0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2216	<.0000	<.0000	3.464
Stddev	.4179	1.455	672.9	2.485
%RSD	188.6	204.1	220.5	71.74
#1	.5172	< .0000	170.6	5.221
#2	<.0000	.3162	< .0000	1.707

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4.506
Stddev	.4733	2.305	3.432	.031
%RSD	282.5	600.6	186.1	.6922
#1	<.0000	< .0000	.5826	4.484
#2	.1671	1.246	< .0000	4.528

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	142.6	.0804	<.0000
Stddev	6263.	.0195	1.766
%RSD	4390.	24.29	168.0
#1	< .000	.0942	.1974
#2	4571.	.0666	< .0000

Method: SHER Sample Name: CRI-1 Operator:
Comment:
Run Time: 03/03/03 11:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	20.03	<.0000	16.12	99.84
Stddev	1.45	24.32	.15	19.03
%RSD	7.221	898.2	.9530	19.07
#1	21.05	14.49	16.02	113.3
#2	19.00	< .0000	16.23	86.38

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	9.101	<.0000
Stddev	.1818	.3124	.037	.2068
%RSD	.4693	31.12	.4079	21.74
#1	<.0000	<.0000	9.128	<.0000
#2	<.0000	<.0000	9.075	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	10.13	94.14	18.66
Stddev	1.851	.20	.15	1.08
%RSD	55.64	1.985	.1543	5.786
#1	< .0000	10.27	94.04	17.89
#2	< .0000	9.985	94.24	19.42

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	46.57	.8914	<.0000	.1818
Stddev	.80	.1633	.5043	.8147
%RSD	1.725	18.32	84.74	448.0
#1	46.00	.7759	<.0000	.7579
#2	47.13	1.007	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	2.455	24.96	2.750	28.70
Stddev	1.415	3.30	6.994	.00
%RSD	57.65	13.23	254.3	.0092
#1	3.456	22.63	7.696	28.71
#2	1.454	27.30	< .0000	28.70

Sample Name: CRI-1 Run Time: 03/03/03 11:33

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	17.70	80.78	7.329
Stddev	.5886	.50	.28	9.070
%RSD	15.27	2.808	.3477	123.8
#1	<.0000	17.35	80.98	.9154
#2	<.0000	18.05	80.58	13.74

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	11.32	122.5	8.716	<.0000
Stddev	.06	3.7	1.532	13.46
%RSD	.5366	3.054	17.58	183400.
#1	11.36	119.9	7.632	< .0000
#2	11.28	125.2	9.799	9.513

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.6464	<.0000	232.6	1.155
Stddev	.3918	.0001	362.3	3.053
%RSD	60.61	.0101	155.8	264.3
#1	.3694	<.0000	488.8	3.314
#2	.9235	<.0000	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	18.60	91.93	204.5
Stddev	.1183	1.49	2.36	2.5
%RSD	20.19	8.019	2.567	1.210
#1	<.0000	17.55	93.60	206.3
#2	<.0000	19.66	90.26	202.8

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	30570.	41.30	.0001
Stddev	808.	.03	.6509
%RSD	2.643	.0715	885500.
#1	31140.	41.32	.4603
#2	30000.	41.28	<.0000

Method: SHER Sample Name: CRI-1 Operator:
Comment:
Run Time: 03/03/03 11:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	19.05	<.0000	17.14	123.4
Stddev	1.25	19.68	1.32	4.8
%RSD	6.570	246.3	7.690	3.869
#1	19.93	5.926	16.21	126.8
#2	18.16	< .0000	18.07	120.0

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	9.093	<.0000
Stddev	.2658	.2100	.065	1.293
%RSD	.6531	20.65	.7193	78.55
#1	<.0000	<.0000	9.046	< .0000
#2	<.0000	<.0000	9.139	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	9.974	94.01	18.12
Stddev	2.012	.099	.05	2.53
%RSD	73.94	.9908	.0505	13.96
#1	< .0000	9.904	94.04	19.91
#2	< .0000	10.04	93.98	16.33

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	46.89	.4980	<.0000	<.0000
Stddev	.42	.0668	4.036	.0858
%RSD	.9024	13.41	154.3	4.223
#1	47.19	.4508	< .0000	<.0000
#2	46.59	.5452	.2376	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.0514	21.61	4.131	28.71
Stddev	2.085	3.00	1.166	.03
%RSD	4058.	13.87	28.22	.0986
#1	< .0000	23.73	3.307	28.69
#2	1.526	19.49	4.956	28.73

Sample Name: CRI-1 Run Time: 03/03/03 11:33

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	18.19	80.68	<.0000
Stddev	.1708	.47	.46	1.297
%RSD	3.347	2.565	.5726	3.370
#1	<.0000	18.52	81.01	< .0000
#2	<.0000	17.86	80.36	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	6.580	124.6	9.746	<.0000
Stddev	1.602	3.5	1.148	7.280
%RSD	24.35	2.812	11.78	121.1
#1	7.713	127.1	8.934	< .0000
#2	5.447	122.2	10.56	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.5911	<.0000	707.3	<.0000
Stddev	.6269	2.236	758.3	1.136
%RSD	106.1	469.8	107.2	66.57
#1	1.034	1.105	1243.	< .0000
#2	.1478	< .0000	171.1	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	20.23	88.50	205.3
Stddev	.2363	1.63	1.21	.0
%RSD	17.65	8.046	1.369	.0027
#1	<.0000	21.39	87.64	205.3
#2	<.0000	19.08	89.36	205.3

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	33710.	41.31	<.0000
Stddev	5050.	.22	.5569
%RSD	14.98	.5358	65.20
#1	30140.	41.16	<.0000
#2	37290.	41.47	<.0000

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 03/03/03 11:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	455400.	<.0000	164300.
Stddev	.2874	1091.	7.223	99.
%RSD	1.741	.2396	.5822	.0601
#1	<.0000	454600.	< .0000	164200.
#2	<.0000	456200.	< .0000	164400.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0774	11.85
Stddev	1.270	.1399	.0435	.21
%RSD	.2701	5.550	56.17	1.753
#1	< .0000	<.0000	.0467	12.00
#2	< .0000	<.0000	.1082	11.70

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	387600.	<.0000	<.0000	11.97
Stddev	2443.	.0776	.0599	.81
%RSD	.6303	26.94	11.60	6.744
#1	385900.	<.0000	<.0000	12.54
#2	389300.	<.0000	<.0000	11.40

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	122800.	.4756	<.0000
Stddev	.0809	750.	4.035	2.997
%RSD	.2649	.6107	848.5	3.100
#1	<.0000	122300.	< .0000	< .0000
#2	<.0000	123400.	3.329	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	448600.	3.896
Stddev	.8540	4.698	2112.	.029
%RSD	11.00	.1882	.4707	.7514
#1	<.0000	< .0000	447100.	3.876
#2	<.0000	< .0000	450100.	3.917

Sample Name: ICSA-1 Run Time: 03/03/03 11:41

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	79.61	<.0000	3593.
Stddev	.6050	.78	3.736	4.
%RSD	2.524	.9848	1.188	.1128
#1	<.0000	79.05	< .0000	3596.
#2	<.0000	80.16	< .0000	3591.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.6220	.9073	.8545	3.935
%RSD	.2601	17.19	.3447	142.4
#1	<.0000	<.0000	<.0000	< .0000
#2	<.0000	<.0000	<.0000	.0195

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.293	10.46	229500.	45.09
Stddev	.209	3.14	2787.	.00
%RSD	16.16	29.99	1.214	.0044
#1	1.145	12.67	231400.	45.09
#2	1.441	8.239	227500.	45.08

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.182	1.355	2.748	2.602
%RSD	2.352	16.63	27.20	14.44
#1	< .0000	< .0000	< .0000	< .0000
#2	< .0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	33.56	36.57
Stddev	91.80	.05	1.39
%RSD	.0494	.1541	3.810
#1	< .0000	33.52	37.55
#2	< .0000	33.59	35.58

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 03/03/03 11:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	456400.	<.0000	164800.
Stddev	.0001	438.	3.411	7.
%RSD	.0006	.0959	.2749	.0040
#1	<.0000	456700.	< .0000	164800.
#2	<.0000	456100.	< .0000	164800.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.1519	10.39
Stddev	1.425	.3112	.0806	.21
%RSD	.3026	12.61	53.05	1.993
#1	< .0000	<.0000	.2089	10.53
#2	< .0000	<.0000	.0949	10.24

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	387600.	<.0000	<.0000	<.0000
Stddev	435.	.0024	.0240	3.960
%RSD	.1121	.5878	6.427	8.896
#1	387900.	<.0000	<.0000	< .0000
#2	387300.	<.0000	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	123200.	<.0000	<.0000
Stddev	1.967	30.	2.774	2.573
%RSD	6.454	.0241	126.1	2.652
#1	< .0000	123200.	< .0000	< .0000
#2	< .0000	123200.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	449100.	3.945
Stddev	2.090	18.84	265.	.010
%RSD	31.29	.7493	.0590	.2619
#1	< .0000	< .0000	448900.	3.938
#2	< .0000	< .0000	449200.	3.953

Sample Name: ICSA-1 Run Time: 03/03/03 11:41

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	79.54	<.0000	3654.
Stddev	.6142	.77	2.647	51.
%RSD	2.520	.9640	.8380	1.383
#1	<.0000	80.09	< .0000	3618.
#2	<.0000	79.00	< .0000	3689.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	9.153
Stddev	.9665	2.082	.5264	6.179
%RSD	.4054	57.17	.2084	67.51
#1	<.0000	< .0000	<.0000	13.52
#2	<.0000	< .0000	<.0000	4.784

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.016	6.179	228100.	45.58
Stddev	1.228	1.792	1241.	.99
%RSD	120.8	29.01	.5443	2.181
#1	1.884	7.446	227200.	46.29
#2	.1478	4.911	229000.	44.88

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.658	.4068	1.511	.7377
%RSD	3.234	4.514	14.27	4.321
#1	< .0000	<.0000	< .0000	<.0000
#2	< .0000	<.0000	< .0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	33.67	37.69
Stddev	1919.	.06	2.60
%RSD	1.053	.1634	6.910
#1	< .000	33.63	39.53
#2	< .000	33.71	35.84

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 03/03/03 11:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	457300.	<.0000	165500.
Stddev	2.786	423.	.0983	227.
%RSD	14.00	.0926	.0079	.1372
#1	< .0000	457600.	<.0000	165700.
#2	< .0000	457000.	<.0000	165400.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0467	7.900
Stddev	.9326	.0309	.0434	4.655
%RSD	.1961	1.132	92.81	58.92
#1	<.0000	<.0000	.0774	11.19
#2	<.0000	<.0000	.0161	4.609

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	388100.	<.0000	<.0000	<.0000
Stddev	309.	.1576	.0419	.8576
%RSD	.0795	41.60	6.384	1.972
#1	387900.	<.0000	<.0000	<.0000
#2	388300.	<.0000	<.0000	<.0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	123200.	<.0000	<.0000
Stddev	.9840	380.	3.531	4.893
%RSD	3.241	.3086	185.6	5.070
#1	<.0000	122900.	.5942	< .0000
#2	<.0000	123500.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	450500.	3.889
Stddev	2.032	19.43	1088.	.039
%RSD	25.48	.7554	.2414	.9922
#1	< .0000	< .0000	451300.	3.916
#2	< .0000	< .0000	449700.	3.862

Sample Name: ICSA-1 Run Time: 03/03/03 11:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	80.28	<.0000	3633.
Stddev	.6477	.37	.2867	28.
%RSD	2.746	.4599	.0926	.7801
#1	<.0000	80.55	<.0000	3653.
#2	<.0000	80.02	<.0000	3613.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	1.209
Stddev	1.589	1.937	3.677	.560
%RSD	.6712	41.04	1.467	46.37
#1	< .0000	< .0000	< .0000	1.605
#2	< .0000	< .0000	< .0000	.8123

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2586	8.792	231600.	45.79
Stddev	.4179	2.128	680.	3.41
%RSD	161.6	24.20	.2934	7.447
#1	.5541	10.30	232100.	43.38
#2	<.0000	7.288	231100.	48.20

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.1170	.6788	1.511	1.733
%RSD	.2249	10.11	15.72	7.960
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	36.24
Stddev	8072.	.9575	.74
%RSD	4.481	.2205	2.050
#1	< .000	<.0000	36.76
#2	< .000	<.0000	35.71

Method: SHER Sample Name: ICSAB-1 Operator:
Comment:
Run Time: 03/03/03 11:59 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	984.1	454000.	<.0000	171200.
Stddev	1.2	1592.	5.827	694.
%RSD	.1243	.3507	.4692	.4051
#1	983.3	452900.	< .0000	170700.
#2	985.0	455100.	< .0000	171700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	477.9	440.7	11.16
Stddev	2.068	.2	.6	1.29
%RSD	.4236	.0427	.1461	11.59
#1	< .0000	478.0	441.1	12.07
#2	< .0000	477.8	440.2	10.24

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	385200.	849.8	444.8	502.0
Stddev	763.	4.8	1.2	3.1
%RSD	.1980	.5593	.2708	.6248
#1	384700.	846.5	444.0	499.8
#2	385800.	853.2	445.7	504.2

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	447.3	122700.	<.0000	<.0000
Stddev	2.4	172.	13.12	4.761
%RSD	.5340	.1404	408.7	4.769
#1	449.0	122600.	6.066	< .0000
#2	445.6	122800.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	447000.	456.8
Stddev	1.826	25.66	1508.	1.5
%RSD	51.00	1.009	.3372	.3244
#1	< .0000	< .0000	445900.	455.8
#2	< .0000	< .0000	448100.	457.8

Sample Name: ICSAB-1 Run Time: 03/03/03 11:59

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	75.97	883.8	3790.
Stddev	.1451	.09	4.8	9.
%RSD	.5878	.1198	.5384	.2393
#1	<.0000	75.91	880.5	3796.
#2	<.0000	76.04	887.2	3784.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	916.4	<.0000	<.0000	<.0000
Stddev	7.1	3.524	4.705	1.685
%RSD	.7800	168.1	1.830	15.73
#1	911.3	< .0000	< .0000	< .0000
#2	921.4	.3958	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.9051	6.654	231900.	20.49
Stddev	.8621	.672	35.	1.42
%RSD	95.24	10.10	.0149	6.932
#1	.2955	6.179	231900.	19.48
#2	1.515	7.129	231900.	21.49

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	426.1	454.6
Stddev	2.604	1.763	3.4	3.7
%RSD	5.048	9.476	.8033	.8095
#1	< .0000	< .0000	423.7	452.0
#2	< .0000	< .0000	428.5	457.2

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	449.4	36.37
Stddev	4142.	1.8	.74
%RSD	4.901	.3947	2.043
#1	< .000	448.1	35.85
#2	< .000	450.6	36.90

Method: SHER Sample Name: ICSAB-1 Operator:
Comment:
Run Time: 03/03/03 11:59 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	900.0	434300.	<.0000	135100.
Stddev	.7	841.	3.519	308.
%RSD	.0816	.1937	.2947	.2284
#1	899.5	433700.	< .0000	134900.
#2	900.6	434900.	< .0000	135300.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	472.3	439.0	19.02
Stddev	.8830	.3	1.1	1.86
%RSD	.2050	.0530	.2528	9.790
#1	<.0000	472.1	438.2	17.70
#2	<.0000	472.5	439.8	20.33

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	326800.	960.2	478.1	474.2
Stddev	1599.	.5	.1	7.5
%RSD	.4894	.0565	.0188	1.584
#1	325700.	959.8	478.2	468.9
#2	327900.	960.6	478.1	479.5

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	452.1	116700.	.6570	<.0000
Stddev	3.0	678.	6.811	2.487
%RSD	.6701	.5813	1037.	4.217
#1	450.0	116200.	5.473	< .0000
#2	454.3	117200.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	442000.	521.2
Stddev	.2096	27.84	268.	1.8
%RSD	8.709	.8300	.0607	.3458
#1	<.0000	< .0000	441800.	520.0
#2	<.0000	< .0000	442200.	522.5

Sample Name: ICSAB-1 Run Time: 03/03/03 11:59

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	674.1	881.9	2648.
Stddev	.3166	1.2	1.4	22.
%RSD	5.362	.1760	.1621	.8248
#1	<.0000	673.3	880.9	2663.
#2	<.0000	675.0	882.9	2632.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	961.0	<.0000	<.0000	21.91
Stddev	2.4	.1553	2.858	14.77
%RSD	.2445	14.88	1.112	67.40
#1	959.3	<.0000	< .0000	32.35
#2	962.6	<.0000	< .0000	11.47

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.829	13.51	941600.	<.0000
Stddev	.035	.47	8150.	1.988
%RSD	1.937	3.512	.8655	3.135
#1	1.804	13.84	947400.	< .0000
#2	1.854	13.17	935900.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	428.3	367.2
Stddev	1.648	1.257	1.4	9.1
%RSD	3.272	5.076	.3302	2.486
#1	< .0000	< .0000	429.3	360.7
#2	< .0000	< .0000	427.3	373.6

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	946.6	1.595
Stddev	2876.	1.2	.398
%RSD	13.89	.1287	24.97
#1	< .000	945.7	1.876
#2	< .000	947.5	1.313

Method: SHER Sample Name: CCV-1 Operator:
Comment:
Run Time: 03/03/03 12:05 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	493.3	1990.	1973.	4892.
Stddev	1.2	16.	5.	71.
%RSD	.2345	.7998	.2336	1.461
#1	492.5	1978.	1970.	4842.
#2	494.1	2001.	1976.	4943.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2172.	2033.	1996.	.6225
Stddev	1.	6.	5.	.4655
%RSD	.0333	.3096	.2447	74.78
#1	2172.	2029.	1992.	.9517
#2	2171.	2038.	1999.	.2933

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2019.	1963.	1941.	1974.
Stddev	1.	3.	4.	1.
%RSD	.0575	.1541	.2257	.0726
#1	2020.	1961.	1938.	1975.
#2	2019.	1965.	1944.	1973.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2037.	2001.	<.0000	<.0000
Stddev	11.	5.	1.093	2.145
%RSD	.5359	.2503	3.300	4.957
#1	2030.	1997.	< .0000	< .0000
#2	2045.	2004.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9769.	1966.	2023.	1963.
Stddev	8.	6.	3.	2.
%RSD	.0824	.3010	.1530	.0840
#1	9774.	1962.	2025.	1962.
#2	9763.	1970.	2021.	1964.

Sample Name: CCV-1 Run Time: 03/03/03 12:05

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2080.	2092.	2068.	549.8
Stddev	4.	1.	7.	22.0
%RSD	.2026	.0484	.3333	4.008
#1	2077.	2091.	2063.	534.2
#2	2083.	2093.	2073.	565.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1990.	2072.	2105.	5766.
Stddev	4.	2.	5.	3.
%RSD	.2243	.1023	.2562	.0576
#1	1986.	2070.	2101.	5768.
#2	1993.	2073.	2109.	5764.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1973.	2017.	9817.	<.0000
Stddev	6.	4.	673.	1.845
%RSD	.3286	.2063	6.852	2.383
#1	1968.	2014.	9341.	< .0000
#2	1977.	2020.	10290.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.4192	1946.	1981.	2022.
Stddev	.8291	5.	7.	19.
%RSD	197.8	.2733	.3405	.9279
#1	1.005	1943.	1977.	2009.
#2	< .0000	1950.	1986.	2035.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	643600.	2077.	<.0000
Stddev	7062.	3.	.9301
%RSD	1.097	.1358	21.11
#1	648600.	2075.	<.0000
#2	638600.	2079.	<.0000

Method: SHER Sample Name: CCB-1 Operator:
Comment:
Run Time: 03/03/03 12:09 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	109.9
Stddev	1.246	15.80	.5135	42.8
%RSD	203.5	74.31	46.37	38.96
#1	.2690	< .0000	<.0000	79.66
#2	< .0000	< .0000	<.0000	140.2

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0674	.2558
Stddev	.8746	.1846	.0092	.0515
%RSD	2.078	16.55	13.65	20.13
#1	<.0000	<.0000	.0609	.2194
#2	<.0000	<.0000	.0739	.2923

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1474	<.0000	3.321
Stddev	2.517	.0145	.2157	.361
%RSD	539.0	9.859	94.25	10.87
#1	1.313	.1372	<.0000	3.066
#2	< .0000	.1577	<.0000	3.576

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.719	.2003	1.486	<.0000
Stddev	1.308	.1023	3.447	1.587
%RSD	76.09	51.11	232.0	261.7
#1	.7944	.2726	3.924	.5156
#2	2.645	.1279	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.9669	26.11	<.0000	<.0000
Stddev	.6759	.59	2.717	.0114
%RSD	69.91	2.273	66.24	74.04
#1	.4889	26.52	< .0000	<.0000
#2	1.445	25.69	< .0000	<.0000

Sample Name: CCB-1 Run Time: 03/03/03 12:09

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	19.82	.1135	6.415
Stddev	3.353	.19	.1995	41.46
%RSD	173.1	.9784	175.7	646.4
#1	.4343	19.68	.2546	35.73
#2	< .0000	19.96	<.0000	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.5799	<.0000	<.0000	<.0000
Stddev	1.276	1.700	2.221	.0015
%RSD	220.0	88.39	60.32	.0184
#1	1.482	< .0000	< .0000	<.0000
#2	< .0000	< .0000	< .0000	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0554	<.0000	<.0000	2.159
Stddev	.3396	1.342	17.70	.923
%RSD	612.7	169.3	4.403	42.75
#1	<.0000	< .0000	< .0000	1.506
#2	.2955	.1562	< .0000	2.812

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	6.467
Stddev	.9457	2.306	1.645	3.950
%RSD	113.0	240.5	169.7	61.08
#1	<.0000	< .0000	< .0000	9.260
#2	<.0000	.6718	.1939	3.674

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	.1611	<.0000
Stddev	6060.	.0186	.0928
%RSD	128.6	11.52	4.155
#1	< .000	.1479	<.0000
#2	< .000	.1742	<.0000

Method: SHER Sample Name: PB Operator:
Comment:
Run Time: 03/03/03 12:15 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.630	4.296	.3126	34.90
%RSD	184.5	14.61	160.4	27.53
#1	< .0000	< .0000	.0261	< .0000
#2	.2690	< .0000	<.0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0213	<.0000
Stddev	.9243	.3707	.0437	.5688
%RSD	2.600	22.81	204.8	141.3
#1	<.0000	<.0000	<.0000	<.0000
#2	<.0000	<.0000	.0522	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	4.161	.1577	<.0000	.2567
Stddev	1.678	.0970	.1917	1.083
%RSD	40.32	61.48	565.3	422.0
#1	2.975	.2263	.1016	1.022
#2	5.347	.0892	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.5615	2.894	<.0000	.0910
Stddev	1.961	.171	3.447	1.887
%RSD	349.2	5.907	252.0	2073.
#1	1.948	3.015	1.070	< .0000
#2	< .0000	2.774	< .0000	1.425

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4.894	34.49	5.504	.0523
Stddev	.766	.79	3.104	.0305
%RSD	15.66	2.305	56.39	58.36
#1	4.352	33.93	3.309	.0307
#2	5.436	35.05	7.699	.0738

Sample Name: PB Run Time: 03/03/03 12:15

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	29.94	<.0000	40.31
Stddev	.7166	.23	.3795	24.62
%RSD	10.46	.7564	689.3	61.06
#1	<.0000	30.10	.2133	57.72
#2	<.0000	29.78	<.0000	22.91

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.3949	.5343	1.531	1.114
%RSD	22.94	18.98	72.54	23.10
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.4723	1671.	1.807
Stddev	.4179	.0003	121.	1.562
%RSD	282.9	.0693	7.245	86.43
#1	<.0000	.4721	1756.	2.912
#2	.1478	.4726	1585.	.7029

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1919	<.0000	8.009
Stddev	.2367	1.763	.8234	1.039
%RSD	10.88	918.8	18.47	12.97
#1	<.0000	1.439	<.0000	7.275
#2	<.0000	< .0000	<.0000	8.743

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	.4813	<.0000
Stddev	2020.	.0164	.4642
%RSD	19.37	3.416	50.46
#1	< .000	.4697	<.0000
#2	< .000	.4930	<.0000

Method: SHER Sample Name: LCS Operator:
Comment:
Run Time: 03/03/03 12:21 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	496.3	2027.	1974.	4808.
Stddev	.2	19.	10.	111.
%RSD	.0405	.9508	.5065	2.310
#1	496.4	2013.	1967.	4887.
#2	496.1	2040.	1981.	4730.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2165.	2037.	1997.	<.0000
Stddev	13.	2.	3.	.0518
%RSD	.5889	.1025	.1525	5.663
#1	2156.	2039.	1999.	<.0000
#2	2174.	2036.	1995.	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2014.	1961.	1942.	1992.
Stddev	3.	9.	9.	8.
%RSD	.1354	.4495	.4737	.3792
#1	2016.	1954.	1935.	1987.
#2	2012.	1967.	1948.	1997.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2044.	2003.	<.0000	<.0000
Stddev	6.	8.	10.26	1.158
%RSD	.3025	.4012	33.31	2.760
#1	2048.	1997.	< .0000	< .0000
#2	2040.	2009.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9803.	1975.	2050.	1962.
Stddev	38.	7.	.	6.
%RSD	.3885	.3678	.0208	.3282
#1	9777.	1970.	2050.	1958.
#2	9830.	1980.	2050.	1967.

Sample Name: LCS Run Time: 03/03/03 12:21

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2064.	2107.	2067.	512.2
Stddev	28.	3.	11.	28.5
%RSD	1.357	.1575	.5378	5.566
#1	2044.	2105.	2059.	492.1
#2	2084.	2109.	2074.	532.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1988.	2070.	2101.	5783.
Stddev	9.	12.	9.	30.
%RSD	.4373	.5991	.4051	.5167
#1	1982.	2061.	2095.	5804.
#2	1995.	2078.	2107.	5762.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1977.	2025.	10090.	<.0000
Stddev	11.	8.	604.	1.847
%RSD	.5780	.4130	5.985	2.290
#1	1969.	2019.	9659.	< .0000
#2	1985.	2031.	10510.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1942.	1986.	2001.
Stddev	.4738	7.	.	7.
%RSD	141.6	.3777	.0225	.3307
#1	<.0000	1937.	1987.	1996.
#2	.0004	1947.	1986.	2006.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	646500.	2081.	<.0000
Stddev	4449.	9.	.8371
%RSD	.6881	.4558	19.28
#1	643400.	2074.	<.0000
#2	649700.	2087.	<.0000

Method: SHER Sample Name: MEGUSH8611 Operator:
Comment:
Run Time: 03/03/03 12:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	986.1	<.0000	29100.
Stddev	.2882	6.8	2.820	227.
%RSD	5.511	.6904	6.344	.7813
#1	<.0000	990.9	< .0000	28940.
#2	<.0000	981.3	< .0000	29260.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	45.93	748.7	.7045	<.0000
Stddev	.08	5.2	.0806	.2586
%RSD	.1656	.6920	11.45	7.290
#1	45.88	745.1	.7615	<.0000
#2	45.98	752.4	.6474	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	129400.	<.0000	36.99	892.5
Stddev	573.	.0027	.30	6.8
%RSD	.4430	.0146	.8116	.7655
#1	129000.	<.0000	36.78	887.7
#2	129800.	<.0000	37.21	897.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	112.4	8798.	<.0000	<.0000
Stddev	1.6	49.	3.447	1.415
%RSD	1.457	.5534	16.15	15.77
#1	111.3	8763.	< .0000	< .0000
#2	113.6	8832.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7837.	<.0000	31190.	23810.
Stddev	42.	.4199	205.	118.
%RSD	.5355	.1669	.6559	.4975
#1	7807.	<.0000	31050.	23720.
#2	7867.	<.0000	31340.	23890.

Sample Name: MEGUSH8611 Run Time: 03/03/03 12:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	81270.	1550.	290.5
Stddev	2.969	189.	9.	41.5
%RSD	106.1	.2323	.5708	14.28
#1	< .0000	81140.	1544.	261.2
#2	< .0000	81400.	1557.	319.8

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	11.49	6.369	3259.
Stddev	.0200	.49	.230	14.
%RSD	1.691	4.229	3.611	.4299
#1	<.0000	11.15	6.207	3249.
#2	<.0000	11.84	6.532	3269.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4248	781.4	29440.	12.25
Stddev	.4441	8.2	69.	.71
%RSD	104.5	1.045	.2353	5.796
#1	.1108	775.6	29390.	12.75
#2	.7388	787.2	29490.	11.75

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	25.80	11.07	48.06
Stddev	1.658	.54	.82	1.85
%RSD	99.02	2.102	7.444	3.841
#1	< .0000	26.18	11.66	46.76
#2	< .0000	25.41	10.49	49.37

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	2953.	<.0000
Stddev	6667.	11.	.0930
%RSD	12.18	.3668	4.419
#1	< .000	2945.	<.0000
#2	< .000	2961.	<.0000

Method: SHER Sample Name: MEGUSH8611 1/10 Operator:
Comment:
Run Time: 03/03/03 12:30 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	87.62	<.0000	3527.
Stddev	.1922	18.35	1.452	105.
%RSD	9.432	20.94	52.08	2.969
#1	<.0000	74.64	< .0000	3453.
#2	<.0000	100.6	< .0000	3601.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	75.26	.0519	<.0000
Stddev	1.096	.25	.0684	1.862
%RSD	2.885	.3379	131.8	87.81
#1	< .0000	75.08	.1003	< .0000
#2	< .0000	75.44	.0035	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	13990.	<.0000	4.793	85.84
Stddev	9.	.0776	.066	3.63
%RSD	.0625	4.062	1.374	4.226
#1	13980.	<.0000	4.746	88.41
#2	13990.	<.0000	4.839	83.28

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	12.07	1042.	<.0000	<.0000
Stddev	.49	1.	1.093	3.217
%RSD	4.097	.0845	13.42	132.6
#1	12.42	1042.	< .0000	< .0000
#2	11.72	1043.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	509.4	<.0000	3475.	3258.
Stddev	2.7	.9268	16.	3.
%RSD	.5373	2.277	.4586	.1062
#1	511.3	<.0000	3487.	3256.
#2	507.5	<.0000	3464.	3261.

Sample Name: MEGUSH8611 1/10 Run Time: 03/03/03 12:30

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	11510.	177.2	25.66
Stddev	.0597	16.	.2	9.07
%RSD	.7765	.1416	.1052	35.35
#1	<.0000	11520.	177.4	32.07
#2	<.0000	11490.	177.1	19.24

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	319.2
Stddev	.4261	1.311	.5357	4.0
%RSD	344.5	63.61	11.77	1.245
#1	.1776	< .0000	<.0000	322.0
#2	<.0000	< .0000	<.0000	316.4

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	81.38	3792.	4.067
Stddev	.9143	.35	52.	2.769
%RSD	150.0	.4241	1.362	68.10
#1	.0369	81.63	3829.	2.109
#2	<.0000	81.14	3755.	6.025

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.315	1.555	1.016
Stddev	1.067	1.085	1.374	1.944
%RSD	60.64	25.15	88.39	191.2
#1	< .0000	3.547	2.527	< .0000
#2	< .0000	5.082	.5830	2.391

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	341.9	<.0000
Stddev	1414.	.7	.1862
%RSD	15.71	.2178	14.90
#1	< .000	341.4	<.0000
#2	< .000	342.4	<.0000

Method: SHER Sample Name: MEGUSH8611 DUP Operator:
Comment:
Run Time: 03/03/03 12:34 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	963.4	<.0000	28090.
Stddev	.2881	3.5	.9860	281.
%RSD	8.658	.3657	2.322	1.000
#1	<.0000	965.9	<.0000	27890.
#2	<.0000	960.9	<.0000	28290.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	39.12	730.4	.7023	<.0000
Stddev	2.07	1.2	.0032	1.242
%RSD	5.287	.1648	.4552	49.93
#1	37.65	729.6	.7001	< .0000
#2	40.58	731.3	.7046	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	125000.	<.0000	35.40	853.1
Stddev	2069.	.0995	.13	1.5
%RSD	1.655	.5649	.3558	.1701
#1	123500.	<.0000	35.31	854.1
#2	126400.	<.0000	35.49	852.1

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	108.8	8516.	<.0000	<.0000
Stddev	.8	64.	.7568	1.501
%RSD	.7487	.7470	4.016	15.00
#1	109.4	8471.	<.0000	< .0000
#2	108.3	8561.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7448.	<.0000	30040.	23240.
Stddev	87.	1.654	248.	203.
%RSD	1.165	.6360	.8272	.8751
#1	7387.	< .0000	29870.	23100.
#2	7510.	< .0000	30220.	23380.

Sample Name: MEGUSH8611 DUP Run Time: 03/03/03 12:34

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	78630.	1500.	227.3
Stddev	.2219	303.	11.	6.5
%RSD	3.760	.3856	.7147	2.851
#1	<.0000	78420.	1492.	231.8
#2	<.0000	78850.	1507.	222.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	11.12	5.666	3154.
Stddev	1.132	1.89	2.604	13.
%RSD	48.34	17.04	45.95	.4137
#1	< .0000	12.46	3.825	3145.
#2	< .0000	9.777	7.507	3163.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0369	754.4	28200.	10.14
Stddev	.7837	9.0	1069.	3.69
%RSD	2123.	1.192	3.792	36.41
#1	<.0000	748.1	28950.	7.531
#2	.5911	760.8	27440.	12.75

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	23.88	10.49	43.63
Stddev	.3553	2.17	.27	1.96
%RSD	28.30	9.088	2.615	4.493
#1	<.0000	22.35	10.68	45.01
#2	<.0000	25.41	10.30	42.24

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	2851.	<.0000
Stddev	2021.	18.	.6511
%RSD	3.664	.6236	123.8
#1	< .000	2839.	<.0000
#2	< .000	2864.	<.0000

Method: SHER Sample Name: MEGUSH8611 DUP 1/10 Operator:
Comment:
Run Time: 03/03/03 12:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	79.94	<.0000	3400.
Stddev	.2884	8.41	1.818	157.
%RSD	28.33	10.52	28.02	4.622
#1	<.0000	85.89	< .0000	3511.
#2	<.0000	74.00	< .0000	3289.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	73.02	.0786	<.0000
Stddev	.3958	.22	.0313	1.242
%RSD	.9308	.3008	39.86	80.85
#1	<.0000	73.18	.0564	< .0000
#2	<.0000	72.87	.1007	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	13440.	<.0000	4.585	83.06
Stddev	56.	.0679	.240	3.24
%RSD	.4147	3.474	5.229	3.902
#1	13470.	<.0000	4.755	85.35
#2	13400.	<.0000	4.416	80.77

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	11.55	1008.	<.0000	<.0000
Stddev	1.89	4.	1.682	.9436
%RSD	16.36	.3940	35.36	63.50
#1	10.21	1011.	< .0000	<.0000
#2	12.89	1005.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	487.0	<.0000	3363.	3161.
Stddev	1.8	2.901	28.	13.
%RSD	.3649	6.987	.8287	.4180
#1	488.2	< .0000	3383.	3170.
#2	485.7	< .0000	3343.	3152.

Sample Name: MEGUSH8611 DUP 1/10 Run Time: 03/03/03 12:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	11000.	171.0	32.07
Stddev	.1536	38.	.8	23.32
%RSD	1.938	.3461	.4619	72.72
#1	<.0000	11020.	171.5	15.58
#2	<.0000	10970.	170.4	48.57

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	313.3
Stddev	1.364	.6316	.3064	.1
%RSD	123.5	83.52	15.29	.0182
#1	< .0000	<.0000	<.0000	313.2
#2	< .0000	<.0000	<.0000	313.3

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.5726	78.86	3926.	5.874
Stddev	.3396	3.01	345.	1.349
%RSD	59.31	3.821	8.785	22.97
#1	.8127	80.99	4170.	6.828
#2	.3325	76.73	3682.	4.920

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3.835	<.0000	1.151
Stddev	1.422	.407	2.337	.573
%RSD	49.94	10.61	480.7	49.81
#1	< .0000	3.547	1.166	1.556
#2	< .0000	4.123	< .0000	.7455

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	330.4	<.0000
Stddev	2324.	1.2	.0933
%RSD	191.2	.3551	4.726
#1	< .000	331.2	<.0000
#2	427.5	329.6	<.0000

Method: SHER Sample Name: MEGUSH8611 SPK Operator:
Comment:
Run Time: 03/03/03 12:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	40.21	2910.	<.0000	30100.
Stddev	1.35	11.	2.557	473.
%RSD	3.351	.3773	11.27	1.571
#1	41.16	2902.	< .0000	29770.
#2	39.26	2918.	< .0000	30440.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	28.83	2687.	47.35	<.0000
Stddev	2.30	10.	.11	.1552
%RSD	7.973	.3774	.2225	4.376
#1	27.20	2694.	47.42	<.0000
#2	30.45	2680.	47.27	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	125400.	<.0000	474.2	1137.
Stddev	627.	.2716	5.3	5.
%RSD	.5000	.8396	1.113	.4661
#1	124900.	<.0000	470.5	1133.
#2	125800.	<.0000	477.9	1141.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	354.6	9683.	<.0000	<.0000
Stddev	2.2	92.	1.934	3.217
%RSD	.6304	.9455	7.992	24.78
#1	356.2	9618.	< .0000	< .0000
#2	353.0	9748.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7504.	<.0000	30280.	23590.
Stddev	29.	16.15	.	395.
%RSD	.3807	6.142	.0011	1.673
#1	7483.	< .0000	30280.	23310.
#2	7524.	< .0000	30280.	23870.

Sample Name: MEGUSH8611 SPK Run Time: 03/03/03 12:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	78620.	1951.	319.8
Stddev	.0853	24.	19.	13.0
%RSD	1.586	.0302	.9619	4.052
#1	<.0000	78600.	1937.	329.0
#2	<.0000	78630.	1964.	310.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	14.19	418.8	13.26	3252.
Stddev	.71	6.1	1.30	19.
%RSD	5.025	1.461	9.816	.5763
#1	13.69	414.5	12.34	3266.
#2	14.69	423.2	14.18	3239.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3509	762.0	34300.	<.0000
Stddev	.4441	4.0	1069.	.7811
%RSD	126.5	.5230	3.118	11.03
#1	.0369	759.2	33540.	<.0000
#2	.6650	764.8	35050.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.6704	54.86	452.6	989.9
Stddev	.2368	2.58	3.0	6.6
%RSD	35.32	4.698	.6615	.6647
#1	.5030	56.68	450.5	985.2
#2	.8378	53.04	454.7	994.5

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	107100.	3303.	<.0000
Stddev	2930.	30.	.1860
%RSD	2.736	.8956	13.47
#1	109200.	3282.	<.0000
#2	105000.	3324.	<.0000

Method: SHER Sample Name: MEGUSH8611 L Operator:
Comment:
Run Time: 03/03/03 12:57 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	190.1	<.0000	6380.
Stddev	1.920	2.8	.5200	68.
%RSD	117.8	1.453	6.761	1.069
#1	< .0000	188.1	<.0000	6332.
#2	< .0000	192.0	<.0000	6428.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	143.5	.0237	<.0000
Stddev	1.261	.6	.0008	1.449
%RSD	3.556	.3876	3.462	55.01
#1	< .0000	143.9	.0243	< .0000
#2	< .0000	143.1	.0231	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	25840.	<.0000	8.268	168.3
Stddev	28.	.0170	.042	1.9
%RSD	.1066	.4519	.5070	1.118
#1	25860.	<.0000	8.238	169.6
#2	25820.	<.0000	8.297	166.9

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	22.58	1926.	<.0000	<.0000
Stddev	.97	6.	.2522	.1716
%RSD	4.284	.3216	8.005	5.390
#1	21.90	1930.	<.0000	<.0000
#2	23.27	1922.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1074.	<.0000	6392.	5941.
Stddev	5.	9.579	2.	21.
%RSD	.4350	23.72	.0285	.3543
#1	1077.	< .0000	6394.	5956.
#2	1071.	< .0000	6391.	5926.

Sample Name: MEGUSH8611 L Run Time: 03/03/03 12:57

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	21640.	327.5	91.64
Stddev	.1963	37.	.9	3.89
%RSD	2.512	.1711	.2693	4.243
#1	<.0000	21620.	328.1	94.38
#2	<.0000	21670.	326.8	88.89

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.326	1.406	<.0000	625.7
Stddev	.724	.486	.9954	2.6
%RSD	54.62	34.54	48.29	.4088
#1	1.838	1.063	<.0000	627.5
#2	.8137	1.750	<.0000	623.8

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	155.9	7048.	3.615
Stddev	.1045	1.4	138.	.568
%RSD	731900.	.8866	1.957	15.71
#1	.0739	154.9	7146.	4.017
#2	<.0000	156.8	6951.	3.213

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	7.192	<.0000	3.331
Stddev	.7095	.542	.8241	2.090
%RSD	32.61	7.543	70.75	62.73
#1	<.0000	7.576	<.0000	1.853
#2	<.0000	6.808	<.0000	4.809

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	636.9	<.0000
Stddev	2930.	2.6	1.023
%RSD	16.74	.4066	129.6
#1	< .000	638.7	< .0000
#2	< .000	635.0	< .0000

Method: SHER Sample Name: MEGUSH8611 A Operator:
Comment:
Run Time: 03/03/03 13:06 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	82.60	4796.	8.989	31490.
Stddev	3.65	23.	1.181	22.
%RSD	4.420	.4882	13.14	.0714
#1	80.02	4779.	9.824	31470.
#2	85.18	4812.	8.154	31500.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	23.85	4606.	93.87	<.0000
Stddev	.59	31.	.60	1.345
%RSD	2.491	.6828	.6373	43.78
#1	23.43	4628.	94.29	< .0000
#2	24.27	4584.	93.44	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	127100.	<.0000	939.1	1273.
Stddev	1149.	.8952	7.7	2.
%RSD	.9042	1.857	.8189	.1377
#1	126300.	<.0000	933.7	1271.
#2	127900.	<.0000	944.6	1274.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	612.0	10200.	<.0000	<.0000
Stddev	1.8	96.	.8407	.4288
%RSD	.2948	.9455	3.950	2.880
#1	610.7	10130.	<.0000	<.0000
#2	613.3	10270.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7668.	<.0000	30630.	23960.
Stddev	42.	35.34	53.	170.
%RSD	.5493	15.34	.1741	.7077
#1	7639.	< .0000	30590.	23840.
#2	7698.	< .0000	30670.	24080.

Sample Name: MEGUSH8611 A Run Time: 03/03/03 13:06

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	78840.	2422.	384.9
Stddev	.2474	47.	20.	29.8
%RSD	3.844	.0598	.8435	7.745
#1	<.0000	78800.	2407.	363.8
#2	<.0000	78870.	2436.	405.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	34.08	815.5	22.75	3287.
Stddev	.99	4.8	1.15	30.
%RSD	2.912	.5845	5.048	.9056
#1	34.78	812.2	21.94	3308.
#2	33.38	818.9	23.56	3266.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.9051	769.4	36410.	<.0000
Stddev	.2351	.3	742.	1.704
%RSD	25.98	.0435	2.037	10.67
#1	.7388	769.6	36930.	< .0000
#2	1.071	769.1	35880.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	3.602	85.55	905.3	1919.
Stddev	.118	.14	2.9	25.
%RSD	3.289	.1578	.3184	1.324
#1	3.518	85.64	907.4	1901.
#2	3.685	85.45	903.3	1936.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	260000.	3769.	<.0000
Stddev	17880.	29.	.1860
%RSD	6.878	.7612	31.44
#1	272600.	3748.	<.0000
#2	247300.	3789.	<.0000

Method: SHER Sample Name: MEGUSH8611 A Operator:
Comment:
Run Time: 03/03/03 13:06 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	81.71	4850.	43.38	31940.
Stddev	1.06	16.	1.87	38.
%RSD	1.294	.3395	4.309	.1193
#1	80.97	4838.	44.71	31970.
#2	82.46	4862.	42.06	31910.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	25.14	4610.	94.22	<.0000
Stddev	.20	44.	.63	1.914
%RSD	.7864	.9646	.6720	127.7
#1	25.00	4579.	93.77	< .0000
#2	25.28	4642.	94.67	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	128100.	<.0000	949.1	1283.
Stddev	71.	.3395	.7	1.
%RSD	.0551	.6876	.0707	.1135
#1	128100.	<.0000	948.6	1282.
#2	128000.	<.0000	949.5	1284.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	612.8	10330.	<.0000	<.0000
Stddev	4.3	.	3.027	.3860
%RSD	.6962	.0018	14.38	2.375
#1	609.8	10330.	< .0000	<.0000
#2	615.8	10330.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7740.	<.0000	30870.	24120.
Stddev	12.	18.25	75.	22.
%RSD	.1555	8.362	.2425	.0894
#1	7749.	< .0000	30820.	24130.
#2	7732.	< .0000	30920.	24100.

Sample Name: MEGUSH8611 A Run Time: 03/03/03 13:06

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	79050.	2448.	391.3
Stddev	.2218	236.	1.	44.1
%RSD	3.482	.2983	.0530	11.26
#1	<.0000	79220.	2447.	360.1
#2	<.0000	78880.	2449.	422.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	34.17	820.3	25.78	3277.
Stddev	.46	.0	1.00	29.
%RSD	1.334	.0001	3.860	.8751
#1	33.84	820.3	25.08	3257.
#2	34.49	820.3	26.49	3297.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.013	775.7	36870.	<.0000
Stddev	.653	5.3	1190.	.0710
%RSD	32.44	.6794	3.228	.3874
#1	1.552	772.0	36030.	<.0000
#2	2.475	779.4	37710.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.345	89.96	913.9	1945.
Stddev	.474	.68	2.1	5.
%RSD	20.20	.7538	.2247	.2353
#1	2.680	89.48	915.3	1942.
#2	2.010	90.44	912.4	1948.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	235200.	3812.	<.0000
Stddev	1010.	1.	.1860
%RSD	.4296	.0222	284.3
#1	235900.	3811.	<.0000
#2	234500.	3812.	.0661

Method: SHER Sample Name: MEGDD0132 Operator:
Comment:
Run Time: 03/03/03 13:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	355.8	<.0000	3215.
Stddev	.9606	6.7	1.151	89.
%RSD	39.29	1.884	15.64	2.759
#1	<.0000	351.0	< .0000	3278.
#2	<.0000	360.5	< .0000	3152.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	293.5	939.2	.3603	<.0000
Stddev	3.0	3.8	.1147	1.707
%RSD	1.014	.4021	31.84	81.91
#1	291.4	941.8	.2792	< .0000
#2	295.6	936.5	.4414	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	180000.	<.0000	.0596	1.361
Stddev	624.	.0085	.2398	1.799
%RSD	.3469	.0319	402.5	132.2
#1	179600.	<.0000	<.0000	.0886
#2	180500.	<.0000	.2291	2.633

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	7.654	2419.	2.083	<.0000
Stddev	.983	15.	.925	2.660
%RSD	12.85	.6256	44.40	24.29
#1	6.959	2408.	2.736	< .0000
#2	8.349	2429.	1.429	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	33940.	663.6	11490.	27.37
Stddev	28.	33.1	1.	.06
%RSD	.0827	4.996	.0130	.2314
#1	33920.	640.2	11490.	27.32
#2	33960.	687.1	11490.	27.41

Sample Name: MEGDD0132 Run Time: 03/03/03 13:14

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	13.84	139300.	<.0000	122.8
Stddev	.35	1189.	.4330	48.0
%RSD	2.536	.8537	27.78	39.04
#1	13.59	140100.	<.0000	156.7
#2	14.09	138500.	<.0000	88.90

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2096.
Stddev	.4431	1.555	1.838	17.
%RSD	27.66	54.45	21.06	.8302
#1	<.0000	< .0000	< .0000	2084.
#2	<.0000	< .0000	< .0000	2109.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4433	4919.	4828.	5.624
Stddev	.3135	4.	1173.	1.704
%RSD	70.72	.0882	24.30	30.31
#1	.2216	4916.	5658.	6.829
#2	.6650	4922.	3999.	4.418

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	39.96
Stddev	.5922	.5422	1.511	.74
%RSD	12.41	112.6	1556.	1.856
#1	<.0000	<.0000	< .0000	40.48
#2	<.0000	<.0000	.9713	39.43

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	1110.	.0323	.0930
%RSD	6.142	.2270	3.074
#1	< .000	<.0000	<.0000
#2	< .000	<.0000	<.0000

Method: SHER Sample Name: CCV-2 Operator:
Comment:
Run Time: 03/03/03 13:24 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	497.6	2060.	1964.	4891.
Stddev	.6	2.	2.	194.
%RSD	.1162	.0968	.1238	3.958
#1	498.0	2059.	1963.	5028.
#2	497.2	2062.	1966.	4754.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2177.	2061.	2027.	<.0000
Stddev	.	8.	1.	1.086
%RSD	.0193	.4068	.0439	118.9
#1	2177.	2067.	2027.	< .0000
#2	2177.	2055.	2026.	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2004.	1962.	1941.	1998.
Stddev	14.	3.	7.	5.
%RSD	.7044	.1783	.3527	.2709
#1	1994.	1960.	1936.	1994.
#2	2014.	1965.	1946.	2002.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2055.	1997.	<.0000	<.0000
Stddev	.	8.	.9251	1.415
%RSD	.0076	.3999	2.998	3.348
#1	2055.	1991.	<.0000	< .0000
#2	2055.	2002.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9815.	1971.	2039.	1974.
Stddev	26.	7.	4.	.
%RSD	.2679	.3745	.2094	.0159
#1	9796.	1965.	2036.	1973.
#2	9833.	1976.	2042.	1974.

Sample Name: CCV-2 Run Time: 03/03/03 13:24

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2083.	2105.	2063.	537.0
Stddev	12.	12.	6.	11.7
%RSD	.5706	.5831	.3107	2.172
#1	2074.	2096.	2058.	545.2
#2	2091.	2114.	2068.	528.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2135.	2070.	2096.	5868.
Stddev	6.	7.	3.	16.
%RSD	.2818	.3524	.1319	.2684
#1	2131.	2065.	2094.	5879.
#2	2139.	2075.	2098.	5856.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1978.	2028.	11180.	<.0000
Stddev	8.	8.	569.	7.172
%RSD	.3967	.3973	5.090	8.589
#1	1972.	2023.	11590.	< .0000
#2	1983.	2034.	10780.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1948.	1981.	1868.
Stddev	.5922	5.	2.	47.
%RSD	236.1	.2371	.0766	2.534
#1	<.0000	1945.	1982.	1835.
#2	.1679	1951.	1980.	1902.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	729600.	2075.	<.0000
Stddev	24550.	7.	.0930
%RSD	3.365	.3484	1.912
#1	746900.	2070.	<.0000
#2	712200.	2080.	<.0000

Method: SHER Sample Name: CCB-2 Operator:
Comment:
Run Time: 03/03/03 13:28 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.726	2.620	1.661	103.1
%RSD	105.9	12.58	1579.	1150.
#1	< .0000	< .0000	1.069	63.96
#2	< .0000	< .0000	< .0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	<.0000	.1097
Stddev	.5037	.4263	.0309	1.086
%RSD	.9187	43.57	170.3	990.1
#1	<.0000	<.0000	.0037	< .0000
#2	<.0000	<.0000	<.0000	.8776

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0720	<.0000	.7688
Stddev	.3353	.2085	.2457	.3609
%RSD	31.65	289.6	101.7	46.94
#1	<.0000	.2195	<.0000	.5136
#2	<.0000	<.0000	<.0000	1.024

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.429	.1794	.6539	1.152
Stddev	.899	.1122	.9252	2.702
%RSD	62.94	62.54	141.5	234.5
#1	2.065	.2588	1.308	< .0000
#2	.7929	.1001	< .0000	3.063

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	22.08	2.760	<.0000
Stddev	.6463	1.93	10.09	.0078
%RSD	126.8	8.743	365.6	16.19
#1	<.0000	20.71	9.894	<.0000
#2	<.0000	23.44	< .0000	<.0000

Sample Name: CCB-2 Run Time: 03/03/03 13:28

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.140	33.69	.0000	<.0000
Stddev	4.701	.08	.4281	16.84
%RSD	412.3	.2287	.0000	131.3
#1	4.465	33.74	.3027	< .0000
#2	< .0000	33.63	<.0000	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.6228	<.0000	.7042	<.0000
Stddev	.9115	.7772	2.450	5.605
%RSD	146.4	35.93	347.9	173.0
#1	<.0000	<.0000	< .0000	.7238
#2	1.267	<.0000	2.437	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2217	<.0000	317.2	.0000
Stddev	.4179	1.006	1414.	.4262
%RSD	188.5	84.71	445.8	2197000.
#1	.5172	< .0000	1317.	<.0000
#2	<.0000	< .0000	< .000	.3014

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.3545	.2717	.5484	4.069
%RSD	15.70	25.76	47.14	160.9
#1	<.0000	<.0000	<.0000	< .0000
#2	<.0000	<.0000	<.0000	.3485

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	2929.	.1027	<.0000
Stddev	1920.	.0652	.6498
%RSD	65.54	63.54	32.99
#1	1571.	.0565	<.0000
#2	4286.	.1488	<.0000

Method: SHER Sample Name: MEGCD0131 Operator:
Comment:
Run Time: 03/03/03 13:32 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	557.5	<.0000	4735.
Stddev	.1921	6.8	.0980	75.
%RSD	28.31	1.220	.6690	1.574
#1	<.0000	552.7	<.0000	4682.
#2	<.0000	562.3	<.0000	4788.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	505.1	1479.	1.448	<.0000
Stddev	5.1	2.	.028	.8277
%RSD	1.006	.1236	1.924	51.45
#1	501.6	1477.	1.467	<.0000
#2	508.7	1480.	1.428	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	42170.	<.0000	1.911	2.541
Stddev	279.	.0919	.150	2.911
%RSD	.6625	.2029	7.840	114.6
#1	41980.	<.0000	2.017	4.600
#2	42370.	<.0000	1.805	.4822

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.857	3435.	<.0000	<.0000
Stddev	.573	31.	1.934	.0429
%RSD	9.791	.8951	130.2	.4447
#1	6.262	3413.	< .0000	<.0000
#2	5.451	3457.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10820.	592.3	11120.	177.8
Stddev	63.	5.7	41.	1.6
%RSD	.5805	.9650	.3721	.8914
#1	10780.	588.3	11090.	176.7
#2	10870.	596.4	11150.	178.9

Sample Name: MEGCD0131 Run Time: 03/03/03 13:32

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	93200.	<.0000	145.7
Stddev	.7168	232.	.3795	20.7
%RSD	21.53	.2489	63.40	14.23
#1	<.0000	93040.	<.0000	160.4
#2	<.0000	93360.	<.0000	131.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	7.664	<.0000	<.0000	3711.
Stddev	.521	1.117	.1533	28.
%RSD	6.799	28.99	2.640	.7434
#1	7.296	< .0000	<.0000	3691.
#2	8.033	< .0000	<.0000	3730.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units.	ppb	ppb	ppb	ppm
Avg	.8497	3655.	5914.	6.477
Stddev	.3657	16.	397.	1.065
%RSD	43.04	.4490	6.707	16.45
#1	1.108	3643.	6195.	7.230
#2	.5911	3666.	5634.	5.724

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1.173	.7662	<.0000	47.88
Stddev	.947	.1357	.8242	.12
%RSD	80.79	17.71	35.36	.2477
#1	1.843	.6702	<.0000	47.96
#2	.5028	.8621	<.0000	47.79

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	59.02	<.0000
Stddev	4344.	.76	.6510
%RSD	26.10	1.283	27.50
#1	< .000	58.49	<.0000
#2	< .000	59.56	<.0000

Method: SHER Sample Name: DUP 2/20/03 Operator:
Comment:
Run Time: 03/03/03 13:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1162.	<.0000	36120.
Stddev	.9605	1.	1.288	382.
%RSD	19.11	.0467	3.140	1.058
#1	<.0000	1161.	< .0000	35850.
#2	<.0000	1162.	< .0000	36390.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	44.08	1025.	.7307	<.0000
Stddev	.39	4.	.0496	.4656
%RSD	.8772	.3802	6.781	20.21
#1	43.81	1028.	.7658	<.0000
#2	44.35	1023.	.6957	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	135600.	<.0000	54.13	873.2
Stddev	1026.	.0971	.09	3.2
%RSD	.7568	.4141	.1665	.3722
#1	134900.	<.0000	54.19	875.5
#2	136300.	<.0000	54.06	870.9

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	173.2	7764.	<.0000	<.0000
Stddev	1.0	24.	3.448	.8578
%RSD	.5703	.3053	10.92	7.583
#1	172.5	7748.	< .0000	<.0000
#2	173.9	7781.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7481.	<.0000	32020.	33140.
Stddev	21.	3.935	30.	130.
%RSD	.2840	1.361	.0945	.3930
#1	7466.	< .0000	31990.	33040.
#2	7496.	< .0000	32040.	33230.

Sample Name: DUP 2/20/03 Run Time: 03/03/03 13:35

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	80250.	2546.	141.1
Stddev	.0597	208.	10.	19.4
%RSD	.8769	.2593	.3779	13.77
#1	<.0000	80400.	2539.	127.4
#2	<.0000	80100.	2553.	154.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	3.061	10.53	18.55	3362.
Stddev	3.210	2.82	1.69	7.
%RSD	104.9	26.76	9.083	.2194
#1	5.331	8.537	19.74	3357.
#2	.7905	12.52	17.36	3367.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3879	842.8	37420.	14.16
Stddev	1.176	2.0	1759.	.85
%RSD	303.1	.2371	4.702	6.018
#1	1.219	844.2	38660.	13.56
#2	< .0000	841.4	36170.	14.76

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	38.46	18.84	34.11
Stddev	.7106	.54	1.37	.62
%RSD	53.05	1.410	7.292	1.827
#1	<.0000	38.07	17.87	33.67
#2	<.0000	38.84	19.81	34.55

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	4301.	.3291
Stddev	2728.	13.	.3720
%RSD	4.067	.2968	113.0
#1	< .000	4292.	.5922
#2	< .000	4310.	.0661

Method: SHER Sample Name: DUP 2/20/03 1/10 Operator:
Comment:
Run Time: 03/03/03 13:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	106.0	<.0000	4697.
Stddev	2.691	2.2	1.500	43.
%RSD	165.1	2.110	49.21	.9127
#1	< .0000	104.4	< .0000	4667.
#2	.2724	107.6	< .0000	4727.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	115.5	.0868	<.0000
Stddev	.8649	.8	.1048	.4139
%RSD	1.919	.6705	120.8	113.4
#1	<.0000	116.0	.0126	<.0000
#2	<.0000	114.9	.1609	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	16260.	<.0000	7.174	99.40
Stddev	25.	.1212	.030	.33
%RSD	.1542	4.259	.4182	.3330
#1	16280.	<.0000	7.153	99.17
#2	16240.	<.0000	7.196	99.64

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	18.91	1020.	<.0000	<.0000
Stddev	.97	5.	.7567	.3860
%RSD	5.151	.4580	13.69	15.91
#1	18.22	1023.	<.0000	<.0000
#2	19.59	1016.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	555.2	<.0000	3973.	5358.
Stddev	.7	5.031	31.	22.
%RSD	.1301	11.10	.7880	.4194
#1	555.7	< .0000	3995.	5374.
#2	554.7	< .0000	3951.	5342.

Sample Name: DUP 2/20/03 1/10 Run Time: 03/03/03 13:41

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	12770.	320.8	40.32
Stddev	.1877	28.	1.2	3.89
%RSD	2.397	.2188	.3833	9.641
#1	<.0000	12750.	321.6	43.07
#2	<.0000	12790.	319.9	37.57

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.1533	<.0000	<.0000	376.0
Stddev	1.098	1.554	.4594	3.5
%RSD	716.1	900.7	65.11	.9349
#1	< .0000	.9266	<.0000	378.4
#2	.9296	< .0000	<.0000	373.5

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	97.30	4926.	3.665
Stddev	.9665	.93	207.	3.479
%RSD	1046.	.9560	4.201	94.94
#1	<.0000	97.96	4780.	1.205
#2	.5911	96.64	5073.	6.125

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.698	2.137	<.0000
Stddev	.0001	.814	.001	2.622
%RSD	.0098	17.32	.0341	70.33
#1	<.0000	5.274	2.138	< .0000
#2	<.0000	4.123	2.137	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	565.3	<.0000
Stddev	5051.	1.9	.0938
%RSD	135.9	.3352	3.241
#1	< .000	566.6	<.0000
#2	< .000	563.9	<.0000

Method: SHER Sample Name: MEGUSH8616 Operator:
Comment:
Run Time: 03/03/03 13:47 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	26.06	.8834	2938.
Stddev	.4803	7.99	1.196	21.
%RSD	16.45	30.68	135.4	.7040
#1	<.0000	20.40	.0378	2952.
#2	<.0000	31.71	1.729	2923.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	137.8	441.0	.2900	<.0000
Stddev	2.5	4.4	.0403	.0001
%RSD	1.839	.9999	13.89	.0026
#1	136.0	437.9	.2615	<.0000
#2	139.6	444.1	.3185	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	108200.	<.0000	<.0000	1.869
Stddev	933.	.2059	.0540	3.258
%RSD	.8622	1.531	256.2	174.3
#1	107500.	<.0000	.0171	4.173
#2	108800.	<.0000	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2.670	719.1	<.0000	<.0000
Stddev	2.131	5.5	2.775	.0859
%RSD	79.82	.7591	667.9	1.382
#1	4.176	715.2	1.547	<.0000
#2	1.163	723.0	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4537.	<.0000	28140.	909.1
Stddev	24.	2.526	174.	9.8
%RSD	.5384	1.552	.6202	1.081
#1	4520.	< .0000	28020.	902.2
#2	4554.	< .0000	28260.	916.1

Sample Name: MEGUSH8616 Run Time: 03/03/03 13:47

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	56190.	.2271	98.05
Stddev	.1024	83.	.0486	25.92
%RSD	1.341	.1484	21.42	26.43
#1	<.0000	56250.	.1927	116.4
#2	<.0000	56130.	.2615	79.72

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	3294.
Stddev	.2689	.8260	1.761	46.
%RSD	5.439	17.95	45.18	1.398
#1	<.0000	<.0000	< .0000	3261.
#2	<.0000	<.0000	< .0000	3327.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	2638.	<.0000	3.816
Stddev	.2612	23.	17.38	.852
%RSD	64.27	.8661	20.09	22.33
#1	<.0000	2621.	< .0000	3.213
#2	<.0000	2654.	< .0000	4.418

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	30.44
Stddev	.3553	.1358	2.610	3.08
%RSD	9.867	13700.	62.49	10.13
#1	<.0000	<.0000	< .0000	32.62
#2	<.0000	.0950	< .0000	28.26

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	2930.	.0574	1.860
%RSD	23.17	.3143	113.2
#1	< .000	<.0000	< .0000
#2	< .000	<.0000	< .0000

Method: SHER Sample Name: MEGUSH8611 F Operator:
Comment:
Run Time: 03/03/03 13:51 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.438	5089.
Stddev	.2882	9.855	1.488	48.
%RSD	9.028	58.91	61.04	.9401
#1	<.0000	< .0000	1.386	5055.
#2	<.0000	< .0000	3.491	5123.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	134.0	779.2	.3208	<.0000
Stddev	1.8	1.4	.0031	.0519
%RSD	1.317	.1816	.9753	2.182
#1	132.8	778.2	.3230	<.0000
#2	135.3	780.2	.3186	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	120000.	<.0000	13.87	.9762
Stddev	990.	.0786	.34	5.786
%RSD	.8251	.3446	2.468	592.7
#1	119300.	<.0000	13.63	< .0000
#2	120700.	<.0000	14.11	5.067

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.6419	76.20	<.0000	.9405
Stddev	2.541	.88	2.859	4.032
%RSD	395.8	1.148	68.71	428.7
#1	< .0000	75.58	< .0000	< .0000
#2	2.438	76.82	< .0000	3.791

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	6771.	<.0000	29360.	5901.
Stddev	64.	9.443	148.	36.
%RSD	.9428	4.999	.5059	.6042
#1	6725.	< .0000	29250.	5876.
#2	6816.	< .0000	29460.	5926.

Sample Name: MEGUSH8611 F Run Time: 03/03/03 13:51

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	80120.	126.6	26.58
Stddev	.0253	91.	1.1	12.96
%RSD	1.038	.1135	.8657	48.77
#1	<.0000	80060.	125.8	17.41
#2	<.0000	80190.	127.4	35.74

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.7569	.8135	2682.
Stddev	.0007	.7283	4.442	.
%RSD	.8586	96.22	546.1	.0014
#1	<.0000	1.272	< .0000	2682.
#2	<.0000	.2419	3.955	2682.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.1293	749.3	3487.	2.962
Stddev	.7054	6.9	173.	1.349
%RSD	545.6	.9254	4.955	45.56
#1	<.0000	744.4	3609.	3.916
#2	.6281	754.2	3364.	2.008

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3.451	<.0000	42.92
Stddev	.7107	.136	1.099	.25
%RSD	14.63	3.937	56.57	.5849
#1	<.0000	3.547	< .0000	43.10
#2	<.0000	3.355	< .0000	42.75

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	233.8	<.0000
Stddev	504.0	1.8	.1860
%RSD	2.856	.7849	7.252
#1	< .0000	232.5	<.0000
#2	< .0000	235.1	<.0000

Method: SHER Sample Name: MEGUSH8611 F DUP Operator:
Comment:
Run Time: 03/03/03 13:55 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.099	.9065	5326.
Stddev	.9606	5.941	.4875	49.
%RSD	47.16	145.0	53.78	.9149
#1	<.0000	8.300	1.251	5291.
#2	<.0000	< .0000	.5618	5360.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	144.6	802.9	.3910	<.0000
Stddev	.1	3.1	.0527	.2583
%RSD	.0590	.3891	13.49	15.70
#1	144.7	805.1	.4283	<.0000
#2	144.6	800.7	.3537	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	123000.	<.0000	14.17	.9735
Stddev	261.	.0845	.16	2.893
%RSD	.2119	.3574	1.109	297.2
#1	122800.	<.0000	14.28	3.019
#2	123200.	<.0000	14.06	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.220	80.92	<.0000	.7585
Stddev	.820	.25	6.644	2.145
%RSD	15.71	.3072	177.4	282.8
#1	5.800	80.75	.9532	2.275
#2	4.640	81.10	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7062.	<.0000	30170.	6071.
Stddev	20.	.1751	38.	13.
%RSD	.2788	.0862	.1257	.2121
#1	7076.	<.0000	30200.	6062.
#2	7048.	<.0000	30140.	6080.

Sample Name: MEGUSH8611 F DUP Run Time: 03/03/03 13:55

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	81650.	130.5	59.57
Stddev	.6309	23.	.1	15.55
%RSD	30.60	.0284	.1107	26.10
#1	<.0000	81670.	130.4	48.58
#2	<.0000	81630.	130.6	70.56

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2746.
Stddev	1.003	1.263	.6127	23.
%RSD	84.60	126.9	32.34	.8204
#1	< .0000	< .0000	<.0000	2762.
#2	< .0000	< .0000	<.0000	2730.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4618	766.6	3974.	4.720
Stddev	.1306	2.3	622.	.142
%RSD	28.28	.2942	15.64	3.011
#1	.3694	768.2	3535.	4.820
#2	.5541	765.0	4414.	4.619

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4.410	<.0000	42.92
Stddev	1.066	1.763	.4120	3.46
%RSD	20.20	39.97	18.44	8.057
#1	< .0000	5.657	<.0000	45.37
#2	< .0000	3.164	<.0000	40.48

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	245.5	<.0000
Stddev	2124.	1.2	.2791
%RSD	24.16	.4804	11.17
#1	< .000	244.7	<.0000
#2	< .000	246.4	<.0000

Method: SHER Sample Name: MEGUSH8611 F SPK Operator:
Comment:
Run Time: 03/03/03 14:00 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	44.90	2052.	30.42	7500.
Stddev	.87	2.	1.69	65.
%RSD	1.928	.0856	5.558	.8689
#1	45.51	2050.	29.22	7454.
#2	44.29	2053.	31.61	7546.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	158.7	2874.	50.29	<.0000
Stddev	1.4	13.	.03	.8795
%RSD	.9108	.4480	.0649	31.23
#1	157.7	2865.	50.26	<.0000
#2	159.7	2883.	50.31	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	124100.	<.0000	494.8	213.9
Stddev	1441.	.0503	3.5	1.1
%RSD	1.161	.1239	.7149	.5120
#1	123100.	<.0000	492.3	214.7
#2	125200.	<.0000	497.3	213.1

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	264.9	1070.	3.271	<.0000
Stddev	1.2	7.	5.802	.5576
%RSD	.4670	.6489	177.4	9.993
#1	265.8	1065.	< .0000	<.0000
#2	264.0	1075.	7.374	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	7035.	<.0000	30330.	6769.
Stddev	46.	14.22	103.	28.
%RSD	.6484	8.344	.3408	.4188
#1	7003.	< .0000	30250.	6749.
#2	7067.	< .0000	30400.	6789.

Sample Name: MEGUSH8611 F SPK Run Time: 03/03/03 14:00

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	81920.	627.6	87.05
Stddev	.4097	205.	4.6	12.96
%RSD	41.95	.2508	.7272	14.89
#1	<.0000	81780.	624.4	77.89
#2	<.0000	82070.	630.8	96.22

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	19.58	440.5	11.98	2841.
Stddev	1.09	.4	1.61	26.
%RSD	5.559	.1007	13.43	.9067
#1	18.81	440.2	10.84	2823.
#2	20.35	440.8	13.12	2859.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2955	770.3	6158.	<.0000
Stddev	.4702	3.5	121.	1.207
%RSD	159.1	.4479	1.960	11.62
#1	.6280	767.9	6073.	< .0000
#2	<.0000	772.7	6243.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	40.66	479.9	1086.
Stddev	.5923	.68	3.7	9.
%RSD	16.45	1.669	.7700	.8256
#1	<.0000	40.18	477.3	1079.
#2	<.0000	41.14	482.5	1092.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	144400.	786.9	<.0000
Stddev	2124.	4.7	.0930
%RSD	1.471	.6030	4.418
#1	142900.	783.6	<.0000
#2	145900.	790.3	<.0000

Method: SHER Sample Name: MEGUSH8611 F L Operator:
Comment:
Run Time: 03/03/03 14:04 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.7978	1326.
Stddev	1.056	.0193	1.172	30.
%RSD	141.4	.0619	146.9	2.267
#1	< .0000	<.0000	< .0000	1305.
#2	< .0000	<.0000	1.627	1348.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	144.9	.0567	<.0000
Stddev	.7122	1.5	.0652	.1554
%RSD	3.624	1.023	115.1	8.677
#1	<.0000	146.0	.0106	<.0000
#2	<.0000	143.9	.1028	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	24170.	<.0000	2.751	1.781
Stddev	54.	.0076	.066	1.807
%RSD	.2227	.1606	2.388	101.5
#1	24210.	<.0000	2.704	3.058
#2	24140.	<.0000	2.797	.5028

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.446	14.56	<.0000	<.0000
Stddev	1.557	.20	.8413	1.587
%RSD	107.7	1.358	50.57	290.8
#1	.3450	14.70	<.0000	.5765
#2	2.547	14.42	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	939.5	<.0000	6008.	1284.
Stddev	4.6	.6693	37.	6.
%RSD	.4928	7.505	.6201	.4525
#1	942.8	<.0000	6034.	1289.
#2	936.2	<.0000	5981.	1280.

Sample Name: MEGUSH8611 F L Run Time: 03/03/03 14:04

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	21880.	26.99	41.24
Stddev	.0001	69.	.34	46.65
%RSD	.0010	.3150	1.268	113.1
#1	<.0000	21830.	27.23	8.252
#2	<.0000	21930.	26.75	74.23

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	500.6
Stddev	.0909	.4861	2.144	9.5
%RSD	10.43	56.70	59.13	1.899
#1	<.0000	<.0000	< .0000	507.4
#2	<.0000	<.0000	< .0000	493.9

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.7758	147.8	717.6	.8530
Stddev	.4702	3.0	52.3	1.633
%RSD	60.61	2.038	7.289	191.5
#1	.4433	149.9	680.6	2.008
#2	1.108	145.7	754.6	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.588	<.0000	2.915
Stddev	.0002	.814	1.098	.883
%RSD	.0055	31.43	35.36	30.28
#1	<.0000	3.163	< .0000	2.291
#2	<.0000	2.013	< .0000	3.539

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	50.63	<.0000
Stddev	3131.	.05	.3719
%RSD	485.6	.0921	26.94
#1	1569.	50.60	<.0000
#2	< .000	50.66	<.0000

Method: SHER Sample Name: MEGUSH8611 F A Operator:
Comment:
Run Time: 03/03/03 14:08 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	87.01	3952.	55.84	8977.
Stddev	2.21	6.	1.33	103.
%RSD	2.535	.1432	2.384	1.149
#1	85.45	3948.	54.90	8904.
#2	88.57	3956.	56.79	9050.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	133.2	4716.	97.54	<.0000
Stddev	1.8	13.	.12	1.500
%RSD	1.354	.2832	.1259	42.29
#1	131.9	4706.	97.45	< .0000
#2	134.5	4725.	97.63	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	118800.	<.0000	976.6	417.7
Stddev	686.	.2182	9.4	4.4
%RSD	.5770	.3851	.9647	1.046
#1	118300.	<.0000	970.0	420.8
#2	119300.	<.0000	983.3	414.6

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	516.6	2014.	<.0000	<.0000
Stddev	1.2	16.	1.261	1.801
%RSD	.2336	.8052	193.1	18.28
#1	515.7	2003.	< .0000	< .0000
#2	517.4	2026.	.2387	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	6605.	<.0000	28810.	6885.
Stddev	14.	7.558	90.	50.
%RSD	.2147	6.176	.3115	.7304
#1	6615.	< .0000	28750.	6850.
#2	6595.	< .0000	28870.	6921.

Sample Name: MEGUSH8611 F A Run Time: 03/03/03 14:08

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	78870.	1110.	182.4
Stddev	.1280	373.	11.	46.6
%RSD	9.693	.4734	.9818	25.58
#1	<.0000	79130.	1102.	215.3
#2	<.0000	78610.	1118.	149.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	35.74	846.4	18.11	2637.
Stddev	1.54	7.3	1.46	10.
%RSD	4.298	.8667	8.033	.3666
#1	34.65	841.2	17.08	2644.
#2	36.82	851.5	19.14	2630.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0369	729.1	10090.	<.0000
Stddev	.6270	4.4	224.	2.627
%RSD	1698.	.6103	2.223	10.32
#1	.4803	725.9	9927.	< .0000
#2	<.0000	732.2	10240.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	70.78	947.9	2047.
Stddev	.1183	2.85	7.8	10.
%RSD	2.394	4.024	.8217	.5010
#1	<.0000	68.76	942.4	2040.
#2	<.0000	72.79	953.4	2054.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	265100.	1260.	<.0000
Stddev	8588.	9.	.5581
%RSD	3.239	.7351	36.90
#1	271200.	1254.	<.0000
#2	259000.	1267.	<.0000

Method: SHER Sample Name: MEGUSH8611 F A Operator:
Comment:
Run Time: 03/03/03 14:08 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	88.30	3960.	70.83	9144.
Stddev	1.15	17.	1.88	70.
%RSD	1.305	.4293	2.653	.7642
#1	87.49	3948.	72.15	9094.
#2	89.12	3972.	69.50	9193.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	136.0	4724.	98.21	<.0000
Stddev	1.2	4.	.10	.8277
%RSD	.8612	.0913	.1011	18.25
#1	135.2	4721.	98.14	<.0000
#2	136.8	4727.	98.28	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	120000.	<.0000	991.4	421.0
Stddev	104.	.1119	1.7	1.1
%RSD	.0868	.1922	.1713	.2575
#1	120100.	<.0000	990.2	420.2
#2	119900.	<.0000	992.6	421.7

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	518.1	2042.	2.855	<.0000
Stddev	1.6	2.	4.204	1.673
%RSD	.3163	.0830	147.3	16.51
#1	519.3	2040.	5.828	< .0000
#2	517.0	2043.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	6689.	<.0000	29040.	6967.
Stddev	38.	2.858	7.	15.
%RSD	.5659	2.194	.0241	.2174
#1	6715.	< .0000	29030.	6956.
#2	6662.	< .0000	29040.	6978.

Sample Name: MEGUSH8611 F A Run Time: 03/03/03 14:08

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	79190.	1126.	169.5
Stddev	.2134	124.	1.	36.3
%RSD	14.68	.1559	.0637	21.40
#1	<.0000	79280.	1126.	143.9
#2	<.0000	79110.	1127.	195.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	36.42	855.7	17.14	2676.
Stddev	3.10	.7	2.22	6.
%RSD	8.506	.0846	12.96	.2100
#1	34.23	856.2	18.71	2672.
#2	38.61	855.2	15.57	2680.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0739	746.6	9500.	<.0000
Stddev	.4180	.9	845.	2.059
%RSD	565.8	.1201	8.897	9.094
#1	<.0000	746.0	8902.	< .0000
#2	.3694	747.3	10100.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	70.20	951.1	2057.
Stddev	.3553	2.31	4.1	1.
%RSD	9.028	3.284	.4333	.0359
#1	<.0000	71.83	948.2	2058.
#2	<.0000	68.57	954.0	2057.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	264500.	1278.	<.0000
Stddev	6568.	1.	.1860
%RSD	2.483	.0773	9.125
#1	259900.	1277.	<.0000
#2	269200.	1278.	<.0000

Method: SHER Sample Name: MEGCD0131 F Operator:
Comment:
Run Time: 03/03/03 14:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	151.4	.4593	698.0
Stddev	.1921	.5	.9197	30.1
%RSD	6.736	.3527	200.2	4.314
#1	<.0000	151.0	<.0000	719.3
#2	<.0000	151.8	1.110	676.7

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	590.2	1613.	.4808	<.0000
Stddev	2.7	4.	.0062	.6724
%RSD	.4653	.2228	1.286	28.29
#1	588.2	1611.	.4765	<.0000
#2	592.1	1616.	.4852	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	42730.	<.0000	.4622	3.227
Stddev	260.	.1529	.1619	.361
%RSD	.6075	.3133	35.03	11.19
#1	42550.	<.0000	.3477	2.972
#2	42920.	<.0000	.5767	3.482

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.917	160.6	1.191	<.0000
Stddev	.082	1.0	.841	.3857
%RSD	4.282	.6159	70.66	5.530
#1	1.975	159.9	.5958	<.0000
#2	1.859	161.3	1.786	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	11100.	580.6	10920.	85.56
Stddev	22.	1.0	78.	.53
%RSD	.1950	.1641	.7184	.6137
#1	11080.	579.9	10870.	85.19
#2	11110.	581.3	10980.	85.93

Sample Name: MEGCD0131 F Run Time: 03/03/03 14:19

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	91290.	1.225	92.56
Stddev	.2900	588.	.526	18.14
%RSD	6.325	.6437	42.91	19.60
#1	<.0000	90880.	.8533	105.4
#2	<.0000	91710.	1.597	79.74

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	3174.
Stddev	1.184	1.943	2.451	24.
%RSD	105.4	58.30	69.58	.7426
#1	< .0000	< .0000	< .0000	3157.
#2	< .0000	< .0000	< .0000	3191.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	12.17	3635.	1120.	3.264
Stddev	.60	18.	793.	5.894
%RSD	4.941	.4984	70.80	180.6
#1	11.75	3623.	559.4	< .0000
#2	12.60	3648.	1681.	7.431

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.245	<.0000	55.47
Stddev	.0000	1.627	1.786	.25
%RSD	.0007	130.7	49.69	.4494
#1	<.0000	.0944	< .0000	55.65
#2	<.0000	2.396	< .0000	55.30

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	63.74	<.0000
Stddev	7074.	.39	.2790
%RSD	55.00	.6118	9.643
#1	< .000	63.46	<.0000
#2	< .000	64.01	<.0000

Method: SHER Sample Name: CCV-3 Operator:
Comment:
Run Time: 03/03/03 14:24 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	502.4	2015.	2008.	5099.
Stddev	1.7	41.	4.	8.
%RSD	.3388	2.050	.2071	.1547
#1	503.6	2045.	2005.	5093.
#2	501.2	1986.	2011.	5104.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2171.	2037.	2017.	<.0000
Stddev	13.	26.	22.	1.293
%RSD	.6050	1.277	1.097	86.28
#1	2181.	2056.	2032.	< .0000
#2	2162.	2019.	2001.	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2078.	1997.	1987.	2004.
Stddev	7.	5.	1.	10.
%RSD	.3208	.2401	.0308	.4819
#1	2074.	2000.	1987.	2011.
#2	2083.	1993.	1988.	1998.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2049.	2042.	<.0000	<.0000
Stddev	20.	1.	.4206	.3006
%RSD	.9949	.0632	1.429	.7278
#1	2063.	2041.	<.0000	<.0000
#2	2034.	2043.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10040.	2058.	2076.	1998.
Stddev	73.	21.	8.	6.
%RSD	.7315	1.032	.3881	.3139
#1	9991.	2043.	2082.	2002.
#2	10090.	2073.	2070.	1993.

Sample Name: CCV-3 Run Time: 03/03/03 14:24

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2105.	2181.	2119.	553.5
Stddev	8.	12.	1.	22.0
%RSD	.3817	.5515	.0478	3.981
#1	2100.	2173.	2119.	569.0
#2	2111.	2190.	2120.	537.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2174.	2104.	2139.	5854.
Stddev	5.	5.	3.	78.
%RSD	.2274	.2179	.1603	1.338
#1	2177.	2107.	2136.	5909.
#2	2170.	2101.	2141.	5798.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2030.	2068.	12100.	<.0000
Stddev	2.	2.	1207.	.4268
%RSD	.0776	.0922	9.980	.5373
#1	2029.	2069.	11240.	<.0000
#2	2031.	2066.	12950.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.1680	1984.	2023.	2080.
Stddev	.2370	5.	3.	60.
%RSD	141.1	.2538	.1644	2.869
#1	.0004	1987.	2025.	2038.
#2	.3355	1980.	2021.	2122.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	625500.	2114.	<.0000
Stddev	46280.	1.	.0003
%RSD	7.398	.0411	.0048
#1	658200.	2115.	<.0000
#2	592800.	2114.	<.0000

Method: SHER Sample Name: CCB-3 Operator:
Comment:
Run Time: 03/03/03 14:27 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.203	26.93
Stddev	.8638	.0167	2.895	90.45
%RSD	31.04	.0748	240.7	335.9
#1	<.0000	<.0000	3.249	< .0000
#2	<.0000	<.0000	< .0000	90.89

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.1045	.2925
Stddev	3.170	.1817	.0463	.4133
%RSD	5.634	14.83	44.30	141.3
#1	< .0000	<.0000	.1373	.5848
#2	< .0000	<.0000	.0718	.0003

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.2006	<.0000	3.322
Stddev	4.369	.1721	.0778	1.084
%RSD	136.3	85.81	55.65	32.64
#1	< .0000	.3223	<.0000	2.555
#2	< .0000	.0789	<.0000	4.089

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.5007	<.0000	2.426
Stddev	2.376	.4050	1.514	1.844
%RSD	314.1	80.89	115.7	76.02
#1	< .0000	.7871	< .0000	1.122
#2	.9235	.2143	< .0000	3.730

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.9342	14.58	2.201	.0475
Stddev	.9707	2.90	4.663	.1116
%RSD	103.9	19.91	211.9	235.0
#1	1.621	12.53	5.499	.1264
#2	.2478	16.63	< .0000	<.0000

Sample Name: CCB-3 Run Time: 03/03/03 14:27

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	13.97	35.85	.1961	<.0000
Stddev	18.07	1.75	.3162	14.25
%RSD	129.3	4.897	161.3	77.78
#1	26.75	37.09	.4196	< .0000
#2	1.195	34.61	<.0000	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.525	3.812	<.0000	<.0000
Stddev	1.093	3.302	.5359	1.126
%RSD	71.70	86.62	17.68	12.87
#1	2.298	6.147	<.0000	< .0000
#2	.7518	1.477	<.0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.422	1.028	48.97	2.510
Stddev	1.019	2.127	309.6	.426
%RSD	71.63	206.8	632.3	16.97
#1	.7018	2.532	< .0000	2.812
#2	2.143	< .0000	267.9	2.209

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.9591	<.0000	<.0000
Stddev	.7102	.4075	.2747	.1456
%RSD	26.52	42.49	10.89	7.927
#1	<.0000	1.247	<.0000	<.0000
#2	<.0000	.6709	<.0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	4500.	.1660	<.0000
Stddev	1515.	.1497	.3718
%RSD	33.66	90.20	564.7
#1	3429.	.2718	<.0000
#2	5571.	.0601	.1971

Method: SHER Sample Name: MEGDIM0110 Operator:
Comment:
Run Time: 03/03/03 15:07 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	322200.	<.0000	178200.
Stddev	.0011	1153.	9.562	1647.
%RSD	.0011	.3578	.5864	.9242
#1	<.0000	321400.	< .0000	179400.
#2	<.0000	323000.	< .0000	177100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	6530.	16.84	71.26
Stddev	1.285	25.	.20	1.24
%RSD	.1063	.3870	1.198	1.742
#1	< .0000	6512.	16.70	70.38
#2	< .0000	6548.	16.99	72.14

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	423100.	<.0000	390.0	782.0
Stddev	2637.	.0582	2.0	3.0
%RSD	.6232	.0308	.5209	.3884
#1	421200.	<.0000	388.6	779.9
#2	425000.	<.0000	391.4	784.2

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1011.	268500.	<.0000	<.0000
Stddev	.	2189.	1.850	.7718
%RSD	.0093	.8153	4.757	.1663
#1	1010.	267000.	< .0000	<.0000
#2	1011.	270100.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	63530.	<.0000	262900.	9952.
Stddev	368.	18.84	926.	97.
%RSD	.5796	1.346	.3520	.9778
#1	63270.	< .0000	262300.	9883.
#2	63790.	< .0000	263600.	10020.

Sample Name: MEGDIM0110 Run Time: 03/03/03 15:07

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	45.51	67190.	<.0000	17750.
Stddev	1.08	184.	2.272	158.
%RSD	2.381	.2741	19.55	.8906
#1	46.28	67320.	< .0000	17640.
#2	44.75	67060.	< .0000	17860.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	44.26	15.38	<.0000	88840.
Stddev	.17	.79	8.908	240.
%RSD	.3769	5.160	.7458	.2705
#1	44.14	15.94	< .0000	88670.
#2	44.37	14.82	< .0000	89010.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	3497.	830800.	222.0
Stddev	1.071	19.	7658.	.5
%RSD	22.22	.5329	.9218	.2239
#1	< .0000	3484.	836200.	222.3
#2	< .0000	3510.	825400.	221.6

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1121.	<.0000	500.6	1212.
Stddev	6.	.6781	1.1	2.
%RSD	.5166	6.202	.2207	.1846
#1	1125.	<.0000	499.8	1210.
#2	1117.	<.0000	501.4	1213.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	2456.	93.33
Stddev	3950.	7.	1.12
%RSD	1.928	.2965	1.197
#1	< .000	2451.	92.54
#2	< .000	2462.	94.12

Method: SHER Sample Name: MEGDIM0110 1/10 Operator:
Comment:
Run Time: 03/03/03 15:12 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	34650.	<.0000	100800.
Stddev	.1918	264.	4.709	1358.
%RSD	1.441	.7604	1.100	1.348
#1	<.0000	34840.	< .0000	101700.
#2	<.0000	34460.	< .0000	99810.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	699.0	1.899	3.843
Stddev	1.519	5.2	.040	1.811
%RSD	.5265	.7472	2.127	47.12
#1	< .0000	702.7	1.871	2.563
#2	< .0000	695.3	1.928	5.124

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	55170.	<.0000	46.66	47.93
Stddev	266.	.1507	.13	3.00
%RSD	.4818	.7349	.2840	6.267
#1	55350.	<.0000	46.76	50.06
#2	54980.	<.0000	46.57	45.81

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	94.01	80360.	<.0000	<.0000
Stddev	.65	1016.	1.598	1.202
%RSD	.6944	1.265	26.10	2.284
#1	94.47	81080.	< .0000	< .0000
#2	93.55	79640.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4576.	<.0000	28520.	1150.
Stddev	41.	5.743	191.	12.
%RSD	.8996	3.526	.6694	1.028
#1	4605.	< .0000	28660.	1158.
#2	4547.	< .0000	28390.	1141.

Sample Name: MEGDIM0110 1/10 Run Time: 03/03/03 15:12

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	8336.	<.0000	2188.
Stddev	.2390	66.	1.104	47.
%RSD	7.772	.7907	1.401	2.134
#1	<.0000	8383.	< .0000	2221.
#2	<.0000	8289.	< .0000	2155.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	9449.
Stddev	1.517	.0522	2.994	98.
%RSD	4.908	2.919	2.341	1.032
#1	< .0000	<.0000	< .0000	9518.
#2	< .0000	<.0000	< .0000	9380.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	389.4	147000.	24.36
Stddev	.2874	5.6	3280.	.35
%RSD	172.8	1.436	2.231	1.457
#1	<.0000	393.4	149300.	24.10
#2	.0369	385.5	144700.	24.61

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	120.6	.3814	51.19	154.9
Stddev	2.1	.6781	1.24	4.0
%RSD	1.765	177.8	2.412	2.555
#1	122.1	.8609	52.06	152.1
#2	119.1	<.0000	50.32	157.7

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	263.9	8.551
Stddev	5757.	1.9	1.023
%RSD	4.279	.7305	11.96
#1	< .000	265.3	9.274
#2	< .000	262.5	7.828

Method: SHER Sample Name: MEGDIM0110 1/20 Operator:
Comment:
Run Time: 03/03/03 15:17 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	17550.	<.0000	52680.
Stddev	.4804	74.	3.162	207.
%RSD	6.151	.4207	1.362	.3936
#1	<.0000	17610.	< .0000	52830.
#2	<.0000	17500.	< .0000	52540.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	352.9	.9588	<.0000
Stddev	.2062	1.9	.0187	1.656
%RSD	.1121	.5467	1.946	324.1
#1	<.0000	354.3	.9720	.6601
#2	<.0000	351.5	.9456	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	27820.	<.0000	24.12	24.70
Stddev	32.	.1366	.21	.13
%RSD	.1140	1.293	.8532	.5076
#1	27800.	<.0000	24.27	24.61
#2	27850.	<.0000	23.98	24.79

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	47.58	44070.	<.0000	<.0000
Stddev	.24	211.	.2526	1.418
%RSD	.5143	.4780	9.884	4.849
#1	47.41	44210.	<.0000	< .0000
#2	47.76	43920.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	2065.	<.0000	14600.	606.1
Stddev	8.	.4900	42.	2.6
%RSD	.3899	.5794	.2869	.4296
#1	2071.	<.0000	14630.	607.9
#2	2059.	<.0000	14570.	604.2

Sample Name: MEGDIM0110 1/20 Run Time: 03/03/03 15:17

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	3958.	<.0000	1103.
Stddev	.2136	12.	1.170	56.
%RSD	4.000	.2943	2.989	5.043
#1	<.0000	3966.	< .0000	1064.
#2	<.0000	3950.	< .0000	1143.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4796.
Stddev	.3716	.6793	.9257	7.
%RSD	2.069	34.03	1.365	.1543
#1	<.0000	<.0000	<.0000	4801.
#2	<.0000	<.0000	<.0000	4791.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0184	202.4	78430.	14.61
Stddev	.0784	.3	1868.	.07
%RSD	425.3	.1641	2.382	.4798
#1	.0738	202.1	79750.	14.56
#2	<.0000	202.6	77110.	14.66

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	59.13	.5736	24.86	81.98
Stddev	1.90	.9501	1.65	.25
%RSD	3.207	165.6	6.631	.3093
#1	60.47	<.0000	26.03	82.16
#2	57.79	1.245	23.70	81.80

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	136.2	3.092
Stddev	6762.	.4	1.302
%RSD	8.110	.2724	42.12
#1	< .000	136.5	2.171
#2	< .000	135.9	4.012

Method: SHER Sample Name: MEGDIM0110 1/100 Operator:
Comment:
Run Time: 03/03/03 15:25 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3121.	<.0000	12470.
Stddev	.6719	5.	1.182	82.
%RSD	25.38	.1537	2.474	.6609
#1	<.0000	3124.	< .0000	12530.
#2	<.0000	3117.	< .0000	12410.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	62.00	.0720	.0373
Stddev	.5274	.22	.0494	2.328
%RSD	.5878	.3606	68.60	6246.
#1	<.0000	62.15	.0371	< .0000
#2	<.0000	61.84	.1069	1.683

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	5154.	<.0000	4.941	7.644
Stddev	8.	.1091	.036	3.615
%RSD	.1552	5.473	.7267	47.29
#1	5160.	<.0000	4.967	10.20
#2	5149.	<.0000	4.916	5.088

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	7.932	9410.	<.0000	<.0000
Stddev	2.537	1.	1.514	1.673
%RSD	31.98	.0094	57.87	23.17
#1	6.138	9410.	< .0000	< .0000
#2	9.726	9409.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	299.3	.3183	2721.	126.9
Stddev	.7	3.831	3.	.3
%RSD	.2316	1203.	.0974	.2728
#1	298.8	< .0000	2723.	127.2
#2	299.8	3.027	2719.	126.7

Sample Name: MEGDIM0110 1/100 Run Time: 03/03/03 15:25

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	610.9	<.0000	223.6
Stddev	.0512	1.0	.1120	3.9
%RSD	.6900	.1705	1.463	1.740
#1	<.0000	610.2	<.0000	220.8
#2	<.0000	611.7	<.0000	226.3

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	842.1
Stddev	.8196	.7771	2.144	3.8
%RSD	23.57	361.7	15.22	.4544
#1	<.0000	.3347	< .0000	839.4
#2	<.0000	<.0000	< .0000	844.8

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	36.65	18510.	4.318
Stddev	.3657	.34	1345.	1.704
%RSD	247.4	.9286	7.268	39.47
#1	<.0000	36.89	17560.	5.523
#2	.1108	36.41	19460.	3.113

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	9.290	.3826	3.883	8.572
Stddev	.356	1.763	.001	2.431
%RSD	3.835	460.8	.0117	28.36
#1	9.542	< .0000	3.883	6.853
#2	9.038	1.629	3.882	10.29

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	28.27	.0657
Stddev	3030.	.00	.3719
%RSD	12.78	.0045	566.1
#1	< .000	28.27	.3287
#2	< .000	28.28	<.0000

Method: SHER Sample Name: MEGDIM0110 D Operator:
Comment:
Run Time: 03/03/03 15:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	307800.	<.0000	182200.
Stddev	.9637	1729.	3.882	1540.
%RSD	1.051	.5617	.2404	.8452
#1	<.0000	306500.	< .0000	183300.
#2	<.0000	309000.	< .0000	181100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	6213.	16.07	68.30
Stddev	1.612	40.	.09	5.12
%RSD	.1318	.6424	.5440	7.499
#1	< .0000	6185.	16.13	64.68
#2	< .0000	6241.	16.01	71.92

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	408100.	<.0000	378.5	741.1
Stddev	3087.	.5597	2.5	2.4
%RSD	.7565	.3103	.6616	.3239
#1	405900.	<.0000	376.7	742.8
#2	410300.	<.0000	380.3	739.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	941.2	267500.	<.0000	<.0000
Stddev	4.5	1536.	2.859	3.988
%RSD	.4754	.5743	7.560	.8787
#1	938.0	266500.	< .0000	< .0000
#2	944.3	268600.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	59030.	<.0000	249800.	8167.
Stddev	427.	14.70	528.	28.
%RSD	.7229	1.106	.2116	.3480
#1	58730.	< .0000	249400.	8147.
#2	59330.	< .0000	250200.	8187.

Sample Name: MEGDIM0110 D Run Time: 03/03/03 15:29

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	42.46	64500.	<.0000	17310.
Stddev	.11	349.	1.654	183.
%RSD	.2616	.5407	5.505	1.056
#1	42.54	64260.	< .0000	17180.
#2	42.38	64750.	< .0000	17440.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	35.40	13.48	<.0000	85790.
Stddev	4.57	.56	10.14	533.
%RSD	12.92	4.143	.8735	.6212
#1	38.63	13.88	< .0000	85410.
#2	32.16	13.09	< .0000	86160.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	3354.	808100.	217.9
Stddev	.7314	20.	4918.	.1
%RSD	17.68	.6043	.6086	.0329
#1	<.0000	3340.	811600.	217.9
#2	<.0000	3368.	804600.	217.8

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1037.	<.0000	476.7	1149.
Stddev	3.	1.763	6.0	9.
%RSD	.3048	20.89	1.264	.7894
#1	1035.	< .0000	472.4	1143.
#2	1039.	< .0000	480.9	1156.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	2390.	98.78
Stddev	3343.	16.	.09
%RSD	1.601	.6901	.0906
#1	< .000	2378.	98.72
#2	< .000	2402.	98.85

Method: SHER Sample Name: MEGDIM0110 D 1/10 Operator:
Comment:
Run Time: 03/03/03 15:34 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	36400.	<.0000	111000.
Stddev	1.057	85.	1.623	617.
%RSD	8.697	.2324	.3661	.5558
#1	< .0000	36340.	< .0000	111400.
#2	< .0000	36460.	< .0000	110600.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	736.4	2.042	4.866
Stddev	.6103	.7	.025	.983
%RSD	.1977	.0974	1.227	20.20
#1	<.0000	736.9	2.059	4.171
#2	<.0000	735.9	2.024	5.561

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	58130.	<.0000	51.14	55.08
Stddev	125.	.1891	.25	.96
%RSD	.2148	.8446	.4919	1.749
#1	58040.	<.0000	51.32	55.76
#2	58210.	<.0000	50.96	54.40

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	98.17	83370.	<.0000	<.0000
Stddev	.34	214.	.8409	.3004
%RSD	.3414	.2571	10.88	.5214
#1	98.41	83520.	<.0000	<.0000
#2	97.94	83220.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4763.	<.0000	29980.	1258.
Stddev	25.	3.053	23.	5.
%RSD	.5234	1.755	.0775	.4157
#1	4745.	< .0000	29960.	1262.
#2	4780.	< .0000	29990.	1255.

Sample Name: MEGDIM0110 D 1/10 Run Time: 03/03/03 15:34

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	8708.	<.0000	2337.
Stddev	.1706	5.	1.723	30.
%RSD	6.459	.0538	2.024	1.275
#1	<.0000	8711.	< .0000	2358.
#2	<.0000	8705.	< .0000	2316.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	10090.
Stddev	.6403	.5840	3.908	17.
%RSD	2.045	21.30	2.864	.1713
#1	<.0000	<.0000	< .0000	10080.
#2	<.0000	<.0000	< .0000	10110.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	415.9	158900.	31.53
Stddev	.8098	.8	1880.	.99
%RSD	74.30	.1953	1.183	3.152
#1	<.0000	416.5	160200.	32.24
#2	<.0000	415.3	157600.	30.83

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	123.5	2.205	50.89	162.5
Stddev	1.5	.542	.83	1.0
%RSD	1.253	24.61	1.626	.5888
#1	124.6	1.821	51.48	161.8
#2	122.4	2.588	50.31	163.2

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	294.2	9.734
Stddev	5657.	1.2	.464
%RSD	4.020	.4027	4.770
#1	< .000	295.0	9.406
#2	< .000	293.4	10.06

Method: SHER Sample Name: MEGDIM0110 D 1/100 Operator:
Comment:
Run Time: 03/03/03 15:38 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3215.	<.0000	12920.
Stddev	2.975	10.	1.522	157.
%RSD	162.3	.3178	3.218	1.215
#1	.2708	3208.	< .0000	13040.
#2	< .0000	3222.	< .0000	12810.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	63.90	.2007	.1836
Stddev	.2389	.24	.0587	.8795
%RSD	.2607	.3758	29.27	479.0
#1	<.0000	64.07	.1592	.8055
#2	<.0000	63.73	.2422	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	5305.	<.0000	4.784	3.661
Stddev	12.	.0218	.174	.365
%RSD	.2246	1.053	3.633	9.980
#1	5314.	<.0000	4.661	3.919
#2	5297.	<.0000	4.907	3.403

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	9.954	9655.	<.0000	<.0000
Stddev	1.148	6.	1.009	.6434
%RSD	11.53	.0622	44.68	13.26
#1	10.77	9651.	< .0000	<.0000
#2	9.143	9659.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	302.5	1.053	2808.	130.3
Stddev	1.5	2.533	16.	.1
%RSD	.5024	240.6	.5734	.1009
#1	303.6	2.844	2819.	130.2
#2	301.4	< .0000	2797.	130.4

Sample Name: MEGDIM0110 D 1/100 Run Time: 03/03/03 15:38

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	621.3	<.0000	233.7
Stddev	.4010	1.4	.0730	7.8
%RSD	5.400	.2309	.9282	3.327
#1	<.0000	622.3	<.0000	239.2
#2	<.0000	620.3	<.0000	228.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	891.0
Stddev	.5520	2.137	1.991	1.7
%RSD	14.24	60.83	15.43	.1954
#1	<.0000	< .0000	< .0000	892.3
#2	<.0000	< .0000	< .0000	889.8

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	35.93	18460.	4.770
Stddev	.7576	.45	518.	1.349
%RSD	4096.	1.240	2.803	28.29
#1	<.0000	35.61	18100.	3.816
#2	.5172	36.24	18830.	5.724

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	9.204	<.0000	2.038	8.844
Stddev	.236	2.577	1.784	1.988
%RSD	2.565	447.0	87.54	22.48
#1	9.037	1.246	.7764	10.25
#2	9.371	< .0000	3.299	7.438

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	29.08	<.0000
Stddev	7779.	.02	.0000
%RSD	39.89	.0621	.0000
#1	< .000	29.09	<.0000
#2	< .000	29.07	<.0000

Method: SHER Sample Name: MEGDIM0110 S Operator:
Comment:
Run Time: 03/03/03 15:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	320800.	<.0000	177400.
Stddev	.8616	1635.	.2483	1167.
%RSD	1.430	.5097	.0156	.6581
#1	<.0000	319700.	<.0000	178200.
#2	<.0000	322000.	<.0000	176600.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	8155.	59.71	69.36
Stddev	1.890	32.	.12	1.13
%RSD	.1569	.3888	.1974	1.632
#1	< .0000	8132.	59.63	68.56
#2	< .0000	8177.	59.79	70.16

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	418400.	<.0000	792.0	968.6
Stddev	2700.	1.314	4.6	6.7
%RSD	.6454	.6657	.5870	.6935
#1	416500.	< .0000	788.7	973.3
#2	420300.	< .0000	795.3	963.8

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1219.	267800.	<.0000	<.0000
Stddev	5.	1458.	7.313	6.098
%RSD	.3918	.5445	18.28	1.323
#1	1215.	266700.	< .0000	< .0000
#2	1222.	268800.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	64600.	<.0000	256800.	8597.
Stddev	326.	4.286	498.	33.
%RSD	.5043	.3291	.1938	.3813
#1	64370.	< .0000	256400.	8573.
#2	64830.	< .0000	257100.	8620.

Sample Name: MEGDIM0110 S Run Time: 03/03/03 15:42

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	44.04	66730.	84.48	17660.
Stddev	.14	206.	9.77	201.
%RSD	.3192	.3095	11.57	1.137
#1	44.14	66590.	77.56	17520.
#2	43.94	66880.	91.39	17800.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	53.78	75.96	<.0000	86210.
Stddev	5.32	.60	11.05	297.
%RSD	9.888	.7923	.9333	.3443
#1	50.02	75.53	< .0000	86010.
#2	57.54	76.38	< .0000	86420.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	3438.	807500.	210.8
Stddev	.7840	13.	1594.	.2
%RSD	24.96	.3828	.1974	.0750
#1	<.0000	3429.	806400.	210.9
#2	<.0000	3448.	808600.	210.7

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1125.	9.782	913.4	2054.
Stddev	.	4.747	1.3	11.
%RSD	.0260	48.53	.1454	.5165
#1	1125.	13.14	912.4	2047.
#2	1125.	6.425	914.3	2062.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	2867.	75.97
Stddev	4155.	20.	4.28
%RSD	3.098	.6829	5.627
#1	< .000	2853.	72.94
#2	< .000	2881.	78.99

Method: SHER Sample Name: MEGDIM0110 L Operator:
Comment:
Run Time: 03/03/03 15:50 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	69920.	<.0000	198400.
Stddev	1.153	290.	.1426	619.
%RSD	5.024	.4147	.0196	.3119
#1	< .0000	70120.	<.0000	198900.
#2	< .0000	69710.	<.0000	198000.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	1402.	3.741	11.67
Stddev	1.318	13.	.053	2.43
%RSD	.2609	.8978	1.405	20.84
#1	< .0000	1410.	3.704	9.951
#2	< .0000	1393.	3.778	13.39

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	108400.	<.0000	94.60	119.5
Stddev	113.	.0582	.25	4.6
%RSD	.1040	.1376	.2597	3.874
#1	108500.	<.0000	94.43	122.8
#2	108300.	<.0000	94.78	116.2

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	200.5	135000.	<.0000	<.0000
Stddev	3.4	473.	.1682	.0000
%RSD	1.679	.3503	1.505	.0000
#1	202.9	134600.	<.0000	<.0000
#2	198.1	135300.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10740.	<.0000	56540.	2258.
Stddev	32.	10.89	234.	6.
%RSD	.2979	3.346	.4148	.2491
#1	10760.	< .0000	56710.	2262.
#2	10720.	< .0000	56380.	2254.

Sample Name: MEGDIM0110 L Run Time: 03/03/03 15:50

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.549	17470.	<.0000	4369.
Stddev	.188	19.	5.668	64.
%RSD	5.290	.1099	3.124	1.453
#1	3.681	17480.	< .0000	4324.
#2	3.416	17460.	< .0000	4414.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.7736	<.0000	18790.
Stddev	.5795	1.356	1.449	104.
%RSD	1.359	175.3	.5557	.5559
#1	<.0000	1.733	< .0000	18870.
#2	<.0000	< .0000	< .0000	18720.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	777.2	278100.	53.33
Stddev	.1829	9.5	3657.	1.14
%RSD	23.02	1.228	1.315	2.131
#1	<.0000	783.9	280700.	54.13
#2	<.0000	770.4	275500.	52.52

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	245.5	<.0000	102.0	286.7
Stddev	3.2	.4069	2.2	4.9
%RSD	1.306	35.32	2.152	1.715
#1	247.7	<.0000	100.4	283.2
#2	243.2	<.0000	103.5	290.2

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	558.1	18.09
Stddev	8487.	.6	.56
%RSD	3.867	.1030	3.083
#1	< .000	557.7	17.69
#2	< .000	558.5	18.48

Method: SHER Sample Name: MEGDIM0110 A Operator:
Comment:
Run Time: 03/03/03 15:53 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	2.786	323300.	<.0000	175600.
Stddev	2.785	886.	17.13	1924.
%RSD	99.99	.2740	1.099	1.095
#1	4.755	322700.	< .0000	177000.
#2	.8160	324000.	< .0000	174200.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	9786.	110.2	72.69
Stddev	1.711	20.	.2	.78
%RSD	.1403	.2053	.1386	1.067
#1	< .0000	9800.	110.1	72.14
#2	< .0000	9772.	110.3	73.24

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	421200.	<.0000	1295.	1222.
Stddev	1785.	.1377	12.	4.
%RSD	.4236	.0647	.8950	.3619
#1	420000.	<.0000	1286.	1225.
#2	422500.	<.0000	1303.	1219.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1544.	267800.	<.0000	<.0000
Stddev	2.	2758.	3.111	8.920
%RSD	.1205	1.030	7.893	1.873
#1	1543.	265800.	< .0000	< .0000
#2	1545.	269700.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	62820.	<.0000	258400.	10560.
Stddev	103.	17.55	1038.	88.
%RSD	.1638	1.295	.4018	.8349
#1	62750.	< .0000	257600.	10500.
#2	62890.	< .0000	259100.	10620.

Sample Name: MEGDIM0110 A Run Time: 03/03/03 15:53

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	41.77	67080.	461.9	17900.
Stddev	1.51	326.	6.0	196.
%RSD	3.616	.4864	1.302	1.093
#1	42.84	66850.	457.6	17760.
#2	40.70	67310.	466.1	18040.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	69.51	869.0	<.0000	87120.
Stddev	1.95	1.5	15.56	70.
%RSD	2.809	.1716	1.304	.0800
#1	70.89	867.9	< .0000	87070.
#2	68.13	870.0	< .0000	87170.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	3443.	800300.	201.5
Stddev	.3135	8.	2952.	.2
%RSD	9.223	.2433	.3688	.1055
#1	<.0000	3437.	802300.	201.4
#2	<.0000	3449.	798200.	201.7

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1077.	49.29	1444.	3044.
Stddev	2.	2.58	3.	11.
%RSD	.1740	5.228	.1897	.3460
#1	1075.	51.12	1442.	3036.
#2	1078.	47.47	1446.	3051.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	3409.	101.0
Stddev	3232.	26.	.3
%RSD	19.33	.7618	.2671
#1	< .000	3391.	101.2
#2	< .000	3428.	100.8

Method: SHER Sample Name: CCV-4 Operator:
Comment:
Run Time: 03/03/03 16:04 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	497.3	2018.	1996.	4806.
Stddev	.6	.	4.	44.
%RSD	.1168	.0033	.1860	.9238
#1	496.9	2018.	1994.	4774.
#2	497.8	2018.	1999.	4837.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2138.	2033.	1999.	<.0000
Stddev	3.	13.	12.	1.811
%RSD	.1275	.6591	.6135	115.2
#1	2140.	2043.	2007.	< .0000
#2	2136.	2024.	1990.	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2051.	1969.	1963.	1999.
Stddev	9.	3.	5.	3.
%RSD	.4273	.1458	.2437	.1636
#1	2044.	1967.	1960.	1996.
#2	2057.	1971.	1967.	2001.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2045.	2024.	<.0000	<.0000
Stddev	9.	7.	8.156	2.273
%RSD	.4358	.3263	28.28	5.278
#1	2052.	2019.	< .0000	< .0000
#2	2039.	2029.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9935.	2016.	2058.	1972.
Stddev	19.	10.	8.	1.
%RSD	.1954	.4732	.3977	.0270
#1	9922.	2010.	2052.	1971.
#2	9949.	2023.	2064.	1972.

Sample Name: CCV-4 Run Time: 03/03/03 16:04

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2073.	2143.	2094.	554.4
Stddev	17.	5.	7.	.0
%RSD	.8209	.2331	.3343	.0008
#1	2061.	2139.	2089.	554.4
#2	2085.	2146.	2099.	554.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2149.	2081.	2133.	5838.
Stddev	.	11.	11.	41.
%RSD	.0032	.5360	.4983	.7016
#1	2149.	2073.	2125.	5867.
#2	2149.	2089.	2141.	5809.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2006.	2048.	11320.	<.0000
Stddev	5.	13.	724.	1.278
%RSD	.2714	.6171	6.401	1.635
#1	2002.	2057.	11830.	< .0000
#2	2010.	2039.	10800.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.3354	1960.	2006.	2032.
Stddev	.2369	1.	6.	8.
%RSD	70.62	.0353	.3004	.3833
#1	.5029	1961.	2010.	2027.
#2	.1679	1960.	2002.	2038.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	610100.	2098.	<.0000
Stddev	35570.	5.	.7441
%RSD	5.830	.2462	15.93
#1	635200.	2094.	<.0000
#2	584900.	2101.	<.0000

Method: SHER Sample Name: CCB-4 Operator:
Comment:
Run Time: 03/03/03 16:07 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.5753	.0099	.9862	30.15
%RSD	52.93	.0394	147.5	83.96
#1	<.0000	<.0000	.0289	< .0000
#2	<.0000	<.0000	<.0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.1395	<.0000
Stddev	1.417	.2514	.0869	1.345
%RSD	2.344	32.12	62.31	204.2
#1	< .0000	<.0000	.2010	.2922
#2	< .0000	<.0000	.0781	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.0789	<.0000	.2579
Stddev	2.516	.2037	.0779	2.527
%RSD	152.2	258.3	63.37	979.7
#1	.1260	.2229	<.0000	< .0000
#2	< .0000	<.0000	<.0000	2.045

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.5423	<.0000	.0909
Stddev	.7348	.0039	.5044	1.887
%RSD	38.17	.7254	15.15	2075.
#1	<.0000	.5451	<.0000	1.425
#2	<.0000	.5396	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1.839	22.21	.2889	<.0000
Stddev	2.438	.48	8.151	.0424
%RSD	132.6	2.166	2821.	141.4
#1	.1150	22.55	< .0000	<.0000
#2	3.563	21.87	6.053	<.0000

Sample Name: CCB-4 Run Time: 03/03/03 16:07

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.782	20.56	.2958	<.0000
Stddev	7.465	.20	.1946	28.50
%RSD	197.4	.9509	65.78	345.7
#1	9.060	20.69	.1582	11.91
#2	< .0000	20.42	.4334	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.525	<.0000	<.0000	<.0000
Stddev	.911	1.117	.0001	11.77
%RSD	59.77	813.1	.0156	79.88
#1	2.169	.6525	<.0000	< .0000
#2	.8803	< .0000	<.0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4248	<.0000	512.8	3.966
Stddev	.4440	1.453	965.6	.213
%RSD	104.5	166.7	188.3	5.370
#1	.7388	< .0000	< .0000	4.117
#2	.1109	.1560	1196.	3.816

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.0002	2.712	.4111	.1652
%RSD	.0094	314.5	47.13	11.26
#1	<.0000	1.055	<.0000	<.0000
#2	<.0000	< .0000	<.0000	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	4929.	.0938	<.0000
Stddev	14e3	.0273	.1854
%RSD	276.6	29.08	7.238
#1	14570.	.0745	<.0000
#2	< .00	.1131	<.0000

Method: SHER Sample Name: DUP 2/20/03 F Operator:
Comment:
Run Time: 03/03/03 16:11 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.677	5292.
Stddev	1.825	1.422	.245	2.
%RSD	76.80	9.941	14.62	.0378
#1	< .0000	< .0000	1.850	5290.
#2	< .0000	< .0000	1.504	5293.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	35.71	408.7	.2552	<.0000
Stddev	.86	.8	.0962	.4654
%RSD	2.398	.1899	37.72	14.63
#1	36.32	408.2	.3232	<.0000
#2	35.11	409.3	.1871	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	122500.	<.0000	13.89	.7238
Stddev	690.	.0349	.24	.3617
%RSD	.5635	.2873	1.761	49.97
#1	122000.	<.0000	14.06	.9796
#2	123000.	<.0000	13.71	.4681

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	3.772	70.67	<.0000	<.0000
Stddev	1.229	.20	3.280	2.702
%RSD	32.57	.2862	5588.	159.1
#1	2.903	70.53	< .0000	< .0000
#2	4.641	70.81	2.261	.2124

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	6729.	<.0000	29670.	6015.
Stddev	16.	8.622	99.	30.
%RSD	.2402	4.058	.3324	.4963
#1	6718.	< .0000	29600.	5994.
#2	6740.	< .0000	29740.	6036.

Sample Name: DUP 2/20/03 F Run Time: 03/03/03 16:11

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	79760.	129.0	38.49
Stddev	.4176	214.	1.1	19.44
%RSD	32.51	.2683	.8862	50.51
#1	<.0000	79610.	128.2	24.74
#2	<.0000	79910.	129.9	52.24

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.3098	<.0000	2707.
Stddev	1.550	.7768	.6895	5.
%RSD	108.0	250.8	640.9	.1926
#1	< .0000	.8590	<.0000	2711.
#2	< .0000	<.0000	.3800	2704.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0185	764.2	3792.	5.322
Stddev	.2873	3.0	570.	1.846
%RSD	1555.	.3900	15.02	34.69
#1	<.0000	762.1	4195.	4.017
#2	.2216	766.3	3389.	6.628

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3.452	<.0000	29.16
Stddev	.7109	.406	.8243	2.94
%RSD	13.69	11.78	47.15	10.09
#1	<.0000	3.164	<.0000	27.08
#2	<.0000	3.739	<.0000	31.24

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	98.66	<.0000
Stddev	200.5	.73	1.023
%RSD	1.922	.7407	37.04
#1	< .0000	98.15	< .0000
#2	< .0000	99.18	< .0000

Method: SHER Sample Name: MEGUSH8601 Operator:
Comment:
Run Time: 03/03/03 16:15 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	30790.	<.0000	224700.
Stddev	7.010	64.	2.673	842.
%RSD	6.032	.2085	.2224	.3747
#1	< .0000	30740.	< .0000	225300.
#2	< .0000	30830.	< .0000	224100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	2613.	3.980	48.54
Stddev	1.274	1.	.037	1.19
%RSD	.1149	.0253	.9316	2.451
#1	< .0000	2612.	3.954	47.70
#2	< .0000	2613.	4.006	49.39

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	144100.	<.0000	1184.	160500.
Stddev	130.	.3713	6.	364.
%RSD	.0903	.4733	.4659	.2270
#1	144200.	<.0000	1180.	160200.
#2	144000.	<.0000	1188.	160700.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2912.	267000.	<.0000	<.0000
Stddev	1.	980.	.8425	4.505
%RSD	.0344	.3670	.1555	.8835
#1	2912.	266300.	<.0000	< .0000
#2	2913.	267700.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	16180.	<.0000	34830.	62480.
Stddev	12.	9.163	18.	165.
%RSD	.0751	5.659	.0525	.2639
#1	16170.	< .0000	34840.	62360.
#2	16190.	< .0000	34820.	62590.

Sample Name: MEGUSH8601 Run Time: 03/03/03 16:15

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1204.	94170.	17360.	50430.
Stddev	4.	87.	48.	193.
%RSD	.3185	.0922	.2776	.3833
#1	1202.	94110.	17330.	50290.
#2	1207.	94230.	17400.	50560.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3369.	<.0000	30580.
Stddev	5.655	18.	10.34	58.
%RSD	1.396	.5209	.9926	.1896
#1	< .0000	3356.	< .0000	30620.
#2	< .0000	3381.	< .0000	30540.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	7.056	670.0	845400.	182.4
Stddev	.679	1.6	5913.	1.4
%RSD	9.626	.2363	.6995	.7784
#1	6.576	671.1	849600.	183.4
#2	7.536	668.8	841200.	181.4

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	70.60	125.7	100.7	1676.
Stddev	1.54	1.9	11.7	3.
%RSD	2.183	1.511	11.59	.1887
#1	71.69	124.4	92.47	1673.
#2	69.51	127.1	109.0	1678.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	785.9	170.3
Stddev	1616.	2.9	1.8
%RSD	1.164	.3655	1.035
#1	< .000	783.9	169.1
#2	< .000	787.9	171.6

Method: SHER Sample Name: MEGUSH8601 1/10 Operator:
Comment:
Run Time: 03/03/03 16:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3271.	<.0000	100400.
Stddev	1.729	.	.2578	509.
%RSD	13.40	.0075	.0725	.5074
#1	< .0000	3271.	<.0000	100700.
#2	< .0000	3271.	<.0000	100000.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	286.3	.5971	3.001
Stddev	1.589	1.2	.0278	1.759
%RSD	.5901	.4277	4.662	58.61
#1	< .0000	287.2	.5774	4.244
#2	< .0000	285.4	.6168	1.757

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	16920.	<.0000	134.7	20370.
Stddev	2.	.0441	.7	27.
%RSD	.0138	.5076	.5202	.1319
#1	16920.	<.0000	135.2	20390.
#2	16920.	<.0000	134.2	20350.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	304.0	75270.	<.0000	<.0000
Stddev	.3	203.	2.862	.3833
%RSD	.1108	.2696	4.305	.6652
#1	304.3	75410.	< .0000	<.0000
#2	303.8	75120.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1064.	<.0000	4079.	13450.
Stddev	.	5.116	11.	108.
%RSD	.0167	8.944	.2603	.8047
#1	1064.	< .0000	4086.	13530.
#2	1064.	< .0000	4071.	13370.

Sample Name: MEGUSH8601 1/10 Run Time: 03/03/03 16:19

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	125.6	14520.	2149.	5820.
Stddev	.4	17.	11.	13.
%RSD	.3073	.1140	.5311	.2179
#1	125.9	14530.	2157.	5829.
#2	125.4	14510.	2141.	5811.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	387.3	<.0000	3493.
Stddev	2.266	.1	4.064	13.
%RSD	2.803	.0202	3.746	.3728
#1	< .0000	387.3	< .0000	3502.
#2	< .0000	387.2	< .0000	3484.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units.	ppb	ppb	ppb	ppm
Avg	.7943	75.97	147900.	21.19
Stddev	.2351	.34	145.	.00
%RSD	29.60	.4453	.0977	.0041
#1	.6280	76.20	147800.	21.19
#2	.9605	75.73	148100.	21.19

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	5.444	14.19	5.925	205.4
Stddev	.355	1.22	3.709	.8
%RSD	6.523	8.599	62.59	.3667
#1	5.193	15.06	3.303	206.0
#2	5.695	13.33	8.547	204.9

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	83.01	17.56
Stddev	5652.	.23	1.86
%RSD	4.830	.2750	10.59
#1	< .000	83.17	16.25
#2	< .000	82.85	18.88

Method: SHER Sample Name: MEGUSH8601 1/100 Operator:
Comment:
Run Time: 03/03/03 16:23 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	293.6	<.0000	12930.
Stddev	.2883	5.0	1.448	8.
%RSD	15.72	1.719	3.222	.0615
#1	<.0000	290.0	< .0000	12930.
#2	<.0000	297.1	< .0000	12920.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	26.95	.1067	<.0000
Stddev	.7332	.16	.0529	.5691
%RSD	.8104	.5955	49.57	74.15
#1	<.0000	27.06	.1441	<.0000
#2	<.0000	26.83	.0693	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1712.	<.0000	15.18	2007.
Stddev	11.	.0558	.01	1.
%RSD	.6575	5.717	.0791	.0453
#1	1720.	<.0000	15.19	2006.
#2	1704.	<.0000	15.17	2008.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	27.08	9266.	<.0000	<.0000
Stddev	.74	7.	.0001	2.102
%RSD	2.737	.0804	.0006	34.65
#1	27.61	9271.	<.0000	< .0000
#2	26.56	9261.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	74.18	16.83	421.1	1613.
Stddev	2.45	6.10	2.7	5.
%RSD	3.306	36.27	.6379	.3132
#1	75.91	12.51	419.2	1616.
#2	72.44	21.14	423.0	1609.

Sample Name: MEGUSH8601 1/100 Run Time: 03/03/03 16:23

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	6.451	1248.	242.2	630.4
Stddev	.299	.	.1	27.2
%RSD	4.630	.0328	.0383	4.317
#1	6.662	1248.	242.2	649.7
#2	6.240	1248.	242.1	611.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	40.25	<.0000	336.7
Stddev	.8142	2.38	1.838	8.4
%RSD	10.02	5.913	13.96	2.494
#1	<.0000	41.94	< .0000	330.7
#2	<.0000	38.57	< .0000	342.6

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.5357	4.597	18140.	5.222
Stddev	.3396	1.121	535.	3.125
%RSD	63.40	24.39	2.948	59.84
#1	.2955	5.390	17760.	7.431
#2	.7758	3.804	18510.	3.012

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.917	<.0000	14.18
Stddev	.1184	.678	3.435	.15
%RSD	6.146	35.38	272.0	1.050
#1	<.0000	1.437	1.166	14.28
#2	<.0000	2.397	< .0000	14.07

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	9.440	<.0000
Stddev	10e3	.045	1.489
%RSD	44.52	.4722	453.2
#1	< .00	9.472	< .0000
#2	< .00	9.409	.7242

Method: SHER Sample Name: MEGDD0121 Operator:
Comment:
Run Time: 03/03/03 16:27 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1918.	<.0000	18700.
Stddev	.0960	23.	.0489	243.
%RSD	4.286	1.179	.0713	1.298
#1	<.0000	1902.	<.0000	18530.
#2	<.0000	1934.	<.0000	18870.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	516.8	1526.	.6036	<.0000
Stddev	3.8	12.	.1178	1.242
%RSD	.7377	.7629	19.52	58.54
#1	514.1	1517.	.5203	< .0000
#2	519.5	1534.	.6870	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	73440.	<.0000	1.805	4.382
Stddev	358.	.1842	.012	.412
%RSD	.4882	.3811	.6634	9.408
#1	73190.	<.0000	1.797	4.674
#2	73700.	<.0000	1.814	4.091

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	16.98	13580.	<.0000	<.0000
Stddev	.90	85.	8.073	1.887
%RSD	5.310	.6234	566.0	14.85
#1	16.35	13520.	4.282	< .0000
#2	17.62	13640.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	15650.	1340.	18280.	504.9
Stddev	88.	21.	36.	3.5
%RSD	.5608	1.604	.1991	.6845
#1	15580.	1325.	18260.	502.4
#2	15710.	1355.	18310.	507.3

Sample Name: MEGDD0121 Run Time: 03/03/03 16:27

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	129200.	<.0000	377.5
Stddev	.2645	167.	.6909	14.2
%RSD	4.094	.1291	3.173	3.775
#1	<.0000	129100.	<.0000	367.5
#2	<.0000	129300.	<.0000	387.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4289.
Stddev	1.985	.1461	1.684	21.
%RSD	15.53	2.898	6.947	.4859
#1	< .0000	<.0000	< .0000	4275.
#2	< .0000	<.0000	< .0000	4304.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.9975	2535.	23250.	5.523
Stddev	.4702	8.	1449.	1.136
%RSD	47.14	.3061	6.233	20.57
#1	.6650	2530.	22220.	4.719
#2	1.330	2541.	24270.	6.326

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	8.543	<.0000	1.360	58.70
Stddev	.000	.8138	1.374	12.95
%RSD	.0013	77.07	101.0	22.06
#1	8.543	<.0000	.3885	49.55
#2	8.543	<.0000	2.331	67.86

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	6971.	.0663	2.046
%RSD	17.97	3.204	26.15
#1	< .000	<.0000	< .0000
#2	< .000	<.0000	< .0000

Method: SHER Sample Name: MEGDSH0121 Operator:
Comment:
Run Time: 03/03/03 16:31 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4448.	<.0000	11140.
Stddev	1.921	47.	.4307	62.
%RSD	83.21	1.062	1.582	.5557
#1	< .0000	4415.	<.0000	11090.
#2	< .0000	4481.	<.0000	11180.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	216.0	.2462	<.0000
Stddev	.0247	.7	.0031	1.552
%RSD	.1517	.3333	1.253	41.60
#1	<.0000	216.5	.2440	< .0000
#2	<.0000	215.5	.2484	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	372600.	<.0000	9.293	100.8
Stddev	784.	.1140	.186	.3
%RSD	.2104	5.628	1.999	.3354
#1	372100.	<.0000	9.424	100.6
#2	373200.	<.0000	9.162	101.0

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	48.51	6322.	<.0000	<.0000
Stddev	2.05	38.	1.850	1.801
%RSD	4.225	.5982	86.45	77.14
#1	49.96	6295.	< .0000	< .0000
#2	47.06	6349.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	8862.	<.0000	15060.	3152.
Stddev	23.	24.93	8.	7.
%RSD	.2617	1.280	.0534	.2236
#1	8846.	< .0000	15060.	3147.
#2	8879.	< .0000	15070.	3157.

Sample Name: MEGDSH0121 Run Time: 03/03/03 16:31

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.7792	54860.	41.51	258.4
Stddev	.0768	182.	.21	3.9
%RSD	9.854	.3317	.5158	1.504
#1	.7249	54730.	41.66	255.7
#2	.8335	54990.	41.35	261.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	10.65	<.0000	<.0000	6116.
Stddev	1.24	.9709	3.215	39.
%RSD	11.68	49.77	26.42	.6347
#1	9.774	<.0000	< .0000	6143.
#2	11.53	<.0000	< .0000	6088.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3.676	483.3	13760.	7.732
Stddev	.392	2.0	759.	2.556
%RSD	10.66	.4180	5.517	33.06
#1	3.953	484.7	14290.	9.540
#2	3.399	481.9	13220.	5.925

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	12.14	.5744	6.896	30.62
Stddev	1.07	.6782	1.236	.37
%RSD	8.777	118.1	17.93	1.200
#1	11.39	1.054	7.770	30.36
#2	12.90	.0949	6.022	30.88

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	623.4	<.0000
Stddev	2122.	3.3	1.767
%RSD	8.413	.5262	58.42
#1	< .000	621.1	< .0000
#2	< .000	625.7	< .0000

Method: SHER Sample Name: MEGDD0123 Operator:
Comment:
Run Time: 03/03/03 16:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3135.	<.0000	27960.
Stddev	.4803	22.	1.468	121.
%RSD	10.25	.7041	1.366	.4318
#1	<.0000	3151.	< .0000	27880.
#2	<.0000	3120.	< .0000	28050.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1484.	1128.	.5927	<.0000
Stddev	2.	2.	.0403	.2069
%RSD	.1559	.1959	6.802	142.1
#1	1483.	1127.	.6212	<.0000
#2	1486.	1130.	.5642	.0007

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	10740.	<.0000	7.916	9.125
Stddev	21.	.1869	.228	4.285
%RSD	.1970	.5177	2.876	46.96
#1	10720.	<.0000	8.077	6.095
#2	10750.	<.0000	7.755	12.15

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	59.00	21440.	<.0000	<.0000
Stddev	3.28	91.	2.691	2.445
%RSD	5.557	.4255	119.1	15.38
#1	61.32	21380.	< .0000	< .0000
#2	56.68	21510.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	24950.	4623.	4607.	225.7
Stddev	77.	15.	.	.7
%RSD	.3071	.3319	.0081	.3131
#1	24900.	4612.	4606.	225.2
#2	25000.	4634.	4607.	226.2

Sample Name: MEGDD0123 Run Time: 03/03/03 16:35

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	4.671	162200.	<.0000	559.9
Stddev	.375	960.	.2336	44.1
%RSD	8.037	.5919	1.366	7.870
#1	4.936	162800.	<.0000	528.7
#2	4.405	161500.	<.0000	591.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	3126.
Stddev	.3791	.1940	.8420	17.
%RSD	2.205	30.92	2.553	.5389
#1	<.0000	<.0000	<.0000	3114.
#2	<.0000	<.0000	<.0000	3138.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	4.175	1940.	38210.	12.95
Stddev	1.045	5.	1328.	4.26
%RSD	25.03	.2537	3.476	32.89
#1	3.436	1937.	37270.	15.97
#2	4.913	1944.	39150.	9.942

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	15.16	<.0000	.5828	61.40
Stddev	.59	1.085	.5494	.74
%RSD	3.907	11.43	94.28	1.206
#1	15.58	< .0000	.1943	61.93
#2	14.74	< .0000	.9713	60.88

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	18.37	<.0000
Stddev	5961.	.01	.7441
%RSD	12.18	.0338	17.41
#1	< .000	18.37	<.0000
#2	< .000	18.36	<.0000

Method: SHER Sample Name: MEGDD0115 Operator:
Comment:
Run Time: 03/03/03 16:40 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	138.1	<.0000	43410.
Stddev	.2882	3.8	1.936	254.
%RSD	5.239	2.775	1.185	.5851
#1	<.0000	135.4	< .0000	43230.
#2	<.0000	140.8	< .0000	43590.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1203.	442.6	.2880	<.0000
Stddev	8.	2.2	.0868	.2070
%RSD	.6985	.5059	30.15	28.32
#1	1209.	444.2	.3493	<.0000
#2	1197.	441.1	.2266	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	10340.	<.0000	1.293	4.920
Stddev	36.	.0946	.102	1.309
%RSD	.3513	.6630	7.881	26.59
#1	10310.	<.0000	1.365	3.995
#2	10360.	<.0000	1.221	5.846

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	6.785	32710.	2.974	<.0000
Stddev	.246	230.	.504	.1715
%RSD	3.624	.7032	16.97	.7372
#1	6.959	32550.	3.331	<.0000
#2	6.611	32880.	2.617	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	24380.	2680.	4332.	233.6
Stddev	79.	23.	2.	1.2
%RSD	.3230	.8419	.0359	.5334
#1	24320.	2664.	4333.	232.7
#2	24440.	2696.	4331.	234.5

Sample Name: MEGDD0115 Run Time: 03/03/03 16:40

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	149700.	<.0000	861.4
Stddev	.0853	1324.	.9490	6.5
%RSD	1.511	.8846	1.605	.7520
#1	<.0000	150600.	<.0000	865.9
#2	<.0000	148700.	<.0000	856.8

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	1006.
Stddev	.7183	1.312	.8421	2.
%RSD	2.518	79.48	1.647	.1675
#1	<.0000	< .0000	<.0000	1005.
#2	<.0000	< .0000	<.0000	1007.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.238	1389.	58850.	12.45
Stddev	.496	1.	190.	3.55
%RSD	40.10	.0968	.3225	28.51
#1	1.589	1390.	58710.	14.96
#2	.8866	1388.	58980.	9.942

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	32.38
Stddev	.2369	4.069	.9615	2.10
%RSD	15.72	86.56	990.0	6.474
#1	<.0000	< .0000	.5828	33.86
#2	<.0000	< .0000	<.0000	30.89

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	8.500	2.894
Stddev	303.2	.262	1.023
%RSD	.4520	3.081	35.35
#1	< .0000	8.315	2.171
#2	< .0000	8.685	3.618

Method: SHER Sample Name: MEGDIM0128 Operator:
Comment:
Run Time: 03/03/03 16:44 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	5733.	<.0000	17280.
Stddev	1.153	35.	.8473	52.
%RSD	40.41	.6099	1.392	.3031
#1	< .0000	5708.	<.0000	17240.
#2	< .0000	5757.	<.0000	17310.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	257.9	2063.	.8337	<.0000
Stddev	1.4	2.	.0216	.7243
%RSD	.5462	.0784	2.594	25.39
#1	257.0	2062.	.8490	<.0000
#2	258.9	2064.	.8184	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	129000.	<.0000	5.831	19.62
Stddev	574.	.2377	.300	.32
%RSD	.4445	.3677	5.139	1.616
#1	128600.	<.0000	6.043	19.40
#2	129400.	<.0000	5.619	19.85

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	20.58	12900.	<.0000	<.0000
Stddev	1.39	76.	1.345	.9006
%RSD	6.767	.5864	567.6	4.206
#1	21.56	12840.	.7143	<.0000
#2	19.59	12950.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	12440.	<.0000	29400.	327.3
Stddev	46.	7.698	32.	1.5
%RSD	.3685	11.26	.1087	.4545
#1	12410.	< .0000	29380.	326.2
#2	12470.	< .0000	29430.	328.3

Sample Name: MEGDIM0128 Run Time: 03/03/03 16:44

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	66400.	<.0000	441.7
Stddev	.0597	75.	.5547	22.0
%RSD	3.551	.1131	6.102	4.988
#1	<.0000	66340.	<.0000	457.3
#2	<.0000	66450.	<.0000	426.1

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.157	<.0000	7672.
Stddev	.3923	2.089	2.834	6.
%RSD	6.657	180.6	11.63	.0834
#1	<.0000	2.634	< .0000	7668.
#2	<.0000	< .0000	< .0000	7677.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.475	6762.	20030.	7.933
Stddev	.940	9.	207.	.852
%RSD	37.99	.1304	1.034	10.74
#1	1.810	6755.	19880.	8.536
#2	3.140	6768.	20170.	7.331

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	29.65	<.0000	8.838	90.25
Stddev	.24	2.034	.962	2.11
%RSD	.7960	106.0	10.88	2.334
#1	29.81	< .0000	8.158	88.76
#2	29.48	< .0000	9.518	91.74

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	320.6	<.0000
Stddev	505.1	2.4	.0931
%RSD	1.772	.7481	2.441
#1	< .0000	318.9	<.0000
#2	< .0000	322.3	<.0000

Method: SHER Sample Name: MEGDIM0110 F Operator:
Comment:
Run Time: 03/03/03 16:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	19.70	1.706	3175.
Stddev	.2882	12.31	.680	170.
%RSD	28.30	62.48	39.83	5.348
#1	<.0000	28.41	2.187	3055.
#2	<.0000	11.00	1.226	3296.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	262.5	286.3	.3449	<.0000
Stddev	1.9	2.1	.0435	.5691
%RSD	.7171	.7247	12.60	24.70
#1	261.1	287.7	.3141	<.0000
#2	263.8	284.8	.3756	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	133400.	<.0000	.2671	2.070
Stddev	671.	.0801	.1378	.721
%RSD	.5026	.9239	51.61	34.84
#1	133000.	<.0000	.1696	1.560
#2	133900.	<.0000	.3646	2.580

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.801	810.7	3.033	<.0000
Stddev	2.869	3.5	.084	2.616
%RSD	159.3	.4326	2.768	50.75
#1	< .0000	808.2	3.093	< .0000
#2	3.829	813.1	2.974	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4050.	<.0000	35460.	398.2
Stddev	15.	1.066	30.	1.3
%RSD	.3776	.3118	.0832	.3336
#1	4039.	< .0000	35440.	397.3
#2	4060.	< .0000	35490.	399.1

Sample Name: MEGDIM0110 F Run Time: 03/03/03 16:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	57790.	<.0000	116.4
Stddev	.5376	13.	.0535	23.3
%RSD	6.675	.0221	5.066	20.04
#1	<.0000	57800.	<.0000	99.88
#2	<.0000	57780.	<.0000	132.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4269.
Stddev	.7323	1.992	.6128	23.
%RSD	15.17	37.66	9.053	.5496
#1	<.0000	< .0000	<.0000	4285.
#2	<.0000	< .0000	<.0000	4252.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2401	1693.	<.0000	3.715
Stddev	.5486	.	345.1	4.261
%RSD	228.5	.0164	26.67	114.7
#1	<.0000	1693.	< .0000	6.728
#2	.6280	1693.	< .0000	.7025

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	25.57
Stddev	.5924	.4068	.6867	.38
%RSD	9.963	40660.	30.74	1.483
#1	<.0000	<.0000	<.0000	25.30
#2	<.0000	.2866	<.0000	25.83

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	3333.	.0195	.4651
%RSD	28.62	.0550	15.38
#1	< .000	<.0000	<.0000
#2	< .000	<.0000	<.0000

Method: SHER Sample Name: CCV-5 Operator:
Comment:
Run Time: 03/03/03 16:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	500.0	1986.	2005.	4813.
Stddev	2.4	21.	1.	127.
%RSD	.4758	1.075	.0593	2.637
#1	501.7	2001.	2004.	4723.
#2	498.3	1971.	2006.	4902.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2136.	2019.	1980.	<.0000
Stddev	11.	8.	3.	.7243
%RSD	.5051	.3785	.1656	70.76
#1	2144.	2025.	1982.	<.0000
#2	2128.	2014.	1978.	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2066.	1983.	1979.	1998.
Stddev	.	4.	3.	1.
%RSD	.0045	.2127	.1286	.0317
#1	2066.	1986.	1981.	1998.
#2	2066.	1980.	1977.	1998.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2044.	2040.	<.0000	<.0000
Stddev	5.	.	5.130	2.531
%RSD	.2280	.0213	17.43	5.835
#1	2047.	2040.	< .0000	< .0000
#2	2041.	2039.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10010.	2040.	2067.	1980.
Stddev	49.	2.	9.	7.
%RSD	.4862	.1112	.4471	.3745
#1	10050.	2042.	2073.	1986.
#2	9977.	2039.	2060.	1975.

Sample Name: CCV-5 Run Time: 03/03/03 16:54

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2081.	2173.	2111.	575.5
Stddev	7.	2.	2.	37.6
%RSD	.3602	.1008	.0987	6.531
#1	2076.	2175.	2113.	602.0
#2	2087.	2172.	2110.	548.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2154.	2095.	2143.	5790.
Stddev	12.	2.	3.	22.
%RSD	.5635	.0933	.1363	.3836
#1	2162.	2097.	2145.	5806.
#2	2145.	2094.	2141.	5774.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2016.	2051.	12430.	<.0000
Stddev	6.	1.	1501.	1.988
%RSD	.2739	.0446	12.08	2.557
#1	2020.	2052.	11370.	< .0000
#2	2012.	2050.	13490.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1970.	2012.	2139.
Stddev	1.895	7.	3.	27.
%RSD	161.7	.3723	.1388	1.273
#1	.1679	1975.	2014.	2120.
#2	< .0000	1965.	2010.	2158.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	576400.	2112.	<.0000
Stddev	30510.	2.	.8369
%RSD	5.294	.0864	14.80
#1	597900.	2113.	<.0000
#2	554800.	2110.	<.0000

Method: SHER Sample Name: CCB-5 Operator:
Comment:
Run Time: 03/03/03 16:57 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4.492
Stddev	1.151	15.41	1.027	14.28
%RSD	420.9	41.65	196.7	318.0
#1	.5402	< .0000	.2041	14.59
#2	< .0000	< .0000	< .0000	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0763	<.0000
Stddev	1.030	.2150	.0155	.5173
%RSD	1.641	23.52	20.28	117.9
#1	< .0000	<.0000	.0653	<.0000
#2	< .0000	<.0000	.0872	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.2023	<.0000	<.0000
Stddev	.8391	.0291	.1738	1.083
%RSD	18.64	14.38	50.64	85.02
#1	<.0000	.1818	<.0000	< .0000
#2	<.0000	.2229	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.3319	.5384	<.0000	1.334
Stddev	.6544	.3010	1.093	.729
%RSD	197.2	55.91	122.6	54.63
#1	<.0000	.7512	< .0000	1.850
#2	.7946	.3255	< .0000	.8188

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.9258	24.56	6.601	<.0000
Stddev	.7350	.95	4.658	.0894
%RSD	79.39	3.879	70.56	699.2
#1	1.445	23.89	9.894	.0504
#2	.4061	25.23	3.308	<.0000

Sample Name: CCB-5 Run Time: 03/03/03 16:57

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	4.386	36.35	<.0000	<.0000
Stddev	8.558	.80	.2725	40.17
%RSD	195.1	2.204	3963.	548.1
#1	10.44	36.92	.1858	< .0000
#2	< .0000	35.79	<.0000	21.08

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.8159	<.0000	<.0000	<.0000
Stddev	1.367	2.428	.8419	8.972
%RSD	167.6	1013.	784.1	62.59
#1	< .0000	1.477	.4880	< .0000
#2	1.783	< .0000	<.0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.2216	<.0000	<.0000	2.259
Stddev	.8881	3.466	1121.	.071
%RSD	400.7	208.5	98.82	3.145
#1	.8496	.7888	< .000	2.309
#2	<.0000	< .0000	< .000	2.209

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.5751	<.0000	1.087
Stddev	.3547	2.306	.6855	2.953
%RSD	24.94	400.9	78.57	271.6
#1	<.0000	2.205	<.0000	< .0000
#2	<.0000	< .0000	<.0000	3.175

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	9000.	.0134	<.0000
Stddev	2425.	.0290	.6499
%RSD	26.94	216.8	98.88
#1	10710.	.0339	<.0000
#2	7285.	<.0000	<.0000

Method: SHER Sample Name: MEGDIM0110F DUP Operator:
Comment:
Run Time: 03/03/03 17:01 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	24.53	<.0000	3061.
Stddev	4.323	4.02	.6432	52.
%RSD	172.0	16.39	60.78	1.711
#1	< .0000	21.69	<.0000	3098.
#2	.5440	27.37	<.0000	3024.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	265.6	288.2	.2374	<.0000
Stddev	1.3	.1	.0155	.5691
%RSD	.4746	.0520	6.527	17.10
#1	264.7	288.1	.2265	<.0000
#2	266.5	288.3	.2484	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	134500.	<.0000	.5807	<.0000
Stddev	662.	.1794	.1618	1.088
%RSD	.4923	2.053	27.86	32.84
#1	134100.	<.0000	.6951	< .0000
#2	135000.	<.0000	.4663	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2.380	830.8	<.0000	<.0000
Stddev	.246	4.4	.4204	1.415
%RSD	10.33	.5289	716.8	35.36
#1	2.206	827.7	.2386	< .0000
#2	2.554	833.9	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4100.	<.0000	35850.	401.0
Stddev	20.	6.908	74.	1.5
%RSD	.4774	2.103	.2070	.3671
#1	4086.	< .0000	35800.	400.0
#2	4114.	< .0000	35900.	402.1

Sample Name: MEGDIM0110F DUP Run Time: 03/03/03 17:01

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	58950.	<.0000	79.72
Stddev	.4778	96.	.0389	2.59
%RSD	7.444	.1625	5.096	3.251
#1	<.0000	58890.	<.0000	81.56
#2	<.0000	59020.	<.0000	77.89

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	4274.
Stddev	.0874	.4858	3.140	2.
%RSD	2.332	10.03	60.40	.0524
#1	<.0000	<.0000	< .0000	4273.
#2	<.0000	<.0000	< .0000	4276.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4618	1705.	<.0000	5.473
Stddev	.1829	1.	517.5	2.485
%RSD	39.60	.0787	26.50	45.41
#1	.3325	1704.	< .0000	3.715
#2	.5911	1706.	< .0000	7.230

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	28.09
Stddev	.8290	.2713	1.236	4.19
%RSD	13.94	40.34	20.87	14.92
#1	<.0000	<.0000	< .0000	25.12
#2	<.0000	<.0000	< .0000	31.05

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	4849.	.0772	.4651
%RSD	53.03	.2150	12.19
#1	< .000	<.0000	<.0000
#2	< .000	<.0000	<.0000

Method: SHER Sample Name: MEGDIM0110F SPK Operator:
Comment:
Run Time: 03/03/03 17:04 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	23.50	1934.	27.51	4873.
Stddev	.77	2.	1.03	63.
%RSD	3.268	.0947	3.740	1.302
#1	22.96	1933.	26.78	4918.
#2	24.05	1935.	28.24	4828.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	264.0	2227.	47.00	<.0000
Stddev	2.1	.	.34	1.707
%RSD	.8086	.0198	.7139	56.24
#1	262.5	2226.	47.23	< .0000
#2	265.5	2227.	46.76	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	134300.	<.0000	457.4	202.7
Stddev	319.	.2765	4.4	3.3
%RSD	.2373	1.121	.9697	1.612
#1	134100.	<.0000	454.3	205.0
#2	134500.	<.0000	460.5	200.4

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	248.2	1799.	<.0000	<.0000
Stddev	.5	16.	1.429	.6005
%RSD	.1996	.8881	218.8	8.354
#1	248.5	1788.	< .0000	<.0000
#2	247.8	1810.	.3576	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4069.	<.0000	35710.	867.2
Stddev	21.	4.109	62.	6.6
%RSD	.5255	1.355	.1750	.7623
#1	4054.	< .0000	35670.	862.5
#2	4084.	< .0000	35760.	871.9

Sample Name: MEGDIM0110F SPK Run Time: 03/03/03 17:04

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	58100.	462.6	219.0
Stddev	.4693	47.	4.7	13.0
%RSD	6.198	.0803	1.015	5.917
#1	<.0000	58130.	459.3	209.8
#2	<.0000	58070.	465.9	228.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	14.26	415.7	3.046	4291.
Stddev	1.17	4.9	2.604	24.
%RSD	8.217	1.181	85.47	.5616
#1	13.43	412.2	1.205	4274.
#2	15.09	419.1	4.887	4308.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4618	1700.	1816.	<.0000
Stddev	.0261	2.	604.	2.059
%RSD	5.659	.1172	33.24	25.47
#1	.4433	1699.	1389.	< .0000
#2	.4803	1702.	2243.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	28.87	456.2	1035.
Stddev	.5921	1.08	6.2	6.
%RSD	13.86	3.759	1.354	.5463
#1	<.0000	29.63	451.8	1031.
#2	<.0000	28.10	460.6	1039.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	111900.	457.0	<.0000
Stddev	7274.	4.3	.2791
%RSD	6.502	.9382	7.073
#1	117000.	454.0	<.0000
#2	106700.	460.0	<.0000

Method: SHER Sample Name: MEGDIM0110F L Operator:
Comment:
Run Time: 03/03/03 17:08 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	1.347	930.4
Stddev	.8652	16.45	1.497	3.2
%RSD	29.62	52.12	111.1	.3403
#1	<.0000	< .0000	2.406	932.6
#2	<.0000	< .0000	.2888	928.1

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	52.97	.1289	<.0000
Stddev	.7081	.51	.0524	.3105
%RSD	114.1	.9574	40.68	20.22
#1	<.0000	53.33	.1660	<.0000
#2	<.0000	52.61	.0919	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	26400.	<.0000	.2122	.9250
Stddev	54.	.0242	.2398	2.894
%RSD	.2036	1.437	113.0	312.9
#1	26440.	<.0000	.0427	2.972
#2	26360.	<.0000	.3817	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.924	160.3	<.0000	<.0000
Stddev	.084	.7	2.859	.4290
%RSD	4.364	.4642	267.6	67.38
#1	1.864	160.8	< .0000	<.0000
#2	1.983	159.8	.9533	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	566.4	<.0000	7214.	78.10
Stddev	3.4	1.708	10.	.38
%RSD	.6032	2.577	.1450	.4852
#1	568.8	< .0000	7207.	78.37
#2	564.0	< .0000	7222.	77.84

Sample Name: MEGDIM0110F L Run Time: 03/03/03 17:08

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	13520.	<.0000	29.33
Stddev	.3072	31.	.0827	34.99
%RSD	3.887	.2265	45.38	119.3
#1	<.0000	13540.	<.0000	4.587
#2	<.0000	13500.	<.0000	54.08

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	806.5
Stddev	.5476	.5828	1.149	1.6
%RSD	100.8	17.50	23.06	.1926
#1	<.0000	<.0000	< .0000	807.6
#2	<.0000	<.0000	< .0000	805.4

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	328.8	<.0000	2.359
Stddev	.2613	4.1	138.1	1.491
%RSD	176.7	1.245	21.68	63.21
#1	.0369	331.7	< .0000	1.305
#2	<.0000	325.9	< .0000	3.414

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	1.491
Stddev	.4742	1.899	.9620	1.646
%RSD	23.59	281.9	141.4	110.4
#1	<.0000	.6692	<.0000	.3268
#2	<.0000	< .0000	.0000	2.655

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1141.	<.0000	<.0000
Stddev	5860.	.0087	.0003
%RSD	513.8	.1322	.0122
#1	< .000	<.0000	<.0000
#2	5284.	<.0000	<.0000

Method: SHER Sample Name: MEGDIM0110F A Operator:
Comment:
Run Time: 03/03/03 17:12 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	84.43	3867.	61.86	6675.
Stddev	1.44	18.	.84	48.
%RSD	1.707	.4534	1.359	.7120
#1	85.45	3879.	61.26	6709.
#2	83.41	3854.	62.45	6642.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	251.5	4106.	93.10	<.0000
Stddev	1.2	6.	.03	2.121
%RSD	.4928	.1368	.0326	56.30
#1	250.7	4102.	93.08	< .0000
#2	252.4	4110.	93.12	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	131600.	<.0000	937.0	403.7
Stddev	499.	.4418	7.0	4.7
%RSD	.3789	1.073	.7482	1.161
#1	131200.	<.0000	932.1	400.3
#2	132000.	<.0000	942.0	407.0

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	495.8	2747.	<.0000	<.0000
Stddev	4.6	22.	4.877	.9005
%RSD	.9249	.7952	821.2	7.733
#1	492.6	2732.	2.855	<.0000
#2	499.1	2763.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	3988.	<.0000	34920.	1317.
Stddev	17.	1.947	59.	8.
%RSD	.4143	.7715	.1686	.5833
#1	3976.	< .0000	34880.	1312.
#2	4000.	< .0000	34960.	1322.

Sample Name: MEGDIM0110F A Run Time: 03/03/03 17:12

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	57420.	932.3	216.3
Stddev	.7423	11.	7.4	16.9
%RSD	9.372	.0184	.7944	7.791
#1	<.0000	57420.	927.1	204.3
#2	<.0000	57430.	937.5	228.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	31.38	814.7	13.67	4199.
Stddev	.80	10.4	.23	4.
%RSD	2.557	1.277	1.676	.0930
#1	30.81	807.3	13.84	4197.
#2	31.95	822.0	13.51	4202.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.1478	1660.	5243.	<.0000
Stddev	.4702	3.	310.	.8519
%RSD	318.2	.2084	5.922	4.284
#1	.4802	1658.	5463.	<.0000
#2	<.0000	1663.	5024.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	64.83	917.2	2000.
Stddev	.4738	1.49	1.0	6.
%RSD	12.30	2.300	.1042	.2890
#1	<.0000	65.89	916.5	1995.
#2	<.0000	63.78	917.9	2004.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	225900.	950.6	<.0000
Stddev	2624.	7.1	.0930
%RSD	1.162	.7475	3.928
#1	227700.	945.6	<.0000
#2	224000.	955.7	<.0000

Method: SHER Sample Name: MEGDIM0110F A Operator:
Comment:
Run Time: 03/03/03 17:12 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	83.82	3871.	71.96	6738.
Stddev	.57	24.	13.44	136.
%RSD	.6851	.6133	18.68	2.025
#1	83.41	3854.	62.45	6642.
#2	84.22	3888.	81.46	6835.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	254.1	4132.	93.69	<.0000
Stddev	2.4	31.	.81	1.242
%RSD	.9468	.7531	.8611	39.47
#1	252.4	4110.	93.12	< .0000
#2	255.8	4154.	94.26	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	132000.	<.0000	944.0	406.5
Stddev	104.	.3371	2.8	.7
%RSD	.0786	.8081	.2972	.1813
#1	132000.	<.0000	942.0	407.0
#2	132100.	<.0000	945.9	405.9

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	499.0	2767.	<.0000	<.0000
Stddev	.2	6.	.3364	3.517
%RSD	.0354	.2031	7.859	26.06
#1	499.1	2763.	<.0000	< .0000
#2	498.8	2771.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	4008.	<.0000	35060.	1326.
Stddev	12.	16.65	137.	5.
%RSD	.2950	6.270	.3913	.4066
#1	4000.	< .0000	34960.	1322.
#2	4017.	< .0000	35150.	1330.

Sample Name: MEGDIM0110F A Run Time: 03/03/03 17:12

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	57330.	939.6	218.1
Stddev	.4352	142.	2.9	14.2
%RSD	5.347	.2484	.3139	6.536
#1	<.0000	57430.	937.5	228.2
#2	<.0000	57230.	941.7	208.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	31.88	821.7	15.14	4221.
Stddev	.10	.5	2.30	26.
%RSD	.3008	.0591	15.18	.6230
#1	31.95	822.0	13.51	4202.
#2	31.81	821.3	16.76	4239.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4064	1671.	6036.	<.0000
Stddev	.8359	12.	1432.	3.053
%RSD	205.7	.7013	23.72	14.24
#1	<.0000	1663.	5024.	< .0000
#2	.9974	1679.	7048.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	63.78	919.3	2003.
Stddev	.8290	.00	2.0	1.
%RSD	20.20	.0001	.2216	.0336
#1	<.0000	63.78	917.9	2004.
#2	<.0000	63.78	920.7	2003.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	226300.	957.6	<.0000
Stddev	3233.	2.8	.3721
%RSD	1.429	.2904	17.15
#1	224000.	955.7	<.0000
#2	228600.	959.6	<.0000

Method: SHER Sample Name: MEGUSH8601F Operator:
Comment:
Run Time: 03/03/03 17:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.593	2249.
Stddev	.8645	9.658	.235	93.
%RSD	47.16	37.07	9.083	4.157
#1	<.0000	< .0000	2.427	2315.
#2	<.0000	< .0000	2.760	2183.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	134.4	686.6	.4018	<.0000
Stddev	.1	2.1	.0062	.5689
%RSD	.1025	.3103	1.548	34.58
#1	134.3	688.1	.3974	<.0000
#2	134.5	685.1	.4062	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	98860.	<.0000	5.378	.5037
Stddev	700.	.0835	.018	.7233
%RSD	.7082	.4076	.3263	143.6
#1	98360.	<.0000	5.391	<.0000
#2	99350.	<.0000	5.366	1.015

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.511	11.62	<.0000	<.0000
Stddev	2.459	.11	1.177	.6861
%RSD	162.8	.9408	99.08	27.26
#1	< .0000	11.69	< .0000	<.0000
#2	3.249	11.54	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	8320.	45.62	25150.	810.6
Stddev	53.	7.33	54.	3.6
%RSD	.6422	16.07	.2158	.4470
#1	8282.	40.43	25110.	808.1
#2	8358.	50.80	25190.	813.2

Sample Name: MEGUSH8601F Run Time: 03/03/03 17:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	90310.	223.4	66.90
Stddev	.2473	12.	1.4	36.29
%RSD	4.739	.0136	.6339	54.25
#1	<.0000	90320.	222.4	41.24
#2	<.0000	90300.	224.4	92.57

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2397.
Stddev	.3041	.9716	.7661	29.
%RSD	8.987	25.49	15.55	1.220
#1	<.0000	<.0000	<.0000	2376.
#2	<.0000	<.0000	<.0000	2418.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.0924	302.3	<.0000	3.665
Stddev	.9144	1.0	224.9	.071
%RSD	990.1	.3325	32.26	1.937
#1	<.0000	303.0	< .0000	3.715
#2	.7389	301.6	< .0000	3.615

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	42.12
Stddev	.1184	.5419	2.472	5.55
%RSD	2.396	29.71	43.89	13.18
#1	<.0000	<.0000	< .0000	38.20
#2	<.0000	<.0000	< .0000	46.05

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	211.7	<.0000
Stddev	201.1	1.3	1.209
%RSD	5.024	.6319	48.39
#1	< .0000	210.7	< .0000
#2	< .0000	212.6	< .0000

Method: SHER Sample Name: MEGDD0121F Operator:
Comment:
Run Time: 03/03/03 17:22 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	3.450	1805.
Stddev	1.633	15.14	.616	98.
%RSD	96.20	149.3	17.85	5.449
#1	< .0000	.5673	3.886	1736.
#2	< .0000	< .0000	3.015	1875.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	493.6	1391.	.3800	<.0000
Stddev	5.0	4.	.0309	2.121
%RSD	1.005	.2939	8.141	86.57
#1	490.1	1389.	.3581	< .0000
#2	497.1	1394.	.4018	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	68940.	<.0000	.1018	3.083
Stddev	251.	.3444	.1318	.359
%RSD	.3639	.7880	129.5	11.66
#1	68760.	<.0000	.0086	2.829
#2	69120.	<.0000	.1951	3.337

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.047	401.0	.1792	.1518
Stddev	.983	3.8	2.943	.7721
%RSD	93.87	.9419	1643.	508.7
#1	.3522	398.4	< .0000	<.0000
#2	1.742	403.7	2.260	.6977

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14660.	994.3	17280.	462.6
Stddev	57.	10.4	86.	4.1
%RSD	.3858	1.043	.4986	.8897
#1	14620.	987.0	17220.	459.7
#2	14700.	1002.	17340.	465.5

Sample Name: MEGDD0121F Run Time: 03/03/03 17:22

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	113000.	<.0000	106.3
Stddev	.2048	46.	.0243	37.6
%RSD	2.993	.0406	15.04	35.35
#1	<.0000	113000.	<.0000	79.72
#2	<.0000	113100.	<.0000	132.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2417.
Stddev	.5134	.1945	3.369	9.
%RSD	23.97	4.925	68.38	.3918
#1	<.0000	<.0000	< .0000	2410.
#2	<.0000	<.0000	< .0000	2423.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.1108	1789.	47.58	3.615
Stddev	.2090	9.	1035.	1.704
%RSD	188.6	.5100	2175.	47.15
#1	.2586	1783.	< .000	4.820
#2	<.0000	1796.	779.4	2.410

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.2867	<.0000	49.11
Stddev	1.421	1.085	2.060	6.28
%RSD	28.29	378.5	163.2	12.78
#1	< .0000	1.054	< .0000	44.67
#2	< .0000	< .0000	.1943	53.55

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	106.3	<.0000
Stddev	100.9	1.2	1.023
%RSD	.6955	1.131	20.47
#1	< .0000	105.5	< .0000
#2	< .0000	107.2	< .0000

Method: SHER Sample Name: MEGDSH0121F Operator:
Comment:
Run Time: 03/03/03 17:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.535	2535.
Stddev	1.249	4.636	1.177	89.
%RSD	59.33	36.64	46.45	3.499
#1	< .0000	< .0000	1.702	2598.
#2	< .0000	< .0000	3.367	2472.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	102.7	726.2	.3319	<.0000
Stddev	.4	3.1	.0497	.0516
%RSD	.3732	.4209	14.97	1.295
#1	102.4	724.0	.2968	<.0000
#2	102.9	728.3	.3670	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	83450.	<.0000	4.433	2.795
Stddev	458.	.0524	.179	2.532
%RSD	.5487	.2458	4.047	90.59
#1	83120.	<.0000	4.560	4.585
#2	83770.	<.0000	4.306	1.005

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.221	28.90	.7148	<.0000
Stddev	.656	.14	.1676	1.287
%RSD	12.57	.4700	23.45	326.4
#1	4.757	28.81	.8334	.5157
#2	5.685	29.00	.5963	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	6573.	<.0000	10730.	2849.
Stddev	54.	1.745	82.	6.
%RSD	.8187	1.366	.7689	.2049
#1	6535.	< .0000	10670.	2845.
#2	6611.	< .0000	10790.	2853.

Sample Name: MEGDSH0121F Run Time: 03/03/03 17:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	52990.	7.859	64.15
Stddev	.2644	166.	.009	37.58
%RSD	4.608	.3141	.1166	58.58
#1	<.0000	52870.	7.865	90.72
#2	<.0000	53110.	7.852	37.58

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2853.
Stddev	.4560	.5346	1.992	27.
%RSD	84.43	19.46	526.9	.9493
#1	<.0000	<.0000	< .0000	2834.
#2	<.0000	<.0000	1.030	2872.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	220.2	2011.	3.916
Stddev	.4963	.2	604.	4.403
%RSD	158.0	.1059	30.05	112.4
#1	<.0000	220.1	2438.	7.029
#2	.0369	220.4	1583.	.8027

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.013	<.0000	49.13
Stddev	.3555	.814	1.236	4.06
%RSD	7.718	40.46	43.89	8.255
#1	<.0000	2.588	< .0000	52.00
#2	<.0000	1.437	< .0000	46.26

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	188.6	<.0000
Stddev	2325.	.1	.8372
%RSD	18.60	.0506	45.47
#1	< .000	188.6	<.0000
#2	< .000	188.7	<.0000

Method: SHER Sample Name: MEGDD0123F Operator:
Comment:
Run Time: 03/03/03 17:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1055.	<.0000	2559.
Stddev	2.209	1.	2.429	32.
%RSD	155.0	.0619	26.47	1.239
#1	.1366	1055.	< .0000	2582.
#2	< .0000	1056.	< .0000	2537.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1446.	968.0	.4042	.0007
Stddev	4.	.6	.0464	.3104
%RSD	.2677	.0608	11.49	45760.
#1	1444.	968.4	.3713	<.0000
#2	1449.	967.6	.4370	.2202

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	7858.	<.0000	.8010	.8529
Stddev	48.	.3107	.1618	2.159
%RSD	.6068	.9882	20.20	253.2
#1	7824.	<.0000	.6866	< .0000
#2	7892.	<.0000	.9155	2.380

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	28.81	1987.	<.0000	<.0000
Stddev	1.23	17.	.0000	1.630
%RSD	4.263	.8774	.0017	80.22
#1	27.94	1974.	<.0000	< .0000
#2	29.68	1999.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	21990.	4147.	3107.	32.87
Stddev	72.	19.	6.	.14
%RSD	.3290	.4674	.1972	.4191
#1	21940.	4133.	3103.	32.78
#2	22040.	4161.	3112.	32.97

Sample Name: MEGDD0123F Run Time: 03/03/03 17:29

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	4.665	157900.	<.0000	73.31
Stddev	.418	2052.	.1654	19.44
%RSD	8.965	1.300	47.14	26.52
#1	4.369	159300.	<.0000	59.56
#2	4.961	156400.	<.0000	87.05

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	1314.
Stddev	1.655	1.749	.3063	14.
%RSD	73.61	103.0	4.058	1.029
#1	< .0000	< .0000	<.0000	1324.
#2	< .0000	< .0000	<.0000	1305.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.755	1456.	3109.	6.176
Stddev	.026	9.	293.	2.059
%RSD	1.490	.5970	9.429	33.35
#1	1.736	1450.	2902.	7.632
#2	1.773	1462.	3316.	4.719

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.680	<.0000	<.0000	49.03
Stddev	.000	.5424	1.923	3.46
%RSD	.0039	6.813	110.0	7.061
#1	2.681	<.0000	< .0000	51.48
#2	2.680	<.0000	< .0000	46.58

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	52.05	<.0000
Stddev	4546.	.53	1.209
%RSD	23.66	1.009	38.31
#1	< .000	51.68	< .0000
#2	< .000	52.43	< .0000

Method: SHER Sample Name: MEGDD0115F Operator:
Comment:
Run Time: 03/03/03 17:33 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3.973	2.283	298.5
Stddev	.3843	12.42	.405	182.4
%RSD	31.44	312.5	17.73	61.11
#1	<.0000	< .0000	1.997	169.5
#2	<.0000	12.75	2.569	427.4

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1322.	700.1	.4107	.3299
Stddev	17.	5.0	.0620	1.088
%RSD	1.264	.7159	15.11	329.7
#1	1334.	696.5	.3668	1.099
#2	1310.	703.6	.4546	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	5551.	<.0000	.0170	4.557
Stddev	24.	.1432	.2035	.722
%RSD	.4345	.6688	1194.	15.85
#1	5534.	<.0000	<.0000	4.046
#2	5568.	<.0000	.1609	5.067

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.279	75.76	.8326	<.0000
Stddev	2.459	1.88	4.371	.1717
%RSD	192.2	2.479	525.0	113.3
#1	< .0000	74.43	< .0000	<.0000
#2	3.018	77.08	3.923	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	23120.	2670.	3488.	3.543
Stddev	26.	13.	17.	.010
%RSD	.1141	.4971	.4808	.2707
#1	23100.	2660.	3476.	3.550
#2	23140.	2679.	3500.	3.536

Sample Name: MEGDD0115F Run Time: 03/03/03 17:33

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	146200.	.5024	21.99
Stddev	.0691	186.	.2337	50.53
%RSD	1.680	.1268	46.52	229.8
#1	<.0000	146100.	.6676	< .0000
#2	<.0000	146400.	.3371	57.72

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.9247	<.0000	<.0000	667.0
Stddev	.7005	1.361	2.680	15.2
%RSD	75.76	48.92	72.78	2.276
#1	1.420	< .0000	< .0000	656.3
#2	.4294	< .0000	< .0000	677.8

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3140	1170.	426.0	2.962
Stddev	.2873	13.	429.1	3.337
%RSD	91.50	1.083	100.7	112.7
#1	.5172	1161.	729.4	5.322
#2	.1109	1179.	122.6	.6027

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	45.63
Stddev	1.184	5.428	.6868	2.34
%RSD	58.94	102.9	28.29	5.124
#1	< .0000	< .0000	<.0000	47.28
#2	< .0000	< .0000	<.0000	43.97

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	10.77	<.0000
Stddev	4853.	.09	.0930
%RSD	59.58	.8337	4.161
#1	< .000	10.70	<.0000
#2	< .000	10.83	<.0000

Method: SHER Sample Name: CCV-6 Operator:
Comment:
Run Time: 03/03/03 17:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	502.1	2007.	2036.	4902.
Stddev	1.2	19.	4.	35.
%RSD	.2296	.9582	.1906	.7129
#1	501.3	2021.	2039.	4927.
#2	502.9	1993.	2033.	4878.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2162.	2038.	2009.	<.0000
Stddev	4.	12.	14.	.2586
%RSD	.1739	.5769	.7185	101.3
#1	2165.	2046.	2019.	<.0000
#2	2160.	2030.	1999.	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2097.	2004.	2025.	2024.
Stddev	2.	.	1.	5.
%RSD	.1042	.0226	.0541	.2502
#1	2099.	2004.	2026.	2027.
#2	2096.	2004.	2024.	2020.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2062.	2063.	<.0000	<.0000
Stddev	10.	1.	2.691	.7287
%RSD	.4650	.0449	7.885	1.615
#1	2069.	2062.	< .0000	<.0000
#2	2055.	2064.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10070.	2060.	2082.	2002.
Stddev	9.	8.	7.	3.
%RSD	.0848	.3908	.3549	.1732
#1	10070.	2066.	2087.	2005.
#2	10060.	2054.	2077.	2000.

Sample Name: CCV-6 Run Time: 03/03/03 17:42

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2116.	2199.	2154.	589.2
Stddev	3.	11.	.	12.9
%RSD	.1450	.4789	.0158	2.199
#1	2114.	2207.	2154.	580.0
#2	2118.	2192.	2154.	598.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2067.	2123.	2168.	5828.
Stddev	2.	1.	1.	32.
%RSD	.0773	.0426	.0609	.5494
#1	2068.	2123.	2169.	5851.
#2	2066.	2124.	2167.	5806.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2047.	2077.	10700.	<.0000
Stddev	.	15.	259.	1.492
%RSD	.0004	.7227	2.419	1.908
#1	2047.	2088.	10880.	< .0000
#2	2047.	2066.	10510.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2000.	2036.	2158.
Stddev	.8291	2.	16.	8.
%RSD	141.5	.0754	.7962	.3886
#1	<.0000	2001.	2047.	2152.
#2	.0004	1999.	2024.	2164.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	581900.	2142.	<.0000
Stddev	11320.	1.	.0930
%RSD	1.945	.0274	1.537
#1	589900.	2141.	<.0000
#2	573900.	2142.	<.0000

Method: SHER Sample Name: CCB-6 Operator:
Comment:
Run Time: 03/03/03 17:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.693	<.0000
Stddev	3.073	8.770	2.268	74.57
%RSD	98.37	30.55	84.22	118.7
#1	< .0000	< .0000	4.297	< .0000
#2	< .0000	< .0000	1.089	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0961	<.0000
Stddev	2.801	.2122	.0271	1.966
%RSD	4.695	31.08	28.22	116.8
#1	< .0000	<.0000	.0770	< .0000
#2	< .0000	<.0000	.1153	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.2109	<.0000	<.0000
Stddev	2.350	.0121	.1857	3.613
%RSD	180.0	5.749	151.1	708.0
#1	.3558	.2194	.0084	2.044
#2	< .0000	.2023	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	.4436	<.0000	<.0000
Stddev	.4951	.3246	2.018	2.058
%RSD	28.47	73.16	84.85	522.2
#1	<.0000	.6731	< .0000	< .0000
#2	<.0000	.2141	< .0000	1.061

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	3.787	18.91	<.0000	.0292
Stddev	1.055	.05	5.836	.0631
%RSD	27.87	.2623	111.8	215.7
#1	3.041	18.87	< .0000	.0738
#2	4.533	18.94	< .0000	<.0000

Sample Name: CCB-6 Run Time: 03/03/03 17:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	10.43	49.03	<.0000	.9165
Stddev	12.38	1.33	.1411	12.96
%RSD	118.7	2.722	164.0	1414.
#1	19.18	49.97	.0137	10.08
#2	1.677	48.08	<.0000	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.5582	1.099	<.0000	<.0000
Stddev	.8200	1.700	.6889	6.164
%RSD	146.9	154.6	57.86	47.02
#1	1.138	2.301	<.0000	< .0000
#2	< .0000	< .0000	<.0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.7572	<.0000	305.2	1.004
Stddev	.1306	3.247	500.2	.284
%RSD	17.25	215.9	163.9	28.28
#1	.8496	.7921	< .0000	.8034
#2	.6649	< .0000	658.9	1.205

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	2.135
Stddev	1.066	2.034	3.706	6.540
%RSD	47.16	132.6	764.9	306.3
#1	< .0000	< .0000	2.136	< .0000
#2	< .0000	< .0000	< .0000	6.760

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	.2099	<.0000
Stddev	3435.	.0946	1.208
%RSD	601.2	45.09	83.56
#1	1857.	.2768	< .0000
#2	< .000	.1430	< .0000

Method: SHER Sample Name: CRI-2 Operator:
Comment:
Run Time: 03/03/03 17:55 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	19.28	<.0000	18.30	155.9
Stddev	.77	1.221	1.17	98.4
%RSD	3.977	3.799	6.398	63.09
#1	18.74	< .0000	19.13	225.5
#2	19.82	< .0000	17.47	86.38

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	9.136	<.0000
Stddev	.0422	.4447	.114	.5694
%RSD	.0640	57.21	1.248	222.3
#1	<.0000	<.0000	9.055	.1465
#2	<.0000	<.0000	9.216	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	10.12	96.63	21.47
Stddev	.0005	.02	.17	1.45
%RSD	.0151	.1521	.1756	6.729
#1	<.0000	10.13	96.75	20.45
#2	<.0000	10.10	96.51	22.49

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	47.14	.6245	<.0000	<.0000
Stddev	1.14	.1674	2.185	3.302
%RSD	2.425	26.80	917.9	247.5
#1	46.33	.7428	< .0000	< .0000
#2	47.95	.5061	1.307	1.001

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	2.621	21.50	<.0000	29.17
Stddev	1.119	2.99	14.38	.17
%RSD	42.69	13.89	1747.	.5698
#1	3.412	19.39	< .0000	29.29
#2	1.830	23.61	9.345	29.05

Sample Name: CRI-2 Run Time: 03/03/03 17:55

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	39.19	83.46	6.414
Stddev	.1960	.36	.06	2.593
%RSD	3.800	.9130	.0735	40.42
#1	<.0000	38.94	83.42	8.248
#2	<.0000	39.45	83.50	4.581

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	7.540	127.0	9.313	<.0000
Stddev	2.005	1.5	2.222	11.79
%RSD	26.59	1.216	23.86	118.7
#1	6.122	125.9	10.88	< .0000
#2	8.957	128.1	7.742	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	146.6	<.0000
Stddev	.3134	.8956	552.7	1.348
%RSD	106.1	56.56	377.0	38.93
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	<.0000	537.4	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	19.95	92.50	203.0
Stddev	1.065	2.85	1.50	1.8
%RSD	115.7	14.28	1.626	.8639
#1	< .0000	21.96	91.44	204.3
#2	< .0000	17.93	93.57	201.8

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	31570.	42.18	<.0000
Stddev	3231.	.14	.0929
%RSD	10.23	.3373	5.889
#1	29290.	42.28	<.0000
#2	33860.	42.08	<.0000

Method: SHER Sample Name: ICSA-2 Operator:
Comment:
Run Time: 03/03/03 17:59 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	460200.	<.0000	168600.
Stddev	.9599	272.	2.547	29.
%RSD	4.680	.0590	.2027	.0172
#1	<.0000	460000.	< .0000	168600.
#2	<.0000	460400.	< .0000	168700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0533	11.19
Stddev	.0145	.2019	.0280	2.27
%RSD	.0029	9.131	52.47	20.33
#1	<.0000	<.0000	.0731	9.583
#2	<.0000	<.0000	.0335	12.80

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	400300.	<.0000	<.0000	4.045
Stddev	84.	.1406	.0959	1.636
%RSD	.0210	28.88	26.94	40.43
#1	400300.	<.0000	<.0000	5.202
#2	400200.	<.0000	<.0000	2.889

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	126200.	<.0000	<.0000
Stddev	1.475	311.	3.615	.8620
%RSD	5.069	.2463	103.1	.8760
#1	< .0000	126000.	< .0000	<.0000
#2	< .0000	126400.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	452000.	3.946
Stddev	.3237	7.724	8.	.098
%RSD	8.143	.3143	.0017	2.471
#1	<.0000	< .0000	452000.	3.877
#2	<.0000	< .0000	452000.	4.015

Sample Name: ICSA-2 Run Time: 03/03/03 17:59

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	128.3	<.0000	3775.
Stddev	.5965	.2	2.009	63.
%RSD	2.420	.1436	.5987	1.677
#1	<.0000	128.2	< .0000	3730.
#2	<.0000	128.5	< .0000	3820.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	5.181
Stddev	.6802	3.307	1.307	8.428
%RSD	.2765	93.87	.4993	162.7
#1	<.0000	< .0000	< .0000	11.14
#2	<.0000	< .0000	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.311	8.396	224200.	45.54
Stddev	1.019	2.688	1060.	1.07
%RSD	77.68	32.01	.4725	2.343
#1	2.032	6.496	223500.	46.29
#2	.5910	10.30	225000.	44.78

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.183	1.084	.9619	2.474
%RSD	2.300	12.70	8.322	9.467
#1	< .0000	< .0000	<.0000	< .0000
#2	< .0000	< .0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	37.88
Stddev	3948.	.0859	.84
%RSD	2.120	.0197	2.206
#1	< .000	<.0000	37.29
#2	< .000	<.0000	38.47

Method: SHER Sample Name: ICSAB-2 Operator:
Comment:
Run Time: 03/03/03 18:06 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	985.9	457700.	<.0000	175600.
Stddev	.1	1091.	.7599	79.
%RSD	.0109	.2383	.0605	.0449
#1	986.0	456900.	<.0000	175600.
#2	985.9	458500.	<.0000	175700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	471.5	439.3	15.29
Stddev	.0190	2.2	.3	1.55
%RSD	.0038	.4571	.0680	10.15
#1	<.0000	473.0	439.5	14.19
#2	<.0000	470.0	439.1	16.39

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	399300.	860.1	457.7	492.7
Stddev	1679.	1.4	.1	6.9
%RSD	.4204	.1686	.0320	1.406
#1	398100.	859.0	457.6	497.6
#2	400500.	861.1	457.8	487.8

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	441.1	125500.	<.0000	<.0000
Stddev	1.6	86.	3.027	1.888
%RSD	.3727	.0686	283.1	1.749
#1	442.3	125400.	< .0000	< .0000
#2	440.0	125500.	1.071	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	451000.	448.6
Stddev	1.207	27.23	245.	.6
%RSD	45.68	1.121	.0544	.1345
#1	< .0000	< .0000	451100.	449.0
#2	< .0000	< .0000	450800.	448.2

Sample Name: ICSAB-2 Run Time: 03/03/03 18:06

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	116.1	914.1	4047.
Stddev	.0854	1.1	3.2	35.
%RSD	.3179	.9133	.3551	.8641
#1	<.0000	116.8	911.8	4071.
#2	<.0000	115.3	916.4	4022.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	952.0	<.0000	<.0000	<.0000
Stddev	2.1	.5191	.4838	14.61
%RSD	.2229	9.298	.1817	930.1
#1	950.5	<.0000	<.0000	< .0000
#2	953.5	<.0000	<.0000	8.758

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.1662	8.238	233600.	26.11
Stddev	.6531	.000	309.	.43
%RSD	392.9	.0014	.1323	1.631
#1	<.0000	8.239	233800.	26.41
#2	.6280	8.238	233400.	25.81

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	434.6	474.5
Stddev	.1190	3.120	1.1	6.9
%RSD	.2288	17.68	.2518	1.453
#1	<.0000	< .0000	433.8	469.6
#2	<.0000	< .0000	435.3	479.3

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	934.6	38.67
Stddev	7172.	2.3	1.58
%RSD	8.458	.2422	4.088
#1	< .000	933.0	37.56
#2	< .000	936.3	39.79

Method: SHER Sample Name: CCV-7 Operator:
Comment:
Run Time: 03/03/03 18:10 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	500.1	1987.	2007.	4745.
Stddev	.0	9.	2.	136.
%RSD	.0007	.4450	.0999	2.875
#1	500.1	1981.	2006.	4842.
#2	500.1	1994.	2009.	4649.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2127.	2012.	1982.	<.0000
Stddev	4.	1.	2.	.2069
%RSD	.1691	.0605	.1176	8.572
#1	2124.	2012.	1984.	<.0000
#2	2129.	2011.	1980.	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2068.	1978.	1978.	2001.
Stddev	1.	3.	5.	5.
%RSD	.0251	.1695	.2644	.2540
#1	2067.	1975.	1975.	1997.
#2	2068.	1980.	1982.	2004.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2034.	2051.	<.0000	<.0000
Stddev	.	5.	4.541	.6429
%RSD	.0114	.2475	15.03	1.410
#1	2034.	2055.	< .0000	<.0000
#2	2034.	2048.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9981.	2047.	2057.	1975.
Stddev	18.	4.	7.	1.
%RSD	.1826	.2019	.3207	.0452
#1	9968.	2050.	2061.	1975.
#2	9993.	2044.	2052.	1976.

Sample Name: CCV-7 Run Time: 03/03/03 18:10

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2075.	2171.	2111.	563.5
Stddev	17.	2.	6.	20.7
%RSD	.7964	.1081	.2680	3.680
#1	2063.	2173.	2107.	548.9
#2	2086.	2170.	2115.	578.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2040.	2092.	2143.	5772.
Stddev	4.	7.	5.	6.
%RSD	.2186	.3492	.2438	.1064
#1	2037.	2087.	2140.	5776.
#2	2043.	2097.	2147.	5768.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2022.	2059.	10870.	<.0000
Stddev	7.	1.	1328.	1.066
%RSD	.3550	.0374	12.22	1.475
#1	2016.	2060.	9927.	< .0000
#2	2027.	2059.	11810.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.0004	1969.	2012.	2138.
Stddev	.2369	7.	1.	4.
%RSD	56720.	.3728	.0402	.1895
#1	<.0000	1964.	2013.	2141.
#2	.1679	1975.	2012.	2135.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	550200.	2117.	<.0000
Stddev	8077.	5.	.0931
%RSD	1.468	.2496	1.862
#1	555900.	2113.	<.0000
#2	544500.	2121.	<.0000

Method: SHER Sample Name: CCB-7 Operator:
Comment:
Run Time: 03/03/03 18:17 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	2.678	<.0000
Stddev	.1921	2.622	1.423	26.97
%RSD	12.86	14.52	53.14	70.71
#1	<.0000	< .0000	1.672	< .0000
#2	<.0000	< .0000	3.684	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0242	<.0000
Stddev	2.166	.3410	.0622	.7244
%RSD	3.673	34.01	256.9	198.1
#1	< .0000	<.0000	<.0000	<.0000
#2	< .0000	<.0000	.0682	.1466

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1.782	.1492	<.0000	<.0000
Stddev	.000	.1188	.0539	3.615
%RSD	.0227	79.64	32.63	353.3
#1	1.783	.2332	<.0000	1.533
#2	1.782	.0652	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.8693	.9070	<.0000	1.395
Stddev	2.702	.2989	2.690	.386
%RSD	310.8	32.96	94.28	27.67
#1	2.780	1.118	< .0000	1.122
#2	< .0000	.6956	< .0000	1.668

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	2.665	24.31	<.0000	.0216
Stddev	3.357	1.36	2.330	.0667
%RSD	126.0	5.585	23.54	309.2
#1	.2915	23.35	< .0000	.0687
#2	5.039	25.27	< .0000	<.0000

Sample Name: CCB-7 Run Time: 03/03/03 18:17

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	9.973	35.75	.1858	.9179
Stddev	12.02	.09	.0584	41.47
%RSD	120.5	.2411	31.42	4517.
#1	18.47	35.69	.2271	< .0000
#2	1.472	35.81	.1445	30.24

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.5155	<.0000	<.0000
Stddev	2.249	3.497	2.067	.5576
%RSD	197.3	678.3	112.3	5.618
#1	< .0000	2.988	< .0000	<.0000
#2	.4506	< .0000	< .0000	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.7388	.6337	658.3	3.012
Stddev	.2612	2.016	276.3	.568
%RSD	35.36	318.1	41.97	18.86
#1	.5541	< .0000	853.6	3.414
#2	.9235	2.059	462.9	2.611

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.3833	<.0000	<.0000
Stddev	.1184	.6778	1.098	2.622
%RSD	10.88	176.8	70.70	217.8
#1	<.0000	<.0000	< .0000	< .0000
#2	<.0000	.8627	< .0000	.6503

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	.1946	<.0000
Stddev	3031.	.0568	1.209
%RSD	84.86	29.19	83.58
#1	< .000	.2348	< .0000
#2	< .000	.1545	< .0000

HGC-48

KB

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Method Name: mercury
Method Description:
Element: Hg

Date: 02/19/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: Results Data Set Name:

Element: Hg Seq. No.: 63 AS Loc.: --- Date: 02/19/2003
Sample ID: Sample

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

Method Name: mercury
Method Description:
Element: Hg

Date: 02/19/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: Results Data Set Name:

Element: Hg Seq. No.: 63 AS Loc.: --- Date: 02/19/2003
Sample ID: Sample

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0553	0.0553	0.0007	0.0133	0.0011	04:42:58	No
Mean:	0.0553	0.0553	0.0007				
SD :							
%RSD:							

Method Name: mercury
Method Description:
Element: Hg

Date: 02/20/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: HGC-48.SIF Results Data Set Name: HGC-48

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/20/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0001	-0.0026	0.0001	10:18:03	No
2			-0.0003	-0.0231	-0.0003	10:18:32	No
Mean:			-0.0001				
SD :			0.0002				
%RSD:			210.5600				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/20/2003
Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0063	0.0335	0.0062	10:19:46	No
2			0.0070	0.0433	0.0069	10:20:15	No
Mean:			0.0066				
SD :			0.0005				
%RSD:			7.8950				

[Hg] Standard number 1 applied. [0.5000]
Correlation Coefficient: 1.00000 Slope: 0.01328

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/20/2003
Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0134	0.0720	0.0133	10:21:28	No
2			0.0139	0.0798	0.0138	10:21:57	No
Mean:			0.0137				
SD :			0.0004				
%RSD:			2.6583				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.01290

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/20/2003
Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0274	0.1506	0.0273	10:23:11	No
2			0.0251	0.1214	0.0250	10:23:40	No
Mean:			0.0263				
SD :			0.0016				
%RSD:			6.2021				

S-shaped calibration curve detected. Two-coefficient equation used.
[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99968 Slope: 0.01356

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/20/2003
Sample ID: 5.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0673	0.3605	0.0672	10:24:55	No
2			0.0670	0.3515	0.0669	10:25:24	No
Mean:			0.0671				
SD :			0.0002				
%RSD:			0.2487				

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99991 Slope: 0.01338

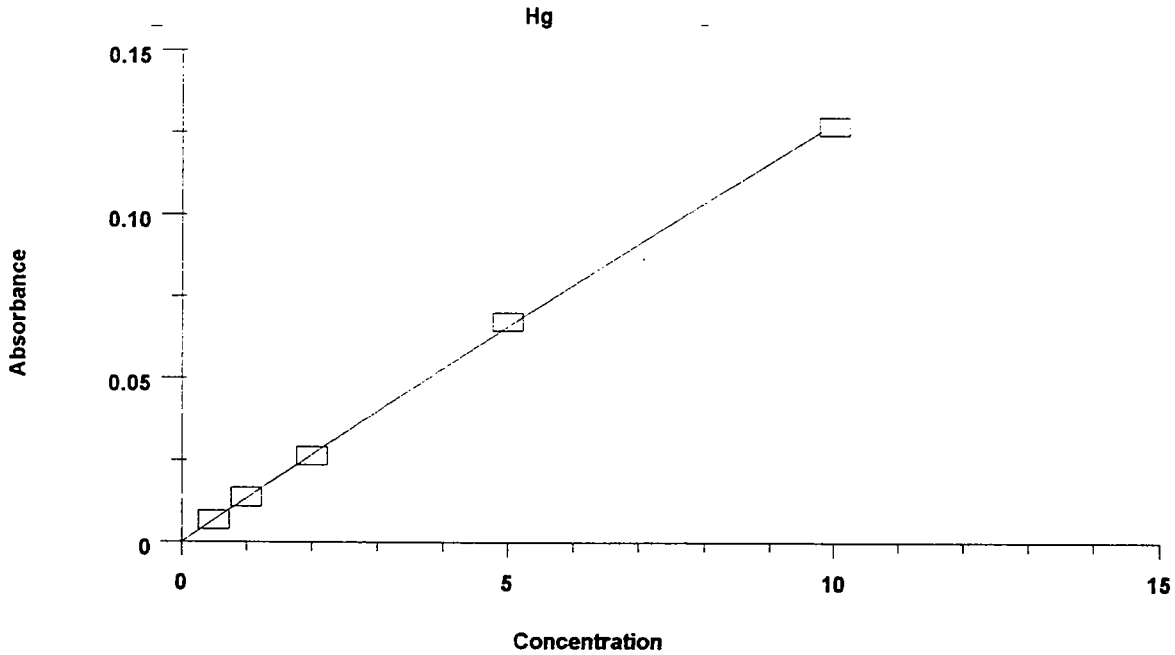
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/20/2003
Sample ID: 10.0 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1269	0.6743	0.1268	10:26:41	No
2			0.1264	0.6724	0.1263	10:27:10	No
Mean:			0.1266				
SD :			0.0003				
%RSD:			0.2517				

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99981 Slope: 0.01352

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	-0.0001	----	----	----	----
0.5 ppb	0.0066	0.5000	0.4926	0.00052	7.9
1.00 ppb	0.0137	1.0000	1.018	0.00036	2.7
2.00 ppb	0.0263	2.0000	1.965	0.00163	6.2
5.00 ppb	0.0671	5.0000	5.113	0.00017	0.2
10.0 ppb	0.1266	10.0000	9.902	0.00032	0.3
Correlation Coefficient: 0.99981		Slope:	0.01352	----	



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Element: Hg Seq. No.: 7 AS Loc.: 4 Date: 02/20/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.981	1.981	0.0265	0.1365	0.0264	10:28:30	No
2	1.988	1.988	0.0266	0.1381	0.0265	10:28:59	No
Mean:	1.984	1.984	0.0265				
SD :	0.00551	0.00551	0.0001				
%RSD:	0.3	0.3	0.2743				

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QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 02/20/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0994	0.0994	0.0013	0.0057	0.0012	10:30:12	No
2	0.0252	0.0252	0.0003	-0.0041	0.0002	10:30:41	No
Mean:	0.0623	0.0623	0.0008				
SD :	0.05253	0.05253	0.0007				
%RSD:	84.3	84.3	84.2958				

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 9 Date: 02/20/2003
Sample ID: PB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1496	0.1496	0.0020	0.0177	0.0019	10:31:51	No
2	0.0106	0.0106	0.0001	-0.0103	0.0000	10:32:20	No
Mean:	0.0801	0.0801	0.0011				
SD :	0.09826	0.09826	0.0013				
%RSD:	122.7	122.7	122.6900				

Element: Hg Seq. No.: 10 AS Loc.: 10 Date: 02/20/2003
Sample ID: 0218-F01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0570	0.0570	0.0008	-0.0111	0.0007	10:33:33	No
2	0.0565	0.0565	0.0008	-0.0143	0.0007	10:34:02	No
Mean:	0.0567	0.0567	0.0008				
SD :	0.00036	0.00036	0.0000				
%RSD:	0.6	0.6	0.6361				

Element: Hg Seq. No.: 11 AS Loc.: 11 Date: 02/20/2003
Sample ID: 0218-F02

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0585	0.0585	0.0008	0.0061	0.0007	10:35:14	No
2	-0.0003	-0.0003	0.0000	-0.0071	-0.0001	10:35:43	No
Mean:	0.0291	0.0291	0.0004				
SD :	0.04155	0.04155	0.0006				
%RSD:	142.8	142.8	142.8299				

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/20/2003
Sample ID: DUP 0218-F02

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0584	0.0584	0.0008	0.0053	0.0007	10:36:56	No
2	0.0115	0.0115	0.0002	-0.0035	0.0001	10:37:25	No
Mean:	0.0350	0.0350	0.0005				
SD :	0.03317	0.03317	0.0004				
%RSD:	94.8	94.8	94.7733				

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/20/2003
Sample ID: SPK 0218-F02

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.798	1.798	0.0240	0.1310	0.0239	10:38:39	No
2	1.738	1.738	0.0233	0.1190	0.0232	10:39:08	No
Mean:	1.768	1.768	0.0237				
SD :	0.04219	0.04219	0.0006				
%RSD:	2.4	2.4	2.3627				

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/20/2003
Sample ID: 0218-J01 MEGDIMC117

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1292	0.1292	0.0017	0.0075	0.0016	10:40:24	No
2	0.1262	0.1262	0.0017	0.0080	0.0016	10:40:53	No
Mean:	0.1277	0.1277	0.0017				
SD :	0.00216	0.00216	0.0000				
%RSD:	1.7	1.7	1.6936				

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/20/2003
Sample ID: 0218-J02 MEGDDC243

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1001	0.1001	0.0014	0.0099	0.0012	10:42:09	No
2	0.0532	0.0532	0.0007	0.0050	0.0006	10:42:38	No
Mean:	0.0767	0.0767	0.0010				
SD :	0.03314	0.03314	0.0004				
%RSD:	43.2	43.2	43.2119				

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 02/20/2003
Sample ID: 0218-J03 MEGDDC233

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0854	0.0854	0.0012	0.0080	0.0011	10:43:56	No
2	0.0693	0.0693	0.0009	0.0050	0.0008	10:44:25	No
Mean:	0.0773	0.0773	0.0010				
SD :	0.01137	0.01137	0.0002				
%RSD:	14.7	14.7	14.7013				

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 02/20/2003
Sample ID: 0218-J04 MEGDDC14

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0452	0.0452	0.0006	-0.0006	0.0005	10:45:39	No
2	0.1128	0.1128	0.0015	0.0100	0.0014	10:46:08	No
Mean:	0.0790	0.0790	0.0011				
SD :	0.04776	0.04776	0.0006				
%RSD:	60.5	60.5	60.4459				

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 02/20/2003
Sample ID: 0218-J05 MEGDDC129

MEGDDC029

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2720	0.2720	0.0037	0.0152	0.0036	10:47:18	No
2	0.3236	0.3236	0.0044	0.0197	0.0043	10:47:47	No
Mean:	0.2978	0.2978	0.0040				
SD :	0.03649	0.03649	0.0005				
%RSD:	12.3	12.3	12.2339				

Element: Hg Seq. No.: 19 AS Loc.: 4 Date: 02/20/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.994	1.994	0.0266	0.1413	0.0265	10:49:00	No
2	2.009	2.009	0.0268	0.1404	0.0267	10:49:29	No
Mean:	2.001	2.001	0.0267				
SD :	0.01037	0.01037	0.0001				
%RSD:	0.5	0.5	0.5121				

QC value within specified limits.

Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 02/20/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0481	0.0481	0.0007	0.0047	0.0005	10:50:41	No
2	0.0028	0.0028	0.0000	-0.0042	-0.0001	10:51:10	No
Mean:	0.0255	0.0255	0.0003				
SD :	0.03207	0.03207	0.0004				
%RSD:	126.0	126.0	125.9880				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 19 Date: 02/20/2003
Sample ID: 0218-J06 DUP 021803

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0957	0.0957	0.0013	0.0046	0.0012	10:52:21	No
2	0.0230	0.0230	0.0003	-0.0027	0.0002	10:52:51	No
Mean:	0.0593	0.0593	0.0008				
SD :	0.05144	0.05144	0.0007				
%RSD:	86.7	86.7	86.6594				

Element: Hg Seq. No.: 22 AS Loc.: 20 Date: 02/20/2003
Sample ID: 0218-J01F MEGDIM0117 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0347	0.0347	0.0005	-0.0201	0.0004	10:54:03	No
2	0.0661	0.0661	0.0009	0.0040	0.0008	10:54:32	No
Mean:	0.0504	0.0504	0.0007				
SD :	0.02220	0.02220	0.0003				
%RSD:	44.0	44.0	44.0121				

Element: Hg Seq. No.: 23 AS Loc.: 21 Date: 02/20/2003
Sample ID: 0218-J02F MEGDDC243 F

MEGDD0243F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0911	0.0911	0.0012	0.0089	0.0011	10:55:44	No
2	0.0185	0.0185	0.0003	-0.0062	0.0001	10:56:13	No
Mean:	0.0548	0.0548	0.0007				
SD :	0.05134	0.05134	0.0007				
%RSD:	93.7	93.7	93.6361				

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 02/20/2003
Sample ID: 0218-J04F MEGDD0214F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0444	0.0444	0.0006	-0.0005	0.0005	10:57:25	No
2	0.0841	0.0841	0.0011	0.0111	0.0010	10:57:55	No
Mean:	0.0642	0.0642	0.0009				
SD :	0.02804	0.02804	0.0004				
%RSD:	43.7	43.7	43.6432				

Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 02/20/2003
Sample ID: 0218-J05F MEGDD0129F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0317	0.0317	0.0004	0.0006	0.0003	10:59:07	No
2	0.0441	0.0441	0.0006	0.0025	0.0005	10:59:36	No
Mean:	0.0379	0.0379	0.0005				
SD :	0.00878	0.00878	0.0001				
%RSD:	23.2	23.2	23.1760				

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 02/20/2003
Sample ID: 0218-J06F DUP0218J2F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0660	0.0660	0.0009	0.0088	0.0008	11:00:50	No
2	0.0217	0.0217	0.0003	-0.0004	0.0002	11:01:19	No
Mean:	0.0439	0.0439	0.0006				
SD :	0.03130	0.03130	0.0004				
%RSD:	71.4	71.4	71.3533				

Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 02/20/2003
Sample ID: 0212-I01 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0125	0.0125	0.0002	-0.0063	0.0001	11:02:33	No
2	0.0995	0.0995	0.0013	0.0119	0.0012	11:03:02	No
Mean:	0.0560	0.0560	0.0008				
SD :	0.06152	0.06152	0.0008				
%RSD:	109.8	109.8	109.8034				

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 02/20/2003
Sample ID: 0212-I02 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0713	0.0713	0.0010	-0.0052	0.0009	11:04:16	No

2	0.1473	0.1473	0.0020	0.0093	0.0019	11:04:46	No
Mean:	0.1093	0.1093	0.0015				
SD :	0.05373	0.05373	0.0007				
%RSD:	49.1	49.1	49.1162				

Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 02/20/2003
Sample ID: 0212-I03 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0238	0.0238	0.0003	-0.0041	0.0002	11:06:00	No
2	0.0088	0.0088	0.0001	-0.0156	0.0000	11:06:30	No
Mean:	0.0163	0.0163	0.0002				
SD :	0.01058	0.01058	0.0001				
%RSD:	64.9	64.9	64.9309				

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 02/20/2003
Sample ID: 0212-I04 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1165	0.1165	0.0016	0.0139	0.0015	11:07:45	No
2	0.0343	0.0343	0.0005	-0.0036	0.0004	11:08:14	No
Mean:	0.0754	0.0754	0.0010				
SD :	0.05808	0.05808	0.0008				
%RSD:	77.1	77.1	77.0306				

Element: Hg Seq. No.: 31 AS Loc.: 4 Date: 02/20/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.994	1.994	0.0266	0.1411	0.0265	11:09:29	No
2	2.030	2.030	0.0271	0.1469	0.0270	11:09:58	No
Mean:	2.012	2.012	0.0269				
SD :	0.02526	0.02526	0.0003				
%RSD:	1.3	1.3	1.2412				

QC value within specified limits.

Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 02/20/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0782	0.0782	0.0011	0.0096	0.0010	11:11:10	No
2	0.0166	0.0166	0.0002	-0.0007	0.0001	11:11:39	No
Mean:	0.0474	0.0474	0.0006				
SD :	0.04355	0.04355	0.0006				
%RSD:	91.9	91.9	91.9343				

QC value within specified limits.

Element: Hg Seq. No.: 33 AS Loc.: 29 Date: 02/20/2003
Sample ID: 0212-I05 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0023	0.0023	0.0000	-0.0084	-0.0001	11:12:53	No
2	0.0788	0.0788	0.0011	0.0069	0.0010	11:13:22	No

Mean:	0.0405	0.0405	0.0005
SD :	0.05408	0.05408	0.0007
%RSD:	133.4	133.4	133.4400

Element: Hg Seq. No.: 34 AS Loc.: 30 Date: 02/20/2003
Sample ID: PB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0260	0.0260	0.0004	-0.0033	0.0002	11:14:38	No
2	0.0831	0.0831	0.0011	0.0004	0.0010	11:15:08	No
Mean:	0.0546	0.0546	0.0007				
SD :	0.04041	0.04041	0.0005				
%RSD:	74.1	74.1	74.0512				

Element: Hg Seq. No.: 35 AS Loc.: 31 Date: 02/20/2003
Sample ID: 0214-E01 TCLP 1/10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	11.03	11.03	0.1402	0.7518	0.1401	11:16:25	No
Sample absorbance is greater than that of the highest standard.							
2	10.93	10.93	0.1391	0.7451	0.1390	11:16:54	No
Sample absorbance is greater than that of the highest standard.							
Mean:	10.98	10.98	0.1396				
SD :	0.06863	0.06863	0.0008				
%RSD:	0.6	0.6	0.5878				
Sample absorbance is greater than that of the highest standard.							

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 02/20/2003
Sample ID: 0214-G01 TCLP 1/10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.807	2.807	0.0373	0.1931	0.0372	11:18:08	No
2	2.820	2.820	0.0375	0.1946	0.0374	11:18:37	No
Mean:	2.814	2.814	0.0374				
SD :	0.00894	0.00894	0.0001				
%RSD:	0.3	0.3	0.3128				

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 02/20/2003
Sample ID: BLANK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0206	0.0206	0.0003	-0.0081	0.0002	11:19:47	No
2	0.0438	0.0438	0.0006	0.0003	0.0005	11:20:16	No
Mean:	0.0322	0.0322	0.0004				
SD :	0.01634	0.01634	0.0002				
%RSD:	50.7	50.7	50.7217				

Element: Hg Seq. No.: 38 AS Loc.: 4 Date: 02/20/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.009	2.009	0.0268	0.1456	0.0267	11:21:28	No
2	2.031	2.031	0.0271	0.1454	0.0270	11:21:57	No

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Mean:	2.020	2.020	0.0270
SD :	0.01544	0.01544	0.0002
%RSD:	0.8	0.8	0.7556

QC value within specified limits.

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Element: Hg Seq. No.: 39 AS Loc.: 1 Date: 02/20/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0172	0.0172	0.0002	-0.0049	0.0001	11:23:09	No
2	0.0182	0.0182	0.0002	-0.0030	0.0001	11:23:38	No
Mean:	0.0177	0.0177	0.0002				
SD :	0.00068	0.00068	0.0000				
%RSD:	3.8	3.8	3.8145				

QC value within specified limits.

Element: Hg Seq. No.: 40 AS Loc.: 31 Date: 02/20/2003
Sample ID: 0214-E01 TCLP 1/20

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.725	5.725	0.0749	0.4022	0.0748	11:36:24	No
2	5.773	5.773	0.0755	0.4125	0.0754	11:36:53	No
Mean:	5.749	5.749	0.0752				
SD :	0.03435	0.03435	0.0004				
%RSD:	0.6	0.6	0.5784				

Element: Hg Seq. No.: 41 AS Loc.: 4 Date: 02/20/2003
Sample ID: Sample004

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.027	2.027	0.0271	0.1461	0.0270	11:38:09	No
2	1.989	1.989	0.0266	0.1422	0.0265	11:38:38	No
Mean:	2.008	2.008	0.0268				
SD :	0.02688	0.02688	0.0004				
%RSD:	1.3	1.3	1.3238				

Element: Hg Seq. No.: 42 AS Loc.: 1 Date: 02/20/2003
Sample ID: Sample001

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0493	0.0493	0.0007	0.0033	0.0006	11:39:52	No
2	0.0347	0.0347	0.0005	-0.0063	0.0004	11:40:21	No
Mean:	0.0420	0.0420	0.0006				
SD :	0.01034	0.01034	0.0001				
%RSD:	24.6	24.6	24.6064				

HG-C-49

URS

220 G

Method Name: mercury
Method Description:
Element: Hg

Date: 02/20/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: Results Data Set Name:

Element: Hg Seq. No.: 43 AS Loc.: --- Date: ~~02/20/2003~~
Sample ID: Sample

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0175	0.0175	0.0002	-0.0056	0.0001	04:44:34	No
Mean:	0.0175	0.0175	0.0002				
SD :							
%RSD:							

Method Name: mercury
Method Description:
Element: Hg

Date: 02/21/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: HG-C-49.SIF Results Data Set Name: HG-C-49

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/21/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0000	-0.0044	0.0000	01:59:59	No
2			0.0002	-0.0002	0.0002	02:00:29	No
Mean:			0.0001				
SD :			0.0002				
%RSD:			208.8914				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/21/2003
Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0049	0.0237	0.0050	02:01:41	No
2			0.0058	0.0373	0.0058	02:02:10	No
Mean:			0.0054				
SD :			0.0006				
%RSD:			10.7957				

[Hg] Standard number 1 applied. [0.5000]
Correlation Coefficient: 1.00000 Slope: 0.01071

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/21/2003

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Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0101	0.0536	0.0102	02:03:23	No
2			0.0105	0.0583	0.0106	02:03:52	No
Mean:			0.0103				
SD :			0.0003				
%RSD:			2.8774				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.01116

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/21/2003
Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0201	0.1084	0.0202	02:05:05	No
2			0.0212	0.1169	0.0212	02:05:34	No
Mean:			0.0206				
SD :			0.0008				
%RSD:			3.7094				

S-shaped calibration curve detected. Two-coefficient equation used.
[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99979 Slope: 0.01072

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/21/2003
Sample ID: 5.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0520	0.2752	0.0521	02:06:49	No
2			0.0544	0.3065	0.0544	02:07:18	No
Mean:			0.0532				
SD :			0.0017				
%RSD:			3.1291				

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99988 Slope: 0.01044

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/21/2003
Sample ID: 10.0 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1024	0.5663	0.1024	02:08:35	No
2			0.1009	0.5620	0.1009	02:09:05	No
Mean:			0.1016				
SD :			0.0010				
%RSD:			1.0321				

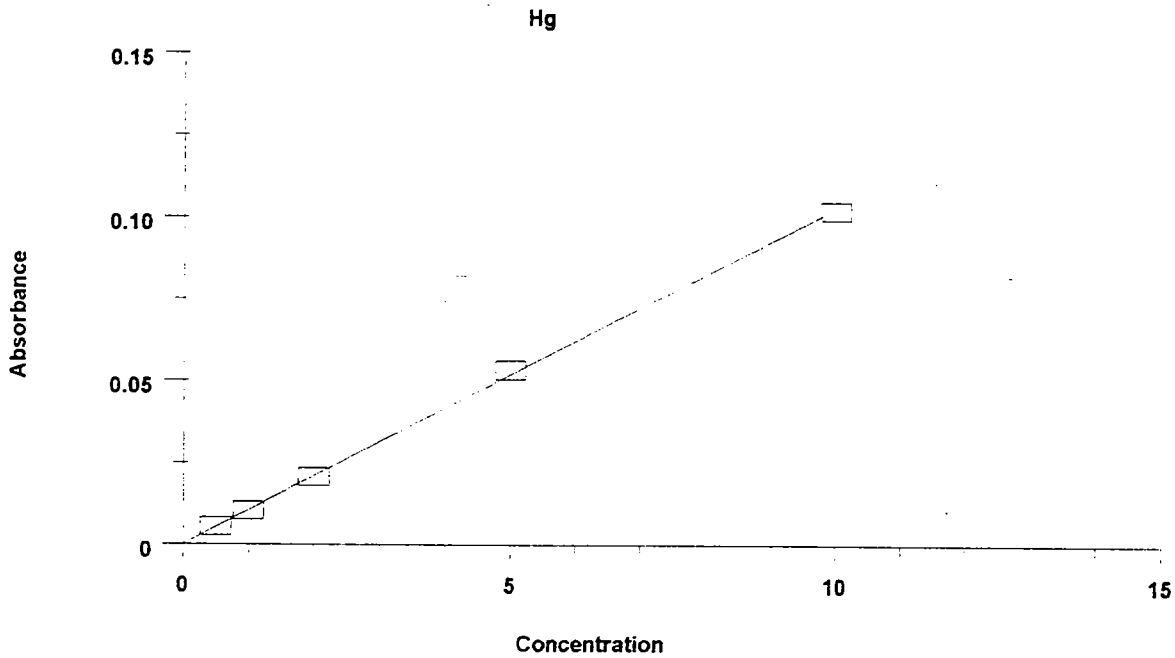
[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99981 Slope: 0.01053

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Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0001	----	----	----	----
0.5 ppb	0.0054	0.5000	0.5092	0.00058	10.8
1.00 ppb	0.0103	1.0000	0.9802	0.00030	2.9
2.00 ppb	0.0206	2.0000	1.968	0.00077	3.7
5.00 ppb	0.0532	5.0000	5.121	0.00166	3.1
10.0 ppb	0.1016	10.0000	9.915	0.00105	1.0

Correlation Coefficient: 0.99981 Slope: 0.01053 ----



Element: Hg Seq. No.: 7 AS Loc.: 4 Date: 02/21/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.940	1.940	0.0203	0.1073	0.0204	02:10:25	No
2	1.953	1.953	0.0205	0.1134	0.0205	02:10:54	No
Mean:	1.946	1.946	0.0204				
SD :	0.00925	0.00925	0.0001				
%RSD:	0.5	0.5	0.4725				

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 02/21/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0384	0.0384	0.0004	-0.0031	0.0005	02:12:06	No

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2	0.0157	0.0157	0.0002	-0.0038	0.0002	02:12:35	No
Mean:	0.0271	0.0271	0.0003				
SD :	0.01605	0.01605	0.0002				
%RSD:	59.3	59.3	59.2575				

QC value within specified limits.

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Element: Hg Seq. No.: 9 AS Loc.: 9 Date: 02/21/2003
Sample ID: PB-S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0284	0.0284	0.0003	-0.0004	0.0004	02:13:45	No
2	0.0489	0.0489	0.0005	0.0008	0.0006	02:14:15	No
Mean:	0.0387	0.0387	0.0004				
SD :	0.01447	0.01447	0.0002				
%RSD:	37.4	37.4	37.4187				

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Element: Hg Seq. No.: 10 AS Loc.: 10 Date: 02/21/2003
Sample ID: LCS-S 0.2/5000

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.5255	0.5255	0.0055	0.0320	0.0056	02:15:27	No
2	0.5339	0.5339	0.0056	0.0353	0.0057	02:15:56	No
Mean:	0.5297	0.5297	0.0056				
SD :	0.00594	0.00594	0.0001				
%RSD:	1.1	1.1	1.1203				

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Element: Hg Seq. No.: 11 AS Loc.: 11 Date: 02/21/2003
Sample ID: 030220038-001A 1/100

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0151	0.0151	0.0002	-0.0021	0.0002	02:17:08	No
2	0.0239	0.0239	0.0003	0.0000	0.0003	02:17:37	No
Mean:	0.0195	0.0195	0.0002				
SD :	0.00621	0.00621	0.0001				
%RSD:	31.8	31.8	31.8267				

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Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/21/2003
Sample ID: 030220038-002A 1/500

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0070	0.0070	0.0001	-0.0014	0.0001	02:18:51	No
2	0.0456	0.0456	0.0005	-0.0237	0.0006	02:19:20	No
Mean:	0.0263	0.0263	0.0003				
SD :	0.02728	0.02728	0.0003				
%RSD:	103.8	103.8	103.8235				

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Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 02/21/2003
Sample ID: 030220038-002A D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0000	0.0000	0.0000	-0.0099	0.0001	02:20:34	No
2	0.1067	0.1067	0.0011	0.0107	0.0012	02:21:03	No
Mean:	0.0533	0.0533	0.0006				

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SD :	0.07550	0.07550	0.0008
%RSD:	141.5	141.5	141.5381

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 02/21/2003
Sample ID: 030220038-002A S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.109	1.109	0.0116	0.0709	0.0117	02:22:20	No
2	1.068	1.068	0.0112	0.0732	0.0113	02:22:49	No
Mean:	1.088	1.088	0.0114				
SD :	0.02924	0.02924	0.0003				
%RSD:	2.7	2.7	2.6792				

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 02/21/2003
Sample ID: 030220C01 TCLP 1/10

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	15.23	15.23	0.1538	0.8463	0.1539	02:24:05	No
Sample absorbance is greater than that of the highest standard.							
2	15.19	15.19	0.1534	0.8488	0.1535	02:24:34	No
Sample absorbance is greater than that of the highest standard.							
Mean:	15.21	15.21	0.1536				
SD :	0.02631	0.02631	0.0003				
%RSD:	0.2	0.2	0.1659				
Sample absorbance is greater than that of the highest standard.							

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 02/21/2003
Sample ID: 030219D01 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0644	0.0644	0.0007	0.0021	0.0008	02:25:51	No
2	0.0511	0.0511	0.0005	0.0004	0.0006	02:26:20	No
Mean:	0.0578	0.0578	0.0006				
SD :	0.00947	0.00947	0.0001				
%RSD:	16.4	16.4	16.3964				

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 02/21/2003
Sample ID: MB-210

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0996	0.0996	0.0010	0.0007	0.0011	02:27:34	No
2	-0.0201	-0.0201	-0.0002	-0.0098	-0.0001	02:28:03	No
Mean:	0.0397	0.0397	0.0004				
SD :	0.08460	0.08460	0.0009				
%RSD:	212.9	212.9	212.9506				

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 02/21/2003
Sample ID: 030219002-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.031	1.031	0.0108	0.0644	0.0109	02:29:13	No
2	0.9231	0.9231	0.0097	0.0712	0.0098	02:29:42	No
Mean:	0.9772	0.9772	0.0103				

SD :	0.07651	0.07651	0.0008
%RSD:	7.8	7.8	7.8088

Element: Hg Seq. No.: 19 AS Loc.: 4 Date: 02/21/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.784	1.784	0.0187	0.0985	0.0188	02:30:55	No
2	2.112	2.112	0.0221	0.1344	0.0222	02:31:25	No
Mean:	1.948	1.948	0.0204				
SD :	0.2324	0.2324	0.0024				
%RSD:	11.9	11.9	11.8633				

QC value within specified limits.

Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 02/21/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1138	0.1138	0.0012	0.0120	0.0013	02:32:36	No
2	0.0059	0.0059	0.0001	-0.0021	0.0001	02:33:05	No
Mean:	0.0598	0.0598	0.0006				
SD :	0.07630	0.07630	0.0008				
%RSD:	127.6	127.6	127.5701				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 19 Date: 02/21/2003
Sample ID: 030219023-003A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4301	0.4301	0.0045	0.0299	0.0046	02:34:17	No
2	0.2611	0.2611	0.0027	0.0142	0.0028	02:34:46	No
Mean:	0.3456	0.3456	0.0036				
SD :	0.1195	0.1195	0.0013				
%RSD:	34.6	34.6	34.5516				

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 22 AS Loc.: 19 Date: 02/21/2003
Sample ID: 030219023-003A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2029	0.2029	0.0021	0.0129	0.0022	02:35:57	No
2	0.1330	0.1330	0.0014	0.0078	0.0015	02:36:26	No
Mean:	0.1679	0.1679	0.0018				
SD :	0.04936	0.04936	0.0005				
%RSD:	29.4	29.4	29.3757				

Element: Hg Seq. No.: 23 AS Loc.: 20 Date: 02/21/2003
Sample ID: 030219023-003A 1/50 D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.9410	0.9410	0.0099	0.0537	0.0100	02:37:38	No
2	0.5926	0.5926	0.0062	0.0291	0.0063	02:38:07	No
Mean:	0.7668	0.7668	0.0081				

SD :	0.2463	0.2463	0.0026
%RSD:	32.1	32.1	32.0568

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 24 AS Loc.: 20 Date: 02/21/2003
Sample ID: 030219023-003A 1/50 D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.5795	0.5795	0.0061	0.0378	0.0062	02:39:19	No
2	0.4955	0.4955	0.0052	0.0287	0.0053	02:39:48	No
Mean:	0.5375	0.5375	0.0057				
SD :	0.05939	0.05939	0.0006				
%RSD:	11.0	11.0	11.0318				

Element: Hg Seq. No.: 25 AS Loc.: 21 Date: 02/21/2003
Sample ID: 030219023-003A 1/50 S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.9378	0.9378	0.0099	0.0562	0.0099	02:41:00	No
2	0.7513	0.7513	0.0079	0.0458	0.0080	02:41:29	No
Mean:	0.8445	0.8445	0.0089				
SD :	0.1319	0.1319	0.0014				
%RSD:	15.6	15.6	15.5814				

Element: Hg Seq. No.: 26 AS Loc.: 22 Date: 02/21/2003
Sample ID: 030219023-004A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.194	1.194	0.0125	0.0749	0.0126	02:42:42	No
2	1.204	1.204	0.0126	0.0731	0.0127	02:43:12	No
Mean:	1.199	1.199	0.0126				
SD :	0.00703	0.00703	0.0001				
%RSD:	0.6	0.6	0.5845				

Element: Hg Seq. No.: 27 AS Loc.: 23 Date: 02/21/2003
Sample ID: MB-218

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0034	0.0034	0.0000	-0.0155	0.0001	02:44:23	No
2	0.0418	0.0418	0.0004	0.0038	0.0005	02:44:53	No
Mean:	0.0226	0.0226	0.0002				
SD :	0.02713	0.02713	0.0003				
%RSD:	120.1	120.1	120.1368				

Element: Hg Seq. No.: 28 AS Loc.: 24 Date: 02/21/2003
Sample ID: 0220G01 MEGDIMCIIC

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.5432	0.5432	0.0057	0.0365	0.0058	02:46:07	No
2	0.4517	0.4517	0.0048	0.0306	0.0048	02:46:36	No
Mean:	0.4975	0.4975	0.0052				
SD :	0.06477	0.06477	0.0007				
%RSD:	13.0	13.0	13.0016				

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Element: Hg Seq. No.: 29 AS Loc.: 25 Date: 02/21/2003
Sample ID: 0220G01 F MEG 01MC110F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0505	0.0505	0.0005	-0.0004	0.0006	02:47:50	No
2	0.0928	0.0928	0.0010	0.0062	0.0011	02:48:19	No
Mean:	0.0716	0.0716	0.0008				
SD :	0.02991	0.02991	0.0003				
%RSD:	41.8	41.8	41.7530				

Element: Hg Seq. No.: 30 AS Loc.: 26 Date: 02/21/2003
Sample ID: 0220G02 MEGUSH 8/01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4699	0.4699	0.0049	0.0024	0.0050	02:49:33	No
2	0.4495	0.4495	0.0047	0.0172	0.0048	02:50:02	No
Mean:	0.4597	0.4597	0.0048				
SD :	0.01444	0.01444	0.0002				
%RSD:	3.1	3.1	3.1381				

Element: Hg Seq. No.: 31 AS Loc.: 27 Date: 02/21/2003
Sample ID: 0220G02 D MEGUSH 8/01 DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4781	0.4781	0.0050	0.0252	0.0051	02:51:16	No
2	0.3745	0.3745	0.0039	0.0202	0.0040	02:51:45	No
Mean:	0.4263	0.4263	0.0045				
SD :	0.07326	0.07326	0.0008				
%RSD:	17.2	17.2	17.1664				

Element: Hg Seq. No.: 32 AS Loc.: 28 Date: 02/21/2003
Sample ID: 0220G02 S MEGUSH 8/01 SPK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.080	2.080	0.0218	0.1253	0.0219	02:53:01	No
2	2.044	2.044	0.0214	0.1207	0.0215	02:53:30	No
Mean:	2.062	2.062	0.0216				
SD :	0.02531	0.02531	0.0003				
%RSD:	1.2	1.2	1.2200				

Element: Hg Seq. No.: 33 AS Loc.: 4 Date: 02/21/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.935	1.935	0.0203	0.1171	0.0203	02:54:45	No
2	2.036	2.036	0.0213	0.1261	0.0214	02:55:14	No
Mean:	1.986	1.986	0.0208				
SD :	0.07184	0.07184	0.0007				
%RSD:	3.6	3.6	3.5979				

QC value within specified limits.

Element: Hg Seq. No.: 34 AS Loc.: 1 Date: 02/21/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0055	0.0055	0.0001	-0.0033	0.0001	02:56:27	No
2	0.0225	0.0225	0.0002	-0.0015	0.0003	02:56:56	No
Mean:	0.0140	0.0140	0.0001				
SD :	0.01203	0.01203	0.0001				
%RSD:	86.1	86.1	86.0773				

QC value within specified limits.

Element: Hg Seq. No.: 35 AS Loc.: 29 Date: 02/21/2003
Sample ID: 0220G02 F MEGUSH SG01 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0529	0.0529	0.0006	0.0034	0.0006	02:58:10	No
2	0.0028	0.0028	0.0000	-0.0037	0.0001	02:58:39	No
Mean:	0.0279	0.0279	0.0003				
SD :	0.03540	0.03540	0.0004				
%RSD:	127.1	127.1	127.0993				

Element: Hg Seq. No.: 36 AS Loc.: 30 Date: 02/21/2003
Sample ID: 0220G02 F D MEGUSH SG01 F DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0094	0.0094	0.0001	-0.0015	0.0002	02:59:55	No
2	-0.0200	-0.0200	-0.0002	-0.0122	-0.0001	03:00:24	No
Mean:	-0.0053	-0.0053	-0.0001				
SD :	0.02080	0.02080	0.0002				
%RSD:	394.8	394.8	394.7216				

Element: Hg Seq. No.: 37 AS Loc.: 31 Date: 02/21/2003
Sample ID: 0220G02 F S MEGUSH SG01 F SPK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.335	1.335	0.0140	0.0809	0.0141	03:01:41	No
2	1.468	1.468	0.0154	0.0886	0.0155	03:02:10	No
Mean:	1.401	1.401	0.0147				
SD :	0.09395	0.09395	0.0010				
%RSD:	6.7	6.7	6.6789				

Element: Hg Seq. No.: 38 AS Loc.: 32 Date: 02/21/2003
Sample ID: 0220G03 MEGDD0121

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0135	0.0135	0.0001	0.0008	0.0002	03:03:24	No
2	0.1224	0.1224	0.0013	0.0088	0.0014	03:03:53	No
Mean:	0.0679	0.0679	0.0007				
SD :	0.07703	0.07703	0.0008				
%RSD:	113.4	113.4	113.3547				

Element: Hg Seq. No.: 39 AS Loc.: 33 Date: 02/21/2003
Sample ID: 0220G03 F MEGDD0121 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.0076	0.0076	0.0001	-0.0013	0.0002	03:05:03	No
2	0.0150	0.0150	0.0002	-0.0027	0.0002	03:05:32	No
Mean:	0.0113	0.0113	0.0001				
SD :	0.00521	0.00521	0.0001				
%RSD:	46.2	46.2	46.1817				

Element: Hg Seq. No.: 40 AS Loc.: 34 Date: 02/21/2003
Sample ID: 0220G04 MEGDSH0121

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1127	0.1127	0.0012	0.0106	0.0013	03:06:42	No
2	-0.0476	-0.0476	-0.0005	-0.0221	-0.0004	03:07:11	No
Mean:	0.0326	0.0326	0.0003				
SD :	0.1134	0.1134	0.0012				
%RSD:	348.3	348.3	348.4405				

Element: Hg Seq. No.: 41 AS Loc.: 35 Date: 02/21/2003
Sample ID: 0220G04 F MEGDSH0121F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0496	0.0496	0.0005	0.0043	0.0006	03:08:22	No
2	0.0101	0.0101	0.0001	-0.0049	0.0002	03:08:51	No
Mean:	0.0298	0.0298	0.0003				
SD :	0.02796	0.02796	0.0003				
%RSD:	93.7	93.7	93.7354				

Element: Hg Seq. No.: 42 AS Loc.: 36 Date: 02/21/2003
Sample ID: 0220G05 MEGDDC123

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0080	0.0080	0.0001	-0.0082	0.0002	03:10:03	No
2	0.0458	0.0458	0.0005	-0.0016	0.0006	03:10:32	No
Mean:	0.0269	0.0269	0.0003				
SD :	0.02672	0.02672	0.0003				
%RSD:	99.4	99.4	99.4286				

Element: Hg Seq. No.: 43 AS Loc.: 37 Date: 02/21/2003
Sample ID: 0220G05 F MEGDDC123F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0123	0.0123	0.0001	0.0000	0.0002	03:11:44	No
2	0.0101	0.0101	0.0001	-0.0001	0.0002	03:12:13	No
Mean:	0.0112	0.0112	0.0001				
SD :	0.00155	0.00155	0.0000				
%RSD:	13.9	13.9	13.8862				

Element: Hg Seq. No.: 44 AS Loc.: 38 Date: 02/21/2003
Sample ID: 0220G06 MEGDDC115

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0187	-0.0187	-0.0002	-0.0041	-0.0001	03:13:25	No
2	0.0714	0.0714	0.0008	0.0088	0.0008	03:13:54	No
Mean:	0.0263	0.0263	0.0003				

SD :	0.06377	0.06377	0.0007
%RSD:	242.1	242.1	242.0911

Element: Hg Seq. No.: 45 AS Loc.: 4 Date: 02/21/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.902	1.902	0.0199	0.1142	0.0200	03:15:11	No
2	1.836	1.836	0.0192	0.1100	0.0193	03:15:41	No
Mean:	1.869	1.869	0.0196				
SD :	0.04640	0.04640	0.0005				
%RSD:	2.5	2.5	2.4701				

QC value within specified limits.

Element: Hg Seq. No.: 46 AS Loc.: 1 Date: 02/21/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0116	-0.0116	-0.0001	-0.0123	0.0000	03:16:53	No
2	0.1282	0.1282	0.0014	0.0157	0.0014	03:17:22	No
Mean:	0.0583	0.0583	0.0006				
SD :	0.09891	0.09891	0.0010				
%RSD:	169.7	169.7	169.6806				

QC value within specified limits.

Element: Hg Seq. No.: 47 AS Loc.: 39 Date: 02/21/2003
Sample ID: 0220G06 F MEGDD115F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1227	0.1227	0.0013	0.0143	0.0014	03:18:34	No
2	0.0015	0.0015	0.0000	-0.0021	0.0001	03:19:03	No
Mean:	0.0621	0.0621	0.0007				
SD :	0.08573	0.08573	0.0009				
%RSD:	138.1	138.1	138.0978				

Element: Hg Seq. No.: 48 AS Loc.: 40 Date: 02/21/2003
Sample ID: 0220G07 MEGDIM012F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0007	-0.0007	0.0000	-0.0032	0.0001	03:20:17	No
2	0.1025	0.1025	0.0011	0.0026	0.0012	03:20:46	No
Mean:	0.0509	0.0509	0.0005				
SD :	0.07299	0.07299	0.0008				
%RSD:	143.4	143.4	143.3723				

Element: Hg Seq. No.: 49 AS Loc.: 41 Date: 02/21/2003
Sample ID: 0220G08 TB030218

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0037	0.0037	0.0000	-0.0165	0.0001	03:22:00	No
2	0.0216	0.0216	0.0002	-0.0094	0.0003	03:22:29	No
Mean:	0.0126	0.0126	0.0001				
SD :	0.01266	0.01266	0.0001				

%RSD:	100.3	100.3	100.2528

Element: Hg Seq. No.: 50 AS Loc.: 42 Date: 02/21/2003
Sample ID: 0220G09

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0220	0.0220	0.0002	-0.0016	0.0003	03:23:47	No
2	0.0944	0.0944	0.0010	0.0095	0.0011	03:24:16	No
Mean:	0.0582	0.0582	0.0006				
SD :	0.05125	0.05125	0.0005				
%RSD:	88.1	88.1	88.0651				

Element: Hg Seq. No.: 51 AS Loc.: 43 Date: 02/21/2003
Sample ID: 0220H01

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0036	0.0036	0.0000	-0.0034	0.0001	03:25:30	No
2	-0.0098	-0.0098	-0.0001	-0.0380	0.0000	03:25:59	No
Mean:	-0.0031	-0.0031	0.0000				
SD :	0.00946	0.00946	0.0001				
%RSD:	305.1	305.1	305.1376				

Element: Hg Seq. No.: 52 AS Loc.: 44 Date: 02/21/2003
Sample ID: 0220H03

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0083	-0.0083	-0.0001	-0.0059	0.0000	03:27:15	No
2	0.1025	0.1025	0.0011	0.0115	0.0012	03:27:44	No
Mean:	0.0471	0.0471	0.0005				
SD :	0.07835	0.07835	0.0008				
%RSD:	166.3	166.3	166.3521				

Element: Hg Seq. No.: 53 AS Loc.: 45 Date: 02/21/2003
Sample ID: 030221005-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.6034	0.6034	0.0063	0.0383	0.0064	03:29:01	No
2	0.4376	0.4376	0.0046	0.0285	0.0047	03:29:31	No
Mean:	0.5205	0.5205	0.0055				
SD :	0.1172	0.1172	0.0012				
%RSD:	22.5	22.5	22.4931				

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 54 AS Loc.: 45 Date: 02/21/2003
Sample ID: 030221005-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4685	0.4685	0.0049	0.0295	0.0050	03:30:47	No
2	0.3378	0.3378	0.0036	0.0194	0.0036	03:31:16	No
Mean:	0.4031	0.4031	0.0042				
SD :	0.09242	0.09242	0.0010				
%RSD:	22.9	22.9	22.9002				

Maximum number of specified repeat precision tests performed. Sample still fails.

Element: Hg Seq. No.: 55 AS Loc.: 46 Date: 02/21/2003
Sample ID: 030220018-001A

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.072	4.072	0.0424	0.2619	0.0425	03:32:35	No
2	4.020	4.020	0.0419	0.2471	0.0419	03:33:04	No
Mean:	4.046	4.046	0.0421				
SD :	0.03726	0.03726	0.0004				
%RSD:	0.9	0.9	0.9106				

Element: Hg Seq. No.: 56 AS Loc.: 47 Date: 02/21/2003
Sample ID: 030220035-005A

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0619	0.0619	0.0007	0.0044	0.0007	03:34:20	No
2	0.1325	0.1325	0.0014	0.0162	0.0015	03:34:49	No
Mean:	0.0972	0.0972	0.0010				
SD :	0.04991	0.04991	0.0005				
%RSD:	51.4	51.4	51.3478				

Element: Hg Seq. No.: 57 AS Loc.: 48 Date: 02/21/2003
Sample ID: 030220035-005A D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0047	0.0047	0.0000	-0.0030	0.0001	03:36:02	No
2	0.0287	0.0287	0.0003	0.0002	0.0004	03:36:32	No
Mean:	0.0167	0.0167	0.0002				
SD :	0.01699	0.01699	0.0002				
%RSD:	101.7	101.7	101.6853				

Element: Hg Seq. No.: 58 AS Loc.: 4 Date: 02/21/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.898	1.898	0.0199	0.1031	0.0200	03:37:44	No
2	2.044	2.044	0.0214	0.1184	0.0215	03:38:13	No
Mean:	1.971	1.971	0.0207				
SD :	0.1031	0.1031	0.0011				
%RSD:	5.2	5.2	5.2014				

QC value within specified limits.

Element: Hg Seq. No.: 59 AS Loc.: 1 Date: 02/21/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0264	0.0264	0.0003	-0.0180	0.0004	03:39:25	No
2	-0.0484	-0.0484	-0.0005	-0.0361	-0.0004	03:39:54	No
Mean:	-0.0110	-0.0110	-0.0001				
SD :	0.05289	0.05289	0.0006				
%RSD:	482.0	482.0	481.8385				

QC value within specified limits.

Element: Hg Seq. No.: 60 AS Loc.: 49 Date: 02/21/2003
Sample ID: 030220035-005A S

Method Name: mercury
Method Description:
Element: Hg

URS 224-C

Date: 02/25/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: HG-C-52.SIF Results Data Set Name: HG-C-52

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 02/25/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0003	0.0030	0.0003	04:52:51	No
2			0.0001	-0.0183	0.0001	04:53:21	No
Mean:			0.0002				
SD :			0.0002				
%RSD:			95.5518				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 02/25/2003
Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0053	0.0250	0.0055	04:54:33	No
2			0.0062	0.0381	0.0064	04:55:02	No
Mean:			0.0057				
SD :			0.0006				
%RSD:			10.5949				

[Hg] Standard number 1 applied. [0.5000]
Correlation Coefficient: 1.00000 Slope: 0.01148

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 02/25/2003
Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0194	0.1216	0.0196	04:56:15	No
2			0.0164	0.0932	0.0166	04:56:44	No
Mean:			0.0179				
SD :			0.0021				
%RSD:			11.8283				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.00844

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 02/25/2003
Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0350	0.2156	0.0352	04:57:58	No
2			0.0336	0.2112	0.0338	04:58:27	No
Mean:			0.0343				
SD :			0.0010				

%RSD: 2.8743
S-shaped calibration curve detected. Two-coefficient equation used.
[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.98377 Slope: 0.01308

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 02/25/2003
Sample ID: 5.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0937	0.5707	0.0939	04:59:42	No
2			0.0862	0.5142	0.0864	05:00:11	No
Mean:			0.0899				
SD :			0.0053				
%RSD:			5.9188				

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99749 Slope: 0.01507

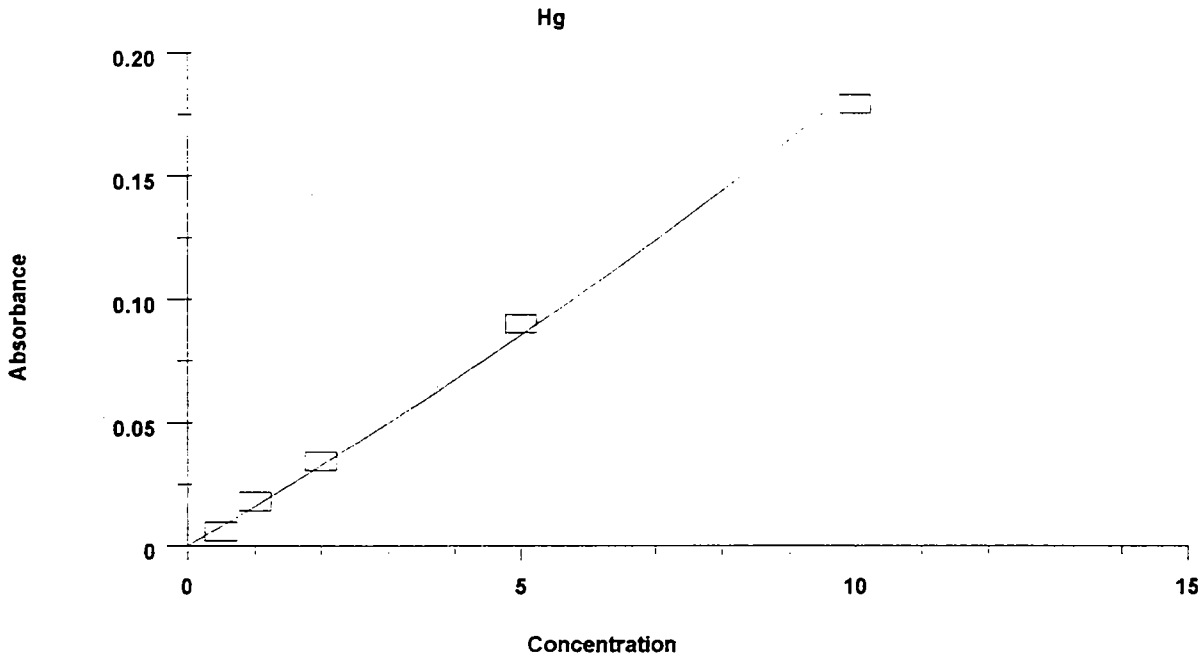
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 02/25/2003
Sample ID: 10.0 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1860	1.1375	0.1862	05:01:28	No
2			0.1718	1.0313	0.1720	05:01:57	No
Mean:			0.1789				
SD :			0.0100				
%RSD:			5.6037				

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99832 Slope: 0.01582

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0002	----	----	----	----
0.5 ppb	0.0057	0.5000	0.3609	0.00061	10.6
1.00 ppb	0.0179	1.0000	1.115	0.00212	11.8
2.00 ppb	0.0343	2.0000	2.099	0.00099	2.9
5.00 ppb	0.0899	5.0000	5.238	0.00532	5.9
10.0 ppb	0.1789	10.0000	9.671	0.01003	5.6
Correlation Coefficient: 0.99832		Slope:	0.01582	----	



Element: Hg Seq. No.: 7 AS Loc.: 4 Date: 02/25/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.157	2.157	0.0353	0.2180	0.0355	05:03:17	No
2	1.959	1.959	0.0319	0.1890	0.0321	05:03:46	No
Mean:	2.058	2.058	0.0336				
SD :	0.1402	0.1402	0.0024				
%RSD:	6.8	6.8	7.0285				

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 02/25/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0609	0.0609	0.0010	0.0077	0.0012	05:04:58	No
2	-0.0166	-0.0166	-0.0003	-0.0082	-0.0001	05:05:27	No
Mean:	0.0221	0.0221	0.0004				
SD :	0.05483	0.05483	0.0009				
%RSD:	247.6	247.6	247.4792				

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 9 Date: 02/25/2003
Sample ID: PB-S MB-226

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1738	0.1738	0.0028	0.0220	0.0030	05:06:37	No
2	0.0057	0.0057	0.0001	-0.0060	0.0003	05:07:06	No

Mean:	0.0898	0.0898	0.0014
SD :	0.1189	0.1189	0.0019
%RSD:	132.4	132.4	132.4087

Element: Hg Seq. No.: 10 AS Loc.: 10 Date: 02/25/2003
Sample ID: 030221010-001A 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.900	2.900	0.0480	0.2887	0.0482	05:08:18	No
2	2.724	2.724	0.0449	0.2716	0.0451	05:08:48	No
Mean:	2.812	2.812	0.0464				
SD :	0.1249	0.1249	0.0022				
%RSD:	4.4	4.4	4.6368				

Element: Hg Seq. No.: 11 AS Loc.: 11 Date: 02/25/2003
Sample ID: 030221010-001A 1/50D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.914	2.914	0.0482	0.2939	0.0484	05:10:00	No
2	2.690	2.690	0.0443	0.2707	0.0446	05:10:29	No
Mean:	2.802	2.802	0.0463				
SD :	0.1586	0.1586	0.0027				
%RSD:	5.7	5.7	5.9071				

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 02/25/2003
Sample ID: 030221010-001A 1/50S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.732	2.732	0.0451	0.2707	0.0453	05:11:43	No
2	1.902	1.902	0.0310	0.1899	0.0312	05:12:12	No
Mean:	2.317	2.317	0.0380				
SD :	0.5870	0.5870	0.0100				
%RSD:	25.3	25.3	26.2150				

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 13 AS Loc.: 12 Date: 02/25/2003
Sample ID: 030221010-001A 1/50S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.680	1.680	0.0273	0.1670	0.0275	05:13:26	No
2	1.696	1.696	0.0275	0.1701	0.0277	05:13:56	No
Mean:	1.688	1.688	0.0274				
SD :	0.01080	0.01080	0.0002				
%RSD:	0.6	0.6	0.6566				

Element: Hg Seq. No.: 14 AS Loc.: 13 Date: 02/25/2003
Sample ID: MB-TCLP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0170	0.0170	0.0003	-0.0005	0.0005	05:15:10	No
2	0.1353	0.1353	0.0021	0.0230	0.0024	05:15:39	No
Mean:	0.0762	0.0762	0.0012				
SD :	0.08365	0.08365	0.0013				

%RSD: 109.8 109.8 109.8414

Element: Hg Seq. No.: 15 AS Loc.: 14 Date: 02/25/2003
Sample ID: 0221E01 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0017	-0.0017	0.0000	-0.0079	0.0002	05:16:55	No
2	0.0454	0.0454	0.0007	0.0078	0.0009	05:17:24	No
Mean:	0.0218	0.0218	0.0003				
SD :	0.03334	0.03334	0.0005				
%RSD:	152.7	152.7	152.7080				

Element: Hg Seq. No.: 16 AS Loc.: 15 Date: 02/25/2003
Sample ID: 0221E01 TCLP 1/5D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0185	0.0185	0.0003	0.0030	0.0005	05:18:40	No
2	0.0160	0.0160	0.0003	0.0022	0.0005	05:19:10	No
Mean:	0.0172	0.0172	0.0003				
SD :	0.00174	0.00174	0.0000				
%RSD:	10.1	10.1	10.0796				

Element: Hg Seq. No.: 17 AS Loc.: 16 Date: 02/25/2003
Sample ID: 0221E01 TCLP 1/5S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.8653	0.8653	0.0139	0.0845	0.0141	05:20:28	No
2	0.9299	0.9299	0.0149	0.0888	0.0151	05:20:57	No
Mean:	0.8976	0.8976	0.0144				
SD :	0.04569	0.04569	0.0007				
%RSD:	5.1	5.1	5.1601				

Element: Hg Seq. No.: 18 AS Loc.: 17 Date: 02/25/2003
Sample ID: 0221F01 TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0047	-0.0047	-0.0001	-0.0049	0.0001	05:22:11	No
2	0.0543	0.0543	0.0009	0.0084	0.0011	05:22:40	No
Mean:	0.0248	0.0248	0.0004				
SD :	0.04171	0.04171	0.0007				
%RSD:	168.3	168.3	168.3023				

Element: Hg Seq. No.: 19 AS Loc.: 18 Date: 02/25/2003
Sample ID: PB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0228	-0.0228	-0.0004	-0.0118	-0.0002	05:23:50	No
2	-0.0080	-0.0080	-0.0001	-0.0022	0.0001	05:24:21	No
Mean:	-0.0154	-0.0154	-0.0002				
SD :	0.01043	0.01043	0.0002				
%RSD:	67.6	67.6	67.5990				

Element: Hg Seq. No.: 20 AS Loc.: 4 Date: 02/25/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.115	2.115	0.0346	0.2128	0.0348	05:25:33	No
2	1.973	1.973	0.0322	0.1947	0.0324	05:26:02	No
Mean:	2.044	2.044	0.0334				
SD :	0.1003	0.1003	0.0017				
%RSD:	4.9	4.9	5.0606				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 1 Date: 02/25/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0339	0.0339	0.0005	0.0053	0.0007	05:27:14	No
2	0.0091	0.0091	0.0001	0.0009	0.0004	05:27:43	No
Mean:	0.0215	0.0215	0.0003				
SD :	0.01755	0.01755	0.0003				
%RSD:	81.6	81.6	81.6160				

QC value within specified limits.

Element: Hg Seq. No.: 22 AS Loc.: 19 Date: 02/25/2003
Sample ID: 030224C01 MEGUSH Soil

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0487	0.0487	0.0008	0.0084	0.0010	05:28:53	No
2	0.0403	0.0403	0.0006	0.0064	0.0008	05:29:22	No
Mean:	0.0445	0.0445	0.0007				
SD :	0.00589	0.00589	0.0001				
%RSD:	13.2	13.2	13.2485				

Element: Hg Seq. No.: 23 AS Loc.: 20 Date: 02/25/2003
Sample ID: 030224C01 D MEGUSH Soil DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0328	0.0328	0.0005	0.0064	0.0007	05:30:34	No
2	-0.0029	-0.0029	0.0000	-0.0150	0.0002	05:31:03	No
Mean:	0.0150	0.0150	0.0002				
SD :	0.02527	0.02527	0.0004				
%RSD:	168.9	168.9	168.9135				

Element: Hg Seq. No.: 24 AS Loc.: 21 Date: 02/25/2003
Sample ID: 030224C01 S MEGUSH Soil SPK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.9950	0.9950	0.0160	0.0962	0.0162	05:32:15	No
2	1.006	1.006	0.0162	0.0930	0.0164	05:32:44	No
Mean:	1.000	1.000	0.0161				
SD :	0.00773	0.00773	0.0001				
%RSD:	0.8	0.8	0.7846				

Element: Hg Seq. No.: 25 AS Loc.: 22 Date: 02/25/2003

Sample ID: 030224C01 F

MEGUSH 8011 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0022	-0.0022	0.0000	-0.0031	0.0002	05:33:56	No
2	0.0274	0.0274	0.0004	0.0055	0.0006	05:34:25	No
Mean:	0.0126	0.0126	0.0002				
SD :	0.02098	0.02098	0.0003				
%RSD:	166.5	166.5	166.4473				

Element: Hg Seq. No.: 26 AS Loc.: 23 Date: 02/25/2003
Sample ID: 030224C01 F D

MEGUSH 8011 F DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0071	0.0071	0.0001	-0.0063	0.0003	05:35:37	No
2	0.0004	0.0004	0.0000	-0.0007	0.0002	05:36:06	No
Mean:	0.0038	0.0038	0.0001				
SD :	0.00473	0.00473	0.0001				
%RSD:	125.7	125.7	125.6793				

Element: Hg Seq. No.: 27 AS Loc.: 24 Date: 02/25/2003
Sample ID: 030224C01 F S

MEGUSH 8011 F SPK

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.8511	0.8511	0.0136	0.0817	0.0138	05:37:21	No
2	0.8947	0.8947	0.0143	0.0817	0.0146	05:37:50	No
Mean:	0.8729	0.8729	0.0140				
SD :	0.03083	0.03083	0.0005				
%RSD:	3.5	3.5	3.5790				

Element: Hg Seq. No.: 28 AS Loc.: 25 Date: 02/25/2003
Sample ID: 030224C02

MEGDDC132

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0049	0.0049	0.0001	-0.0018	0.0003	05:39:04	No
2	0.0686	0.0686	0.0011	0.0145	0.0013	05:39:33	No
Mean:	0.0367	0.0367	0.0006				
SD :	0.04506	0.04506	0.0007				
%RSD:	122.6	122.6	122.6645				

Element: Hg Seq. No.: 29 AS Loc.: 26 Date: 02/25/2003
Sample ID: 030224C03

MEGDC131

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0253	0.0253	0.0004	0.0037	0.0006	05:40:47	No
2	0.0065	0.0065	0.0001	0.0024	0.0003	05:41:16	No
Mean:	0.0159	0.0159	0.0003				
SD :	0.01326	0.01326	0.0002				
%RSD:	83.5	83.5	83.4778				

Element: Hg Seq. No.: 30 AS Loc.: 27 Date: 02/25/2003
Sample ID: 030224C03 F

MEGDC131F

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

873

#	µg/L	µg/L	Signal	Area	Height		Stored
1	0.0013	0.0013	0.0000	0.0010	0.0002	05:42:30	No
2	0.1447	0.1447	0.0023	0.0261	0.0025	05:42:59	No
Mean:	0.0730	0.0730	0.0012				
SD :	0.1014	0.1014	0.0016				
%RSD:	138.8	138.8	138.8356				

==========

Element: Hg Seq. No.: 31 AS Loc.: 28 Date: 02/25/2003
Sample ID: 030224C04 DUP022003

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0070	0.0070	0.0001	0.0016	0.0003	05:44:15	No
2	-0.0186	-0.0186	-0.0003	-0.0230	-0.0001	05:44:44	No
Mean:	-0.0058	-0.0058	-0.0001				
SD :	0.01811	0.01811	0.0003				
%RSD:	314.4	314.4	314.4600				

==========

Element: Hg Seq. No.: 32 AS Loc.: 4 Date: 02/25/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.040	2.040	0.0333	0.2014	0.0335	05:45:59	No
2	1.989	1.989	0.0324	0.1999	0.0326	05:46:30	No
Mean:	2.015	2.015	0.0329				
SD :	0.03612	0.03612	0.0006				
%RSD:	1.8	1.8	1.8486				

QC value within specified limits.

==========

Element: Hg Seq. No.: 33 AS Loc.: 1 Date: 02/25/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0234	0.0234	0.0004	0.0033	0.0006	05:47:42	No
2	0.0861	0.0861	0.0014	0.0085	0.0016	05:48:11	No
Mean:	0.0548	0.0548	0.0009				
SD :	0.04436	0.04436	0.0007				
%RSD:	81.0	81.0	81.0446				

QC value within specified limits.

==========

Element: Hg Seq. No.: 34 AS Loc.: 29 Date: 02/25/2003
Sample ID: 030224C04 F DUP022003 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0476	0.0476	0.0008	0.0114	0.0010	05:49:25	No
2	-0.0125	-0.0125	-0.0002	-0.0190	0.0000	05:49:54	No
Mean:	0.0176	0.0176	0.0003				
SD :	0.04245	0.04245	0.0007				
%RSD:	241.8	241.8	241.6976				

==========

Element: Hg Seq. No.: 35 AS Loc.: 30 Date: 02/25/2003
Sample ID: 030224C05 MEGUSH 8616

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.0138	0.0138	0.0002	0.0002	0.0004	05:51:10	No
2	0.0657	0.0657	0.0010	0.0062	0.0012	05:51:39	No
Mean:	0.0398	0.0398	0.0006				
SD :	0.03671	0.03671	0.0006				
%RSD:	92.3	92.3	92.3106				

Element: Hg Seq. No.: 36 AS Loc.: 31 Date: 02/25/2003
Sample ID: PB-S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0474	0.0474	0.0007	0.0061	0.0010	05:52:55	No
2	0.0196	0.0196	0.0003	-0.0016	0.0005	05:53:24	No
Mean:	0.0335	0.0335	0.0005				
SD :	0.01962	0.01962	0.0003				
%RSD:	58.6	58.6	58.6327				

Element: Hg Seq. No.: 37 AS Loc.: 32 Date: 02/25/2003
Sample ID: LCS-S 0.2/5000

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2501	0.2501	0.0040	0.0201	0.0042	05:54:37	No
2	0.2288	0.2288	0.0036	0.0166	0.0038	05:55:07	No
Mean:	0.2394	0.2394	0.0038				
SD :	0.01503	0.01503	0.0002				
%RSD:	6.3	6.3	6.3014				

Element: Hg Seq. No.: 38 AS Loc.: 33 Date: 02/25/2003
Sample ID: 0225G01 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.759	1.759	0.0286	0.1693	0.0288	05:56:17	No
2	1.709	1.709	0.0278	0.1619	0.0280	05:56:46	No
Mean:	1.734	1.734	0.0282				
SD :	0.03523	0.03523	0.0006				
%RSD:	2.0	2.0	2.0859				

Element: Hg Seq. No.: 39 AS Loc.: 34 Date: 02/25/2003
Sample ID: 0225G01 1/50 D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.243	3.243	0.0539	0.3229	0.0541	05:57:56	No
2	3.122	3.122	0.0518	0.3086	0.0520	05:58:25	No
Mean:	3.183	3.183	0.0529				
SD :	0.08528	0.08528	0.0015				
%RSD:	2.7	2.7	2.8136				

Element: Hg Seq. No.: 40 AS Loc.: 35 Date: 02/25/2003
Sample ID: 0225G01 1/50 S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.166	6.166	0.1075	0.6471	0.1077	05:59:35	No
2	5.884	5.884	0.1021	0.6042	0.1023	06:00:04	No
Mean:	6.025	6.025	0.1048				

875

SD :	0.1991	0.1991	0.0038
%RSD:	3.3	3.3	3.6329

Element: Hg Seq. No.: 41 AS Loc.: 36 Date: 02/25/2003
Sample ID: 0225G02 150

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0593	0.0593	0.0009	0.0031	0.0011	06:01:21	No
2	0.0659	0.0659	0.0010	0.0070	0.0013	06:01:50	No
Mean:	0.0626	0.0626	0.0010				
SD :	0.00469	0.00469	0.0001				
%RSD:	7.5	7.5	7.5027				

Element: Hg Seq. No.: 42 AS Loc.: 4 Date: 02/25/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.033	2.033	0.0332	0.2048	0.0334	06:03:03	No
2	2.004	2.004	0.0327	0.2025	0.0329	06:03:32	No
Mean:	2.019	2.019	0.0329				
SD :	0.02058	0.02058	0.0003				
%RSD:	1.0	1.0	1.0509				

QC value within specified limits.

Element: Hg Seq. No.: 43 AS Loc.: 1 Date: 02/25/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0143	0.0143	0.0002	0.0002	0.0004	06:04:44	No
2	0.0347	0.0347	0.0005	0.0030	0.0008	06:05:13	No
Mean:	0.0245	0.0245	0.0004				
SD :	0.01445	0.01445	0.0002				
%RSD:	59.0	59.0	59.0465				

QC value within specified limits.

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Date	Sample ID	Initial wt/vol.	Final wt/vol	Analytical Method	Tech	Comments
2/21/03	PB-W	100 mL	100 mL	AV-Hg	SR	URS 030
	MEGDD0115					
	MEGDD0115F					
	MEGDD0121					
	MEGDD0121F					
	MEGDD0123					
	MEGDD0123F					
	MEGDIMD110					
	MEGDIMD110F					
	MEGDIM0128					
	MEGDSH0121					
	MEGDSH0121F					
	MEGUSH8601					
	MEGUSH8601DUP					
	MEGUSH8601SPK					
	MEGUSH8601F					
	MEGUSH8601FDUP					
	MEGUSH8601FSPK					
2/25/03	PB-W	100mL	100mL	AV-Hg	SR	URS 030
	DUP02003					
	DUP02003F					
	MEGCD013					
	MEGCD013F					
	MEGDD0132					
	MEGUSH8611					
	MEGUSH8611DUP					
	MEGUSH8611SPK					
	MEGUSH8611F					
	MEGUSH8611FDUP					
	MEGUSH8611FSPK					
	MEGUSH8616					

Date	Sample ID	Initial wet/vol.	Final wet/vol.	Analytical Method	Tech	Comments
3/3/03	PB-C	100mL	100 mL	FCP	SM	ICS0307
	LCS-C					
	DUP 2/20/03					
	DUP 2/20/03F					
	MEGCD013					
	MEGCD013F					
	MEGDD0115					
	MEGDD0115F					
	MEGDD0121					
	MEGDD0121F					
	MEGDDC123					
	MEGDDC123F					
	MEGDDC132					
	MEGDIMC110					
	MEGDIMC110DUP					
	MEGDIMC110SPK					
	MEGDIMD110F					
	MEGDIMD110FDUP					
	MEGDIMD110FSPK					
	MEGDIMC125					
	MEGDSHC121					
	MEGDSHC121F					
	MEGUSH8601					
	MEGUSH8601F					
	MEGUSH 8611					
	MEGUSH 8611 DUP					
	MEGUSH 8611 SPK					
	MEGUSH 8611 F					
	MEGUSH 8611 F DUP					
	MEGUSH 8611 FSPK					
	MEGUSH 8616					

Date 3/3/03	Sample ID 98-C	Initial wt/vol 100 mL	Final wt/vol 100 mL	Analytical Method FCP	Tech SM	11 Comments CRS0307
	LCS-C					
	DUP 2/20/03					
	DUP 2/20/03 F					
	MEGCD013					
	MEGCD013F					
	MEGDD0115					
	MEGDD0115F					
	MEGDD0121					
	MEGDD021F					
	MEGDDC123					
	MEGDDC123F					
	MEGDDC132					
	MEGDMC110					
	MEGDMC110 DUP					
	MEGDMC110 SPK					
	MEGDMC110F					
	MEGDMC110F DUP					
	MEGDMC110F SPK					
	MEGDMC125					
	MEGDSHC121					
	MEGDSHC121F					
	MEGUSH 8601					
	MEGUSH 8601F					
	MEGUSH 8611					
	MEGUSH 8611 DUP					
	MEGUSH 8611 SPK					
	MEGUSH 8611F					
	MEGUSH 8611F DUP					
	MEGUSH 8611F SPK					
	MEGUSH 8616					

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ANALYSIS

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CONVENTIONALS ANALYSIS DATA SHEET

MEGCD0131

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-03

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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MEGDD014

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-04

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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MEGDD0115

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-06

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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MEGDD0123

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-05

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-03

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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MEGDD0129

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-05

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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MEGDD0132

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-02

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	3			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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MEGDD0238

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-03

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0243

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-02

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	3			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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MEGDIM0117

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-01

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0110

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-01

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	88	J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-07

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	4			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

AMF 4/24/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGDSH0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-04

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	5			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U J		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

Amk 4/8/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8601

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-02

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

AMK 4/22/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8611

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-01

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

AMK 4/28/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8616

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-05

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

DUP 021803

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-06

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

DUP 022003

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-04

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	40	41	103	30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	297	99	300	295	98	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	30	31	103	30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	293	98	300	292	97	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols				30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	287	96	300	285	95	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

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FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	284	95	300	283	94	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	292	97	300	306	102	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	307	102	300	310	103	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
CRQL STANDARDS FOR CONVENTIONALS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.:MEGCD0131

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Initial Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	2	2	100				EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	10	7.6	76	10	9.3	93	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 2) - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols	2	U	2	U	2	U	2	U	2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

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FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols			2	U							EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

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FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols											EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	79		10	U	100	79		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

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FORM V (Part 1) - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	75-125	62		4		60	97		
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide									
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

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FORM V (Part 1) - CONV

U.S. EPA - CLP

6
DUPLICATES

MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols								
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments _____

FORM VI - CONV

U.S. EPA - CLP

6
DUPLICATES

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols	20	4		3.4		16.2		
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide								
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments _____

FORM VI - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG: MEGCD0131

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	40	41	103						
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	300	297	99						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

_____

_____

FORM VII - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG: MEGCD0131

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	261	308	118						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

_____

_____

FORM VII - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG: MEGCD0131

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	201	158	79						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM VII - CONV

RAW QC

DATA

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 AMMONIA ~~CYANIDE~~
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	467.47
500.0 PPB	469.18
400.0 PPB	425.24
200.0 PPB	216.50
100.0 PPB	102.80
50.00 PPB	46.79
10.00 PPB	5.97
500.0 PPB	471.75
100.0 PPB	101.93
100.0 PPB	101.94

916

ICB	-3.58
030212 M02	-0.41
030212 M03	18.81
030212 M04	-3.46

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
030212 M05	-6.13
030214021 002A	-3.60
030213011 001B	9.69
030218 F01	-5.76
030218 F02	-6.46
030220026 002	-6.68
PREP BLANK 2/21	-6.76
CCV	294.59 (98%)
CCB	-7.03
030224018 001	-6.17
030224018 002	-5.24
030218 J01	7.48
030218 J02	-5.79
030218 J03	-7.08
030218 J04	-5.42
030218 J05	-6.67
030218 J06	-5.19
030220018 002	-6.52
030213011 001C	20.39
CCV	291.67 (97%)

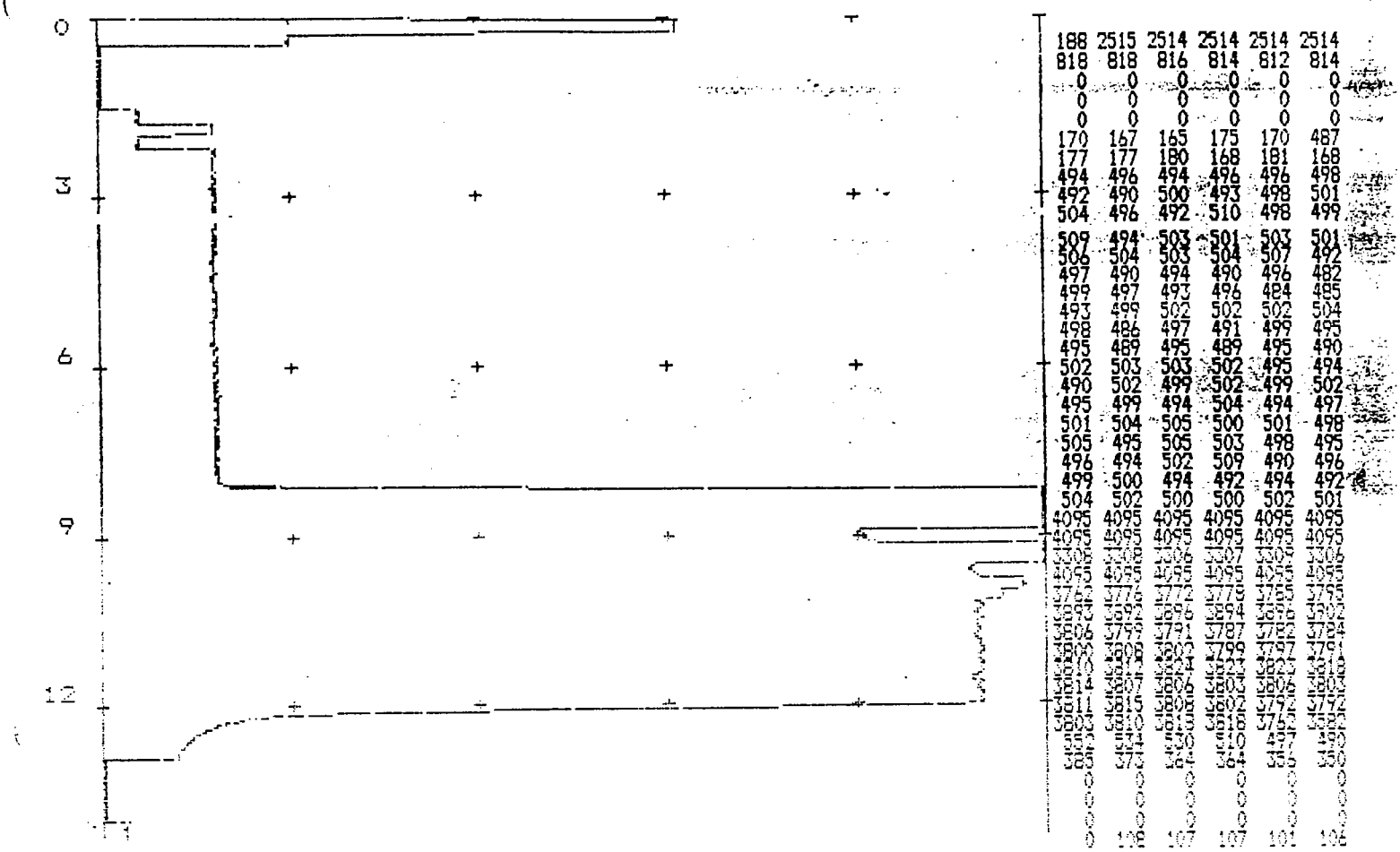
[illegible]	-5.80
[illegible]	-6.04
[illegible]	292.05 (97%)
[illegible]	-6.85

Adirondack Environmental Services, Inc.
314 North Fearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
200.0 PPB	208.94
500.0 PPB	469.18

CN0225

Chart minimum: 0%, maximum 100%
Active analyses: 2



188	2515	2514	2514	2514	2514
818	818	816	814	812	814
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
170	167	165	175	170	487
177	177	180	168	181	168
494	496	494	496	496	498
492	490	500	493	498	501
504	496	492	510	498	499
509	494	503	501	503	501
506	504	503	504	507	492
497	490	494	490	496	482
499	497	493	496	484	485
493	499	502	502	502	504
498	486	497	491	499	495
495	489	495	489	495	490
502	503	503	502	495	494
490	502	499	502	499	502
495	499	494	504	494	497
501	504	505	500	501	498
505	495	505	503	498	495
496	494	502	509	490	496
499	500	494	492	494	492
504	502	500	500	502	501
4095	4095	4095	4095	4095	4095
4095	4095	4095	4095	4095	4095
3306	3308	3306	3307	3309	3306
4095	4095	4095	4095	4095	4095
3776	3776	3772	3776	3776	3776
3896	3893	3896	3894	3896	3892
3806	3799	3791	3787	3788	3784
3808	3808	3800	3799	3797	3791
3814	3807	3806	3803	3806	3803
3811	3815	3809	3802	3792	3792
3803	3810	3813	3818	3792	3803
385	374	364	364	385	380
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	106	107	107	101	104

Base and gain found. They are:
Channel 2: base 63, gain 13, rel, abs, 0.31. Actual low 6%, high 94%.
Actual lag time: 7.9 min. Base and gain were changed from 100 13.

Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name	B:CYANIDE.INP	Analysis	1	2	3	4	
# of anal.	1	Channel	2	2	3	4	

Samples/hr	080	Sample/wash	2.0000	Pecking	N
Sample time	0030	Wash time	0015	Base Corr	Y
				Raw output	N

919

Anal	Inv Fit	Base Chem	Concent.	Dilution Carryover	Carryover	Chem Name	Units	Base in Calib

2	L	N	.000000	.000000	.000000	Y
3	L	N	.000000	.000000	.000000	Y
4	L	N	.000000	.000000	.000000	Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (8 characters,no spaces).

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

1

Technicon TRAACS 800 System Editor

Second Screen

to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol

P,6C>1,H@1,2L@4,26S>7,I@3,G@1,E

Gain peak # 002

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

1

Technicon TRAACS 800 System Editor

Second Screen

to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol

P,6D>1,H@1,2L@4,2&6>7,I@3,3@1,E

Gain peak # 002

921

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

1

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
1	1	4	P	00.0 PPB.....	1.000000	1.000000	N
2	3	1	C	400.0 PPB	1.000000	1.000000	N
3	4	2	C	200.0 PPB	1.000000	1.000000	N
4	5	3	C	100.0 PPB	1.000000	1.000000	N
5	6	1	C	50.00 PPB	1.000000	1.000000	N
6	7	1	C	10.00 PPB	1.000000	1.000000	N
7	11	1	S	ICV 300 PPB	1.000000	1.000000	N
8	12	1	S	ICB	1.000000	1.000000	N
9	13	1	S	030212 M02	1.000000	1.000000	N
10	14	1	S	030212 M03	1.000000	1.000000	N
11	15	1	S	030212 M04	1.000000	1.000000	N
12	16	1	S	[illegible]	1.000000	1.000000	N
13	17	1	S	[illegible]	1.000000	1.000000	N
14	18	1	S	[illegible]	1.000000	1.000000	N
15	19	1	S	030218 F01	1.000000	1.000000	N
16	20	1	S	[illegible]	1.000000	1.000000	N
17	21	1	S	[illegible]	1.000000	1.000000	N
18	22	1	S	[illegible]	1.000000	1.000000	N
19	23	1	S	[illegible]	1.000000	1.000000	N
20	24	1	S	CCB	1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
1

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	S	030224018 001..	1.000000	1.000000	N
22	26	1	S	030224018 002	1.000000	1.000000	N
23	27	1	S	030218 J01	1.000000	1.000000	N
24	28	1	S	030218 J02	1.000000	1.000000	N
25	29	1	S	030218 J03	1.000000	1.000000	N

27	31	1	S	030218 J05	1.000000	1.000000	N
28	32	1	S	030218 J06	1.000000	1.000000	N
29	33	1	S	030220018 002	1.000000	1.000000	N
30	34	1	S	030213011 001AC	1.000000	1.000000	N
31	35	1	S	CCV	1.000000	1.000000	N
32	36	1	S	CCB	1.000000	1.000000	N
33					1.000000	1.000000	N
34					1.000000	1.000000	N
35					1.000000	1.000000	N
36					1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe

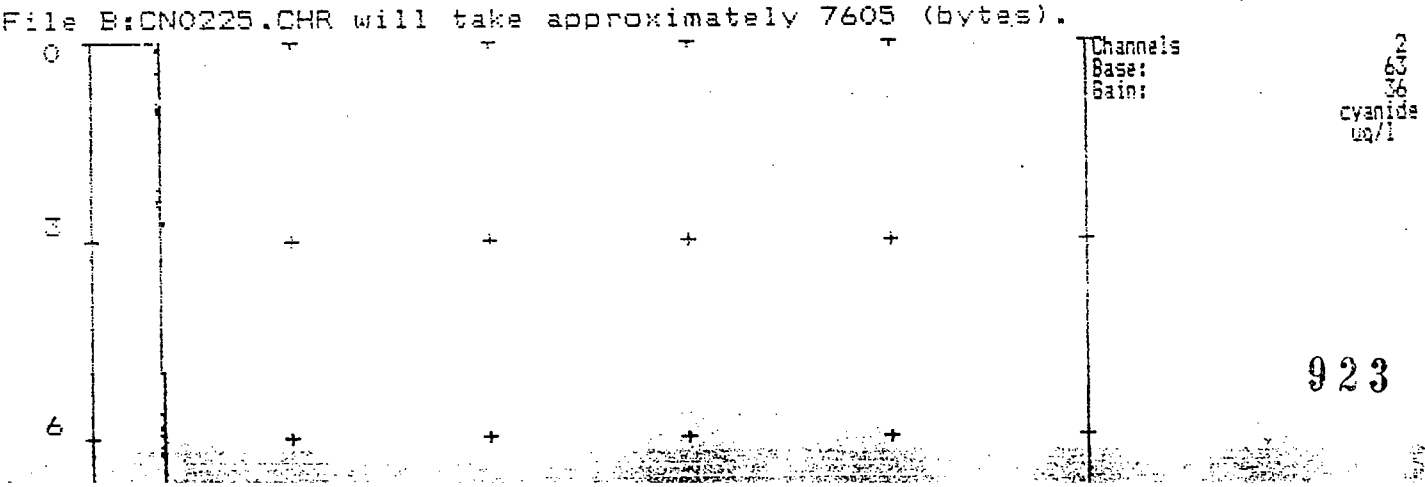
Chart minimum: 0%, maximum 100%
Active analyses: 2

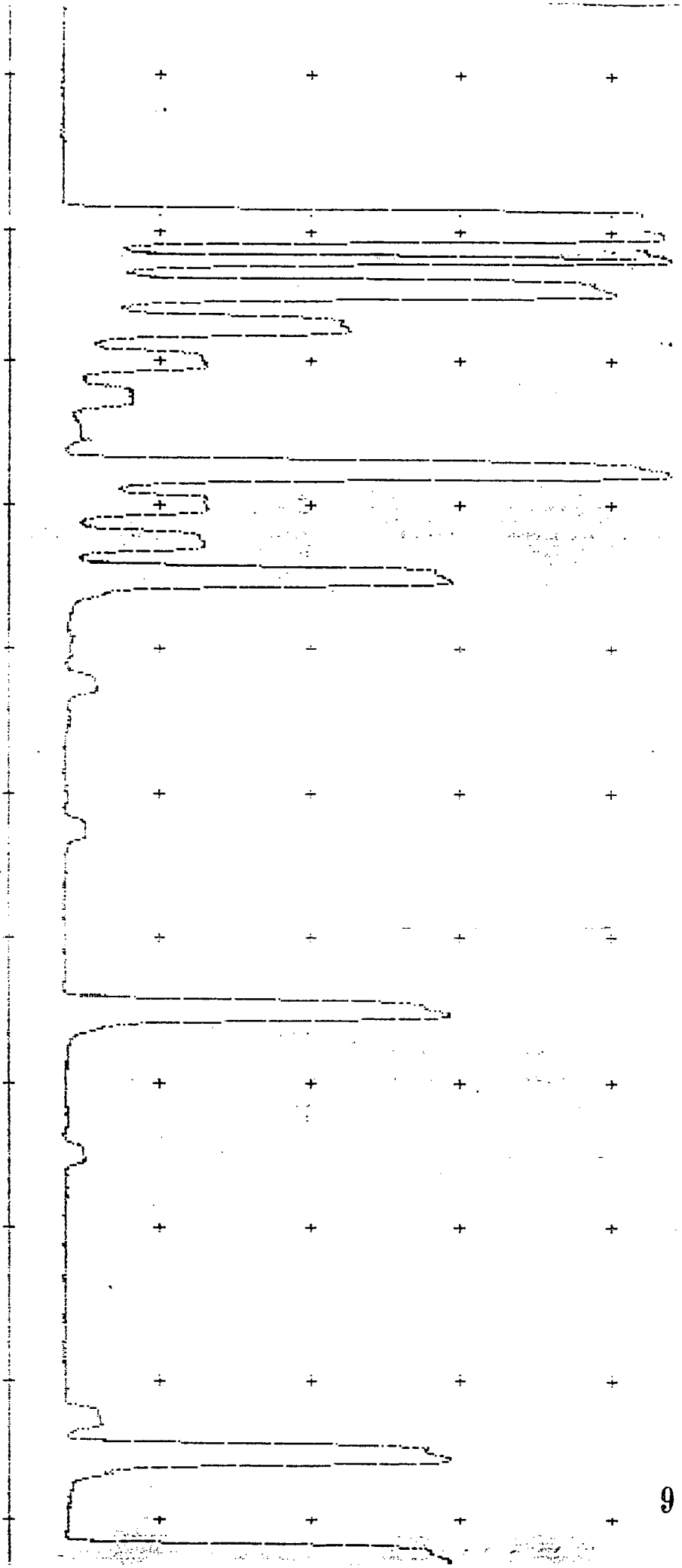
Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
Time: 17:28; Date: 02-25-103
Operator: MAC

Comment:

There are 12554240 (bytes) free on disk.
File B:CN0225.CHR will take approximately 7605 (bytes).

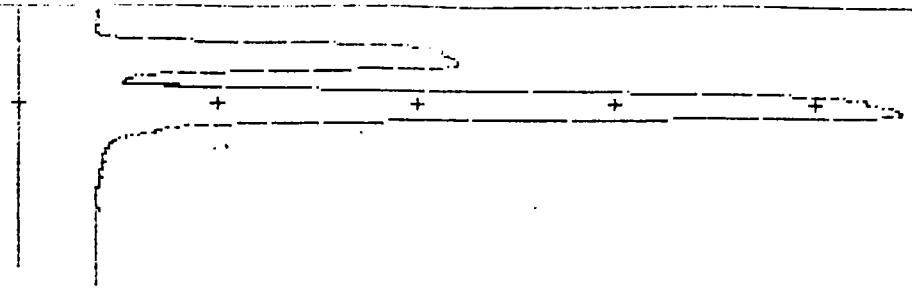




Init base 291

PK	Rel	Abs				
PK	1	CP	1	typ P	0.28	N
PK	2	CP	1	typ C		N
PK	3	CP	2	typ C		N
PK	4	CP	3	typ C		
PK	5	CP	4	typ C		
PK	6	CP	5	typ C		
PK	7	CP	6	typ C	5.982	M
PK	8	CP	1	typ H	468.9	
PK	9	CP	4	typ L	104.5	
PK	10	CP	4	typ L	102.1	
PK	11	CP	7	typ S	296.6	N
PK	12	CP	8	typ S	-1.333	M
PK	13	CP	9	typ S	-0.1857	M
PK	14	CP	10	typ S	19.04	
PK	15	CP	11	typ S	-2.911	M
PK	16	CP	12	typ S	-5.637	M
PK	17	CP	13	typ S	-3.055	M
PK	18	CP	14	typ S	10.29	M
PK	19	CP	15	typ S	-4.919	M
PK	20	CP	16	typ S	-5.637	M
PK	21	CP	17	typ S	-3.780	M
PK	22	CP	18	typ S	-3.780	M
PK	23	CP	19	typ S	294.6	N
PK	24	CP	20	typ S	-3.772	M
PK	25	CP	21	typ S	-4.919	M
PK	26	CP	22	typ S	-3.915	M
PK	27	CP	23	typ S	8.651	M
PK	28	CP	24	typ S	-4.202	M
PK	29	CP	25	typ S	-5.493	M
PK	30	CP	26	typ S	-4.776	M
PK	31	CP	27	typ S	-4.919	M
PK	32	CP	28	typ S	-6.354	M
PK	33	CP	29	typ S	-4.919	M
PK	34	CP	30	typ S	22.33	
PK	35	CP	31	typ S	294.4	N
PK	36	CP	32	typ S	-2.337	M
PK	37	CP	33	typ S	-3.772	M

924



PK 39 CP 35 typ S -2.337 M
PK 40 CP 3 typ I 211.3 N
PK 41 CP 1 typ G 472.9 N

Last base 317

Time: 17:28; Date: 02-25-103
Operator: MAC

Comment:

Channels 2
Base: 63
Gain: 36

cyanide
ug/l

Base drift correction made
Carryover correction made
Gain drift correction made

	Init base				291	
PK	1	CP	1	typ F	467.5	N
	Rel Abs				0.28	
PK	2	CP	1	typ C	469.2	N
PK	3	CP	2	typ C	425.2	N
PK	4	CP	3	typ C	216.5	
PK	5	CP	4	typ C	102.8	
	6	CP	5	typ C	46.79	
PK	7	CP	6	typ C	5.968	M
PK	8	CP	1	typ H	471.8	
PK	9	CP	4	typ L	101.9	
PK	10	CP	4	typ L	101.9	
PK	11	CP	7	typ S	297.4	N
PK	12	CP	8	typ S	-3.576	M
PK	13	CP	9	typ S	-0.4112	M
PK	14	CP	10	typ S	18.81	
PK	15	CP	11	typ S	-3.464	M
PK	16	CP	12	typ S	-6.132	M
PK	17	CP	13	typ S	-3.604	M
PK	18	CP	14	typ S	9.690	M
PK	19	CP	15	typ S	-5.759	M
PK	20	CP	16	typ S	-6.457	M
PK	21	CP	17	typ S	-6.680	M

[redacted] Risk. 202%

text file B:CN0227.TXT has been saved to disk.

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	466.60
500.0 PPB	469.88
400.0 PPB	424.41
200.0 PPB	216.10
100.0 PPB	104.44
50.00 PPB	46.36
10.00 PPB	5.18
500.0 PPB	471.13
100.0 PPB	102.70
100.0 PPB	102.55
ICV 300 PPB	287.38 (96%)
ICB	-4.55
CRDL	7.61
PB	-3.83
LCS DDW5511-241	308.18 (119%)

926

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

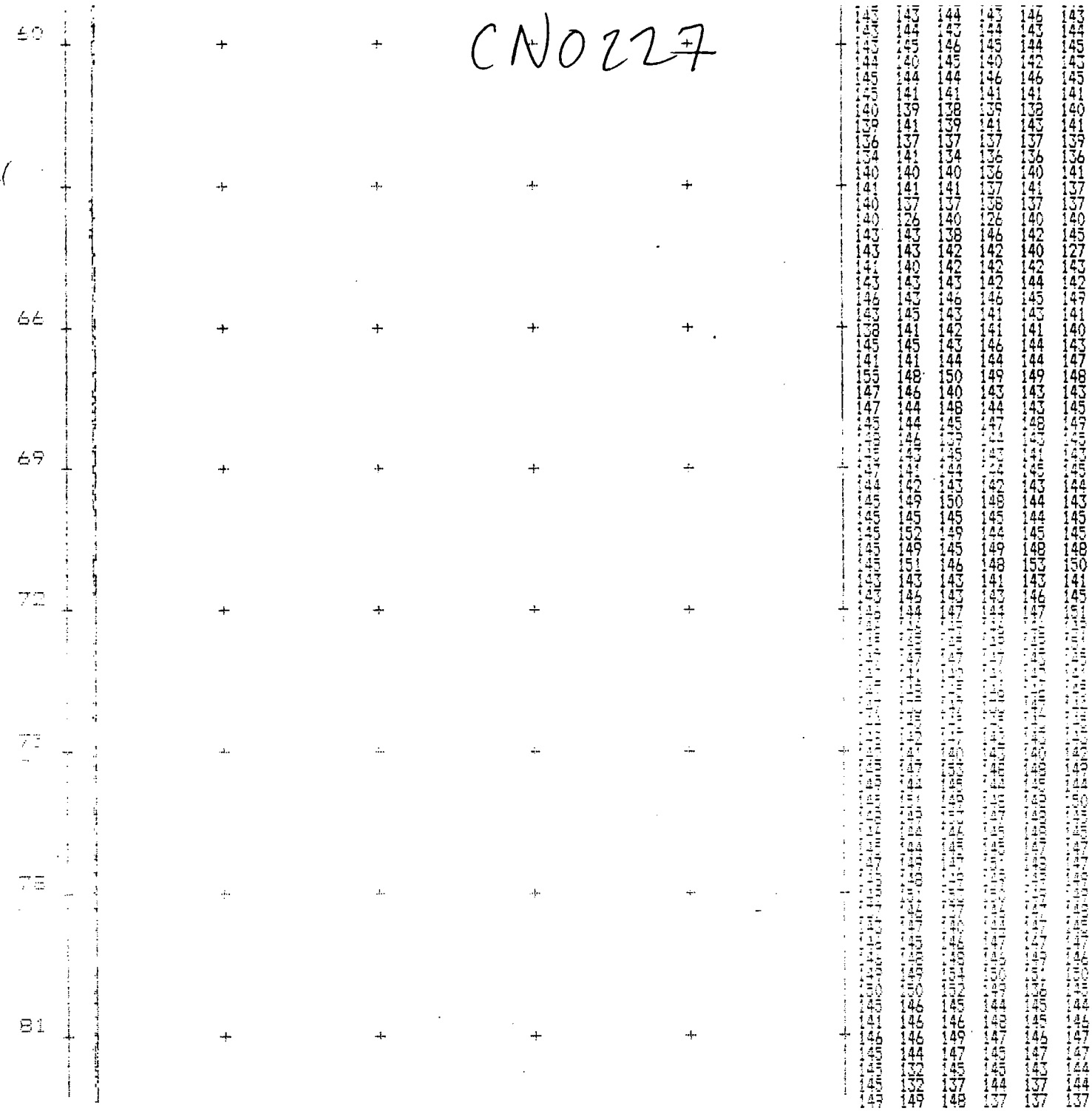
SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE	
CCV	285.07	(96%)
CCB	0.80	
030212 M03 DUP	2.18	
030212 M03 SPK	120.21	(120%)
030212 M03 WD	-4.44	
030225025 001	-5.12	
030220 B01	88.08	
030220 B02	1.52	
030220 B03	-4.09	
030220 B04	0.15	
030220 B05	-5.17	
CCV	283.96	(95%)
CCB	-5.17	
030226039 001	9.20	
030220 B03 DUP	-2.69	
030220 B03 SPK	78.89	(79%)
030220 B06	-3.15	
030220 B07	8.40	
030220 B08	6.53	
030220 B09	3.10	
030224006 004	-7.07	
030224 C01	3.42	
030224 C02	-1.83	
CCV	282.55	(94%)

927

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 AMMONIA
CCB	-7.84
200.0 PPB	212.80
500.0 PPB	469.88

CN0227



Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name	B:CYANIDE.INP	Analysis	1	2	3	4	
# of anal.	1	Channel	2	2	3	-	

Samples/rr	080	Sample/wash	2.0000	Packing	N
Sample time	0030	Wash time	0015	Base Corr	Y
				Raw output	N

929

Anal	Fit	Inv Chem	Base Concent.	Dilution Carryover	Carryover	Chem Name	Units	Base in Calib
1	L	N	.000000	.000000	.000000	cyanide	ug/l	Y
2	L	N	.000000	.000000	.000000			Y
3	L	N	.000000	.000000	.000000			Y
4	L	N	.000000	.000000	.000000			Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (8 characters,no spaces).

2 Edit 3 Read 4 Exit 5 Rd fi & Wr fi 9 DIR 0 ConDe

Technicon TRAACS 800 System Editor

Second Screen

no reassay Z Zic cal file name Dual Probe System N

Run Comment

Tray Protocol

P,6C>1,H@1,2L@4,30S>7,I@3,8@1,E

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe
1

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
1	1	4	P	500.0 PPB.....	1.000000	1.000000	N
2	3	1	C	400.0 PPB	1.000000	1.000000	N
3	4	2	C	200.0 PPB	1.000000	1.000000	N
4	5	3	C	100.0 PPB	1.000000	1.000000	N
5	6	1	C	50.00 PPB	1.000000	1.000000	N
6	7	1	C	10.00 PPB	1.000000	1.000000	N
7	11	1	S	ICV 300 PPB	1.000000	1.000000	N
8	12	1	S	ICB	1.000000	1.000000	N
9	13	1	S	CRDL	1.000000	1.000000	N
10	14	1	S	PB	1.000000	1.000000	N
11	15	1	S	LCS D0H5511 261	1.000000	1.000000	N
12	16	1	S	CCV	1.000000	1.000000	N
13	17	1	S	CCB	1.000000	1.000000	N
14	18	1	S	030212 M03 DUP	1.000000	1.000000	N
15	19	1	S	030212 M03 SPK	1.000000	1.000000	N
16	20	1	S	030212 M03 WD	1.000000	1.000000	N
17	21	1	S	030225025 001	1.000000	1.000000	N
18	22	1	S	030220 B01	1.000000	1.000000	N
19	23	1	S	030220 B02	1.000000	1.000000	N
20	24	1	S	030220 B03	1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc up 8 Sc dn 9 DIR 0 ConDe
l

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	S	030220 G04.....	1.000000	1.000000	N
22	26	1	S	030220 G05	1.000000	1.000000	N
23	27	1	S	CCV	1.000000	1.000000	N
24	28	1	S	CCB	1.000000	1.000000	N
25	29	1	S	030226039 001	1.000000	1.000000	N
26	30	1	S	030220 G03 DUP	1.000000	1.000000	N
27	31	1	S	030220 G03 SPK	1.000000	1.000000	N
28	32	1	S	030220 G06	1.000000	1.000000	N
29	33	1	S	030220 G07	1.000000	1.000000	N
30	34	1	S	030220 G08	1.000000	1.000000	N
31	35	1	S	030220 G09	1.000000	1.000000	N
32	36	1	S	030224006 004	1.000000	1.000000	N
33	37	1	S	030224 C01	1.000000	1.000000	N
34	38	1	S	030224 C02	1.000000	1.000000	N
35	39	1	S	CCV	1.000000	1.000000	N
36	40	1	S	CCB	1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

Sample id for the specified cup

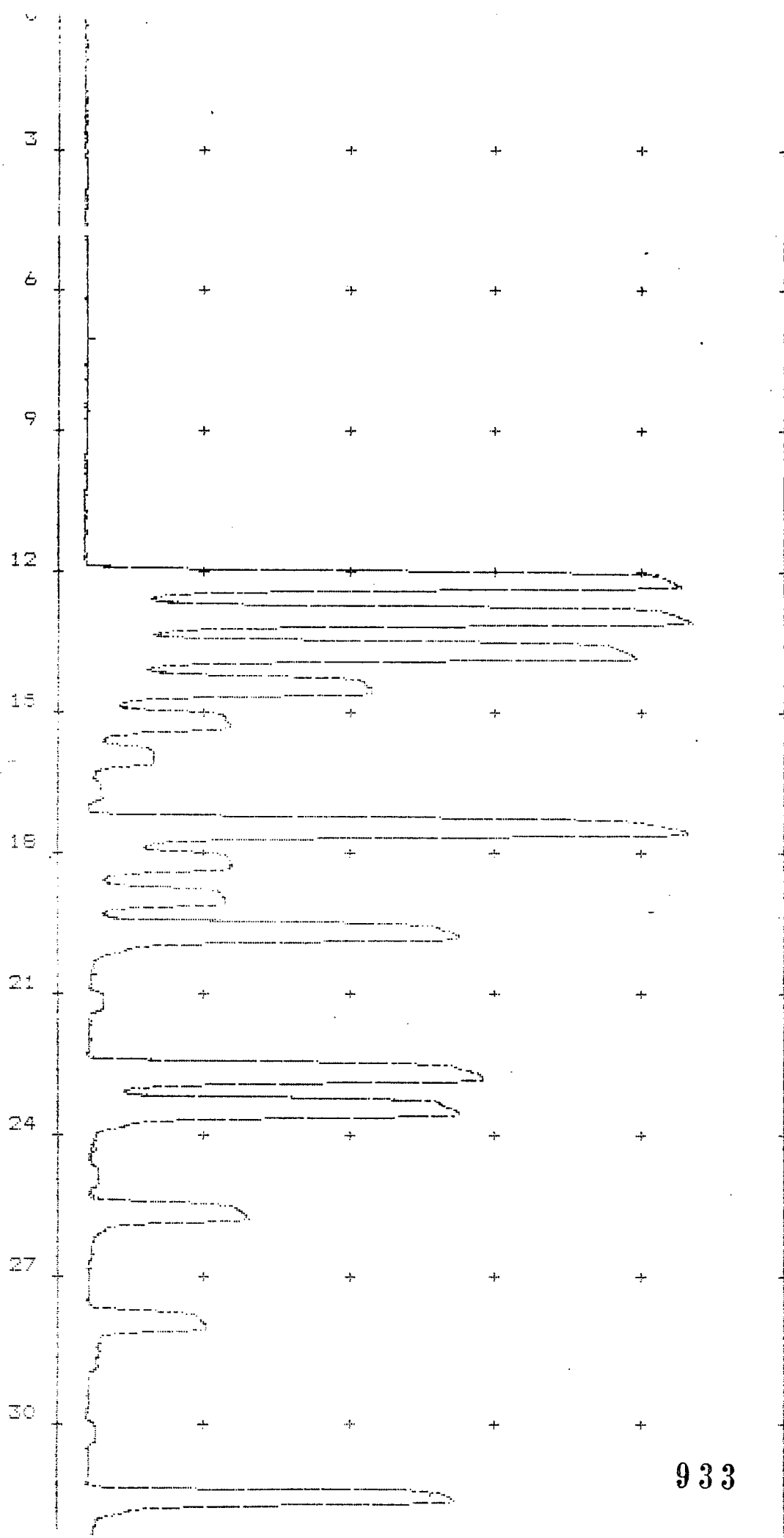
1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
l

Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
me: 15:40; Date: 02-27-103
Operator: MAC

Comment:

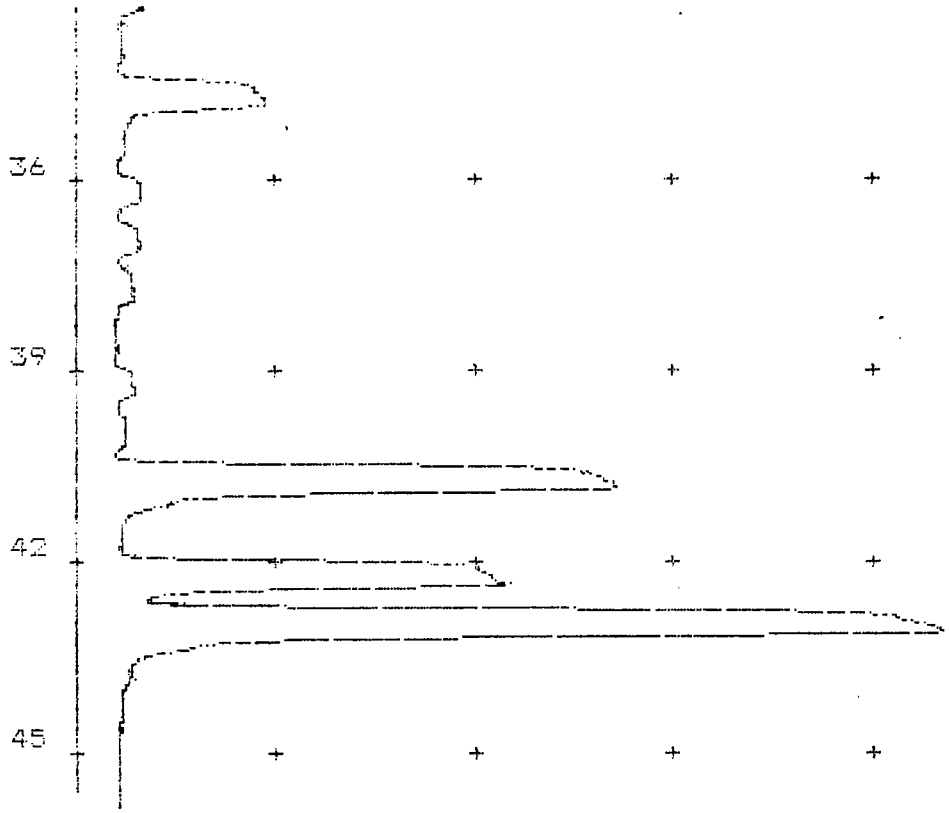
There are 12474368 (bytes) free on disk.



Channels 2
Base: 62
Gain: 37
cyanide
ug/l

Init base 152

PK	1	CP	1	typ P	0.28	N
	Rel	Abs				
PK	2	CP	1	typ C		N
PK	3	CP	2	typ C		N
PK	4	CP	3	typ C		
PK	5	CP	4	typ C		
PK	6	CP	5	typ C		
PK	7	CP	6	typ C	5.035	M
PK	9	CP	1	typ H	465.7	
PK	9	CP	4	typ L	106.3	
PK	10	CP	4	typ L	102.2	
PK	11	CP	7	typ S	295.1	N
PK	12	CP	8	typ S	-1.667	M
PK	13	CP	9	typ S	7.270	M
PK	14	CP	10	typ S	-3.901	M
PK	15	CP	11	typ S	304.8	
PK	16	CP	12	typ S	295.4	N
PK	17	CP	13	typ S	3.918	M
PK	18	CP	14	typ S	2.243	M
PK	19	CP	15	typ S	119.1	S
PK	20	CP	16	typ S	-2.924	M
PK	21	CP	17	typ S	-4.579	M
PK	22	CP	18	typ S	87.42	
PK	23	CP	19	typ S	2.801	M
PK	24	CP	20	typ S	-3.622	M
PK	25	CP	21	typ S	0.8671	M
PK	26	CP	22	typ S	-4.599	M
PK	27	CP	23	typ S	261.7	N



PK	29 CP	25 typ S	9.783	M
PK	30 CP	26 typ S	-1.807	M
PK	31 CP	27 typ S	78.90	
PK	32 CP	28 typ S	-1.388	M
PK	33 CP	29 typ S	9.225	M
PK	34 CP	30 typ S	7.549	M
PK	35 CP	31 typ S	4.198	M
PK	36 CP	32 typ S	-5.856	M
PK	37 CP	33 typ S	4.477	M
PK	38 CP	34 typ S	-0.5500	M
PK	39 CP	35 typ S	281.1	N
PK	40 CP	36 typ S	-3.343	M
PK	41 CP	3 typ I	212.1	N
PK	42 CP	1 typ G	469.2	N

Last base 171

Time: 15:40; Date: 02-27-103
Operator: MAC

Comment:

Channels 2
Base: 62
Gain: 37

cyanide
ug/l

Base drift correction made
Carryover correction made
Gain drift correction made

	Init base			152	
PK	1 CP	1	typ P	466.6	N
	Rel Abs			0.28	
PK	2 CP	1	typ C	469.9	N
PK	3 CP	2	typ C	424.4	N
PK	4 CP	3	typ C	216.1	
PK	5 CP	4	typ C	104.4	
PK	6 CP	5	typ C	46.36	
PK	7 CP	6	typ C	5.177	M
PK	8 CP	1	typ H	471.1	
PK	9 CP	4	typ L	102.7	
PK	10 CP	4	typ L	102.5	
PK	11 CP	7	typ S	287.4	N
PK	12 CP	8	typ S	-4.546	M
PK	13 CP	9	typ S	7.613	M
	14 CP	10	typ S	-3.833	M
PK	15 CP	11	typ S	308.2	
PK	16 CP	12	typ S	285.1	N
PK	17 CP	13	typ S	0.7989	M
PK	18 CP	14	typ S	2.175	M
PK	19 CP	15	typ S	120.2	S
PK	20 CP	16	typ S	-4.443	M

PK	22	CP	18	typ	S	88.08
PK	23	CP	19	typ	S	1.516 M
PK	24	CP	20	typ	S	-4.091 M
PK	25	CP	21	typ	S	0.1526 M
PK	26	CP	22	typ	S	-5.172 M
PK	27	CP	23	typ	S	284.0 N
PK	28	CP	24	typ	S	-5.169 M
	29	CP	25	typ	S	9.200 M
PK	30	CP	26	typ	S	-2.689 M
PK	31	CP	27	typ	S	78.89
PK	32	CP	28	typ	S	-3.152 M
PK	33	CP	29	typ	S	8.398 M
PK	34	CP	30	typ	S	6.529 M
PK	35	CP	31	typ	S	3.104 M
PK	36	CP	32	typ	S	-7.070 M
PK	37	CP	33	typ	S	3.417 M
PK	38	CP	34	typ	S	-1.833 M
PK	39	CP	35	typ	S	282.5 N
PK	40	CP	36	typ	S	-7.843 M
PK	41	CP	3	typ	I	212.8 N
PK	42	CP	1	typ	G	469.9 N
Last base						171

Sample statistics

Anal	level	cups	avg	std dev	cv
1	all	30	57.41	110	191%

Anal 1: linear fit
Carryover factor: 1.10%.

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~ARSENIC~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	494.17
500.0 PPB	500.22
400.0 PPB	396.91
200.0 PPB	205.31
100.0 PPB	99.61
50.00 PPB	51.30
10.00 PPB	9.01
500.0 PPB	495.37
100.0 PPB	97.95
100.0 PPB	97.90
ICV 300 PPB	292.29
ICB	-0.65
CRDL	9.25
PB	-1.15
LCS ERA 201UG/G	157.99

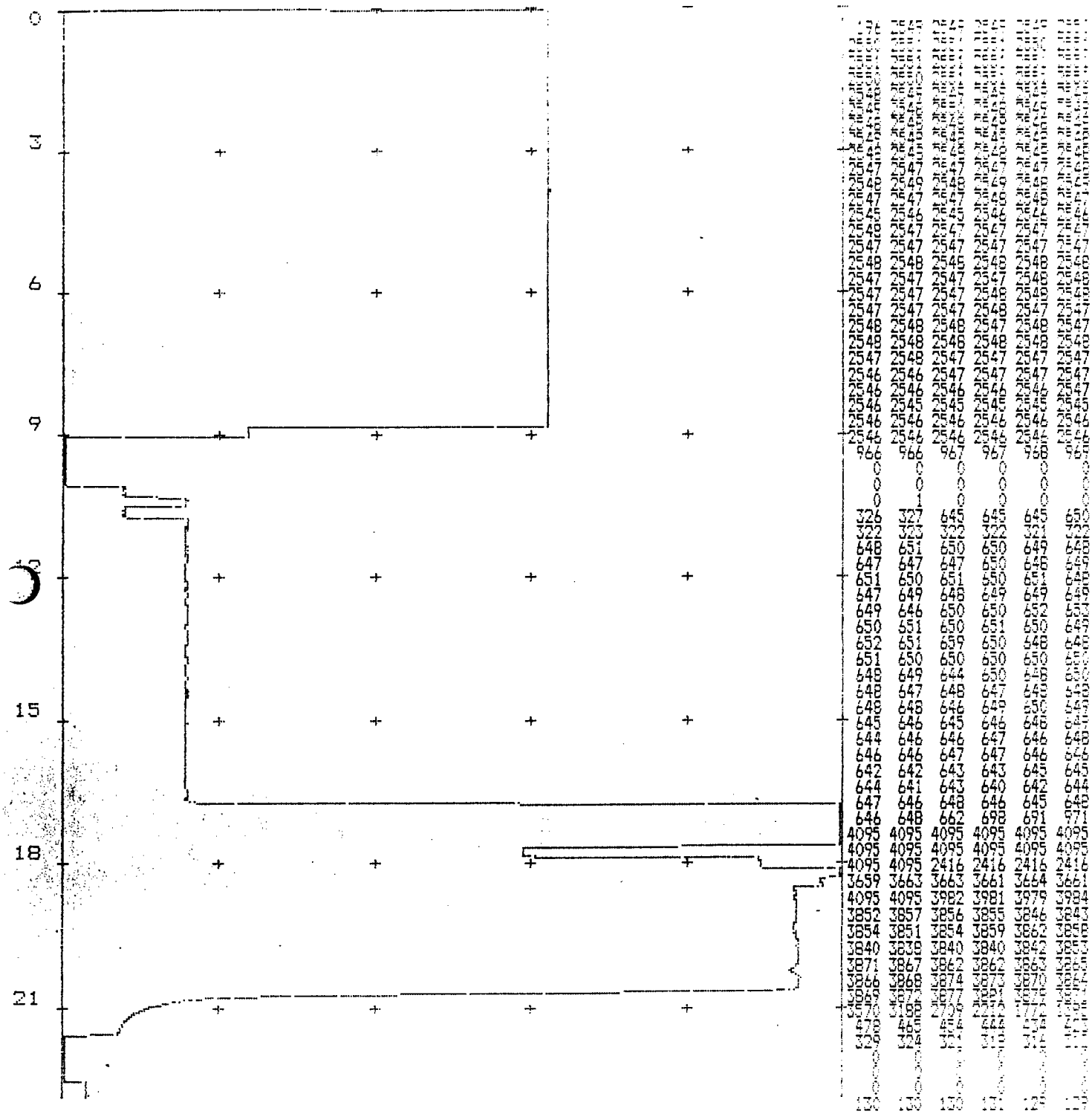
Page No. 1
03/01/03

Advanced Environmental Services, Inc.
214 North Fairfield Street
Albany, NY 12203

SAMPLE ID	CHANNEL #3 AMMONIA ~~CYANIDE~~
CCV	305.94
CCB	-1.53
030220 B07 DUP	-1.06
030220 B07 SPK	34.49
X 030220 B01 W&D	0.52
030224 C02	-2.36
030224 C04	-1.77
030224 C05	-0.45
03022502O 03	4.61
030225027 01	32.96
CCV	306.53
CCB	-1.56
030225002 01R	14.71
CCV	310.25
CCB	-1.69
200.0 PPB	196.72
500.0 PPB	500.22

CN0304

Chart minimum: 0%, maximum 100%
Live analyses: 2



Base and gain found. They are:
Channel 2: base 62, gain 25, rel. abs. 0.45. Actual low 3%, high 91%.
Actual lag time: 7.9 min. Base and gain were changed from 100 13.

938

First Screen

File Name B:CYANIDE.INP Analysis 1 2 3 4

# of anal. 1 Channel 2 2 3 4

Samples/hr 080 Sample/wash 2.0000 Pecking N

Sample time 0030 Wash time 0015 Base Corr Y

Raw output N

Anal	Fit	Inv Base Chem	Concent.	Dilution Carryover	Carryover	Chem Name	Units	Base in Calib
1	L	N	.000000	.000000	.000000	cyanide	ug/l	Y
2	L	N	.000000	.000000	.000000			Y
3	L	N	.000000	.000000	.000000			Y
4	L	N	.000000	.000000	.000000			Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (8 characters,no spaces).

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

1

Technicon TRAACS 800 System Editor

Second Screen

to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol

P,SC>1,H@1,2L@4,2OB:7,I@I,3@1,E

Gain peak # 002

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

Technicom TRAACS 800 System Editor

Goto --> 000 Third Screer

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
1	1	4	P	500.0 PPB	1.000000	1.000000	N
2	3	1	C	400.0 PPB	1.000000	1.000000	N
3	4	2	C	200.0 PPB	1.000000	1.000000	N
4	5	3	C	100.0 PPB	1.000000	1.000000	N
5	6	1	C	50.00 PPB	1.000000	1.000000	N
6	7	1	C	10.00 PPB	1.000000	1.000000	N
7	11	1	S	ICV 300 PPB	1.000000	1.000000	N
8	12	1	S	ICB	1.000000	1.000000	N
9	13	1	S	CRDL	1.000000	1.000000	N
10	14	1	S	PB	1.000000	1.000000	N
11	15	1	S	LCS ERA 201UG/G	1.000000	20.000000	N
12	16	1	S	CCV	1.000000	1.000000	N

940

14	18	1	S	030220 G07 DUP	1.000000	1.000000	N
15	19	1	S	030220 G07 SPK	1.000000	1.000000	N
16	20	1	S	030220 G01 W&D	1.000000	1.000000	N
17	21	1	S	030224 C03	1.000000	1.000000	N
18	22	1	S	030224 C04	1.000000	1.000000	N
19	23	1	S	030224 C05	1.000000	1.000000	N
20	24	1	S	030225002 03	1.000000	1.000000	N

Cup number to move to

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
l

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	S	030225027 01...	1.000000	1.000000	N
22	26	1	S	CCV	1.000000	1.000000	N
23	27	1	S	CCB	1.000000	1.000000	N
24	28	1	S	030225002 01R	1.000000	1.000000	N
25	29	1	S	CCV	1.000000	1.000000	N
26	30	1	S	CCB	1.000000	1.000000	N
27					1.000000	1.000000	N
28					1.000000	1.000000	N
29					1.000000	1.000000	N
30					1.000000	1.000000	N
31					1.000000	1.000000	N
32					1.000000	1.000000	N
33					1.000000	1.000000	N
34					1.000000	1.000000	N
35					1.000000	1.000000	N
36					1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

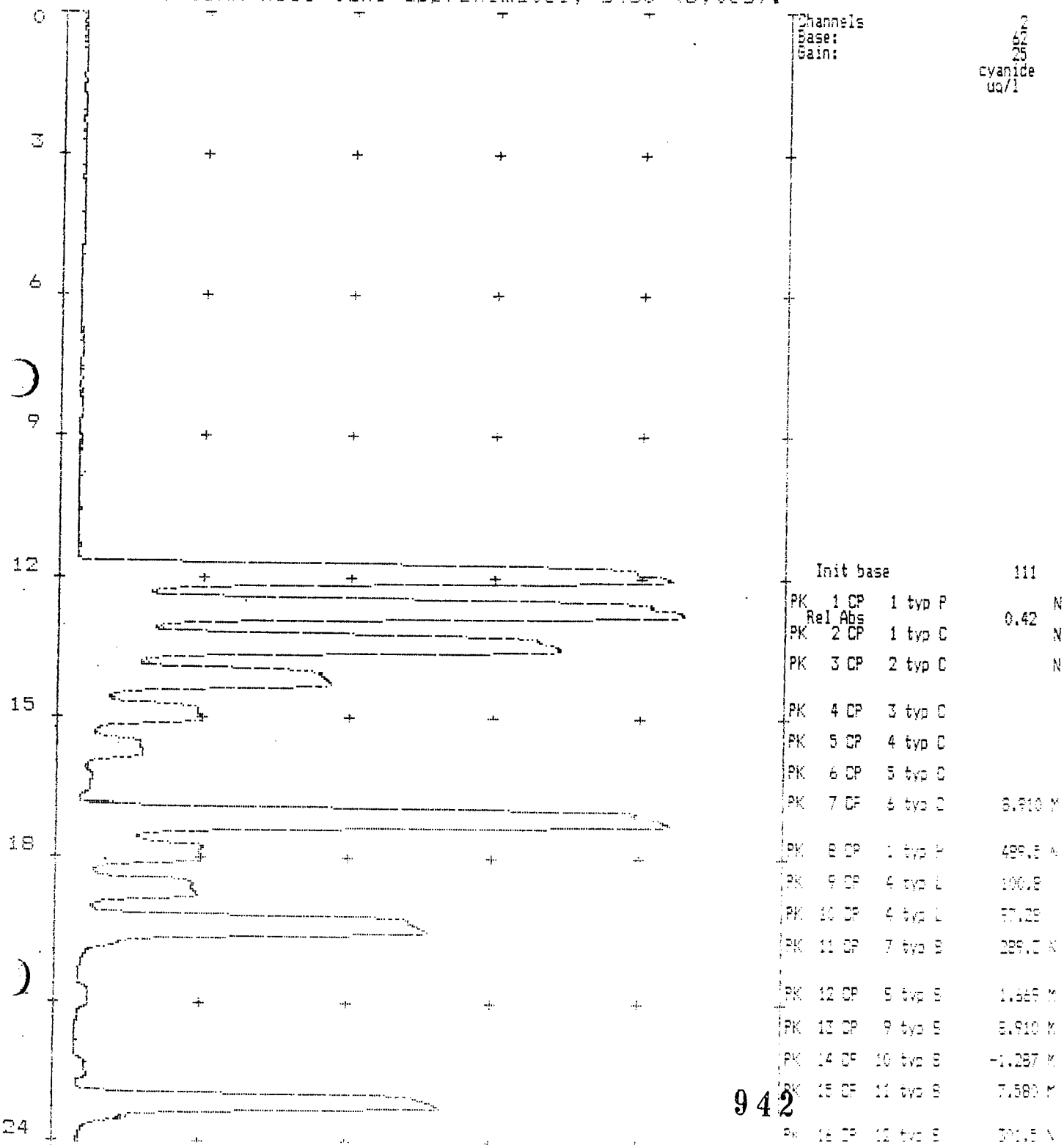
1 Copy 2 Edone 3 Ree E 4 Exit 5 Rd 41 6 Wr 41 7 Bc Up E Bc Dr 9 DIR 0 DirDe
1

Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
Time: 13:19: Date: 03-01-102
Operator: MAC

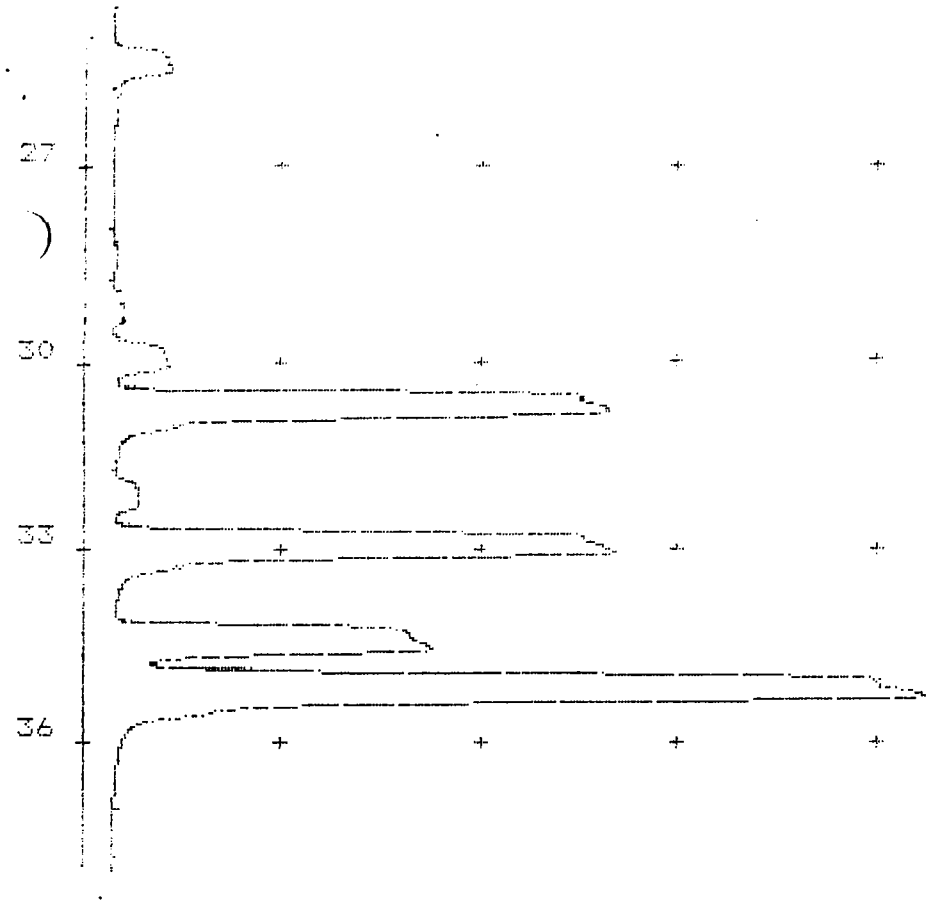
Comment:

There are 12400640 (bytes) free on disk.
File B:CN0304.CHR will take approximately 6480 (bytes).



Init base 111

PK	1 CP	1 typ P		N
Rel Abs			0.42	
PK	2 CP	1 typ C		N
PK	3 CP	2 typ C		N
PK	4 CP	3 typ C		
PK	5 CP	4 typ C		
PK	6 CP	5 typ C		
PK	7 CP	6 typ C	8.910	M
PK	8 CP	1 typ P	499.5	M
PK	9 CP	4 typ C	100.8	
PK	10 CP	4 typ C	57.25	
PK	11 CP	7 typ S	389.2	M
PK	12 CP	5 typ S	1.665	M
PK	13 CP	9 typ S	8.910	M
PK	14 CP	10 typ S	-1.257	M
PK	15 CP	11 typ S	7.583	M
PK	16 CP	12 typ S	391.5	M



PK	18	CP	14	typ	B	-1.139 M
PK	19	CP	15	typ	B	33.89
PK	20	CP	16	typ	B	0.7823 M
PK	21	CP	17	typ	B	-1.321 M
PK	22	CP	18	typ	B	-1.753 M
PK	23	CP	19	typ	B	-0.4000 M
PK	24	CP	20	typ	B	4.625 M
PK	25	CP	21	typ	B	32.56
PK	26	CP	22	typ	B	301.5 M
PK	27	CP	23	typ	B	1.373 M
PK	28	CP	24	typ	B	14.67
PK	29	CP	25	typ	B	304.8 M
PK	30	CP	26	typ	B	1.372 M
PK	31	CP	3	typ	I	193.2 M
PK	32	CP	1	typ	B	492.3 M

Last base 113

Time: 12:19; Date: 03-01-103
Operator: MAC

Comments:

Channels	2
Base:	60
Gain:	25

cyanide
ug/l

Base drift correction made
Carryover correction made
Gain drift correction made

Init base					111	
PK	1	CP	1	typ	P	494.2 N
Rel Abs						0.42
PK	2	CP	1	typ	C	500.2 N
PK	3	CP	2	typ	C	396.9 N
PK	4	CP	3	typ	C	205.3
PK	5	CP	4	typ	C	99.61
PK	6	CP	5	typ	C	51.30
PK	7	CP	6	typ	C	9.006 M
PK	8	CP	1	typ	B	495.4 N
PK	9	CP	4	typ	B	97.95
PK	10	CP	4	typ	B	97.90
PK	11	CP	7	typ	B	292.3 N
PK	12	CP	8	typ	B	-0.6457 M
PK	13	CP	9	typ	B	9.260 M
PK	14	CP	10	typ	B	-1.151 M
PK	15	CP	11	typ	B	7.299 M
PK	16	CP	12	typ	B	305.9 N
PK	17	CP	13	typ	B	-1.054 M
PK	18	CP	14	typ	B	-1.062 M
PK	19	CP	15	typ	B	33.89

[illegible]

Sample statistics

Anal level	Type	Avg	Std dev	CV
1	all	30	45.34	133	186%

Anal 1: linear fit
Carryover factor: 0.90%.

Chart saved to file B:CN0304.CHR.

Text file B:CN0304.TXT has been saved to disk.

URS/Dames & Moore

016

T. Phenols ASP 460nm spec 610

3.13.03 LL

sample ID	vol dist	vol used	abs	ug/L remove	ug/L ϕ
BK			0.000		
2 ug/L			0.015		
10			0.060	r = 0.9981	
20			0.112		
40			0.239		
50			0.316		
ICV 40 ug/L			0.257	41	41
ICB			0.000		
CRDL 2 ug/L			0.009	2.0	2.0
PBK			0.000		
LCS 40 ug/L			0.252	41	41
CCV 30 ug/L			0.191	31	31
CCB			0.000		
02120J01 MC117	500	500	0.009	2.0	2.0
2 DD243			0.015	3.0	3.0
3 DD238			0.002	< 2	< 2
4 DD014			< 0.001		
5 DD129			0.002		
6 dup			0.004		
02120G01 MC110			< 0.001	< 2	< 2
2 SH 8601			< 0.001		
3 DD0121			< 0.001		
4 SH0121			0.028	5.0	5.0
CCV			0.192	31	31
CCB			0.000		
02120G05 DD0125	500	500	< 0.001	< 2	< 2
6 DD0115			0.002		
7 IM0123			0.019	4.0	4.0
7 MS/MSD			0.017	3.4	3.4
02124C01 SH 2611			< 0.001	< 2	< 2
2 DD0132			0.015	3.0	3.0
3 DD0131			< 0.001	< 2	< 2
4 dup			0.005		
5 SH 3016			< 0.001		
02128H01 IM0237			< 0.001	< 2	< 2
CCV			0.192	31	31
CCB			0.000		

945

ZR 3 / Barnes & Moore

T Phenol 437 cont p D-16

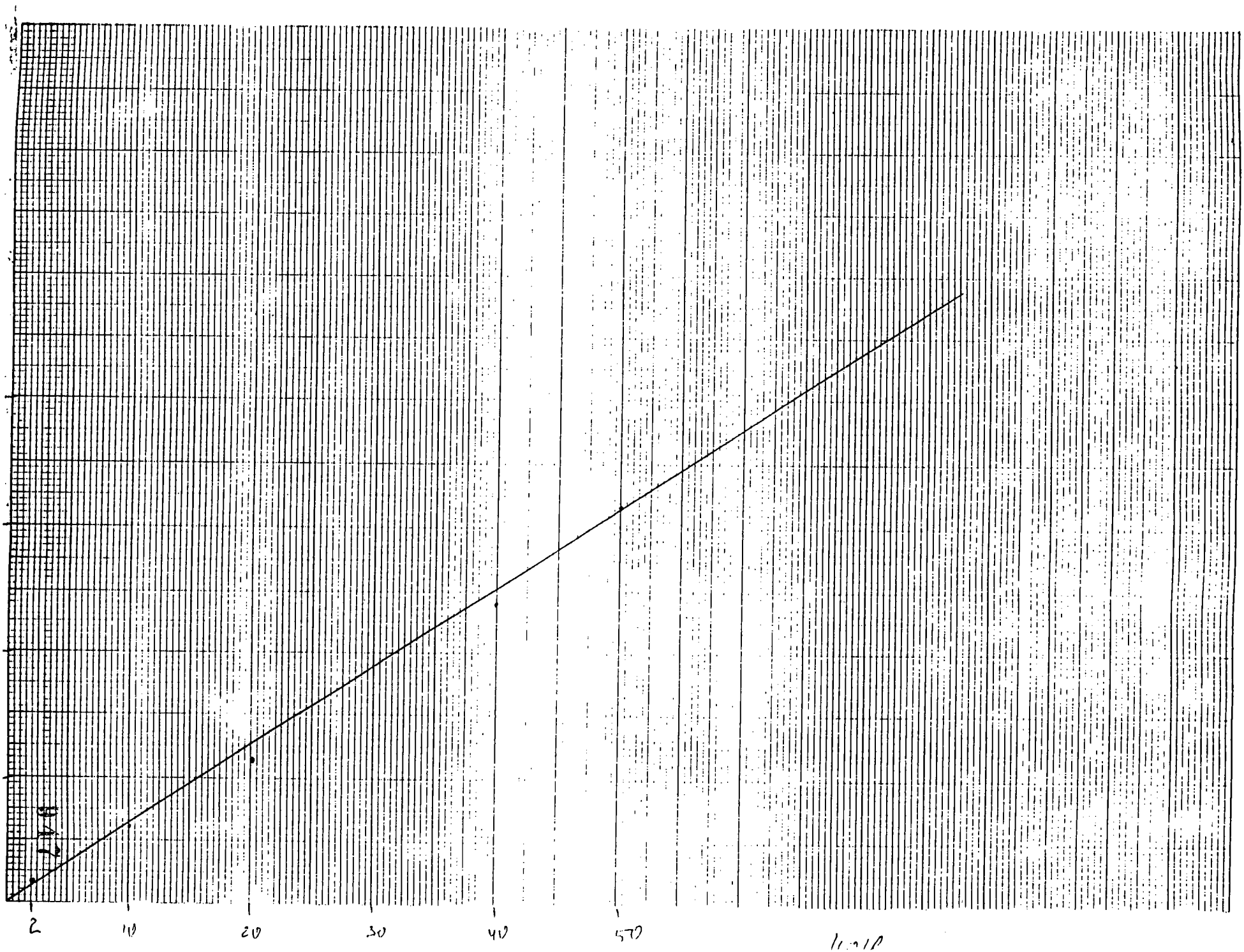
3-13-03 BS

Sample #	Vol d/IT	Vol Used	abs	ug/L Conc	ug/L Corr
0228 HOI MS/MSD	500	500	<0.001	< 2	< 2
2 SD920			<0.001		
3 SMW19			0.002		
4 SD020			<0.001		
5 SH 8617			0.006	~~0.002~~	~~0.002~~
9 SD0134			<0.001	< 2	< 2
Ref. st 40 ug/L			0.254	41	41 A = 102%
SP 60 ug/L 0220 607	500	500	0.381	62	62 SP = $\frac{62-4}{60} \times 100\% = 97\%$
SP 60 ug/L 0228 HOI			0.327	53	53 SP = 88%
CCV			0.191	31	31
CCB			0.000		

T. Phenols 460nm spec 6/10

10.9.03 LS

r = 0.9981



Cyanide Distillation

Sample ID	VOL/AMT	apparatus	Tech/Date
030212 M02	50	1	MAE 2/2
030212 M03		2	
030212 M04		3	
030212 M05	HEATON: 1455	4	
030214 021 0024		5	
030213 011 001B		6	
030218 F01		7	
030218 F02		8	
030220026 -002		9	
Prep blank		10	
~~030218 J01~~ ~~218~~	MAC 2/25	1	MAE 2/2
030224018 01	50g	1	
030224018 02	53g	2	
030218 J01	50	3	
218 J02	HEAT ON 1120	4	
218 J03		5	
218 J04		6	
218 J05		7	
218 J06		8	
030220 18 02		9	
030213 011 01 AC		10	
030212 M03 dup	50	1	MAE 2/2
030212 M03 spike		2	
212 M03 WRO	HEAT ON: 1310	3	
DCS DCH 5511		4	
030225015 001C		5	
030220 G01		6	
030220 G02		7	
030220 G03		8	
030220 G04		9	
030220 G05		10	

2] Cyanide Distillation 08

Sample ID	Vol/AMT		Apparatus	Tech/Date
Amp 030226039 001	50		1	MAL 2/26
030220 G03 dup			2	
030220 G05 spike		HEAT on: 1635	3	
030220 G06			4	
030220 G07			5	
030220 G08			6	
030220 G09			7	
030224 G06 004			8	
030224 C01			9	
030224 C02			10	
030221 A01	3.0g		1	MAL 2/27
030220 B01	3.2g		2	
030224 B01	3.3g		3	
030224 B02	3.2g		4	
030225 B01	3.1		5	
030225 B01 dup	3.0	HEAT on: 1215	6	
030225 B01 Spike (25ug/g)	3.0		7	
~~LCS~~ 030225 B02	3.2		8	
~~030225 B02~~ LCS	1.0g		9	
ptcp blank	50ml		10	
BK	50ml	heat on 10:15	1	DA 2/28
2 030221A01 wk+diss	3.3g		2	
2 030224 B02 wk+diss	3.3g		3	
2 030225B02	3.0g		4	
Cleaning BK	50ml		5	
"			6	
"			7	
3 030225 B01	3.1		8	
246 LCS 20ug/L	1.0g		9	
3 030225 B01 Dup	3.0		10	

Cyanide Distillation

Sample ID	Vol/AMT		Apparatus	Tech/Date
030220 G07 dup	50		1	MAE 3/3
030220 G07 spike	50		2	
~~030220~~ Blank, Rinse	50		3	
Blank, Rinse	50		4	
030220 G01 W&D	50	HEAT ON: 1555	5	
030224 C03	50		6	
030224 C04	50		7	
030224 C05	50		8	
030225 02 03	50		9	
030225 027 01	50		10	
030220037-001	50		1	MAE 3/4
030224017-001			2	
030225003-001		HEAT ON: 1530	3	
030225003-002			4	
030227 029-001			5	
030228 001-003			6	
030225 003-003	3.5g		7	
~~030~~ DOH 5511 (CN) 261 ug/L	50		8	
030220 G07 Spike	50		9	
prep blank	50		10	
030228 H01	50		1	MAE 3/5
030228 H01 dup			2	
030228 H01 spike		HEAT ON: 1535	3	
030228 H02			4	
030228 H03			5	
030228 H04			6	
030228 H05			7	
030228 H09			8	
DOH 5511 CN- (261 ug/L			9	
030305042-001			10	

Sample ID

APL 0220039-001C K03-6

45 {

501 {

AS 0221012-002C CL. EH

BK

4 0219301 mw-135
0218J01 M0117
2 00243
3 4-238
4 #014
5 4129
6 dup

4 { 0219 [illegible] mw-105
0219 H01 " GS
H02 GS dup

{ 0219009-002B 064-001A
003A 063-001
004B 063-01N

Illeg 0219023-002B EH.

Idue 0219 H02

4 0220601 MC HC (7)

{ 0220017-002B 062-001
0221008-002A 065-00.

0220010-001A EH
0220006-002A RAW HW
001A EH

{ 0224003-004A 066-00.
5A 067-001
6A 068-00,

4 { 0220 H01 MPKE
3 BRFE

VOL	#	Date	TB
STP	1	2.24.03	U
	3		
	4		
	5		
500	3-4		
500	1	2.25.03	LS
	2		
	3		
	4		
	5		
	6		
	7		
500	1	2.25.03	LS
	2		
	3		
	4		
	5		
	6		
	7		
500	1	2.26.03	LS
	2		
	3		
	4		
	5		
	6		
	7		
500	1	2.26.03	LS
	2		
	3		
	4		
	5		

stomer Sample ID	Vol	#	Date	Tech
lu. 0225013-002A 069-001	800	1	2·[illegible]·03	LS
0226024-002B 073-01A		2		
3A 072-01A		3		
ut 4A 070-001		4		
0224017-001B 001		5		
0225002-001A Encore		6		
0225020-003B		7		
0227003-002B 071-001	500	1	2·28·03	LS
ut 0225003-002B E1A		2		
001B int		3		
0224017-003B 002 Day 2		4		
0226045-003B 013		5		
001B 001		6		
002B 01A		7		
0224017-004B 002 Day 3	500	5	2·28·03	LS
0221055-001B	250/500	2		
0.06 mg/ml 0218010-006A	500	1		
BK	500	1-7		
RS 0220602 SH 8601 7	500	1	3·3·03	LS
3 DD 0121 7		2		
4 SH 0121 3		3		
5 DD 0123 7		4		
6 DD 0115 7		5		
FIM 0123 10		6		
7 ms/mm 11		7		
0224 C01 SH 8611 6	500	1	3·5·03	LS
2 DD 0132 6		2		
3 CD 0131 6		3		
4 DMD (:001) 6		4		
5 SH 8616 5		5		
0228 HC1 IM 0237 17		6		
HC1 ms/mm 18		7		

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APR 15 2003

X
AMK

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, New York 12065

Attention: Eriko Fujita

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TITLE PAGE

On February 28, 2003 nine water samples were received by Adirondack Environmental Services, Inc. from URS Consultants, Inc. at the NYSEG Mechanicville site. These samples were analyzed for Volatile Organics, Semi-Volatile Organics, Metals and Conventionals as specified by the contract. The project was completed on April 11, 2003.

Laboratory Manager

Date: 4/11/03

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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Metals	*Other CN
MEGDIM0237	030228H-01	X	X			X	X
MEGDD0120	030228H-02	X	X			X	X
MEGUIM0119	030228H-03	X	X			X	X
MEGDD0240	030228H-04	X	X			X	X
MEGDSH8617	030228H-05	X	X			X	X
TB030227	030228H-06	X					
MEGDD0132	030228H-07		X				
MEGDD0132	030228H-08					X	
MEGDD0134	030228H-09	X	X			X	X

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
030228H-01	WATER	2/25/03	2/28/03	N/A	3/3/03
030228H-02	WATER	2/27/03	2/28/03	N/A	3/3/03
030228H-03	WATER	2/26/03	2/28/03	N/A	3/3/03
030228H-04	WATER	2/27/03	2/28/03	N/A	3/3/03
030228H-05	WATER	2/27/03	2/28/03	N/A	3/3/03
030228H-06	WATER	2/27/03	2/28/03	N/A	3/3/03
030228H-09	WATER	2/28/03	2/28/03	N/A	3/3/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
SEMIVOLATILE (BNA)
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
030228H-01	WATER	2/25/03	2/28/03	3/4/03	3/31/03
030228H-02	WATER	2/27/03	2/28/03	3/4/03	4/1/03
030228H-03	WATER	2/26/03	2/28/03	3/4/03	4/1/03
030228H-04	WATER	2/27/03	2/28/03	3/4/03	3/30/03
030228H-05	WATER	2/27/03	2/28/03	3/4/03	4/1/03
030228H-07	WATER	2/25/03	2/28/03	3/4/03	3/29/03
030228H-09	WATER	2/28/03	2/28/03	3/4/03	3/29/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030228H-01	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03
		Total Cyanide		3/5/03	3/6/03
		Free Cyanide		3/5/03	3/6/03
		Total Phenols		3/5/03	3/13/03
030228H-02	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03
		Total Cyanide		3/5/03	3/6/03
		Free Cyanide		3/5/03	3/6/03
		Total Phenols		3/5/03	3/13/03
030228H-03	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03
		Total Cyanide		3/5/03	3/6/03
		Free Cyanide		3/10/03	3/10/03
		Total Phenols		3/5/03	3/13/03
030228H-04	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03
		Total Cyanide		3/5/03	3/6/03
		Free Cyanide		3/5/03	3/6/03
		Total Phenols		3/5/03	3/13/03
030228H-05	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03
		Total Cyanide		3/5/03	3/6/03
		Free Cyanide		3/10/03	3/10/03
		Total Phenols		3/5/03	3/13/03
030228H-08	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
030228H-09	WATER	ICP	2/28/03	3/13/03	3/13/03
		Mercury		3/12/03	3/12/03
		Total Cyanide		3/5/03	3/6/03
		Free Cyanide		3/5/03	3/6/03
		Total Phenols		3/5/03	3/13/03

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Case Narrative

Client: URS Consultants, Inc. – NYSEG Mechanicville

Case: URS 0310

SDG: MEGDD0120

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MEGDIM0237 MW-31I 2/25/03	030228H-01	02/28/03	14:36	Water
MEGDD0120 MW-20D 2/27/03	030228H-02	02/28/03	14:36	Water
MEGUIM0119 MW-19I 2/26/03	030228H-03	02/28/03	14:36	Water
MEGDD0240 MW-40D 2/27/03	030228H-04	02/28/03	14:36	Water
MEGDSH8617 MW-17 2/27/03	030228H-05	02/28/03	14:36	Water
TB030227	030228H-06	02/28/03	14:36	Water
MEGDD0132 MW-32D 2/28/03	030228H-07	02/28/03	14:36	Water
MEGDD0132	030228H-08	02/28/03	14:36	Water
MEGDD0134 MW-34D 2/28/03	030228H-09	02/28/03	14:36	Water

Volatile Organics

1) The samples were analyzed using EPA Method 8260 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %RSD for the compound Bromomethane in the initial calibration analyzed on 2/21/03 was outside the criteria established by the method. The %RSD for this compound was 25.3 %. The RRF for the compound Trichloroethene in the initial calibration analyzed on 2/21/03 was outside the required limits. The RRF for this compound was 0.283. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for these compounds.

3) The RRF for the compound Trichloroethene in the continuing calibration analyzed on 3/3/03 was outside the required limits. The RRF for this compound was 0.292. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

4) Sample MEGDIM0237 (AES sample number 030228H-01) was used for the matrix spike and matrix spike duplicate analysis. All recoveries were within required limits.

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5) The surrogate recovery for Toluene-d8 on sample MEGUIM0119 (AES sample number 030228H-03) was outside required limits. The recovery was just above the specified limits. This sample was not re-analyzed.

6) The surrogate recovery for sample MEGDIM0237 MSD (AES sample number 030228H-01 MSD) was outside required limits. According to the protocol, matrix spike and matrix spike duplicate are not re-analyzed for surrogate recoveries outside specified limits.

7) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed for Polynuclear Aromatic Hydrocarbons only using EPA Method 8270 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %D for the compound Benzo(k)fluoranthene in the continuing calibration analyzed on 3/29/03 was outside the criteria established by the method. The %D for this compound was 25.5 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

3) Sample MEGDIM0237 (AES sample number 030228H-01) was used for the matrix spike and the matrix spike duplicate analysis. Several of the recoveries in the matrix spike and matrix spike duplicate were outside required limits. According to the protocol, a matrix spike blank must be analyzed. A matrix spike blank was analyzed and all recoveries were within required limits.

Inorganics – Total Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

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2) The digested spike recoveries for the elements Aluminum, Arsenic, Mercury and Selenium for sample MEGDIM0237 (AES sample number 030228H-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recoveries for Aluminum and Selenium were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

Inorganics – Filtered Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) The digested spike recoveries for the elements Aluminum, Arsenic, Lead, Manganese, Mercury, Selenium and Zinc for sample MEGDIM0237 filtered (AES sample number 030228H-01) were outside the required 75-125 % limits. A post digestion spike was performed and all recoveries, except Arsenic were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

3) The elements Iron and Manganese for sample MEGDIM0237 filtered (AES sample number 030228H-01) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol for the water samples. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

4) The %RPD recovery for Lead between sample MEGDIM0110 (AES sample number 030220G-01) and the duplicate sample was outside of the required 20 % acceptance limit. The results for this element are flagged with an "*" as required by the protocol.

Conventionals

1) Samples MEGDIM0237 (AES sample number 030228H-01) were used for the Cyanide and Phenols matrix spike and duplicate analysis. All recoveries were within required limits.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 4/11/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0120

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0120
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0644
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SJ
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U SJ
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	1.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/26/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0134

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0134
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0656
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U UJ
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U UJ
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	4.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/6/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0240

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0240
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0654
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SS
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U SS
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/26/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0643
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U CJ
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U CJ
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	1.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/26/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH8617

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDSH8617
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0655
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U GJ
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U GJ
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/26/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUIM0119

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGUIM0119
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0645
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	4.	J
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030227

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: TB030227
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0648
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 6/6/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0120

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0120

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: A3192

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0132

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0132

Sample wt/vol: 800.0 (g/mL) ML Lab File ID: A3153

Level: (low/med) LOW Date Received: 03/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0134

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0134

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: A3154

Level: (low/med) LOW Date Received: 03/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	~~U~~ UJ
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	~~U~~ UJ
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

AMK 6/26/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0240

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0240

Sample wt/vol: 930.0 (g/mL) ML Lab File ID: A3163

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

AMS 4/26/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3189

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/31/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH8617

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDSH8617

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: A3194

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUIM0119

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGUIM0119

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: A3193

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0120

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0120__

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	550		N R	P
7440-36-0	Antimony	3.6	B		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	400			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	15.8	B		P
7439-89-6	Iron	2550			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	60.8			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	8.1	B		P
7440-42-8	Boron				NR

AMK 4/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0120F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0120F_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~151~~	~~B~~	~~EN~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.8	B	N J	P
7440-39-3	Barium	784			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.9	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.0	B		P
7439-89-6	Iron	425		E J	P
7439-92-1	Lead	~~3.7~~		~~*N~~ R	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	35.2		EN J	P
7439-97-6	Mercury	0.13	U	N R	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.9~~	~~B~~	~~N~~ R	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	36.6		N J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0132 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0132_F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~9100~~		~~EN~~ R	P
7440-36-0	Antimony	8.4	B		P
7440-38-2	Arsenic	8.8	B	~~N~~ J	P
7440-39-3	Barium	521			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.8	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	7.3	B		P
7439-89-6	Iron	49.4	B	E	P
7439-92-1	Lead	1.3	U	~~*N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1.1	B	~~EN~~ J	P
7439-97-6	Mercury	~~0.13~~	U	~~N~~ R	AV
7440-02-0	Nickel	4.6	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~6.7~~		~~N~~ R	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	4.1	B	J	P
7440-66-6	Zinc	58.1		~~N~~ J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0134

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0134__

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~569~~		N R	P
7440-36-0	Antimony	2.9	B		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	239			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.5	B		P
7439-89-6	Iron	14700			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	248			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.5	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	45.9			P
7440-42-8	Boron				NR

AMK 4/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0134 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0134_F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~155~~	B	~~EN~~ R	P
7440-36-0	Antimony	4.4	B		P
7440-38-2	Arsenic	2.5	B	N J	P
7440-39-3	Barium	626			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	318		E J	P
7439-92-1	Lead	~~2.0~~	~~B~~	~~*N~~ R	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	38.2		EN J	P
7439-97-6	Mercury	~~0.19~~	~~B~~	~~N~~ R	AV
7440-02-0	Nickel	4.8	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N~~ R	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	50.3		N J	P
7440-42-8	Boron				NR

amk 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0240

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0240__

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~283~~		~~N~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	~~7.3~~	B	~~N~~ R	P
7440-39-3	Barium	1500			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.0	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.0	B		P
7439-89-6	Iron	447			P
7439-92-1	Lead	3.2		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	78.1			P
7439-97-6	Mercury	0.41		N J	AV
7440-02-0	Nickel	1.3	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	315		J	P
7440-42-8	Boron				NR

amk 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0240F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0240F_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~151~~	~~B~~	~~EN~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	9.1	B	N J	P
7440-39-3	Barium	1960			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.0	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	57.4	B	E	P
7439-92-1	Lead	~~5.1~~		~~*N~~ R	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	44.8		~~EN~~ J	P
7439-97-6	Mercury	~~0.31~~		~~N~~ R	AV
7440-02-0	Nickel	1.2	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N~~ R	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	416		N J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0237

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0237_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~4150~~		~~N~~ R	P
7440-36-0	Antimony	6.8	B		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	2760			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.9	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	35.2			P
7439-89-6	Iron	11400			P
7439-92-1	Lead	14.3		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1120			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	2.9	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	5.2	B	J	P
7440-66-6	Zinc	85.2		J	P
7440-42-8	Boron				NR

AMIC 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0237_F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~3260~~		~~EN~~ R	P
7440-36-0	Antimony	2.5	B		P
7440-38-2	Arsenic	2.2	U	~~N~~	P
7440-39-3	Barium	2090			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	37.1			P
7439-89-6	Iron	9590		~~E~~ J	P
7439-92-1	Lead	~~9.2~~		~~*N~~ R	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1080		~~EN~~ J	P
7439-97-6	Mercury	~~0.13~~	U	~~N~~ R	AV
7440-02-0	Nickel	14.9	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	8.0	B	J	P
7440-66-6	Zinc	174		~~N~~ J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH8617

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH8617_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~76.7~~	~~B~~	~~N~~ R	P
7440-36-0	Antimony	4.3	B		P
7440-38-2	Arsenic	~~4.7~~	~~B~~	~~N~~ R	P
7440-39-3	Barium	69.5	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	37.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.3	B		P
7439-89-6	Iron	714			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	71.6			P
7439-97-6	Mercury	0.13	U	~~N~~ J	AV
7440-02-0	Nickel	49.8		J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	~~N~~ J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	9.1	B		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGUIM0119

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGUIM0119_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~409~~		~~N~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	~~N~~	P
7440-39-3	Barium	436			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.2	B		P
7439-89-6	Iron	69900			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1950			P
7439-97-6	Mercury	0.13	U	~~N~~ J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	~~N~~ J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	4.8	B	J	P
7440-66-6	Zinc	~~32.3~~		R	P
7440-42-8	Boron				NR

amk 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUIM0119F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGUIM0119F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~15.5~~	B	~~EN~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	9.0	B	~~N~~ J	P
7440-39-3	Barium	685			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.0	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	44.1	B	E	P
7439-92-1	Lead	~~5.0~~		~~*N~~ R	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	118		E J	P
7439-97-6	Mercury	~~0.13~~	U	~~N~~ R	AV
7440-02-0	Nickel	3.2	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.6~~	B	~~N~~ R	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	~~223~~		~~N~~ R	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0120

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-02

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

AMK 6/26/03

FORM I - CONV

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0134

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-09

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

AMK 4/24/03

FORM I - CONV

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0240

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-04

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

AMK 6/26/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-01

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

AMK 6/26/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGDSH8617

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-05

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U-J		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	80	J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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FORM I - CONV

AMK 6/26/03

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

MEGUIM0119

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-03

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	12	J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

AMK 6/25/03

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	VBLK01	100	98	97		0
2	MEGDIM0237	105	100	114		0
3	MEGDD0120	99	96	97		0
4	MEGUIM0119	111 *	99	112		1
5	TB030227	103	100	113		0
6	MEGDIM0237 MS	102	96	107		0
7	MEGDIM0237 MSD	107	97	120 *		1
8	VMSB	109	103	111		0
9	MEGDD0240	102	97	104		0
10	MEGDSH8617	103	95	105		0
11	MEGDD0134	107	103	112		0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	TOT OUT
1	MEGDD0132	70	72	55	N/A	N/A	N/A	0
2	MEGDD0134	74	84	67	N/A	N/A	N/A	0
3	WBLK01	65	67	45	N/A	N/A	N/A	0
4	WMSB	74	72	52	N/A	N/A	N/A	0
5	MEGDD0240	70	76	45	N/A	N/A	N/A	0
6	MEGDIM0237	66	87	78	N/A	N/A	N/A	0
7	MEGDIM0237 MS	49	62	57	N/A	N/A	N/A	0
8	MEGDIM0237 MSD	67	81	83	N/A	N/A	N/A	0
9	MEGDD0120	39	55	55	N/A	N/A	N/A	0
10	MEGUIM0119	57	76	73	N/A	N/A	N/A	0
11	MEGDSH8617	57	75	78	N/A	N/A	N/A	0
12								
13								
14								
15								
16								
17								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-110)
S5 (2FP) = 2-Fluorophenol	(21-110)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: MEGDIM0237

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	0.	37.	74	61-145
Trichloroethene	50.	0.	45.	90	71-120
Benzene	50.	0.	47.	94	76-127
Toluene	50.	1.	47.	92	76-125
Chlorobenzene	50.	0.	46.	92	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	35.	70	6	14	61-145
Trichloroethene	50.	44.	88	2	14	71-120
Benzene	50.	48.	96	2	11	76-127
Toluene	50.	49.	96	4	13	76-125
Chlorobenzene	50.	46.	92	0	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: MEGDIM0237

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,4-Dichlorobenzene	25.	0.	13.	52	36- 97
n-Nitroso-di-n-propylam	25.	0.	10.	40 *	41-116
1,2,4-Trichlorobenzene	25.	0.	14.	59	39- 98
Acenaphthene	25.	0.	15.	60	46-118
2,4-Dinitrotoluene	25.	0.	5.	20 *	24- 96
Pyrene	25.	0.	13.	52	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	25.	18.	72	32 *	28	36- 97
n-Nitroso-di-n-propylam	25.	16.	64	46 *	38	41-116
1,2,4-Trichlorobenzene	25.	17.	68	19	28	39- 98
Acenaphthene	25.	19.	76	24	31	46-118
2,4-Dinitrotoluene	25.	10.	40	67 *	38	24- 96
Pyrene	25.	19.	76	38 *	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 4 out of 6 outside limits
Spike Recovery: 2 out of 12 outside limits

COMMENTS:

3A

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,1 Dichloroethene	50	0	39	77	61-145
Trichloroethene	50	0	51	102	71-120
Benzene	50	0	55	110	76-127
Toluene	50	0	55	109	76-125
Chlorobenzene	50	0	53	107	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

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FORM III VOA

3C

WATER SEMI-VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,4 Dichlorobenzene	25	0	14	55	36-97
N-Nitroso-di-n-propylamine	25	0	10	40	41-116
1,2,4 Trichlorobenzene	25	0	15	60	39-98
Acenaphthene	25	0	16	62	46-118
2,4 Dinitrotoluene	25	0	14	56	24-96
Pyrene	25	0	11	42	26-127

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 6 outside limits

Comments: _____

_____

_____

FORM III SV-1

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGDIM0237 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		4148.1187		4140.5537		0.2		P
Antimony	60.0	6.8297	B	3.4635	B	65.4		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium		2757.8779		2783.4399		0.9		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	7.8664	B	8.3048	B	5.4		P
Cobalt								NR
Copper	25.0	35.1837		36.4100		3.4		P
Iron		11401.9238		11655.9199		2.2		P
Lead	3.0	14.3480		15.5663		8.1		P
Magnesium								NR
Manganese		1122.2622		1142.3508		1.8		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel	40.0	2.8738	B	3.2874	B	13.4		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	5.2307	B	9.6841	B	59.7		P
Zinc	20.0	85.2002		87.1527		2.3		P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGDIM0237 F D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		3258.2244		3611.2788		10.3		P
Antimony	60.0	2.5472	B	2.5422	B	0.2		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium		2092.9504		2196.6826		4.8		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	6.6007	B	3.6000	U	200.0		P
Cobalt								NR
Copper	25.0	37.0694		39.6111		6.6		P
Iron		9593.5078		10443.6445		8.5		P
Lead	3.0	9.2064		12.5532		30.8	*	P
Magnesium								NR
Manganese		1078.4158		1164.7156		7.7		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel	40.0	14.8762	B	15.5500	B	4.4		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	8.0141	B	6.9011	B	14.9		P
Zinc		173.8264		187.9616		7.8		P
Boron								NR

U.S. EPA - CLP

6
DUPLICATES

MEGDIM0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols	20	2	U	2	U	NC		
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments _____

FORM VI - CONV

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0237 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	7685.1152		4148.1187		2000.00	176.8	N	P
Antimony	75-125	439.7255		6.8297	B	500.00	86.6		P
Arsenic	75-125	70.5890		2.2000	U	40.00	176.5	N	P
Barium	75-125	4717.7022		2757.8779		2000.00	98.0		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	217.6897		7.8664	B	200.00	104.9		P
Cobalt									NR
Copper	75-125	298.3365		35.1837		250.00	105.3		P
Iron		13137.8379		11401.9238		1000.00	173.6		P
Lead	75-125	33.6896		14.3480		20.00	96.7		P
Magnesium									NR
Manganese	75-125	1621.6555		1122.2622		500.00	99.9		P
Mercury	75-125	1.2650		0.130	U	2.00	63.2	N	AV
Nickel	75-125	523.4751		2.8738	B	500.00	104.1		P
Potassium									NR
Selenium	75-125	5.7387		2.5000	U	10.00	57.4	N	P
Silver	75-125	47.0999		1.8000	U	50.00	94.2		P
Sodium									NR
Thallium									NR
Vanadium	75-125	490.8833		5.2307	B	500.00	97.1		P
Zinc	75-125	642.8458		85.2002		500.00	111.5		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0237 F S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	7387.2022		3258.2244		2000.00	206.4	N	P
Antimony	75-125	472.4324		2.5472	B	500.00	94.0		P
Arsenic	75-125	54.2196		2.2000	U	40.00	135.5	N	P
Barium	75-125	4156.3813		2092.9504		2000.00	103.2		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	220.0561		6.6007	B	200.00	106.7		P
Cobalt									NR
Copper	75-125	295.8570		37.0694		250.00	103.5		P
Iron		12999.6641		9593.5078		1000.00	340.6		P
Lead	75-125	47.4492		9.2064		20.00	191.2	N	P
Magnesium									NR
Manganese	75-125	1738.5764		1078.4158		500.00	132.0	N	P
Mercury	75-125	0.0273	B	0.130	U	2.00	1.4	N	AV
Nickel	75-125	620.9303		14.8762	B	500.00	121.2		P
Potassium									NR
Selenium	75-125	2.5000	U	2.5000	U	10.00	0.0	N	P
Silver	75-125	48.2180		1.8000	U	50.00	96.4		P
Sodium									NR
Thallium									NR
Vanadium	75-125	537.9159		8.0141	B	500.00	106.0		P
Zinc	75-125	812.7136		173.8264		500.00	127.8	N	P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIM0237 A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		8581.80		4148.12		4000.0	110.8		P
Antimony		892.44		6.83	B	1000.0	88.6		P
Arsenic		124.07		2.20	U	80.0	155.1		P
Barium		6803.70		2757.88		4000.0	101.1		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		438.07		7.87	B	400.0	107.6		P
Cobalt									NR
Copper		574.66		35.18		500.0	107.9		P
Iron		13952.00		11401.92		2000.0	127.5		P
Lead		61.99		14.35		40.0	119.1		P
Magnesium									NR
Manganese		2246.92		1122.26		1000.0	112.5		P
Mercury									NR
Nickel		1118.66		2.87	B	1000.0	111.6		P
Potassium									NR
Selenium		15.95		2.50	U	20.0	79.8		P
Silver		96.75		1.80	U	100.0	96.8		P
Sodium									NR
Thallium									NR
Vanadium		1035.33		5.23	B	1000.0	103.0		P
Zinc		1251.81		85.20		1000.0	116.7		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIMO237 F A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		7694.12		3258.22		4000.0	110.9		P
Antimony		850.85		2.55	B	1000.0	84.8		P
Arsenic		42.60		2.20	U	80.0	53.2		P
Barium		6245.40		2092.95		4000.0	103.8		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		453.04		6.60	B	400.0	111.6		P
Cobalt									NR
Copper		586.01		37.07		500.0	109.8		P
Iron		10089.19		9593.51		2000.0	24.8		P
Lead		45.04		9.21		40.0	89.6		P
Magnesium									NR
Manganese		1989.90		1078.42		1000.0	91.1		P
Mercury									NR
Nickel		900.09		14.88	B	1000.0	88.5		P
Potassium									NR
Selenium		17.80		2.50	U	20.0	89.0		P
Silver		97.60		1.80	U	100.0	97.6		P
Sodium									NR
Thallium									NR
Vanadium		854.01		8.01	B	1000.0	84.6		P
Zinc		1200.84		173.83		1000.0	102.7		P
Boron									NR

Comments:

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDIM0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	75-125	53		2	U	60	88		
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	84		10	U	100	84		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: CB086 Lab Sample ID: VBLK01

Date Analyzed: 03/03/03 Time Analyzed: 10:10

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGDIM0237	MEGDIM0237	C0643	12:30
2	MEGDD0120	MEGDD0120	C0644	12:56
3	MEGUIM0119	MEGUIM0119	C0645	13:23
4	TB030227	TB030227	C0648	14:44
5	MEGDIM0237 MS	MEGDIM0237 MS	C0650	15:38
6	MEGDIM0237 MSD	MEGDIM0237 MSD	C0651	16:05
7	VMSB	VMSB	C0653	17:03
8	MEGDD0240	MEGDD0240	C0654	17:30
9	MEGDSH8617	MEGDSH8617	C0655	17:57
10	MEGDD0134	MEGDD0134	C0656	18:24
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
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22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: VBLK01
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB086
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: A3158 Lab Sample ID: WBLK 3/4/03

Instrument ID: 5970 A Date Extracted: 03/04/03

Matrix: (soil/water) WATER Date Analyzed: 03/30/03

Level:(low/med) LOW Time Analyzed: 14:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDD0132	MEGDD0132	A3153	03/29/03
2	MEGDD0134	MEGDD0134	A3154	03/29/03
3	WMSB	WMSB 3/4/03	A3159	03/30/03
4	MEGDD0240	MEGDD0240	A3163	03/30/03
5	MEGDIM0237	MEGDIM0237	A3189	03/31/03
6	MEGDIM0237 MS	MEGDIM0237 MS	A3190	04/01/03
7	MEGDIM0237 MSD	MEGDIM0237 MSD	A3191	04/01/03
8	MEGDD0120	MEGDD0120	A3192	04/01/03
9	MEGUIM0119	MEGUIM0119	A3193	04/01/03
10	MEGDSH8617	MEGDSH8617	A3194	04/01/03
11				
12				
13				
14				
15				
16				
17				
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22				
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29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: WBLK 3/4/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3158

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
129-00-0	Pyrene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.:MEGDD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	14.9	B	14.351	B	P
Antimony	2.5	U	2.5	U	2.5	U	6.4	B	2.500	U	P
Arsenic	3.3	B	2.2	U	3.7	B	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	6.7	B	6.0	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.4	U	1.4	U	1.4	U	1.420	B	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Lead	1.3	U	1.3	U	1.3	U	2.4	B	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.6	B	0.300	U	P
Mercury	0.1	U	0.1	U	0.1	U			0.135	B	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.:MEGDD01

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			60.5	B							P
Antimony			3.0	B							P
Arsenic			3.3	B							P
Barium			6.2	B							P
Beryllium											
Cadmium											
Calcium											
Chromium			5.6	B							P
Cobalt											
Copper			1.4	U							P
Iron			1.0	U							P
Lead			1.3	U							P
Magnesium											
Manganese			0.3	U							P
Mercury											
Nickel			1.0	U							P
Potassium											
Selenium			2.5	U							P
Silver			1.8	U							P
Sodium											
Thallium											
Vanadium			3.1	U							P
Zinc			0.5	U							P
Boron											

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols	2	U	2	U	2	U	2	U	2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

_____

_____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols			2	U							EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

_____

_____

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): CS086 Date Analyzed: 03/03/03
Instrument ID: H5970 C Time Analyzed: 09:43
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	5915.		8.39		49886.		9.81		43570.		15.21	
	UPPER LIMIT	11830.		8.89		99772.		10.31		87140.		15.71	
	LOWER LIMIT	2958.		7.89		24943.		9.31		21785.		14.71	
	EPA SAMPLE NO.												
1	VBLK01	5174.		8.38		40494.		9.79		37204.		15.19	
2	MEGDIM0237	4933.		8.37		44978.		9.82		38757.		15.22	
3	MEGDD0120	4181.		8.41		37447.		9.82		30658.		15.22	
4	MEGUIM0119	5049.		8.39		44472.		9.81		37164.		15.21	
5	TB030227	4358.		8.40		37776.		9.82		33873.		15.22	
6	MEGDIM0237 MS	5017.		8.37		45607.		9.78		39021.		15.22	
7	MEGDIM0237 MSD	4738.		8.37		44280.		9.78		38574.		15.22	
8	VMSB	4953.		8.41		43997.		9.78		38236.		15.22	
9	MEGDD0240	5138.		8.37		40995.		9.78		38011.		15.22	
10	MEGDSH8617	5051.		8.40		40261.		9.78		37410.		15.22	
11	MEGDD0134	4778.		8.40		42320.		9.82		37122.		15.22	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS340 Date Analyzed: 03/29/03
Instrument ID: 5970 A Time Analyzed: 15:04

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	115771.		10.41		406970.		14.89		203202.		20.79	
	UPPER LIMIT	231542.		10.91		813940		15.39		406404.		21.29	
	LOWER LIMIT	57886.		9.91		203485.		14.39		79071.		20.29	
	EPA SAMPLE NO.												
1	MEGDD0132	145559.		10.40		364608.		14.87		166650.		20.77	
2	MEGDD0134	156070.		10.39		414914.		14.87		158527.		20.77	
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS340 Date Analyzed: 03/29/03
Instrument ID: 5970 A Time Analyzed: 15:04

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	331381.		25.45		296398.		33.27		256490.		38.35	
	UPPER LIMIT	662762.		25.95		592796.		33.77		512980.		38.85	
	LOWER LIMIT	165690.		23.95		148199.		32.77		128245.		37.85	
	EPA SAMPLE NO.												
1	MEGDD0132	311994.		25.44		349530.		33.26		509707.		38.32	
2	MEGDD0134	258425.		25.44		303726.		33.25		416840.		38.31	
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS342 Date Analyzed: 03/30/03
Instrument ID: 5970 A Time Analyzed: 11:19

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	158770.		10.39		395835.		14.87		177924.		20.78	
	UPPER LIMIT	317540.		10.89		791670		15.37		355848.		21.28	
	LOWER LIMIT	79385.		9.89		197918.		14.37		88962.		20.28	
	EPA SAMPLE NO.												
1	WBLK01	141750.		10.38		364478.		14.88		152189.		20.78	
2	WMSB 3/4/03	104200.		10.39		272968.		14.89		125392.		20.79	
3	MEGDD0240	157917.		10.40		384148.		14.89		136997.		20.78	
4													
5													
6													
7													
8													
9													
10													
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS342 Date Analyzed: 03/30/03
Instrument ID: 5970 A Time Analyzed: 11:19

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	333124.	25.45	428034.	33.27	571083.	38.34
	UPPER LIMIT	666248.	25.95	856068.	33.77	1142166.	38.84
	LOWER LIMIT	166562.	23.95	214017.	32.77	285542.	37.84
	EPA SAMPLE NO.						
1	WBLK01	242583.	25.44	299146.	33.27	443608.	38.33
2	WMSB 3/4/03	250972.	25.45	317841.	33.27	423708.	38.34
3	MEGDD0240	249411.	25.45	382683.	33.27	575286.	38.36
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS345 Date Analyzed: 03/31/03
Instrument ID: 5970 A Time Analyzed: 18:24

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	154049.		10.26		445177.		14.74		267643.		20.65	
	UPPER LIMIT	308098.		10.76		890354		15.24		535286.		21.15	
	LOWER LIMIT	77024.		9.76		222589.		14.24		133822.		20.15	
	EPA SAMPLE NO.												
1	MEGDIM0237	124221.		10.25		371770.		14.74		215729.		20.64	
2	MEGDIM0237 MS	102069.		10.25		292089.		14.73		172009.		20.63	
3	MEGDIM0237 MSD	142303.		10.24		435279.		14.74		261981.		20.64	
4	MEGDD0120	133397.		10.25		406448.		14.73		241269.		20.64	
5	MEGUIM0119	140327.		10.25		419957.		14.73		248964.		20.63	
6	MEGDSH8617	149569.		10.24		459024.		14.73		274909.		20.63	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS345 Date Analyzed: 03/31/03
Instrument ID: 5970 A Time Analyzed: 18:24

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	600709.		25.31		840087.		33.13		1095817.		38.10	
	UPPER LIMIT	1201418.		25.81		1680174.		33.63		2191634.		38.60	
	LOWER LIMIT	300355.		24.81		420044.		32.63		547909.		37.60	
	EPA SAMPLE NO.												
1	MEGDIM0237	523912.		25.30		770786.		33.12		882138.		38.06	
2	MEGDIM0237 MS	381527.		25.29		527393.		33.12		625968.		38.07	
3	MEGDIM0237 MSD	583451.		25.29		798943.		33.11		966777.		38.06	
4	MEGDD0120	537050.		25.30		766144.		33.12		939233.		38.07	
5	MEGUIM0119	565627.		25.29		797114.		33.12		954877.		38.06	
6	MEGDSH8617	642529.		25.29		901661.		33.11		1092591.		38.07	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

PACKAGE

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Case Narrative

Client: URS Consultants, Inc. – NYSEG Mechanicville

Case: URS 0310

SDG: MEGDD0120

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MEGDIM0237	030228H-01	02/28/03	14:36	Water
MEGDD0120	030228H-02	02/28/03	14:36	Water
MEGUIM0119	030228H-03	02/28/03	14:36	Water
MEGDD0240	030228H-04	02/28/03	14:36	Water
MEGDSH8617	030228H-05	02/28/03	14:36	Water
TB030227	030228H-06	02/28/03	14:36	Water
MEGDD0132	030228H-07	02/28/03	14:36	Water
MEGDD0132	030228H-08	02/28/03	14:36	Water
MEGDD0134	030228H-09	02/28/03	14:36	Water

Volatile Organics

1) The samples were analyzed using EPA Method 8260 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %RSD for the compound Bromomethane in the initial calibration analyzed on 2/21/03 was outside the criteria established by the method. The %RSD for this compound was 25.3 %. The RRF for the compound Trichloroethene in the initial calibration analyzed on 2/21/03 was outside the required limits. The RRF for this compound was 0.283. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for these compounds.

3) The RRF for the compound Trichloroethene in the continuing calibration analyzed on 3/3/03 was outside the required limits. The RRF for this compound was 0.292. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

4) Sample MEGDIM0237 (AES sample number 030228H-01) was used for the matrix spike and matrix spike duplicate analysis. All recoveries were within required limits.

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5) The surrogate recovery for Toluene-d8 on sample MEGUIM0119 (AES sample number 030228H-03) was outside required limits. The recovery was just above the specified limits. This sample was not re-analyzed.

6) The surrogate recovery for sample MEGDIM0237 MSD (AES sample number 030228H-01 MSD) was outside required limits. According to the protocol, matrix spike and matrix spike duplicate are not re-analyzed for surrogate recoveries outside specified limits.

7) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed for Polynuclear Aromatic Hydrocarbons only using EPA Method 8270 as per the NYSDEC Analytical Services Protocol 10/95 revision Exhibit E.

2) The %D for the compound Benzo(k)fluoranthene in the continuing calibration analyzed on 3/29/03 was outside the criteria established by the method. The %D for this compound was 25.5 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % and the minimum RRF values as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

3) Sample MEGDIM0237 (AES sample number 030228H-01) was used for the matrix spike and the matrix spike duplicate analysis. Several of the recoveries in the matrix spike and matrix spike duplicate were outside required limits. According to the protocol, a matrix spike blank must be analyzed. A matrix spike blank was analyzed and all recoveries were within required limits.

Inorganics – Total Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

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2) The digested spike recoveries for the elements Aluminum, Arsenic, Mercury and Selenium for sample MEGDIM0237 (AES sample number 030228H-01) were outside the required 75-125 % limits. A post digestion spike was performed and the recoveries for Aluminum and Selenium were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

Inorganics – Filtered Metals

1) The recovery for Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Calcium and Iron is 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Calcium and Iron in the check standards is not possible. No further action is required.

2) The digested spike recoveries for the elements Aluminum, Arsenic, Lead, Manganese, Mercury, Selenium and Zinc for sample MEGDIM0237 filtered (AES sample number 030228H-01) were outside the required 75-125 % limits. A post digestion spike was performed and all recoveries, except Arsenic were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.

3) The elements Iron and Manganese for sample MEGDIM0237 filtered (AES sample number 030228H-01) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol for the water samples. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

4) The %RPD recovery for Lead between sample MEGDIM0110 (AES sample number 030220G-01) and the duplicate sample was outside of the required 20 % acceptance limit. The results for this element are flagged with an "*" as required by the protocol.

Conventionals

1) Samples MEGDIM0237 (AES sample number 030228H-01) were used for the Cyanide and Phenols matrix spike and duplicate analysis. All recoveries were within required limits.

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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 4/11/03

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Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

ASP Category B deliverable

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Erika Fujita	M'VILLE MGP SITE	Eric Lovendusk / Chris McMahon
Client Phone No: 688-0015	**PO Number:** 3030971194 #5	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
030228 H01	MEGDIM0237	2/25/03	1030 A/P	W		x	8	See Below
	MS 030225	2/25/03	1030 A/P	W		x	7	
	MSD 030225	2/25/03	1030 A/P	W		x	7	
H02	MEGDD0120	2/27/03	1000 A/P	W		x	9	
H03	MEGUIM0119	2/26/03	1220 A/P	W		x	9	
H04	MEGDD0240	2/27/03	1110 A/P	W		x	9	
H05	MEGDSH8617	2/27/03	1355 A/P	W		x	7	No filt met.
H06	TB 030227	2/27/03	/ A/P	TB		x	2	TCL VOCs
H07	MEGDD0132	2/25/03	1200 A/P	W		x	1	PAH-8270
H08	MEGDD0132	2/28/03	1110 A/P	W		x	1	Field Filtered Metals
H09	MEGDD0134	2/28/03	1230 A/P	W		x	9	See Below
			A/P					
			A/P					
			A/P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAH-8270
TCL VOCs - 8260
Cyanide - Total 9012/335.3; Weak acid dissociable SM4500I
Total Phenols 9065/420.1
Metals: 6010 series - Al, Sb, As, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, V, Zn
Field Filtered Samples @ 250ml

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		2/28/03 1430
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
	ML	2/28/03 2:36

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled (9°C)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030228 H

Sample # **030228 H01** Client Sample ID **MEGDIM0237** # Bottles: 22

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1			2/28/03 16:45				VOA
2							
3							
4							
5							
6							
7			3/5/03 1300			3/5/03 1700	CN
8			3/12/03 9:00			3/12/03 11:00	metals
9							TCLP Metals
10							
11							
12							
13							
14							
15							
16							
17			3:5:03 11:00			3:5:03 11:30	Phenol
18							
19							
20			3/4/03 2:15 PM	used up			PAH
21			3/4/03 2:15 PM				
22			3/4/03 2:15 PM				
8			3/13/03 9:00			3/13/03 11:00	1,4 Dioxane
9							TCLP Hg

Sample # **030228 H02** Client Sample ID **MEGDD0120** # Bottles: 9

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1			2/28/03 16:45				VOA
2							
3			3/5/03 1300			3/5/03 1700	CN
4			3/12/03 9:00			3/12/03 11:00	metals
5							TCLP Metals
6							
7							
8			3:5:03 14:00			3:5:03 15:00	Phenol
9			3/4/03 2:15 PM	used up			PAH
4			3/13/03 9:00			3/13/03 11:00	1,4 Dioxane
5							TCLP Hg

Sample # **030228 H03** Client Sample ID **MEGUIM0119** # Bottles: 9

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1			2/28/03 16:45				VOA

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030228 H

Sample # **030228 H03** Client Sample ID **MEGUIM0119** # Bottles: 9

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
2	ML	[illegible]	2/28/03 16:45				VOA
3	ML	[illegible]	3/5/03 1300	[illegible]	ML	3/5/03 1700	CN
4	ML	[illegible]	3/12/03 9:00	[illegible]	ML	3/12/03 11:00	Metals
5	↓	↓	↓	↓	↓	↓	Filt Metals
6							
7							
8	ML	[illegible]	3:5:03 14:30	[illegible]		3:5:03 1500	Phenols
9	ML	[illegible]	3/4/03 2:15	used			PAH
4	ML	[illegible]	3/13/03 9:00	[illegible]	ML	3/13/03 11:00	Hg
5	ML	[illegible]	↓	↓	↓	↓	Filt Hg

Sample # **030228 H04** Client Sample ID **MEGDD0240** # Bottles: 9

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/28/03 16:45				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	3/5/03 1300	[illegible]	ML	3/5/03 1700	CN
4	ML	[illegible]	3/12/03 9:00	[illegible]	ML	3/12/03 11.00	Metals
5	↓	↓	↓	↓	↓		Filt Metals
6							
7							
8	ML	[illegible]	3:5:03 14:30	[illegible]	ML	3:5:03 15:00	Phenols
9	ML	[illegible]	3/4/03 2:15	used			PAH

Sample # **030228 H05** Client Sample ID **MEGDSH8617** # Bottles: 7

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/28/03 16:45				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	3/5/03 1300	[illegible]	ML	3/5/03 1700	CN
4	ML	[illegible]	3/12/03 9:00	[illegible]	ML	3/12/03 11.00	Metals
5							
6	ML	[illegible]	3:5:03 14:30	[illegible]	ML	3:5:03 15:00	Phenols
7	ML	[illegible]	3/4/03 2:15	used			PAH
4	ML	[illegible]	3/13/03 9:00	[illegible]	ML	3/13/03 11:00	Hg

Sample # **030228 H06** Client Sample ID **TB030227** # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	2/28/03 16:45				VOA

Adirondack Environmental Services
Internal Chain of Custody
AES Project # 030228 H

Sample # **030228 H06** Client Sample ID **TB030227** # Bottles: 2

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
2	ML	A Jamison	2/28/03 16:45				VOA

Sample # **030228 H07** Client Sample ID **MEGDD0132** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	3/4/03 2:50	MLC			PAH
	[illegible]	[illegible]	3/12/03 9:00	[illegible]		3/12/03 11:00	[illegible]

Sample # **030228 H08** Client Sample ID **MEGDD0132** # Bottles: 1

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	[illegible]	3/12/03 9:00	[illegible]	ML	3/12/03 11:00	Metals
	ML	[illegible]	3/13/03 9:00	[illegible]	ML	3/13/03 "	Hg

Sample # **030228 H09** Client Sample ID **MEGDD0134** # Bottles: 9

	Out			Back			
Bottle	Relinquished	Received	Date/Time	Relinquished	Received	Date/Time	Analysis
1	ML	A Jamison	2/28/03 16:45				VOA
2	↓	↓	↓				↓
3	ML	[illegible]	3/5/03 1300	[illegible]	ML	3/5/03 1700	CN
4	ML	[illegible]	3/12/03 9:00	[illegible]	ML	3/12/03 9:00	Metals
5	ML	[illegible]	3/13/03 9:00	"	↓	" "	PAH Hg
6							
7							
8	ML	[illegible]	3/5/03 1430	[illegible]	ML	3/5/03 1540	PAH VOA
9	ML	[illegible]	3/4/03 2:50	MLC			PAH
4	ML	[illegible]	3/13/03 9:00	[illegible]	ML	3/13/03 11:00	Hg
5	↓	"	"	"	↓	" "	VOA Hg

***** End Chain of Custody Form *****

VOLATILE ORGANICS

ANALYSIS

QC

SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	VBLK01	100	98	97		0
2	MEGDIM0237	105	100	114		0
3	MEGDD0120	99	96	97		0
4	MEGUIM0119	111 *	99	112		1
5	TB030227	103	100	113		0
6	MEGDIM0237 MS	102	96	107		0
7	MEGDIM0237 MSD	107	97	120 *		1
8	VMSB	109	103	111		0
9	MEGDD0240	102	97	104		0
10	MEGDSH8617	103	95	105		0
11	MEGDD0134	107	103	112		0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (TOL) = Toluene d-8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: MEGDIM0237

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.	0.	37.	74	61-145
Trichloroethene	50.	0.	45.	90	71-120
Benzene	50.	0.	47.	94	76-127
Toluene	50.	1.	47.	92	76-125
Chlorobenzene	50.	0.	46.	92	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.	35.	70	6	14	61-145
Trichloroethene	50.	44.	88	2	14	71-120
Benzene	50.	48.	96	2	11	76-127
Toluene	50.	49.	96	4	13	76-125
Chlorobenzene	50.	46.	92	0	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3A

WATER VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,1 Dichloroethene	50	0	39	77	61-145
Trichloroethene	50	0	51	102	71-120
Benzene	50	0	55	110	76-127
Toluene	50	0	55	109	76-125
Chlorobenzene	50	0	53	107	75-130

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 5 outside limits

Comments: _____

_____

_____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: CB086 Lab Sample ID: VBLK01

Date Analyzed: 03/03/03 Time Analyzed: 10:10

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

Instrument ID: H5970 C

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	MEGDIM0237	MEGDIM0237	C0643	12:30
2	MEGDD0120	MEGDD0120	C0644	12:56
3	MEGUIM0119	MEGUIM0119	C0645	13:23
4	TB030227	TB030227	C0648	14:44
5	MEGDIM0237 MS	MEGDIM0237 MS	C0650	15:38
6	MEGDIM0237 MSD	MEGDIM0237 MSD	C0651	16:05
7	VMSB	VMSB	C0653	17:03
8	MEGDD0240	MEGDD0240	C0654	17:30
9	MEGDSH8617	MEGDSH8617	C0655	17:57
10	MEGDD0134	MEGDD0134	C0656	18:24
11				
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30				

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: CT073 BFB Injection Date: 02/21/03

Instrument ID.: H5970 C BFB Injection Time: 08:28

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.7
75	30.0 - 60.0% of mass 95	44.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	67.2
175	5.0 - 9.0 % of mass 174	5.9 (8.8)1
176	95.0 - 101.0% of mass 174	63.9 (95.1)1
177	5.0 - 9.0% of mass 176	5.0 (7.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS073	02/21/03	08:54
2	VSTD010	VSTD010	CS074	02/21/03	09:25
3	VSTD020	VSTD020	CS075	02/21/03	09:52
4	VSTD100	VSTD100	CS076	02/21/03	10:20
5	VSTD200	VSTD200	CS077	02/21/03	10:47
6					
7					
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19					
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21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: CT086 BFB Injection Date: 03/03/03

Instrument ID.: H5970 C BFB Injection Time: 09:25

GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.5
75	30.0 - 60.0% of mass 95	55.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	.0 (.0)1
174	50.0 - 120.0% of mass 95	51.7
175	5.0 - 9.0 % of mass 174	4.6 (8.9)1
176	95.0 - 101.0% of mass 174	49.9 (96.5)1
177	5.0 - 9.0% of mass 176	3.6 (7.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD050	VSTD050	CS086	03/03/03	09:43
2	VBLK01	VBLK01	CB086	03/03/03	10:10
3	MEGDIM0237	MEGDIM0237	C0643	03/03/03	12:30
4	MEGDD0120	MEGDD0120	C0644	03/03/03	12:56
5	MEGUIM0119	MEGUIM0119	C0645	03/03/03	13:23
6	TB030227	TB030227	C0648	03/03/03	14:44
7	MEGDIM0237 MS	MEGDIM0237 MS	C0650	03/03/03	15:38
8	MEGDIM0237 MSD	MEGDIM0237 MSD	C0651	03/03/03	16:05
9	VMSB	VMSB	C0653	03/03/03	17:03
10	MEGDD0240	MEGDD0240	C0654	03/03/03	17:30
11	MEGDSH8617	MEGDSH8617	C0655	03/03/03	17:57
12	MEGDD0134	MEGDD0134	C0656	03/03/03	18:24
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): CS086 Date Analyzed: 03/03/03
Instrument ID: H5970 C Time Analyzed: 09:43
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #		IS2(DFB) AREA #		IS3(CBZ) AREA #	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	5915.	8.39	49886.	9.81	43570.	15.21
	UPPER LIMIT	11830.	8.89	99772.	10.31	87140.	15.71
	LOWER LIMIT	2958.	7.89	24943.	9.31	21785.	14.71
	EPA SAMPLE NO.						
1	VBLK01	5174.	8.38	40494.	9.79	37204.	15.19
2	MEGDIM0237	4933.	8.37	44978.	9.82	38757.	15.22
3	MEGDD0120	4181.	8.41	37447.	9.82	30658.	15.22
4	MEGUIM0119	5049.	8.39	44472.	9.81	37164.	15.21
5	TB030227	4358.	8.40	37776.	9.82	33873.	15.22
6	MEGDIM0237 MS	5017.	8.37	45607.	9.78	39021.	15.22
7	MEGDIM0237 MSD	4738.	8.37	44280.	9.78	38574.	15.22
8	VMSB	4953.	8.41	43997.	9.78	38236.	15.22
9	MEGDD0240	5138.	8.37	40995.	9.78	38011.	15.22
10	MEGDSH8617	5051.	8.40	40261.	9.78	37410.	15.22
11	MEGDD0134	4778.	8.40	42320.	9.82	37122.	15.22
12							
13							
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20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Volatile Organics IDL

Date Performed: 1/8/2003

Parameter	Conc 1 CIDL1	Conc 2 CIDL2	Conc 3 CIDL3	Conc 4 CIDL4	Conc 5 CIDL5	Conc 6 CIDL6	Conc 7 CIDL7	SD	IDL
Chloromethane	17.43	18.52	20.71	21.76	20.76	17.17	22.57	2.138	6.719
Bromomethane	19.27	22.02	18.72	18.16	21.84	22.81	22.14	1.914	6.016
Vinyl Chloride	17.24	17.13	18.58	19.39	20.25	20.13	19.69	1.303	4.096
Chloroethane	19.55	19.40	21.35	18.36	18.49	19.45	19.78	0.986	3.099
Methylene Chloride	21.78	20.77	21.45	21.47	21.19	20.91	21.78	0.398	1.250
Acetone	20.84	21.04	18.81	22.10	19.48	18.47	21.02	1.343	4.221
Trichlorofluoromethane	17.61	19.46	18.66	17.74	20.62	19.21	19.70	1.081	3.396
Carbon Disulfide	18.71	17.50	15.52	17.83	18.80	16.84	16.07	1.255	3.944
1,1-Dichloroethene	21.92	22.08		21.12	21.80	19.63	22.07	0.953	3.208
1,1-Dichloroethane	19.29	18.30	19.22	20.40	18.39	18.18	22.14	1.430	4.494
trans-1,2-Dichloroethene	17.67	14.01	16.44	15.95	18.00	17.42	14.71	1.524	4.790
cis-1,2-Dichloroethene	20.85	19.30	18.84	21.45	19.58	21.09	19.84	0.993	3.122
Chloroform	22.68	20.94	21.27	21.15	21.78	22.40	20.61	0.769	2.416
1,2 Dichloroethane	21.48	20.07	19.68	22.03	20.81	21.75	18.56	1.256	3.949
2-Butanone	23.52	19.32	23.50	19.84	21.16	17.61	22.01	2.210	6.946
1,1,1-Trichloroethane	21.30	20.60	19.88	19.85	20.91	19.67	21.55	0.754	2.368
Carbon Tetrachloride	20.09	20.94	20.13	20.21	20.56	20.61	20.79	0.336	1.057
Vinyl Acetate	18.99	19.55	18.54	19.36	17.16	19.28	19.14	0.815	2.563
Bromodichloromethane	21.20	21.47	19.38	19.74	21.25	18.53	20.89	1.133	3.561
1,2-Dichloropropane	20.33	20.70	19.76	19.87	20.16	18.61	19.49	0.674	2.118
cis-1,3-Dichloropropene	18.82	18.33	18.41	16.78	19.44	16.35	18.27	1.102	3.463
Trichloroethene	19.24	20.23	18.00	17.91	20.64	18.25	20.07	1.147	3.606
Dibromochloromethane	21.41	20.70	19.14	19.63	22.23	19.75	21.11	1.108	3.484
1,1,2-Trichloroethane	23.57	23.70	21.80	21.57	23.24	21.08	22.57	1.042	3.273
Benzene	19.54	19.38	19.16	18.63	20.47	18.26	19.82	0.736	2.313
trans-1,3-Dichloropropene	20.71	19.84	19.60	17.89	21.04	18.20	19.56	1.171	3.681
2-Chloroethyl vinyl ether	20.33	20.70	19.76	19.87	20.16	18.61	19.49	0.674	2.118
Bromoform	22.82	24.38	21.85	20.33	23.91	20.78	23.43	1.559	4.899
2-Hexanone	22.83	21.62	21.93	19.61	20.18	19.47	18.76	1.505	4.731
4-Methyl-2-pentanone	19.13	18.53	17.80	18.22	18.74	18.89	17.72	0.540	1.699
Tetrachloroethene	21.74	18.77	19.72	18.23	20.00	19.12	18.39	1.211	3.806
1,1,2,2-Tetrachloroethane	23.80	22.20	20.17	20.58	20.49	21.10		1.379	4.639
Toluene	18.29	18.46	17.66	18.23	19.95	18.00	18.20	0.730	2.293
Chlorobenzene	19.60	19.88	18.59	19.11	20.91	19.11	19.59	0.738	2.321
Ethylbenzene	19.57	17.19	18.09	17.33	19.07	17.28	17.23	0.985	3.097
Styrene	21.12	19.32	19.32	20.37	18.89	19.86	18.58	0.882	2.771
m&p-Xylene	39.79	37.89	40.31	40.88	38.08	40.43	38.78	1.199	3.767
o-Xylene	20.76	18.81	18.70	20.13	19.03	18.97	19.87	0.789	2.479
1,3-Dichlorobenzene	19.56	20.80	19.79	19.94	22.42	20.28	20.24	0.963	3.026
1,4-Dichlorobenzene	19.64	20.67	19.28	20.63	22.10	18.32	19.39	1.231	3.870
1,2-Dichlorobenzene	23.31	20.35	20.99	20.24	19.86	19.51	19.69	1.307	4.107
Dichlorodifluoromethane	19.77	17.31	18.82	19.98	18.43	20.92	17.80	1.284	4.036

SAMPLE

DATA

1A

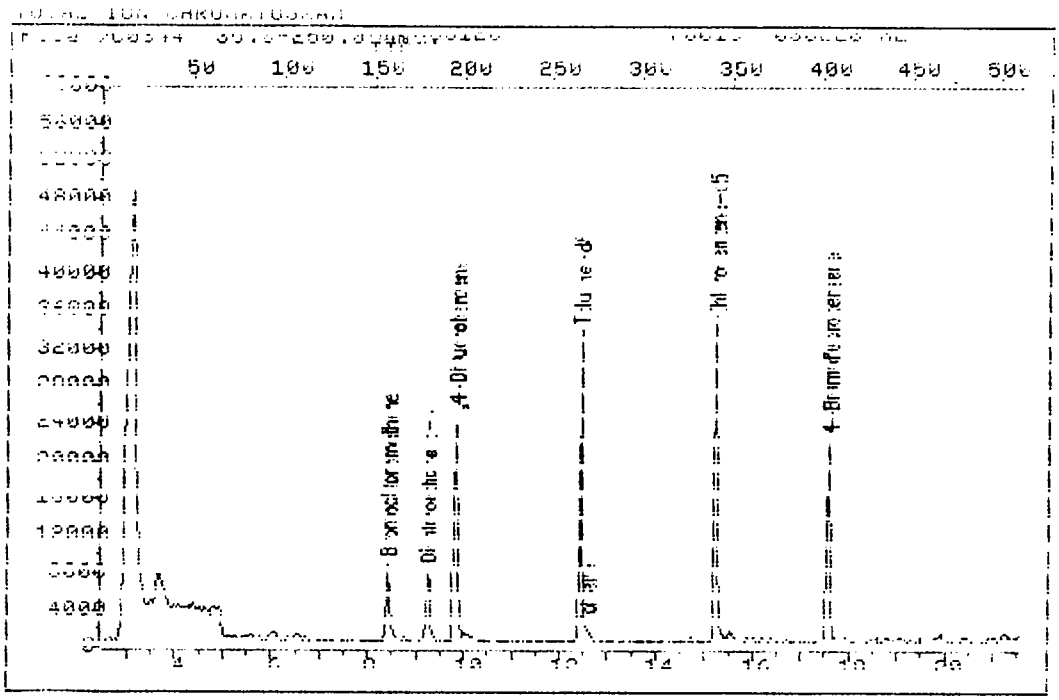
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0120

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0120
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0644
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	1.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >DUA44::D4 Quant Output File: ^DUA44::Q1
Name: MF6000120 Instrument ID: /U01 1.
Misc: 70010 050228 HZ

Id File: DS911.::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Ncal time: **0303 [illegible]

Operator ID: MARIF
Quant Time : 030303 13:19
Injected at: **0303 12:56

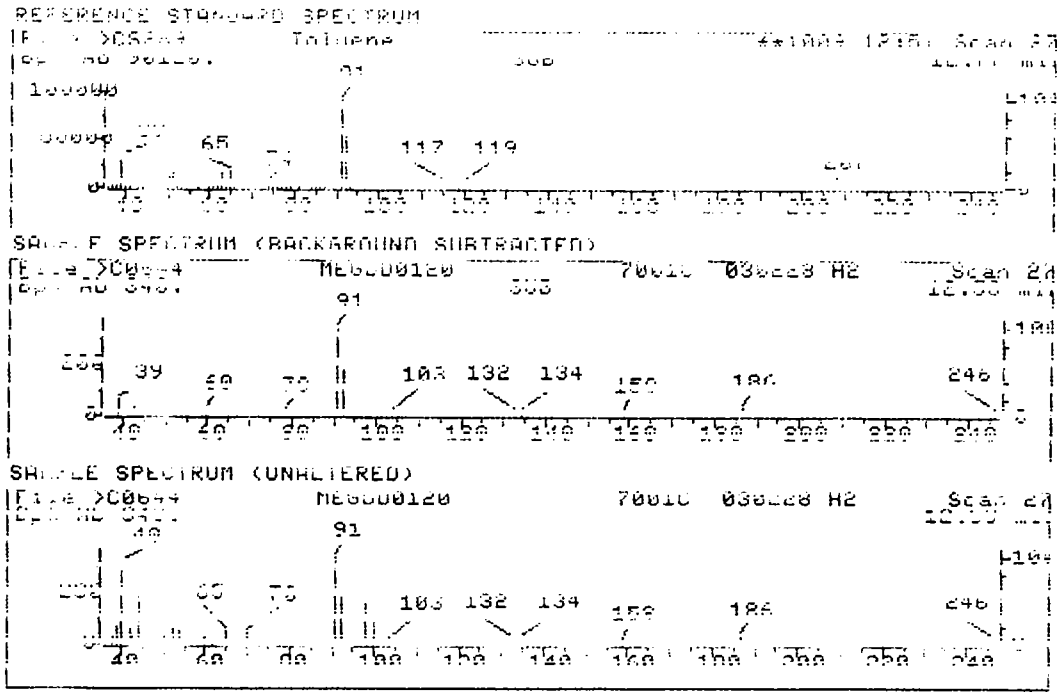
Operator ID: MARIF
Output File: ^C:\m44::Q1
Data File: >1.\m44::D4
Name: MB-000121H
Misc: 2000LC 030228 H2

Quant Rev: 2 Quant Time: 0..03 12..7
Injected at: **/03/03 12:56
Dilution Factor: 1.0000.00
Instrument ID: 2000 C

ID File: ID5?1C::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **/03/03 09:43

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.41	128.0	4181	50.00	ug/L	9
2)	1,2-Dichloroethane-d4	9.23	65.0	13200	48.40	ug/L	8.
23)	*1,4-Difluorobenzene	9.82	114.0	32447	50.00	ug/L	9
32)	*Chlorobenzene-d5	15.22	117.0	30028	50.00	ug/L	9
42)	Toluene	12.28	91.0	0215	1.00	ug/L	2
43)	Toluene d-8	12.43	98.0	42212	49.53	ug/L	9.
49)	Bromofluorobenzene	17.57	95.0	19220	48.04	ug/L	

* Compound is ISTD



Data File: >Clin44::D4
Name: MEGD0120
Misc: 70010 030228 H2
Quant Time: 03/03/03 13:19
Injected at: **/03/03 12:26
Last Cal Time: **/03/03 09:43

Quant Output File: >Clin44::Q1
Instrument ID: 001

Quant ID File: ...891...
Last Calibration: 03/01/31 10:0>

Compound No : 42
Compound Name : Toluene
Scan Number : 971
Retention Time: 12.58 min.
Quant Ion : 91.0
Area : 1>.>
Concentration : 1.00 UG
q-Value : 97

1A

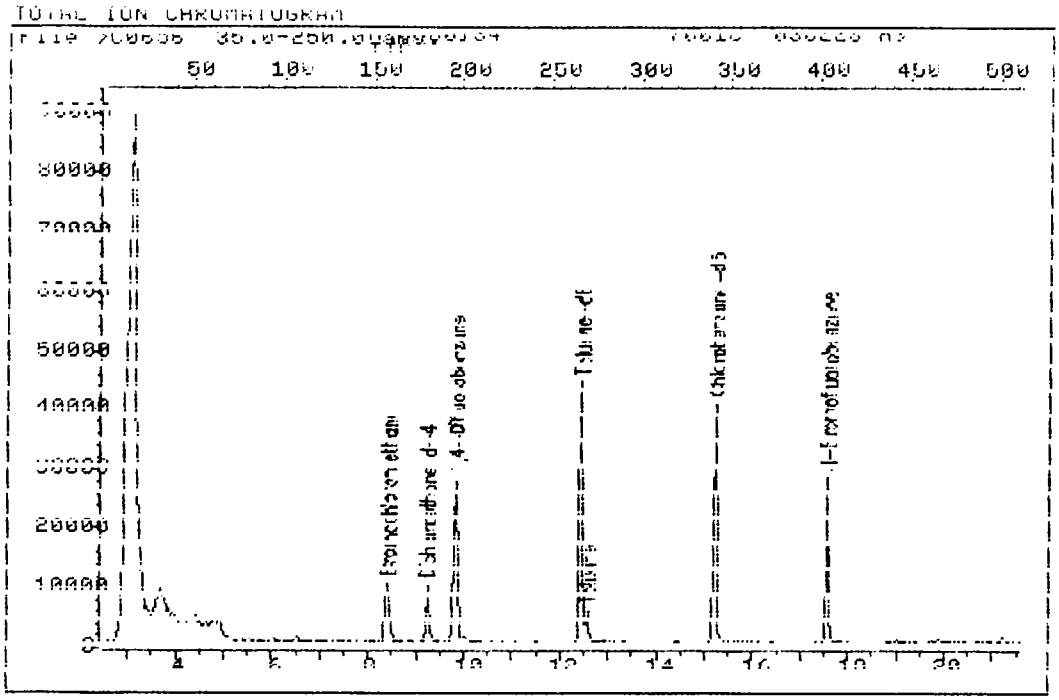
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0134

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0134
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0656
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	4.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >C0656::D4 Quant Output File: ^C0656::QT
Name: MEGDD0134 Instrument ID: 7001 C
Misc: 7001C 030228 H9

Id File: 10591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Ncal Time: **0303 09:43

Operator ID: MARIE
Quant Time : 030303 18:46
Injected at: **0303 18:24

QUANT REPORT Page 1

Operator ID: MARIE
Output File: ^C0656::QT
Data File: >C0656::D4
Name: MF6D00134
Misc: 7001C 030228 H9

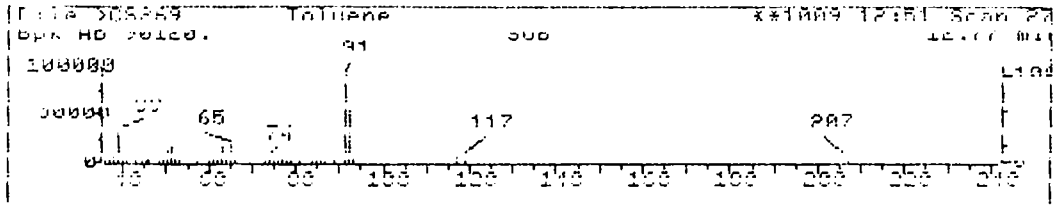
Quant Rev: 7 Quant Time: 030303 18:4n
Injected at: **0303 18:24
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **0303 09:43

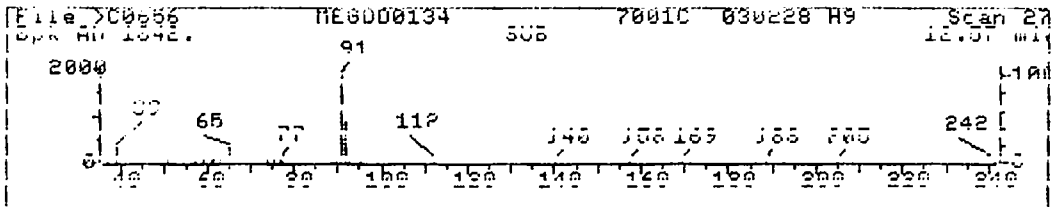
	Compound	R.T.	Q ion	Area	Conc	Units	n
1)	*Bromochloromethane	8.40	128.0	4778	50.00	UG	[illegible]
20)	1,2-Dichloroethane-d4	9.22	65.0	17496	56.13	UG	81
23)	*1,4-Difluorobenzene	9.82	114.0	42320	50.00	UG	[illegible]
37)	*Chlorobenzene-d5	15.22	117.0	37122	50.00	UG	94
42)	Toluene	12.57	91.0	7647	4.18	UG	[illegible]
43)	Toluene d-8	12.42	98.0	62224	53.57	UG	9[illegible]
49)	Bromofluorobenzene	17.56	95.0	25761	51.69	UG	[illegible]

* Compound is ISTD

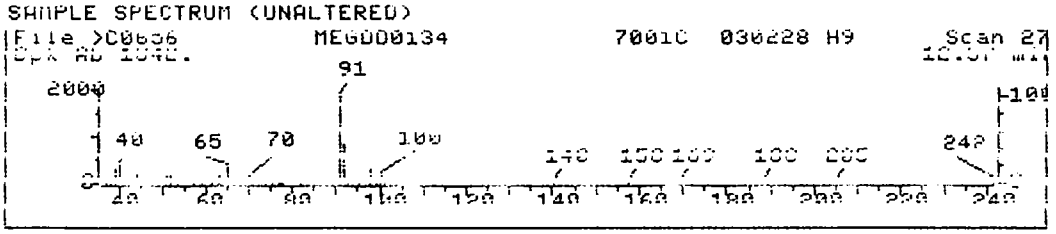
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C0656::D4
Name: MEGDD0134
Misc: 7001C 030228 H9
Quant Time: 0303 18:46
Injected at: **0303 18:24
Last Qcal Time: **0303 09:43

Quant Output File: ^C0656::QT
Instrument ID: [illegible]
Quant ID File: DS91C::MT
Last Calibration: 030131 10:03

Compound No : 42
Compound Name : Toluene
Scan Number : 271
Retention Time: 12.57 min.
Quant Ion : 91.0
Area : [illegible]
Concentration : 4.18 UG
q-value : 85

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

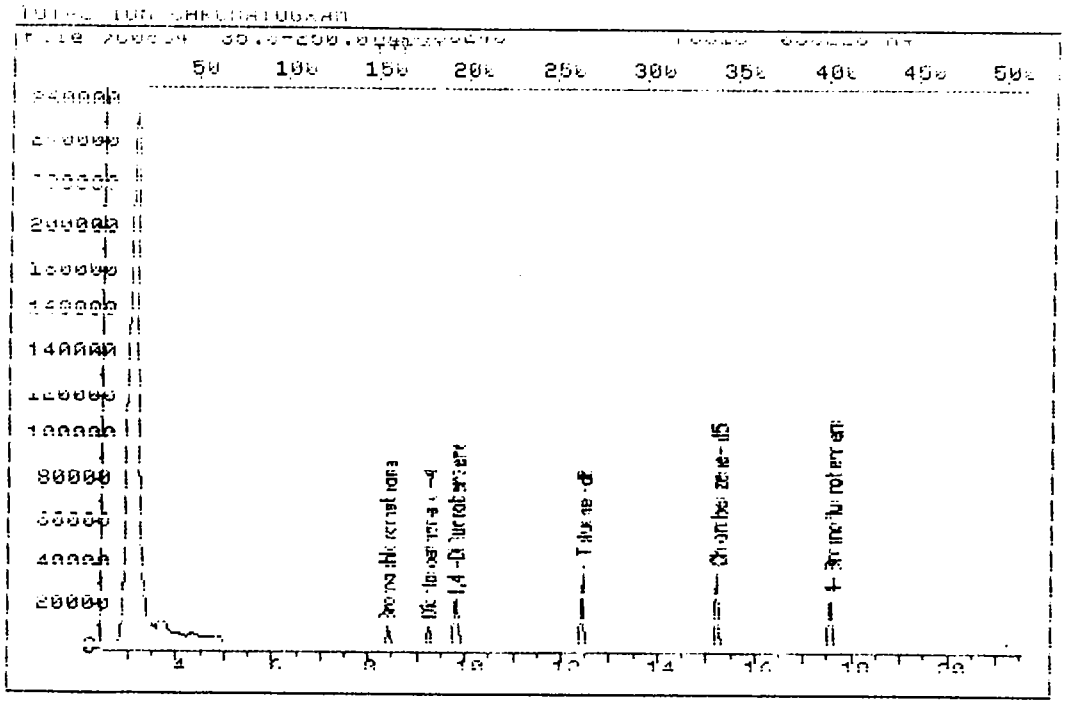
MEGDD0240

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0240
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0654
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 6/26/03



Data File: >C0A54::D4 Quant Output File: ^C0A54::QT
Name: MFGD0040 Instrument ID: 7001 C
Misc: 7001C 030228 H4

Id File: 1DS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Ucal Time: **0303 09:45

Operator ID: MARIE
Quant Time : 030303 17:55
Injected at: **0303 17:30

QUANT REPORT

Page 1

Operator ID: MARIE
Report File: C:\DATA\94::\Q1
Data File: >1.DATA\94::\04
Name: MRISU00240
Misc: 2ul1C 050228 m4

Quant Seq: 2
Quant Time: 05. 03 12:
Injected at: **2005 12:20
Dilution Factor: 1.0000
Instrument ID: 2000 C

ID File: 10591D::MT
Title: HP 5UA Continuing Calibration Standard
Last Calibration: 03\31 10:03
Last Qual Time: **\05\5 09:45

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	8.37	128.0	5158	50.00	UG	-
2U)	1,2-Dichloroethane-d4	9.23	65.0	17444	52.04	UG	M-
2S)	*1,4-Difluorobenzene	9.28	114.0	40995	50.00	UG	-
3)	*Chlorobenzene-d5	15.22	117.0	38011	50.00	UG	R
4S)	Toluene d-8	1..43	98.0	00955	51.24	UG	-
4)	Bromofluorobenzene	17.57	95.0	24255	48.51	UG	%

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

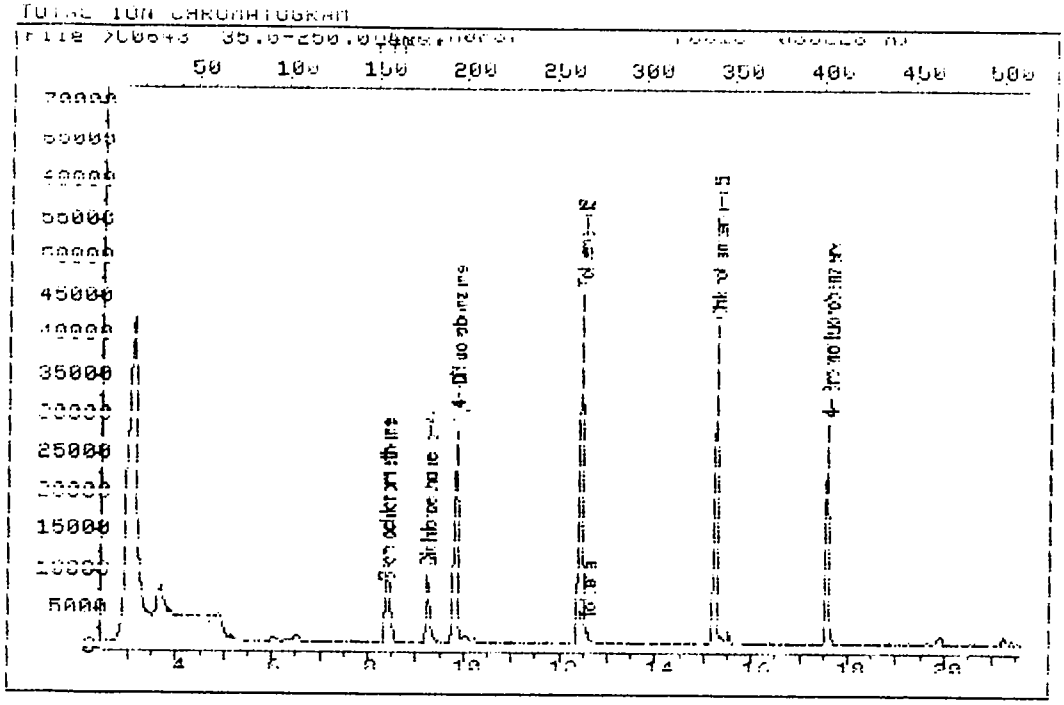
EPA SAMPLE NO.

MEGDIM0237

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0643
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	SS
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	SS
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	1.	J	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

amk 6/25/03



Data File: >C0643::D4
Name: MEGDIM0237
Misc: 7001C 030228 HI

Quant Output File: ^C0643::QT
Instrument ID: ^001 1.

Id File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03

Last Ucal Time: **:>03 09:4>

Operator ID: MARIE
Quant Time : 030303 12:>2
Injected at: **0303 12:30

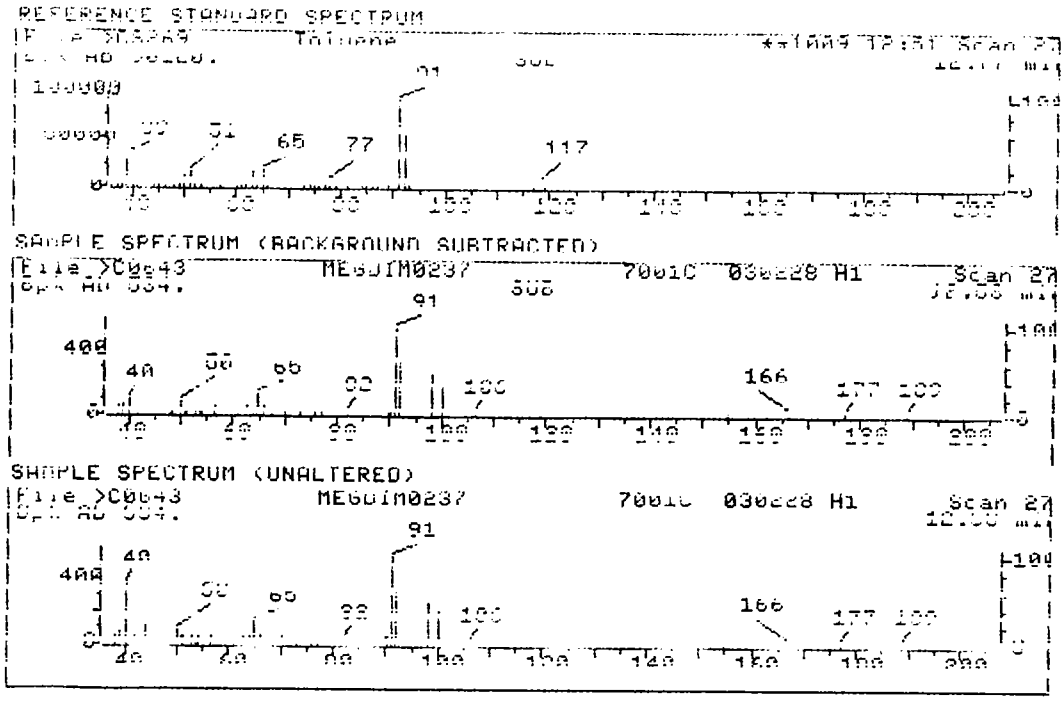
QUANT REPORT Page 1

Operator ID: MARIE Quant Rev: 2 Quant Time: 03:03 12:32
Output File: ^C0643::Q1 Injected at: **0303 12:30
Data File: >C0643::D4 Dilution Factor: 1.0000
Name: MBSDIM0232 Instrument ID: 2000 C
Misc: 2000C 030228 H1

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **0303 09:43

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.37	128.0	4933	50.00	UG	9
20)	1,2-Dichloroethane-d4	9.22	65.0	18337	56.98	UG	8
23)	*1,4-Difluorobenzene	9.82	114.0	44928	50.00	UG	9
37)	*Chlorobenzene-d5	15.22	117.0	38757	50.00	UG	9
42)	Toluene	12.58	91.0	2291	1.16	UG	9
43)	Toluene d-8	12.43	98.0	63822	52.63	UG	9
49)	Bromofluorobenzene	17.57	95.0	26162	50.09	UG	9

* Compound is ISTD



Data File: >C0643::04
Name: ME6D1M0237
Misc: 70010 03Ø228 H1
Quant Time: 03Ø303 12:52
Injected at: **0303 12:30
Last Cal Time: **0303 09:43

Quant Output File: ^C0643::QT
Instrument ID: 7001 C
Quant ID File: 0:91C::.I
Last Calibration: 03Ø131 10:03

Compound No : 42
Compound Name : Toluene
Scan Number : 271
Retention Time: 12.58 min.
Quant Ion : 91.0
Area : 2771
Concentration : 1.16 UG
q-Value : 90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

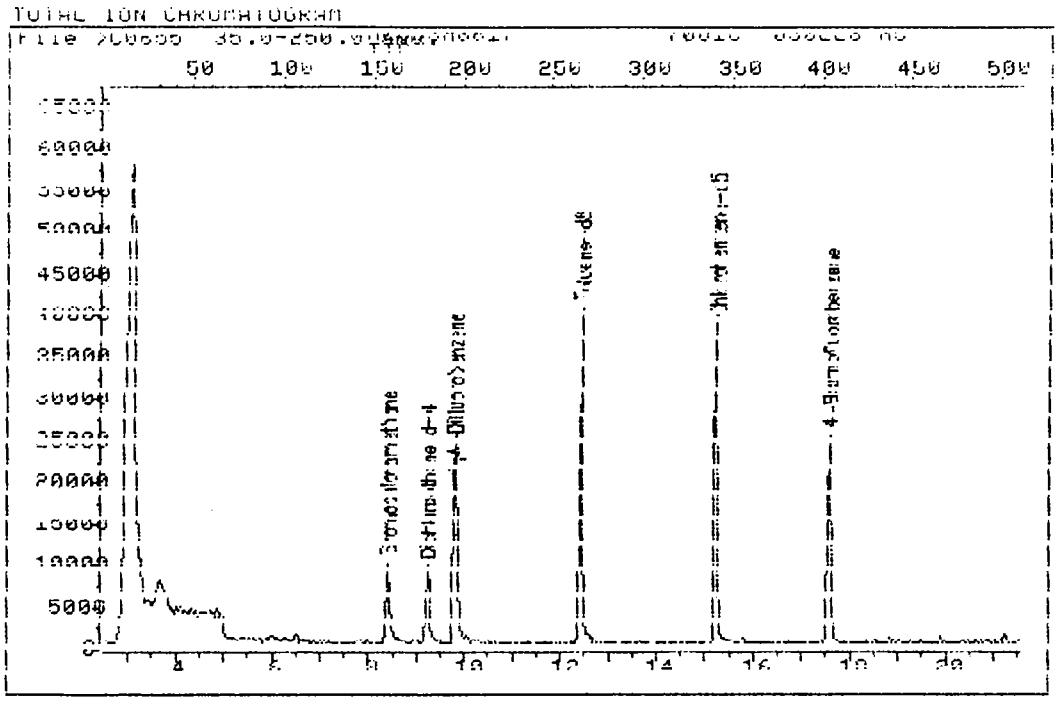
MEGDSH8617

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDSH8617
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0655
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

Amk 4/25/03



Data File: >C0655::D4 Quant Output File: ^C0655::QT
Name: MEGDSH8617 Instrument ID: 7H01 C
Misc: 7001C 030228 H5

IJ File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **0303 09:43

Operator ID: MARIE
Quant Time : 030303 18:19
Injected at: **0303 17:57

Operator ID: MARIE Quant Rev: 7 Quant Time: 03/03/03 18:29
Output File: ^CD0655::QT Injected at: **0303 17:57
Data File: >CD0655::D4 Dilution Factor: 1.00000
Name: MEGDSH0617 Instrument ID: 2000 C
Misc: 2000IC 030228 H5

ID File: IDS91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **0303 09:43

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.40	128.0	5051	50.00	UG	78
20)	1,2-Dichloroethane-d4	9.22	65.0	17228	52.29	UG	81
23)	*1,4-Difluorobenzene	9.78	114.0	40261	50.00	UG	94
32)	*Chlorobenzene-d5	15.22	117.0	37410	50.00	UG	91
43)	Toluene d-8	12.42	98.0	60360	51.57	UG	97
49)	Bromofluorobenzene	17.56	95.0	23775	47.34	UG	84

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

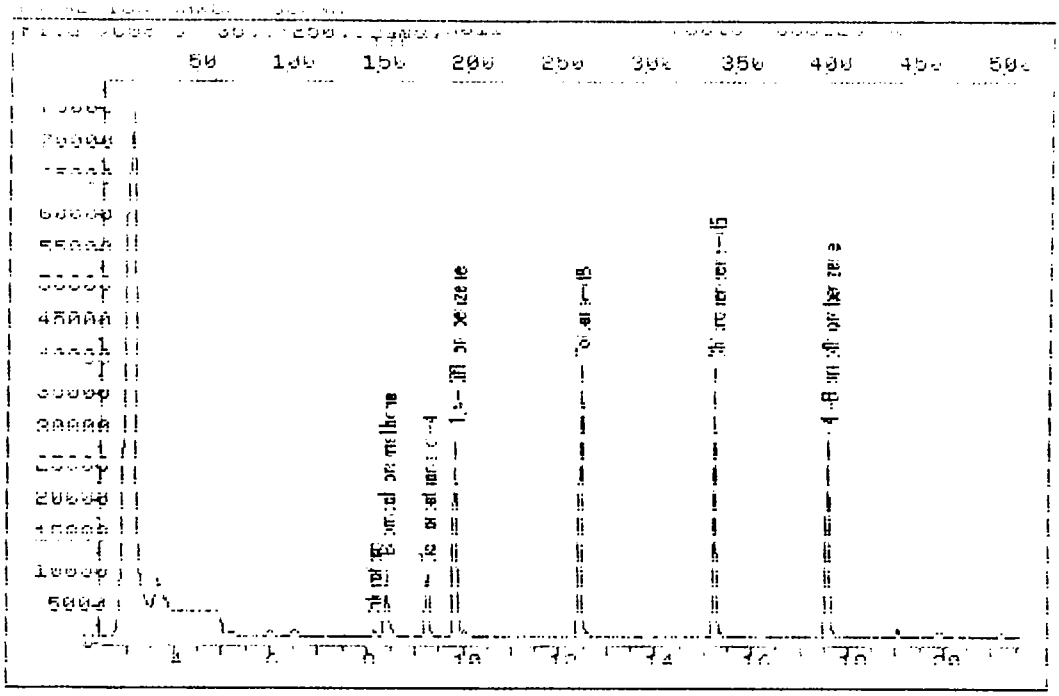
EPA SAMPLE NO.

MEGUIM0119

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGUIM0119
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0645
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	4.	J	J
107-06-2	1,2-Dichloroethane	5.	U	J
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	J
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

amk 6/25/03



Data File: >C:\m45::\04 Quant Output File: >C:\m4>::\q>
Name: MBLANK0119 Instrument ID: >001 >
Misc: 2[illegible] 03\28 H>

Id File: \US9[illegible]::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 03\31 10:03 Last Qcal Time: **\>03 0?:>>

Operator ID: MARIF
Quant Time : 03\03\3 13:>6
Injected at: **0>\0> 13:?>

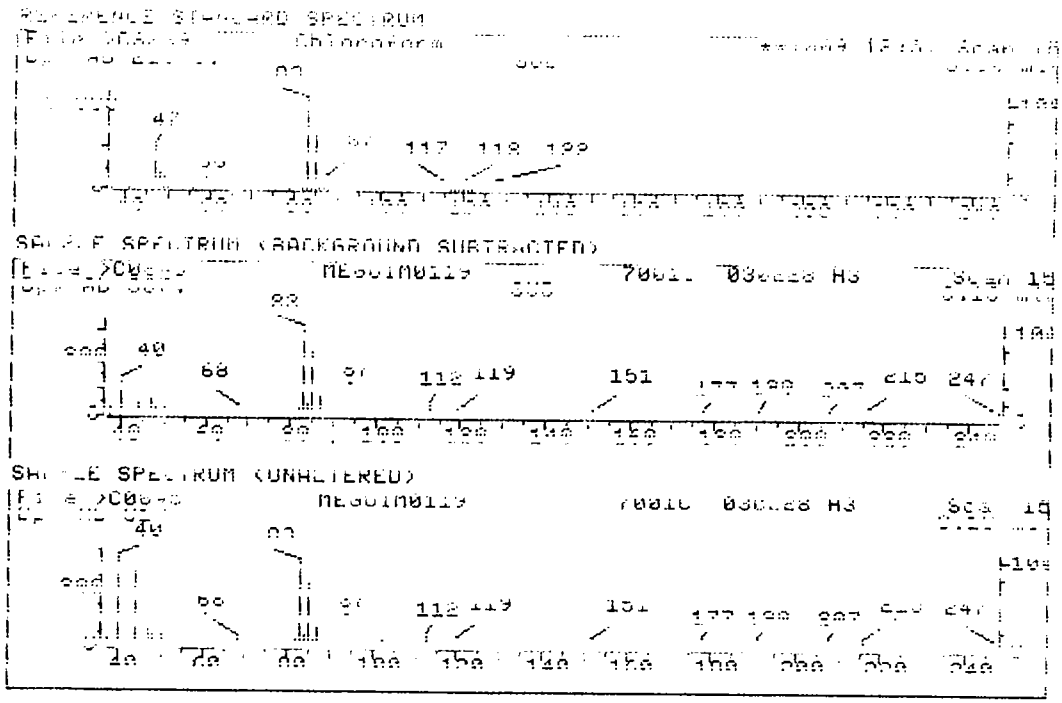
Quant Results Page 1

Operator ID: RMcK Quant Rev: / Quant Time: 11/ 3/ 9
Quant File: C:\HP5970\DATA\ Injected At: **/**/** **:**
Data File: 21JN45::104 Dilution Factor: 1.000
Name: MB+LCMB.10 Instrument ID: 5970 1.
Misc: 25ng/L 11/21/28 RS

ID File: 1059LL::M1
Title: HP VOA Continuing Calibration Standard
Last Calibration: 11/11/91 10:19 Last Qual Time: **/**/** 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	
17)	*Bromochloromethane	8.69	128.0	5149	50.00	ug/L	
19)	Chloroform	8.13	83.0	2531	3.72	ug/L	87
20)	1,2-Dichloroethane-d4	9.25	65.0	18484	26.12	ug/L	
25)	*1,4-Difluorobenzene	9.81	114.0	44472	50.00	ug/L	7
32)	*Chlorobenzene-d5	15.21	117.0	32184	50.00	ug/L	
45)	Toluene d-8	17.47	98.0	64264	55.28	ug/L	9
49)	Bromofluorobenzene	17.55	95.0	24711	47.65	ug/L	

* Compound is ISTD



Data File: >1.DA45::D4
Name: MEGD1M0119
Misc: 2DDDD 03DD28 H3
Quant Time: 03D>D13 1>:46
Injecten at: **D>D13 1>:2>
Last Qual Time: **D>D13 09:43

Quant Output File: >1.DA45::Q1
Instrument ID: .a01 ..

Quant ID File: D:\591D.:...
Last Calibration: D>DD1>1 DD:D>

Compound No : 19
Compound Name : Chloroform
Scan Number : 151
Retention Time: 8.13 min.
Quant Ion : 83.0
Area : 2% 0
Concentration : 5.22 DG
q-value : 89

1A

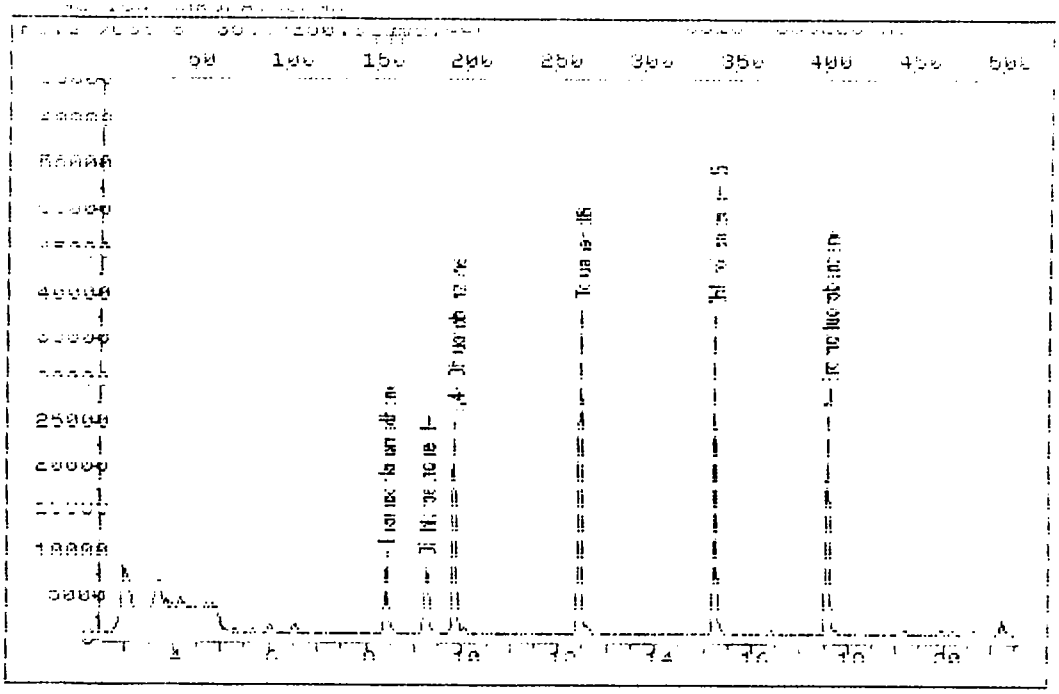
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030227

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: TB030227
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0648
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U 55
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U 55
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: [illegible]
Name: [illegible]
Misc: [illegible]

Quant Output File: [illegible]
Instrument ID: [illegible]

Id File: [illegible]
Title: HP UOA Continuing Calibration Standard
Last Calibration: [illegible]

Last Cal Time: [illegible]

Operator ID: MARIE
Quant Time : [illegible]
Injected at: [illegible]

Operator ID: [illegible] Quant Pass: 2 Quant Time: [illegible]
Method File: [illegible] Injection #: [illegible]
Data File: [illegible] Dilution Factor: [illegible]
Name: [illegible] Instrument ID: [illegible]
Misc: [illegible]

ID File: [illegible]
Title: HP VOA Continuing Calibration Standard
Last Calibration: [illegible] Last Qual Time: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	8.40	128.0	4998	50.00	ug/L	
2)	1,2-Dichloroethane-d4	9.22	65.0	16052	56.40	ug/L	82
3)	*1,4-Difluorobenzene	9.82	114.0	52226	50.00	ug/L	
4)	*Chlorobenzene-d5	19.22	117.0	33523	50.00	ug/L	7
5)	Toluene d-8	12.43	98.0	54467	51.39	ug/L	
6)	Bromofluorobenzene	17.27	95.0	22245	50.02	ug/L	4

* Compound is ISTD

STANDARDS

DATA

6A

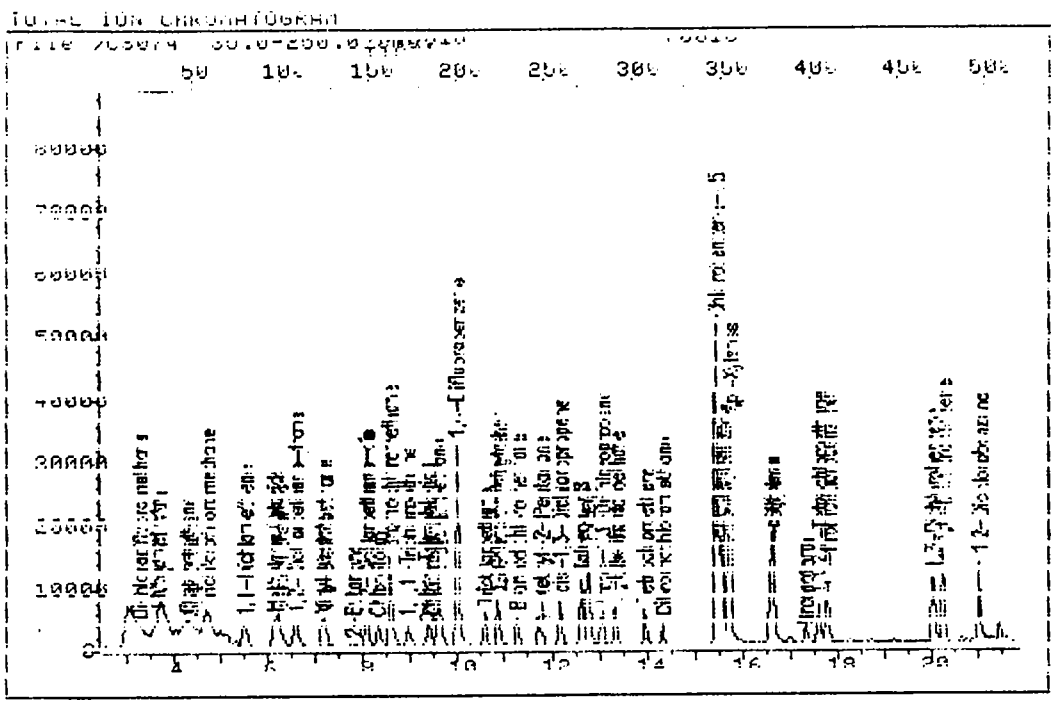
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Instrument ID: H5970 C Calibration Date(s): 02/21/03 02/21/03
Heated Purge: (Y/N) N Calibration Times: 08:54 10:47
GC Column: RTX502.2 ID: .32 (mm)

LAB FILE ID: RRF010= CS074 RRF020= CS075
RRF050= CS073 RRF100= CS076 RRF200= CS077

COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	9.596	8.156	8.091	7.874	6.479	8.039	13.8
Bromomethane *	5.409	2.868	4.234	4.467	3.195	4.034	25.3*
Vinyl Chloride *	10.267	9.246	9.708	8.902	7.910	9.206	9.6*
Chloroethane	3.904	3.077	2.953	2.847	2.385	3.033	18.2
Methylene Chloride	5.803	4.587	4.290	4.279	4.310	4.654	14.1
Acetone	1.091	.635	1.787	.843	1.226	1.116	39.3
Carbon Disulfide	15.309	15.794	15.466	16.837	16.453	15.971	4.1
1,1-Dichloroethene *	3.282	3.578	3.146	3.358	2.988	3.270	6.8*
1,1-Dichloroethane *	8.903	9.453	9.383	10.070	10.650	9.692	7.0*
1,2-Dichloroethene-trans	3.763	3.428	3.480	3.853	3.714	3.647	5.1
Chloroform *	7.447	7.513	7.619	8.232	8.655	7.893	6.7*
1,2-Dichloroethane *	5.965	5.783	5.605	5.790	6.801	5.989	7.9*
2-Butanone	1.509	1.613	1.406	1.291	1.830	1.530	13.5
1,1,1-Trichloroethane *	.584	.554	.546	.552	.586	.564	3.4*
Carbon Tetrachloride *	.416	.384	.386	.387	.401	.395	3.4*
Bromodichloromethane *	.643	.670	.564	.636	.661	.635	6.6*
1,2-Dichloropropane	.698	.681	.589	.646	.671	.657	6.5
cis-1,3-Dichloropropene *	.837	.805	.813	.922	.987	.873	9.1*
Trichloroethene *	.302	.263	.272	.285	.294	.283	5.6*
Dibromochloromethane *	.292	.288	.228	.284	.294	.277	10.0*
1,1,2-Trichloroethane *	.397	.375	.310	.371	.373	.365	8.9*
Benzene *	2.282	2.290	2.346	2.438	2.545	2.380	4.7*
trans-1,3-Dichloropropene *	.798	.805	.730	.840	.902	.815	7.7*
Bromoform *	.190	.196	.174	.197	.185	.188	4.8*
4-Methyl-2-Pentanone	.655	.613	.774	.676	.746	.693	9.5
2-Hexanone	.258	.244	.292	.249	.271	.263	7.4
Tetrachloroethene *	.233	.237	.268	.253	.244	.247	5.6*
1,1,2,2-Tetrachloroethane *	.745	.634	.733	.648	.620	.676	8.6*
Toluene *	2.361	2.490	2.664	2.739	2.896	2.630	8.0*
Chlorobenzene *	1.279	1.230	1.337	1.339	1.383	1.314	4.5*
Ethylbenzene *	.668	.710	.779	.791	.919	.773	12.4*
Styrene *	1.461	1.539	1.769	1.756	2.020	1.709	12.9*
Toluene d-8	1.581	1.589	1.736	1.671	1.747	1.665	4.7
Bromofluorobenzene *	.783	.715	.827	.743	.766	.767	5.5*
1,2-Dichloroethane-d4	4.573	3.664	3.893	4.056	4.844	4.206	11.6
1,2-Dichloroethene-cis	7.159	7.388	7.431	8.189	8.674	7.768	8.2
m,p-Xylenes	.795	.850	.954	.943	1.117	.932	13.2
o-Xylene *	.801	.850	.916	.872	.898	.867	5.1*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of .010.



Data File: >CS074::D4 Quant Output File: ^CS074::QT
Name: VSTD0110 Instrument ID: 7001 C
Misc: 7001C

Id File: DU.91C::DT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Cal Time: <none>

Operator ID: MARIE
Quant Time : 030221 10:00
Injected at: **0221 09:25

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 10:11
Output File: ^C5074::QT Injected at: **0221 09:25
Data File: ^C5074::04 Dilution Factor: 1.000000
Name: VSTD010 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.55	128.0	6954	50.00	UG	99
2)	Chloromethane	3.63	50.0	13308	10.85	UG	98
3)	Bromomethane	4.26	94.0	7981	11.22	UG	86
4)	Vinyl Chloride	3.66	62.0	14238	10.28	UG	99
5)	Chloroethane	4.34	64.0	5414	11.39	UG	88
6)	Methylene Chloride	6.13	84.0	8047	11.50	UG	66
8)	Acetone	4.34	43.0	1913	5.12	UG	79
12)	Trichlorofluoromethane	4.71	101.0	15375	10.64	UG	90
13)	Carbon Disulfide	6.24	76.0	21750	9.95	UG	100
14)	1,1-Dichloroethene	5.49	96.0	4551	10.21	UG	64
15)	1,1-Dichloroethane	7.17	63.0	12946	9.74	UG	88
16)	1,2-Dichloroethene-trans	6.57	96.0	5218	10.39	UG	71
18)	1,2-Dichloroethene-cis	8.06	61.0	9598	9.81	UG	88
19)	Chloroform	8.29	83.0	10328	9.89	UG	96
20)	1,2-Dichloroethane-d4	9.40	65.0	6942	10.80	UG	97
21)	1,2-Dichloroethane	9.55	62.0	8272	10.31	UG	84
22)	2-Butanone	7.76	43.0	2093	10.35	UG	100
23)	*1,4-Difluorobenzene	9.96	114.0	57767	50.00	UG	99
24)	1,1,1-Trichloroethane	8.92	97.0	6751	10.34	UG	97
25)	Carbon Tetrachloride	9.33	117.0	4804	10.37	UG	84
26)	Vinyl Acetate	7.13	43.0	19688	10.39	UG	90
27)	Bromodichloromethane	11.27	83.0	7433	10.66	UG	99
28)	1,2-Dichloropropane	10.86	63.0	8063	10.85	UG	94
29)	cis-1,3-Dichloropropene	12.16	75.0	9671	10.15	UG	81
30)	Trichloroethene	10.56	130.0	5489	10.52	UG	87
31)	Dibromochloromethane	14.32	129.0	3378	11.23	UG	91
32)	1,1,2-Trichloroethane	13.35	97.0	4987	11.23	UG	98
33)	Benzene	9.59	78.0	26361	9.86	UG	97
34)	trans-1,3-Dichloropropene	13.05	75.0	9218	10.45	UG	98
35)	2-Chloroethylvinylether	10.86	63.0	8063	10.85	UG	91
36)	Bromoform	12.30	173.0	2196	10.43	UG	97
37)	*Chlorobenzene-d5	15.44	117.0	54595	50.00	UG	94
38)	2-Hexanone	12.31	43.0	28279M	8.85	UG	
39)	4-Methyl-2-Pentanone	11.75	43.0	7156	9.17	UG	94
40)	Tetrachloroethene	13.95	164.0	7942	9.30	UG	99
41)	1,1,2,2-Tetrachloroethane	17.60	83.0	8156	10.08	UG	89
42)	Toluene	12.76	91.0	24278	9.40	UG	98
43)	Toluene d-8	12.61	98.0	17266	9.53	UG	96
44)	Chlorobenzene	15.51	112.0	17280	9.78	UG	99
45)	Ethylbenzene	15.59	106.0	7298	9.24	UG	83

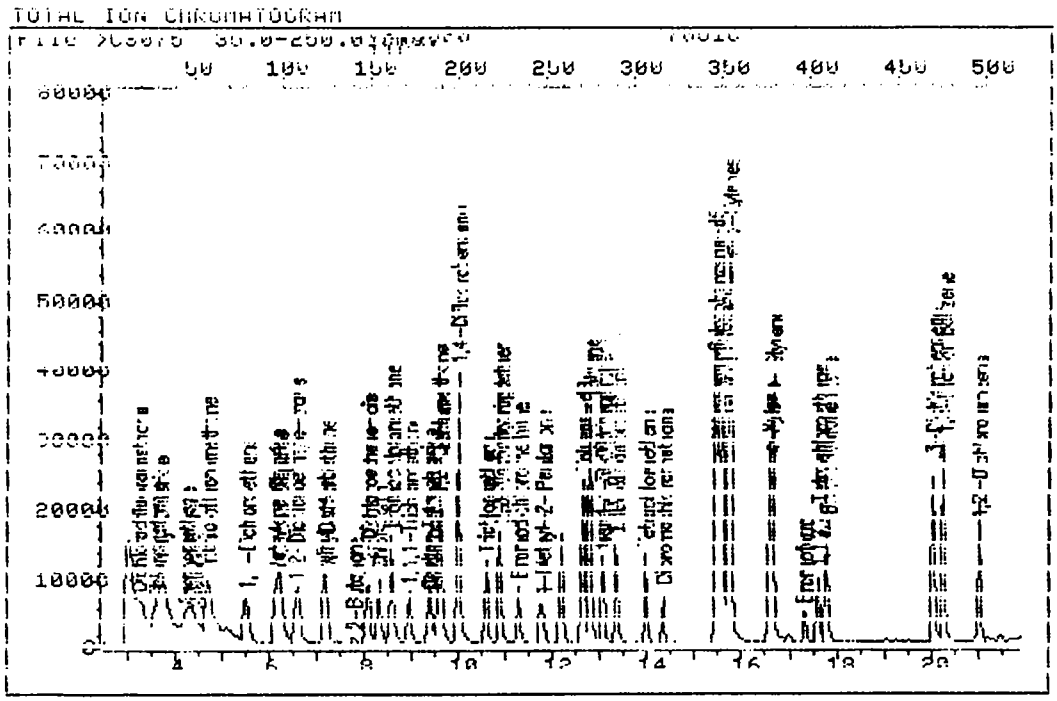
Operator ID: MARIE
Output File: >C5024::QT
Data File: >C5024::04
Name: VSTD010
Misc: 7001C

Quant Rev: 7 Quant Time: 030221 10:00
Injected at: **0221 09:5>
Dilution Factor: 1.00000
Instrument ID: 7001 C

ID File: >0C91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Cal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.63	104.0	15952	9.05	UG	88
47)	m,p-Xylenes	15.73	106.0	17391	18.18	UG	88
48)	o-Xylene	16.59	106.0	8751	9.33	UG	89
49)	Bromofluorobenzene	17.78	95.0	8551	9.23	UG	92
50)	1,3-Dichlorobenzene	20.02	146.0	9238M	8.70	UG	98
51)	1,4-Dichlorobenzene	20.24	146.0	9655	9.09	UG	98
52)	1,2-Dichlorobenzene	21.02	146.0	9219	9.44	UG	98
53)	Dichlorodifluoromethane	3.25	85.0	17849	8.82	UG	91

* Compound is ISTD



Data File: >CS075::D4 Quant Output File: ^CS075::QT
Name: VSTD020 Instrument ID: /001 C
Misc: 7001C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Ncal Time: <none>

Operator ID: MARIE
Quant Time : 030221 10:15
Injected at: **0221 09:52

Operator ID: MARIE Quant Rev: 2 Quant Time: 03/02/21 10:15
Output File: ^CS0125::QT Injected at: **0221 09:52
Data File: >CS0125::04 Dilution Factor: 1.00000
Name: VSTD020 Instrument ID: 7000 C
Misc: 7000C

ID File: ID091C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

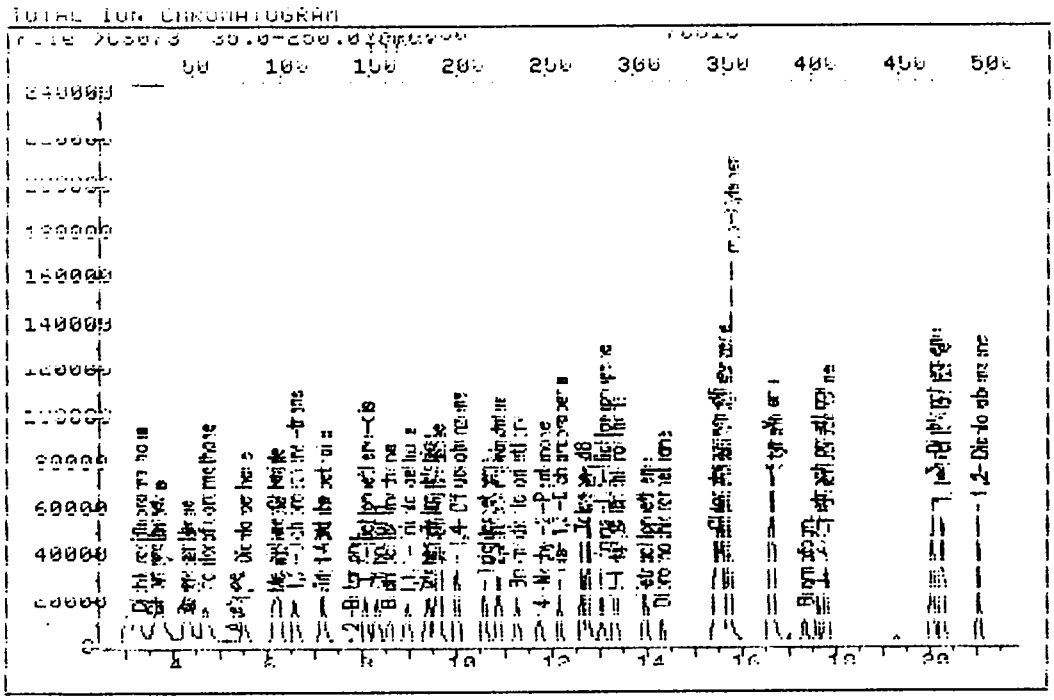
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.56	128.0	7473	50.00	UG	84
2)	Chloromethane	3.60	50.0	24379	18.44	UG	75
3)	Bromomethane	4.24	94.0	8572	11.90	UG	47
4)	Vinyl Chloride	3.68	62.0	27637	18.51	UG	87
5)	Chloroethane	4.35	64.0	9197	17.95	UG	78
6)	Methylene Chloride	6.14	84.0	13711	18.18	UG	80
8)	Acetone	4.42	43.0	1878	5.96	UG	63
12)	Trichlorofluoromethane	4.68	101.0	30023	19.27	UG	93
13)	Carbon Disulfide	6.21	76.0	47210	20.53	UG	100
14)	1,1-Dichloroethene	5.50	96.0	10695	22.27	UG	59
15)	1,1-Dichloroethane	7.18	63.0	28798	20.68	UG	93
16)	1,2-Dichloroethene-trans	6.55	96.0	10247	18.93	UG	86
18)	1,2-Dichloroethene-cis	8.07	61.0	22085	20.26	UG	71
19)	Chloroform	8.30	83.0	22458	19.95	UG	90
20)	1,2-Dichloromethane-d4	9.41	65.0	10953	17.51	UG	89
21)	1,2-Dichloroethane	9.56	62.0	17287	19.99	UG	99
22)	2-Butanone	7.78	43.0	4823	22.14	UG	100
23)	*1,4-Difluorobenzene	9.97	114.0	62320	50.00	UG	95
24)	1,1,1-Trichloroethane	8.93	97.0	13816	19.61	UG	91
25)	Carbon Tetrachloride	9.34	117.0	9563	19.13	UG	86
26)	Vinyl Acetate	7.14	43.0	24881	18.86	UG	81
27)	Bromodichloromethane	11.28	83.0	16708	22.21	UG	86
28)	1,2-Dichloropropane	10.87	63.0	16973	21.17	UG	92
29)	cis-1,3-Dichloropropene	13.03	75.0	20068	19.52	UG	92
30)	Trichloroethene	10.57	130.0	6545	18.32	UG	89
31)	Dibromochloromethane	14.33	129.0	7191	22.16	UG	99
32)	1,1,2-Trichloroethane	13.33	97.0	9399	21.23	UG	92
33)	Benzene	9.60	78.0	57086	19.79	UG	96
34)	trans-1,3-Dichloropropene	13.03	75.0	20108	21.08	UG	94
35)	2-Chloroethylvinylether	10.87	63.0	16973	21.17	UG	93
36)	Bromoform	17.31	173.0	4878	21.47	UG	97
37)	*Chlorobenzene-d5	15.41	117.0	56316	50.00	UG	92
38)	2-Hexanone	13.33	43.0	5488	16.69	UG	89
39)	4-Methyl-2-Pentanone	11.76	43.0	13809	17.15	UG	97
40)	Tetrachloroethene	13.96	164.0	5947	18.96	UG	95
41)	1,1,2,2-Tetrachloroethane	17.61	83.0	14782	17.16	UG	92
42)	Toluene	12.77	91.0	56187	19.82	UG	94
43)	Toluene d-8	12.62	98.0	35787	19.16	UG	96
44)	Chlorobenzene	15.49	112.0	27216	18.81	UG	99
45)	Ethylbenzene	15.60	106.0	16803	19.64	UG	86

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 10:15
Output File: C:\5975::QT Injected at: **.0221 09:52
Data File: >C:\5975::D4 Dilution Factor: 1.00000
Name: VSTD020 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.64	104.0	34673	19.06	UG	91
47)	m,p-Xylenes	15.71	106.0	38287	38.88	UG	98
48)	o-Xylene	16.57	106.0	19145	19.79	UG	99
49)	Bromofluorobenzene	17.79	95.0	16105	17.76	UG	94
50)	1,3-Dichlorobenzene	20.03	146.0	16404M	14.97	UG	93
51)	1,4-Dichlorobenzene	20.25	146.0	18588	16.96	UG	84
52)	1,2-Dichlorobenzene	21.00	146.0	15579	15.47	UG	99
53)	Dichlorodifluoromethane	3.23	85.0	23847	16.92	UG	92

* Compound is ISTD



Data File: >CS073::D4 Quant Output File: ^CS073::QT
Name: VSTD050 Instrument ID: /001 C
Misc: 7001C

Id File: [...91C::mf
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 030221 09:09
Injected at: **0221 08:54

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 09:59
Output File: ^CS073::QT Injected at: **0221 08:54
Data File: ^CS073::04 Dilution Factor: 1.000000
Name: VSTD050 Instrument ID: 7001 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

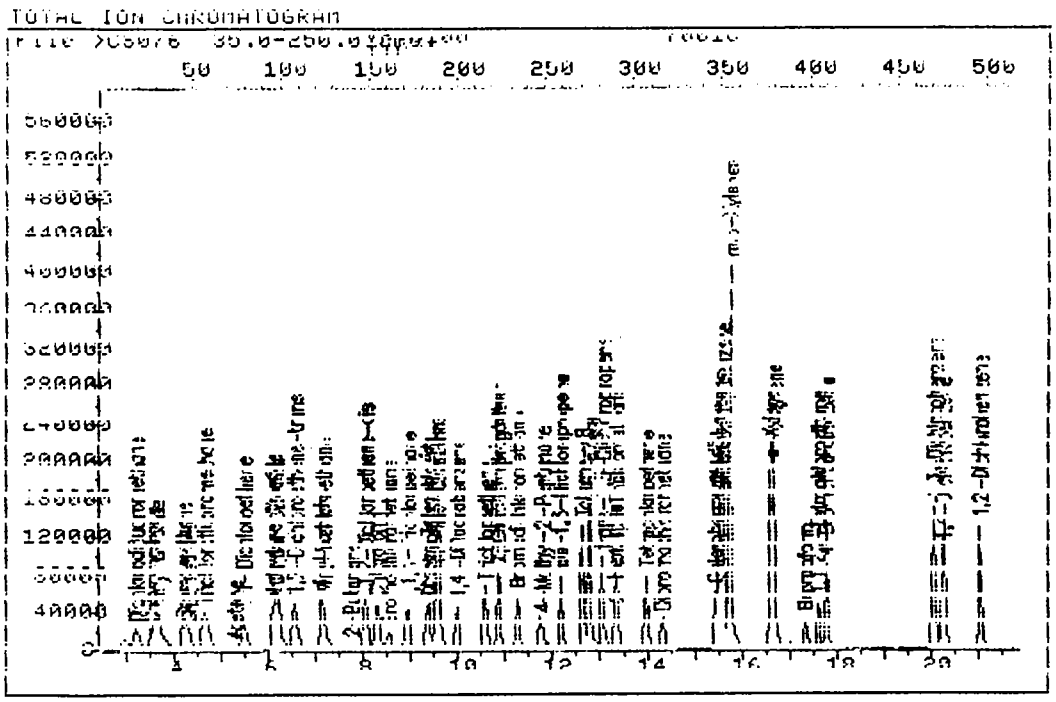
	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.52	128.0	6759	50.00	UG	[illegible]
2)	Chloromethane	3.60	50.0	54689	45.75	UG	82
3)	Bromomethane	4.24	94.0	28615	43.91	UG	[illegible]
4)	Vinyl Chloride	3.68	62.0	65615	48.60	UG	92
5)	Chloroethane	4.31	64.0	19960	43.07	UG	[illegible]
6)	Methylene Chloride	6.14	84.0	28999	42.51	UG	71
8)	Acetone	5.28	43.0	12079	41.96	UG	[illegible]
12)	Trichlorofluoromethane	4.69	101.0	65973	46.82	UG	88
13)	Carbon Disulfide	6.22	76.0	104933	50.26	UG	[illegible]
14)	1,1-Dichloroethene	5.47	96.0	21262	48.94	UG	59
15)	1,1-Dichloroethane	7.15	63.0	63420	51.31	UG	[illegible]
16)	1,2-Dichloroethene-trans	6.55	96.0	23518	48.05	UG	80
18)	1,2-Dichloroethene-cis	8.04	61.0	50229	50.93	UG	[illegible]
19)	Chloroform	8.30	83.0	51498	50.57	UG	92
20)	1,2-Dichloroethane-d4	9.38	65.0	26315	45.99	UG	[illegible]
21)	1,2-Dichloroethane	9.53	62.0	37887	48.45	UG	98
22)	2-Butanone	7.74	43.0	9504	48.23	UG	[illegible]
23)	*1,4-Difluorobenzene	9.98	114.0	59572	50.00	UG	97
24)	1,1,1-Trichloroethane	8.93	97.0	32532	48.31	UG	84
25)	Carbon Tetrachloride	9.34	117.0	23012	48.16	UG	96
26)	Vinyl Acetate	7.11	43.0	60567	48.07	UG	84
27)	Bromodichloromethane	11.24	83.0	33597	46.71	UG	86
28)	1,2-Dichloropropane	10.83	63.0	35076	45.76	UG	[illegible]
29)	cis-1,3-Dichloropropene	12.14	75.0	48410	49.26	UG	81
30)	Trichloroethene	10.57	130.0	16179	47.38	UG	[illegible]
31)	Dibromochloromethane	14.30	129.0	13599	43.84	UG	89
32)	1,1,2-Trichloroethane	13.33	97.0	18488	43.87	UG	[illegible]
33)	Benzene	9.57	78.0	139762	50.70	UG	98
34)	trans-1,3-Dichloropropene	13.03	75.0	43468	47.77	UG	[illegible]
35)	2-Chloroethylvinylether	10.83	63.0	35076	45.76	UG	90
36)	Bromoform	17.32	173.0	10391	47.85	UG	[illegible]
37)	*Chlorobenzene-d5	15.42	117.0	42841	50.00	UG	92
38)	2-Hexanone	13.29	43.0	12508	50.00	UG	[illegible]
39)	4-Methyl-2-Pentanone	11.77	43.0	33159	54.15	UG	59
40)	Tetrachloroethene	13.93	164.0	11478	53.51	UG	[illegible]
41)	1,1,2,2-Tetrachloroethane	17.58	83.0	31391	49.58	UG	96
42)	Toluene	12.23	91.0	114117	53.01	UG	[illegible]
43)	Toluene d-8	12.62	98.0	74362	52.33	UG	91
44)	Chlorobenzene	15.49	112.0	57284	51.12	UG	[illegible]
45)	Ethylbenzene	15.57	106.0	33357	53.81	UG	88

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 09:59
Output File: ^C:5073::QT Injected at: **0221 08:-4
Data File: >C:5073::D4 Dilution Factor: 1.00000
Name: VSTD050 Instrument ID: 7000 C
Misc: 7000C

ID File: 00C91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Mod Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.65	104.0	75775	54.77	UG	97
47)	m,p-Xylenes	15.72	106.0	81741	109.12	UG	9[illegible]
48)	o-Xylene	16.57	106.0	39250	53.34	UG	84
49)	Bromofluorobenzene	17.76	95.0	35421	51.36	UG	[illegible]
50)	1,3-Dichlorobenzene	20.04	146.0	42823M	51.38	UG	98
51)	1,4-Dichlorobenzene	20.22	146.0	45466	54.55	UG	[illegible]
52)	1,2-Dichlorobenzene	21.01	146.0	40424	52.78	UG	99
53)	Dichlorodifluoromethane	[illegible].27	85.0	59955	55.91	UG	[illegible]

* Compound is ISTD



Data File: >CS076::D4 Quant Output File: ^CS076::QT
Name: USTD100 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

Operator ID: MARIE
Quant Time : 030221 10:45
Injected at: **0221 10:20

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 10:43
Output File: ^CS076::QT Injected at: **0221 10:20
Data File: >CS076::04 Dilution Factor: 1.000000
Name: VSTD100 Instrument ID: 7000 C
Misc: 7000IC

ID File: ID091C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

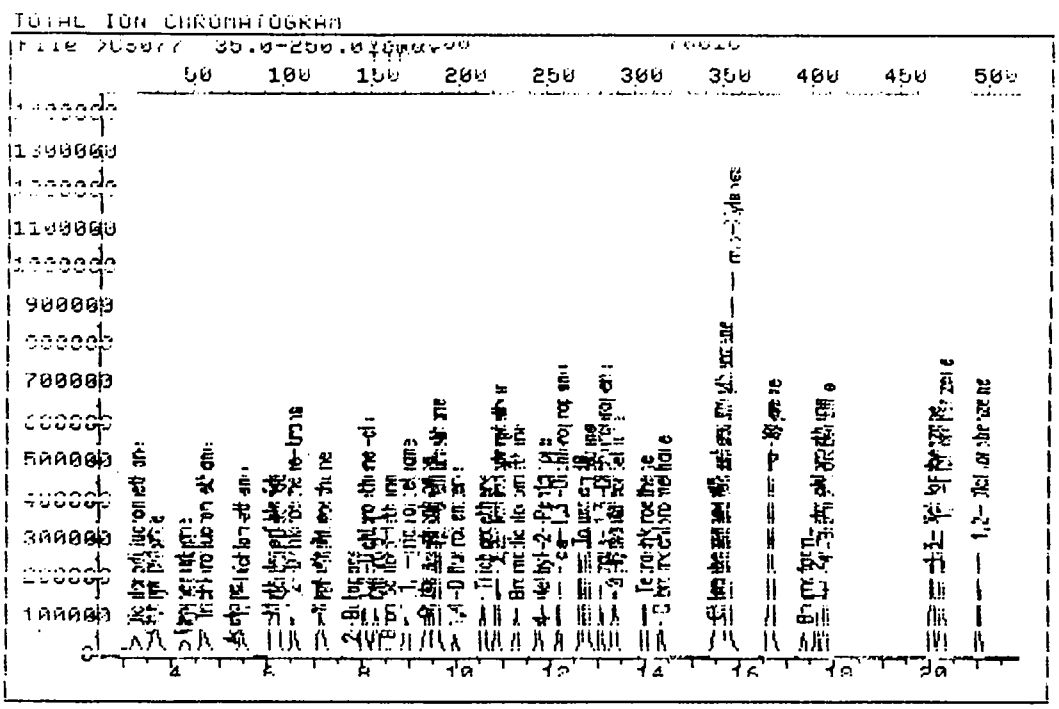
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.53	128.0	7719	50.00	UG	83
2)	Chloromethane	3.53	50.0	121562	89.04	UG	89
3)	Bromomethane	4.20	94.0	68962	92.65	UG	98
4)	Vinyl Chloride	3.64	62.0	137428	89.13	UG	92
5)	Chloroethane	4.32	64.0	43947	83.03	UG	82
6)	Methylene Chloride	6.11	84.0	66064	84.80	UG	72
8)	Acetone	5.29	43.0	130700M	39.60	UG	90
12)	Trichlorofluoromethane	4.65	101.0	155664	96.73	UG	88
13)	Carbon Disulfide	6.18	76.0	259922	109.42	UG	100
14)	1,1-Dichloroethene	5.47	96.0	51845	104.50	UG	67
15)	1,1-Dichloroethane	7.15	63.0	155468	110.15	UG	94
16)	1,2-Dichloroethene-trans	6.55	96.0	59488	106.41	UG	82
18)	1,2-Dichloroethene-cis	8.04	61.0	126416	112.25	UG	79
19)	Chloroform	8.27	83.0	127082	109.27	UG	99
20)	1,2-Dichloroethane-d4	9.39	65.0	62624	95.82	UG	83
21)	1,2-Dichloroethane	9.53	62.0	89387	100.09	UG	98
22)	2-Butanone	7.75	43.0	19924	88.54	UG	100
23)	*1,4-Difluorobenzene	9.98	114.0	72019	50.00	UG	99
24)	1,1,1-Trichloroethane	8.94	97.0	79442	97.58	UG	86
25)	Carbon Tetrachloride	9.35	117.0	55750	96.51	UG	98
26)	Vinyl Acetate	7.11	43.0	125153	82.17	UG	79
27)	Bromodichloromethane	11.25	83.0	91640	105.39	UG	93
28)	1,2-Dichloropropane	10.84	63.0	93022	100.38	UG	99
29)	cis-1,3-Dichloropropene	12.14	75.0	132755	111.74	UG	84
30)	Trichloroethene	10.58	130.0	41112	99.58	UG	92
31)	Dibromochloromethane	14.30	129.0	40862	108.97	UG	96
32)	1,1,2-Trichloroethane	13.34	97.0	53447	104.91	UG	89
33)	Benzene	9.57	78.0	351204	105.38	UG	96
34)	trans-1,3-Dichloropropene	13.04	75.0	120999	109.99	UG	90
35)	2-Chloroethylvinylether	10.84	63.0	93022	100.38	UG	96
36)	Bromoform	17.32	173.0	28911	107.85	UG	93
37)	*Chlorobenzene-d5	15.42	117.0	62432	50.00	UG	94
38)	2-Hexanone	13.30	43.0	310600M	85.20	UG	
39)	4-Methyl-2-Pentanone	11.77	43.0	84411	94.59	UG	96
40)	Tetrachloroethene	13.97	164.0	31579	101.02	UG	89
41)	1,1,2,2-Tetrachloroethane	17.58	83.0	80971	87.76	UG	96
42)	Toluene	12.78	91.0	342022	109.03	UG	98
43)	Toluene d-8	12.63	98.0	208654	100.76	UG	97
44)	Chlorobenzene	15.50	112.0	167262	102.41	UG	92
45)	Ethylbenzene	15.57	106.0	98735	109.29	UG	89

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 10:43
Output File: C:\5076::QT Injected at: **0221 10:40
Data File: >C5076::D4 Dilution Factor: 1.00000
Name: VSTD100 Instrument ID: 7001 C
Misc: 7001C

ID File: ID0191C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	Styrene	16.69	104.0	219280	108.75	UG	97
47)	m,p-Xylenes	15.72	106.0	235430	215.67	UG	96
48)	o-Xylene	16.58	106.0	108904	101.56	UG	89
49)	Bromofluorobenzene	17.77	95.0	92803	92.33	UG	90
50)	1,3-Dichlorobenzene	20.04	146.0	98733M	81.29	UG	98
51)	1,4-Dichlorobenzene	20.23	146.0	107401	88.42	UG	89
52)	1,2-Dichlorobenzene	21.01	146.0	92342	82.73	UG	96
53)	Dichlorodifluoromethane	3.20	85.0	108399	69.37	UG	98

* Compound is ISTD



Data File: >CS077::D4 Quant Output File: ^CS077::QT
Name: VSTD200 Instrument ID: 7001 C
Misc: 7001C

Id File: IDC91C::MF
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: **0221 10:11

Operator ID: MARIE
Quant Time : 030221 11:09
Injected at: **0221 10:47

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 11:09
Output File: ^CS077::QT Injected at: **0221 10:47
Data File: >CS077::D4 Dilution Factor: 1.000000
Name: VSTD200 Instrument ID: 7011 C
Misc: 7011C

ID File: ID091C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: **0221 10:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.54	128.0	7902	50.00	UG	81
2)	Chloromethane	3.55	50.0	204783	146.52	UG	89
3)	Bromomethane	4.22	94.0	100976	132.52	UG	98
4)	Vinyl Chloride	3.62	62.0	250020	158.40	UG	94
5)	Chloroethane	4.29	64.0	75374	139.11	UG	84
6)	Methylene Chloride	6.08	84.0	136239	170.82	UG	68
8)	Acetone	5.26	43.0	38749M	115.12	UG	88
12)	Trichlorofluoromethane	4.67	101.0	281553	170.91	UG	95
13)	Carbon Disulfide	6.20	76.0	520036	213.85	UG	100
14)	1,1-Dichloroethene	5.45	96.0	94441	185.95	UG	69
15)	1,1-Dichloroethane	7.16	63.0	336628	232.97	UG	95
16)	1,2-Dichloroethene-trans	6.53	96.0	117389	205.13	UG	86
17)	Acetonitrile	7.09	41.0	4156	128.28	UG	95
18)	1,2-Dichloroethene-cis	8.06	61.0	274155	237.79	UG	73
19)	Chloroform	8.28	83.0	273554	229.77	UG	98
20)	1,2-Dichloroethane-d4	9.40	65.0	153102	228.85	UG	77
21)	1,2-Dichloroethane	9.55	62.0	214981	235.14	UG	95
22)	2-Butanone	7.76	43.0	57837	251.06	UG	100
23)	*1,4-Difluorobenzene	9.96	114.0	77103	50.00	UG	93
24)	1,1,1-Trichloroethane	8.92	97.0	180593	207.20	UG	82
25)	Carbon Tetrachloride	9.33	117.0	123615	199.88	UG	91
26)	Vinyl Acetate	7.09	43.0	341603	209.49	UG	81
27)	Bromodichloromethane	11.27	83.0	203775	218.90	UG	89
28)	1,2-Dichloropropane	10.86	63.0	206862	208.51	UG	95
29)	cis-1,3-Dichloropropene	12.16	75.0	304510	239.40	UG	80
30)	Trichloroethene	10.56	130.0	90678	205.16	UG	92
31)	Dibromochloromethane	14.32	129.0	90279	226.13	UG	97
32)	1,1,2-Trichloroethane	13.35	97.0	114949	210.76	UG	91
33)	Benzene	9.59	78.0	784973	219.99	UG	98
34)	trans-1,3-Dichloropropene	13.05	75.0	278261	236.26	UG	90
35)	2-Chloroethylvinylether	10.86	63.0	206662	208.51	UG	92
36)	Bromoform	17.34	173.0	57088	205.13	UG	99
37)	*Chlorobenzene-d5	15.44	117.0	67756	50.00	UG	92
38)	2-Hexanone	13.32	43.0	72789M	185.34	UG	94
39)	4-Methyl-2-Pentanone	11.79	43.0	206793	208.66	UG	86
40)	Tetrachloroethene	13.95	164.0	65542	194.62	UG	97
41)	1,1,2,2-Tetrachloroethane	17.60	83.0	166749	167.76	UG	92
42)	Toluene	12.76	91.0	729130	230.56	UG	97
43)	Toluene d-8	12.61	98.0	469741	210.65	UG	98
44)	Chlorobenzene	15.51	112.0	372106	211.52	UG	98

Operator ID: MARIE Quant Rev: 7 Quant Time: 030221 11:09
Output File: >CS077::QT Injected at: **0221 10:47
Data File: >CS077::04 Dilution Factor: 1.00000
Name: VSTD200 Instrument ID: 7890 C
Misc: 7001C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 09:58 Last Qcal Time: **0221 10:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Ethylbenzene	15.59	106.0	247240	254.05	UG	90
46)	Styrene	16.63	104.0	543545	250.23	UG	84
47)	m,p-Xylenes	15.74	106.0	601053	511.10	UG	64
48)	o-Xylene	16.60	106.0	241520	209.07	UG	86
49)	Bromofluorobenzene	17.79	95.0	206144	190.38	UG	69
50)	1,3-Dichlorobenzene	20.02	146.0	207866	158.86	UG	98
51)	1,4-Dichlorobenzene	20.25	146.0	226775	173.31	UG	88
52)	1,2-Dichlorobenzene	21.03	146.0	188710	156.94	UG	95
53)	Dichlorodifluoromethane	3.21	85.0	249855	148.42	UG	99

* Compound is ISTD

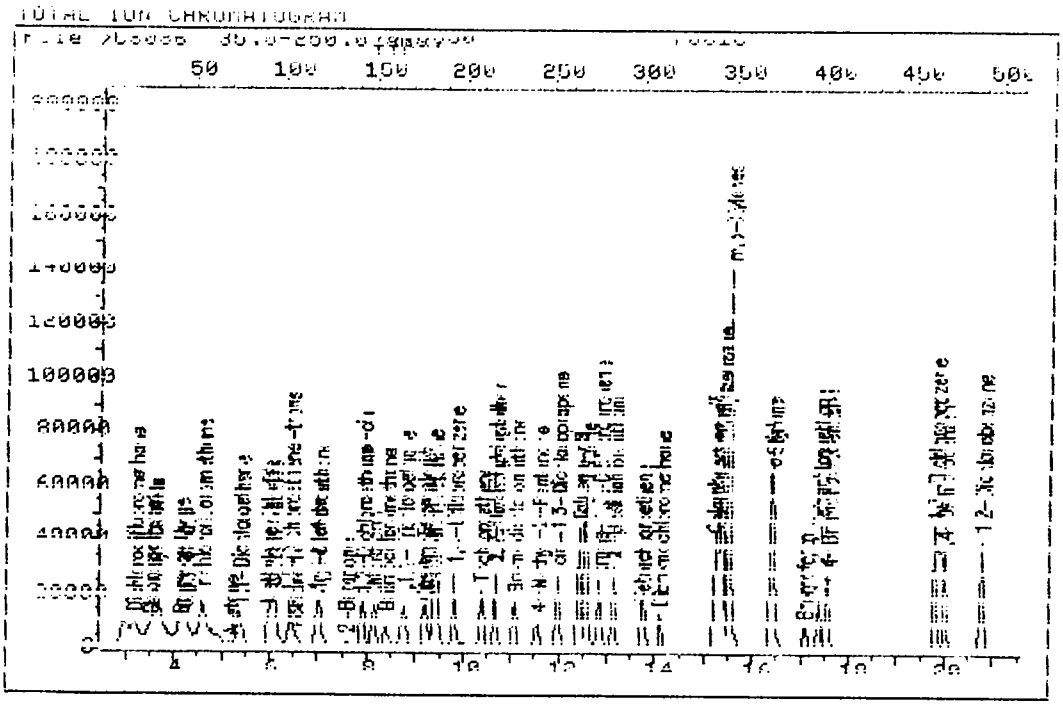
7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Instrument ID: H5970 C Calibration Date: 03/03/03 Time: 09:43
Lab File ID: CS086 Init. Calib. Date(s): 02/21/03 02/21/03
Heated Purge: (Y/N) N Init. Calib. Times: 8:54 10:47
GC Column: RTX502.2 ID: .32 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	8.039	6.794		15.5	
Bromomethane	4.034	3.390	.100	16.0	25.0
Vinyl Chloride	9.206	8.556	.100	7.1	25.0
Chloroethane	3.033	2.936		3.2	
Methylene Chloride	4.654	4.017		13.7	
Acetone	1.116	1.074		3.8	
Carbon Disulfide	15.971	14.162		11.3	
1,1-Dichloroethene	3.270	2.969	.100	9.2	25.0
1,1-Dichloroethane	9.692	7.940	.200	18.1	25.0
1,2-Dichloroethene-trans	3.647	3.343		8.3	
Chloroform	7.893	6.733	.200	14.7	25.0
1,2-Dichloroethane	5.989	4.540	.100	24.2	25.0
2-Butanone	1.530	1.603		-4.8	
1,1,1-Trichloroethane	.564	.559	.100	.9	25.0
Carbon Tetrachloride	.395	.386	.100	2.3	25.0
Bromodichloromethane	.635	.629	.200	.9	25.0
1,2-Dichloropropane	.657	.569		13.4	
cis-1,3-Dichloropropene	.873	.835	.200	4.4	25.0
Trichloroethene	.283	.292	.300	-3.2	25.0
Dibromochloromethane	.277	.270	.100	2.5	25.0
1,1,2-Trichloroethane	.365	.342	.100	6.3	25.0
Benzene	2.380	2.081	.500	12.6	25.0
trans-1,3-Dichloropropene	.815	.671	.100	17.7	25.0
Bromoform	.188	.160	.100	14.9	25.0
4-Methyl-2-Pentanone	.693	.539		22.2	
2-Hexanone	.263	.220		16.3	
Tetrachloroethene	.247	.221	.200	10.5	25.0
1,1,2,2-Tetrachloroethane	.676	.603	.500	10.8	25.0
Toluene	2.630	2.462	.400	6.4	25.0
Chlorobenzene	1.314	1.251	.500	4.8	25.0
Ethylbenzene	.773	.718	.100	7.1	25.0
Styrene	1.709	1.510	.300	11.6	25.0
Toluene d-8	1.665	1.564		6.1	
Bromofluorobenzene	.767	.671	.200	12.5	25.0
1,2-Dichloroethane-d4	4.206	3.262		22.4	
1,2-Dichloroethene-cis	7.768	6.438		17.1	
m,p-Xylenes	.932	.895		4.0	
o-Xylene	.867	.829	.010	4.4	25.0

All other compounds must meet a minimum RRF of .010.



Data File: >CS086::D4
Name: VSTD050
Misc: 7001C

Quant Output File: ^CS086::QT
Instrument ID: 7001 C

Id File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 11:31

Last Ncal Time: <none>

Operator ID: MARIE
Quant Time : 030303 10:06
Injected at: **0303 09:43

Operator ID: MARIE Quant Rev: 2 Quant Time: 03/21/03 11:31
Output File: ^C5UBA::QT Injected at: **/**/** 09:43
Data File: ^C5UBA::D4 Dilution Factor: 1.0000
Name: VS1005H Instrument ID: 2000 C
Misc: 2000C

ID File: ID1910::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 11:31 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	8.39	128.0	5915	50.00	UG	
2)	Chloromethane	3.50	50.0	40188	42.26	UG	
3)	Bromomethane	4.14	94.0	20050	42.01	UG	
4)	Vinyl Chloride	3.58	62.0	50609	46.47	UG	
5)	Chloroethane	4.21	64.0	17364	48.29	UG	
6)	Methylene Chloride	5.97	84.0	23761M	43.16	UG	
8)	Acetone	5.18	43.0	63?2M	48.09	UG	
12)	Trichlorofluoromethane	4.59	101.0	59318	50.26	UG	
13)	Carbon Disulfide	6.08	76.0	83788	44.34	UG	
14)	1,1-Dichloroethene	5.37	96.0	17563	45.40	UG	
15)	1,1-Dichloroethane	7.01	63.0	46967	40.76	UG	
16)	1,2-Dichloroethene-trans	6.41	96.0	19774	45.83	UG	
17)	Acetonitrile	6.53	41.0	1411	90.71	UG	
18)	1,2-Dichloroethene-cis	7.90	61.0	38078	41.44	UG	
19)	Chloroform	8.13	83.0	59825	42.65	UG	
20)	1,2-Dichloroethane-d4	9.21	65.0	19293	38.27	UG	
21)	1,2-Dichloroethane	9.36	62.0	26855	52.90	UG	
22)	2-Butanone	7.57	43.0	9481	52.39	UG	
23)	*1,4-Difluorobenzene	9.81	114.0	49886	50.00	UG	
24)	1,1,1-Trichloroethane	8.76	97.0	27914	49.56	UG	
25)	Carbon Tetrachloride	9.17	117.0	19768	48.93	UG	
26)	Vinyl Acetate	6.97	43.0	44577	43.90	UG	
27)	Bromodichloromethane	11.07	83.0	31369	49.52	UG	
28)	1,2-Dichloropropane	10.66	63.0	28413	43.34	UG	
29)	cis-1,3-Dichloropropene	11.97	75.0	41626	47.84	UG	
30)	Trichloroethene	10.36	130.0	14960	51.56	UG	
31)	Dibromochloromethane	14.09	129.0	13495	48.60	UG	
32)	1,1,2-Trichloroethane	13.12	97.0	17143	46.76	UG	
33)	Benzene	9.40	78.0	105828	45.22	UG	
34)	trans-1,3-Dichloropropene	12.82	75.0	33455	41.14	UG	
35)	2-Chloroethylvinylether	11.66	63.0	28415	43.24	UG	
36)	Bromoform	12.07	173.0	7982	42.47	UG	
37)	*Chlorobenzene-d5	15.21	117.0	43570	50.00	UG	
38)	2-Hexanone	13.12	43.0	9581	41.85	UG	
39)	4-Methyl-2-Pentanone	11.56	43.0	22000	38.93	UG	
40)	Tetrachloroethene	13.72	164.0	9619	44.20	UG	
41)	1,1,2,2-Tetrachloroethane	17.57	83.0	26280	44.61	UG	
42)	Toluene	12.56	91.0	102225	46.81	UG	
43)	Toluene d-8	12.41	98.0	88161	46.99	UG	
44)	Chlorobenzene	15.28	112.0	54619	47.62	UG	

Operator ID: MARIE
Output File: Y:5086::QT
Data File: Y:5086::04
Name: 05100150
Misc: 70011C

Quant Rev: 7 Quant Time: 03/05/03 10:06
Injected at: **:**:03 0?:??
Dilution Factor: 1.000000
Instrument ID: 7000 C

ID File: IDC91C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030221 11:31 Last Ncal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	Ethylbenzene	15.36	106.0	31792	46.43	UG	8?
46)	Styrene	16.40	104.0	65?76	44.17	UG	??
47)	m,p-Xylenes	15.51	106.0	72989	96.07	UG	9?
48)	o-Xylene	16.37	106.0	36199	47.25	UG	??
49)	Bromofluorobenzene	17.56	95.0	29?45	43.76	UG	8?
50)	1,3-Dichlorobenzene	19.79	146.0	27?50	37.29	UG	??
51)	1,4-Dichlorobenzene	19.98	146.0	28?53	36.37	UG	8?
52)	1,2-Dichlorobenzene	20.76	146.0	25?72	36.69	UG	??
53)	Dichlorodifluoromethane	3.17	85.0	41329	43.18	UG	9?

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): CS086 Date Analyzed: 03/03/03
Instrument ID: H5970 C Time Analyzed: 09:43
GC Column: RTX502.2 ID: .32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	5915.	8.39	49886.	9.81	43570.	15.21
	UPPER LIMIT	11830.	8.89	99772.	10.31	87140.	15.71
	LOWER LIMIT	2958.	7.89	24943.	9.31	21785.	14.71
	EPA SAMPLE NO.						
1	VBLK01	5174.	8.38	40494.	9.79	37204.	15.19
2	MEGDIM0237	4933.	8.37	44978.	9.82	38757.	15.22
3	MEGDD0120	4181.	8.41	37447.	9.82	30658.	15.22
4	MEGUIM0119	5049.	8.39	44472.	9.81	37164.	15.21
5	TB030227	4358.	8.40	37776.	9.82	33873.	15.22
6	MEGDIM0237 MS	5017.	8.37	45607.	9.78	39021.	15.22
7	MEGDIM0237 MSD	4738.	8.37	44280.	9.78	38574.	15.22
8	VMSB	4953.	8.41	43997.	9.78	38236.	15.22
9	MEGDD0240	5138.	8.37	40995.	9.78	38011.	15.22
10	MEGDSH8617	5051.	8.40	40261.	9.78	37410.	15.22
11	MEGDD0134	4778.	8.40	42320.	9.82	37122.	15.22
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

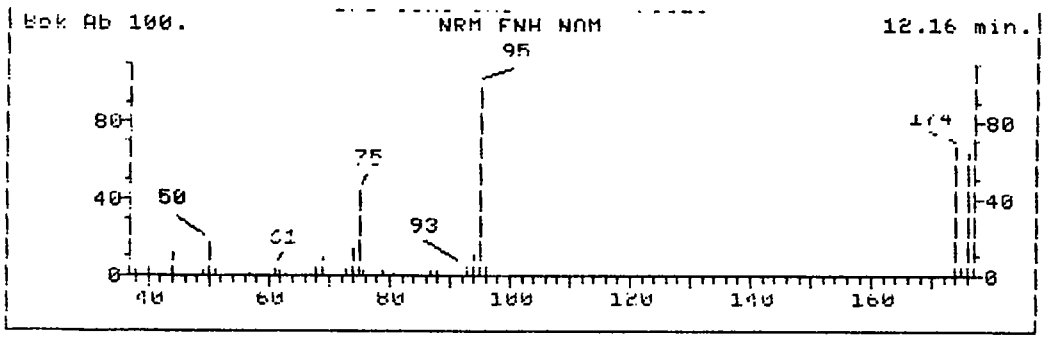
RAW QC

DATA

MS data file header from : >CT073::D4

Sample: BFB 50NG INJ Operator: MASTER REG. GRP. 2/21/03 8:..A
Misc : 7011C
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: 7011 C
Method file: METHCT Tuning file: MT9003 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	90.	290.	290.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	5.0	.1	11.0	.2	0.0



>CT023 BFR 50NG INJ 70010
157 NRM ENH NOM

File: >CT023 Scan #: 157 Retn. time: 12.16

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	2.989	50.95	3.494	68.95	9.623	80.90	1.864	96.00	6.142
38.00	1.971	57.00	1.321	72.95	3.065	86.85	2.047	173.90	67.212
39.90	4.670	61.00	3.229	73.90	13.589	87.85	2.129	174.90	5.921
44.00	11.696	62.00	2.553	75.00	44.629	92.90	2.275	175.90	63.914
48.95	2.262	63.00	1.877	75.90	2.591	94.00	10.205	176.90	4.960
49.95	16.662	67.95	5.876	78.90	1.952	95.00	100.000		

MS data file header from : >CTUA6::D4

Sample: MFB Operator: MARIE REG. REF. 3/.. 03 ..

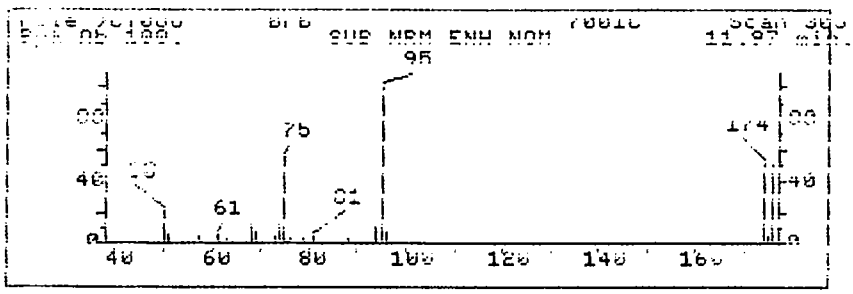
Misc : 70111

Sys. #: 1 MS model: 70 SW/HW rev.: LF AMS # : 0 Equip ID: 70111 C

Method file: METHCT Tuning file: MT70103 No. of extra records: 2

Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	70.	270.	250.	0.	0.
Chromatographic times, min. :	3.0	33.0	33.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	.1	0.0	.2	0.0



>1.086 Bem 7000.0
>03 SUB NRM ENH NOM

File: >CTUBA Scan #: 303 Retn. time: 11.97

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.90	6.023	62.90	3.650	75.00	55.056	87.85	3.207	173.90	51.726
50.05	20.524	67.95	12.664	76.00	3.415	93.90	11.029	174.80	4.552
50.95	6.558	69.05	8.093	78.80	3.889	95.00	100.000	175.90	49.943
57.00	4.205	73.00	4.141	80.90	4.684	95.90	8.542	176.90	3.617
61.00	6.048	74.00	16.526						

1A

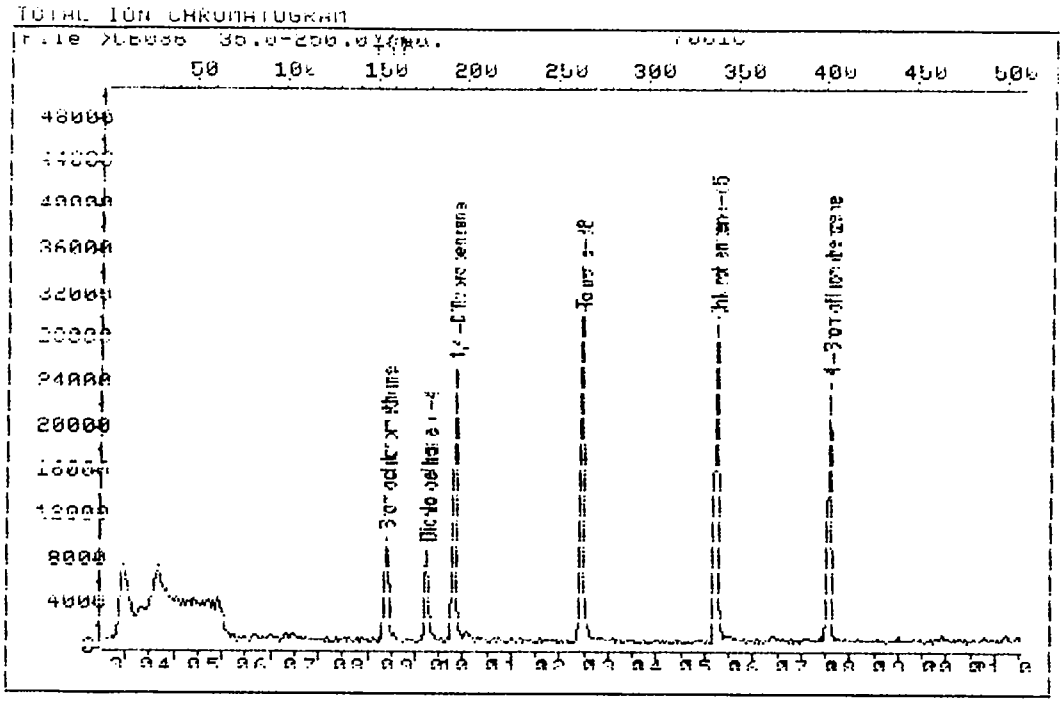
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: VBLK01
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: CB086
Level: (low/med) LOW Date Received:
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >CB086::D4 Quant Output File: ^CB086::QT
Name: VBLK Instrument ID: 7001 C
Misc: 7001C

Id File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **0303 09:45

Operator ID: MARIE
Quant Time : 030303 10:46
Injected at: **0303 10:10

QUANT REPORT Page 1

Operator ID: MARIE
Output File: ^CB086::QT
Data File: >CB086::04
Name: VBLK
Misc: 2000C

Quant Rev: 2 Quant Time: 03*03 10:46
Injected at: **0303 10:10
Dilution Factor: 1.00000
Instrument ID: 2000 C

ID File: ID591C::MT
Title: HP VOA Continuing Calibration Standard
Last Calibration: 030131 10:03 Last Qcal Time: **0303 09:43

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*Bromochloromethane	8.38	128.0	5124	50.00	UG	9[illegible]
20)	1,2-Dichloroethane-d4	9.23	65.0	16320	48.35	UG	8[illegible]
23)	*1,4-Difluorobenzene	9.79	114.0	40494	50.00	UG	9[illegible]
37)	*Chlorobenzene-d5	15.19	117.0	37204	50.00	UG	9[illegible]
43)	Toluene d-8	12.40	98.0	58309	50.09	UG	9[illegible]
49)	Bromofluorobenzene	17.54	95.0	24563	49.18	UG	8[illegible]

* Compound is ISTD

1A

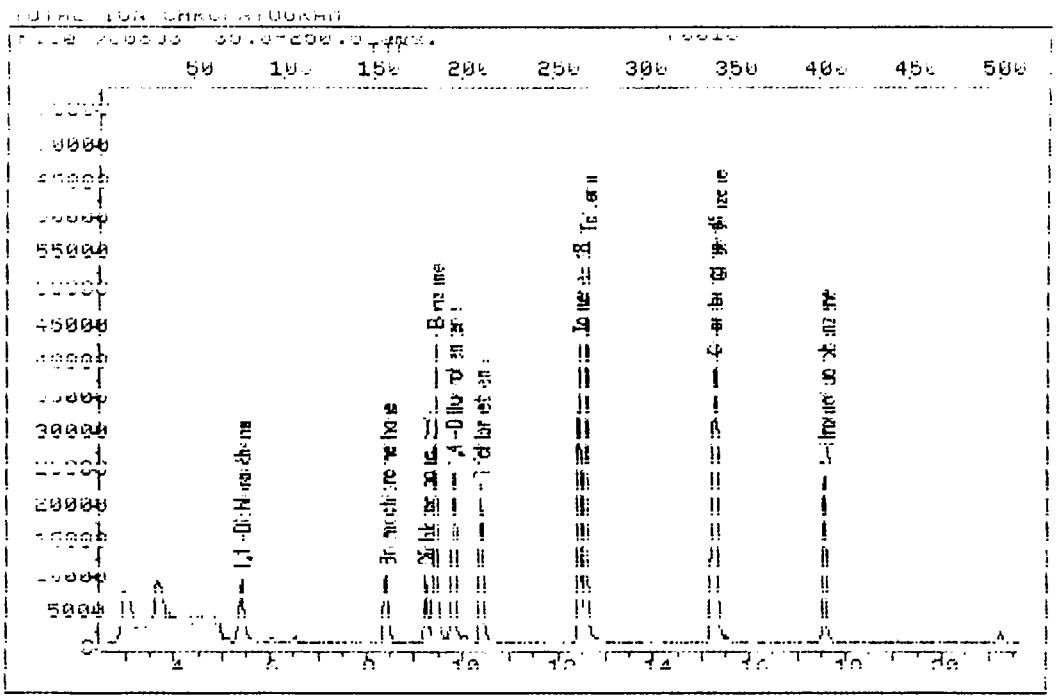
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

VMSB

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: VMSB
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0653
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	38.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	51.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	55.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	55.	
108-90-7	Chlorobenzene	53.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >C:\HP5973\DATA\03031704.D Quant Output File: C:\HP5973\DATA\03031704.RES
Name: VOASH Instrument ID:
Misc: 200UG

Id File: HP5971C:\HPCHEM\1\METHODS\VOA.M
Title: HP VOA Continuing Calibration Standard
Last Calibration: 03/01/31 11:03 Last Qcal Time: **/**/** **:**

Operator ID: MARIE
Quant Time : 03/03/03 17:04
Injected at: **/**/** 17:03

Operator ID: [illegible]
Quant Rev: / Quant Time:
Data File: Injection at:
Dilution Factor:
Name: VOA8
Instrument ID:
Misc:

ID File:
Title: HP VOA Continuing Calibration Standa
Last Calibration: Last Qcal Time:

	Compound	R.T.	M ion	Area	Conc	Limits	
1)	*Bromochloromethane	8.41	128.0	4995	50.00	0%	
14)	1,1-Dichloroethene	5.39	96.0	11518	38.48	0%	
20)	1,2-Dichloroethane-d4	9.23	65.0	12865M	55.29	0%	
22)	*1,4-Difluorobenzene	9.28	114.0	45992	50.00	0%	
30)	Trichloroethene	10.58	130.0	13108	50.96	0%	
32)	Benzene	9.41	78.0	10884	54.94	0%	
37)	*Chlorobenzene-d5	15.22	117.0	38736	50.00	0%	
42)	Toluene	12.58	91.0	10765	54.52	0%	
43)	Toluene d-8	12.43	98.0	8[illegible]5	54.54	0%	
44)	Chlorobenzene	15.30	112.0	5[illegible]8	55.32	0%	
49)	Bromofluorobenzene	17.57	95.0	26992	51.24	0%	

* Compound is (ST)

1A

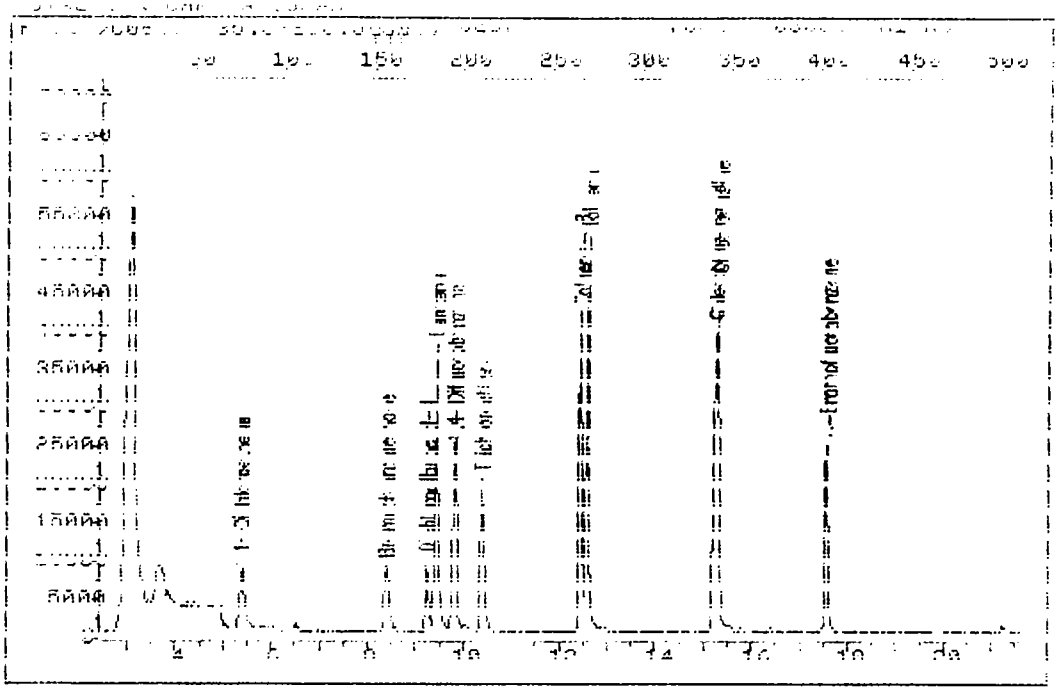
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0237 MS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237 MS
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0650
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	37.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	45.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	47.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	47.	
108-90-7	Chlorobenzene	46.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: [illegible] Quant Output File: [illegible]
Name: MFG[illegible] Instrument ID: [illegible]
Misc: [illegible]

Id File: [illegible]
Title: HP 6890 Continuing Calibration Standard
Last Calibration: [illegible] Last Cal Time: [illegible]

Operator ID: MARKER
Quant Time : [illegible]
Injected at: [illegible]

Operator ID: MASTER Quant Rev: 7 Quant Time: 11:03 10/
Report File: C:\HPCHEM\1\QA
Data File: C:\HPCHEM\1\04
Name: MB+SURR+MS 7
Misc: 25ml/5. 113127R HI 05

ID File: ID5711.:::MI
Title: HP VOA Continuing Calibration Standard
Last Calibration: 03/31/91 10:05 Last Quan Time: **/**/** 09:49

	Compound	R.T.	Q ion	Area	Conc	Limits	
1)	*Bromochloromethane	8.57	128.0	5012	50.000	100	
14)	1,1-Dichloroethene	5.55	96.0	11021	52.16	100	0.
20)	1,2-Dichloroethane-d4	9.23	65.0	12559	51.56	100	
23)	*1,4-Difluorobenzene	9.78	114.0	49802	50.000	100	0.
26)	Trichloroethene	10.58	130.0	11822	45.68	100	
32)	Benzene	9.41	78.0	32965	47.18	100	0.
37)	*Chlorobenzene-d5	15.22	117.0	39021	50.000	100	
41)	Toluene	12.58	91.0	9[illegible]1	47.47	100	0
43)	Toluene-d8	12.43	98.0	62467	51.18	100	
44)	Chlorobenzene	15.30	112.0	49399	46.90	100	0.
49)	Bromofluorobenzene	17.57	95.0	25124	47.96	100	

* Compound is (50)

1A

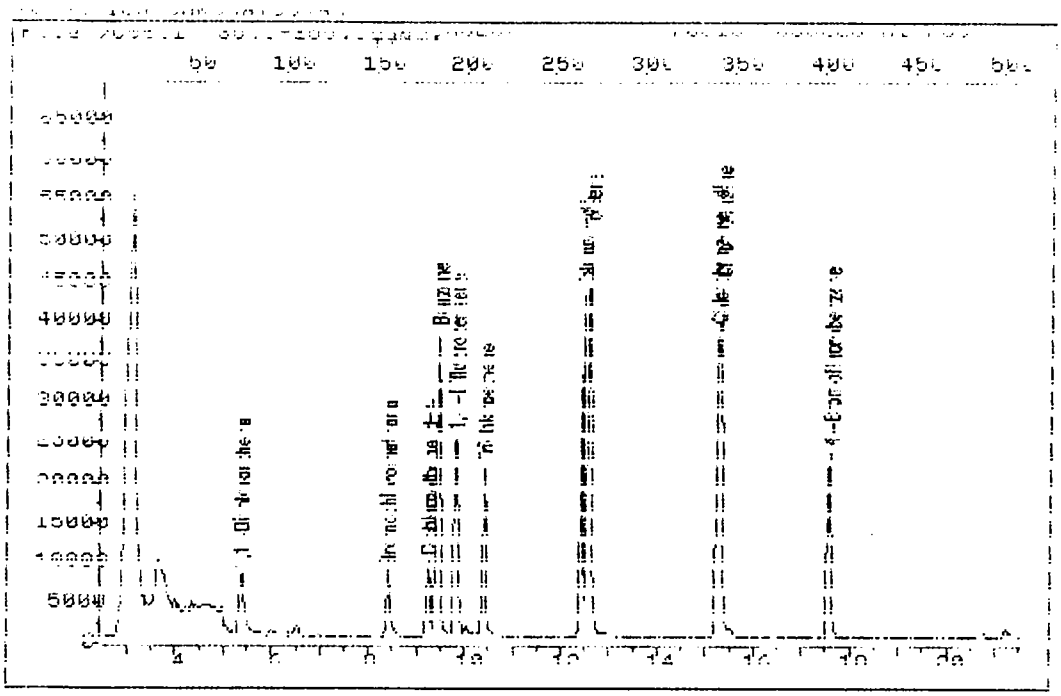
EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0237 MSD

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237 MSD
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0651
Level: (low/med) LOW Date Received: 02/28/03
% Moisture: not dec._____ Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	35.	
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	44.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	48.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	49.	
108-90-7	Chlorobenzene	46.	
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U



Data File: >:\DATA1\::04 Quant Output File: ^\DATA1\::Q1
Name: MFG01M0232 Instrument ID: .H01 1.
Misc: 2HHHC 0510228 HI MSD

Id File: \DATA1C\::01
Title: HP V0A Continuing Calibration Standard
Last Calibration: 0500131 10:09 Last Qcal Time: **:.>03 07:..>

Operator ID: MARIF
Quant Time : 03:.>03 16:..
Injected at: **:5:03 16:05

Quant Report Page 1

Operator ID: Mesar Quant Rev: Acquisition Date: 03-Jan-
Sample File: Mscan01::104 Dilution Factor: 1.000
Data File: Mscan01::104 Instrument ID: Vinci 1
Name: Mesa/EMSL Sy
Misc: 200ng 8260/8 HI GSD

ID File: 8059IL::MI
Title: HP VOA Continuing Calibration Standa
Last Calibration: 02Jul91 10:10 Last Quan Time: **Undef** 09:49

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	8.57	128.0	47388	50.000	ug/L	
14)	1,1-Dichloroethene	5.55	96.0	9979	50.47	ug/L	
20)	1,2-Dichloroethane-d4	9.23	65.0	10461	49.29	ug/L	
22)	*1,4-Difluorobenzene	9.78	114.0	44281	50.000	ug/L	
30)	Trichloroethene	10.58	130.0	11999	4.54	ug/L	
32)	Benzene	9.41	78.0	89999	48.47	ug/L	
37)	*Chlorobenzene-d5	15.22	117.0	38974	50.000	ug/L	
40)	Toluene	12.58	91.0	9919	48.97	ug/L	
45)	Toluene d-8	12.43	98.0	6440	49.56	ug/L	
46)	Chlorobenzene	15.30	112.0	44780	49.86	ug/L	
49)	Bromofluorobenzene	17.57	95.0	25884	48.44	ug/L	

* Compound is (50)

CLP

SAMPLE CALCULATIONS FOR VOLATILE ORGANICS:

1) RRF of Benzene from the VSTD050 analyzed on 3/3/03:

$$= \frac{\text{area of Benzene in std.}}{\text{area of internal std}} \quad \mathbf{X} \quad \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{103828}{49886} \times \frac{50}{50} = 2.081$$

2) Amount of Benzene in sample MEGDIM0237 MS (AES sample number 030228H-01 MS):

$$\text{ug/L} = \frac{\text{area of Benzene in sample}}{\text{area of internal standard in sample}} \times \frac{\text{amount of internal std. (ng)}}{\text{(ml of sample purged)(RRF)}}$$

$$= \frac{89565}{45607} \times \frac{(250)}{(5.0)(2.081)} = 47.2 \text{ ug/L}$$

which is reported as 47 ug/L on the Form I for Volatile Organics

3) Calculation of spike recovery for Benzene in sample MEGDIM0237 MS:

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Benzene} = \frac{(47.2 - 0.0)}{50.0} \times 100 = 94.4\ \%$$

SEMI-VOLATILE

ORGANICS ANALYSIS

QC

SUMMARY

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	TOT OUT
1	MEGDD0132	70	72	55	N/A	N/A	N/A	0
2	MEGDD0134	74	84	67	N/A	N/A	N/A	0
3	WBLK01	65	67	45	N/A	N/A	N/A	0
4	WMSB	74	72	52	N/A	N/A	N/A	0
5	MEGDD0240	70	76	45	N/A	N/A	N/A	0
6	MEGDIM0237	66	87	78	N/A	N/A	N/A	0
7	MEGDIM0237 MS	49	62	57	N/A	N/A	N/A	0
8	MEGDIM0237 MSD	67	81	83	N/A	N/A	N/A	0
9	MEGDD0120	39	55	55	N/A	N/A	N/A	0
10	MEGUIM0119	57	76	73	N/A	N/A	N/A	0
11	MEGDSH8617	57	75	78	N/A	N/A	N/A	0
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	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10-110)
S5 (2FP) = 2-Fluorophenol	(21-110)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: MEGDIM0237

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,4-Dichlorobenzene	25.	0.	13.	52	36- 97
n-Nitroso-di-n-propylam	25.	0.	10.	40 *	41-116
1,2,4-Trichlorobenzene	25.	0.	14.	59	39- 98
Acenaphthene	25.	0.	15.	60	46-118
2,4-Dinitrotoluene	25.	0.	5.	20 *	24- 96
Pyrene	25.	0.	13.	52	26-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	25.	18.	72	32 *	28	36- 97
n-Nitroso-di-n-propylam	25.	16.	64	46 *	38	41-116
1,2,4-Trichlorobenzene	25.	17.	68	19	28	39- 98
Acenaphthene	25.	19.	76	24	31	46-118
2,4-Dinitrotoluene	25.	10.	40	67 *	38	24- 96
Pyrene	25.	19.	76	38 *	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 4 out of 6 outside limits
Spike Recovery: 2 out of 12 outside limits

COMMENTS:

3C

WATER SEMI-VOLATILE MATRIX SPIKE BLANK RECOVERY

LAB NAME Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix Spike - EPA Sample No.: Blank Level:(Low/Med) Low

Compound	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MS % REC. #	QC Limits REC.
1,4 Dichlorobenzene	25	0	14	55	36-97
N-Nitroso-di-n-propylamine	25	0	10	40	41-116
1,2,4 Trichlorobenzene	25	0	15	60	39-98
Acenaphthene	25	0	16	62	46-118
2,4 Dinitrotoluene	25	0	14	56	24-96
Pyrene	25	0	11	42	26-127

Column used to flag recovery values

* Values outside of required QC limits

Spike Recovery 0 out of 6 outside limits

Comments: _____

_____

_____

FORM III SV-1

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: A3158 Lab Sample ID: WBLK 3/4/03

Instrument ID: 5970 A Date Extracted: 03/04/03

Matrix: (soil/water) WATER Date Analyzed: 03/30/03

Level: (low/med) LOW Time Analyzed: 14:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	MEGDD0132	MEGDD0132	A3153	03/29/03
2	MEGDD0134	MEGDD0134	A3154	03/29/03
3	WMSB	WMSB 3/4/03	A3159	03/30/03
4	MEGDD0240	MEGDD0240	A3163	03/30/03
5	MEGDIM0237	MEGDIM0237	A3189	03/31/03
6	MEGDIM0237 MS	MEGDIM0237 MS	A3190	04/01/03
7	MEGDIM0237 MSD	MEGDIM0237 MSD	A3191	04/01/03
8	MEGDD0120	MEGDD0120	A3192	04/01/03
9	MEGUIM0119	MEGUIM0119	A3193	04/01/03
10	MEGDSH8617	MEGDSH8617	A3194	04/01/03
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.:URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: AT329 DFTPP Injection Date: 03/25/03

Instrument ID.: 5973 A DFTPP Injection Time: 13:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.6
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	62.9
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	50.6
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.6
275	10.0 - 30.0% of mass 198	20.4
365	Greater than 0.75% of mass 198	2.40
441	Present, but less than mass 443	35.7
442	40.0 - 110.0% of mass 198	55.4
443	15.0 - 23.0% of mass 442	10.4 (18.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	AS330	03/25/03	03:21
2	SSTD020	SSTD020	A3331	03/25/03	04:18
3	SSTD080	SSTD080	A3332	03/25/03	05:18
4	SSTD120	SSTD120	A3333	03/25/03	06:16
5	SSTD160	SSTD160	A3334	03/25/03	07:13
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: AT340 DFTPP Injection Date: 03/29/03

Instrument ID.: 5970 A DFTPP Injection Time: 14:45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.8
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	59.6
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	44.6
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	22.2
365	Greater than 0.75% of mass 198	1.50
441	Present, but less than mass 443	83.1
442	40.0 - 110.0% of mass 198	54.1
443	15.0 - 23.0% of mass 442	10.6 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	AS340	03/29/03	15:04
2	MEGDD0132	MEGDD0132	A3153	03/30/03	00:38
3	MEGDD0134	MEGDD0134	A3154	03/30/03	01:35
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: AT341 DFTPP Injection Date: 03/30/03

Instrument ID.: 5970 A DFTPP Injection Time: 10:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.9
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	59.6
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	44.6
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	22.2
365	Greater than 0.75% of mass 198	1.50
441	Present, but less than mass 443	83.1
442	40.0 - 110.0% of mass 198	54.1
443	15.0 - 23.0% of mass 442	10.6 (19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	AS342	03/30/03	11:19
2	WBLK01	WBLK 3/4/03	A3158	03/30/03	14:10
3	WMSB	WMSB 3/4/03	A3159	03/30/03	15:08
4	MEGDD0240	MEGDD0240	A3163	03/30/03	18:56
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Lab File ID: AT345 DFTPP Injection Date: 03/31/03

Instrument ID.: 5970 A DFTPP Injection Time: 18:06

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.2
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	64.1
70	Less than 2.0% of mass 69	.0 (.0)1
127	40.0 - 60.0% of mass 198	44.8
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	26.2
365	Greater than 0.75% of mass 198	2.4
441	Present, but less than mass 443	84.7
442	40.0 - 110.0% of mass 198	87.8
443	15.0 - 23.0% of mass 442	16.9 (19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	SSTD050	AS345	03/31/03	18:24
2	MEGDIM0237	MEGDIM0237	A3189	03/31/03	23:09
3	MEGDIM0237 MS	MEGDIM0237 MS	A3190	04/01/03	00:06
4	MEGDIM0237 MSD	MEGDIM0237 MSD	A3191	04/01/03	01:03
5	MEGDD0120	MEGDD0120	A3192	04/01/03	02:00
6	MEGUIM0119	MEGUIM0119	A3193	04/01/03	02:57
7	MEGDSH8617	MEGDSH8617	A3194	04/01/03	03:54
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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS340 Date Analyzed: 03/29/03
Instrument ID: 5970 A Time Analyzed: 15:04

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	115771.	10.41	406970.	14.89	203202.	20.79
	UPPER LIMIT	231542.	10.91	813940	15.39	406404.	21.29
	LOWER LIMIT	57886.	9.91	203485.	14.39	79071.	20.29
	EPA SAMPLE NO.						
1	MEGDD0132	145559.	10.40	364608.	14.87	166650.	20.77
2	MEGDD0134	156070.	10.39	414914.	14.87	158527.	20.77
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS340 Date Analyzed: 03/29/03
Instrument ID: 5970 A Time Analyzed: 15:04

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	331381.	25.45	296398.	33.27	256490.	38.35
	UPPER LIMIT	662762.	25.95	592796.	33.77	512980.	38.85
	LOWER LIMIT	165690.	23.95	148199.	32.77	128245.	37.85
	EPA SAMPLE NO.						
1	MEGDD0132	311994.	25.44	349530.	33.26	509707.	38.32
2	MEGDD0134	258425.	25.44	303726.	33.25	416840.	38.31
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS342 Date Analyzed: 03/30/03
Instrument ID: 5970 A Time Analyzed: 11:19

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	158770.		10.39		395835.		14.87		177924.		20.78	
	UPPER LIMIT	317540.		10.89		791670		15.37		355848.		21.28	
	LOWER LIMIT	79385.		9.89		197918.		14.37		88962.		20.28	
	EPA SAMPLE NO.												
1	WBLK01	141750.		10.38		364478.		14.88		152189.		20.78	
2	WMSB 3/4/03	104200.		10.39		272968.		14.89		125392.		20.79	
3	MEGDD0240	157917.		10.40		384148.		14.89		136997.		20.78	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS342 Date Analyzed: 03/30/03
Instrument ID: 5970 A Time Analyzed: 11:19

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	333124.	25.45	428034.	33.27	571083.	38.34
	UPPER LIMIT	666248.	25.95	856068.	33.77	1142166.	38.84
	LOWER LIMIT	166562.	23.95	214017.	32.77	285542.	37.84
	EPA SAMPLE NO.						
1	WBLK01	242583.	25.44	299146.	33.27	443608.	38.33
2	WMSB 3/4/03	250972.	25.45	317841.	33.27	423708.	38.34
3	MEGDD0240	249411.	25.45	382683.	33.27	575286.	38.36
4							
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS345 Date Analyzed: 03/31/03
Instrument ID: 5970 A Time Analyzed: 18:24

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	154049.		10.26		445177.		14.74		267643.		20.65	
	UPPER LIMIT	308098.		10.76		890354		15.24		535286.		21.15	
	LOWER LIMIT	77024.		9.76		222589.		14.24		133822.		20.15	
	EPA SAMPLE NO.												
1	MEGDIM0237	124221.		10.25		371770.		14.74		215729.		20.64	
2	MEGDIM0237 MS	102069.		10.25		292089.		14.73		172009.		20.63	
3	MEGDIM0237 MSD	142303.		10.24		435279.		14.74		261981.		20.64	
4	MEGDD0120	133397.		10.25		406448.		14.73		241269.		20.64	
5	MEGUIM0119	140327.		10.25		419957.		14.73		248964.		20.63	
6	MEGDSH8617	149569.		10.24		459024.		14.73		274909.		20.63	
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS345 Date Analyzed: 03/31/03
Instrument ID: 5970 A Time Analyzed: 18:24

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	600709.		25.31		840087.		33.13		1095817.		38.10	
	UPPER LIMIT	1201418.		25.81		1680174.		33.63		2191634.		38.60	
	LOWER LIMIT	300355.		24.81		420044.		32.63		547909.		37.60	
	EPA SAMPLE NO.												
1	MEGDIM0237	523912.		25.30		770786.		33.12		882138.		38.06	
2	MEGDIM0237 MS	381527.		25.29		527393.		33.12		625968.		38.07	
3	MEGDIM0237 MSD	583451.		25.29		798943.		33.11		966777.		38.06	
4	MEGDD0120	537050.		25.30		766144.		33.12		939233.		38.07	
5	MEGUIM0119	565627.		25.29		797114.		33.12		954877.		38.06	
6	MEGDSH8617	642529.		25.29		901661.		33.11		1092591.		38.07	
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Semi-Volatile Method Detection Limits

Date Performed: **2/5/2003**

Parameter	Conc 1 BMDL1	Conc 2 BMDL2	Conc 3 BMDL3	Conc 4 BMDL4	Conc 5 BMDL5	Conc 6 BMDL6	Conc 7 BMDL7	SD	MDL
Pyridine	4.08	6.10	4.20	8.63	7.35	4.01	4.07	1.895	5.957
N-Nitroso-di-methylamine	13.37	15.57	14.14	14.60	13.94	17.60	15.88	1.446	4.543
Analine	10.94	13.62	11.97	15.56	13.60	14.69	13.25	1.556	4.892
Phenol	13.27	17.62	16.03	16.25	15.49	17.59	16.63	1.484	4.665
bis(2-chloroethyl) ether	23.36	26.27	24.34	23.44	22.12	27.13	23.61	1.767	5.554
2-Chlorophenol	27.62	32.18	28.87	29.48	27.42	32.92	29.43	2.116	6.649
1,3 Dichlorobenzene	15.21	17.19	15.38	16.39	14.15	17.89	17.44	1.370	4.305
1,4 Dichlorobenzene	15.72	17.75	15.84	16.79	14.52	18.19	17.65	1.333	4.189
Benzyl Alcohol	22.38	27.14	25.14	23.19	22.48	25.75	22.54	1.910	6.003
1,2 Dichlorobenzene	15.90	17.91	16.26	17.21	15.02	18.51	17.90	1.267	3.981
2-Methylphenol	21.32	23.99	22.77	21.94	20.71	24.68	22.53	1.410	4.432
2,2'-oxybis (1-chloropropane)	22.25	25.72	23.77	23.33	21.87	25.34	23.43	1.439	4.524
4-Methylphenol	18.19	20.95	19.15	19.32	17.43	20.44	19.57	1.214	3.816
N-Nitroso-di-n-propylamine	23.67	27.34	25.85	24.89	23.77	26.52	24.96	1.368	4.300
Hexachloroethane	14.14	15.85	13.60	15.09	12.71	16.57	16.46	1.485	4.666
Nitrobenzene	22.17	26.03	24.53	23.45	22.68	26.26	23.54	1.584	4.978
Isophorone	25.66	28.71	27.27	26.59	25.27	27.97	26.25	1.240	3.897
2-Nitrophenol	31.63	36.32	33.68	33.81	31.99	38.06	33.98	2.286	7.185
2,4 Dimethylphenol	26.39	31.38	26.78	28.43	26.20	28.59	26.64	1.860	5.847
bis(2-chloroethoxy)methane	23.66	26.78	25.37	25.21	23.64	26.82	25.17	1.288	4.047
2,4 Dichlorophenol	29.82	34.21	30.58	31.30	30.18	34.13	31.45	1.804	5.669
1,2,4 Trichlorobenzene	17.25	19.40	17.70	18.21	16.55	19.53	18.98	1.132	3.557
Naphthalene	21.60	24.26	23.40	22.43	21.72	24.68	23.22	1.192	3.747
Benzoic Acid			3.99		3.37	3.56	3.10	0.374	1.700
4-Chloroanaline	21.76	25.18	23.29	25.34	23.57	24.90	24.41	1.281	4.026
Hexachlorobutadiene	14.84	16.49	14.07	15.64	13.66	16.99	17.32	1.435	4.511
4-Chloro-3-methylphenol	30.61	37.86	33.80	32.35	32.59	36.29	32.25	2.541	7.985
2-Methylnaphthalene	23.78	26.94	25.06	24.33	23.85	26.38	24.98	1.219	3.832
Hexachlorocyclopentadiene	12.78	15.28	13.75	14.39	13.24	15.56	16.38	1.316	4.135
2,4,6 Trichlorophenol	33.65	39.71	37.02	36.18	35.77	38.20	35.62	1.955	6.145
2,4,5 Trichlorophenol	25.34	29.36	27.93	26.29	26.37	26.81	26.03	1.352	4.248
2-Chloronaphthalene	21.74	24.97	23.37	23.91	22.33	24.17	23.37	1.097	3.448
2-Nitroaniline	24.28	29.02	27.85	25.58	25.80	27.11	24.60	1.741	5.473
Dimethylphthalene	19.70	22.59	20.21	19.95	18.17	23.40	21.98	1.850	5.814
Acenaphthylene	25.99	29.59	28.51	27.45	26.40	28.00	26.24	1.336	4.198
2,6 Dinitrotoluene	28.30	32.47	31.10	29.90	28.80	30.25	29.21	1.434	4.507
3-Nitroaniline	26.63	30.89	29.29	27.52	27.39	28.81	27.33	1.478	4.645
Acenaphthene	26.35	30.15	28.61	27.80	26.76	27.99	26.53	1.353	4.253

Semi-Volatile Method Detection Limits

Date Performed: **2/5/2003**

Parameter	Conc 1 BMDL1	Conc 2 BMDL2	Conc 3 BMDL3	Conc 4 BMDL4	Conc 5 BMDL5	Conc 6 BMDL6	Conc 7 BMDL7	SD	MDL
2,4 Dinitrophenol	16.76	25.26	23.85	23.24	23.54	25.33	23.41	2.907	9.136
4-Nitrophenol	6.78	10.96	7.16	8.86	6.69	8.44	8.18	1.499	4.710
Dibenzofuran	28.47	32.38	30.35	29.29	28.48	30.51	28.49	1.466	4.607
2,4 Dinitrotoluene	25.64	29.62	28.13	27.36	26.13	28.03	26.83	1.348	4.235
Diethylphthalate	25.70	29.60	27.15	26.29	25.56	27.82	27.64	1.417	4.454
Fluorene	26.85	30.71	29.15	28.37	27.17	28.45	27.70	1.309	4.115
4-Chlorophenyl phenylether	25.23	29.31	26.33	26.74	26.81	27.36	27.31	1.241	3.902
4-Nitroaniline	26.73	33.42	31.81	29.26	27.98	29.10	29.71	2.259	7.100
4,6-Dinitro-2-methylphenol	32.67	40.53	36.88	36.01	36.45	38.79	35.51	2.492	7.833
N-Nitrosodi-n-phenylamine	28.59	31.26	29.42	29.62	28.26	29.86	27.29	1.278	4.018
Azobenzene	24.05	28.05	24.72	25.46	24.78	25.89	24.68	1.320	4.148
4-Bromophenyl phenylether	26.09	30.09	27.53	27.65	26.70	28.32	25.15	1.603	5.039
Hexachlorobenzene	28.01	31.36	29.26	29.14	28.07	29.42	26.14	1.607	5.050
Pentachlorophenol	30.49	36.70	34.07	32.40	32.89	35.24	32.18	2.079	6.535
Phenanthrene	27.84	31.51	29.74	28.86	28.23	28.97	26.81	1.497	4.705
Anthracene	26.92	30.68	29.31	28.49	24.41	28.92	26.45	2.095	6.586
Benzidine	49.64	49.87	50.04	50.38	50.11	49.88	49.49	0.297	0.934
Carbazole	33.40	38.92	36.52	35.25	34.53	35.38	32.95	2.013	6.328
Di-n-butylphthalate	28.86	32.64	30.56	29.66	28.41	30.38	28.23	1.543	4.848
Fluoranthene	27.51	31.29	29.48	28.59	27.15	28.74	26.57	1.599	5.024
Pyrene	27.00	30.02	29.33	28.82	27.33	27.21	26.22	1.400	4.401
Butylbenzylphthalate	27.47	30.49	28.81	28.54	27.07	29.51	27.21	1.280	4.022
Benzo(a)anthracene	27.21	30.44	29.61	28.89	27.25	28.67	26.42	1.448	4.552
3,3'-Dichlorobenzidine	31.40	34.12	33.43	33.99	31.08	33.98	29.05	1.958	6.154
Chrysene	28.08	31.45	30.32	29.94	28.04	29.74	27.17	1.520	4.777
bis(2-ethylhexyl) phthalate	28.12	31.71	29.99	29.22	27.82	29.54	27.21	1.527	4.798
Di-n-octylphthalate	26.59	29.97	28.93	27.52	27.26	27.56	25.47	1.476	4.638
Benzo(b)fluoranthene	26.85	30.46	29.05	27.92	27.73	26.84	25.20	1.693	5.321
Benzo(k)fluoranthene	27.14	31.40	29.52	28.65	28.14	29.40	27.57	1.435	4.511
Benzo(a)pyrene	26.73	30.16	29.51	28.26	27.16	28.21	25.92	1.511	4.750
Indeno(1,2,3-cd)pyrene	25.69	30.17	28.12	28.54	26.24	27.27	24.78	1.849	5.810
Dibenz(a,h)anthracene	25.10	28.34	26.84	27.30	25.29	26.54	24.55	1.356	4.262
Benzo(g,h,i)perylene	26.79	30.03	28.75	28.94	27.09	27.45	26.18	1.378	4.330

SAMPLE

DATA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0120

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0120

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: A3192

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

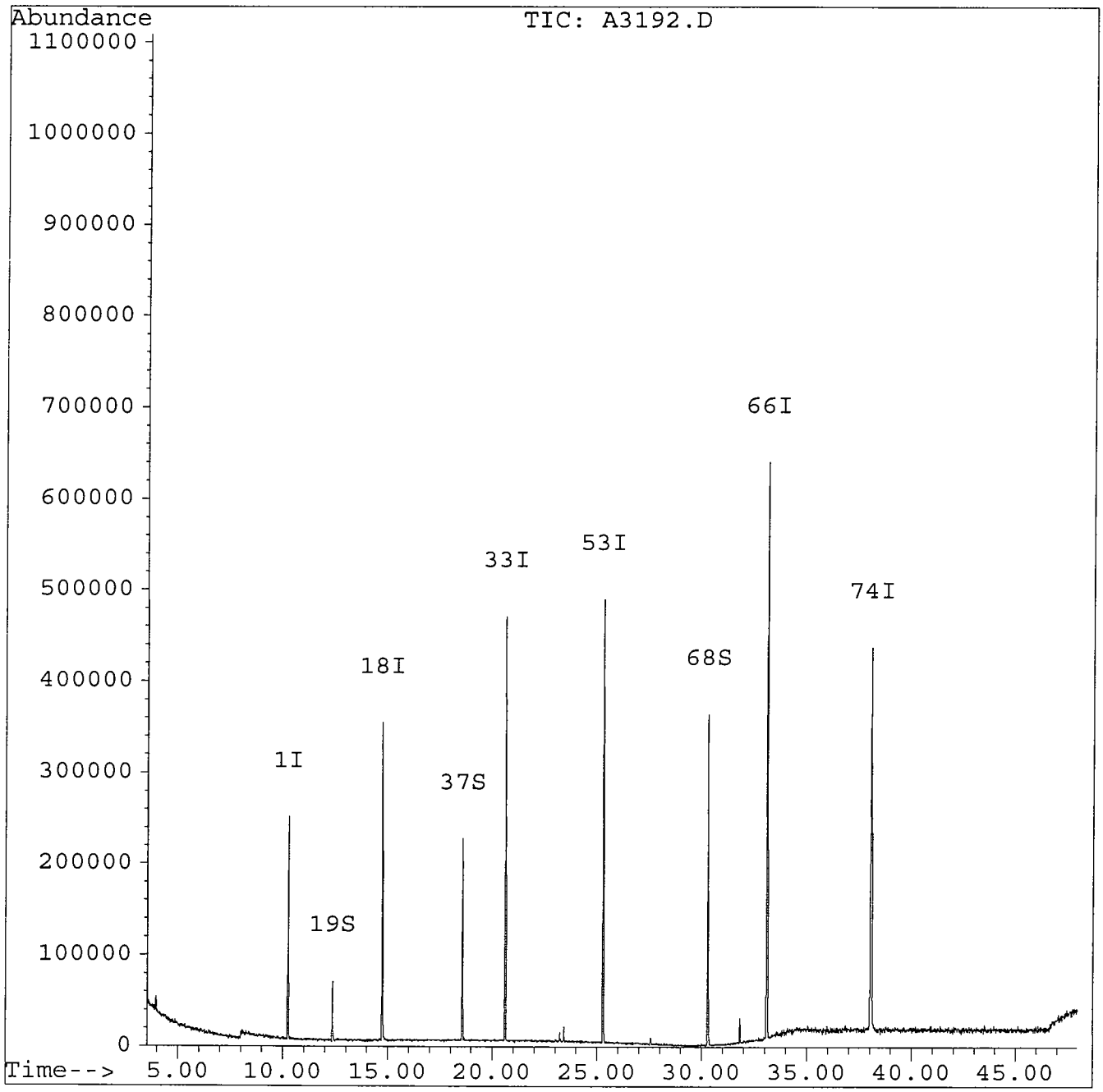
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3192.D
Acq On : 1 Apr 103 2:00 am
Sample : MEGDD0120
Misc : GCMS-A 030228H02
Quant Time: Apr 1 10:45 19103

Vial: 10
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3192.D
Acq On : 1 Apr 103 2:00 am
Sample : MEGDD0120
Misc : GCMS-A 030228H02
Quant Time: Apr 1 10:45 19103

Vial: 10
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.25	152	133397	40.00	ug	-0.01
18) Naphthalene-d8	14.73	136	406448	40.00		0.00
33) Acenaphthene-d10	20.64	164	241269	40.00		-0.01
53) Phenanthrene-d10	25.30	188	537050	40.00		-0.01
66) Chyrsene-d12	33.12	240	766144	40.00		-0.01
74) Perylene-d12	38.07	264	939233	40.00		-0.03
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.37	82	104485	19.32		38.64%
37) 2-Fluorobiphenyl	18.56	172	228116	27.64		55.27%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.31	244	350241	27.49		54.98%

Target Compounds Qvalue

176

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0132

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0132

Sample wt/vol: 800.0 (g/mL) ML Lab File ID: A3153

Level: (low/med) LOW Date Received: 03/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
91-20-3	Naphthalene	6.	U	
91-57-6	2-Methylnaphthalene	6.	U	
208-96-8	Acenaphthylene	6.	U	
83-32-9	Acenaphthene	6.	U	
132-64-9	Dibenzofuran	6.	U	
86-73-7	Fluorene	6.	U	
85-01-8	Phenanthrene	6.	U	
120-12-7	Anthracene	6.	U	
206-44-0	Fluoranthene	6.	U	
129-00-0	Pyrene	6.	~~U~~	JS
56-55-3	Benzo(a)anthracene	6.	U	
218-01-9	Chrysene	6.	U	
205-99-2	Benzo(b)fluoranthene	6.	U	
207-08-9	Benzo(k)fluoranthene	6.	~~U~~	JS
50-32-8	Benzo(a)pyrene	6.	U	
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U	
53-70-3	Dibenzo(a,h)anthracene	6.	U	
191-24-2	Benzo(g,h,i)perylene	6.	U	

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

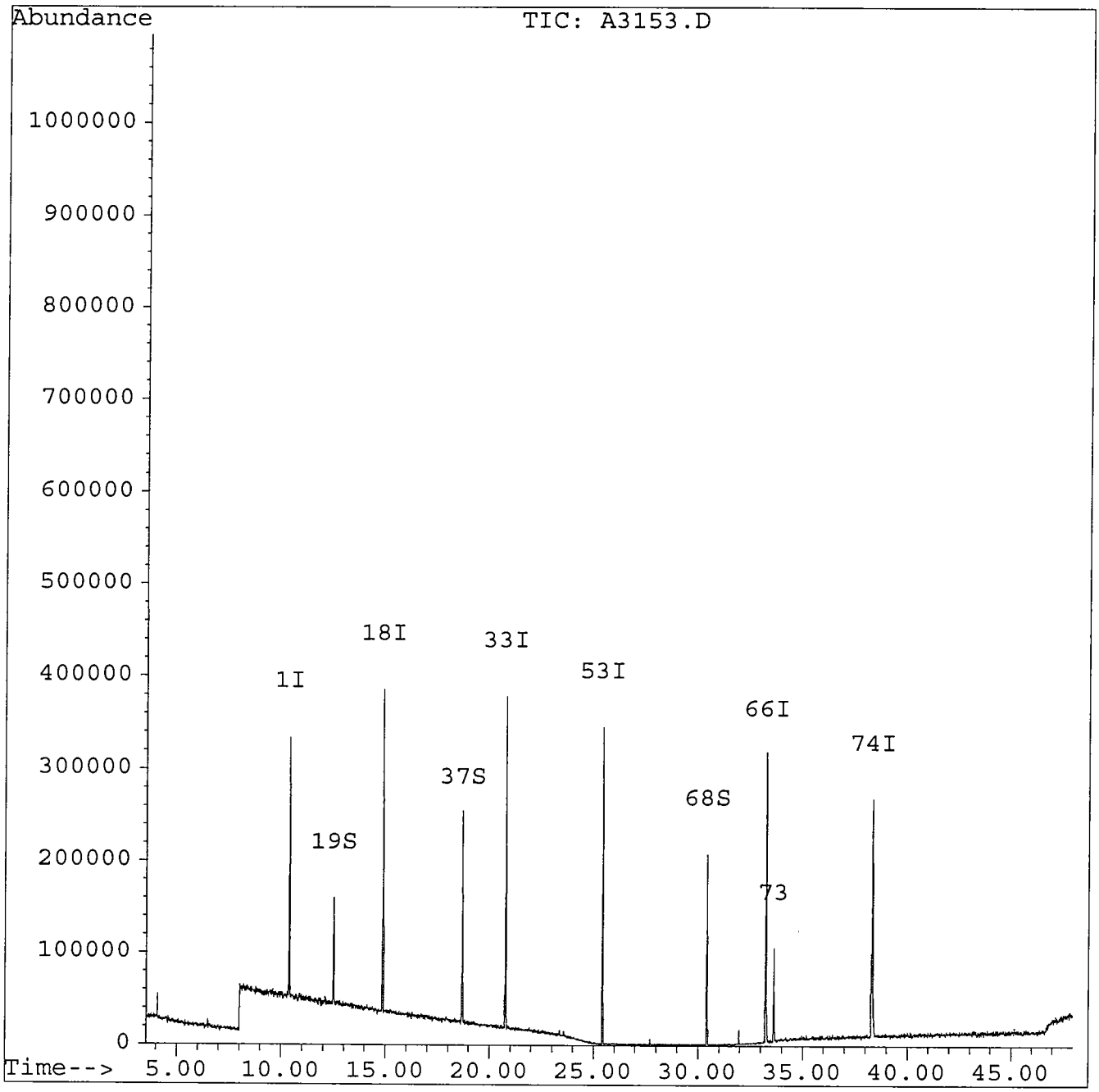
AMK 4/8/03

Quantitation Report

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Sample : MEGDD0132
Misc : GCMS-A 030228H07
Quant Time: Mar 30 10:30 19103

Vial: 12
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Single Level Calibration



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Quantitation Report

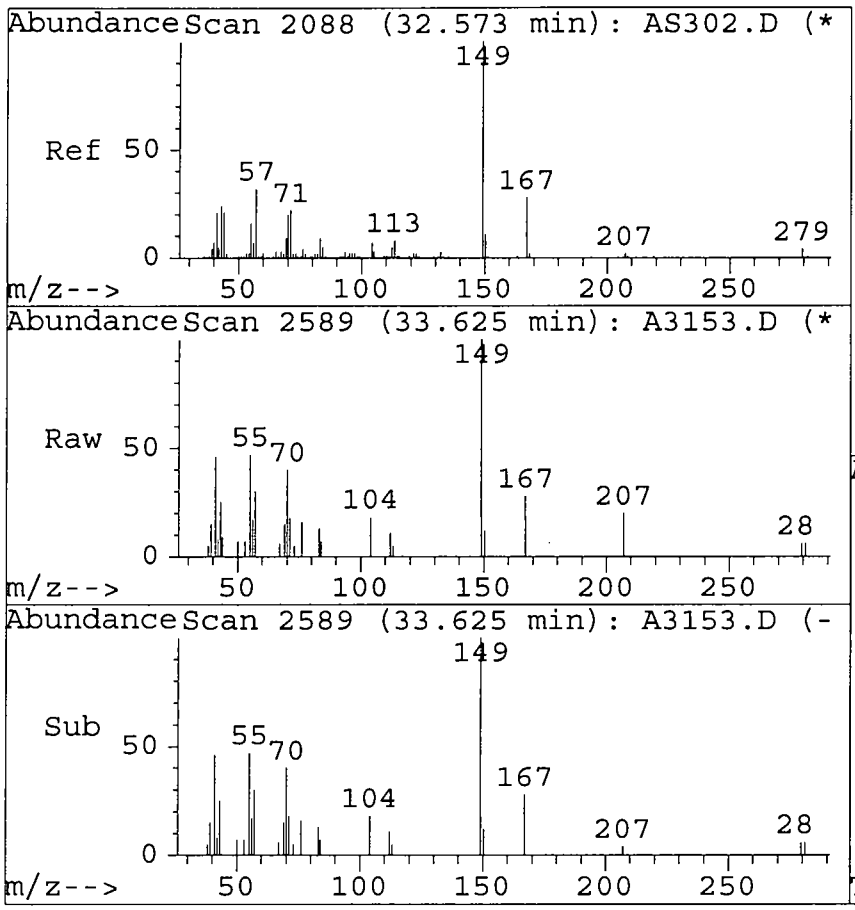
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Acq On : 30 Mar 103 12:38 am
Sample : MEGDD0132
Misc : GCMS-A 030228H07
Quant Time: Mar 30 10:30 19103

Vial: 12
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.40	152	145559	40.00	ug	-0.01
18) Naphthalene-d8	14.87	136	364608	40.00		-0.02
33) Acenaphthene-d10	20.77	164	166650	40.00		-0.02
53) Phenanthrene-d10	25.44	188	311994	40.00		-0.02
66) Chyrsene-d12	33.26	240	349530	40.00		0.00
74) Perylene-d12	38.32	264	509707	40.00		-0.02
System Monitoring Compounds						%Recovery
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.51	82	178158	35.06		70.12%
37) 2-Fluorobiphenyl	18.71	172	219889	35.97		71.94%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.44	244	155767	27.70		55.40%
Target Compounds						Qvalue
73) bis(2-Ethylhexyl)phthalate	33.63	149	52199	6.43		# 89

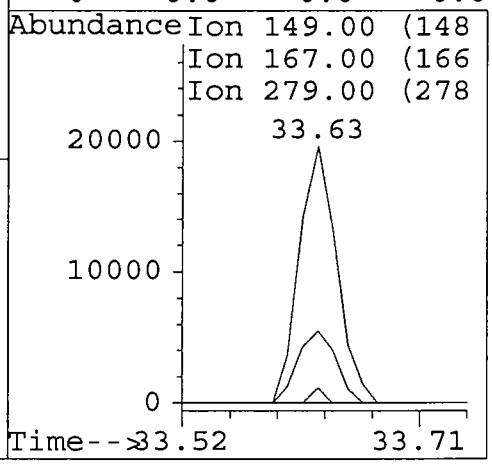
(#) = qualifier out of range (m) = manual integration
A3153.D METH0A.M Sun Mar 30 10:30:33 2003 REPORT Page 1



#73
bis(2-Ethylhexyl)phthalate
Concen: 6.43
RT: 33.63 min Scan# 2589
Delta R.T. -0.02 min
Lab File: A3153.D
Acq: 30 Mar 103 12:38 am

Tgt Ion:149 Resp: 52199

Ion	Ratio	Lower	Upper
149	100		
167	21.9	22.5	33.8#
279	1.6	3.0	4.5#
0	0.0	0.0	0.0



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0134

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0134

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: A3154

Level: (low/med) LOW Date Received: 03/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
91-20-3	Naphthalene	5.	U	
91-57-6	2-Methylnaphthalene	5.	U	
208-96-8	Acenaphthylene	5.	U	
83-32-9	Acenaphthene	5.	U	
132-64-9	Dibenzofuran	5.	U	
86-73-7	Fluorene	5.	U	
85-01-8	Phenanthrene	5.	U	
120-12-7	Anthracene	5.	U	
206-44-0	Fluoranthene	5.	U	
129-00-0	Pyrene	5.	U	JS
56-55-3	Benzo(a)anthracene	5.	U	
218-01-9	Chrysene	5.	U	
205-99-2	Benzo(b)fluoranthene	5.	U	
207-08-9	Benzo(k)fluoranthene	5.	U	JS
50-32-8	Benzo(a)pyrene	5.	U	
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U	
53-70-3	Dibenzo(a,h)anthracene	5.	U	
191-24-2	Benzo(g,h,i)perylene	5.	U	

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

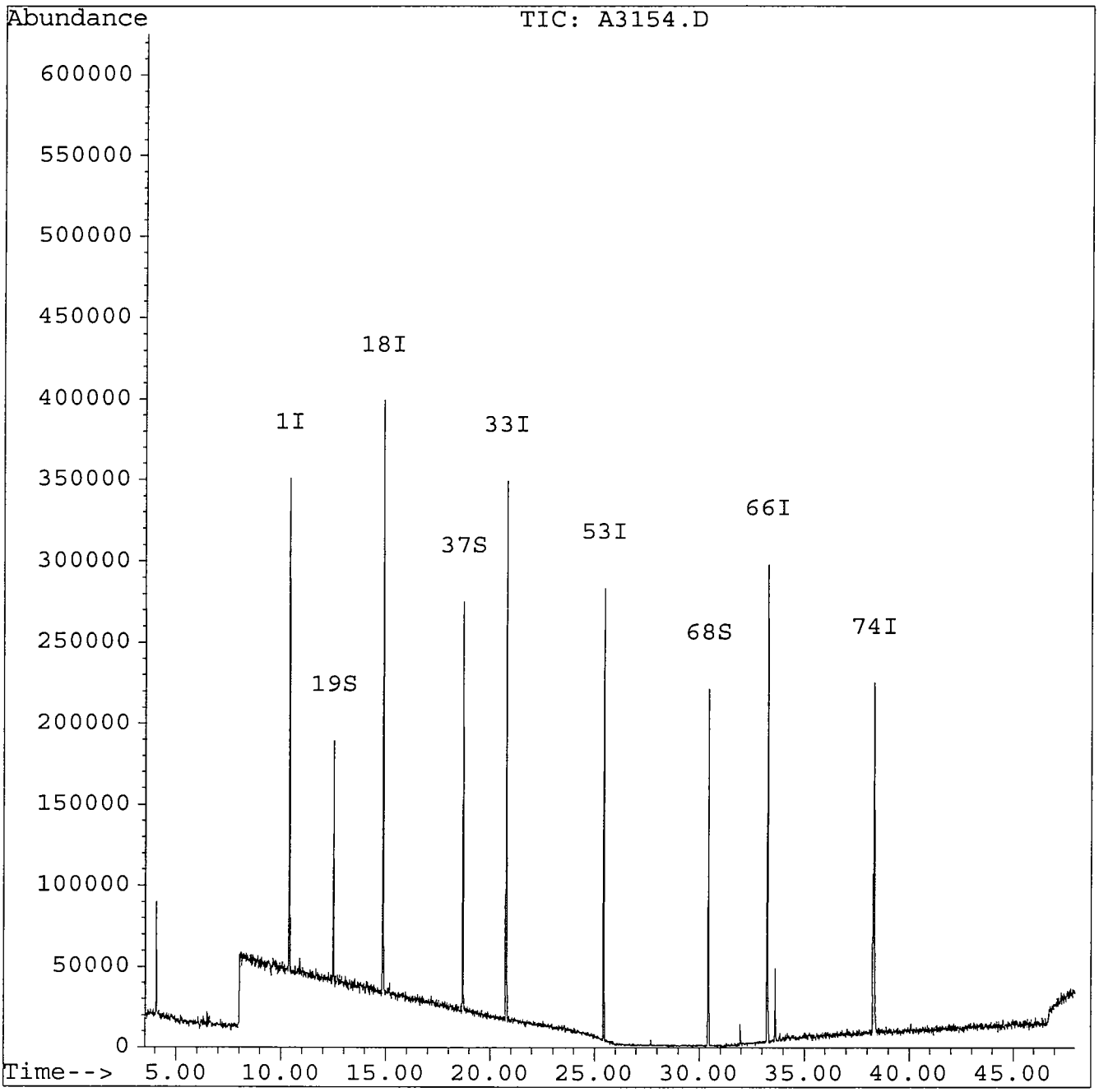
AMK 4/6/03

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3154.D
Acq On : 30 Mar 103 1:35 am
Sample : MEGDD0134
Misc : GCMS-A 030228H09
Quant Time: Mar 30 10:32 19103

Vial: 13
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Single Level Calibration



182

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3154.D Vial: 13
Acq On : 30 Mar 103 1:35 am Operator:
Sample : MEGDD0134 Inst : 5970 - In
Misc : GCMS-A 030228H09 Multiplr: 1.00
Quant Time: Mar 30 10:32 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.39	152	156070	40.00	ug	-0.01
18) Naphthalene-d8	14.87	136	414914	40.00		-0.02
33) Acenaphthene-d10	20.77	164	158527	40.00		-0.02
53) Phenanthrene-d10	25.44	188	258425	40.00		-0.02
66) Chyrsene-d12	33.25	240	303726	40.00		-0.02
74) Perylene-d12	38.31	264	416840	40.00		-0.03
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.50	82	214774	37.14		74.28%
37) 2-Fluorobiphenyl	18.70	172	245511	42.22		84.43%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.44	244	162798	33.31		66.63%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A3154.D METH0A.M Sun Mar 30 10:32:38 2003 REPORT Page 1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0240

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0240

Sample wt/vol: 930.0 (g/mL) ML Lab File ID: A3163

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	~~U~~ UJ
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

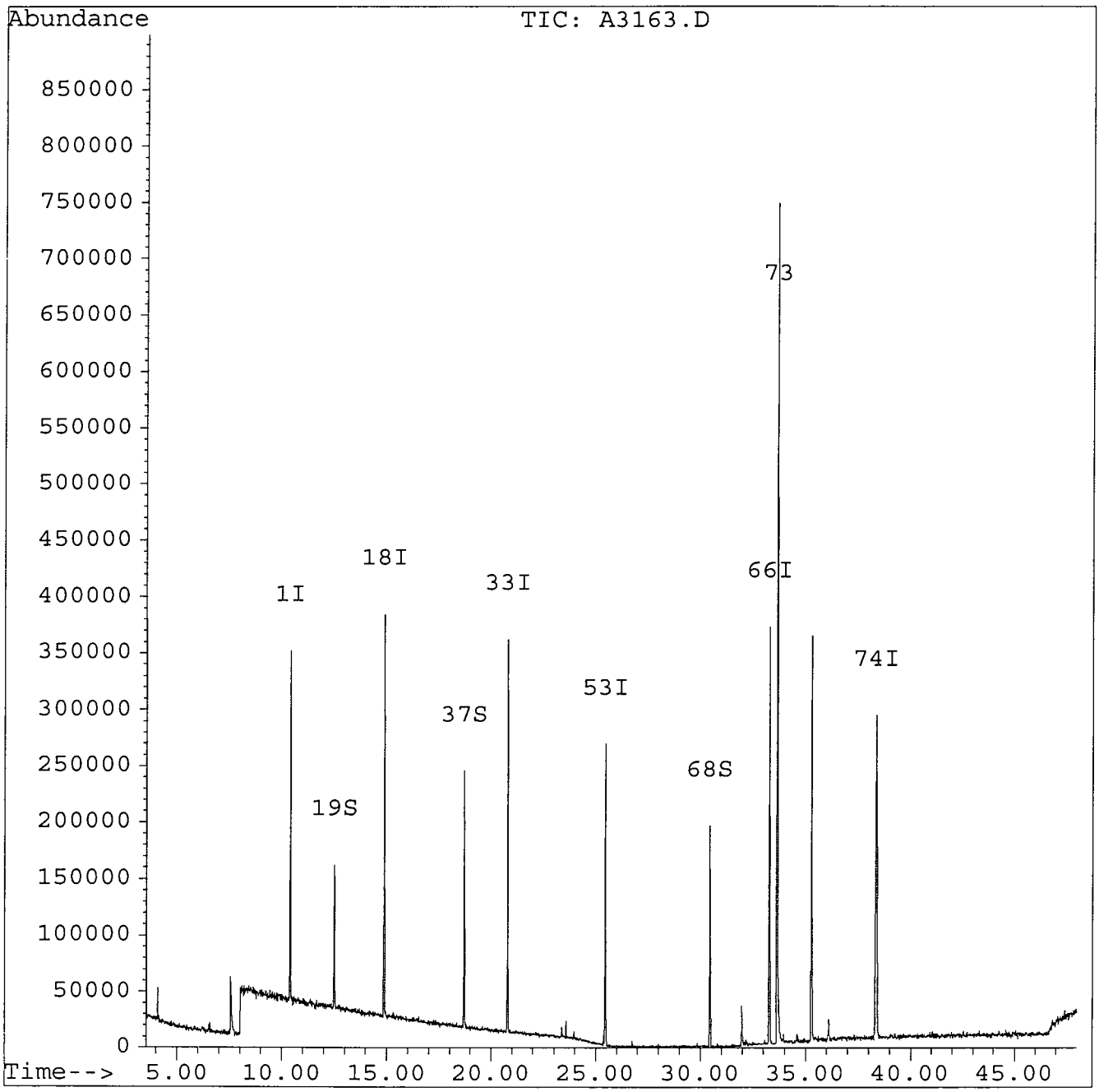
AMK 6/26/03

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3163.D
Acq On : 30 Mar 103 6:56 pm
Sample : MEGDD0240
Misc : GCMS-A 030228H04
Quant Time: Apr 1 11:38 19103

Vial: 10
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 11:30:35 2003
Response via : Single Level Calibration



Quantitation Report

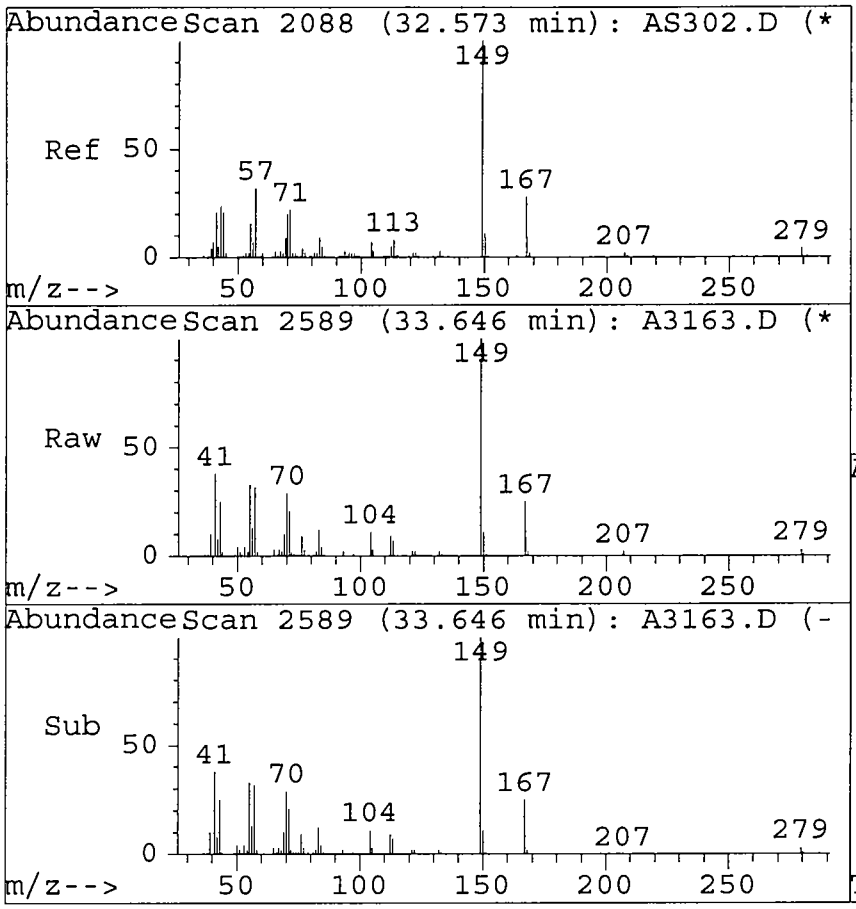
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Acq On : 30 Mar 103 6:56 pm
Sample : MEGDD0240
Misc : GCMS-A 030228H04
Quant Time: Apr 1 11:38 19103

Vial: 10
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 11:30:35 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.40	152	157917	40.00	ug	0.00
18) Naphthalene-d8	14.89	136	384148	40.00		0.00
33) Acenaphthene-d10	20.78	164	136997	40.00		0.00
53) Phenanthrene-d10	25.45	188	249411	40.00		0.00
66) Chyrsene-d12	33.27	240	382683	40.00		0.00
74) Perylene-d12	38.36	264	575286	40.00		0.01
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.51	82	188426	35.20		70.39%
37) 2-Fluorobiphenyl	18.71	172	189744	37.76		75.51%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.45	244	137771	22.38		44.75%
Target Compounds						**Qvalue**
73) bis(2-Ethylhexyl)phthalate	33.65	149	428085	48.17		85

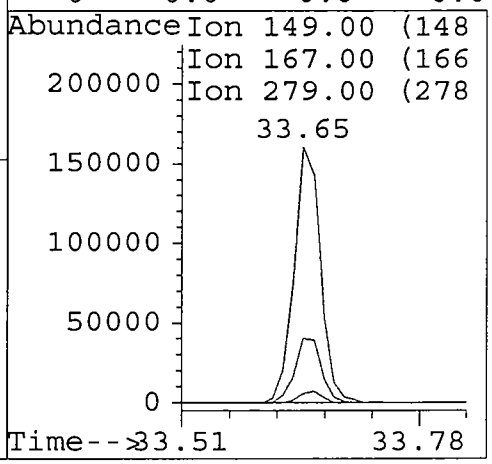
(#) = qualifier out of range (m) = manual integration
A3163.D METH0A.M Tue Apr 01 11:38:17 2003 REPORT Page 1



#73
bis(2-Ethylhexyl)phthalate
Concen: 48.17
RT: 33.65 min Scan# 2589
Delta R.T. -0.00 min
Lab File: A3163.D
Acq: 30 Mar 103 6:56 pm

Tgt Ion:149 Resp: 428085

Ion	Ratio	Lower	Upper
149	100		
167	19.6	22.5	33.8#
279	2.9	3.0	4.5#
0	0.0	0.0	0.0



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3189

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/31/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

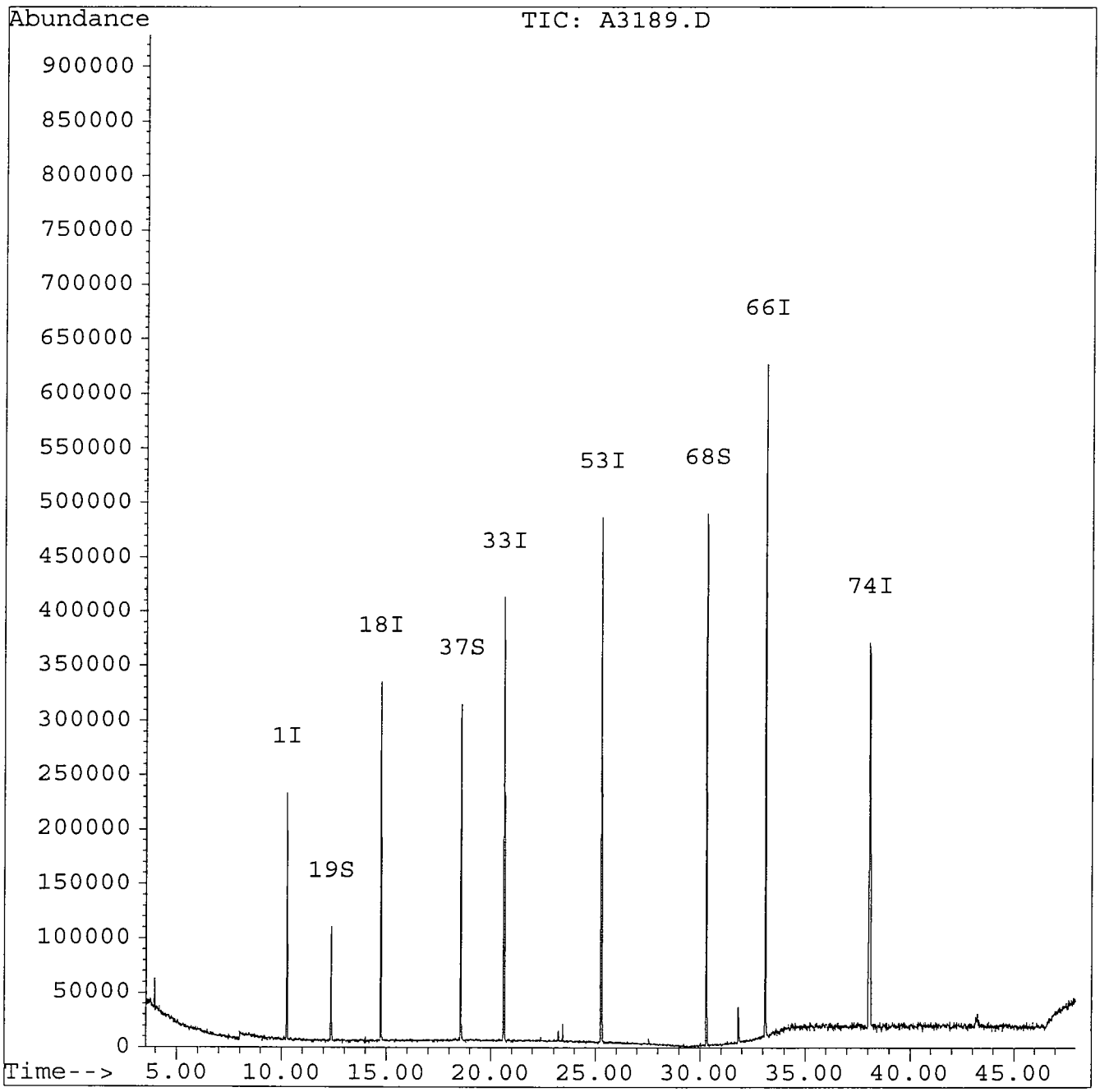
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3189.D
Acq On : 31 Mar 103 11:09 pm
Sample : MEGDIM0237
Misc : GCMS-A 030228H01
Quant Time: Apr 1 10:36 19103

Vial: 7
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



189

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3189.D Vial: 7
Acq On : 31 Mar 103 11:09 pm Operator:
Sample : MEGDIM0237 Inst : 5970 - In
Misc : GCMS-A 030228H01 Multiplr: 1.00
Quant Time: Apr 1 10:36 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.25	152	124221	40.00	ug	0.00
18) Naphthalene-d8	14.74	136	371770	40.00		0.00
33) Acenaphthene-d10	20.64	164	215729	40.00		0.00
53) Phenanthrene-d10	25.30	188	523912	40.00		-0.01
66) Chyrsene-d12	33.12	240	770786	40.00		-0.01
74) Perylene-d12	38.06	264	882138	40.00		-0.04
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.37	82	163639	33.08		66.16%
37) 2-Fluorobiphenyl	18.58	172	320627	43.44		86.89%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.31	244	501171	39.10		78.20%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH8617

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDSH8617

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: A3194

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

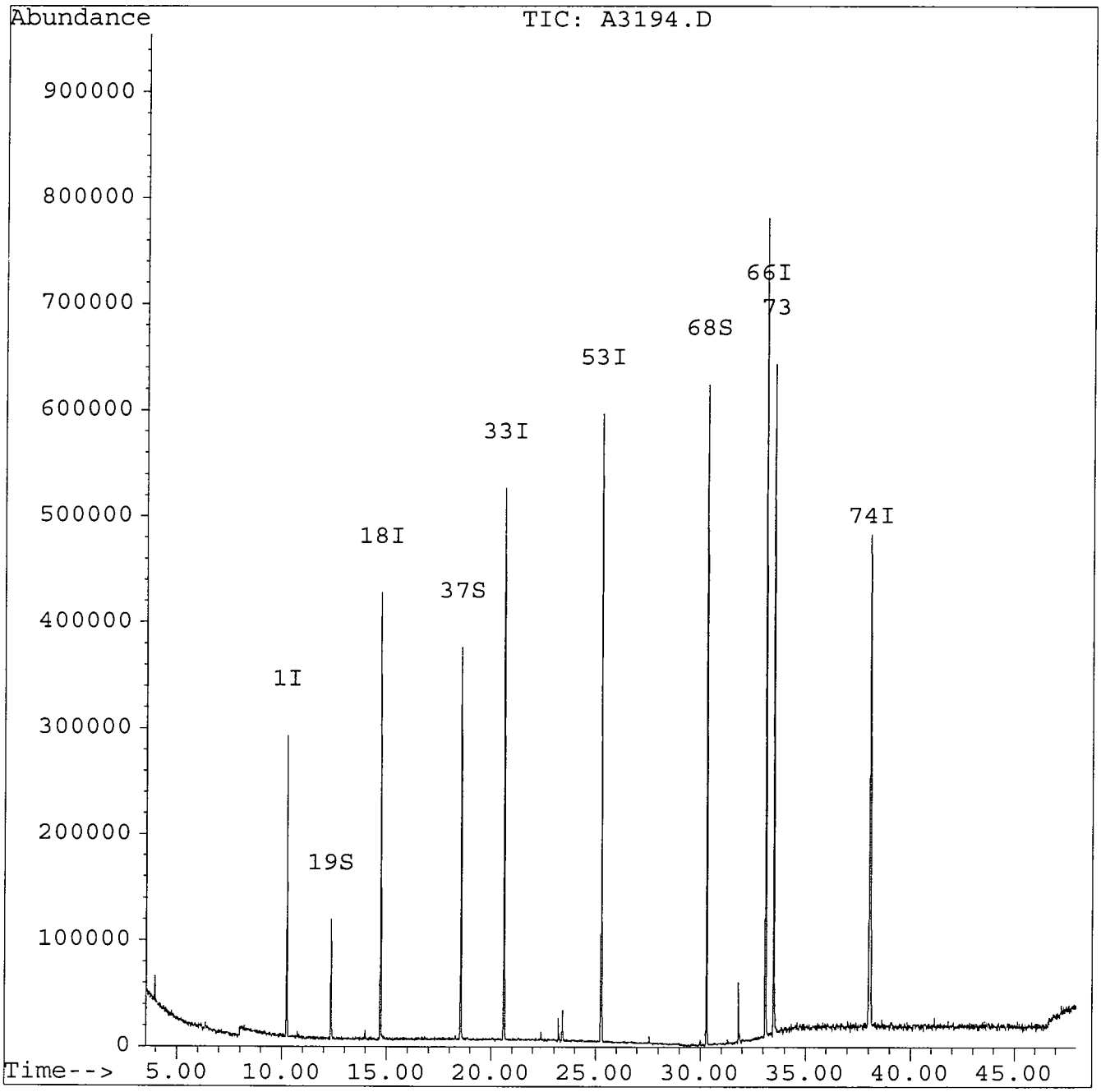
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3194.D
Acq On : 1 Apr 103 3:54 am
Sample : MEGDSH8617
Misc : GCMS-A 030228H05
Quant Time: Apr 1 10:49 19103

Vial: 12
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



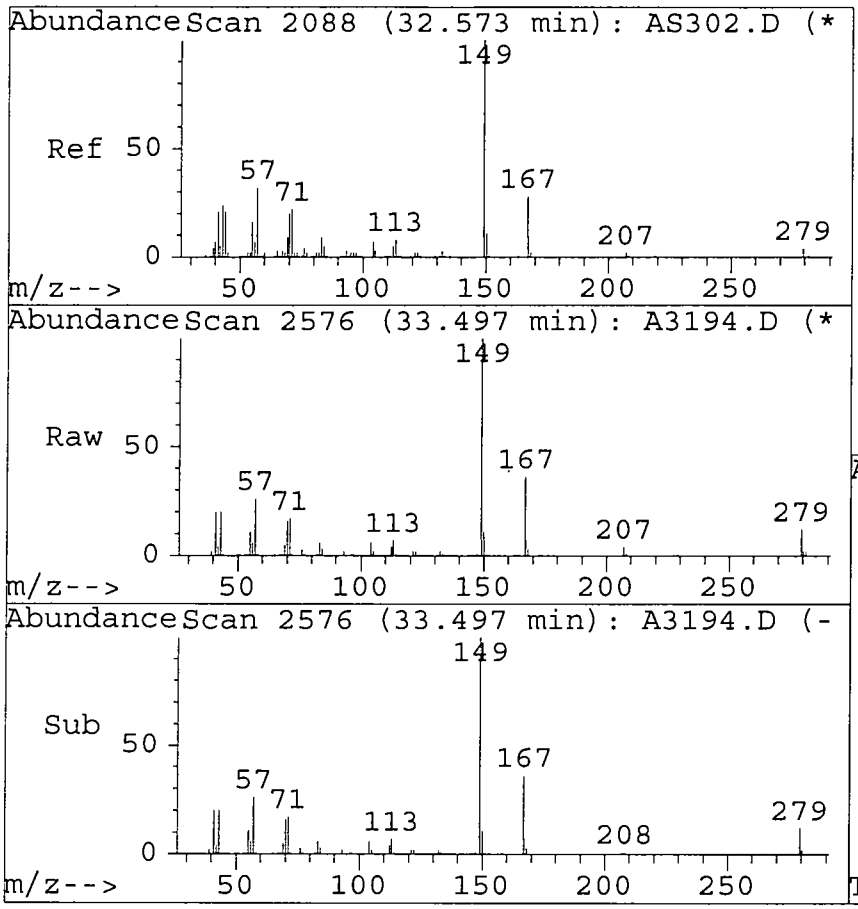
Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3194.D Vial: 12
Acq On : 1 Apr 103 3:54 am Operator:
Sample : MEGDSH8617 Inst : 5970 - In
Misc : GCMS-A 030228H05 Multiplr: 1.00
Quant Time: Apr 1 10:49 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.24	152	149569	40.00	ug	-0.01
18) Naphthalene-d8	14.73	136	459024	40.00		0.00
33) Acenaphthene-d10	20.63	164	274909	40.00		-0.02
53) Phenanthrene-d10	25.29	188	642529	40.00		-0.02
66) Chyrsene-d12	33.11	240	901661	40.00		-0.02
74) Perylene-d12	38.07	264	1092591	40.00		-0.02
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.36	82	174506	28.57		57.14%
37) 2-Fluorobiphenyl	18.56	172	353524	37.59		75.18%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.31	244	584793	39.00		78.01%
Target Compounds						**Qvalue**
73) bis(2-Ethylhexyl)phthalate	33.50	149	600255	35.39		# 92

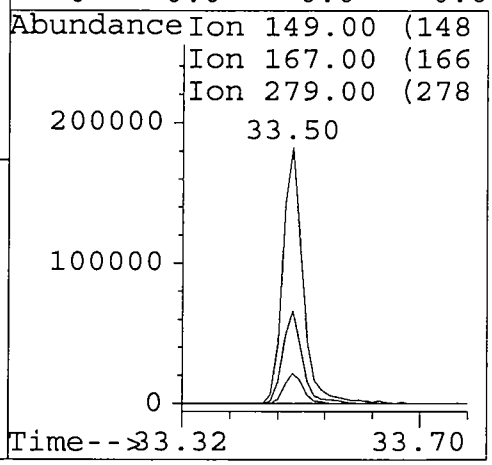
(#) = qualifier out of range (m) = manual integration
A3194.D METH0A.M Tue Apr 01 10:55:04 2003 REPORT Page 1



#73
bis(2-Ethylhexyl)phthalate
Concen: 35.39
RT: 33.50 min Scan# 2576
Delta R.T. -0.01 min
Lab File: A3194.D
Acq: 1 Apr 103 3:54 am

Tgt Ion:149 Resp: 600255

Ion	Ratio	Lower	Upper
149	100		
167	24.0	22.5	33.8
279	7.6	3.0	4.5#
0	0.0	0.0	0.0



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUIM0119

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGUIM0119

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: A3193

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

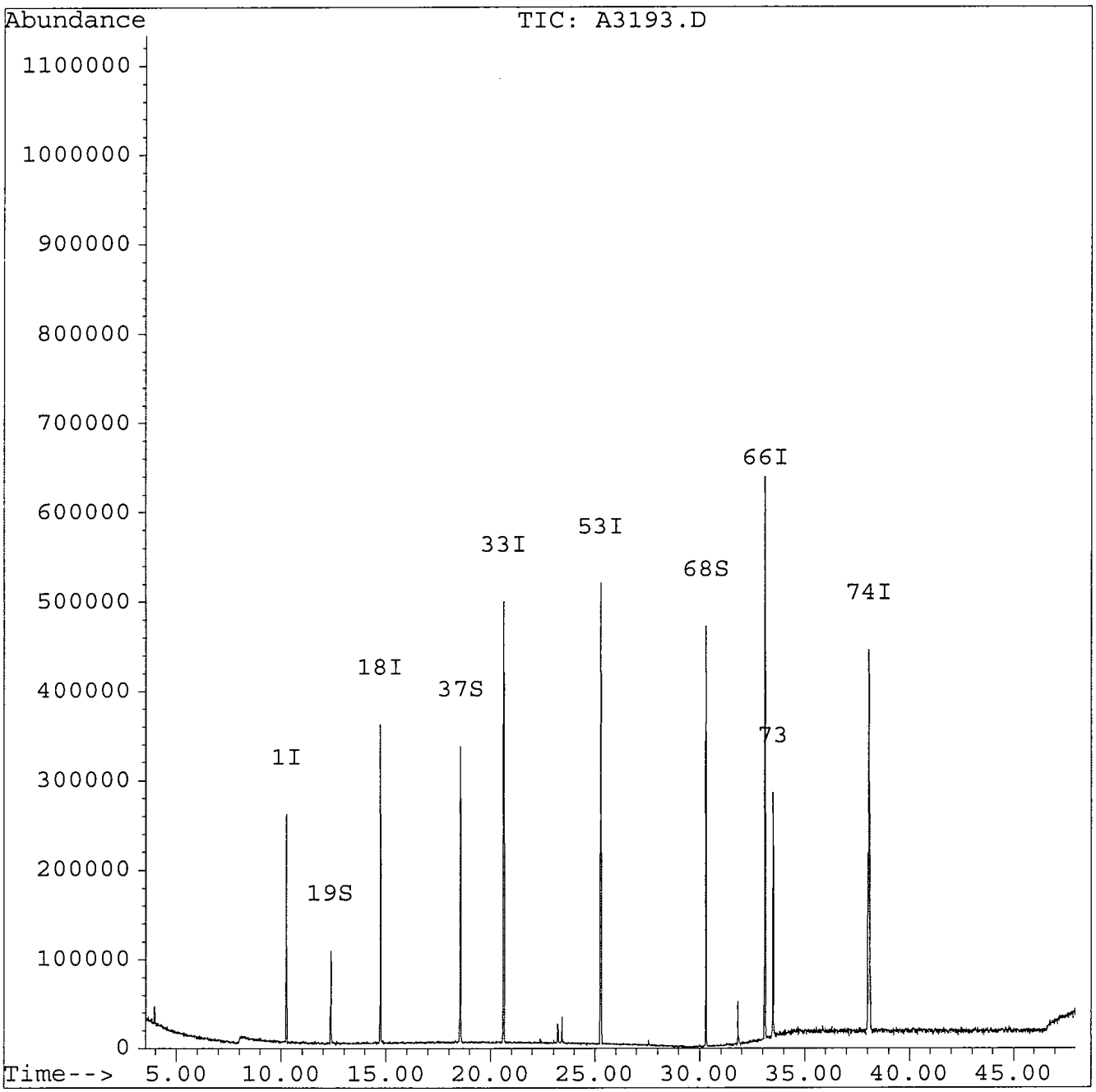
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3193.D
Acq On : 1 Apr 103 2:57 am
Sample : MEGUIM0119
Misc : GCMS-A 030228H03
Quant Time: Apr 1 10:47 19103

Vial: 11
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



Quantitation Report

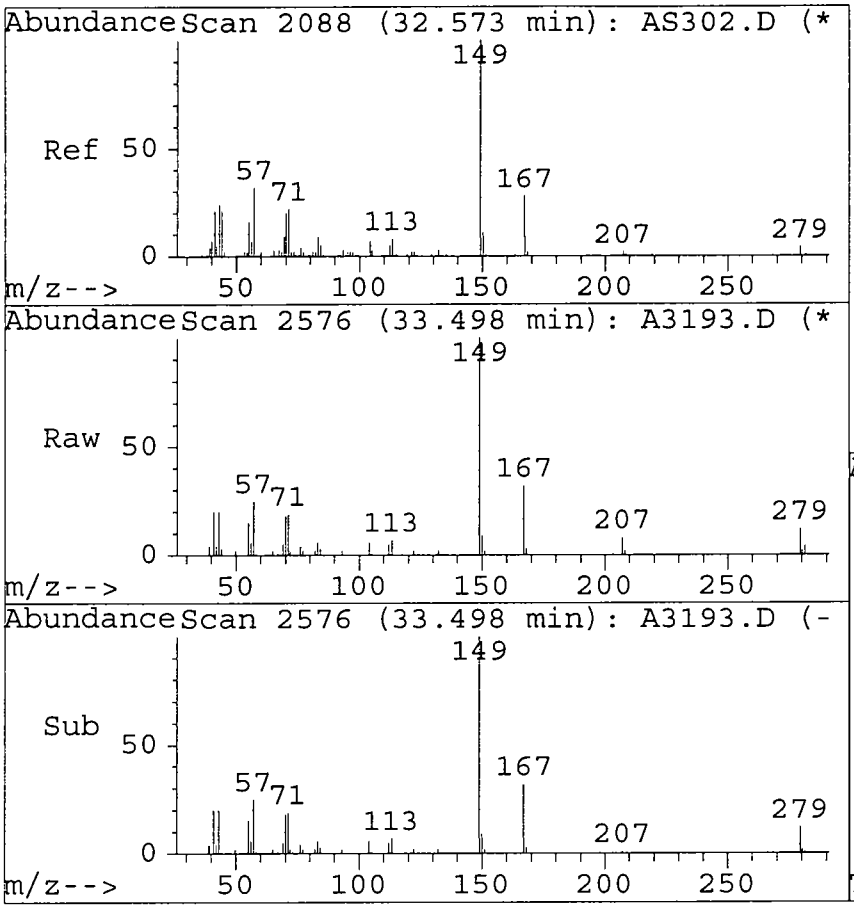
Data File : C:\HPCHEM\1\DATA\A3193.D Vial: 11
Acq On : 1 Apr 103 2:57 am Operator:
Sample : MEGUIM0119 Inst : 5970 - In
Misc : GCMS-A 030228H03 Multiplr: 1.00
Quant Time: Apr 1 10:47 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.25	152	140327	40.00	ug	0.00
18) Naphthalene-d8	14.73	136	419957	40.00		-0.01
33) Acenaphthene-d10	20.63	164	248964	40.00		-0.01
53) Phenanthrene-d10	25.29	188	565627	40.00		-0.01
66) Chyrsene-d12	33.12	240	797114	40.00		0.00
74) Perylene-d12	38.06	264	954877	40.00		-0.04
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.36	82	160622	28.74		57.49%
37) 2-Fluorobiphenyl	18.56	172	323559	37.99		75.98%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.31	244	483940	36.51		73.02%
Target Compounds						**Qvalue**
73) bis(2-Ethylhexyl)phthalate	33.50	149	235068	15.68		# 90

197

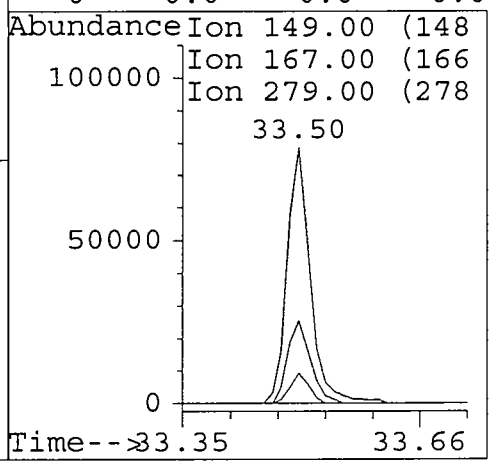
(#) = qualifier out of range (m) = manual integration



#73
bis(2-Ethylhexyl)phthalate
Concen: 15.68
RT: 33.50 min Scan# 2576
Delta R.T. -0.01 min
Lab File: A3193.D
Acq: 1 Apr 103 2:57 am

Tgt Ion:149 Resp: 235068

Ion	Ratio	Lower	Upper
149	100		
167	22.5	22.5	33.8
279	6.9	3.0	4.5#
0	0.0	0.0	0.0



STANDARDS

DATA

6C

SEMIVOLATILE INITIAL CALIBRATION CHECK

Lab Name: AES,INC. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Instrument ID: 7001A Calibration Date(s): 3/26/03 3/26/03

Min RRF50 for SPCC(#) = .050 Max %D for CCC(*) = 25.0%

Lab File IDs:	AS331	AS330	AS332	AS333	AS334			
COMPOUND	RRF020	RRF050	RRF080	RRF120	RRF160	Ave RRF	%RSD	
1,4-Dichlorobenzene	1.479	1.495	1.420	1.500	1.392	1.457	3.3	*
N-Nitroso-Di-n-propylamine	1.125	1.315	1.161	1.208	1.160	1.194	6.2	#
1,2,4-Trichlorobenzene	0.578	0.576	0.542	0.536	0.530	0.552	4.1	*
Naphthalene	1.068	1.065	1.003	1.000	0.979	1.023	4.0	*
2-Methylnaphthalene	1.166	1.178	1.055	1.056	1.001	1.091	7.1	*
Acenaphthylene	2.194	2.141	1.946	2.004	1.936	2.044	5.7	*
Acenaphthene	2.476	2.367	2.208	2.319	2.236	2.321	4.6	*
Dibenzofuran	1.910	1.881	1.834	1.928	1.867	1.884	2.0	*
2,4-Dinitrotoluene	0.439	0.567	0.541	0.577	0.550	0.535	10.4	*
Fluorene	2.372	2.399	2.313	2.450	2.325	2.372	2.4	*
Phenanthrene	1.102	1.158	1.066	1.079	1.021	1.085	4.6	*
Anthracene	1.102	1.158	1.080	1.073	1.035	1.090	4.2	*
Fluoranthene	1.122	1.096	0.994	1.073	0.996	1.056	5.5	*
Pyrene	1.058	1.174	1.162	0.993	0.892	1.056	11.2	*
Benzo(a)Anthracene	1.080	1.117	1.040	1.050	0.930	1.043	6.7	*
Chrysene	1.134	1.117	1.078	1.074	0.930	1.067	7.5	*
Benzo(b)fluoranthene	0.954	1.042	0.986	0.997	0.887	0.973	5.9	*
Benzo(k)Fluoranthene	0.985	1.005	0.977	0.762	0.896	0.925	10.8	*
Benzo(a)Pyrene	0.870	0.946	0.894	0.829	0.842	0.876	5.3	*
Indeno(1,2,3-cd)Pyrene	0.827	0.900	0.816	0.787	0.828	0.832	5.0	*
Dibenzo(a,h)Anthracene	0.907	1.051	0.941	0.630	0.971	0.900	17.8	*
Benzo(g,h,i)Perylene	0.872	1.075	1.020	0.991	0.945	0.981	7.8	*
Nitrobenzene-d5	0.519	0.636	0.565	0.546	0.573	0.568	7.6	*
2-Fluorobiphenyl	1.371	1.342	1.336	1.416	1.318	1.357	2.8	*
Terphenyl-d14	0.643	0.714	0.695	0.645	0.597	0.659	7.0	*
Phenol-d5	1.469	1.550	1.489	1.549	1.484	1.508	2.5	*
2-Fluorophenol	1.006	1.164	1.063	1.126	1.127	1.097	5.7	*
2,4,6-Tribromophenol	0.179	0.208	0.211	0.189	0.204	0.198	6.9	

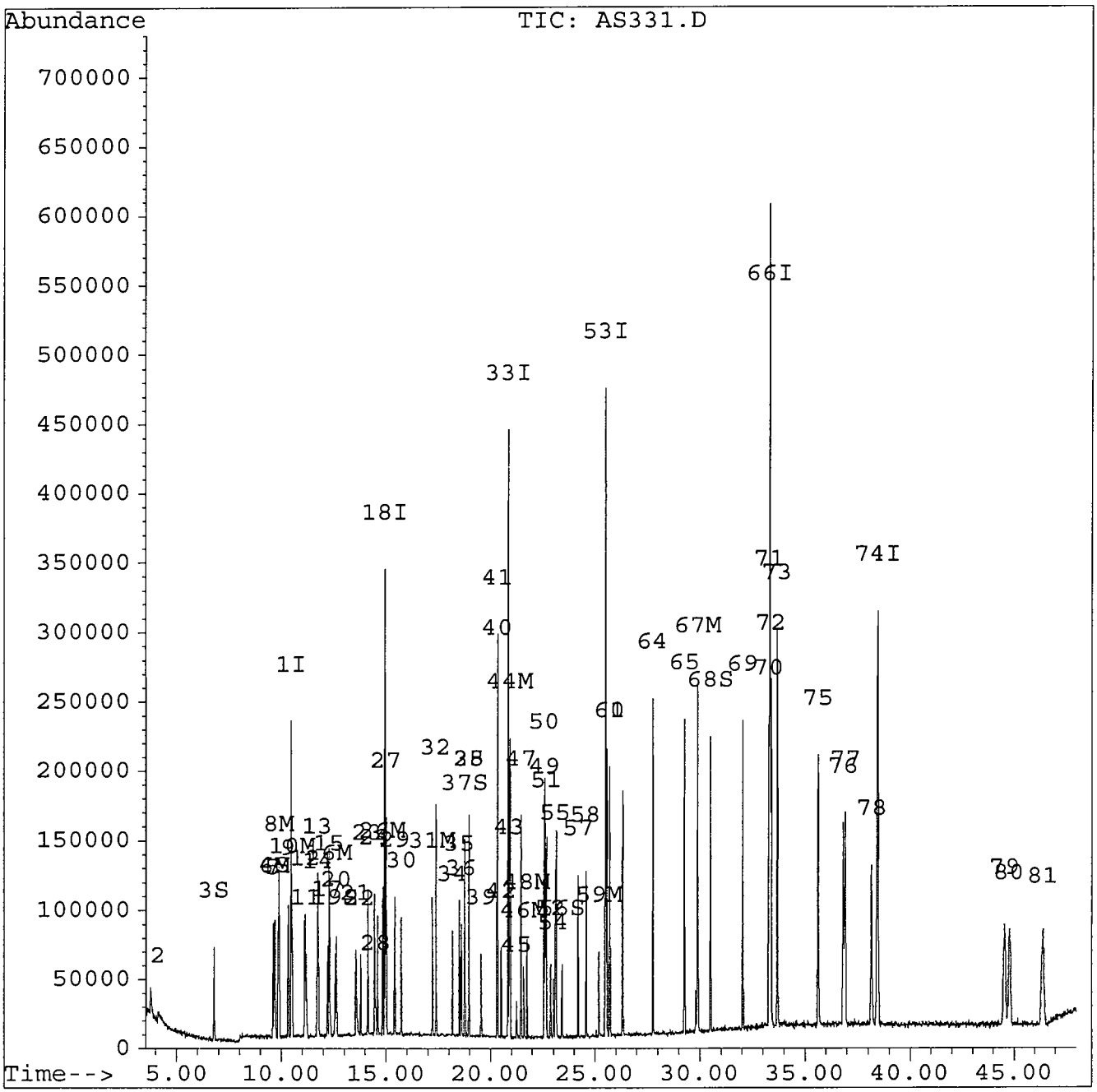
(1) Cannot be separated from Diphenylamine

FORM VI SV-1

Data File : C:\HPCHEM\1\DATA\AS331.D
Acq On : 25 Mar 103 4:18 pm
Sample : SSTD020
Misc : GCMS-A
Quant Time: Mar 26 12:56 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration



201

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS331.D
Acq On : 25 Mar 103 4:18 pm
Sample : SSTD020
Misc : GCMS-A
Quant Time: Mar 26 12:56 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.47	152	123869	40.00	ug		0.00
18) Naphthalene-d8	14.95	136	365601	40.00			0.00
33) Acenaphthene-d10	20.85	164	222853	40.00			0.00
53) Phenanthrene-d10	25.51	188	502213	40.00			-0.01
66) Chyrsene-d12	33.33	240	639944	40.00			-0.01
74) Perylene-d12	38.46	264	678757	40.00			-0.02
System Monitoring Compounds							%Recovery
3) 2-Fluorophenol	6.79	112	62277	21.73	ug		21.73%
4) Phenol-d5	9.68	99	90989	19.87	ug		19.87%
19) Nitrobenzene-d5	12.58	82	94934	16.63			33.26%
37) 2-Fluorobiphenyl	18.77	172	152726	18.36			36.73%
56) 2,4,6-Tribromophenol	23.43	330	44904	18.63			18.63%
68) Terphenyl-d14	30.51	244	205847	19.80			39.60%
Target Compounds							Qvalue
2) Pyridine	4.12	79	42596	12.54	ug	m	0
5) Aniline	9.61	93	65200	24.04	ug		98
6) Phenol	9.71	94	102694	18.65	ug		71
7) bis(2-Chloroethyl)ether	9.61	93	68799	23.85		#	98
8) 2-Chlorophenol	9.90	128	85656	19.63			69
9) 1,3-Dichlorobenzene	10.33	146	89205	21.30			69
10) 1,4-Dichlorobenzene	10.53	146	91628	20.86			75
11) Benzyl alcohol	11.20	108	78236	23.57			22
12) 1,2-Dichlorobenzene	11.15	146	87323	21.20			63
13) 2-Methylphenol	11.73	108	75293	20.73			49
14) bis(2-chloroisopropyl)ethe	11.76	45	161069	26.39		#	89
15) 4-Methylphenol	12.28	108	94234	21.51			37
16) n-Nitroso-di-n-propylamine	12.30	70	69679	22.27		#	71
17) Hexachloroethane	12.21	117	46356	19.16		#	74
20) Nitrobenzene	12.64	77	85122	17.70			79
21) Isophorone	13.56	82	110055	20.80			95
22) 2-Nitrophenol	13.79	139	44117	19.75			66
23) 2,4-Dimethylphenol	14.13	107	109367	21.88			51
24) bis(2-Chloroethoxy)methane	14.47	93	96050	22.42		#	89
25) 2,4-Dichlorophenol	18.98	162	143087	24.35		#	38
26) 1,2,4-Trichlorobenzene	14.86	180	105716	22.08			53
27) Naphthalene	15.01	128	195257	21.63			95
28) Benzoic acid	14.52	105	25213	4.18			86
29) 4-Chloroaniline	15.44	127	75354	24.26			86
30) Hexachlorobutadiene	15.75	225	58211	23.37		#	62
31) 4-Chloro-3-methylphenol	17.22	107	99484	25.14		#	1
32) 2-Methylnaphthalene	17.39	142	213116	24.59		#	72
34) Hexachlorocyclopentadiene	18.20	237	50360	16.29		#	46

(#) = qualifier out of range (m) = manual integration

202

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS331.D
Acq On : 25 Mar 103 4:18 pm
Sample : SSTD020
Misc : GCMS-A
Quant Time: Mar 26 12:56 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	2,4,6-Trichlorophenol	18.51	196	74431	20.23		48
36)	2,4,5-Trichlorophenol	18.62	196	74848	20.88		51
38)	2-Chloronaphthalene	18.98	162	179062	19.43		72
39)	2-Nitroaniline	19.56	65	69606	18.60	#	50
40)	Dimethylphthalate	20.35	163	143648	21.73		96
41)	Acenaphthylene	20.33	152	244484	20.80		94
42)	2,6-Dinitrotoluene	20.53	165	33621	15.61		66
43)	3-Nitroaniline	20.92	138	56563	18.98	#	33
44)	Acenaphthene	20.94	153	275913	20.18		49
45)	2,4-Dinitrophenol	21.26	184	17136	15.96	#	64
46)	4-Nitrophenol	21.59	109	53272	18.62	#	20
47)	Dibenzofuran	21.47	168	212804	19.98		81
48)	2,4-Dinitrotoluene	21.75	165	48906	18.08	#	66
49)	Diethylphthalate	22.62	149	183444	21.46		93
50)	Fluorene	22.57	166	264272	20.54		60
51)	4-Chlorophenyl-phenylether	22.68	204	116395	21.22		62
52)	4-Nitroaniline	22.89	138	47293	17.95		64
54)	4,6-Dinitro-2-methylphenol	23.02	198	18660	16.48		100
55)	n-Nitrosodiphenylamine	23.11	169	162419	18.36		59
57)	4-Bromophenyl-phenylether	24.20	248	103171	20.99	#	42
58)	Hexachlorobenzene	24.58	284	73130	20.08	#	59
59)	Pentachlorophenol	25.20	266	59064	22.33		47
60)	Phenanthrene	25.71	178	276621	19.87		94
61)	Anthracene	25.71	178	276621	20.37		93
64)	Di-n-butylphthalate	27.77	149	303485	21.21	#	96
65)	Fluoranthene	29.28	202	281785	22.58	#	86
67)	Pyrene	29.91	202	338544	21.02	#	80
69)	Butylbenzylphthalate	32.04	149	215980	23.79	#	57
70)	Benzo[a]anthracene	33.28	228	345587	22.45		84
71)	3,3'-Dichlorobenzidine	33.35	252	135393	28.01	#	68
72)	Chyrsene	33.39	228	362933	22.77	#	93
73)	bis(2-Ethylhexyl)phthalate	33.69	149	248776	21.73	#	90
75)	Di-n-octylphthalate	35.63	149	305473	20.82		96
76)	Benzo[b]fluoranthene	36.83	252	323930	21.21	#	73
77)	Benzo[k]fluoranthene	36.93	252	334388	22.71	#	70
78)	Benzo[a]pyrene	38.17	252	295309	21.00	#	77
79)	Indeno[1,2,3-cd]pyrene	44.54	276	280579	18.97	m	71
80)	Dibenz[a,h]anthracene	44.78	278	307775	18.06	#	55
81)	Benzo[g,h,i]perylene	46.40	276	296102	15.49	#	43

203

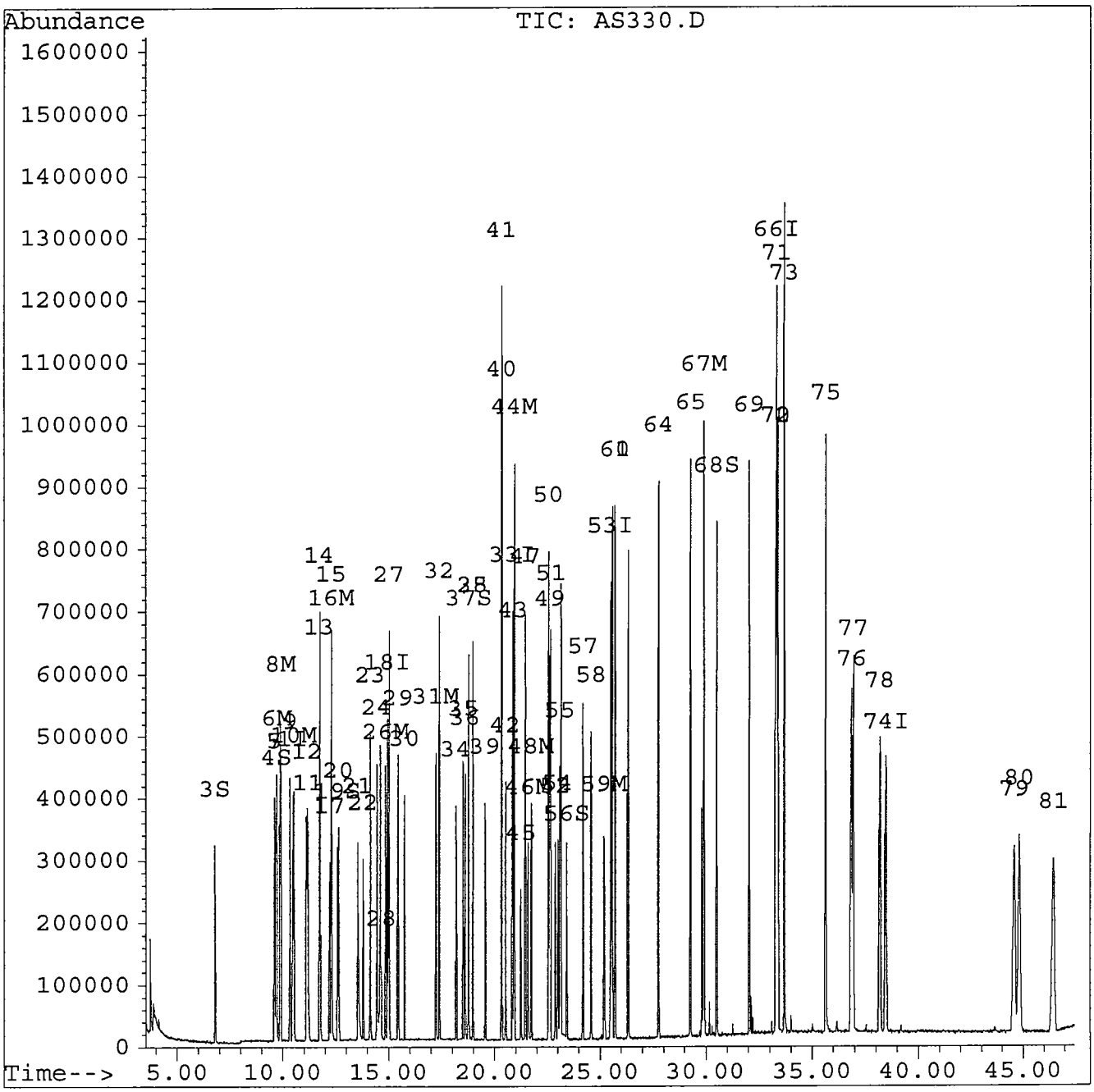
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS330.D
Acq On : 25 Mar 103 3:21 pm
Sample : SSTD050
Misc : GCMS-A
Quant Time: Mar 26 12:54 19103

Vial: 1
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS330.D Vial: 1
Acq On : 25 Mar 103 3:21 pm Operator:
Sample : SSTD050 Inst : 5970 - In
Misc : GCMS-A Multiplr: 1.00
Quant Time: Mar 26 12:54 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.47	152	204841	40.00	ug		0.00
18) Naphthalene-d8	14.95	136	587989	40.00			0.00
33) Acenaphthene-d10	20.86	164	375464	40.00			0.00
53) Phenanthrene-d10	25.52	188	807456	40.00			0.00
66) Chyrsene-d12	33.34	240	939783	40.00			0.00
74) Perylene-d12	38.48	264	984126	40.00			0.00
System Monitoring Compounds							%Recovery
3) 2-Fluorophenol	6.80	112	297961	62.88	ug		62.88%
4) Phenol-d5	9.69	99	396994	52.44	ug		52.44%
19) Nitrobenzene-d5	12.58	82	467516	50.92			101.84%
37) 2-Fluorobiphenyl	18.78	172	629728	44.94			89.88%
56) 2,4,6-Tribromophenol	23.44	330	209460	54.04			54.04%
68) Terphenyl-d14	30.52	244	838992	54.95			109.90%
Target Compounds							Qvalue
2) Pyridine	3.88	79	297607	52.96	ug	m	37
5) Aniline	9.60	93	292710	65.28	ug		99
6) Phenol	9.73	94	469086	51.51	ug		73
7) bis(2-Chloroethyl)ether	9.60	93	309946	64.99		#	97
8) 2-Chlorophenol	9.90	128	391210	54.23		#	70
9) 1,3-Dichlorobenzene	10.33	146	376270	54.32			69
10) 1,4-Dichlorobenzene	10.53	146	382892	52.71			74
11) Benzyl alcohol	11.20	108	368032	67.05			22
12) 1,2-Dichlorobenzene	11.15	146	374288	54.95			63
13) 2-Methylphenol	11.73	108	334414	55.66			49
14) bis(2-chloroisopropyl)ethe	11.74	45	698270	69.19		#	89
15) 4-Methylphenol	12.29	108	422180	58.29			38
16) n-Nitroso-di-n-propylamine	12.28	70	336637	65.06		#	73
17) Hexachloroethane	12.21	117	198754	49.68		#	72
20) Nitrobenzene	12.64	77	387514	50.10		#	78
21) Isophorone	13.54	82	530952	62.41			97
22) 2-Nitrophenol	13.80	139	222996	62.07			66
23) 2,4-Dimethylphenol	14.15	107	505877	62.92			52
24) bis(2-Chloroethoxy)methane	14.46	93	417795	60.63		#	88
25) 2,4-Dichlorophenol	18.98	162	588339	62.26		#	39
26) 1,2,4-Trichlorobenzene	14.87	180	423093	54.95			53
27) Naphthalene	15.02	128	782645	53.90			94
28) Benzoic acid	14.66	105	157771	16.28			90
29) 4-Chloroaniline	15.44	127	334250	66.91			88
30) Hexachlorobutadiene	15.74	225	221804	55.36		#	65
31) 4-Chloro-3-methylphenol	17.24	107	410081	64.43		#	1
32) 2-Methylnaphthalene	17.40	142	866093	62.14		#	71
34) Hexachlorocyclopentadiene	18.20	237	244584	46.96		#	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS330.D
Acq On : 25 Mar 103 3:21 pm
Sample : SSTD050
Misc : GCMS-A
Quant Time: Mar 26 12:54 19103

Vial: 1
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
35)	2,4,6-Trichlorophenol	18.52	196	322819	52.09		49
36)	2,4,5-Trichlorophenol	18.62	196	335168	55.49		49
38)	2-Chloronaphthalene	18.98	162	737154	47.49		73
39)	2-Nitroaniline	19.56	65	392548	62.27	#	50
40)	Dimethylphthalate	20.35	163	588611	52.84		96
41)	Acenaphthylene	20.34	152	1005008	50.75		93
42)	2,6-Dinitrotoluene	20.53	165	190871	52.59	#	65
43)	3-Nitroaniline	20.93	138	297147	59.19	#	35
44)	Acenaphthene	20.95	153	1110917	48.22		49
45)	2,4-Dinitrophenol	21.27	184	167276	92.47		68
46)	4-Nitrophenol	21.61	109	304249	63.12	#	20
47)	Dibenzofuran	21.48	168	882610	49.19		82
48)	2,4-Dinitrotoluene	21.76	165	266150	58.41	#	65
49)	Diethylphthalate	22.63	149	766628	53.24		95
50)	Fluorene	22.57	166	1125855	51.93		60
51)	4-Chlorophenyl-phenylether	22.68	204	484358	52.41		61
52)	4-Nitroaniline	22.90	138	270975	61.06		63
54)	4,6-Dinitro-2-methylphenol	23.03	198	120943	66.44		100
55)	n-Nitrosodiphenylamine	23.11	169	570162	40.09		59
57)	4-Bromophenyl-phenylether	24.20	248	392589	49.69		43
58)	Hexachlorobenzene	24.59	284	288599	49.30	#	61
59)	Pentachlorophenol	25.21	266	240348	56.53		47
60)	Phenanthrene	25.72	178	1168834	52.23		94
61)	Anthracene	25.72	178	1168834	53.54		93
64)	Di-n-butylphthalate	27.78	149	1273990	55.39	#	97
65)	Fluoranthene	29.28	202	1106169	55.13	#	85
67)	Pyrene	29.91	202	1378748	58.30	#	78
69)	Butylbenzylphthalate	32.06	149	961965	72.15	#	58
70)	Benzo[a]anthracene	33.29	228	1312703	58.06		81
71)	3,3'-Dichlorobenzidine	33.35	252	615319	86.68	#	70
72)	Chyrsene	33.29	228	1312703	56.08		91
73)	bis(2-Ethylhexyl)phthalate	33.70	149	1115981	66.39	#	91
75)	Di-n-octylphthalate	35.65	149	1508358	70.91		97
76)	Benzo[b]fluoranthene	36.86	252	1281825	57.89	#	73
77)	Benzo[k]fluoranthene	36.95	252	1235940	57.88	#	70
78)	Benzo[a]pyrene	38.19	252	1164072	57.10	#	79
79)	Indeno[1,2,3-cd]pyrene	44.58	276	1106908	51.61	m	74
80)	Dibenz[a,h]anthracene	44.82	278	1292633	52.32	#	56
81)	Benzo[g,h,i]perylene	46.46	276	1322629	47.71	#	42

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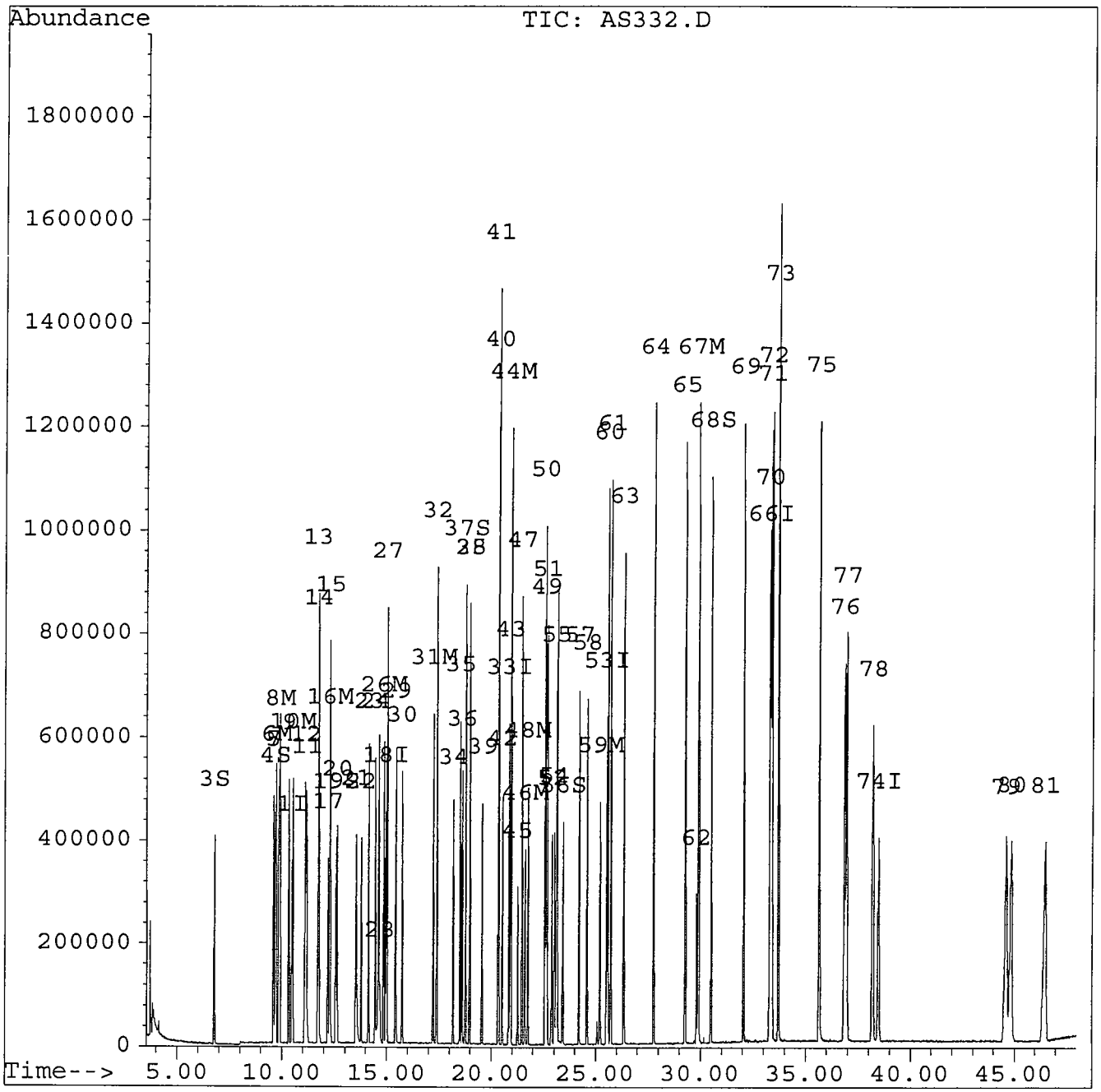
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS332.D
Acq On : 25 Mar 103 5:18 pm
Sample : SSTD080
Misc : GCMS-A
Quant Time: Mar 26 12:53 19103

Vial: 3
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS332.D Vial: 3
Acq On : 25 Mar 103 5:18 pm Operator:
Sample : SSTD080 Inst : 5970 - In
Misc : GCMS-A Multiplr: 1.00
Quant Time: Mar 26 12:53 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.47	152	175381	40.00	ug		0.00
18) Naphthalene-d8	14.95	136	508876	40.00			0.00
33) Acenaphthene-d10	20.86	164	318481	40.00			0.00
53) Phenanthrene-d10	25.52	188	700215	40.00			0.00
66) Chyrsene-d12	33.34	240	784319	40.00			0.00
74) Perylene-d12	38.48	264	899480	40.00			0.00
System Monitoring Compounds							%Recovery
3) 2-Fluorophenol	6.79	112	372744	78.38	ug		78.38%
4) Phenol-d5	9.68	99	522327	78.91	ug		78.91%
19) Nitrobenzene-d5	12.57	82	575127	78.25			156.51%
37) 2-Fluorobiphenyl	18.77	172	850950	78.81			157.61%
56) 2,4,6-Tribromophenol	23.44	330	295055	87.25			87.25%
68) Terphenyl-d14	30.51	244	1090944	81.97			163.94%
Target Compounds							Qvalue
2) Pyridine	3.82	79	419873	188.68	ug	m	83
5) Aniline	9.60	93	351516	73.02	ug		99
6) Phenol	9.73	94	596181	77.92	ug		72
7) bis(2-Chloroethyl)ether	9.60	93	372035	73.11		#	97
8) 2-Chlorophenol	9.90	128	472390	74.03			70
9) 1,3-Dichlorobenzene	10.33	146	486545	76.27			69
10) 1,4-Dichlorobenzene	10.52	146	498010	76.36			74
11) Benzyl alcohol	11.18	108	466072	78.72			21
12) 1,2-Dichlorobenzene	11.15	146	460715	73.18			63
13) 2-Methylphenol	11.73	108	420783	76.11			50
14) bis(2-chloroisopropyl)ethe	11.74	45	870307	74.51		#	88
15) 4-Methylphenol	12.29	108	532736	76.65			38
16) n-Nitroso-di-n-propylamine	12.27	70	407158	76.12		#	75
17) Hexachloroethane	12.20	117	261121	78.12		#	74
20) Nitrobenzene	12.64	77	476100	75.38		#	79
21) Isophorone	13.53	82	666431	79.10			97
22) 2-Nitrophenol	13.78	139	279953	80.79			65
23) 2,4-Dimethylphenol	14.14	107	592822	72.44			51
24) bis(2-Chloroethoxy)methane	14.46	93	531877	76.44			88
25) 2,4-Dichlorophenol	18.98	162	778544	77.31		#	39
26) 1,2,4-Trichlorobenzene	14.86	180	551735	75.17			53
27) Naphthalene	15.02	128	1021051	75.26			94
28) Benzoic acid	14.69	105	199464	88.94			86
29) 4-Chloroaniline	15.44	127	419722	76.11			90
30) Hexachlorobutadiene	15.74	225	298137	75.57		#	63
31) 4-Chloro-3-methylphenol	17.23	107	538064	76.75		#	1
32) 2-Methylnaphthalene	17.39	142	1074211	72.04		#	71
34) Hexachlorocyclopentadiene	18.20	237	321395	82.96		#	46

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(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS332.D
Acq On : 25 Mar 103 5:18 pm
Sample : SSTD080
Misc : GCMS-A
Quant Time: Mar 26 12:53 19103

Vial: 3
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35)	2,4,6-Trichlorophenol	18.52	196	423464	78.46			49
36)	2,4,5-Trichlorophenol	18.62	196	442994	80.29			49
38)	2-Chloronaphthalene	18.98	162	972645	76.89			74
39)	2-Nitroaniline	19.57	65	498844	85.76		#	51
40)	Dimethylphthalate	20.35	163	758796	74.94			96
41)	Acenaphthylene	20.34	152	1239536	71.82			93
42)	2,6-Dinitrotoluene	20.54	165	246217	87.30		#	63
43)	3-Nitroaniline	20.93	138	381870	84.09		#	35
44)	Acenaphthene	20.95	153	1406674	72.96			49
45)	2,4-Dinitrophenol	21.27	184	218323	107.49			67
46)	4-Nitrophenol	21.61	109	393541	87.77		#	20
47)	Dibenzofuran	21.47	168	1168106	77.41			80
48)	2,4-Dinitrotoluene	21.77	165	344770	86.09		#	64
49)	Diethylphthalate	22.63	149	1004865	76.96		#	96
50)	Fluorene	22.57	166	1473076	77.56			60
51)	4-Chlorophenyl-phenylether	22.68	204	622116	75.25			61
52)	4-Nitroaniline	22.91	138	361602	90.67			64
54)	4,6-Dinitro-2-methylphenol	23.03	198	156769	92.26			100
55)	n-Nitrosodiphenylamine	23.11	169	834364	78.67			57
57)	4-Bromophenyl-phenylether	24.21	248	528768	75.53			42
58)	Hexachlorobenzene	24.59	284	395140	78.22		#	59
59)	Pentachlorophenol	25.21	266	319791	77.19			48
60)	Phenanthrene	25.59	178	1493247	75.50			93
61)	Anthracene	25.73	178	1512592	76.48			94
62)	Benzidine	29.82	184	327864	63.94	ug	#	95
63)	Carbazole	26.35	167	1000688	71.86	ug		99
64)	Di-n-butylphthalate	27.78	149	1637462	75.72		#	97
65)	Fluoranthene	29.28	202	1392198	71.71		#	84
67)	Pyrene	29.92	202	1822236	83.28		#	78
69)	Butylbenzylphthalate	32.06	149	1224776	83.63		#	58
70)	Benzo[a]anthracene	33.30	228	1631455	75.73			82
71)	3,3'-Dichlorobenzidine	33.36	252	757417	81.59		#	70
72)	Chyrsene	33.41	228	1690477	76.58		#	95
73)	bis(2-Ethylhexyl)phthalate	33.70	149	1417916	83.72		#	89
75)	Di-n-octylphthalate	35.65	149	1899793	79.47			98
76)	Benzo[b]fluoranthene	36.87	252	1774608	79.06		#	71
77)	Benzo[k]fluoranthene	36.95	252	1757758	78.56		#	70
78)	Benzo[a]pyrene	38.21	252	1608672	78.77		#	77
79)	Indeno[1,2,3-cd]pyrene	44.58	276	1468386	223.39		m	74
80)	Dibenz[a,h]anthracene	44.84	278	1693581	76.94		#	56
81)	Benzo[g,h,i]perylene	46.49	276	1834851	83.79		m	57

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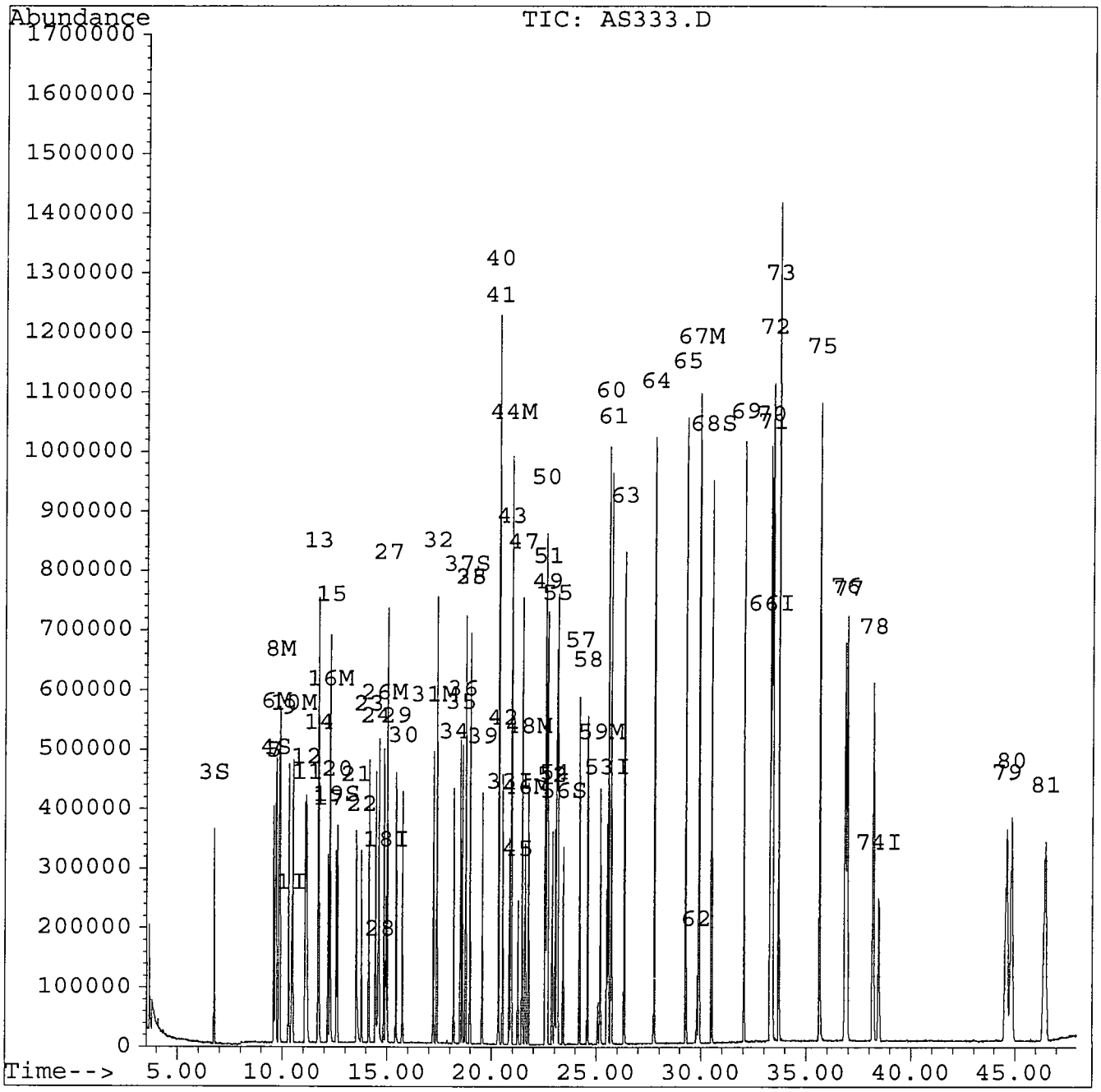
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS333.D
Acq On : 25 Mar 103 6:16 pm
Sample : SSTD120
Misc : GCMS-A
Quant Time: Mar 26 12:51 19103

Vial: 4
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS333.D Vial: 4
Acq On : 25 Mar 103 6:16 pm Operator:
Sample : SSTD120 Inst : 5970 - In
Misc : GCMS-A Multiplr: 1.00
Quant Time: Mar 26 12:51 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.46	152	97363	40.00	ug		-0.01
18) Naphthalene-d8	14.95	136	298654	40.00			0.00
33) Acenaphthene-d10	20.85	164	176119	40.00			0.00
53) Phenanthrene-d10	25.52	188	400475	40.00			0.00
66) Chyrsene-d12	33.33	240	511689	40.00			-0.01
74) Perylene-d12	38.46	264	578785	40.00			-0.03
System Monitoring Compounds							%Recovery
3) 2-Fluorophenol	6.75	112	328919	125.44	ug		125.44%
4) Phenol-d5	9.67	99	452548	123.71	ug		123.71%
19) Nitrobenzene-d5	12.56	82	488849	114.16			228.33%
37) 2-Fluorobiphenyl	18.78	172	748364	125.95			251.91%
56) 2,4,6-Tribromophenol	23.44	330	227286	114.07			114.07%
68) Terphenyl-d14	30.52	244	989367	113.02			226.03%
Target Compounds							Qvalue
2) Pyridine	3.80	79	340848	276.99	ug	m	38
5) Aniline	9.57	93	289484	111.56	ug		96
6) Phenol	9.70	94	516229	122.60	ug		72
7) bis(2-Chloroethyl)ether	9.57	93	305548	111.35		#	98
8) 2-Chlorophenol	9.88	128	418431	121.13			69
9) 1,3-Dichlorobenzene	10.31	146	425696	122.10			69
10) 1,4-Dichlorobenzene	10.51	146	438184	122.89			74
11) Benzyl alcohol	11.17	108	399744	122.28			22
12) 1,2-Dichlorobenzene	11.14	146	417028	122.81			62
13) 2-Methylphenol	11.72	108	364987	120.88			49
14) bis(2-chloroisopropyl)ethe	11.74	45	764912	120.73		#	89
15) 4-Methylphenol	12.28	108	475527	124.99			38
16) n-Nitroso-di-n-propylamine	12.26	70	352966	120.82		#	74
17) Hexachloroethane	12.19	117	224371	121.87		#	74
20) Nitrobenzene	12.63	77	412614	113.50			78
21) Isophorone	13.52	82	549230	111.50			98
22) 2-Nitrophenol	13.78	139	240966	118.10			65
23) 2,4-Dimethylphenol	14.14	107	497902	107.04			52
24) bis(2-Chloroethoxy)methane	14.45	93	444830	110.57			88
25) 2,4-Dichlorophenol	18.98	162	650939	111.38		#	39
26) 1,2,4-Trichlorobenzene	14.85	180	480641	113.86			53
27) Naphthalene	15.01	128	895612	114.74			94
28) Benzoic acid	14.67	105	167522	122.70			85
29) 4-Chloroaniline	15.43	127	357056	112.14			87
30) Hexachlorobutadiene	15.74	225	260983	114.84		#	62
31) 4-Chloro-3-methylphenol	17.23	107	468257	115.37		#	1
32) 2-Methylnaphthalene	17.39	142	946099	111.82		#	71
34) Hexachlorocyclopentadiene	18.19	237	274148	126.41		#	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS333.D
Acq On : 25 Mar 103 6:16 pm
Sample : SSTD120
Misc : GCMS-A
Quant Time: Mar 26 12:51 19103

Vial: 4
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35)	2,4,6-Trichlorophenol	18.52	196	363887	122.70			49
36)	2,4,5-Trichlorophenol	18.61	196	392292	128.42			49
38)	2-Chloronaphthalene	18.98	162	819223	118.64			74
39)	2-Nitroaniline	19.56	65	433060	131.48		#	51
40)	Dimethylphthalate	20.35	163	646130	117.88			95
41)	Acenaphthylene	20.33	152	1058633	114.83		#	94
42)	2,6-Dinitrotoluene	20.53	165	205581	127.93		#	63
43)	3-Nitroaniline	20.93	138	318127	124.55		#	35
44)	Acenaphthene	20.95	153	1225058	118.37			49
45)	2,4-Dinitrophenol	21.27	184	181716	145.16			68
46)	4-Nitrophenol	21.61	109	337080	131.68		#	20
47)	Dibenzofuran	21.47	168	1018853	123.43			80
48)	2,4-Dinitrotoluene	21.76	165	305062	134.34		#	65
49)	Diethylphthalate	22.64	149	865108	121.35		#	96
50)	Fluorene	22.57	166	1294225	124.50			59
51)	4-Chlorophenyl-phenylether	22.67	204	552887	123.38		#	60
52)	4-Nitroaniline	22.91	138	308952	134.12			64
54)	4,6-Dinitro-2-methylphenol	23.02	198	132475	129.69			100
55)	n-Nitrosodiphenylamine	23.11	169	821036	136.11			59
57)	4-Bromophenyl-phenylether	24.21	248	470494	119.74			42
58)	Hexachlorobenzene	24.59	284	334005	116.47		#	59
59)	Pentachlorophenol	25.20	266	319173	136.30			48
60)	Phenanthrene	25.59	178	1296829	116.84			95
61)	Anthracene	25.73	178	1288617	115.62			94
62)	Benzidine	29.82	184	143720	52.52	ug	#	95
63)	Carbazole	26.35	167	890743	115.77	ug		99
64)	Di-n-butylphthalate	27.78	149	1380217	113.62		#	97
65)	Fluoranthene	29.28	202	1288748	120.22		#	84
67)	Pyrene	29.91	202	1524642	105.37		#	78
69)	Butylbenzylphthalate	32.06	149	1059767	109.26		#	58
70)	Benzo[a]anthracene	33.28	228	1612221	116.78			81
71)	3,3'-Dichlorobenzidine	33.35	252	704947	115.63		#	68
72)	Chyrsene	33.41	228	1648680	116.13		#	92
73)	bis(2-Ethylhexyl)phthalate	33.70	149	1220858	108.81		#	91
75)	Di-n-octylphthalate	35.64	149	1638822	106.77			99
76)	Benzo[b]fluoranthene	36.85	252	1731136	120.32		#	69
77)	Benzo[k]fluoranthene	36.96	252	1322711	92.43		#	73
78)	Benzo[a]pyrene	38.20	252	1439619	110.11		#	78
79)	Indeno[1,2,3-cd]pyrene	44.59	276	1366878	333.58		m	72
80)	Dibenz[a,h]anthracene	44.82	278	1093417	78.20		#	31
81)	Benzo[g,h,i]perylene	46.46	276	1720928	131.12		#	48

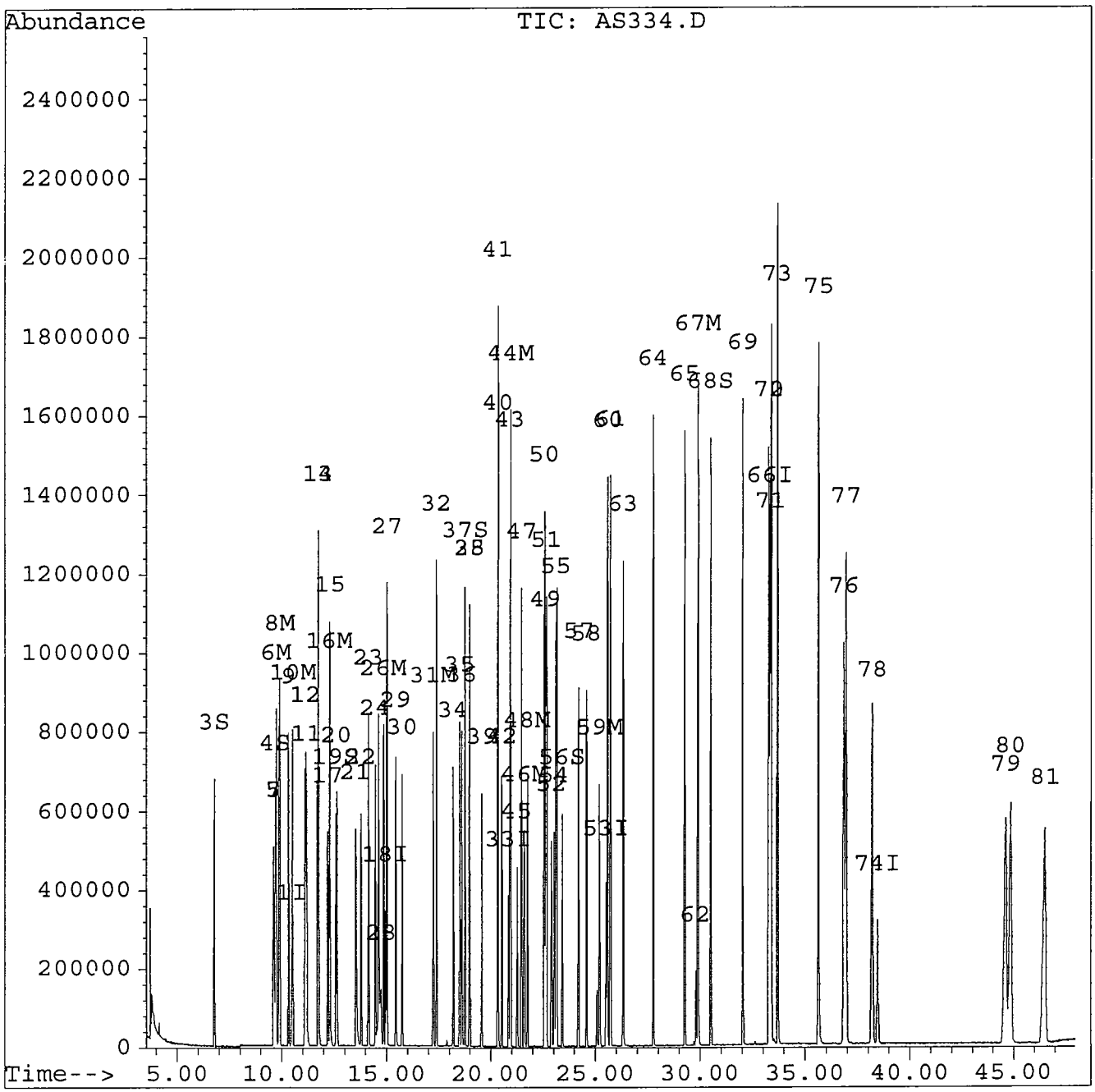
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS334.D
Acq On : 25 Mar 103 7:13 pm
Sample : SSTD160
Misc : GCMS-A
Quant Time: Mar 26 12:52 19103

Vial: 5
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS334.D
Acq On : 25 Mar 103 7:13 pm
Sample : SSTD160
Misc : GCMS-A
Quant Time: Mar 26 12:52 19103

Vial: 5
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.48	152	132420	40.00	ug		0.00
18) Naphthalene-d8	14.96	136	372670	40.00			0.00
33) Acenaphthene-d10	20.86	164	213292	40.00			0.00
53) Phenanthrene-d10	25.53	188	488737	40.00			0.00
66) Chyrsene-d12	33.35	240	663922	40.00			0.00
74) Perylene-d12	38.46	264	699833	40.00			-0.02
System Monitoring Compounds							**%Recovery**
3) 2-Fluorophenol	6.78	112	596699	165.44	ug		165.44%
4) Phenol-d5	9.68	99	785861	156.74	ug		156.74%
19) Nitrobenzene-d5	12.58	82	854242	161.84			323.68%
37) 2-Fluorobiphenyl	18.78	172	1124759	154.40			308.79%
56) 2,4,6-Tribromophenol	23.44	330	399215	166.23			166.23%
68) Terphenyl-d14	30.52	244	1585880	141.68			283.36%
Target Compounds							**Qvalue**
2) Pyridine	3.79	79	641076	420.57	ug	m	78
5) Aniline	9.60	93	485217	139.95	ug		97
6) Phenol	9.73	94	906902	157.51	ug		73
7) bis(2-Chloroethyl)ether	9.60	93	513864	140.22		#	97
8) 2-Chlorophenol	9.90	128	724401	153.82		#	70
9) 1,3-Dichlorobenzene	10.33	146	725587	152.36			69
10) 1,4-Dichlorobenzene	10.52	146	737353	151.14			75
11) Benzyl alcohol	11.19	108	687386	153.87			22
12) 1,2-Dichlorobenzene	11.14	146	697836	150.22			63
13) 2-Methylphenol	11.74	108	607501	147.66			49
14) bis(2-chloroisopropyl)ethe	11.74	45	1302700	150.95		#	89
15) 4-Methylphenol	12.30	108	789963	151.10			38
16) n-Nitroso-di-n-propylamine	12.27	70	614374	154.36		#	75
17) Hexachloroethane	12.20	117	397128	157.98		#	74
20) Nitrobenzene	12.64	77	708147	158.25			79
21) Isophorone	13.53	82	936362	155.08			100
22) 2-Nitrophenol	13.79	139	418173	164.90			66
23) 2,4-Dimethylphenol	14.14	107	809113	143.26			51
24) bis(2-Chloroethoxy)methane	14.47	93	736753	149.70		#	88
25) 2,4-Dichlorophenol	18.99	162	1027555	143.48		#	38
26) 1,2,4-Trichlorobenzene	14.86	180	790173	151.96			54
27) Naphthalene	15.01	128	1458685	151.42			94
28) Benzoic acid	14.75	105	299850	175.02			90
29) 4-Chloroaniline	15.45	127	606096	155.08			88
30) Hexachlorobutadiene	15.75	225	422530	150.61		#	64
31) 4-Chloro-3-methylphenol	17.24	107	745295	148.59		#	1
32) 2-Methylnaphthalene	17.39	142	1492736	143.84		#	70
34) Hexachlorocyclopentadiene	18.19	237	451416	169.61		#	46

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS334.D
Acq On : 25 Mar 103 7:13 pm
Sample : SSTD160
Misc : GCMS-A
Quant Time: Mar 26 12:52 19103

Vial: 5
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35)	2,4,6-Trichlorophenol	18.52	196	584601	161.86			49
36)	2,4,5-Trichlorophenol	18.62	196	622241	165.30			49
38)	2-Chloronaphthalene	18.99	162	1281708	153.71			73
39)	2-Nitroaniline	19.57	65	702888	172.09		#	51
40)	Dimethylphthalate	20.36	163	982695	148.70			95
41)	Acenaphthylene	20.34	152	1651928	149.57			94
42)	2,6-Dinitrotoluene	20.54	165	332758	168.20		#	64
43)	3-Nitroaniline	20.94	138	494673	158.42			35
44)	Acenaphthene	20.95	153	1907863	152.74			50
45)	2,4-Dinitrophenol	21.27	184	308446	193.32			68
46)	4-Nitrophenol	21.62	109	550086	173.22		#	20
47)	Dibenzofuran	21.48	168	1592865	158.21			79
48)	2,4-Dinitrotoluene	21.77	165	469394	165.73		#	66
49)	Diethylphthalate	22.64	149	1313442	151.70		#	96
50)	Fluorene	22.57	166	1983571	156.09			59
51)	4-Chlorophenyl-phenylether	22.68	204	863240	157.95			60
52)	4-Nitroaniline	22.93	138	510213	177.67			63
54)	4,6-Dinitro-2-methylphenol	23.04	198	218835	172.07			100
55)	n-Nitrosodiphenylamine	23.12	169	1258534	165.41			58
57)	4-Bromophenyl-phenylether	24.21	248	715556	149.30		#	41
58)	Hexachlorobenzene	24.59	284	546329	157.26		#	59
59)	Pentachlorophenol	25.21	266	498596	168.74			47
60)	Phenanthrene	25.60	178	1996060	148.33			95
61)	Anthracene	25.74	178	2022622	150.07			94
62)	Benzidine	29.82	184	230530	80.32	ug	#	96
63)	Carbazole	26.36	167	1444185	155.17	ug		99
64)	Di-n-butylphthalate	27.78	149	2134416	145.91		#	97
65)	Fluoranthene	29.29	202	1947862	148.82		#	83
67)	Pyrene	29.92	202	2367916	130.09		#	78
69)	Butylbenzylphthalate	32.06	149	1723492	140.08		#	58
70)	Benzo[a]anthracene	33.29	228	2469626	138.80			81
71)	3,3'-Dichlorobenzidine	33.37	252	1183267	150.96		#	71
72)	Chyrsene	33.29	228	2469626	135.16			91
73)	bis(2-Ethylhexyl)phthalate	33.71	149	1993691	140.21		#	92
75)	Di-n-octylphthalate	35.65	149	2791534	154.68			97
76)	Benzo[b]fluoranthene	36.86	252	2482417	142.60		#	71
77)	Benzo[k]fluoranthene	36.97	252	2507739	153.76		#	68
78)	Benzo[a]pyrene	38.23	252	2358050	152.30		#	76
79)	Indeno[1,2,3-cd]pyrene	44.64	276	2316919	475.72		m	73
80)	Dibenz[a,h]anthracene	44.86	278	2717791	176.08		#	55
81)	Benzo[g,h,i]perylene	46.53	276	2645233	162.91		#	45

215

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Instrument ID: 5970 A Calibration Date: 03/29/03 Time: 15:04

Lab File ID: AS340 Init. Calib. Date(s): 03/25/03 03/25/30

Init. Calib. Times: 15:21 19:13

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.457	1.562	.500	-7.2	25.0
n-Nitroso-di-n-propylamine	1.194	1.308	.500	-9.5	25.0
1,2,4-Trichlorobenzene	.552	.553	.200	-0.2	25.0
Naphthalene	1.023	1.063	.700	-3.9	25.0
2-Methylnaphthalene	1.091	1.078	.400	1.2	25.0
Acenaphthylene	2.044	2.236	1.300	-9.4	25.0
Acenaphthene	2.321	2.609	.800	-12.4	25.0
Dibenzofuran	1.884	1.914	.800	-1.6	25.0
2,4-Dinitrotoluene	.535	.449	.200	16.1	25.0
Fluorene	2.372	2.275	.900	4.1	25.0
Phenanthrene	1.085	1.182	.700	-8.9	25.0
Anthracene	1.089	1.136	.700	-4.3	25.0
Fluoranthene	1.056	0.921	.600	12.8	25.0
Pyrene	1.056	1.286	.600	-21.8	25.0
Benzo(a)anthracene	1.044	1.018	.800	2.4	25.0
Chrysene	1.067	1.063	.700	0.3	25.0
Benzo(b)fluoranthene	.973	1.061	.700	-9.0	25.0
Benzo(k)fluoranthene	.925	1.161	.700	-25.5	25.0
Benzo(a)pyrene	.876	1.015	.700	-15.9	25.0
Indeno(1,2,3-cd)pyrene	0.832	0.942	.500	-13.2	25.0
Dibenzo(a,h)anthracene	0.900	1.049	.400	-16.6	25.0
Benzo(g,h,i)perylene	0.981	1.178	.500	-20.1	25.0
Nitrobenzene-d5	.568	.557		1.8	
2-Fluorobiphenyl	1.357	1.467	.700	-8.2	25.0
Terphenyl-d14	.659	.644	.500	2.3	25.0

(1) Cannot be separated from Diphenylamine

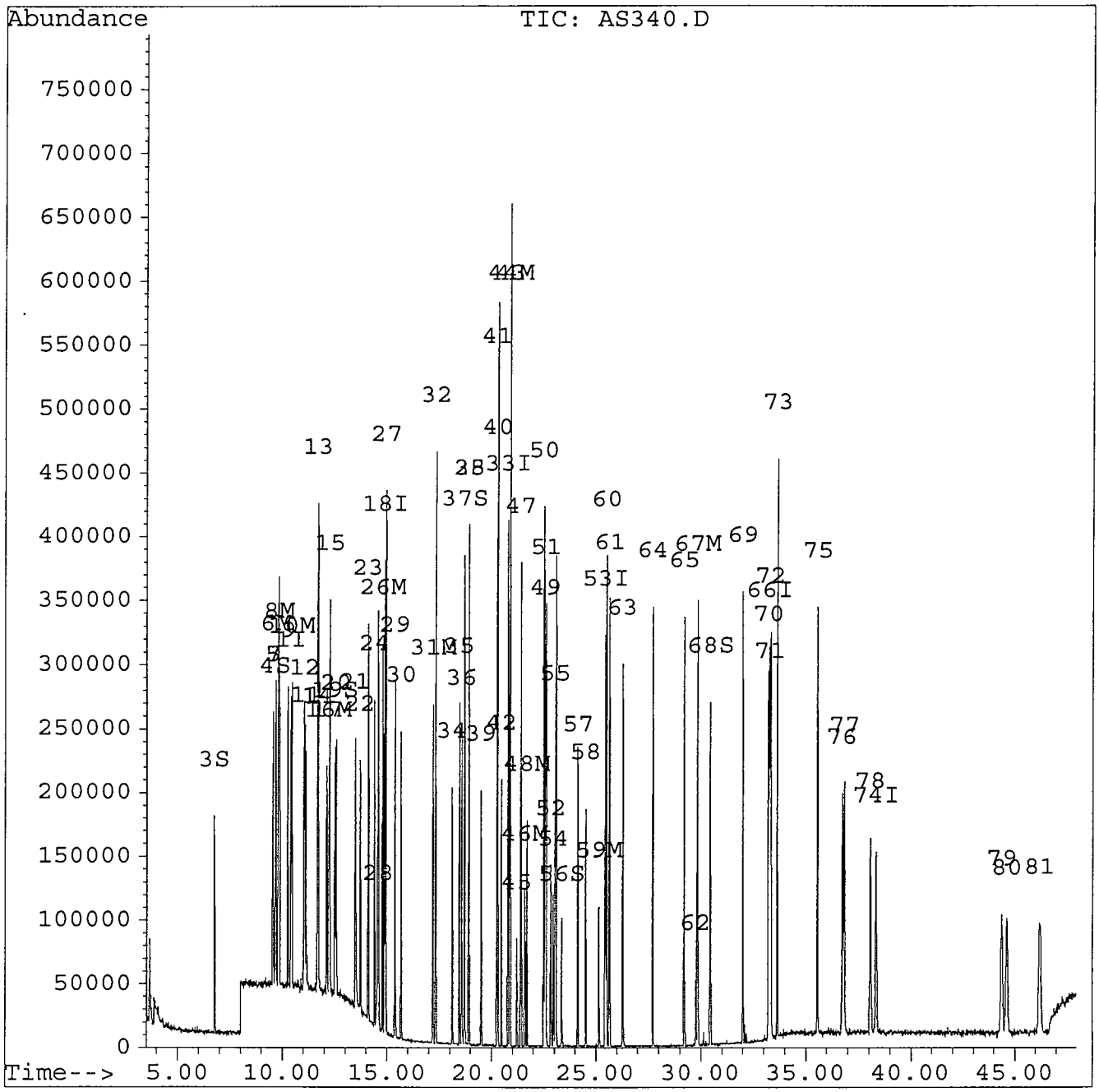
All other compounds must meet a minimum RRF of .010.

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS340.D
Acq On : 29 Mar 103 3:04 pm
Sample : SSTD050
Misc : GCMS-A STRGHT
Quant Time: Mar 30 9:52 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS340.D
Acq On : 29 Mar 103 3:04 pm
Sample : SSTD050
Misc : GCMS-A STRGHT
Quant Time: Mar 30 9:52 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.41	152	115771	40.00	ug		-0.04
18) Naphthalene-d8	14.89	136	406970	40.00			-0.04
33) Acenaphthene-d10	20.79	164	203202	40.00			-0.04
53) Phenanthrene-d10	25.45	188	331381	40.00			-0.05
66) Chyrsene-d12	33.27	240	296398	40.00			-0.06
74) Perylene-d12	38.35	264	256490	40.00			-0.12
System Monitoring Compounds							%Recovery
3) 2-Fluorophenol	6.76	112	147089	46.33	ug		46.33%
4) Phenol-d5	9.66	99	233214	53.42	ug		53.42%
19) Nitrobenzene-d5	12.52	82	283588	49.09			98.17%
37) 2-Fluorobiphenyl	18.71	172	372716	54.08			108.16%
56) 2,4,6-Tribromophenol	23.37	330	56381	34.36			34.36%
68) Terphenyl-d14	30.45	244	238439	48.83			97.67%
Target Compounds							Qvalue
2) Pyridine	3.88	79	122965	39.16	ug	m	58
5) Aniline	9.55	93	156662	53.01	ug		99
6) Phenol	9.70	94	251728	50.16	ug		72
7) bis(2-Chloroethyl)ether	9.55	93	166594	53.31		#	96
8) 2-Chlorophenol	9.85	128	209326	51.24			69
9) 1,3-Dichlorobenzene	10.27	146	215160	52.17			70
10) 1,4-Dichlorobenzene	10.45	146	226048	53.59			75
11) Benzyl alcohol	11.14	108	201569	52.01			22
12) 1,2-Dichlorobenzene	11.09	146	217920	54.32			62
13) 2-Methylphenol	11.70	108	193048	54.51			49
14) bis(2-chloroisopropyl)ethe	11.68	45	308798	41.40		m	69
15) 4-Methylphenol	12.26	108	248568	54.99			38
16) n-Nitroso-di-n-propylamine	12.22	70	189281	54.78		#	75
17) Hexachloroethane	12.13	117	121610	55.48		#	72
20) Nitrobenzene	12.58	77	221775	45.48			79
21) Isophorone	13.48	82	301194	45.96			98
22) 2-Nitrophenol	13.73	139	144983	52.03			66
23) 2,4-Dimethylphenol	14.10	107	305829	50.65			52
24) bis(2-Chloroethoxy)methane	14.40	93	273380	51.53		#	87
25) 2,4-Dichlorophenol	18.92	162	351532	45.90		#	39
26) 1,2,4-Trichlorobenzene	14.80	180	281491	50.07			53
27) Naphthalene	14.95	128	540721	51.96			94
28) Benzoic acid	14.61	105	89114	46.75			87
29) 4-Chloroaniline	15.39	127	221455	52.21			87
30) Hexachlorobutadiene	15.68	225	135522	44.76		#	63
31) 4-Chloro-3-methylphenol	17.22	107	248626	46.05		#	1
32) 2-Methylnaphthalene	17.33	142	548293	49.38		#	72
34) Hexachlorocyclopentadiene	18.13	237	119431	46.54		#	46

(#) = qualifier out of range (m) = manual integration

218

Data File : C:\HPCHEM\1\DATA\AS340.D
Acq On : 29 Mar 103 3:04 pm
Sample : SSTD050
Misc : GCMS-A STRGHT
Quant Time: Mar 30 9:52 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Sun Mar 30 09:52:59 2003
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35) 2,4,6-Trichlorophenol	18.47	196	176846	51.28			49
36) 2,4,5-Trichlorophenol	18.58	196	177198	49.08			49
38) 2-Chloronaphthalene	18.92	162	447138	56.73			74
39) 2-Nitroaniline	19.51	65	199514	50.51		#	51
40) Dimethylphthalate	20.30	163	307891	49.60			95
41) Acenaphthylene	20.27	152	568029	54.70			93
42) 2,6-Dinitrotoluene	20.47	165	94953	49.87		#	66
43) 3-Nitroaniline	20.88	138	139579	47.01		#	35
44) Acenaphthene	20.88	153	662743	56.20			49
45) 2,4-Dinitrophenol	21.21	184	77056	48.67		#	73
46) 4-Nitrophenol	21.60	109	122671	39.89		#	20
47) Dibenzofuran	21.41	168	486286	50.81			81
48) 2,4-Dinitrotoluene	21.70	165	113980	41.94		#	65
49) Diethylphthalate	22.58	149	361285	44.26			94
50) Fluorene	22.51	166	577778	47.96			59
51) 4-Chlorophenyl-phenylether	22.61	204	244104	47.00			62
52) 4-Nitroaniline	22.85	138	106724	38.17			63
54) 4,6-Dinitro-2-methylphenol	22.97	198	42231	48.25			100
55) n-Nitrosodiphenylamine	23.06	169	311216	59.92			58
57) 4-Bromophenyl-phenylether	24.15	248	157259	49.05			43
58) Hexachlorobenzene	24.52	284	100838	42.96			68
59) Pentachlorophenol	25.15	266	67808	33.48		m	47
60) Phenanthrene	25.52	178	489576	54.45			94
61) Anthracene	25.66	178	470470	52.13			94
62) Benzidine	29.77	184	68797	39.26	ug	#	95
63) Carbazole	26.28	167	294191	46.90	ug		100
64) Di-n-butylphthalate	27.72	149	448597	46.04		#	97
65) Fluoranthene	29.22	202	381659	43.62			95
67) Pyrene	29.85	202	476402	60.90			85
69) Butylbenzylphthalate	32.00	149	318993	59.56			60
70) Benzo[a]anthracene	33.23	228	377244	48.79			83
71) 3,3'-Dichlorobenzidine	33.30	252	144104	41.65			69
72) Chyrsene	33.34	228	394022	49.85		#	94
73) bis(2-Ethylhexyl)phthalate	33.65	149	344173	55.59		#	87
75) Di-n-octylphthalate	35.56	149	455614	69.34			97
76) Benzo[b]fluoranthene	36.75	252	340219	54.51		m	78
77) Benzo[k]fluoranthene	36.84	252	372146	62.75			77
78) Benzo[a]pyrene	38.07	252	325540	57.93			84
79) Indeno[1,2,3-cd]pyrene	44.37	276	301915	56.62		#	61
80) Dibenz[a,h]anthracene	44.62	278	336377	58.29		#	63
81) Benzo[g,h,i]perylene	46.20	276	377713	60.06		#	55

219

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Instrument ID: 5970 A Calibration Date: 03/30/03 Time: 11:19

Lab File ID: AS342 Init. Calib. Date(s): 03/25/03 03/25/30

Init. Calib. Times: 15:21 19:13

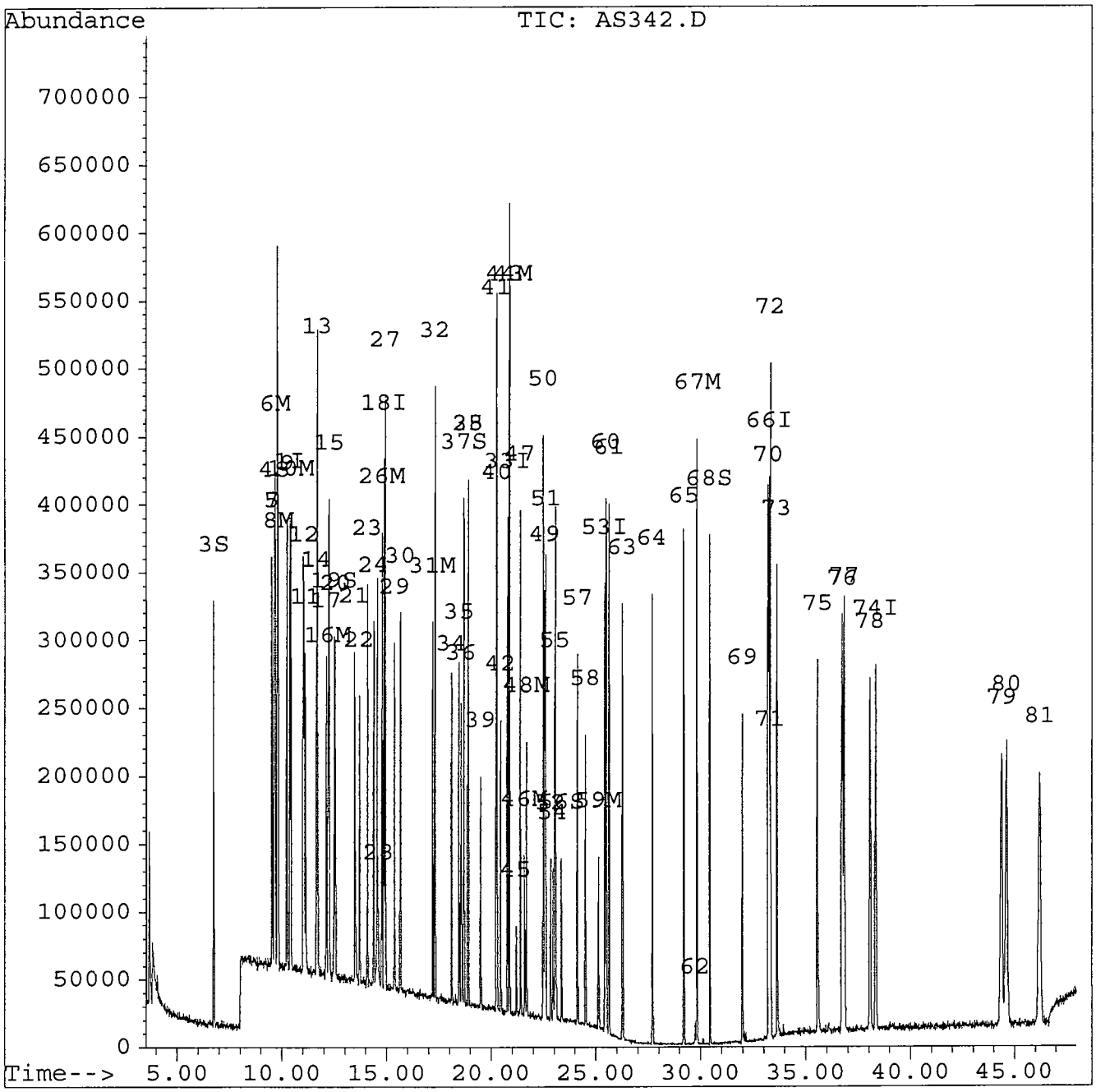
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.457	1.538	.500	-5.6	25.0
n-Nitroso-di-n-propylamine	1.194	1.062	.500	11.1	25.0
1,2,4-Trichlorobenzene	.552	.585	.200	-6.0	25.0
Naphthalene	1.023	1.044	.700	-2.1	25.0
2-Methylnaphthalene	1.091	0.975	.400	10.7	25.0
Acenaphthylene	2.044	2.233	1.300	-9.3	25.0
Acenaphthene	2.321	2.570	.800	-10.7	25.0
Dibenzofuran	1.884	2.016	.800	-7.0	25.0
2,4-Dinitrotoluene	.535	.521	.200	2.6	25.0
Fluorene	2.372	2.452	.900	-3.4	25.0
Phenanthrene	1.085	1.203	.700	-10.8	25.0
Anthracene	1.089	1.174	.700	-7.8	25.0
Fluoranthene	1.056	1.047	.600	0.9	25.0
Pyrene	1.056	1.033	.600	2.2	25.0
Benzo(a)anthracene	1.044	1.086	.800	-4.1	25.0
Chrysene	1.067	1.159	.700	-8.7	25.0
Benzo(b)fluoranthene	.973	0.912	.700	6.3	25.0
Benzo(k)fluoranthene	.925	0.895	.700	3.2	25.0
Benzo(a)pyrene	.876	0.873	.700	0.3	25.0
Indeno(1,2,3-cd)pyrene	0.832	0.890	.500	-7.1	25.0
Dibenzo(a,h)anthracene	0.900	1.104	.400	-22.6	25.0
Benzo(g,h,i)perylene	0.981	1.009	.500	-2.9	25.0
Nitrobenzene-d5	.568	.696		-22.6	
2-Fluorobiphenyl	1.357	1.631	.700	-20.2	25.0
Terphenyl-d14	.659	.620	.500	6.0	25.0

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of .010.

Data File : C:\HPCHEM\1\DATA\AS342.D
Acq On : 30 Mar 103 11:19 am
Sample : SSTD050
Misc : GCMS-A STRGHT
Quant Time: Mar 30 12:10 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS342.D
Acq On : 30 Mar 103 11:19 am
Sample : SSTD050
Misc : GCMS-A STRGHT
Quant Time: Mar 30 12:10 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.39	152	158770	40.00	ug		-0.02
18) Naphthalene-d8	14.87	136	395835	40.00			-0.02
33) Acenaphthene-d10	20.78	164	177924	40.00			-0.01
53) Phenanthrene-d10	25.45	188	333124	40.00			0.00
66) Chyrsene-d12	33.27	240	428034	40.00			0.00
74) Perylene-d12	38.34	264	571083	40.00			-0.01
System Monitoring Compounds							**%Recovery**
3) 2-Fluorophenol	6.75	112	260509	59.83	ug		59.83%
4) Phenol-d5	9.66	99	339246	56.66	ug		56.66%
19) Nitrobenzene-d5	12.50	82	344506	61.31			122.62%
37) 2-Fluorobiphenyl	18.69	172	362695	60.10			120.21%
56) 2,4,6-Tribromophenol	23.36	330	68768	41.69			41.69%
68) Terphenyl-d14	30.45	244	331470	47.01			94.02%
Target Compounds							**Qvalue**
2) Pyridine	3.82	79	259680	60.31	ug	m	93
5) Aniline	9.53	93	223881	55.24	ug		95
6) Phenol	9.69	94	377323	54.83	ug		72
7) bis(2-Chloroethyl)ether	9.53	93	236553	55.20		#	98
8) 2-Chlorophenol	9.84	128	295632	52.76		#	71
9) 1,3-Dichlorobenzene	10.25	146	292276	51.68			69
10) 1,4-Dichlorobenzene	10.44	146	305173	52.76			75
11) Benzyl alcohol	11.13	108	247608	46.58			22
12) 1,2-Dichlorobenzene	11.07	146	271733	49.39			62
13) 2-Methylphenol	11.70	108	239104	49.23			49
14) bis(2-chloroisopropyl)ethe	11.67	45	546963	53.46		#	91
15) 4-Methylphenol	12.25	108	312320	50.38			39
16) n-Nitroso-di-n-propylamine	12.20	70	210786	44.48		#	73
17) Hexachloroethane	12.11	117	165942	55.20		#	74
20) Nitrobenzene	12.56	77	285456	60.19			77
21) Isophorone	13.46	82	330221	51.81			94
22) 2-Nitrophenol	13.71	139	140436	51.82			67
23) 2,4-Dimethylphenol	14.09	107	290303	49.43			52
24) bis(2-Chloroethoxy)methane	14.38	93	277024	53.69			88
25) 2,4-Dichlorophenol	18.90	162	319032	42.82		#	40
26) 1,2,4-Trichlorobenzene	14.78	180	289620	52.97			54
27) Naphthalene	14.93	128	516768	51.05			94
28) Benzoic acid	14.62	105	72240	38.97			92
29) 4-Chloroaniline	15.38	127	183103	44.38			85
30) Hexachlorobutadiene	15.67	225	164517	55.87		#	65
31) 4-Chloro-3-methylphenol	17.20	107	223172	42.50		#	2
32) 2-Methylnaphthalene	17.31	142	482218	44.65		#	72
34) Hexachlorocyclopentadiene	18.12	237	162232	72.20		#	47

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS342.D
Acq On : 30 Mar 103 11:19 am
Sample : SSTD050
Misc : GCMS-A STRGHT
Quant Time: Mar 30 12:10 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35)	2,4,6-Trichlorophenol	18.46	196	178326	59.05			50
36)	2,4,5-Trichlorophenol	18.58	196	186570	59.02			49
38)	2-Chloronaphthalene	18.90	162	402990	58.39			75
39)	2-Nitroaniline	19.50	65	160489	46.40			50
40)	Dimethylphthalate	20.28	163	280362	51.58			96
41)	Acenaphthylene	20.26	152	496718	54.63		#	95
42)	2,6-Dinitrotoluene	20.46	165	90714	54.41			70
43)	3-Nitroaniline	20.87	138	107301	41.28		#	37
44)	Acenaphthene	20.87	153	571495	55.35			49
45)	2,4-Dinitrophenol	21.20	184	56288	40.60		#	76
46)	4-Nitrophenol	21.60	109	105782	39.28		#	19
47)	Dibenzofuran	21.40	168	448365	53.51			81
48)	2,4-Dinitrotoluene	21.69	165	115773	48.65			72
49)	Diethylphthalate	22.56	149	339817	47.54			94
50)	Fluorene	22.50	166	545298	51.69			60
51)	4-Chlorophenyl-phenylether	22.60	204	236056	51.91			61
52)	4-Nitroaniline	22.84	138	81118	33.13		#	66
54)	4,6-Dinitro-2-methylphenol	22.96	198	33975	38.61			100
55)	n-Nitrosodiphenylamine	23.05	169	289127	55.38			59
57)	4-Bromophenyl-phenylether	24.13	248	172903	53.65			43
58)	Hexachlorobenzene	24.51	284	116241	49.26			66
59)	Pentachlorophenol	25.14	266	84279	41.39			47
60)	Phenanthrene	25.50	178	500813	55.41			95
61)	Anthracene	25.65	178	489011	53.90			94
62)	Benzidine	29.76	184	27716	15.73	ug	#	79
63)	Carbazole	26.28	167	316573	50.21	ug		100
64)	Di-n-butylphthalate	27.70	149	443891	45.32			99
65)	Fluoranthene	29.21	202	435859	49.55		#	84
67)	Pyrene	29.84	202	552519	48.91		#	77
69)	Butylbenzylphthalate	31.99	149	205198	26.53			62
70)	Benzo[a]anthracene	33.22	228	581260	52.05			81
71)	3,3'-Dichlorobenzidine	33.29	252	104758	20.97		#	68
72)	Chyrsene	33.33	228	620243	54.34		#	92
73)	bis(2-Ethylhexyl)phthalate	33.63	149	257385	28.79		#	88
75)	Di-n-octylphthalate	35.56	149	393344	26.89			98
76)	Benzo[b]fluoranthene	36.75	252	651017	46.85		#	73
77)	Benzo[k]fluoranthene	36.84	252	639041	48.39		#	73
78)	Benzo[a]pyrene	38.06	252	623519	49.83		#	79
79)	Indeno[1,2,3-cd]pyrene	44.37	276	635511	53.53		m	65
80)	Dibenz[a,h]anthracene	44.60	278	787827	61.32		#	56
81)	Benzo[g,h,i]perylene	46.22	276	720103	51.43		#	42

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(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Instrument ID: 5970 A Calibration Date: 03/31/03 Time: 18:24

Lab File ID: AS345 Init. Calib. Date(s): 03/25/03 03/25/30

Init. Calib. Times: 15:21 19:13

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.457	1.376	.500	5.6	25.0
n-Nitroso-di-n-propylamine	1.194	1.182	.500	1.0	25.0
1,2,4-Trichlorobenzene	.552	.552	.200	0.0	25.0
Naphthalene	1.023	1.018	.700	0.5	25.0
2-Methylnaphthalene	1.091	1.035	.400	5.1	25.0
Acenaphthylene	2.044	2.093	1.300	-2.4	25.0
Acenaphthene	2.321	2.270	.800	2.2	25.0
Dibenzofuran	1.884	1.975	.800	-4.8	25.0
2,4-Dinitrotoluene	.535	.535	.200	0.0	25.0
Fluorene	2.372	2.467	.900	-4.0	25.0
Phenanthrene	1.085	1.105	.700	-1.9	25.0
Anthracene	1.089	1.128	.700	-3.6	25.0
Fluoranthene	1.056	1.098	.600	-4.0	25.0
Pyrene	1.056	0.949	.600	10.1	25.0
Benzo(a)anthracene	1.044	1.022	.800	2.1	25.0
Chrysene	1.067	1.032	.700	3.3	25.0
Benzo(b)fluoranthene	.973	0.881	.700	9.4	25.0
Benzo(k)fluoranthene	.925	0.883	.700	4.5	25.0
Benzo(a)pyrene	.876	0.842	.700	3.9	25.0
Indeno(1,2,3-cd)pyrene	0.832	0.805	.500	3.2	25.0
Dibenzo(a,h)anthracene	0.900	0.942	.400	-4.7	25.0
Benzo(g,h,i)perylene	0.981	1.001	.500	-2.1	25.0
Nitrobenzene-d5	.568	.532		6.3	
2-Fluorobiphenyl	1.357	1.368	.700	-0.9	25.0
Terphenyl-d14	.659	.665	.500	-0.9	25.0

(1) Cannot be separated from Diphenylamine

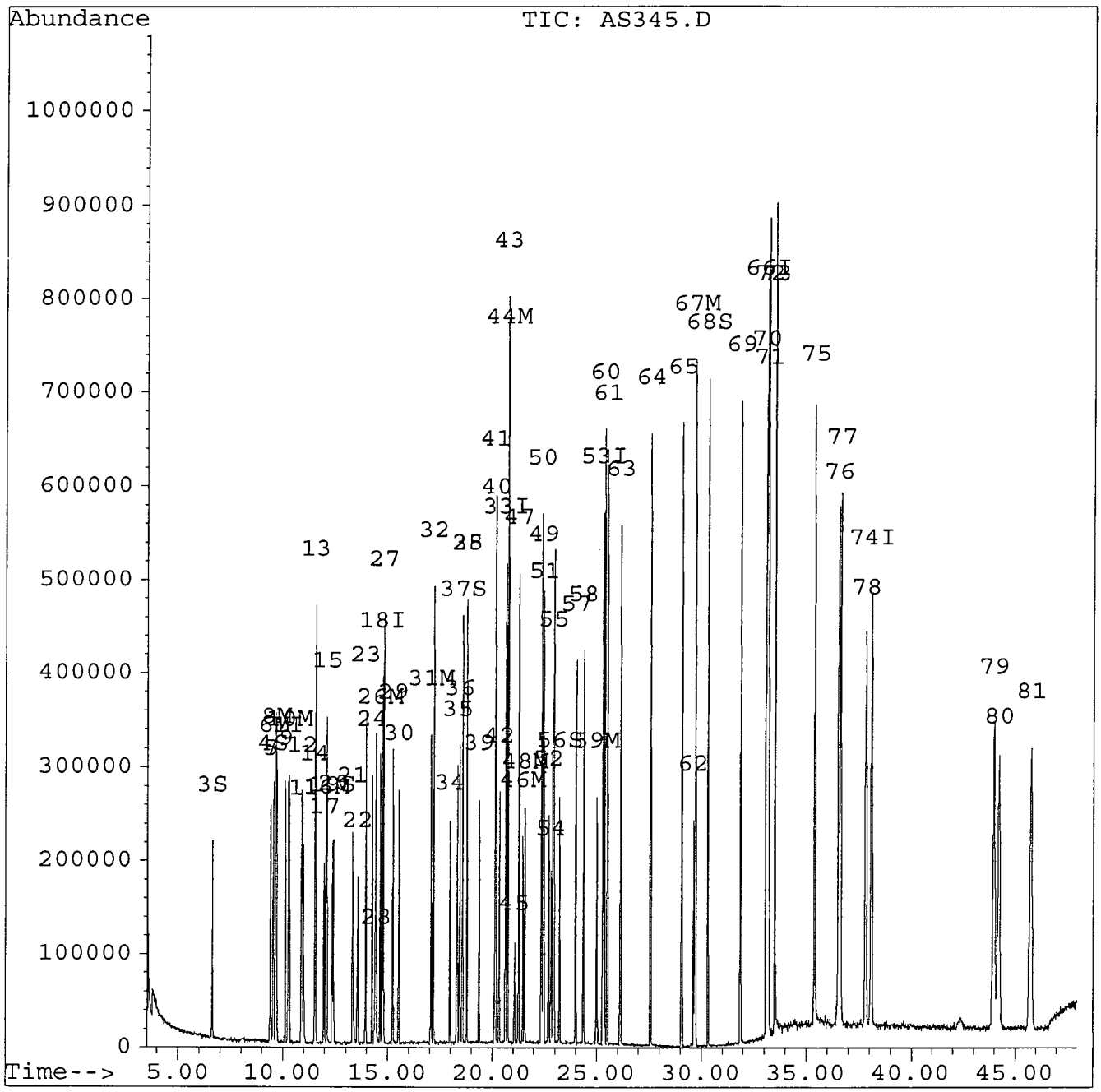
All other compounds must meet a minimum RRF of .010.

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS345.D
Acq On : 31 Mar 103 6:24 pm
Sample : SSTD050
Misc : GCMS-A
Quant Time: Apr 1 10:15 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 10:15:57 2003
Response via : Multiple Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS345.D Vial: 2
Acq On : 31 Mar 103 6:24 pm Operator:
Sample : SSTD050 Inst : 5970 - In
Misc : GCMS-A Multiplr: 1.00
Quant Time: Apr 1 10:15 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 10:15:57 2003
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.26	152	154049	40.00	ug		-0.22
18) Naphthalene-d8	14.74	136	445177	40.00			-0.22
33) Acenaphthene-d10	20.65	164	267643	40.00			-0.21
53) Phenanthrene-d10	25.31	188	600709	40.00			-0.22
66) Chyrsene-d12	33.13	240	840087	40.00			-0.21
74) Perylene-d12	38.10	264	1095817	40.00			-0.36
System Monitoring Compounds							**%Recovery**
3) 2-Fluorophenol	6.64	112	194595	46.06	ug		46.06%
4) Phenol-d5	9.53	99	282686	48.66	ug		48.66%
19) Nitrobenzene-d5	12.37	82	296180	46.87			93.73%
37) 2-Fluorobiphenyl	18.58	172	457821	50.44			100.87%
56) 2,4,6-Tribromophenol	23.23	330	199304	67.00			67.00%
68) Terphenyl-d14	30.32	244	698468	50.47			100.94%
Target Compounds							**Qvalue**
2) Pyridine	3.80	79	182408	43.66	ug	m	58
5) Aniline	9.41	93	186231	47.36	ug		96
6) Phenol	9.57	94	315565	47.26	ug		73
7) bis(2-Chloroethyl)ether	9.41	93	195704	47.07		#	99
8) 2-Chlorophenol	9.71	128	271178	49.88			68
9) 1,3-Dichlorobenzene	10.12	146	264267	48.16			70
10) 1,4-Dichlorobenzene	10.31	146	264975	47.21			74
11) Benzyl alcohol	11.00	108	248096	48.11			21
12) 1,2-Dichlorobenzene	10.93	146	249383	46.72			63
13) 2-Methylphenol	11.56	108	230857	48.99			50
14) bis(2-chloroisopropyl)ethe	11.54	45	463912	46.74		#	88
15) 4-Methylphenol	12.12	108	301781	50.18			39
16) n-Nitroso-di-n-propylamine	12.07	70	227664	49.52		#	75
17) Hexachloroethane	11.98	117	134470	46.10		#	75
20) Nitrobenzene	12.42	77	244962	45.93		#	79
21) Isophorone	13.33	82	346339	48.32			99
22) 2-Nitrophenol	13.59	139	140268	46.02			66
23) 2,4-Dimethylphenol	13.96	107	338243	51.21			52
24) bis(2-Chloroethoxy)methane	14.27	93	276661	47.67		#	88
25) 2,4-Dichlorophenol	18.78	162	428702	51.17		#	39
26) 1,2,4-Trichlorobenzene	14.65	180	307159	49.95			52
27) Naphthalene	14.81	128	566308	49.75			93
28) Benzoic acid	14.49	105	89362	42.86			88
29) 4-Chloroaniline	15.25	127	236769	51.03			91
30) Hexachlorobutadiene	15.53	225	173722	52.45		#	63
31) 4-Chloro-3-methylphenol	17.07	107	290802	49.24		#	1
32) 2-Methylnaphthalene	17.19	142	576126	47.43		#	71
34) Hexachlorocyclopentadiene	18.00	237	156191	46.21		#	46

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\AS345.D
Acq On : 31 Mar 103 6:24 pm
Sample : SSTD050
Misc : GCMS-A
Quant Time: Apr 1 10:15 19103

Vial: 2
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 10:15:57 2003
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
35)	2,4,6-Trichlorophenol	18.34	196	228018	50.19			50
36)	2,4,5-Trichlorophenol	18.44	196	248407	52.24			49
38)	2-Chloronaphthalene	18.78	162	540566	52.07			74
39)	2-Nitroaniline	19.38	65	256913	49.38		#	51
40)	Dimethylphthalate	20.16	163	420879	51.48			96
41)	Acenaphthylene	20.14	152	700067	51.18		#	95
42)	2,6-Dinitrotoluene	20.33	165	128527	51.25		#	63
43)	3-Nitroaniline	20.74	138	191955	49.09		#	35
44)	Acenaphthene	20.75	153	759451	48.90			49
45)	2,4-Dinitrophenol	21.08	184	77609	37.21			66
46)	4-Nitrophenol	21.47	109	202980	50.11		#	20
47)	Dibenzofuran	21.27	168	660773	52.42			79
48)	2,4-Dinitrotoluene	21.57	165	179043	50.02		#	64
49)	Diethylphthalate	22.45	149	535423	49.80			95
50)	Fluorene	22.36	166	825489	52.02			58
51)	4-Chlorophenyl-phenylether	22.48	204	370970	54.23			61
52)	4-Nitroaniline	22.72	138	187458	50.90			64
54)	4,6-Dinitro-2-methylphenol	22.83	198	77109	48.60			100
55)	n-Nitrosodiphenylamine	22.92	169	512898	54.48			59
57)	4-Bromophenyl-phenylether	24.00	248	327716	56.39		#	41
58)	Hexachlorobenzene	24.38	284	254356	59.77		#	56
59)	Pentachlorophenol	25.00	266	217288	59.18		#	46
60)	Phenanthrene	25.38	178	830089	50.93		#	95
61)	Anthracene	25.52	178	847178	51.78			95
62)	Benzidine	29.63	184	269293	84.78	ug		97
63)	Carbazole	26.15	167	564538	49.65	ug		100
64)	Di-n-butylphthalate	27.58	149	876513	49.62		#	96
65)	Fluoranthene	29.08	202	824575	51.98		#	83
67)	Pyrene	29.71	202	997042	44.97		#	77
69)	Butylbenzylphthalate	31.87	149	665611	43.85		#	58
70)	Benzo[a]anthracene	33.10	228	1073113	48.96			81
71)	3,3'-Dichlorobenzidine	33.17	252	511172	52.13		#	68
72)	Chyrsene	33.20	228	1083596	48.37		m	91
73)	bis(2-Ethylhexyl)phthalate	33.51	149	790105	45.03		#	90
75)	Di-n-octylphthalate	35.40	149	1139427	40.59			97
76)	Benzo[b]fluoranthene	36.54	252	1207410	45.28		#	70
77)	Benzo[k]fluoranthene	36.64	252	1210034	47.75		#	69
78)	Benzo[a]pyrene	37.84	252	1153435	48.04		#	76
79)	Indeno[1,2,3-cd]pyrene	43.98	276	1102415	48.39		m	64
80)	Dibenz[a,h]anthracene	44.22	278	1290340	52.34		#	53
81)	Benzo[g,h,i]perylene	45.76	276	1370946	51.03		#	45

227

(#) = qualifier out of range (m) = manual integration

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS340 Date Analyzed: 03/29/03
Instrument ID: 5970 A Time Analyzed: 15:04

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	115771.	10.41	406970.	14.89	203202.	20.79
	UPPER LIMIT	231542.	10.91	813940	15.39	406404.	21.29
	LOWER LIMIT	57886.	9.91	203485.	14.39	79071.	20.29
	EPA SAMPLE NO.						
1	MEGDD0132	145559.	10.40	364608.	14.87	166650.	20.77
2	MEGDD0134	156070.	10.39	414914.	14.87	158527.	20.77
3							
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21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS340 Date Analyzed: 03/29/03
Instrument ID: 5970 A Time Analyzed: 15:04

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	331381.	25.45	296398.	33.27	256490.	38.35
	UPPER LIMIT	662762.	25.95	592796.	33.77	512980.	38.85
	LOWER LIMIT	165690.	23.95	148199.	32.77	128245.	37.85
	EPA SAMPLE NO.						
1	MEGDD0132	311994.	25.44	349530.	33.26	509707.	38.32
2	MEGDD0134	258425.	25.44	303726.	33.25	416840.	38.31
3							
4							
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20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS342 Date Analyzed: 03/30/03
Instrument ID: 5970 A Time Analyzed: 11:19

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	158770.		10.39		395835.		14.87		177924.		20.78	
	UPPER LIMIT	317540.		10.89		791670		15.37		355848.		21.28	
	LOWER LIMIT	79385.		9.89		197918.		14.37		88962.		20.28	
	EPA SAMPLE NO.												
1	WBLK01	141750.		10.38		364478.		14.88		152189.		20.78	
2	WMSB 3/4/03	104200.		10.39		272968.		14.89		125392.		20.79	
3	MEGDD0240	157917.		10.40		384148.		14.89		136997.		20.78	
4													
5													
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20													
21													
22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS342 Date Analyzed: 03/30/03
Instrument ID: 5970 A Time Analyzed: 11:19

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	333124.		25.45		428034.		33.27		571083.		38.34	
	UPPER LIMIT	666248.		25.95		856068.		33.77		1142166.		38.84	
	LOWER LIMIT	166562.		23.95		214017.		32.77		285542.		37.84	
	EPA SAMPLE NO.												
1	WBLK01	242583.		25.44		299146.		33.27		443608.		38.33	
2	WMSB 3/4/03	250972.		25.45		317841.		33.27		423708.		38.34	
3	MEGDD0240	249411.		25.45		382683.		33.27		575286.		38.36	
4													
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18													
19													
20													
21													
22													

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS345 Date Analyzed: 03/31/03
Instrument ID: 5970 A Time Analyzed: 18:24

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	154049.		10.26		445177.		14.74		267643.		20.65	
	UPPER LIMIT	308098.		10.76		890354		15.24		535286.		21.15	
	LOWER LIMIT	77024.		9.76		222589.		14.24		133822.		20.15	
	EPA SAMPLE NO.												
1	MEGDIM0237	124221.		10.25		371770.		14.74		215729.		20.64	
2	MEGDIM0237 MS	102069.		10.25		292089.		14.73		172009.		20.63	
3	MEGDIM0237 MSD	142303.		10.24		435279.		14.74		261981.		20.64	
4	MEGDD0120	133397.		10.25		406448.		14.73		241269.		20.64	
5	MEGUIM0119	140327.		10.25		419957.		14.73		248964.		20.63	
6	MEGDSH8617	149569.		10.24		459024.		14.73		274909.		20.63	
7													
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16													
17													
18													
19													
20													
21													
22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120
Lab File ID (Standard): AS345 Date Analyzed: 03/31/03
Instrument ID: 5970 A Time Analyzed: 18:24

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	600709.	25.31	840087.	33.13	1095817.	38.10
	UPPER LIMIT	1201418.	25.81	1680174.	33.63	2191634.	38.60
	LOWER LIMIT	300355.	24.81	420044.	32.63	547909.	37.60
	EPA SAMPLE NO.						
1	MEGDIM0237	523912.	25.30	770786.	33.12	882138.	38.06
2	MEGDIM0237 MS	381527.	25.29	527393.	33.12	625968.	38.07
3	MEGDIM0237 MSD	583451.	25.29	798943.	33.11	966777.	38.06
4	MEGDD0120	537050.	25.30	766144.	33.12	939233.	38.07
5	MEGUIM0119	565627.	25.29	797114.	33.12	954877.	38.06
6	MEGDSH8617	642529.	25.29	901661.	33.11	1092591.	38.07
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

RAW QC

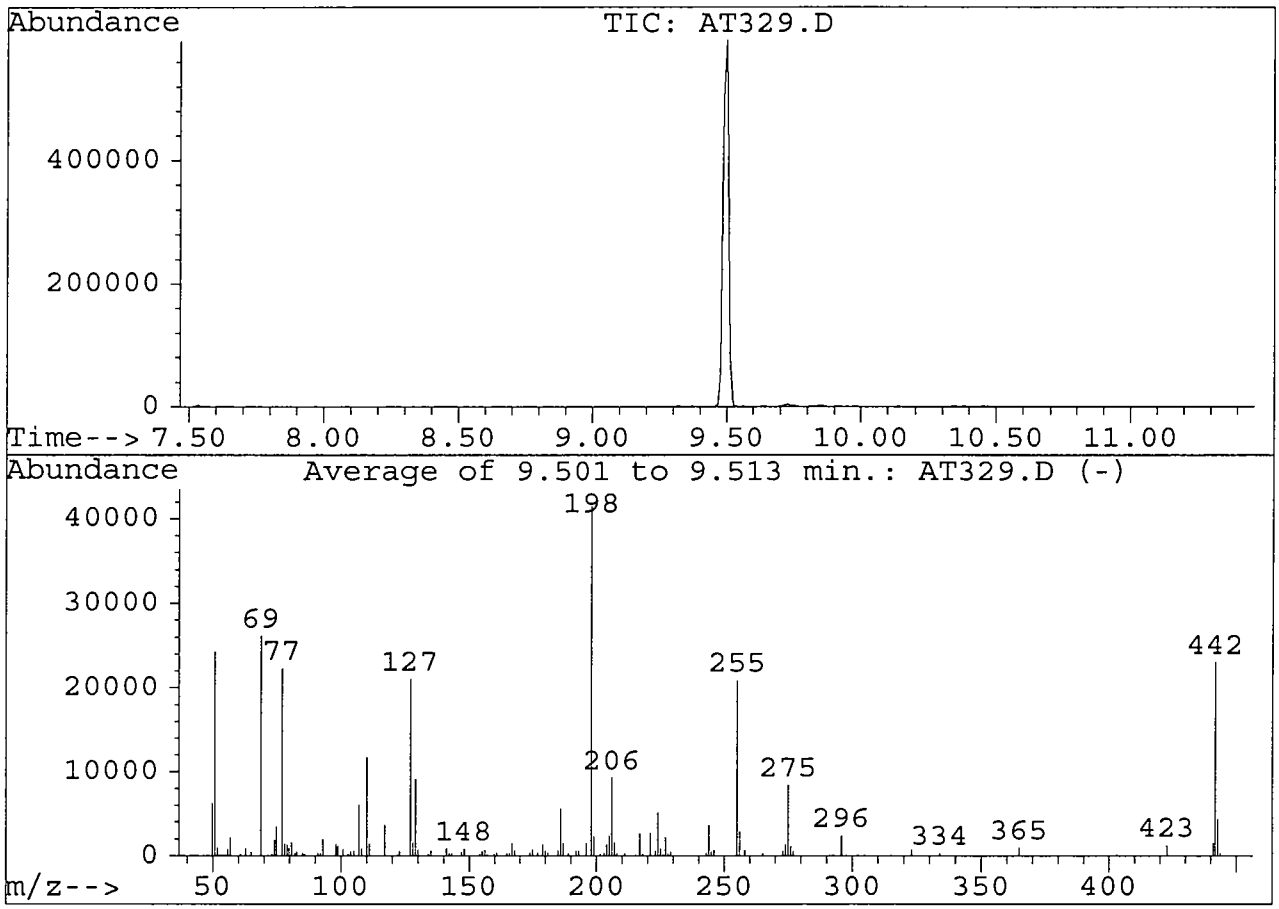
DATA

DFTPP

Data File : C:\HPCHEM\1\DATA\AT329.D
Acq On : 25 Mar 103 1:56 pm
Sample : DFTPP
Misc : GCMS-A

Vial: 1
Operator:
Inst : 5970 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration



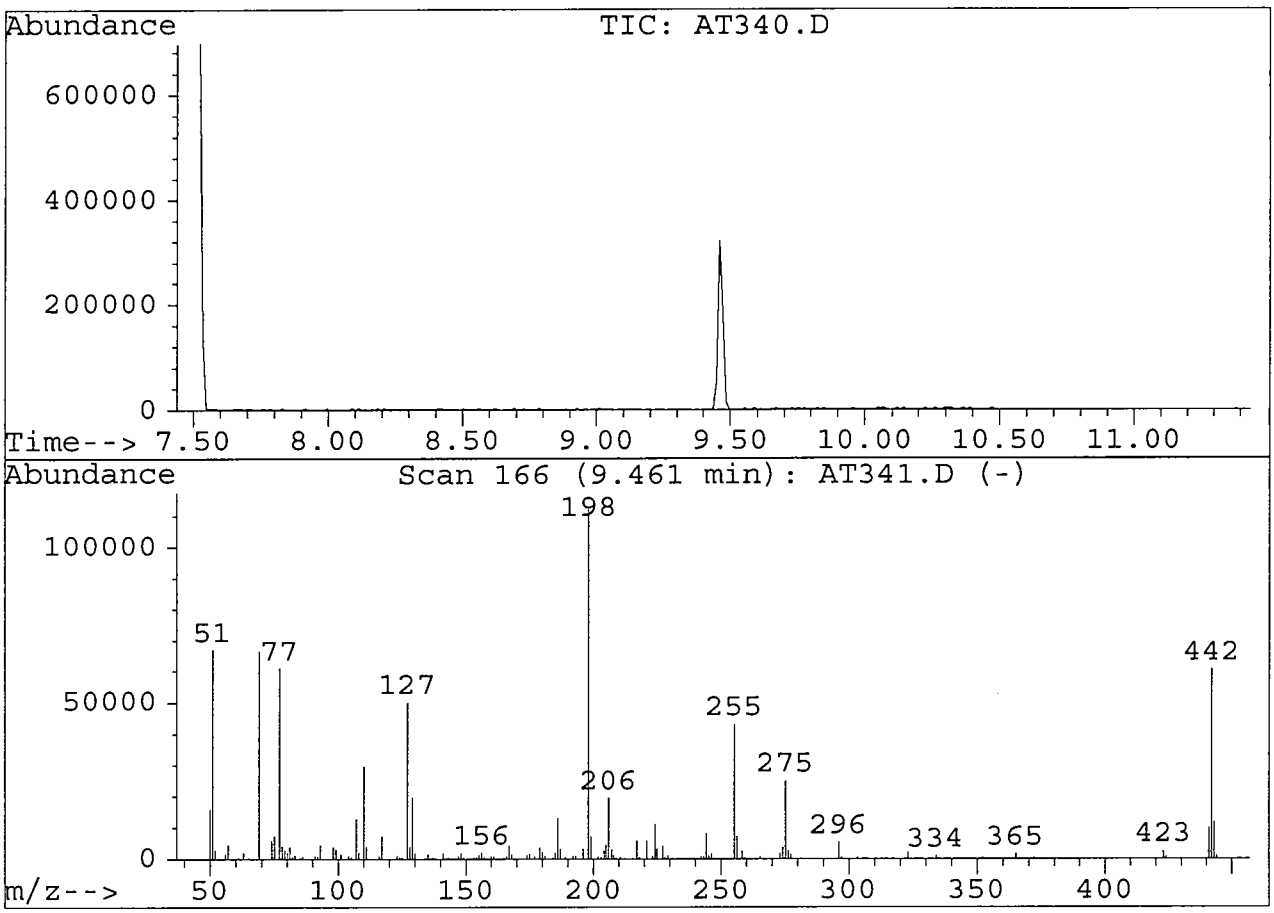
Peak Apex is scan: 166

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.6	24304	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	62.9	26118	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	50.6	21018	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	41498	PASS
199	198	5	9	5.6	2324	PASS
275	198	10	30	20.4	8448	PASS
365	198	1	100	2.4	985	PASS
441	443	0	100	35.7	1538	PASS
442	198	40	100	55.4	22994	PASS
443	442	17	23	18.7	4305	PASS

Data File : C:\HPCHEM\1\DATA\AT340.D
Acq On : 29 Mar 103 2:45 pm
Sample : DFTPP
Misc : GCMS-A STRGHT

Vial: 1
Operator:
Inst : 5970 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration



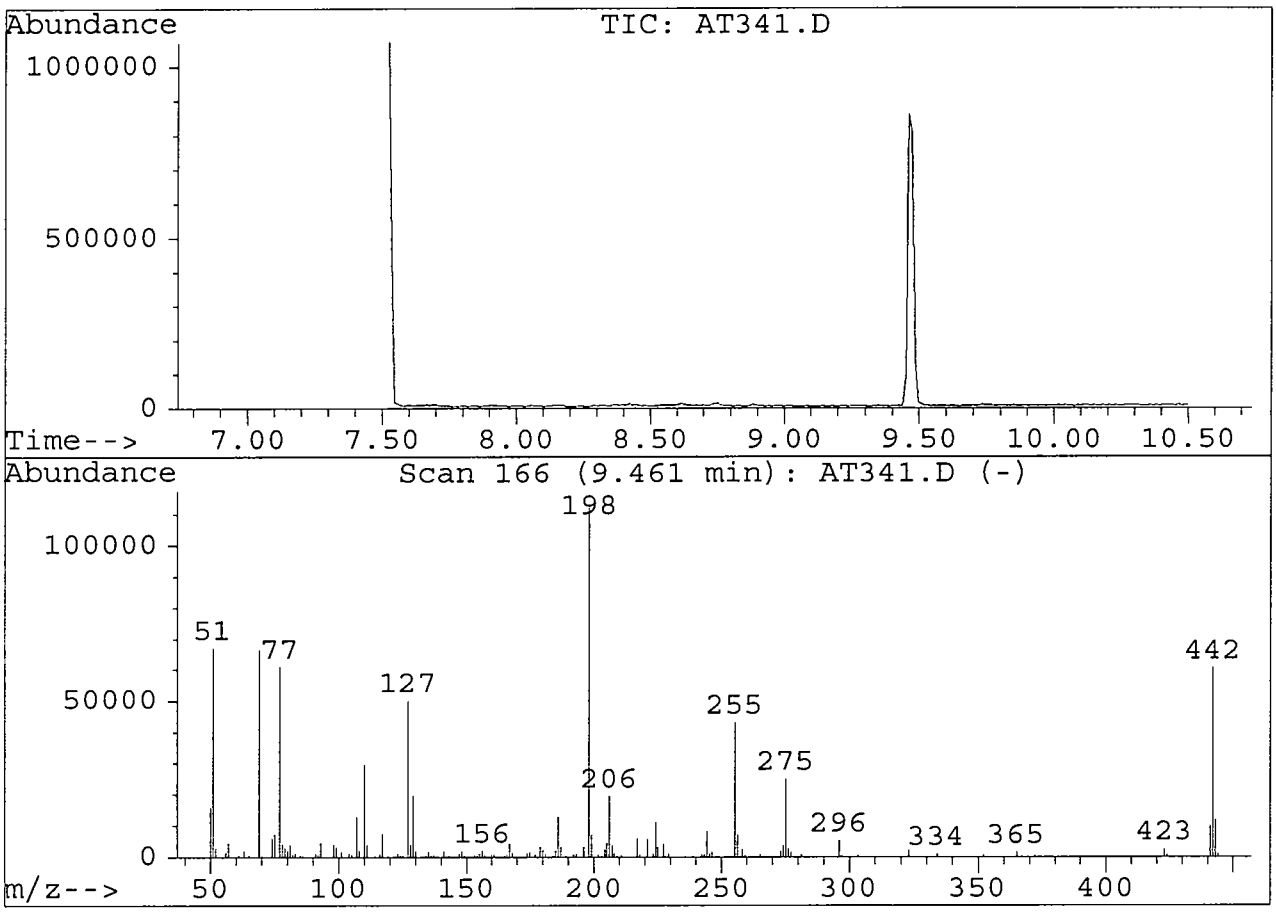
Peak Apex is scan: 164

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	59.8	67029	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	59.6	66744	PASS
70	69	0	2	0.8	510	PASS
127	198	40	60	44.6	50040	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	112080	PASS
199	198	5	9	6.5	7294	PASS
275	198	10	30	22.2	24920	PASS
365	198	1	100	1.5	1648	PASS
441	443	0	100	83.1	9838	PASS
442	198	40	100	54.1	60688	PASS
443	442	17	23	19.5	11833	PASS

Data File : C:\HPCHEM\1\DATA\AT341.D
Acq On : 30 Mar 103 10:03 am
Sample : DFTPP
Misc : GCMS-A STRGHT

Vial: 1
Operator:
Inst : 5970 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration



Peak Apex is scan: 105

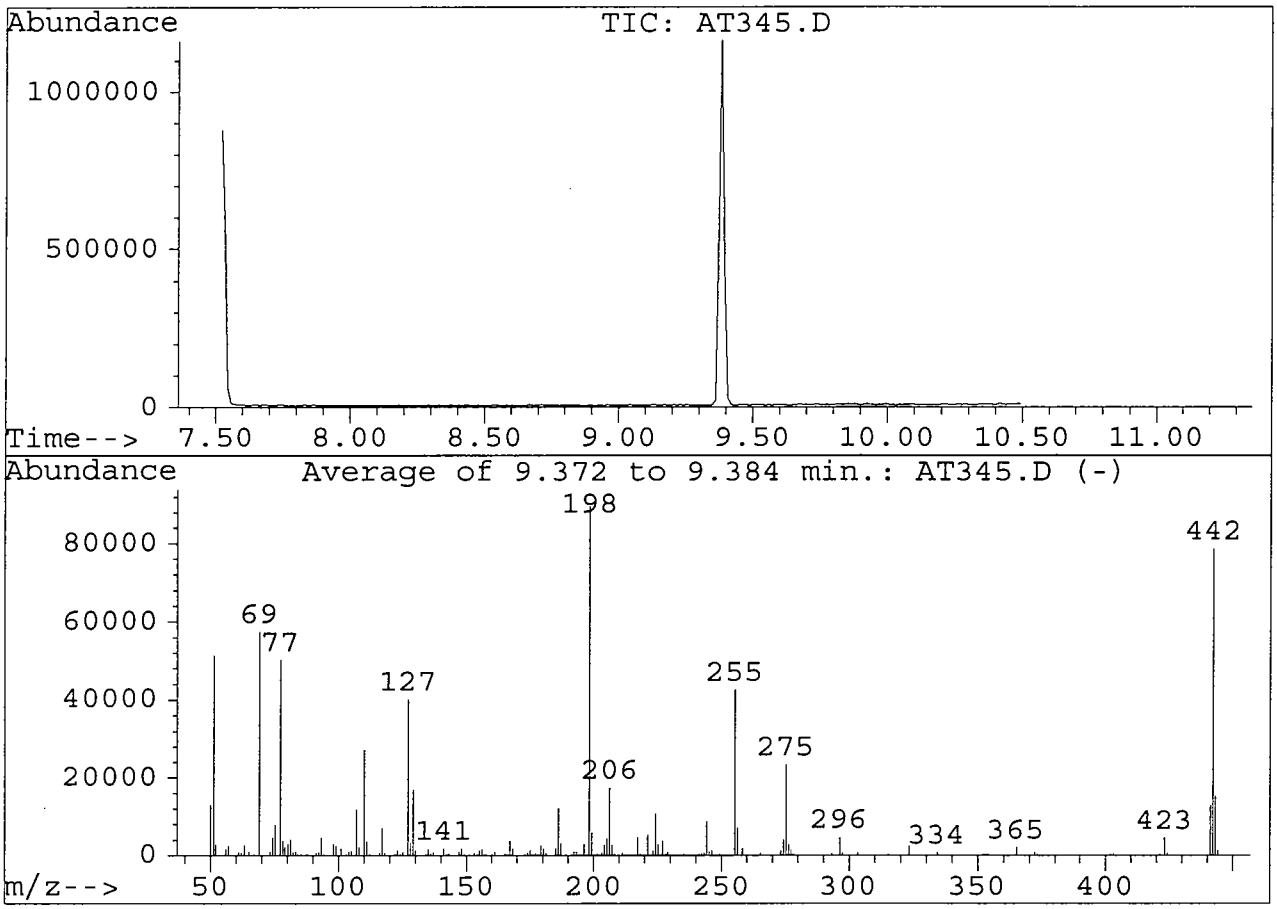
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	59.9	67119	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	59.6	66744	PASS
70	69	0	2	0.8	510	PASS
127	198	40	60	44.6	50040	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	112080	PASS
199	198	5	9	6.5	7294	PASS
275	198	10	30	22.2	24920	PASS
365	198	1	100	1.5	1648	PASS
441	443	0	100	83.1	9838	PASS
442	198	40	100	54.1	60688	PASS
443	442	17	23	19.5	11833	PASS

DFTPP

Data File : C:\HPCHEM\1\DATA\AT345.D
Acq On : 31 Mar 103 6:06 pm
Sample : DFTPP
Misc : GCMS-A

Vial: 1
Operator:
Inst : 5970 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\ENVDEF.M
Title :



Peak Apex is scan: 157

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.2	51305	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	64.1	57466	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	44.8	40186	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	89659	PASS
199	198	5	9	6.6	5949	PASS
275	198	10	30	26.2	23447	PASS
365	198	1	100	2.4	2124	PASS
441	443	0	100	84.7	12842	PASS
442	198	40	100	87.8	78730	PASS
443	442	17	23	19.3	15158	PASS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WBLK01

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: WBLK 3/4/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3158

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
129-00-0	Pyrene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

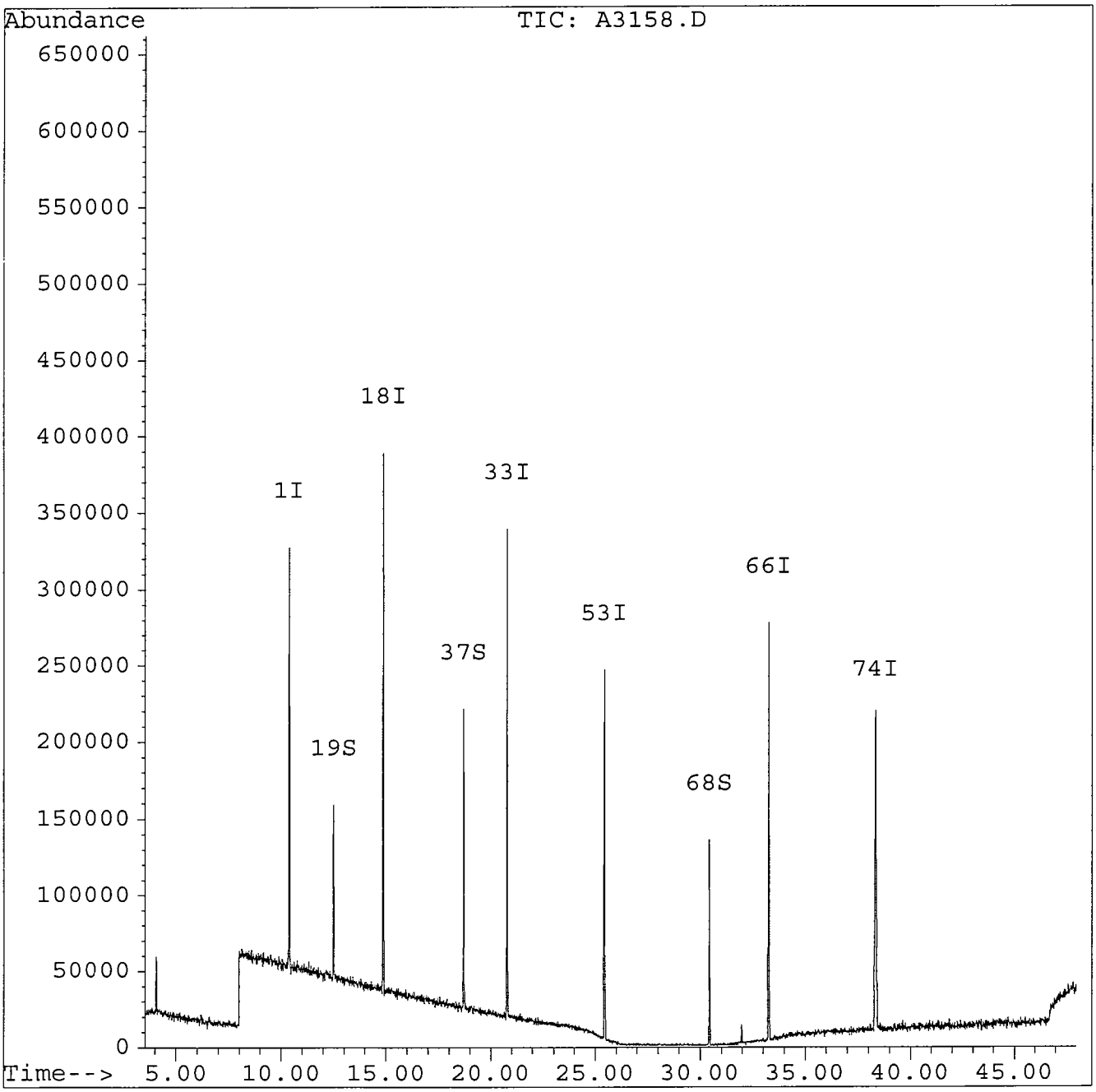
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3158.D
Acq On : 30 Mar 103 2:10 pm
Sample : WBLK 3/4/03
Misc : GCMS-A
Quant Time: Apr 1 11:29 19103

Vial: 5
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



240

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3158.D
Acq On : 30 Mar 103 2:10 pm
Sample : WBLK 3/4/03
Misc : GCMS-A
Quant Time: Apr 1 11:29 19103

Vial: 5
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.38	152	141750	40.00	ug	-0.02
18) Naphthalene-d8	14.88	136	364478	40.00		-0.01
33) Acenaphthene-d10	20.78	164	152189	40.00		0.00
53) Phenanthrene-d10	25.44	188	242583	40.00		-0.01
66) Chyrsene-d12	33.27	240	299146	40.00		0.00
74) Perylene-d12	38.33	264	443608	40.00		-0.01
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.50	82	165906	32.66		65.32%
37) 2-Fluorobiphenyl	18.70	172	187793	33.64		67.27%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.45	244	107915	22.42		44.84%

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A3158.D METH0A.M Tue Apr 01 11:29:37 2003 REPORT Page 1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WMSB 3/4/03

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: WMSB 3/4/03

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3159

Level: (low/med) LOW Date Received:

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

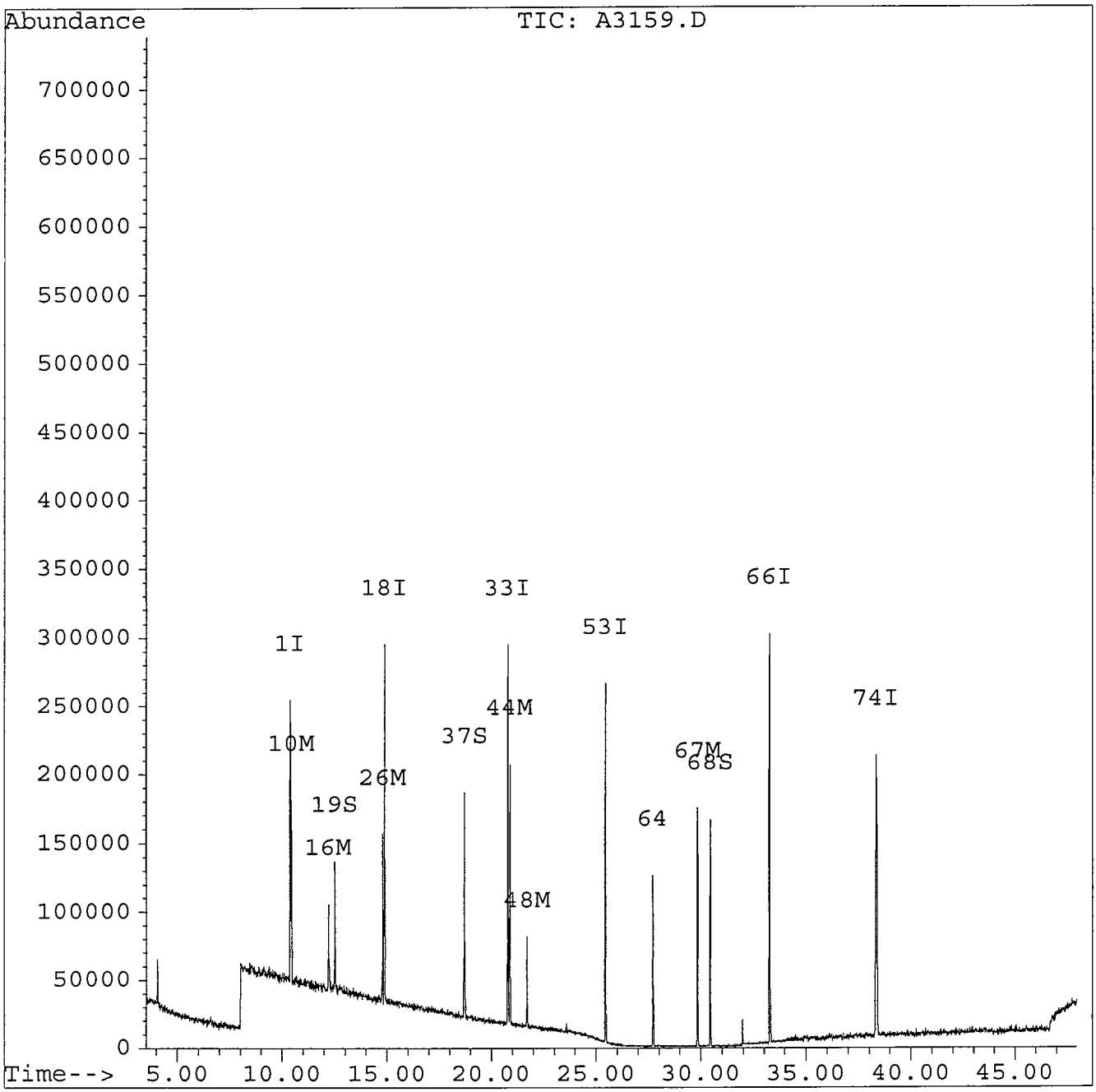
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	16.	
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	11.	
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Data File : C:\HPCHEM\1\DATA\A3159.D
Acq On : 30 Mar 103 3:08 pm
Sample : WMSB 3/4/03
Misc : GCMS-A
Quant Time: Apr 1 11:35 19103

Vial: 6
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 11:30:35 2003
Response via : Single Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3159.D
Acq On : 30 Mar 103 3:08 pm
Sample : WMSB 3/4/03
Misc : GCMS-A
Quant Time: Apr 1 11:35 19103

Vial: 6
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Tue Apr 01 11:30:35 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.39	152	104200	40.00	ug	-0.02
18) Naphthalene-d8	14.89	136	272968	40.00		0.00
33) Acenaphthene-d10	20.79	164	125392	40.00		0.00
53) Phenanthrene-d10	25.45	188	250972	40.00		0.00
66) Chyrsene-d12	33.27	240	317841	40.00		0.00
74) Perylene-d12	38.34	264	423708	40.00		0.00
System Monitoring Compounds						%Recovery
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.51	82	140601	36.96		73.92%
37) 2-Fluorobiphenyl	18.71	172	165030	35.88		71.75%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.46	244	134130	26.23		52.46%
Target Compounds						Qvalue
10) 1,4-Dichlorobenzene	10.45	146	112492	27.65		74
16) n-Nitroso-di-n-propylamine	12.22	70	68877	20.21	#	70
26) 1,2,4-Trichlorobenzene	14.79	180	113677	30.10		54
44) Acenaphthene	20.88	153	254113	31.07		48
48) 2,4-Dinitrotoluene	21.71	165	39274	27.92	#	77
64) Di-n-butylphthalate	27.72	149	157357	23.16	#	94
67) Pyrene	29.85	202	216241	21.16	#	79

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237 MS

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237 MS

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3190

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	14.	
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	13.	
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

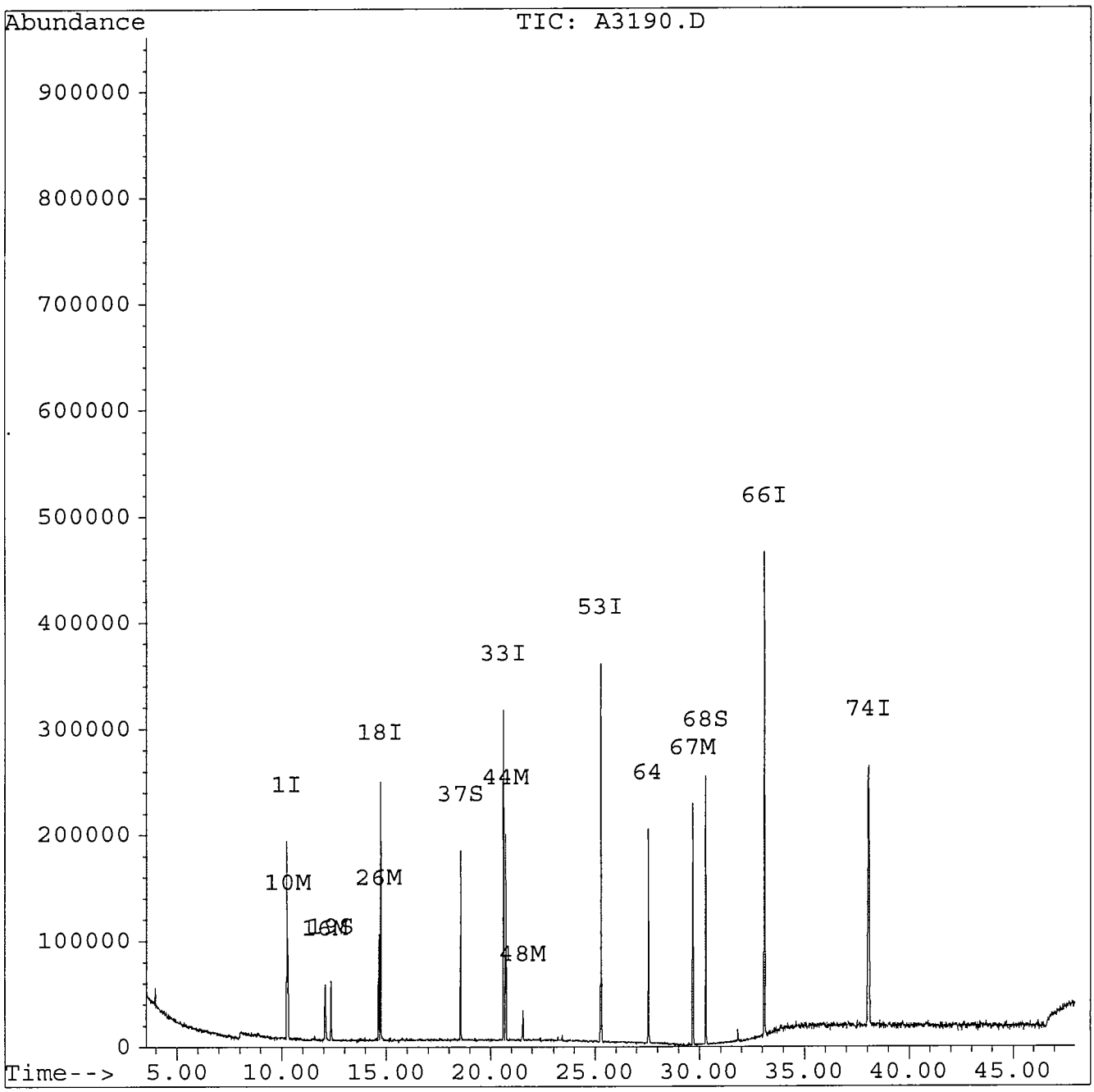
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3190.D
Acq On : 1 Apr 103 12:06 am
Sample : MEGDIM0237 MS
Misc : GCMS-A 030228H01MS
Quant Time: Apr 1 10:41 19103

Vial: 8
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3190.D Vial: 8
Acq On : 1 Apr 103 12:06 am Operator:
Sample : MEGDIM0237 MS Inst : 5970 - In
Misc : GCMS-A 030228H01MS Multiplr: 1.00
Quant Time: Apr 1 10:41 19103

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.25	152	102069	40.00	ug	0.00
18) Naphthalene-d8	14.73	136	292089	40.00		0.00
33) Acenaphthene-d10	20.63	164	172009	40.00		-0.02
53) Phenanthrene-d10	25.29	188	381527	40.00		-0.02
66) Chyrsene-d12	33.12	240	527393	40.00		-0.02
74) Perylene-d12	38.07	264	625968	40.00		-0.02
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.37	82	95922	24.68		49.36%
37) 2-Fluorobiphenyl	18.57	172	183621	31.20		62.41%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.30	244	249083	28.40		56.81%
Target Compounds						**Qvalue**
10) 1,4-Dichlorobenzene	10.31	146	94273	26.85	#	73
16) n-Nitroso-di-n-propylamine	12.08	70	62275	20.64	#	70
26) 1,2,4-Trichlorobenzene	14.65	180	109979	27.29		54
44) Acenaphthene	20.74	153	283839	29.08		49
48) 2,4-Dinitrotoluene	21.56	165	22284	9.68	#	66
64) Di-n-butylphthalate	27.57	149	268297	24.10	#	96
67) Pyrene	29.70	202	330943	26.44	#	75

(#) = qualifier out of range (m) = manual integration
A3190.D METH0A.M Tue Apr 01 10:41:26 2003 REPORT Page 1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237 MSD

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0310 SAS No.: SDG No.: MEGDD0120

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0237 MSD

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: A3191

Level: (low/med) LOW Date Received: 02/28/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/04/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 04/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	19.	
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	19.	
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

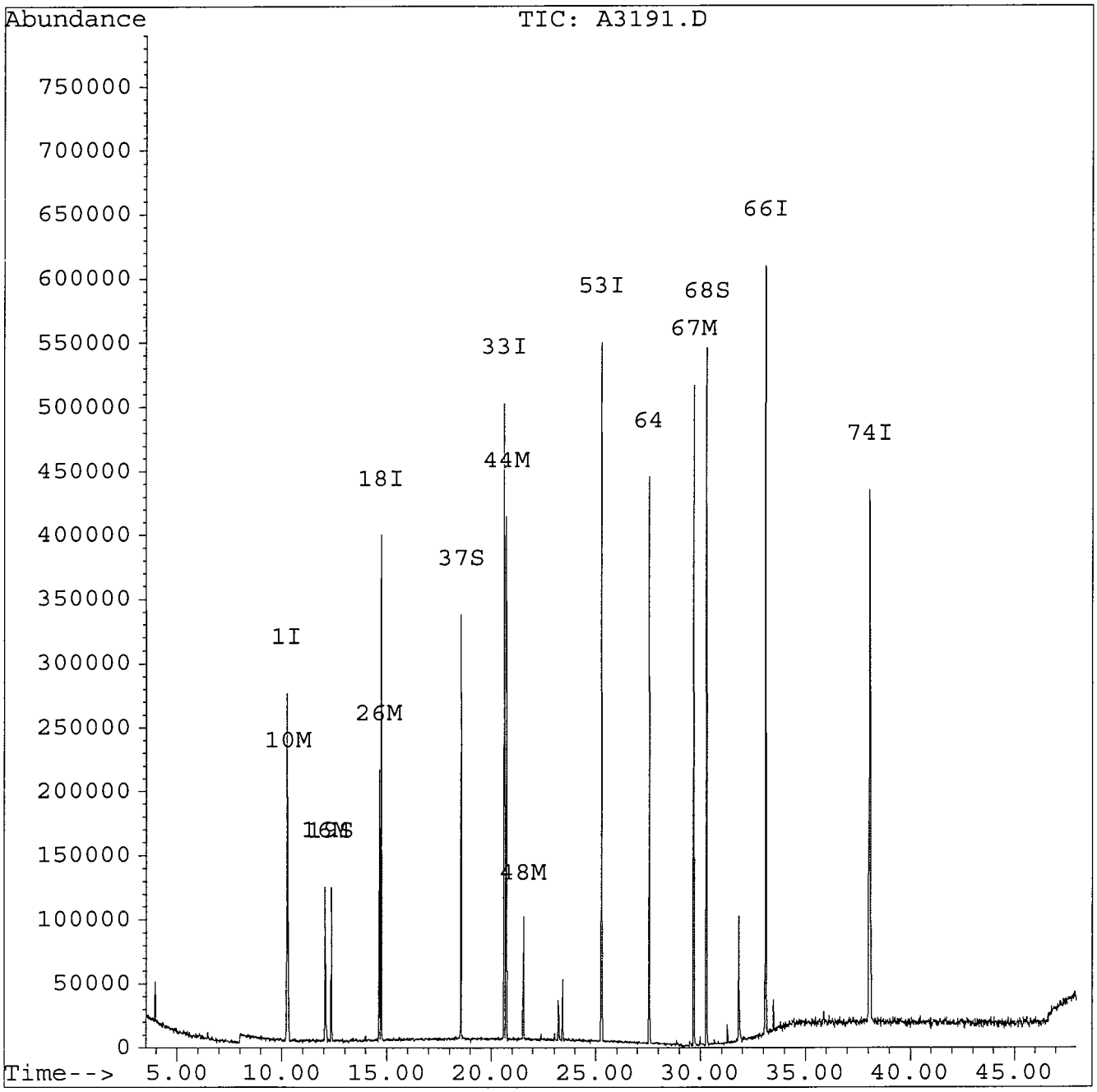
(1) - Cannot be separated from diphenylamine

Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3191.D
Acq On : 1 Apr 103 1:03 am
Sample : MEGDIM0237
Misc : GCMS-A 030228H01MSD
Quant Time: Apr 1 10:43 19103

Vial: 9
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration



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Quantitation Report

Data File : C:\HPCHEM\1\DATA\A3191.D
Acq On : 1 Apr 103 1:03 am
Sample : MEGDIM0237
Misc : GCMS-A 030228H01MSD
Quant Time: Apr 1 10:43 19103

Vial: 9
Operator:
Inst : 5970 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\METH0A.M
Title : CLP BNA Calibration
Last Update : Wed Mar 26 13:01:11 2003
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.24	152	142303	40.00	ug	-0.01
18) Naphthalene-d8	14.74	136	435279	40.00		0.00
33) Acenaphthene-d10	20.64	164	261981	40.00		0.00
53) Phenanthrene-d10	25.29	188	583451	40.00		-0.02
66) Chyrsene-d12	33.11	240	798943	40.00		-0.02
74) Perylene-d12	38.06	264	966777	40.00		-0.04
System Monitoring Compounds						**%Recovery**
3) 2-Fluorophenol	0.00	112	0	0.00	ug	0.00%
4) Phenol-d5	0.00	99	0	0.00	ug	0.00%
19) Nitrobenzene-d5	12.36	82	193694	33.44		66.88%
37) 2-Fluorobiphenyl	18.57	172	362604	40.46		80.91%
56) 2,4,6-Tribromophenol	0.00	330	0	0.00		0.00%
68) Terphenyl-d14	30.31	244	549603	41.37		82.74%
Target Compounds						**Qvalue**
10) 1,4-Dichlorobenzene	10.30	146	178497	36.46	#	74
16) n-Nitroso-di-n-propylamine	12.06	70	131591	31.29	#	74
26) 1,2,4-Trichlorobenzene	14.64	180	207935	34.62		53
44) Acenaphthene	20.73	153	554017	37.26		48
48) 2,4-Dinitrotoluene	21.56	165	69111	19.72	#	64
64) Di-n-butylphthalate	27.57	149	619746	36.40	#	97
67) Pyrene	29.69	202	718854	37.91	#	75

250

(#) = qualifier out of range (m) = manual integration

CLP

SAMPLE CALCULATIONS FOR SEMI-VOLATILE ORGANICS:

1) RRF of Acenaphthene from the STD050 analyzed on 3/31/03:

$$= \frac{\text{area of Acenaphthene in std.}}{\text{area of internal std}} \times \frac{\text{concentration of internal standard.}}{\text{concentration of standard}}$$

$$= \frac{759451}{267643} \times \frac{40}{50} = 2.270$$

2) Concentration of Acenaphthene in sample MEGDIM0237 MS (AES sample number 030228H-01 MS):

$$\text{ug/L} = \frac{\text{area of Acenaphthene in sample}}{\text{area of internal standard in sample}} \times \frac{\{\text{amount of internal std. (ng)}\}\{\text{Vol. extract (ul)}\}(\text{Df})}{\{\text{Vol. extracted (ml)}\}(\text{RRF})\{\text{Vol. injected(uL)}\}}$$

$$= \frac{283839}{172009} \times \frac{(40)(1000)(1)}{(1000)(2.270)(2)} = 14.5 \text{ ug/L}$$

which is reported as 15 ug/L on the Form I for Semi-Volatile Organics

3) Calculation of spike recovery for Acenaphthene for MEGDIM0237 Matrix Spike:

$$\text{Percent spike recovery} = \frac{\text{quantity determined by analysis}}{\text{quantity added to sample}} \times 100$$

$$\text{\% recovery of Acenaphthene} = \frac{(14.5 - 0.0)}{25.0} \times 100 = 58.0\ \%$$

Analyst: UHT
Date Extracted: 3/4/03
Solvent 1 Lot No.: MeCl2 42317 (246 247)
Solvent 2 Lot No.:

Sodium Sulfate Lot No.: 148308
NaOH Lot No: 10703 NaOH
Acid Lot No.: —
Internal Standard Lot No.: 020618 ISTD

BNA Surrogate Lot No.: —
B/N Surrogate Lot No.: 030225WBN
Acid Surrogate Lot No.: —
B/N Spike Solution Lot No.: 021219WBNSPK
Acid Spike Solution Lot No.: —

Client (Optional)	Sample ID AES/Client	Matrix	Wt/Vol Sample	Analysis Type	pH Basic	pH Acid	Spike Added	Surr. Added	Final Volume	Date Conc.	Comments
	UBLK 3/4/03	DI	1L	CLP PAH				1ml B/N	1.0	3/6A	1A
	UMSB 3/4/03	↓	1L	↓			1ml B/N	↓	↓	↓	2A
	030228 H01	W	1L							3/7A	3A
	2	↓	900mLs							↓	4A
	3		950ml								3B
	4		930ml								4B
	5		980ml							3/7B	5B
	7		800ml							↓	2B
	9	↓	960mL	↓			↓	↓	↓	↓	6B
	MS H01		1L				1ml B/N			3/7A	5A
	MSD H01	↓	1L	↓			↓	↓	↓	↓	6A
	030228023-003H	W	1L	B/N						3/6A	1C
	-005I	↓	↓	↓							3C DBC?
	228039-001B	W	↓	PAH				↓	↓	↓	4C Dmelly
	-002B	↓	↓	↓							5C

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
	3/28			AT334	OK				
				AS339	qcal'd				
	143147			A3139	030314027-001	6 1/100	-D-	OK	
	430477			A3140	326B01	TOT	-↓√√-√	all ↑	
	263260			A3141	B02	↓1/10	-D-	↑↑√√√	
	513224			A3142	-314027-C016	5	10↑ √ √√√√	√↑√√↑↑	
	703251			A3143	326B02	TOT	-↓√√ -√	OK	
	777146								
		—	Col. maintenance	—					
	3/29/03			AT340	OK				
				AS340	qcal'd				
				A3144	SBLK 2/21/03		OK	all ↑	
	115771			A3145	030221A01		OK	↓	
	406970			A3146	WBLK 3/4		OK	√√√↑↑↑	
	203202			A3149	LCSD 3/4		OK	√√√ ↑↑↑	
	331381			A3148	030228A01		OK	√√√√ ↑↑	
	296398			A3149	2		OK	√√√√√ ↑	
	256490			A3150	3		OK	√√√√↑↑	
				A3151	4		OK	√√√√ ↑↑	
				A3152	5		OK	√√√√ ↑↑	
				A3153	7	✓	OK	OK	
				A3154	9	✓	OK	OK	
				A3155	SBLK 2/21		OK	↑√√↑↑↑	
									253

REVIEW _____ DATE _____

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks		Comments
							Surrogate Check	Internal Std Check	
	3/30			AT341	OK				
				AS341	AS342				
	158770.			A3156	SBLK 2/21	✓	OK	OK	
	395835			57	030221A01		OK	↑↑√√√	
	177924			58	LLG 3/4		OK	OK	
	333124			59	LLM 3/4		OK	OK	
	428034			A3160	030228A01		OK	√√√↓↓√	
	571083			61	2		OK	√√↓↓↓↓	
				62	3		OK	√√↓↓↓↓	
				63	4		OK	OK	
				64	5		OK	√√↓↓↓↓	
				65	MS 1		OK	√√√√↓↓	
				66	MSD 1		OK	√√√↓↓↓	
				67	~~DUP 25/100~~		OK	↑↑↑√√√	030221A01
				AT343	OK				
				AS343	Weird - off files to curve				
	134303			A3168	SBL 3/19		OK	√√√↓↓√	
	358618			69	318627-1A		OK	√↑↑↑√√	NO HITS
	172711			70	2A		OK	OK	
	359506			71	3A		OK	OK	
	489916			72	4A		OK	↑↑↑↑√√	
	693997			73	5A		OK	↑↑↑↑√√	
				74	6A		OK	↑↑↑↑√√	↓
				75	LCS LK 3/20		OK	OK	
				76	319038-15		OK	OK	NO HITS
				77	319040-16		√√√√√	√√↓↓↓↓	OK

REVIEW _____ DATE 254

Analyst	Date	Time	Job #	File ID	Sample ID	DF	QA/QC Checks: Surrogate Check	QA/QC Checks: Internal Std Check	Comments
				A3178	MB 3/11		OK	OK	Acids out of bat
				79	MB LCS 3/14				
				80	SB LCS 3/13		run stopped by me ... MHT		
				81	MB 25/100		↓		
MHT	3/31/03			AT344	QC				
				AS344	qc'd				
	109066			A3181	030327654-1A		OK	99 ✓✓✓	2MN in this cell.
	305873			82	-3A				
	101467			83	-2A				
	361862			84	328016-001A				
	529419								
	664485								
				AT345					
				AS345	qc'd				
				A3185	WBLK 3/28		OK	OK	
	154049			A3186	SBLK 3/28		OK	OK	NO HITS
	445177			A3187	030328001-1A		22 ✓✓✓14✓	OK	NO HITS Neutral
	267643			A3188	2A		OK	OK	NO HITS
	600709			A3189	030328H01		OK	OK	
	840087			A3190	MS		OK	OK	
	1095817			A3191	MSD		OK	OK	
				A3192	- H02		OK	OK	
				A3193	- H03		OK	OK	
				A3194	- H05		OK	OK	
				A3195	030319041-001A		OK	↓✓✓✓	

REVIEW _____ DATE _____

INORGANIC - METALS

ANALYSIS

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ADIRONDACK_ENVIRONMENTAL_ Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.: MEGDD0120

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
_MEGDD0120_____	_MEGDD0120___
_MEGDD0120_F___	_MEGDD0120_F_
_MEGDD0132_____	_MEGDD0132___
_MEGDD0132_F___	_MEGDD0132_F_
_MEGDD0134_____	_MEGDD0134___
_MEGDD0134_F___	_MEGDD0134_F_
_MEGDD0240_____	_MEGDD0240___
_MEGDD0240_F___	_MEGDD0240_F_
_MEGDIM0237____	_MEGDIM0237__
_MEGDIM0237_D__	_MEGDIM0237_D
_MEGDIM0237_F__	_MEGDIM0237_F
_MEGDIM0237_F_D	_MEGDIM0237_F_D
_MEGDIM0237_F_S	_MEGDIM0237_F_S
_MEGDIM0237_S__	_MEGDIM0237_S
_MEGDSH8617____	_MEGDSH8617__
_MEGUIM0119_____	_MEGUIM0119__
_MEGUIM0119_F___	_MEGUIM0119_F
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES_

Were ICP background corrections applied ? Yes/No YES_
If yes - were raw data generated before application of background corrections ? Yes/No NO__

Comments:

_____
_____
_____
_____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0120

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0120__

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~550~~		N R	P
7440-36-0	Antimony	3.6	B		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	400			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	15.8	B		P
7439-89-6	Iron	2550			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	60.8			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	8.1	B		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0120F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0120F_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	~~151~~	~~B~~	~~EN~~ R	P	
7440-36-0	Antimony	2.5	U		P	
7440-38-2	Arsenic	~~5.6~~	~~B~~	~~N~~ J	P	
7440-39-3	Barium	784			P	
7440-41-7	Beryllium				NR	
7440-43-9	Cadmium				NR	
7440-70-2	Calcium				NR	
7440-47-3	Chromium	5.9	B		P	
7440-48-4	Cobalt				NR	
7440-50-8	Copper	2.0	B		P	
7439-89-6	Iron	425		E J	P	
7439-92-1	Lead	~~3.7~~		~~N~~ J	P	R
7439-95-4	Magnesium				NR	
7439-96-5	Manganese	35.2		EN J	P	
7439-97-6	Mercury	~~0.13~~	~~U~~	~~N~~ J	AV	R
7440-02-0	Nickel	1.0	U		P	
7440-09-7	Potassium				NR	
7782-49-2	Selenium	~~2.9~~	~~B~~	~~N~~ J	P	R
7440-22-4	Silver	1.8	U		P	
7440-23-5	Sodium				NR	
7440-28-0	Thallium				NR	
7440-62-2	Vanadium	3.1	U		P	
7440-66-6	Zinc	36.6		N J	P	
7440-42-8	Boron				NR	

AMK 6/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0132 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0132_F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	~~2100~~		~~EN~~ R	P	
7440-36-0	Antimony	8.4	B		P	
7440-38-2	Arsenic	8.8	B	N J	P	
7440-39-3	Barium	521			P	
7440-41-7	Beryllium				NR	
7440-43-9	Cadmium				NR	
7440-70-2	Calcium				NR	
7440-47-3	Chromium	4.8	B		P	
7440-48-4	Cobalt				NR	
7440-50-8	Copper	7.3	B		P	
7439-89-6	Iron	49.4	B		P	
7439-92-1	Lead	~~1.3~~	U	~~N~~ J	P	UJ
7439-95-4	Magnesium				NR	
7439-96-5	Manganese	1.1	B	EN J	P	
7439-97-6	Mercury	~~0.13~~	U	N J	AV	R
7440-02-0	Nickel	4.6	B	J	P	
7440-09-7	Potassium				NR	
7782-49-2	Selenium	~~6.7~~		N J	P	R
7440-22-4	Silver	1.8	U		P	
7440-23-5	Sodium				NR	
7440-28-0	Thallium				NR	
7440-62-2	Vanadium	4.1	B	J	P	
7440-66-6	Zinc	58.1		N J	P	
7440-42-8	Boron				NR	

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0134

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0134__

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~.569~~		~~N~~ R	P
7440-36-0	Antimony	2.9	B		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	239			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.5	B		P
7439-89-6	Iron	14700			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	248			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.5	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	45.9			P
7440-42-8	Boron				NR

AMK 6/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0134 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0134_F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	~~155~~	~~B~~	~~EN~~	~~P~~	R
7440-36-0	Antimony	4.4	B		P	
7440-38-2	Arsenic	2.5	B	N J	P	
7440-39-3	Barium	626			P	
7440-41-7	Beryllium				NR	
7440-43-9	Cadmium				NR	
7440-70-2	Calcium				NR	
7440-47-3	Chromium	4.2	B		P	
7440-48-4	Cobalt				NR	
7440-50-8	Copper	1.4	U		P	
7439-89-6	Iron	318		E J	P	
7439-92-1	Lead	~~2.0~~	~~B~~	~~*N J~~	~~P~~	R
7439-95-4	Magnesium				NR	
7439-96-5	Manganese	38.2		EN J	P	
7439-97-6	Mercury	~~0.19~~	~~B~~	~~N J~~	~~AV~~	R
7440-02-0	Nickel	4.8	B	J	P	
7440-09-7	Potassium				NR	
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N J~~	~~P~~	R
7440-22-4	Silver	1.8	U		P	
7440-23-5	Sodium				NR	
7440-28-0	Thallium				NR	
7440-62-2	Vanadium	3.1	U		P	
7440-66-6	Zinc	50.3		N J	P	
7440-42-8	Boron				NR	

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0240

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0240__

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~283~~		~~N~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	~~7.3~~	B	~~N~~ J R	P
7440-39-3	Barium	1500			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.0	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.0	B		P
7439-89-6	Iron	447			P
7439-92-1	Lead	3.2		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	78.1			P
7439-97-6	Mercury	0.41		~~N~~ J	AV
7440-02-0	Nickel	1.3	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	~~N~~ J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	315		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0240F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0240F_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	~~151~~	~~B~~	~~EN~~	P	R
7440-36-0	Antimony	2.5	U		P	
7440-38-2	Arsenic	9.1	B	N J	P	
7440-39-3	Barium	1960			P	
7440-41-7	Beryllium				NR	
7440-43-9	Cadmium				NR	
7440-70-2	Calcium				NR	
7440-47-3	Chromium	8.0	B		P	
7440-48-4	Cobalt				NR	
7440-50-8	Copper	1.4	U		P	
7439-89-6	Iron	57.4	B	E	P	
7439-92-1	Lead	~~5.1~~		~~N J~~	~~P~~	R
7439-95-4	Magnesium				NR	
7439-96-5	Manganese	44.8		EN J	P	
7439-97-6	Mercury	~~0.31~~		~~N J~~	~~AV~~	R
7440-02-0	Nickel	1.2	B	J	P	
7440-09-7	Potassium				NR	
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N J~~	~~P~~	R
7440-22-4	Silver	1.8	U		P	
7440-23-5	Sodium				NR	
7440-28-0	Thallium				NR	
7440-62-2	Vanadium	3.1	U		P	
7440-66-6	Zinc	416		N J	P	
7440-42-8	Boron				NR	

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0237

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0237_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~4150~~		N R	P
7440-36-0	Antimony	6.8	B		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	2760			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.9	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	35.2			P
7439-89-6	Iron	11400			P
7439-92-1	Lead	14.3		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1120			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	2.9	B	J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	5.2	B	J	P
7440-66-6	Zinc	85.2		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0237 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0237_F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	~~3260~~		~~EN~~	P	R
7440-36-0	Antimony	2.5	B		P	
7440-38-2	Arsenic	2.2	U	N	P	
7440-39-3	Barium	2090			P	
7440-41-7	Beryllium				NR	
7440-43-9	Cadmium				NR	
7440-70-2	Calcium				NR	
7440-47-3	Chromium	6.6	B		P	
7440-48-4	Cobalt				NR	
7440-50-8	Copper	37.1			P	
7439-89-6	Iron	9590		E J	P	
7439-92-1	Lead	~~9.2~~		~~*N J~~	P	R
7439-95-4	Magnesium				NR	
7439-96-5	Manganese	1080		EN J	P	
7439-97-6	Mercury	~~0.13~~	U	~~N J~~	~~AV~~	R
7440-02-0	Nickel	14.9	B	J	P	
7440-09-7	Potassium				NR	
7782-49-2	Selenium	~~2.5~~	U	~~N J~~	~~P~~	R
7440-22-4	Silver	1.8	U		P	
7440-23-5	Sodium				NR	
7440-28-0	Thallium				NR	
7440-62-2	Vanadium	8.0	B	J	P	
7440-66-6	Zinc	174		N J	P	
7440-42-8	Boron				NR	

Amk 6663

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDSH8617

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH8617_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~76.7~~	~~B~~	~~N~~ R	P
7440-36-0	Antimony	4.3	B		P
7440-38-2	Arsenic	~~4.7~~	~~B~~	~~N~~ J	P R
7440-39-3	Barium	69.5	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	37.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.3	B		P
7439-89-6	Iron	714			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	71.6			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	49.8		J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	9.1	B		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUIM0119

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGUIM0119_

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	~~409~~		~~N~~ R	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N	P
7440-39-3	Barium	436			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.2	B		P
7439-89-6	Iron	69900			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1950			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	4.8	B	J	P
7440-66-6	Zinc	~~32.3~~			P R
7440-42-8	Boron				NR

AMK 62603

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUIM0119F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: ____ SDG No.: MEGDD0120

Matrix (soil/water): WATER_ Lab Sample ID: MEGUIM0119F

Level (low/med): LOW___ Date Received: 02/28/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	~~15.5~~	~~B~~	~~EN~~	~~P~~	R
7440-36-0	Antimony	2.5	U		P	
7440-38-2	Arsenic	9.0	B	N J	P	
7440-39-3	Barium	685			P	
7440-41-7	Beryllium				NR	
7440-43-9	Cadmium				NR	
7440-70-2	Calcium				NR	
7440-47-3	Chromium	5.0	B		P	
7440-48-4	Cobalt				NR	
7440-50-8	Copper	5.0	B		P	
7439-89-6	Iron	44.1	B	E	P	
7439-92-1	Lead	~~5.0~~		~~N J~~	~~P~~	R
7439-95-4	Magnesium				NR	
7439-96-5	Manganese	118		EN J	P	
7439-97-6	Mercury	~~0.13~~	~~U~~	~~N J~~	~~AV~~	R
7440-02-0	Nickel	3.2	B	J	P	
7440-09-7	Potassium				NR	
7782-49-2	Selenium	~~2.6~~	~~B~~	~~N J~~	~~P~~	R
7440-22-4	Silver	1.8	U		P	
7440-23-5	Sodium				NR	
7440-28-0	Thallium				NR	
7440-62-2	Vanadium	3.1	U		P	
7440-66-6	Zinc	~~223~~		~~N J~~	~~P~~	R
7440-42-8	Boron				NR	

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.: MEGDD0120

Initial Calibration Source: HIGH_PURITY

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	2000.0	1867.19	93.4	2000.0	1835.23	91.8	2040.80	102.0	P
Antimony	2000.0	2115.98	105.8	2000.0	2117.53	105.9	2144.56	107.2	P
Arsenic	2000.0	1988.93	99.4	2000.0	1987.29	99.4	2093.98	104.7	P
Barium	2000.0	2048.23	102.4	2000.0	2051.13	102.6	2086.13	104.3	P
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2011.72	100.6	2000.0	2038.29	101.9	2070.15	103.5	P
Cobalt									
Copper	2000.0	2067.20	103.4	2000.0	2065.64	103.3	2112.02	105.6	P
Iron	2000.0	2006.93	100.3	2000.0	2007.78	100.4	1994.27	99.7	P
Lead	2000.0	2079.57	104.0	2000.0	2079.57	104.0	2020.63	101.0	P
Magnesium									
Manganese	2000.0	1968.05	98.4	2000.0	1950.26	97.5	2034.48	101.7	P
Mercury	2.0	2.38	119.0	2.0	1.90	95.0	1.91	95.5	AV
Nickel	2000.0	2062.37	103.1	2000.0	2063.30	103.2	1892.24	94.6	P
Potassium									
Selenium	2000.0	2120.33	106.0	2000.0	2121.65	106.1	1955.62	97.8	P
Silver	500.0	501.48	100.3	500.0	506.46	101.3	541.62	108.3	P
Sodium									
Thallium									
Vanadium	2000.0	2007.26	100.4	2000.0	2013.29	100.7	1809.75	90.5	P
Zinc	2000.0	2082.83	104.1	2000.0	2077.98	103.9	2046.96	102.3	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.: MEGDD0120

Initial Calibration Source: _____

Continuing Calibration Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum				2000.0	2079.26	104.0	2121.84	106.1	P
Antimony				2000.0	1930.75	96.5	1945.44	97.3	P
Arsenic				2000.0	2096.73	104.8	2106.46	105.3	P
Barium				2000.0	1889.28	94.5	1857.39	92.9	P
Beryllium									
Cadmium									
Calcium									
Chromium				2000.0	1916.04	95.8	1965.30	98.3	P
Cobalt									
Copper				2000.0	1990.07	99.5	2009.57	100.5	P
Iron				2000.0	2145.51	107.3	1963.70	98.2	P
Lead				2000.0	2150.08	107.5	2074.97	103.7	P
Magnesium									
Manganese				2000.0	1924.46	96.2	2195.29	109.8	P
Mercury									
Nickel				2000.0	1904.52	95.2	2099.79	105.0	P
Potassium									
Selenium				2000.0	2139.74	107.0	2056.64	102.8	P
Silver				500.0	545.01	109.0	476.04	95.2	P
Sodium									
Thallium									
Vanadium				2000.0	1922.62	96.1	1939.35	97.0	P
Zinc				2000.0	2075.45	103.8	2087.56	104.4	P
Boron									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.: MEGDD0120

AA CRDL Standard Source: _____

ICP CRDL Standard Source: HIGH_PURITY__

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum								
Antimony				120.0	129.53	107.9	141.80	118.2
Arsenic				20.0	21.36	106.8	27.55	137.8
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium				20.0	21.13	105.6	16.86	84.3
Cobalt								
Copper				50.0	48.54	97.1	52.90	105.8
Iron								
Lead				6.0	10.16	169.3	4.41	73.5
Magnesium								
Manganese				30.0	29.06	96.9	37.84	126.1
Mercury								
Nickel				80.0	81.53	101.9	100.73	125.9
Potassium								
Selenium				10.0	12.32	123.2	6.10	61.0
Silver				20.0	20.99	105.0	23.08	115.4
Sodium								
Thallium								
Vanadium				100.0	83.75	83.8	121.27	121.3
Zinc				40.0	42.42	106.0	45.87	114.7
Boron								

Control Limits: no limits have been established by EPA at this time

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.:MEGDD01

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	12.8	U	12.8	U	12.8	U	14.9	B	14.351	B	P
Antimony	2.5	U	2.5	U	2.5	U	6.4	B	2.500	U	P
Arsenic	3.3	B	2.2	U	3.7	B	2.2	U	2.200	U	P
Barium	0.5	U	0.5	U	6.7	B	6.0	B	0.500	U	P
Beryllium											
Cadmium											
Calcium											
Chromium	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Cobalt											
Copper	1.4	U	1.4	U	1.4	U	1.4	U	1.420	B	P
Iron	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Lead	1.3	U	1.3	U	1.3	U	2.4	B	1.300	U	P
Magnesium											
Manganese	0.3	U	0.3	U	0.3	U	0.6	B	0.300	U	P
Mercury	0.1	U	0.1	U	0.1	U			0.135	B	AV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium											
Selenium	2.5	U	2.5	U	2.5	U	2.5	U	2.500	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Sodium											
Thallium											
Vanadium	3.1	U	3.1	U	3.1	U	3.1	U	3.100	U	P
Zinc	0.5	U	0.5	U	0.5	U	0.5	U	0.500	U	P
Boron											

U.S. EPA - CLP
3
BLANKS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: ___

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.:MEGDD01

Preparation Blank Matrix (soil/water): __

Preparation Blank Concentration Units (ug/L or mg/kg): ___

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			60.5	B							P
Antimony			3.0	B							P
Arsenic			3.3	B							P
Barium			6.2	B							P
Beryllium											
Cadmium											
Calcium											
Chromium			5.6	B							P
Cobalt											
Copper			1.4	U							P
Iron			1.0	U							P
Lead			1.3	U							P
Magnesium											
Manganese			0.3	U							P
Mercury											
Nickel			1.0	U							P
Potassium											
Selenium			2.5	U							P
Silver			1.8	U							P
Sodium											
Thallium											
Vanadium			3.1	U							P
Zinc			0.5	U							P
Boron											

U.S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.: MEGDD0120

ICP ID Number: IRIS_____ ICS Source: HIGH_PURITY

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	479159	470762.9	94.2	543317	535949.7	107.2
Antimony								
Arsenic								
Barium		500		490.4	98.1		439.0	87.8
Beryllium								
Cadmium								
Calcium								
Chromium		500		504.9	101.0		467.4	93.5
Cobalt								
Copper		500		475.8	95.2		409.8	82.0
Iron	200000	200000	122549	122272.4	61.1	169663	169408.1	84.7
Lead		1000		956.9	95.7		909.8	91.0
Magnesium								
Manganese		500		437.5	87.5		544.4	108.9
Mercury								
Nickel		1000		907.0	90.7		1114.1	111.4
Potassium								
Selenium								
Silver		1000		993.5	99.4		1047.5	104.8
Sodium								
Thallium								
Vanadium		500		431.0	86.2		542.5	108.5
Zinc		1000		928.2	92.8		1033.4	103.3

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIM0237 S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	7685.1152		4148.1187		2000.00	176.8	N	P
Antimony	75-125	439.7255		6.8297	B	500.00	86.6		P
Arsenic	75-125	70.5890		2.2000	U	40.00	176.5	N	P
Barium	75-125	4717.7022		2757.8779		2000.00	98.0		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	217.6897		7.8664	B	200.00	104.9		P
Cobalt									NR
Copper	75-125	298.3365		35.1837		250.00	105.3		P
Iron		13137.8379		11401.9238		1000.00	173.6		P
Lead	75-125	33.6896		14.3480		20.00	96.7		P
Magnesium									NR
Manganese	75-125	1621.6555		1122.2622		500.00	99.9		P
Mercury	75-125	1.2650		0.130	U	2.00	63.2	N	AV
Nickel	75-125	523.4751		2.8738	B	500.00	104.1		P
Potassium									NR
Selenium	75-125	5.7387		2.5000	U	10.00	57.4	N	P
Silver	75-125	47.0999		1.8000	U	50.00	94.2		P
Sodium									NR
Thallium									NR
Vanadium	75-125	490.8833		5.2307	B	500.00	97.1		P
Zinc	75-125	642.8458		85.2002		500.00	111.5		P
Boron									NR

Comments:

U.S. EPA - CLP
5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEGDIM0237 F S

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.: URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med):LOW___

% Solids for Sample: 0.0__

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	7387.2022		3258.2244		2000.00	206.4	N	P
Antimony	75-125	472.4324		2.5472	B	500.00	94.0		P
Arsenic	75-125	54.2196		2.2000	U	40.00	135.5	N	P
Barium	75-125	4156.3813		2092.9504		2000.00	103.2		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium	75-125	220.0561		6.6007	B	200.00	106.7		P
Cobalt									NR
Copper	75-125	295.8570		37.0694		250.00	103.5		P
Iron		12999.6641		9593.5078		1000.00	340.6		P
Lead	75-125	47.4492		9.2064		20.00	191.2	N	P
Magnesium									NR
Manganese	75-125	1738.5764		1078.4158		500.00	132.0	N	P
Mercury	75-125	0.0273	B	0.130	U	2.00	1.4	N	AV
Nickel	75-125	620.9303		14.8762	B	500.00	121.2		P
Potassium									NR
Selenium	75-125	2.5000	U	2.5000	U	10.00	0.0	N	P
Silver	75-125	48.2180		1.8000	U	50.00	96.4		P
Sodium									NR
Thallium									NR
Vanadium	75-125	537.9159		8.0141	B	500.00	106.0		P
Zinc	75-125	812.7136		173.8264		500.00	127.8	N	P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIM0237 A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		8581.80		4148.12		4000.0	110.8		P
Antimony		892.44		6.83	B	1000.0	88.6		P
Arsenic		124.07		2.20	U	80.0	155.1		P
Barium		6803.70		2757.88		4000.0	101.1		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		438.07		7.87	B	400.0	107.6		P
Cobalt									NR
Copper		574.66		35.18		500.0	107.9		P
Iron		13952.00		11401.92		2000.0	127.5		P
Lead		61.99		14.35		40.0	119.1		P
Magnesium									NR
Manganese		2246.92		1122.26		1000.0	112.5		P
Mercury									NR
Nickel		1118.66		2.87	B	1000.0	111.6		P
Potassium									NR
Selenium		15.95		2.50	U	20.0	79.8		P
Silver		96.75		1.80	U	100.0	96.8		P
Sodium									NR
Thallium									NR
Vanadium		1035.33		5.23	B	1000.0	103.0		P
Zinc		1251.81		85.20		1000.0	116.7		P
Boron									NR

Comments:

U.S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEGDIMO237 F A

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		7694.12		3258.22		4000.0	110.9		P
Antimony		850.85		2.55	B	1000.0	84.8		P
Arsenic		42.60		2.20	U	80.0	53.2		P
Barium		6245.40		2092.95		4000.0	103.8		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium		453.04		6.60	B	400.0	111.6		P
Cobalt									NR
Copper		586.01		37.07		500.0	109.8		P
Iron		10089.19		9593.51		2000.0	24.8		P
Lead		45.04		9.21		40.0	89.6		P
Magnesium									NR
Manganese		1989.90		1078.42		1000.0	91.1		P
Mercury									NR
Nickel		900.09		14.88	B	1000.0	88.5		P
Potassium									NR
Selenium		17.80		2.50	U	20.0	89.0		P
Silver		97.60		1.80	U	100.0	97.6		P
Sodium									NR
Thallium									NR
Vanadium		854.01		8.01	B	1000.0	84.6		P
Zinc		1200.84		173.83		1000.0	102.7		P
Boron									NR

Comments:

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGDIM0237 D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		4148.1187		4140.5537		0.2		P
Antimony	60.0	6.8297	B	3.4635	B	65.4		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium		2757.8779		2783.4399		0.9		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	7.8664	B	8.3048	B	5.4		P
Cobalt								NR
Copper	25.0	35.1837		36.4100		3.4		P
Iron		11401.9238		11655.9199		2.2		P
Lead	3.0	14.3480		15.5663		8.1		P
Magnesium								NR
Manganese		1122.2622		1142.3508		1.8		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel	40.0	2.8738	B	3.2874	B	13.4		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	5.2307	B	9.6841	B	59.7		P
Zinc	20.0	85.2002		87.1527		2.3		P
Boron								NR

U.S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

MEGDIM0237 F D

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

Matrix (soil/water): WATER_ Level (low/med):LOW____

% Solids for Sample: 0.0___ % Solids for Duplicate: 0.0_____

Concentration Units (ug/L or mg/kg dry weight): UG/L_

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		3258.2244		3611.2788		10.3		P
Antimony	60.0	2.5472	B	2.5422	B	0.2		P
Arsenic	10.0	2.2000	U	2.2000	U			P
Barium		2092.9504		2196.6826		4.8		P
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	10.0	6.6007	B	3.6000	U	200.0		P
Cobalt								NR
Copper	25.0	37.0694		39.6111		6.6		P
Iron		9593.5078		10443.6445		8.5		P
Lead	3.0	9.2064		12.5532		30.8	*	P
Magnesium								NR
Manganese		1078.4158		1164.7156		7.7		P
Mercury	0.2	0.1300	U	0.1300	U			AV
Nickel	40.0	14.8762	B	15.5500	B	4.4		P
Potassium								NR
Selenium	5.0	2.5000	U	2.5000	U			P
Silver	10.0	1.8000	U	1.8000	U			P
Sodium								NR
Thallium								NR
Vanadium	50.0	8.0141	B	6.9011	B	14.9		P
Zinc		173.8264		187.9616		7.8		P
Boron								NR

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310SAS No.: _____ SDG No.:MEGDD0120

Solid LCS Source: _____

Aqueous LCS Source: HIGH_PURITY

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	2000.0	1867.6	93.4						
Antimony	2000.0	2115.6	105.8						
Arsenic	2000.0	1992.0	99.6						
Barium	2000.0	2048.9	102.4						
Beryllium									
Cadmium									
Calcium									
Chromium	2000.0	2019.6	101.0						
Cobalt									
Copper	2000.0	2065.9	103.3						
Iron	2000.0	2009.4	100.5						
Lead	2000.0	2080.2	104.0						
Magnesium									
Manganese	2000.0	1956.7	97.8						
Mercury									
Nickel	2000.0	2064.5	103.2						
Potassium									
Selenium	2000.0	2123.2	106.2						
Silver	500.0	501.7	100.3						
Sodium									
Thallium									
Vanadium	2000.0	2004.8	100.2						
Zinc	2000.0	2079.7	104.0						
Boron									

U.S. EPA - CLP
8
STANDARD ADDITION RESULTS

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0310 SAS No.: _____ SDG No.:MEGDD0120

Concentration Units: ug/L

EPA Sample No.	An	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q

U.S. EPA - CLP

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ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MEGDIM0237 L

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract: _____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	4148.12		3847.20		7.3		P
Antimony	6.83	B	12.72	B	86.2		P
Arsenic	2.20	U	11.00	U			P
Barium	2757.88		2599.49		5.7		P
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium	7.87	B	18.00	U	100.0		P
Cobalt							NR
Copper	35.18		38.71	B	10.0		P
Iron	11401.92		12377.90		8.6		P
Lead	14.35		16.33		13.8		P
Magnesium							NR
Manganese	1122.26		1167.09		4.0		P
Mercury							NR
Nickel	2.87	B	5.00	U	100.0		P
Potassium							NR
Selenium	2.50	U	12.50	U			P
Silver	1.80	U	9.00	U			P
Sodium							NR
Thallium							NR
Vanadium	5.23	B	24.49	B	368.3		P
Zinc	85.20		91.94	B	7.9		P

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9

ICP SERIAL DILUTIONS

EPA SAMPLE NO.

MEGDIMO237 F L

Lab Name: ADIRONDACK_ENVIRONMENTAL__ Contract: _____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.:MEGDD01

Matrix (soil/water): WATER_ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	3258.22		2869.67		11.9	E	P
Antimony	2.55	B	12.50	U	100.0		P
Arsenic	2.20	U	11.00	U			P
Barium	2092.95		1983.06		5.3		P
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium	6.60	B	18.00	U	100.0		P
Cobalt							NR
Copper	37.07		27.27	B	26.4		P
Iron	9593.51		8269.84		13.8	E	P
Lead	9.21		6.84	B	25.7		P
Magnesium							NR
Manganese	1078.42		947.31		12.2	E	P
Mercury							NR
Nickel	14.88	B	7.28	B	51.1		P
Potassium							NR
Selenium	2.50	U	12.50	U			P
Silver	1.80	U	9.00	U			P
Sodium							NR
Thallium							NR
Vanadium	8.01	B	15.50	U	100.0		P
Zinc	173.83		160.79		7.5		P

U.S. EPA - CLP
10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

ICP ID Number: IRIS_____ Date: 10/26/02

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-round	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	12.8	P
Antimony	206.83		60	2.5	P
Arsenic	193.76		10	2.2	P
Barium	493.41		200	0.5	P
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium	357.87		10	3.6	P
Cobalt			50		NR
Copper	324.75		25	1.4	P
Iron	259.94		100	1.0	P
Lead	220.35		3	1.3	P
Magnesium			5000		NR
Manganese	257.61		15	0.3	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium			5000		NR
Selenium	196.09		5	2.5	P
Silver	328.07		10	1.8	P
Sodium			5000		NR
Thallium			10		NR
Vanadium	292.40		50	3.1	P
Zinc	213.86		20	0.5	P

Comments:

U.S. EPA - CLP
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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

ICP ID Number: _____ Date: 10/26/02

Flame AA ID Number: PE-FIMS____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-round	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.13	AV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP
11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.: MEGD

ICP ID Number:IRIS_____ Date: 11/04/02

Analyte	Wave-length (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	_
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.83	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	193.76	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium						
Cadmium						
Calcium						
Chromium	357.87	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt						
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium						
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium						
Selenium	196.09	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium						
Thallium						
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	213.86	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

U.S. EPA - CLP
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ICP LINEAR RANGES (QUARTERLY)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract:_____

Lab Code: AES__ Case No.:URS_0310 SAS No.: _____ SDG No.:MEGDD0120

ICP ID Number:IRIS_____ Date: 11/04/02

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	60.00	500000	P
Antimony	60.00	50000	P
Arsenic	60.00	50000	P
Barium	60.00	10000	P
Beryllium			NR
Cadmium			NR
Calcium			NR
Chromium	60.00	5000	P
Cobalt			NR
Copper	60.00	100000	P
Iron	60.00	80000	P
Lead	60.00	200000	P
Magnesium			NR
Manganese	60.00	10000	P
Mercury			NR
Nickel	60.00	500000	P
Potassium			NR
Selenium	60.00	10000	P
Silver	60.00	50000	P
Sodium			NR
Thallium			NR
Vanadium	60.00	50000	P
Zinc	60.00	20000	P

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0310 SAS No.:_____ SDG No.: MEGDD0120

Method: P__

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
_LCSW_____	03/13/03		100
_MEGDD0120___	03/13/03		100
_MEGDD0120F__	03/13/03		100
_MEGDD0132_F_	03/13/03		100
_MEGDD0134___	03/13/03		100
_MEGDD0134_F_	03/13/03		100
_MEGDD0240___	03/13/03		100
_MEGDD0240F__	03/13/03		100
_MEGDIM0237__	03/13/03		100
_MEGDIM0237_D	03/13/03		100
_MEGDIM0237_F	03/13/03		100
_MEGDIM0237_F_D	03/13/03		100
_MEGDIM0237_F_S	03/13/03		100
_MEGDIM0237_S	03/13/03		100
_MEGDSH8617__	03/13/03		100
_MEGUIM0119__	03/13/03		100
MEGUIM0119F	03/13/03		100
_PBW_____	03/13/03		100

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES____ Case No.: URS_0310 SAS No.:_____ SDG No.: MEGDD0120

Method: AV_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
MEGDD0120	03/12/03		100
MEGDD0120_F	03/12/03		100
MEGDD0132	03/12/03		100
MEGDD0132_F	03/12/03		100
MEGDD0134	03/12/03		100
MEGDD0134_F	03/12/03		100
MEGDD0240	03/12/03		100
MEGDD0240_F	03/12/03		100
MEGDIM0237	03/12/03		100
MEGDIM0237_D	03/12/03		100
MEGDIM0237_F	03/12/03		100
MEGDIM0237_F_D	03/12/03		100
MEGDIM0237_F_S	03/12/03		100
MEGDIM0237_S	03/12/03		100
MEGDSH8617	03/12/03		100
MEGUI0119	03/12/03		100
MEGUI0119_F	03/12/03		100
PBW	03/12/03		100

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.: MEGDD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:03/13/03 End Date: 03/13/03

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
S0	1.00	0913		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
S	1.00	0923													X						X					
S141.4365	1.00	0933					X							X			X									
S	1.00	0943																								
S	1.00	0949		X															X						X	
S548.6063	1.00	0959			X																					
ICV	1.00	1017		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1032			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1041		X										X												
ICSAB	1.00	1047		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1054		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1115		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
PBW	1.00	1118		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
LCSW	1.00	1122		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237	1.00	1126		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_D	1.00	1135		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_S	1.00	1139		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_A	1.00	1224		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_L	1.00	1229		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_F	1.00	1235		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_F	1.00	1243		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIM0237_F	1.00	1249		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1254		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1301		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIMO237_F	1.00	1309		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDIMO237_F	1.00	1314		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0120	1.00	1317		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0120F	1.00	1342		X	X	X	X				X		X	X	X		X		X		X	X			X	X	

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.: MEGDD01

Instrument ID Number:IRIS_____ Method: P_

Start Date:03/13/03 End Date: 03/13/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
MEGDD0120F	1.00	1342		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUIM0119	1.00	1404		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGUIM0119F	1.00	1408		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0240	1.00	1424		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0240F	1.00	1437		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1450		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1454		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDSH8617	1.00	1500		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0132_F	1.00	1506		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0134	1.00	1514		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0134_F	1.00	1519		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
MEGDD0134_F	1.00	1519		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CRI	1.00	1529			X	X					X		X		X		X		X		X	X			X	X	
ICSA	1.00	1553		X										X													
ICSAB	1.00	1601		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCV	1.00	1611		X	X	X	X				X		X	X	X		X		X		X	X			X	X	
CCB	1.00	1620		X	X	X	X				X		X	X	X		X		X		X	X			X	X	

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ANALYSIS RUN LOG

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.:URS_0310 SAS No.:_____ SDG No.: MEGDD01

Instrument ID Number:PE-FIMS_____ Method: AV

Start Date:03/12/03 End Date: 03/12/03

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	B
ICV	1.00	1617																X								
ICB	1.00	1619																X								
PBW	1.00	1621																X								
MEGDD0134	1.00	1624																X								
MEGDD0134_F	1.00	1626																X								
MEGDD0120	1.00	1627																X								
MEGDD0120_F	1.00	1629																X								
MEGDD0132	1.00	1631																X								
MEGDD0132_F	1.00	1633																X								
MEGDD0240	1.00	1635																X								
MEGDD0240_F	1.00	1636																X								
MEGUI0119	1.00	1638																X								
CCV	1.00	1640																X								
CCB	1.00	1641																X								
MEGUI0119_F	1.00	1643																X								
MEGDIM0237	1.00	1645																X								
MEGDIM0237_D	1.00	1646																X								
MEGDIM0237_S	1.00	1648																X								
MEGDIM0237_F	1.00	1650																X								
MEGDIM0237_F	1.00	1652																X								
MEGDIM0237_F	1.00	1653																X								
MEGDSH8617	1.00	1655																X								
CCV	1.00	1700																X								
CCB	1.00	1702																X								

RAW QC

DATA

Method: SHER Sample Name: Blank Operator: I4F-41
Comment:
Run Time: 03/13/03 09:13 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0111	.2656	.0299	-.0234
Stddev	.0078	.0235	.0039	.0026
%RSD	70.70	8.848	13.13	11.16
#1	.0055	.2822	.0327	-.0216
#2	.0166	.2490	.0271	-.0253

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.004	2.653	.7138	.0450
Stddev	.009	.074	.0117	.0017
%RSD	.8592	2.792	1.635	3.865
#1	.9980	2.601	.7056	.0438
#2	1.010	2.706	.7221	.0463

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0346	.1363	.0685	.0332
Stddev	.0333	.0227	.0131	.0587
%RSD	96.16	16.65	19.10	176.8
#1	-.0111	.1524	.0592	.0747
#2	-.0581	.1203	.0777	-.0083

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1757	.3809	.0170	.0318
Stddev	.0137	.0004	.0092	.0161
%RSD	7.804	.1052	53.99	50.81
#1	.1854	.3806	.0105	.0432
#2	.1660	.3812	.0234	.0204

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4884	-39.81	-.0470	.2418
Stddev	.0019	.06	.0039	.0296
%RSD	.3921	.1383	8.328	12.26
#1	.4871	-39.77	-.0498	.2208
#2	.4898	-39.84	-.0443	.2627

Sample Name: Blank Run Time: 03/13/03 09:13

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0262	-25.98	.0096	.0009
Stddev	.0074	.23	.0231	.0013
%RSD	28.27	.8904	241.8	141.4
#1	.0210	-26.14	-.0068	.0000
#2	.0315	-25.81	.0259	.0019

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0080	.0068	-.0019	.0941
Stddev	.0026	.0192	.0017	.0117
%RSD	32.65	282.8	94.27	12.47
#1	-.0099	.0204	-.0031	.0858
#2	-.0062	-.0068	-.0006	.1024

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	.0014	.1471	-.0259
Stddev	.004	.0020	.0083	.0227
%RSD	1463000.	141.4	5.642	87.54
#1	-.0025	.0028	.1530	-.0099
#2	.0025	.0000	.1412	-.0419

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0249	-.0506	-.0014	5.408
Stddev	.0117	.0070	.0059	.014
%RSD	47.15	13.81	424.3	.2624
#1	-.0332	-.0555	.0028	5.418
#2	-.0166	-.0456	-.0055	5.398

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	Cts/S	Cts/S	Cts/S
Avg	.0913	.0928	-.0166
Stddev	.0201	.0004	.0470
%RSD	21.99	.4606	282.9
#1	.1055	.0925	.0166
#2	.0771	.0931	-.0498

Method: SHER Sample Name: 200.7-3 Operator:
Comment:
Run Time: 03/13/03 09:23 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B_2496	Cd2288	Pb2203	Se1960
Line	249.678 {135}	228.802 {147}	220.353 {152}	196.090 {171}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	13.10	75.08	10.55	2.351
Stddev	.01	.01	.00	.025
%RSD	.0544	.0135	.0327	1.043
#1	13.09	75.09	10.56	2.334
#2	13.10	75.08	10.55	2.369

Elem	Tl1908
Line	190.864 {176}
Units	Cts/S
Avg	4.762
Stddev	.009
%RSD	.1787
#1	4.768
#2	4.756

Method: SHER Sample Name: 200.7-2 Operator:
Comment:
Run Time: 03/13/03 09:33 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	805.6	715.4	230.5	27.45
Stddev	3.3	.8	.0	.03
%RSD	.4080	.1125	.0078	.1188
#1	803.3	715.9	230.5	27.43
#2	808.0	714.8	230.5	27.47

Elem	Fe2599	Mn2576	Sr3464
Line	259.940 {129}	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S	Cts/S
Avg	1876.	733.6	141.4
Stddev	3.	2.9	.1
%RSD	.1673	.3944	.0736
#1	1874.	731.5	141.4
#2	1878.	735.6	141.5

Method: SHER Sample Name: 200.7 Operator:
Comment:
Run Time: 03/13/03 09:43 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280	As1937	Cr3578	Li6103
Line	328.068 {102}	193.759 {173}	357.869 { 94}	610.362 { 55}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.799	11.75	28.32	87.16
Stddev	.033	.01	.09	.48
%RSD	.3363	.0665	.3285	.5483
#1	9.822	11.75	28.38	86.82
#2	9.776	11.76	28.25	87.50

Elem	Sn1899	V_2924	V_3102
Line	189.989 {176}	292.402 {115}	310.230 {108}
Units	Cts/S	Cts/S	Cts/S
Avg	24.63	24.91	40.22
Stddev	.03	.01	.52
%RSD	.1342	.0589	1.301
#1	24.61	24.90	39.85
#2	24.66	24.92	40.59

Method: SHER Sample Name: 200.7-1 Operator:
Comment:
Run Time: 03/13/03 09:49 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Ca3179	K_7664	Mg3838
Line	308.215 {109}	317.933 {105}	766.490 { 44}	383.826 { 87}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	40.59	94.60	616.6	47.34
Stddev	.11	.22	1.6	.14
%RSD	.2625	.2317	.2599	.2966
#1	40.51	94.44	617.7	47.44
#2	40.66	94.75	615.4	47.24

Elem	Na5889	Ni2316	Zn2138
Line	588.995 { 57}	231.604 {145}	213.856 {157}
Units	Cts/S	Cts/S	Cts/S
Avg	3878.	361.8	1029.
Stddev	6.	.5	1.
%RSD	.1440	.1331	.0872
#1	3882.	361.5	1028.
#2	3874.	362.1	1029.

Method: SHER Sample Name: 200.7-4 Operator:
Comment:
Run Time: 03/13/03 09:59 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 {166}	206.833 {162}	336.121 {100}
Units	Cts/S	Cts/S	Cts/S
Avg	457.7	79.74	548.6
Stddev	1.4	.08	5.0
%RSD	.3065	.1062	.9201
#1	456.7	79.68	545.0
#2	458.7	79.80	552.2

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0196	0.0111	1.0000000	03/13/03 09:45:58
Al3082	0.0040	0.2656	1.0000000	03/13/03 09:52:37
As1937	0.0059	0.0299	1.0000000	03/13/03 09:45:58
Au2427	-0.0003	-0.0234	-1.0000000	03/13/03 09:17:16
B_2496	0.0605	1.0041	1.0000000	03/13/03 09:26:07
Ba4934	0.8030	2.6533	1.0000000	03/13/03 09:36:07
Be3130	0.7147	0.7138	1.0000000	03/13/03 09:36:07
Bi1902	0.0084	0.0450	1.0000000	03/13/03 09:17:16
Ca3179	0.0095	-0.0346	1.0000000	03/13/03 09:52:37
Cd2288	0.1499	0.1363	1.0000000	03/13/03 09:26:07
Co2286	0.1152	0.0685	1.0000000	03/13/03 09:36:07
Cr3578	0.0141	0.0332	1.0000000	03/13/03 09:45:58
Cu3247	0.0273	0.1757	1.0000000	03/13/03 09:36:07
Fe2599	0.1876	0.3809	1.0000000	03/13/03 09:36:07
Ge2068	0.0052	0.0170	1.0000000	03/13/03 09:17:16
In2306	0.0102	0.0318	1.0000000	03/13/03 09:17:16
K_7664	0.0616	0.4884	1.0000000	03/13/03 09:52:37
Li6103	0.0635	-39.8056	1.0000000	03/13/03 09:45:58
Mg3838	0.0047	-0.0470	1.0000000	03/13/03 09:52:37
Mn2576	0.7393	0.2418	1.0000000	03/13/03 09:36:07
Mo2020	0.0458	0.0262	1.0000000	03/13/03 10:02:55
Na5889	0.3904	-25.9759	1.0000000	03/13/03 09:52:37
Ni2316	0.0724	0.0096	1.0000000	03/13/03 09:52:37
Os1898	-0.0003	0.0009	-1.0000000	03/13/03 09:17:16
Pb2203	0.0106	-0.0080	1.0000000	03/13/03 09:26:07
Sb2068	0.0080	0.0068	1.0000000	03/13/03 10:02:55
Se1960	0.0047	-0.0019	1.0000000	03/13/03 09:26:07
Si2881	0.0028	0.0941	1.0000000	03/13/03 09:17:16
Sn1899	0.0123	0.0000	1.0000000	03/13/03 09:45:58
Sr3464	0.0141	0.0014	1.0000000	03/13/03 09:36:07
Ta2400	0.0000	0.1471	-1.0000000	03/13/03 09:17:16
Te2142	0.0061	-0.0259	1.0000000	03/13/03 09:17:16
Ti3361	0.0549	-0.0249	1.0000000	03/13/03 10:02:55
Tl1908	0.0048	-0.0506	1.0000000	03/13/03 09:26:07
V_2924	0.0125	-0.0014	1.0000000	03/13/03 09:45:58
V_3102	0.0174	5.4077	1.0000000	03/13/03 09:45:58
W_2397	0.0000	0.0913	-1.0000000	03/13/03 09:17:16
Zn2138	0.2057	0.0928	1.0000000	03/13/03 09:52:37
Zr3391	0.0591	-0.0166	1.0000000	03/13/03 09:17:16

Method: SHER Sample Name: ICV-1 Operator:
Comment:
Run Time: 03/13/03 10:17 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	501.5	1867.	1989.	6495.
Stddev	.2	13.	4.	62.
%RSD	.0463	.7053	.2233	.9502
#1	501.6	1877.	1986.	6452.
#2	501.3	1858.	1992.	6539.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2171.	2048.	2037.	2.161
Stddev	6.	5.	6.	.569
%RSD	.2583	.2311	.2830	26.34
#1	2167.	2045.	2041.	2.563
#2	2175.	2052.	2033.	1.758

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2016.	2069.	1988.	2012.
Stddev	6.	2.	2.	6.
%RSD	.3014	.1061	.1253	.2967
#1	2011.	2067.	1986.	2016.
#2	2020.	2071.	1990.	2008.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2067.	2007.	<.0000	<.0000
Stddev	10.	7.	10.43	.5147
%RSD	.4866	.3665	1.341	1.191
#1	2060.	2002.	< .0000	<.0000
#2	2074.	2012.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9493.	2006.	1983.	1968.
Stddev	29.	1.	7.	12.
%RSD	.3039	.0615	.3473	.6248
#1	9472.	2007.	1979.	1959.
#2	9513.	2006.	1988.	1977.

Sample Name: ICV-1 Run Time: 03/13/03 10:17

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2074.	2124.	2062.	355.4
Stddev	12.	10.	7.	5.1
%RSD	.5964	.4503	.3389	1.446
#1	2065.	2118.	2057.	351.7
#2	2083.	2131.	2067.	359.0

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2080.	2116.	2120.	8607.
Stddev	9.	1.	5.	34.
%RSD	.4365	.0282	.2315	.3901
#1	2073.	2116.	2117.	8583.
#2	2086.	2116.	2124.	8631.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1998.	2047.	10630.	<.0000
Stddev	4.	5.	1364.	2.200
%RSD	.1823	.2572	12.84	.8261
#1	1996.	2051.	9664.	< .0000
#2	2001.	2044.	11590.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2041.	2007.	1992.
Stddev	.1069	7.	6.	42.
%RSD	5.637	.3373	.2922	2.091
#1	<.0000	2036.	2011.	1963.
#2	<.0000	2046.	2003.	2022.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1176000.	2083.	1.173
Stddev	13910.	6.	.199
%RSD	1.183	.2752	16.99
#1	1186000.	2079.	1.032
#2	1166000.	2087.	1.313

Method: SHER Sample Name: ICB-1 Operator:
Comment:
Run Time: 03/13/03 10:23 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.4244	12.32	2.352	26.86
Stddev	.3999	5.85	2.240	37.98
%RSD	94.24	47.51	95.23	141.4
#1	.1416	8.182	3.936	53.71
#2	.7072	16.46	.7683	< .0000

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.050	<.0000	.0681	<.0000
Stddev	3.102	.0805	.0137	.6208
%RSD	101.7	27.76	20.06	94.35
#1	5.243	<.0000	.0778	<.0000
#2	.8563	<.0000	.0585	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.1499	.8813
Stddev	.8274	.0203	.1892	1.246
%RSD	22.62	3.971	126.2	141.3
#1	<.0000	<.0000	.0161	.0006
#2	<.0000	<.0000	.2837	1.762

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	<.0000	.5349	<.0000
Stddev	.6456	.0211	.6720	.7717
%RSD	650.4	322.4	125.6	169.7
#1	.3572	.0084	.0597	<.0000
#2	<.0000	<.0000	1.010	.0908

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1.575	8.893	12.85	<.0000
Stddev	.096	.599	1.65	.0319
%RSD	6.064	6.735	12.86	131.8
#1	1.508	8.470	14.01	<.0000
#2	1.643	9.317	11.68	<.0000

Sample Name: ICB-1 Run Time: 03/13/03 10:23

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.712	.7106	<.0000	<.0000
Stddev	2.278	.7839	.3496	8.993
%RSD	133.1	110.3	1172.	495.0
#1	3.322	1.265	<.0000	4.542
#2	.1011	.1563	.2174	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.237	2.490	<.0000
Stddev	.2477	.766	1.297	7.031
%RSD	212.1	61.90	52.10	355.8
#1	.0583	1.779	1.573	< .0000
#2	<.0000	.6958	3.407	2.995

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.9785	<.0000	<.0000
Stddev	.4603	.1383	2076.	1.917
%RSD	262.7	14.14	520.8	347.0
#1	.1502	1.076	< .000	< .0000
#2	<.0000	.8806	1069.	.8029

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.6052	<.0000	2.000	<.0000
Stddev	.2140	1.270	.471	1.003
%RSD	35.36	989.0	23.57	118.6
#1	.7566	< .0000	1.666	< .0000
#2	.4539	.7693	2.333	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	715.9	.0806	.8612
%RSD	43.24	173.5	367.5
#1	< .0000	.0105	.3746
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: CRI-1 Operator:
Comment:
Run Time: 03/13/03 10:32 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	20.99	<.0000	21.36	265.2
Stddev	2.29	.1271	1.41	1.6
%RSD	10.93	2.976	6.608	.5891
#1	19.37	<.0000	22.36	266.3
#2	22.61	<.0000	20.36	264.0

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	.3794	9.692	<.0000
Stddev	.3596	.0822	.042	.6719
%RSD	500.4	21.67	.4329	122.5
#1	.1824	.3213	9.662	<.0000
#2	<.0000	.4376	9.721	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1.754	10.00	97.54	21.13
Stddev	3.101	.02	.10	3.32
%RSD	176.8	.1973	.1028	15.70
#1	3.947	10.01	97.61	18.78
#2	< .0000	9.987	97.47	23.47

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	48.54	.7481	<.0000	.3333
Stddev	.85	.0835	.5851	1.972
%RSD	1.754	11.17	1.075	591.8
#1	47.94	.8071	<.0000	1.728
#2	49.15	.6890	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	8.997	7.297	29.06
Stddev	.9199	.448	6.194	.03
%RSD	170.9	4.978	84.88	.1031
#1	<.0000	9.313	2.918	29.04
#2	.1122	8.680	11.68	29.09

Sample Name: CRI-1 Run Time: 03/13/03 10:32

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.988	<.0000	81.53	9.084
Stddev	.210	.6130	.36	1.284
%RSD	10.55	111.5	.4420	14.14
#1	1.839	<.0000	81.27	9.992
#2	2.136	<.0000	81.78	8.176

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	10.16	129.5	12.32	<.0000
Stddev	1.07	3.8	3.34	.6983
%RSD	10.56	2.920	27.09	9.372
#1	10.92	126.9	9.960	<.0000
#2	9.402	132.2	14.68	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.7261	4.304	2453.	<.0000
Stddev	.1770	3.183	1779.	.4959
%RSD	24.38	73.94	72.53	4.353
#1	.8513	6.555	3711.	<.0000
#2	.6009	2.054	1195.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.2269	20.51	83.75	166.5
Stddev	.1069	1.09	.46	1.8
%RSD	47.13	5.306	.5454	1.098
#1	.3026	19.74	83.43	165.2
#2	.1513	21.28	84.08	167.8

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	58340.	42.43	.2341
Stddev	1866.	.09	.4636
%RSD	3.198	.2208	198.1
#1	57020.	42.36	<.0000
#2	59660.	42.49	.5619

Method: SHER Sample Name: ICSA-1 Operator:
Comment:
Run Time: 03/13/03 10:41 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	479200.	<.0000	125900.
Stddev	.8009	2659.	11.12	371.
%RSD	4.452	.5550	.8834	.2944
#1	<.0000	477300.	< .0000	125600.
#2	<.0000	481000.	< .0000	126100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.0759	<.0000
Stddev	.5338	.1026	.0055	1.241
%RSD	.1315	6.488	7.199	11.95
#1	<.0000	<.0000	.0798	< .0000
#2	<.0000	<.0000	.0721	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	392700.	<.0000	<.0000	<.0000
Stddev	1832.	.0087	.1893	2.739
%RSD	.4666	1.327	253.1	12.76
#1	391400.	<.0000	<.0000	< .0000
#2	394000.	<.0000	.0590	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	122500.	<.0000	<.0000
Stddev	.2880	289.	1.597	1.677
%RSD	1.052	.2360	149.4	4.279
#1	<.0000	122300.	< .0000	< .0000
#2	<.0000	122800.	.0603	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	461400.	<.0000
Stddev	2.101	44.34	1589.	.1093
%RSD	28.96	1.552	.3444	8.501
#1	< .0000	< .0000	462600.	<.0000
#2	< .0000	< .0000	460300.	<.0000

Sample Name: ICSA-1 Run Time: 03/13/03 10:41

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	60.63	<.0000	1527.
Stddev	.2092	.60	5.680	43.
%RSD	3.884	.9942	1.769	2.789
#1	<.0000	61.06	< .0000	1557.
#2	<.0000	60.21	< .0000	1497.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	29.46
Stddev	.5600	2.938	.6746	.71
%RSD	.2501	372.6	.2401	2.395
#1	<.0000	1.289	<.0000	28.96
#2	<.0000	< .0000	<.0000	29.96

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.530	12.84	288600.	10.74
Stddev	.319	2.22	4865.	.14
%RSD	12.61	17.27	1.686	1.315
#1	2.755	11.27	292000.	10.64
#2	2.304	14.41	285200.	10.84

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.3220	3.080	2.991	2.472
%RSD	1.888	36.95	31.25	13.47
#1	<.0000	< .0000	< .0000	< .0000
#2	<.0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	2.674
Stddev	501.2	1.467	.996
%RSD	.2391	.3315	37.23
#1	< .0000	< .0000	1.970
#2	< .0000	< .0000	3.378

Method: SHER Sample Name: ICSAB-1 Operator:
Comment:
Run Time: 03/13/03 10:47 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	993.5	470800.	<.0000	130100.
Stddev	7.0	531.	.0971	73.
%RSD	.7026	.1127	.0077	.0561
#1	998.5	470400.	<.0000	130000.
#2	988.6	471100.	<.0000	130100.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	490.4	436.2	<.0000
Stddev	.4350	1.7	.4	.4657
%RSD	.1048	.3452	.0918	3.992
#1	<.0000	491.6	436.0	<.0000
#2	<.0000	489.2	436.5	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	389100.	911.3	467.1	504.9
Stddev	83.	.4	.2	2.6
%RSD	.0212	.0484	.0522	.5232
#1	389100.	911.0	467.3	506.7
#2	389200.	911.6	467.0	503.0

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	475.8	122300.	2.439	<.0000
Stddev	4.7	176.	.673	.6430
%RSD	.9891	.1442	27.58	1.536
#1	479.2	122100.	1.963	<.0000
#2	472.5	122400.	2.914	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	461500.	437.5
Stddev	1.114	6.924	19.	.7
%RSD	23.66	.2407	.0042	.1557
#1	< .0000	< .0000	461500.	438.0
#2	< .0000	< .0000	461500.	437.1

Sample Name: ICSAB-1 Run Time: 03/13/03 10:47

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	56.97	907.0	1617.
Stddev	.2861	.57	.9	41.
%RSD	4.300	1.004	.1010	2.543
#1	<.0000	57.37	906.3	1646.
#2	<.0000	56.56	907.6	1588.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	956.9	<.0000	<.0000	11.04
Stddev	1.9	.5945	1.283	2.82
%RSD	.1954	39.07	.4472	25.56
#1	958.3	<.0000	< .0000	13.03
#2	955.6	<.0000	< .0000	9.041

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.804	10.20	301100.	<.0000
Stddev	.071	.42	2584.	.6397
%RSD	3.928	4.072	.8583	1.278
#1	1.753	9.902	299300.	<.0000
#2	1.854	10.49	302900.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	431.0	439.5
Stddev	.3230	1.450	.8	2.6
%RSD	1.697	6.574	.1757	.6014
#1	<.0000	< .0000	430.5	441.4
#2	<.0000	< .0000	431.6	437.7

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	928.2	3.332
Stddev	4636.	1.1	.730
%RSD	21.67	.1239	21.92
#1	< .000	929.1	3.848
#2	< .000	927.4	2.815

Method: SHER Sample Name: CCV-1 Operator:
Comment:
Run Time: 03/13/03 10:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	506.5	1835.	1987.	6559.
Stddev	.9	9.	2.	10.
%RSD	.1711	.4739	.1193	.1453
#1	505.8	1829.	1986.	6552.
#2	507.1	1841.	1989.	6566.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2171.	2051.	2038.	1.612
Stddev	.	9.	13.	.103
%RSD	.0132	.4427	.6215	6.421
#1	2171.	2045.	2029.	1.539
#2	2172.	2058.	2047.	1.685

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2006.	2070.	1990.	2038.
Stddev	9.	1.	3.	8.
%RSD	.4400	.0653	.1376	.3825
#1	1999.	2071.	1988.	2033.
#2	2012.	2069.	1992.	2044.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2066.	2008.	<.0000	<.0000
Stddev	14.	2.	7.813	.4721
%RSD	.6955	.1127	.9853	1.085
#1	2055.	2006.	< .0000	<.0000
#2	2076.	2009.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9486.	2003.	2004.	1950.
Stddev	53.	11.	12.	6.
%RSD	.5604	.5372	.5740	.3101
#1	9448.	1995.	1996.	1946.
#2	9523.	2011.	2012.	1955.

Sample Name: CCV-1 Run Time: 03/13/03 10:54

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2068.	2132.	2063.	320.8
Stddev	8.	8.	5.	7.7
%RSD	.4049	.3928	.2466	2.404
#1	2062.	2126.	2060.	315.4
#2	2074.	2138.	2067.	326.3

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2080.	2118.	2122.	8647.
Stddev	2.	1.	3.	50.
%RSD	.0997	.0289	.1272	.5769
#1	2078.	2117.	2120.	8612.
#2	2081.	2118.	2124.	8682.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1999.	2056.	10570.	<.0000
Stddev	3.	4.	1275.	.5694
%RSD	.1458	.1766	12.07	.2130
#1	1997.	2053.	11470.	<.0000
#2	2001.	2058.	9664.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2046.	2013.	1949.
Stddev	1.069	11.	.	31.
%RSD	37.13	.5589	.0121	1.610
#1	< .0000	2038.	2013.	1927.
#2	< .0000	2054.	2013.	1972.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1188000.	2078.	1.735
Stddev	2157.	3.	.200
%RSD	.1816	.1680	11.52
#1	1186000.	2076.	1.877
#2	1189000.	2080.	1.594

Method: SHER Sample Name: CCB-1 Operator:
Comment:
Run Time: 03/13/03 11:15 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.1414	3.981	1.362	1.117
Stddev	1.999	.120	1.861	39.55
%RSD	1414.	3.015	136.6	3542.
#1	1.555	4.066	.0468	< .0000
#2	< .0000	3.896	2.678	29.08

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	4.987	<.0000	.0970	.1096
Stddev	2.252	.2774	.0002	1.396
%RSD	45.16	85.82	.1659	1273.
#1	6.579	<.0000	.0969	< .0000
#2	3.395	<.0000	.0971	1.096

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	.5838	<.0000	.1178	<.0000
Stddev	1.034	.1892	.1136	6.642
%RSD	177.2	43.17	96.47	377.3
#1	1.315	<.0000	.1981	< .0000
#2	< .0000	<.0000	.0374	2.936

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.2552	.0740	.0593	<.0000
Stddev	1.292	.1769	3.865	.2575
%RSD	506.5	239.1	6520.	19.75
#1	< .0000	.1991	< .0000	<.0000
#2	1.169	<.0000	2.792	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	14.51	20.14	<.0000
Stddev	1.111	3.92	5.37	.0348
%RSD	53.81	27.00	26.64	11.97
#1	< .0000	11.74	23.94	<.0000
#2	< .0000	17.28	16.35	<.0000

Sample Name: CCB-1 Run Time: 03/13/03 11:15

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.615	<.0000	<.0000	.9059
Stddev	2.221	2.065	.0542	48.82
%RSD	84.93	506.0	28.93	5389.
#1	4.185	< .0000	<.0000	< .0000
#2	1.044	1.052	<.0000	35.43

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	.1547	1.442	<.0000
Stddev	.5784	3.720	.927	.7068
%RSD	82.53	2404.	64.28	9.490
#1	<.0000	2.785	.7863	<.0000
#2	<.0000	< .0000	2.097	<.0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	1069.	<.0000
Stddev	.4603	2.906	4270.	2.839
%RSD	367.6	494.8	399.5	706.7
#1	<.0000	1.467	< .000	< .0000
#2	.2003	< .0000	4088.	1.606

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.666	.3334	2.693
Stddev	.1073	1.993	1.885	.721
%RSD	7.462	119.6	565.5	26.76
#1	<.0000	3.076	< .0000	2.184
#2	<.0000	.2571	1.666	3.203

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	.5151
Stddev	476.6	.1027	.1988
%RSD	28.22	350.1	38.58
#1	< .0000	.0433	.3746
#2	< .0000	<.0000	.6557

Method: SHER Sample Name: PB-W Operator:
Comment:
Run Time: 03/13/03 11:18 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	14.35	1.350	<.0000
Stddev	.1999	8.72	1.574	77.53
%RSD	20.20	60.75	116.6	770.0
#1	<.0000	8.187	2.462	< .0000
#2	<.0000	20.52	.2370	44.75

Elem	B 2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.755	<.0000	.0987	<.0000
Stddev	.318	.1852	.0247	.0515
%RSD	18.13	47.15	24.99	3.278
#1	1.980	<.0000	.0813	<.0000
#2	1.530	<.0000	.1161	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1.754	<.0000	.0910	<.0000
Stddev	.207	.0727	.0000	1.660
%RSD	11.78	18.90	.0354	633300.
#1	1.608	<.0000	.0911	< .0000
#2	1.900	<.0000	.0910	1.174

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1.420	.0576	.2972	<.0000
Stddev	.215	.0699	1.848	1.286
%RSD	15.17	121.2	621.9	223.3
#1	1.268	.1070	< .0000	< .0000
#2	1.572	.0082	1.604	.3335

Elem	K 7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	.6288	11.00	8.758	<.0000
Stddev	.9214	2.39	3.303	.0118
%RSD	146.5	21.72	37.71	4.379
#1	<.0000	9.309	11.09	<.0000
#2	1.280	12.69	6.422	<.0000

Sample Name: PB-W Run Time: 03/13/03 11:18

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.4178	.1612	<.0000	21.80
Stddev	.5432	.0617	.0241	6.42
%RSD	130.0	38.28	80.84	29.46
#1	.0337	.2049	<.0000	17.26
#2	.8019	.1176	<.0000	26.34

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.2919	.6960	1.966	<.0000
Stddev	.1653	.9848	2.410	1.406
%RSD	56.61	141.5	122.6	35.37
#1	.1751	1.392	3.670	< .0000
#2	.4088	< .0000	.2617	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	2.739	2893.	.5517
Stddev	.3895	2.075	979.	2.626
%RSD	311.1	75.76	33.83	476.0
#1	<.0000	1.271	2201.	< .0000
#2	.1502	4.206	3585.	2.409

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.3332	.7867
Stddev	.0000	.3619	1.571	1.229
%RSD	.0041	14.12	471.4	156.3
#1	<.0000	<.0000	< .0000	1.656
#2	<.0000	<.0000	1.444	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	190.4	.1220	.6622
%RSD	7.227	173.6	706.9
#1	< .0000	<.0000	<.0000
#2	< .0000	.0160	.3746

Method: SHER Sample Name: LCS-W Operator:
Comment:
Run Time: 03/13/03 11:22 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	501.7	1868.	1992.	6400.
Stddev	5.1	2.	4.	101.
%RSD	1.018	.1057	.2084	1.583
#1	498.1	1869.	1989.	6329.
#2	505.3	1866.	1995.	6472.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2175.	2049.	2043.	.9168
Stddev	5.	.	6.	1.811
%RSD	.2227	.0015	.2733	197.5
#1	2171.	2049.	2039.	2.197
#2	2178.	2049.	2047.	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2013.	2066.	1989.	2020.
Stddev	6.	7.	7.	1.
%RSD	.3184	.3168	.3466	.0626
#1	2009.	2062.	1984.	2020.
#2	2018.	2071.	1994.	2019.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2066.	2009.	<.0000	<.0000
Stddev	8.	6.	8.157	.3430
%RSD	.3752	.2991	1.050	.7881
#1	2060.	2005.	< .0000	<.0000
#2	2071.	2014.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9452.	2007.	2001.	1957.
Stddev	8.	11.	5.	6.
%RSD	.0885	.5443	.2268	.2915
#1	9458.	1999.	1998.	1953.
#2	9446.	2015.	2004.	1961.

Sample Name: LCS-W Run Time: 03/13/03 11:22

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2075.	2127.	2064.	320.8
Stddev	9.	9.	9.	23.1
%RSD	.4357	.4310	.4310	7.211
#1	2068.	2121.	2058.	337.2
#2	2081.	2134.	2071.	304.5

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2080.	2116.	2123.	8617.
Stddev	8.	7.	11.	20.
%RSD	.3915	.3238	.5376	.2364
#1	2074.	2111.	2115.	8603.
#2	2086.	2120.	2131.	8631.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1998.	2056.	9853.	<.0000
Stddev	5.	2.	3114.	1.066
%RSD	.2327	.1207	31.61	.4023
#1	1995.	2054.	12060.	< .0000
#2	2002.	2058.	7651.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2051.	2005.	1991.
Stddev	.3217	15.	14.	25.
%RSD	9.864	.7343	.6982	1.267
#1	<.0000	2040.	1995.	1973.
#2	<.0000	2062.	2015.	2009.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1176000.	2080.	2.581
Stddev	12430.	7.	.730
%RSD	1.057	.3316	28.29
#1	1167000.	2075.	3.097
#2	1185000.	2085.	2.064

Method: SHER Sample Name: MEGDIM0237 Operator:
Comment:
Run Time: 03/13/03 11:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	4148.	<.0000	9867.
Stddev	.8011	18.	4.655	65.
%RSD	62.91	.4383	9.586	.6571
#1	<.0000	4135.	< .0000	9821.
#2	<.0000	4161.	< .0000	9913.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	197.5	2758.	2.179	<.0000
Stddev	1.0	9.	.027	.1552
%RSD	.5180	.3193	1.240	6.338
#1	196.8	2752.	2.198	<.0000
#2	198.2	2764.	2.159	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	99630.	<.0000	11.59	7.866
Stddev	499.	.5063	.07	.054
%RSD	.5013	1.838	.5888	.6910
#1	99280.	<.0000	11.64	7.905
#2	99980.	<.0000	11.54	7.828

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	35.18	11400.	<.0000	<.0000
Stddev	1.50	94.	.4203	.0430
%RSD	4.274	.8280	25.28	.2470
#1	36.25	11340.	<.0000	<.0000
#2	34.12	11470.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9769.	<.0000	24370.	1122.
Stddev	25.	1.671	82.	10.
%RSD	.2564	.6195	.3359	.9261
#1	9752.	< .0000	24310.	1115.
#2	9787.	< .0000	24430.	1130.

Sample Name: MEGDIM0237 Run Time: 03/13/03 11:26

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.616	28490.	2.874	173.6
Stddev	1.630	116.	.102	30.9
%RSD	62.32	.4079	3.567	17.77
#1	3.769	28410.	2.946	151.8
#2	1.463	28570.	2.801	195.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	14.35	6.830	<.0000	9495.
Stddev	1.94	.438	2.596	44.
%RSD	13.51	6.414	21.60	.4584
#1	15.72	7.139	< .0000	9464.
#2	12.98	6.520	< .0000	9526.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3.908	6145.	26380.	2.257
Stddev	1.275	28.	445.	.639
%RSD	32.64	.4487	1.686	28.31
#1	4.809	6126.	26070.	2.709
#2	3.006	6165.	26690.	1.806

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	7.580	3.073	5.231	42.07
Stddev	1.931	1.813	.629	1.64
%RSD	25.47	59.01	12.02	3.905
#1	6.214	4.355	5.675	43.23
#2	8.945	1.791	4.786	40.91

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	85.20	11.17
Stddev	526.0	.74	.67
%RSD	3.289	.8689	5.955
#1	< .0000	84.68	10.70
#2	< .0000	85.72	11.64

Method: SHER Sample Name: MEGDIM0237 D Operator:
Comment:
Run Time: 03/13/03 11:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.0721	4141.	<.0000	10190.
Stddev	1.502	6.	.5859	76.
%RSD	2085.	.1370	1.089	.7454
#1	1.134	4145.	<.0000	10240.
#2	< .0000	4137.	<.0000	10130.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	230.7	2783.	2.210	<.0000
Stddev	14.1	1.	.033	.0000
%RSD	6.094	.0405	1.481	.0006
#1	240.7	2784.	2.233	<.0000
#2	220.8	2783.	2.187	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	101600.	<.0000	11.92	8.305
Stddev	70.	.0406	.01	1.663
%RSD	.0690	.1397	.0641	20.02
#1	101600.	<.0000	11.92	7.129
#2	101500.	<.0000	11.93	9.481

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	36.41	11660.	.5959	<.0000
Stddev	.79	3.	1.429	1.201
%RSD	2.164	.0296	239.8	6.863
#1	36.97	11650.	< .0000	< .0000
#2	35.85	11660.	1.606	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9789.	<.0000	24700.	1142.
Stddev	58.	2.659	75.	.
%RSD	.5916	.8540	.3035	.0302
#1	9830.	< .0000	24760.	1143.
#2	9748.	< .0000	24650.	1142.

Sample Name: MEGDIM0237 D Run Time: 03/13/03 11:35

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.126	29770.	3.287	176.3
Stddev	.305	6.	.591	1.3
%RSD	27.09	.0216	17.97	.7285
#1	.9103	29780.	3.705	177.2
#2	1.342	29770.	2.870	175.4

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	15.57	3.463	<.0000	9619.
Stddev	.99	3.119	.8345	12.
%RSD	6.352	90.06	5.575	.1235
#1	14.87	5.669	<.0000	9610.
#2	16.27	1.258	<.0000	9627.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4759	6304.	29320.	2.559
Stddev	.3897	13.	1216.	1.065
%RSD	81.87	.2026	4.148	41.63
#1	.7515	6313.	30180.	1.805
#2	.2004	6295.	28460.	3.312

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	8.718	2.816	9.684	36.46
Stddev	.108	.000	.629	2.73
%RSD	1.236	.0012	6.496	7.475
#1	8.642	2.817	10.13	34.54
#2	8.794	2.816	9.239	38.39

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	87.15	13.00
Stddev	1242.	.03	.20
%RSD	6.587	.0336	1.538
#1	< .000	87.13	12.86
#2	< .000	87.17	13.14

Method: SHER Sample Name: MEGDIM0237 S Operator:
Comment:
Run Time: 03/13/03 11:39 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	47.10	7685.	70.59	13150.
Stddev	.30	682.	4.62	575.
%RSD	.6333	8.877	6.538	4.369
#1	47.31	7203.	73.85	12750.
#2	46.89	8167.	67.33	13560.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	214.7	4718.	57.88	<.0000
Stddev	36.4	39.	1.08	.4138
%RSD	16.96	.8367	1.872	12.87
#1	240.4	4746.	57.11	<.0000
#2	189.0	4690.	58.64	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	101400.	.9225	532.4	217.7
Stddev	3454.	.4890	12.3	3.1
%RSD	3.405	53.01	2.302	1.429
#1	98990.	1.268	523.7	219.9
#2	103900.	.5767	541.0	215.5

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	298.3	13140.	<.0000	<.0000
Stddev	3.0	348.	3.194	2.488
%RSD	1.007	2.653	1.915	13.43
#1	300.5	12890.	< .0000	< .0000
#2	296.2	13380.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10420.	<.0000	24240.	1622.
Stddev	277.	23.14	156.	25.
%RSD	2.660	8.529	.6446	1.549
#1	10230.	< .0000	24130.	1604.
#2	10620.	< .0000	24350.	1639.

Sample Name: MEGDIM0237 S Run Time: 03/13/03 11:39

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.531	30250.	523.5	229.0
Stddev	.191	264.	11.1	21.9
%RSD	12.46	.8722	2.118	9.540
#1	1.396	30070.	515.6	244.5
#2	1.665	30440.	531.3	213.6

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	33.69	439.7	5.739	13470.
Stddev	2.15	1.9	6.690	2171.
%RSD	6.387	.4338	116.6	16.12
#1	35.21	438.4	10.47	11940.
#2	32.17	441.1	1.008	15010.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.9769	6277.	32210.	<.0000
Stddev	.1771	170.	623.	2.627
%RSD	18.13	2.708	1.934	4.156
#1	1.102	6157.	31770.	< .0000
#2	.8517	6397.	32650.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	126.5	44.62	490.9	867.7
Stddev	57.0	.36	8.4	9.6
%RSD	45.11	.8125	1.704	1.110
#1	86.12	44.87	485.0	860.9
#2	166.8	44.36	496.8	874.5

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	284800.	642.8	14.55
Stddev	4733.	10.8	1.46
%RSD	1.662	1.687	10.04
#1	281500.	635.2	13.52
#2	288200.	650.5	15.58

Method: SHER Sample Name: MEGDIM0237 A Operator:
Comment:
Run Time: 03/13/03 12:24 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	96.75	8582.	124.1	15880.
Stddev	2.00	50.	4.0	65.
%RSD	2.071	.5778	3.240	.4085
#1	95.33	8547.	121.2	15830.
#2	98.17	8617.	126.9	15930.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	208.8	6804.	121.1	<.0000
Stddev	2.2	8.	.0	1.397
%RSD	1.044	.1171	.0220	39.39
#1	210.3	6809.	121.1	< .0000
#2	207.3	6798.	121.1	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	111500.	31.37	1148.	438.1
Stddev	922.	.03	1.	3.3
%RSD	.8269	.0927	.0487	.7643
#1	110800.	31.35	1148.	440.4
#2	112100.	31.39	1149.	435.7

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	574.7	13950.	<.0000	<.0000
Stddev	.1	39.	7.229	.4719
%RSD	.0244	.2819	2.077	3.099
#1	574.8	13920.	< .0000	<.0000
#2	574.6	13980.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9602.	<.0000	24750.	2247.
Stddev	6.	2.168	3.	8.
%RSD	.0676	.8160	.0110	.3754
#1	9598.	< .0000	24760.	2241.
#2	9607.	< .0000	24750.	2253.

Sample Name: MEGDIM0237 A Run Time: 03/13/03 12:24

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.070	31130.	1119.	265.4
Stddev	.076	102.	1.	1.3
%RSD	3.685	.3286	.0576	.4844
#1	2.016	31060.	1118.	266.3
#2	2.124	31200.	1119.	264.5

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	61.99	892.4	15.95	9896.
Stddev	2.49	1.9	11.12	63.
%RSD	4.012	.2148	69.76	.6341
#1	60.23	893.8	8.081	9852.
#2	63.74	891.1	23.81	9940.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.478	6849.	35650.	<.0000
Stddev	.390	17.	2521.	1.917
%RSD	26.37	.2496	7.072	1.401
#1	1.202	6837.	33870.	< .0000
#2	1.753	6861.	37430.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	7.277	88.34	1035.	1745.
Stddev	.214	1.63	8.	9.
%RSD	2.946	1.847	.7292	.5174
#1	7.429	87.19	1041.	1738.
#2	7.126	89.50	1030.	1751.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	623400.	1252.	11.36
Stddev	2390.	.	.80
%RSD	.3835	.0170	7.012
#1	625100.	1252.	11.92
#2	621700.	1252.	10.79

Method: SHER Sample Name: MEGDIM0237 L Operator:
Comment:
Run Time: 03/13/03 12:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.0722	769.4	<.0000	2539.
Stddev	2.504	14.3	.8170	32.
%RSD	3470.	1.865	9.796	1.248
#1	< .0000	779.6	<.0000	2516.
#2	1.843	759.3	<.0000	2561.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	41.22	519.9	.4291	<.0000
Stddev	2.44	1.8	.0330	2.121
%RSD	5.915	.3550	7.683	105.5
#1	42.94	521.2	.4058	< .0000
#2	39.49	518.6	.4524	< .0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	21790.	<.0000	3.015	1.755
Stddev	93.	.0000	.091	2.905
%RSD	.4278	.0005	3.013	165.5
#1	21850.	<.0000	3.080	3.809
#2	21720.	<.0000	2.951	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	7.741	2476.	<.0000	<.0000
Stddev	.503	11.	.9247	1.888
%RSD	6.495	.4462	86.55	39.15
#1	8.097	2483.	<.0000	< .0000
#2	7.386	2468.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1383.	<.0000	4840.	233.4
Stddev	13.	6.400	13.	1.5
%RSD	.9451	3.638	.2766	.6434
#1	1392.	< .0000	4831.	234.5
#2	1374.	< .0000	4850.	232.4

Sample Name: MEGDIM0237 L Run Time: 03/13/03 12:29

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	6135.	.7931	29.99
Stddev	.2955	21.	.3678	30.85
%RSD	274.7	.3458	46.37	102.9
#1	<.0000	6150.	1.053	51.80
#2	.1014	6120.	.5330	8.178

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	3.266	2.543	<.0000	1847.
Stddev	2.199	.110	.4639	16.
%RSD	67.32	4.313	33.30	.8421
#1	1.711	2.466	<.0000	1836.
#2	4.821	2.621	<.0000	1858.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.3507	1340.	4337.	1.856
Stddev	.2126	.	1424.	.355
%RSD	60.61	.0177	32.83	19.13
#1	.5010	1341.	5344.	2.107
#2	.2004	1340.	3330.	1.605

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.8330	.3802	4.898	.3025
Stddev	.9650	1.995	1.732	2.469
%RSD	115.9	524.6	35.35	816.2
#1	1.515	< .0000	6.122	2.048
#2	.1506	1.791	3.673	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	18.39	2.721
Stddev	1386.	.19	.398
%RSD	19.24	1.035	14.63
#1	< .000	18.52	3.003
#2	< .000	18.25	2.440

Method: SHER Sample Name: MEGDIM0237 F Operator:
Comment:
Run Time: 03/13/03 12:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3258.	<.0000	9478.
Stddev	1.002	.	.6661	238.
%RSD	141.7	.0019	1.684	2.506
#1	< .0000	3258.	<.0000	9310.
#2	.0012	3258.	<.0000	9646.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	237.3	2093.	2.239	<.0000
Stddev	3.0	3.	.025	.7242
%RSD	1.278	.1308	1.100	43.10
#1	235.2	2091.	2.222	<.0000
#2	239.5	2095.	2.256	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	108300.	<.0000	15.55	6.601
Stddev	1166.	.0875	.26	.054
%RSD	1.077	.3599	1.657	.8252
#1	107500.	<.0000	15.36	6.639
#2	109100.	<.0000	15.73	6.562

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	37.07	9594.	1.904	<.0000
Stddev	.43	90.	2.942	.3002
%RSD	1.161	.9405	154.6	1.655
#1	36.77	9530.	< .0000	<.0000
#2	37.37	9657.	3.984	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9439.	<.0000	23420.	1078.
Stddev	20.	3.112	36.	13.
%RSD	.2156	.7266	.1532	1.231
#1	9425.	< .0000	23390.	1069.
#2	9453.	< .0000	23440.	1088.

Sample Name: MEGDIM0237 F Run Time: 03/13/03 12:35

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.7688	31340.	14.88	126.3
Stddev	.2384	27.	.37	48.8
%RSD	31.00	.0877	2.514	38.66
#1	.6002	31360.	14.61	91.79
#2	.9373	31320.	15.14	160.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	9.206	2.547	<.0000	8955.
Stddev	.282	1.477	1.020	15.
%RSD	3.066	58.00	8.838	.1708
#1	9.406	3.592	< .0000	8944.
#2	9.007	1.502	< .0000	8966.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.979	6870.	24680.	<.0000
Stddev	.035	55.	2076.	.2130
%RSD	1.792	.8069	8.412	407.7
#1	1.954	6831.	26150.	.0984
#2	2.004	6909.	23210.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	6.291	3.586	8.014	22.35
Stddev	.965	1.088	1.417	1.70
%RSD	15.34	30.34	17.68	7.594
#1	6.974	4.355	7.012	23.55
#2	5.609	2.816	9.016	21.15

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	173.8	7.602
Stddev	4397.	2.0	.398
%RSD	39.65	1.157	5.240
#1	< .000	172.4	7.884
#2	< .000	175.2	7.321

Method: SHER Sample Name: MEGDIM0237 F D Operator:
Comment:
Run Time: 03/13/03 12:43 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3611.	<.0000	10600.
Stddev	3.606	14.	2.237	92.
%RSD	2569.	.3962	5.157	.8665
#1	2.409	3601.	< .0000	10530.
#2	< .0000	3621.	< .0000	10660.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	253.3	2197.	2.307	<.0000
Stddev	1.9	7.	.050	.1552
%RSD	.7461	.3020	2.144	6.534
#1	252.0	2192.	2.342	<.0000
#2	254.7	2201.	2.272	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	119400.	<.0000	16.58	<.0000
Stddev	1275.	.4803	.07	4.504
%RSD	1.068	1.838	.4111	5279.
#1	118500.	<.0000	16.53	< .0000
#2	120300.	<.0000	16.63	3.099

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	39.61	10440.	.2988	<.0000
Stddev	1.01	118.	1.513	.8580
%RSD	2.543	1.134	506.4	4.427
#1	40.32	10360.	< .0000	<.0000
#2	38.90	10530.	1.369	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10060.	<.0000	24740.	1165.
Stddev	65.	2.373	94.	15.
%RSD	.6500	.5163	.3807	1.324
#1	10010.	< .0000	24670.	1154.
#2	10110.	< .0000	24800.	1176.

Sample Name: MEGDIM0237 F D Run Time: 03/13/03 12:43

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.9778	33750.	15.55	159.0
Stddev	.3242	433.	.07	10.3
%RSD	33.15	1.284	.4652	6.465
#1	1.207	33450.	15.50	166.3
#2	.7486	34060.	15.60	151.8

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	12.55	2.542	<.0000	9828.
Stddev	2.17	.055	2.596	26.
%RSD	17.25	2.160	20.29	.2628
#1	14.08	2.581	< .0000	9810.
#2	11.02	2.503	< .0000	9846.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units.	ppb	ppb	ppb	ppm
Avg	1.503	7475.	24640.	.7511
Stddev	1.134	59.	1424.	4.473
%RSD	75.43	.7858	5.778	595.6
#1	.7014	7434.	23630.	< .0000
#2	2.305	7517.	25650.	3.914

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	12.58	.8930	6.901	18.29
Stddev	.43	1.269	1.417	2.47
%RSD	3.406	142.1	20.53	13.51
#1	12.28	< .0000	5.899	16.54
#2	12.89	1.791	7.903	20.04

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	188.0	7.602
Stddev	239.0	2.5	.398
%RSD	1.663	1.310	5.241
#1	< .0000	186.2	7.884
#2	< .0000	189.7	7.321

Method: SHER Sample Name: MEGDIM0237 F S Operator:
Comment:
Run Time: 03/13/03 12:49 Type: Unk Mode: CONC Corr.Fact: 1.000000

Run Status: User Aborted

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	48.22	7387.	54.22	14970.
Stddev	2.48	12.	1.86	356.
%RSD	5.151	.1675	3.432	2.380
#1	46.46	7396.	52.90	14710.
#2	49.97	7378.	55.54	15220.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	238.1	4156.	64.96	<.0000
Stddev	.1	15.	.43	.8277
%RSD	.0211	.3627	.6560	16.65
#1	238.1	4167.	64.66	<.0000
#2	238.2	4146.	65.26	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	122900.	5.088	618.5	220.1
Stddev	1773.	.303	7.1	1.1
%RSD	1.442	5.949	1.147	.5060
#1	121700.	5.303	613.5	219.3
#2	124200.	4.874	623.5	220.8

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	295.9	13000.	<.0000	<.0000
Stddev	.5	70.	.7566	2.016
%RSD	.1623	.5359	.4062	10.01
#1	296.2	12950.	<.0000	< .0000
#2	295.5	13050.	<.0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	11020.	<.0000	25030.	1739.
Stddev	60.	26.15	.	10.
%RSD	.5461	1.125	.0003	.5754
#1	10980.	< .0000	25030.	1732.
#2	11070.	< .0000	25030.	1746.

Sample Name: MEGDIM0237 F S Run Time: 03/13/03 12:49

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.097	34880.	620.9	239.9
Stddev	.324	571.	8.2	14.1
%RSD	15.46	1.637	1.322	5.893
#1	1.868	34480.	615.1	229.9
#2	2.326	35290.	626.7	249.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	47.45	472.4	<.0000	13570.
Stddev	4.40	4.6	7.603	14.
%RSD	9.280	.9729	518.4	.1023
#1	44.34	469.2	< .0000	13580.
#2	50.56	475.7	3.909	13560.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.202	7697.	32290.	<.0000
Stddev	1.346	94.	386.	1.775
%RSD	112.0	1.222	1.194	2.394
#1	.2505	7630.	32570.	< .0000
#2	2.154	7763.	32020.	< .0000

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	123.1	51.16	537.9	915.8
Stddev	2.3	3.08	9.7	2.5
%RSD	1.876	6.026	1.803	.2785
#1	121.4	53.34	531.1	914.0
#2	124.7	48.98	544.8	917.6

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	338700.	812.7	10.70
Stddev	3298.	5.5	.53
%RSD	.9737	.6739	4.924
#1	336400.	808.8	10.32
#2	341000.	816.6	11.07

Method: SHER Sample Name: CCV-2 Operator:
Comment:
Run Time: 03/13/03 12:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	541.6	2041.	2094.	7905.
Stddev	1.1	13.	12.	171.
%RSD	.2038	.6445	.5860	2.163
#1	542.4	2050.	2085.	7784.
#2	540.8	2031.	2103.	8025.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2046.	2086.	2027.	3.624
Stddev	2.	1.	1.	.155
%RSD	.1179	.0575	.0430	4.283
#1	2045.	2085.	2027.	3.514
#2	2048.	2087.	2026.	3.733

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1909.	2118.	1967.	2070.
Stddev	4.	14.	4.	15.
%RSD	.2219	.6508	.1784	.7428
#1	1912.	2109.	1965.	2059.
#2	1906.	2128.	1970.	2081.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2112.	1994.	<.0000	<.0000
Stddev	3.	6.	4.623	.1717
%RSD	.1630	.2834	.5135	.3225
#1	2110.	1990.	< .0000	<.0000
#2	2114.	1998.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9860.	2331.	2168.	2034.
Stddev	7.	3.	36.	5.
%RSD	.0661	.1455	1.641	.2384
#1	9855.	2328.	2143.	2031.
#2	9865.	2333.	2193.	2038.

Sample Name: CCV-2 Run Time: 03/13/03 12:54

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2163.	1870.	1892.	446.2
Stddev	6.	2.	5.	20.6
%RSD	.2935	.1018	.2696	4.609
#1	2159.	1871.	1889.	460.8
#2	2168.	1868.	1896.	431.7

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2021.	2145.	1956.	9738.
Stddev	6.	4.	4.	3.
%RSD	.2930	.1990	.2219	.0285
#1	2016.	2142.	1953.	9736.
#2	2025.	2148.	1959.	9740.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2566.	2547.	38230.	<.0000
Stddev	1.	12.	475.	2.769
%RSD	.0318	.4794	1.241	.8663
#1	2567.	2555.	38570.	< .0000
#2	2566.	2538.	37890.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2129.	1810.	2023.
Stddev	.5361	1.	1.	28.
%RSD	28.27	.0383	.0779	1.387
#1	<.0000	2130.	1809.	2003.
#2	<.0000	2129.	1811.	2042.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1453000.	2047.	1.642
Stddev	2677.	4.	.199
%RSD	.1842	.2107	12.13
#1	1451000.	2044.	1.501
#2	1455000.	2050.	1.783

Method: SHER Sample Name: CCB-2 Operator:
Comment:
Run Time: 03/13/03 13:01 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.0708	5.631	3.677	52.62
Stddev	4.698	5.559	.366	39.56
%RSD	6632.	98.71	9.948	75.19
#1	3.393	9.562	3.936	80.59
#2	< .0000	1.701	3.419	24.64

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	6.698	1.109	1.611
Stddev	.2166	.139	.008	.310
%RSD	11.89	2.078	.7345	19.26
#1	<.0000	6.796	1.104	1.391
#2	<.0000	6.599	1.115	1.830

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	.6266	1.467
Stddev	2.109	.0960	.2726	1.245
%RSD	48.72	25.80	43.51	84.87
#1	< .0000	<.0000	.8194	2.348
#2	< .0000	<.0000	.4339	.5868

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.9138	.1551	<.0000	.1220
Stddev	.7893	.1186	.8403	.3859
%RSD	86.38	76.45	157.4	316.4
#1	1.472	.0713	<.0000	<.0000
#2	.3557	.2390	.0603	.3949

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	.0511
Stddev	.3814	.1456	7.845	.0353
%RSD	37.76	.1481	206.6	69.09
#1	<.0000	<.0000	< .0000	.0761
#2	<.0000	<.0000	1.751	.0261

Sample Name: CCB-2 Run Time: 03/13/03 13:01

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.4383	<.0000	.0776	<.0000
Stddev	.1716	.2068	.1519	6.425
%RSD	39.15	.3768	195.7	10.71
#1	.3169	<.0000	<.0000	< .0000
#2	.5596	<.0000	.1851	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.285	.7738	1.901	<.0000
Stddev	.149	.9849	.649	5.622
%RSD	11.58	127.3	34.14	567.9
#1	1.390	.0774	1.442	< .0000
#2	1.180	1.470	2.360	2.985

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.5009	1.957	4212.	<.0000
Stddev	.0000	2.905	712.	.5678
%RSD	.0000	148.5	16.90	25.69
#1	.5009	4.011	4716.	<.0000
#2	.5009	< .0000	3709.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.6809	4.356	.4443	<.0000
Stddev	.5350	1.632	3.299	2.032
%RSD	78.57	37.46	742.4	6.648
#1	1.059	3.202	2.777	< .0000
#2	.3026	5.510	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	403.2	<.0000	.4683
Stddev	2676.	.0509	.7948
%RSD	663.7	43.01	169.7
#1	2295.	<.0000	1.030
#2	< .000	<.0000	< .0000

Method: SHER Sample Name: MEGDIMO237 F A Operator:
Comment:
Run Time: 03/13/03 13:09 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	97.60	7694.	42.60	14760.
Stddev	1.00	52.	.43	73.
%RSD	1.027	.6754	1.002	.4928
#1	96.89	7657.	42.90	14710.
#2	98.31	7731.	42.30	14810.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	194.0	6245.	110.9	<.0000
Stddev	1.2	1.	.1	.8277
%RSD	.6241	.0119	.1343	22.20
#1	193.2	6245.	110.8	<.0000
#2	194.9	6246.	111.0	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	83830.	25.82	1004.	453.0
Stddev	186.	.40	2.	4.6
%RSD	.2223	1.556	.2279	1.007
#1	83700.	25.53	1003.	449.8
#2	83960.	26.10	1006.	456.3

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	586.0	10090.	<.0000	<.0000
Stddev	.9	28.	5.382	1.287
%RSD	.1602	.2764	1.421	7.728
#1	585.3	10070.	< .0000	< .0000
#2	586.7	10110.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9358.	<.0000	23380.	1990.
Stddev	42.	10.19	32.	7.
%RSD	.4463	3.363	.1369	.3521
#1	9328.	< .0000	23360.	1985.
#2	9387.	< .0000	23410.	1995.

Sample Name: MEGDIMO237 F A Run Time: 03/13/03 13:09

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.683	25880.	900.1	228.1
Stddev	.029	103.	2.9	12.8
%RSD	1.067	.3985	.3218	5.634
#1	2.704	25800.	898.0	219.0
#2	2.663	25950.	902.1	237.2

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	45.04	850.9	17.80	8977.
Stddev	.52	.0	1.67	3.
%RSD	1.158	.0006	9.381	.0385
#1	44.68	850.9	18.98	8979.
#2	45.41	850.9	16.62	8974.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	5.836	7023.	107500.	<.0000
Stddev	1.948	17.	266.	2.060
%RSD	33.38	.2396	.2479	1.399
#1	7.214	7011.	107300.	< .0000
#2	4.459	7035.	107700.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	6.747	81.87	854.0	1816.
Stddev	.322	2.45	5.2	7.
%RSD	4.768	2.990	.6090	.3856
#1	6.519	80.14	850.3	1811.
#2	6.974	83.60	857.7	1820.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	691400.	1201.	7.086
Stddev	92.	4.	.199
%RSD	.0133	.3267	2.809
#1	691300.	1198.	7.227
#2	691400.	1204.	6.945

Method: SHER Sample Name: MEGDIMO237 F L Operator:
Comment:
Run Time: 03/13/03 13:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	573.9	<.0000	2140.
Stddev	1.703	17.6	.0604	41.
%RSD	72.89	3.069	4.764	1.924
#1	< .0000	561.5	<.0000	2111.
#2	< .0000	586.4	<.0000	2169.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	33.79	396.6	1.673	<.0000
Stddev	1.19	.6	.008	.2069
%RSD	3.521	.1492	.4909	95.28
#1	34.64	396.2	1.678	<.0000
#2	32.95	397.0	1.667	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	15950.	<.0000	3.286	<.0000
Stddev	14.	.0350	.011	1.668
%RSD	.0857	.6944	.3469	417.9
#1	15940.	<.0000	3.278	< .0000
#2	15960.	<.0000	3.294	.7804

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.453	1654.	<.0000	<.0000
Stddev	1.869	7.	1.513	3.003
%RSD	34.27	.4469	150.0	119.3
#1	6.775	1659.	< .0000	< .0000
#2	4.132	1649.	.0609	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	1323.	<.0000	4492.	189.5
Stddev	3.	1.229	18.	.7
%RSD	.1917	.5986	.3953	.3542
#1	1325.	< .0000	4504.	189.9
#2	1321.	< .0000	4479.	189.0

Sample Name: MEGDIMO237 F L Run Time: 03/13/03 13:14

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	4852.	1.457	17.27
Stddev	.0286	4.	.054	10.28
%RSD	12.49	.0734	3.725	59.55
#1	<.0000	4850.	1.495	9.996
#2	<.0000	4855.	1.418	24.54

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.368	.6500	.2501	1661.
Stddev	1.332	1.478	2.411	11.
%RSD	97.38	227.3	964.1	.6368
#1	2.310	1.695	1.955	1654.
#2	.4260	< .0000	< .0000	1669.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.403	1348.	20950.	<.0000
Stddev	.921	6.	237.	2.130
%RSD	65.66	.4106	1.132	2081.
#1	2.054	1352.	21120.	< .0000
#2	.7515	1344.	20780.	1.404

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.804	5.702	.4450	<.0000
Stddev	.322	1.904	4.250	2.143
%RSD	11.47	33.39	955.2	39.97
#1	3.032	4.355	3.450	< .0000
#2	2.577	7.048	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	32.16	1.501
Stddev	1625.	.34	.664
%RSD	35.85	1.068	44.21
#1	< .000	32.40	1.971
#2	< .000	31.92	1.032

Method: SHER Sample Name: MEGDD0120 Operator:
Comment:
Run Time: 03/13/03 13:17 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	549.8	<.0000	2796.
Stddev	1.503	18.0	.4567	174.
%RSD	92.31	3.273	5.474	6.231
#1	< .0000	537.0	<.0000	2673.
#2	< .0000	562.5	<.0000	2919.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	940.7	399.8	1.428	<.0000
Stddev	14.2	1.6	.025	.5689
%RSD	1.510	.3952	1.737	315.2
#1	930.6	400.9	1.411	.2218
#2	950.7	398.6	1.446	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	4876.	<.0000	1.326	1.414
Stddev	132.	.0610	.261	3.295
%RSD	2.710	1.181	19.71	233.1
#1	4783.	<.0000	1.141	< .0000
#2	4970.	<.0000	1.511	3.744

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	15.77	2555.	.1203	<.0000
Stddev	.36	54.	3.446	1.201
%RSD	2.272	2.115	2864.	158.7
#1	16.03	2516.	2.557	< .0000
#2	15.52	2593.	< .0000	.0924

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10980.	1735.	1744.	60.80
Stddev	52.	23.	15.	1.35
%RSD	.4759	1.306	.8353	2.224
#1	10940.	1719.	1734.	59.84
#2	11010.	1751.	1754.	61.75

Sample Name: MEGDD0120 Run Time: 03/13/03 13:17

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.126	109900.	<.0000	29.99
Stddev	.057	1290.	.1159	33.42
%RSD	5.084	1.174	3.846	111.4
#1	1.086	109000.	<.0000	6.361
#2	1.167	110800.	<.0000	53.62

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.3488	3.552	<.0000	3693.
Stddev	1.657	1.970	2.875	47.
%RSD	475.0	55.46	610.8	1.264
#1	1.520	4.946	1.562	3660.
#2	< .0000	2.159	< .0000	3726.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	4.459	947.0	30620.	1.153
Stddev	.638	13.8	1334.	.497
%RSD	14.30	1.454	4.357	43.13
#1	4.008	937.3	31560.	1.504
#2	4.910	956.7	29670.	.8011

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	3.790	7.817	.7789	<.0000
Stddev	1.287	2.720	1.889	7.196
%RSD	33.95	34.80	242.5	42.58
#1	4.700	9.741	2.115	< .0000
#2	2.880	5.894	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	8.147	3.801
Stddev	1626.	.223	.067
%RSD	13.36	2.737	1.751
#1	< .000	7.989	3.754
#2	< .000	8.304	3.848

Method: SHER Sample Name: MEGDD0120F Operator:
Comment:
Run Time: 03/13/03 13:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	.9929	151.3	5.779	898.8
Stddev	1.402	.1	.410	77.6
%RSD	141.2	.0602	7.095	8.629
#1	.0013	151.2	5.489	953.7
#2	1.984	151.3	6.069	844.0

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1134.	783.6	1.067	3.807
Stddev	12.	2.1	.058	3.311
%RSD	1.059	.2693	5.408	86.97
#1	1126.	782.1	1.108	1.466
#2	1143.	785.1	1.027	6.148

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	6310.	<.0000	1.776	5.927
Stddev	157.	.0960	.125	.421
%RSD	2.487	.8246	7.038	7.101
#1	6199.	<.0000	1.864	6.224
#2	6421.	<.0000	1.687	5.629

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2.048	424.5	5.945	1.124
Stddev	.791	7.5	1.093	.858
%RSD	38.63	1.759	18.38	76.36
#1	2.608	419.2	6.718	.5169
#2	1.489	429.8	5.173	1.730

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	12330.	2002.	2354.	35.18
Stddev	500.	90.	43.	.46
%RSD	4.051	4.502	1.823	1.301
#1	11980.	1938.	2323.	34.85
#2	12690.	2066.	2384.	35.50

Sample Name: MEGDD0120F Run Time: 03/13/03 13:42

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	1.510	131300.	.2951	49.08
Stddev	.715	3441.	.0760	16.71
%RSD	47.34	2.621	25.74	34.05
#1	2.016	128900.	.3488	60.89
#2	1.005	133700.	.2414	37.26

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	3.733	.0755	2.947	4004.
Stddev	2.720	1.970	2.318	72.
%RSD	72.87	2609.	78.66	1.807
#1	1.809	< .0000	1.308	3953.
#2	5.657	1.469	4.586	4055.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.856	1168.	4023.	<.0000
Stddev	.850	21.	1038.	3.905
%RSD	29.77	1.811	25.81	210.0
#1	3.457	1153.	3288.	< .0000
#2	2.254	1183.	4757.	.9018

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	5.003	<.0000	.4450	<.0000
Stddev	.215	.8160	2.361	4.408
%RSD	4.291	1190.	530.7	8.497
#1	5.155	.5084	< .0000	< .0000
#2	4.851	<.0000	2.115	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	36.63	1.126
Stddev	2342.	.46	1.460
%RSD	18.57	1.268	129.7
#1	< .000	36.30	2.158
#2	< .000	36.95	.0932

Method: SHER Sample Name: MEGUIM0119 Operator:
Comment:
Run Time: 03/13/03 14:04 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	409.4	<.0000	98630.
Stddev	.4001	14.8	2.184	628.
%RSD	3.621	3.610	.6270	.6369
#1	<.0000	399.0	< .0000	98180.
#2	<.0000	419.9	< .0000	99070.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	436.1	1.149	<.0000
Stddev	.2388	.2	.074	.3105
%RSD	.3307	.0415	6.459	1.903
#1	<.0000	435.9	1.096	<.0000
#2	<.0000	436.2	1.201	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	166400.	<.0000	26.07	<.0000
Stddev	264.	.2706	.06	5.245
%RSD	.1586	3.864	.2193	34.52
#1	166300.	<.0000	26.03	< .0000
#2	166600.	<.0000	26.11	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	4.183	69940.	<.0000	<.0000
Stddev	.648	267.	1.429	1.802
%RSD	15.48	.3813	30.06	11.72
#1	3.725	70130.	< .0000	< .0000
#2	4.641	69750.	< .0000	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	15210.	218.7	33980.	1949.
Stddev	97.	8.8	32.	3.
%RSD	.6383	4.028	.0928	.1416
#1	15140.	212.5	34010.	1947.
#2	15280.	225.0	33960.	1951.

Sample Name: MEGUIM0119 Run Time: 03/13/03 14:04

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	147700.	<.0000	1103.
Stddev	.6864	231.	.0564	40.
%RSD	23.85	.1564	.0351	3.610
#1	<.0000	147600.	<.0000	1132.
#2	<.0000	147900.	<.0000	1075.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.001	<.0000	9243.
Stddev	2.430	3.612	6.399	15.
%RSD	4.288	361.0	5.542	.1582
#1	< .0000	3.555	< .0000	9233.
#2	< .0000	< .0000	< .0000	9254.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.280	1324.	758700.	2.157
Stddev	.461	1.	3540.	1.775
%RSD	20.20	.0581	.4666	82.30
#1	2.605	1324.	756200.	3.412
#2	1.954	1325.	761200.	.9016

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1.440	6.471	4.786	<.0000
Stddev	.322	1.904	2.833	.4362
%RSD	22.35	29.43	59.20	.7054
#1	1.212	7.817	6.790	<.0000
#2	1.667	5.124	2.783	<.0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	32.33	2.909
Stddev	5356.	.06	.531
%RSD	4.299	.1785	18.25
#1	< .000	32.29	3.285
#2	< .000	32.37	2.534

Method: SHER Sample Name: MEGUIM0119F Operator:
Comment:
Run Time: 03/13/03 14:08 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	15.47	9.031	3688.
Stddev	.7011	5.98	1.406	56.
%RSD	58.29	38.68	15.57	1.512
#1	<.0000	11.24	10.03	3649.
#2	<.0000	19.70	8.037	3728.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	173.6	685.1	1.120	3.442
Stddev	4.0	1.1	.016	1.449
%RSD	2.321	.1547	1.464	42.12
#1	176.4	685.9	1.131	2.417
#2	170.7	684.4	1.108	4.466

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	146800.	<.0000	2.667	4.978
Stddev	2293.	.0341	.023	2.082
%RSD	1.562	.3383	.8636	41.81
#1	148500.	<.0000	2.651	3.507
#2	145200.	<.0000	2.684	6.450

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.047	44.14	5.530	2.064
Stddev	1.726	2.91	1.849	1.158
%RSD	34.19	6.584	33.43	56.09
#1	3.827	46.19	6.837	2.883
#2	6.267	42.08	4.223	1.246

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	14310.	270.6	31860.	118.4
Stddev	306.	68.0	226.	1.9
%RSD	2.135	25.12	.7107	1.596
#1	14530.	318.6	32020.	119.7
#2	14100.	222.5	31700.	117.1

Sample Name: MEGUIM0119F Run Time: 03/13/03 14:08

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.1149	147200.	3.222	<.0000
Stddev	.2860	486.	.242	3.857
%RSD	248.9	.3303	7.515	106.1
#1	.3171	147600.	3.393	< .0000
#2	<.0000	146900.	3.051	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	5.017	<.0000	2.622	4716.
Stddev	1.019	.6564	1.483	59.
%RSD	20.31	19.28	56.57	1.251
#1	4.296	<.0000	3.671	4758.
#2	5.738	<.0000	1.573	4674.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.305	866.3	3687.	<.0000
Stddev	1.913	11.9	1750.	2.272
%RSD	83.01	1.373	47.46	86.93
#1	.9519	874.7	2449.	< .0000
#2	3.658	857.9	4924.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	1.854	<.0000	<.0000
Stddev	.7505	1.905	2.361	5.286
%RSD	43.01	102.7	151.5	9.227
#1	<.0000	3.201	< .0000	< .0000
#2	<.0000	.5071	.1110	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	223.3	1.736
Stddev	1961.	3.0	1.261
%RSD	57.36	1.327	72.65
#1	< .000	225.4	2.628
#2	< .000	221.2	.8442

Method: SHER Sample Name: MEGDD0240 Operator:
Comment:
Run Time: 03/13/03 14:24 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	283.3	7.343	1354.
Stddev	.2008	4.8	.263	51.
%RSD	10.92	1.680	3.585	3.740
#1	<.0000	286.6	7.157	1319.
#2	<.0000	279.9	7.529	1390.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1663.	1500.	1.276	3.697
Stddev	25.	81.	.303	.569
%RSD	1.520	5.419	23.78	15.39
#1	1681.	1557.	1.491	3.294
#2	1645.	1442.	1.062	4.099

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	15910.	<.0000	2.940	6.989
Stddev	116.	.5152	.227	1.949
%RSD	.7257	2.260	7.727	27.88
#1	16000.	<.0000	2.780	5.611
#2	15830.	<.0000	3.101	8.367

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.958	447.0	2.617	<.0000
Stddev	1.299	6.9	6.304	1.201
%RSD	21.80	1.545	240.9	20.73
#1	5.040	451.9	< .0000	< .0000
#2	6.877	442.2	7.075	< .0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	25910.	8218.	5182.	78.10
Stddev	390.	77.	203.	.97
%RSD	1.505	.9332	3.926	1.238
#1	25640.	8164.	5326.	78.79
#2	26190.	8273.	5038.	77.42

Sample Name: MEGDD0240 Run Time: 03/13/03 14:24

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.6205	189200.	1.272	25.45
Stddev	.4862	7951.	.553	1.28
%RSD	78.36	4.203	43.51	5.049
#1	.2766	183500.	1.664	24.54
#2	.9643	194800.	.8809	26.35

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	3.206	.3059	<.0000	4075.
Stddev	.378	1.642	12.42	117.
%RSD	11.78	536.7	1345.	2.879
#1	2.939	1.467	7.861	4157.
#2	3.473	< .0000	< .0000	3992.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.755	4296.	5323.	3.211
Stddev	.071	67.	1394.	1.420
%RSD	2.571	1.549	26.19	44.22
#1	2.806	4343.	4337.	2.207
#2	2.705	4249.	6309.	4.216

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.273	.5085	2.448	<.0000
Stddev	.428	3.808	1.417	20.06
%RSD	18.83	748.9	57.89	36.26
#1	2.575	3.201	1.446	< .0000
#2	1.970	< .0000	3.451	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	315.4	18.20
Stddev	2963.	4.7	.67
%RSD	42.95	1.490	3.686
#1	< .000	318.8	17.73
#2	< .000	312.1	18.68

Method: SHER Sample Name: MEGDD0240F Operator:
Comment:
Run Time: 03/13/03 14:37 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	151.4	9.139	941.3
Stddev	4.007	11.2	.174	109.3
%RSD	314.6	7.385	1.910	11.61
#1	1.559	143.5	9.262	1019.
#2	< .0000	159.3	9.015	864.0

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1661.	1964.	1.230	2.416
Stddev	176.	31.	.058	.932
%RSD	10.57	1.592	4.681	38.57
#1	1785.	1941.	1.190	3.075
#2	1537.	1986.	1.271	1.757

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	15520.	<.0000	2.057	8.009
Stddev	303.	2.727	.295	.834
%RSD	1.955	9.696	14.35	10.41
#1	15300.	< .0000	1.848	7.419
#2	15730.	< .0000	2.265	8.599

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	57.40	3.033	<.0000
Stddev	1.869	4.03	2.354	.0859
%RSD	32.62	7.021	77.63	2.229
#1	< .0000	60.25	4.697	<.0000
#2	< .0000	54.55	1.368	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	27960.	8272.	4916.	44.76
Stddev	802.	116.	99.	4.51
%RSD	2.870	1.401	2.019	10.08
#1	27390.	8190.	4846.	47.95
#2	28530.	8354.	4986.	41.57

Sample Name: MEGDD0240F Run Time: 03/13/03 14:37

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.420	194200.	1.180	9.085
Stddev	.687	2833.	.351	19.28
%RSD	28.37	1.458	29.75	212.2
#1	2.906	192200.	1.428	< .0000
#2	1.935	196200.	.9319	22.72

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	5.145	1.468	1.767	4356.
Stddev	.567	2.626	.834	106.
%RSD	11.02	178.9	47.20	2.424
#1	5.546	< .0000	1.177	4281.
#2	4.744	3.325	2.356	4431.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.455	3994.	<.0000	3.663
Stddev	.354	90.	1484.	3.479
%RSD	14.42	2.251	87.19	94.96
#1	2.204	3931.	< .000	6.123
#2	2.705	4058.	< .000	1.204

Elem	Ti3361	Tl1908	V 2924	V 3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	5.306	5.125	2.783	<.0000
Stddev	1.501	1.087	4.723	5.066
%RSD	28.29	21.22	169.7	8.991
#1	6.367	5.894	< .0000	< .0000
#2	4.245	4.356	6.122	< .0000

Elem	W 2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	415.7	96.68
Stddev	3299.	46.2	2.39
%RSD	46.69	11.11	2.470
#1	< .000	448.4	94.99
#2	< .000	383.1	98.37

Method: SHER Sample Name: CCV-3 Operator:
Comment:
Run Time: 03/13/03 14:50 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	545.0	2079.	2097.	9694.
Stddev	7.3	19.	5.	122.
%RSD	1.342	.9241	.2161	1.257
#1	539.8	2093.	2094.	9608.
#2	550.2	2066.	2100.	9781.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2070.	1889.	1819.	8.489
Stddev	1.	8.	5.	.517
%RSD	.0406	.4224	.2785	6.095
#1	2069.	1895.	1823.	8.123
#2	2070.	1884.	1815.	8.855

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2062.	1953.	2151.	1916.
Stddev	7.	2.	1.	7.
%RSD	.3214	.0787	.0507	.3471
#1	2066.	1952.	2151.	1921.
#2	2057.	1954.	2152.	1911.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	1990.	2146.	<.0000	<.0000
Stddev	3.	1.	10.42	.0431
%RSD	.1267	.0293	1.069	.0800
#1	1988.	2145.	< .0000	<.0000
#2	1992.	2146.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	9961.	4282.	2193.	1924.
Stddev	46.	25.	16.	1.
%RSD	.4616	.5913	.7357	.0636
#1	9994.	4300.	2204.	1924.
#2	9929.	4264.	2181.	1925.

Sample Name: CCV-3 Run Time: 03/13/03 14:50

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2352.	1913.	1905.	528.0
Stddev	3.	13.	.	15.4
%RSD	.1094	.6539	.0199	2.921
#1	2350.	1922.	1904.	517.1
#2	2354.	1904.	1905.	538.9

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2150.	1931.	2140.	10490.
Stddev	133.	3.	1.	54.
%RSD	6.199	.1513	.0390	.5101
#1	2244.	1933.	2139.	10530.
#2	2056.	1929.	2140.	10450.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3301.	3043.	39910.	<.0000
Stddev	6.	15.	59.	.7099
%RSD	.1738	.5009	.1484	.1979
#1	3297.	3054.	39870.	<.0000
#2	3306.	3032.	39950.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2167.	1923.	1952.
Stddev	.1072	4.	9.	15.
%RSD	8.313	.2008	.4665	.7732
#1	<.0000	2164.	1929.	1963.
#2	<.0000	2170.	1916.	1941.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1761000.	2075.	2.205
Stddev	5784.	1.	1.128
%RSD	.3285	.0387	51.17
#1	1765000.	2075.	3.003
#2	1756000.	2076.	1.407

Method: SHER Sample Name: CCB-3 Operator:
Comment:
Run Time: 03/13/03 14:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1.558	14.92	.8788	226.1
Stddev	.401	8.46	1.628	85.5
%RSD	25.71	56.72	185.2	37.81
#1	1.275	20.91	2.030	165.7
#2	1.841	8.937	< .0000	286.5

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	4.341	5.991	<.0000	6.220
Stddev	.417	.159	.0219	1.966
%RSD	9.615	2.659	8.735	31.61
#1	4.636	5.878	<.0000	4.829
#2	4.046	6.104	<.0000	7.610

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	.7260	<.0000	1.660	2.766
Stddev	.8285	.2823	.356	3.242
%RSD	114.1	657.3	21.45	117.2
#1	1.312	.1567	1.408	5.059
#2	.1402	<.0000	1.912	.4741

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	<.0000	<.0000	2.154
Stddev	.8625	.2141	3.110	.944
%RSD	132.7	72.06	655.4	43.80
#1	<.0000	<.0000	1.724	2.822
#2	<.0000	<.0000	< .0000	1.487

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	.5632
Stddev	.8597	2.525	14.06	.0108
%RSD	74.30	.9786	77.48	1.924
#1	<.0000	< .0000	< .0000	.5555
#2	<.0000	< .0000	< .0000	.5709

Sample Name: CCB-3 Run Time: 03/13/03 14:54

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.2968	<.0000	.3965	<.0000
Stddev	.1239	1.370	.2050	21.85
%RSD	41.74	1.106	51.70	34.35
#1	.3844	< .0000	.2516	< .0000
#2	.2092	< .0000	.5415	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2.395	6.384	<.0000	<.0000
Stddev	.331	.164	3.244	17.60
%RSD	13.80	2.563	1646.	209.3
#1	2.162	6.500	2.097	< .0000
#2	2.629	6.268	< .0000	4.038

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	2.229	<.0000	<.0000	<.0000
Stddev	.673	4.018	1632.	1.136
%RSD	30.19	683.9	258.1	281.7
#1	2.705	< .0000	521.5	< .0000
#2	1.753	2.253	< .000	.3998

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.8327	<.0000	<.0000	<.0000
Stddev	.1071	2.721	1.731	3.811
%RSD	12.87	49.32	77.78	4.333
#1	.9085	< .0000	< .0000	< .0000
#2	.7570	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	907.0	.0636	.3980
%RSD	10.05	22.95	84.77
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

Method: SHER Sample Name: MEGDSH8617 Operator:
Comment:
Run Time: 03/13/03 15:00 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1.418	76.70	4.716	4573.
Stddev	3.005	3.39	1.122	156.
%RSD	211.9	4.416	23.80	3.418
#1	< .0000	74.31	5.509	4683.
#2	3.543	79.10	3.922	4462.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	232.1	69.46	<.0000	3.880
Stddev	.3	1.42	.0494	1.034
%RSD	.1223	2.049	21.42	26.64
#1	231.9	70.46	<.0000	4.611
#2	232.3	68.45	<.0000	3.149

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	152400.	<.0000	6.888	37.16
Stddev	1531.	.0553	.295	.58
%RSD	1.004	3.788	4.278	1.567
#1	153500.	<.0000	7.096	36.75
#2	151300.	<.0000	6.679	37.57

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2.251	714.1	3.449	5.037
Stddev	.647	.5	5.463	.214
%RSD	28.74	.0725	158.4	4.242
#1	2.708	713.8	7.312	5.188
#2	1.793	714.5	< .0000	4.886

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	17380.	109.6	33870.	71.62
Stddev	178.	20.1	320.	.14
%RSD	1.023	18.31	.9445	.1932
#1	17250.	95.45	34100.	71.53
#2	17500.	123.8	33650.	71.72

Sample Name: MEGDSH8617 Run Time: 03/13/03 15:00

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.0947	151000.	49.85	81.80
Stddev	.0096	1242.	1.37	34.70
%RSD	10.12	.8225	2.756	42.42
#1	.0879	150100.	48.88	106.3
#2	.1014	151900.	50.82	57.26

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	.8897	4.295	.4569	4640.
Stddev	1.199	4.433	6.027	20.
%RSD	134.7	103.2	1319.	.4241
#1	1.737	1.160	4.718	4654.
#2	.0422	7.430	< .0000	4626.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	7.916	613.8	12680.	<.0000
Stddev	1.345	4.4	5221.	1.634
%RSD	17.00	.7219	41.16	55.11
#1	8.867	616.9	8993.	< .0000
#2	6.965	610.6	16380.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	1.287	4.535	1.259	8.109
%RSD	77.09	107.0	36.49	9.710
#1	< .0000	< .0000	< .0000	< .0000
#2	< .0000	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	9.143	1.407
Stddev	2439.	.167	.266
%RSD	107.5	1.822	18.86
#1	< .000	9.261	1.595
#2	< .000	9.025	1.220

Method: SHER Sample Name: MEGDD0132 F Operator:
Comment:
Run Time: 03/13/03 15:06 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2100.	8.776	42.55
Stddev	1.502	23.	2.124	12.67
%RSD	141.6	1.084	24.20	29.77
#1	< .0000	2083.	7.274	33.59
#2	.0013	2116.	10.28	51.50

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	517.4	520.7	<.0000	1.391
Stddev	13.6	19.1	.0055	1.448
%RSD	2.625	3.669	2.466	104.1
#1	507.8	507.2	<.0000	2.415
#2	527.0	534.2	<.0000	.3672

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	32610.	<.0000	1.478	4.799
Stddev	598.	.3926	.507	5.323
%RSD	1.832	4.668	34.32	110.9
#1	32190.	<.0000	1.837	1.035
#2	33030.	<.0000	1.119	8.563

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	7.283	49.42	3.210	<.0000
Stddev	1.294	1.32	.084	.3861
%RSD	17.76	2.673	2.623	23.58
#1	8.198	48.49	3.150	<.0000
#2	6.368	50.36	3.269	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	32210.	2182.	30.11	1.141
Stddev	791.	25.	18.62	.065
%RSD	2.456	1.167	61.83	5.694
#1	32770.	2200.	43.28	1.187
#2	31650.	2164.	16.95	1.095

Sample Name: MEGDD0132 F Run Time: 03/13/03 15:06

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	39.46	192800.	4.570	10.90
Stddev	.23	3831.	.271	42.41
%RSD	.5839	1.987	5.932	389.0
#1	39.30	195500.	4.762	40.89
#2	39.63	190100.	4.378	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.127	8.404	6.707	4249.
Stddev	1.158	1.094	.464	142.
%RSD	102.8	13.02	6.913	3.350
#1	1.945	9.178	7.035	4148.
#2	.3081	7.631	6.379	4349.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	4.633	2507.	<.0000	2.207
Stddev	.319	51.	2492.	2.130
%RSD	6.883	2.042	130.4	96.48
#1	4.408	2471.	< .000	3.713
#2	4.859	2543.	< .000	.7015

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	1.212	<.0000	4.118	<.0000
Stddev	1.072	7.977	1.574	13.52
%RSD	88.46	155.5	38.22	19.15
#1	.4539	< .0000	5.231	< .0000
#2	1.970	.5101	3.005	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	58.09	<.0000
Stddev	3683.	1.11	.7301
%RSD	5.727	1.906	516.1
#1	< .000	57.31	<.0000
#2	< .000	58.87	.3748

Method: SHER Sample Name: MEGDD0134 Operator:
Comment:
Run Time: 03/13/03 15:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	569.3	<.0000	16180.
Stddev	2.905	12.2	4.574	240.
%RSD	823.4	2.149	6.634	1.486
#1	1.701	577.9	< .0000	16350.
#2	< .0000	560.6	< .0000	16010.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1264.	238.9	<.0000	2.234
Stddev	11.	.4	.0466	3.466
%RSD	.8574	.1717	44.63	155.2
#1	1272.	238.6	<.0000	< .0000
#2	1257.	239.2	<.0000	4.685

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	8210.	<.0000	7.766	<.0000
Stddev	95.	.0815	.265	2.585
%RSD	1.151	1.992	3.414	120.4
#1	8277.	<.0000	7.578	< .0000
#2	8143.	<.0000	7.953	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	5.454	14670.	1.844	.6079
Stddev	.432	10.	4.876	.3862
%RSD	7.916	.0673	264.4	63.53
#1	5.759	14660.	< .0000	.8810
#2	5.149	14670.	5.292	.3348

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	11660.	3132.	1638.	247.8
Stddev	353.	72.	39.	.4
%RSD	3.029	2.314	2.377	.1786
#1	11910.	3184.	1666.	247.5
#2	11410.	3081.	1611.	248.1

Sample Name: MEGDD0134 Run Time: 03/13/03 15:14

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	185200.	1.501	173.6
Stddev	.3241	6950.	.754	15.4
%RSD	130.1	3.752	50.22	8.885
#1	<.0000	190200.	2.034	162.7
#2	<.0000	180300.	.9679	184.5

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2.933	<.0000	3595.
Stddev	2.487	4.925	1.576	18.
%RSD	43.06	167.9	7.348	.5126
#1	< .0000	6.415	< .0000	3608.
#2	< .0000	< .0000	< .0000	3582.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3.983	684.7	149600.	<.0000
Stddev	1.311	8.5	3380.	4.544
%RSD	32.91	1.238	2.260	901.3
#1	4.910	690.7	151900.	2.709
#2	3.056	678.7	147200.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	3.941	<.0000	2.115	<.0000
Stddev	.643	8.523	6.297	4.612
%RSD	16.32	112.6	297.8	5.900
#1	3.487	< .0000	< .0000	< .0000
#2	4.396	< .0000	6.567	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	45.92	3.426
Stddev	5353.	.30	.199
%RSD	17.06	.6457	5.810
#1	< .000	46.13	3.285
#2	< .000	45.71	3.566

Method: SHER Sample Name: MEGDD0134 F Operator:
Comment:
Run Time: 03/13/03 15:19 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	155.0	2.454	802.7
Stddev	3.205	3.1	.795	102.9
%RSD	94.32	1.985	32.38	12.82
#1	< .0000	157.1	1.892	875.4
#2	< .0000	152.8	3.016	729.9

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	1363.	625.9	<.0000	5.929
Stddev	26.	8.8	.1454	.310
%RSD	1.896	1.402	83.42	5.235
#1	1344.	619.7	<.0000	6.149
#2	1381.	632.1	<.0000	5.710

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	6067.	<.0000	2.271	4.226
Stddev	32.	.1077	.114	2.083
%RSD	.5319	1.112	5.002	49.30
#1	6044.	<.0000	2.191	5.699
#2	6089.	<.0000	2.352	2.753

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.1160	318.3	4.222	4.370
Stddev	1.078	5.7	4.708	3.475
%RSD	929.9	1.800	111.5	79.52
#1	.8785	314.3	.8935	6.827
#2	< .0000	322.4	7.551	1.913

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	12610.	3143.	1246.	38.18
Stddev	67.	14.	21.	.52
%RSD	.5327	.4588	1.660	1.369
#1	12560.	3133.	1231.	37.81
#2	12660.	3153.	1260.	38.55

Sample Name: MEGDD0134 F Run Time: 03/13/03 15:19

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	.7959	188400.	4.759	<.0000
Stddev	.2193	1780.	.694	7.713
%RSD	27.55	.9450	14.57	12.30
#1	.6408	187100.	5.249	< .0000
#2	.9509	189700.	4.268	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	1.982	4.371	<.0000	2832.
Stddev	1.689	1.697	5.656	34.
%RSD	85.24	38.82	156.7	1.218
#1	.7873	3.171	.3901	2807.
#2	3.176	5.571	< .0000	2856.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3.457	500.8	<.0000	1.052
Stddev	1.134	3.6	741.5	3.053
%RSD	32.79	.7188	79.91	290.2
#1	2.655	498.3	< .0000	< .0000
#2	4.259	503.4	< .0000	3.211

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	2.501	<.0000	<.0000	<.0000
Stddev	.107	4.171	1.889	1.237
%RSD	4.288	29.29	73.78	1.512
#1	2.577	< .0000	< .0000	< .0000
#2	2.425	< .0000	< .0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	50.26	2.064
Stddev	430.2	.85	1.858
%RSD	5.322	1.697	90.02
#1	< .0000	49.65	3.378
#2	< .0000	50.86	.7503

Method: SHER Sample Name: CRI-2 Operator:
Comment:
Run Time: 03/13/03 15:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	23.08	.7510	27.55	444.3
Stddev	2.00	11.55	1.45	109.2
%RSD	8.667	1537.	5.251	24.58
#1	24.49	8.915	26.52	367.1
#2	21.66	< .0000	28.57	521.6

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	3.005	6.451	12.13	6.073
Stddev	.188	.021	.08	.311
%RSD	6.255	.3274	.6198	5.114
#1	3.137	6.466	12.07	6.293
#2	2.872	6.436	12.18	5.854

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	1.019	13.19	115.3	16.86
Stddev	2.485	.01	.1	7.21
%RSD	244.0	.1123	.0708	42.76
#1	2.776	13.20	115.4	11.76
#2	< .0000	13.18	115.3	21.95

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	52.90	.2671	<.0000	6.674
Stddev	.29	.6723	3.109	2.016
%RSD	.5528	251.7	5.252	30.21
#1	52.69	.7425	< .0000	8.099
#2	53.10	<.0000	< .0000	5.248

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	2.128	<.0000	<.0000	37.84
Stddev	3.722	3.814	24.40	.05
%RSD	174.9	1.453	238.0	.1277
#1	4.760	< .0000	< .0000	37.80
#2	< .0000	< .0000	7.001	37.87

Sample Name: CRI-2 Run Time: 03/13/03 15:29

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2.245	<.0000	100.7	<.0000
Stddev	.763	1.838	.0	19.28
%RSD	33.97	1.551	.0341	106.1
#1	1.706	< .0000	100.7	< .0000
#2	2.784	< .0000	100.8	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	4.410	141.8	6.096	<.0000
Stddev	.042	1.8	1.576	2.114
%RSD	.9466	1.272	25.85	22.49
#1	4.381	140.5	7.210	< .0000
#2	4.440	143.1	4.982	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.453	.8820	<.0000	<.0000
Stddev	1.842	2.217	148.2	1.277
%RSD	126.8	251.4	10.68	6.524
#1	.1503	< .0000	< .0000	< .0000
#2	2.755	2.450	< .0000	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.6054	18.84	121.3	113.3
Stddev	.0000	.91	2.7	4.9
%RSD	.0041	4.812	2.214	4.339
#1	.6054	19.48	119.4	116.8
#2	.6054	18.20	123.2	109.9

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	87120.	45.87	<.0000
Stddev	5447.	.06	.9287
%RSD	6.252	.1230	493.6
#1	83270.	45.83	.4685
#2	90970.	45.91	<.0000

Method: SHER Sample Name: ICSA-2 Operator:
Comment:
Run Time: 03/13/03 15:53 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	543300.	<.0000	220400.
Stddev	4.410	3337.	1.580	212.
%RSD	20.62	.6141	.1001	.0959
#1	< .0000	545700.	< .0000	220600.
#2	< .0000	541000.	< .0000	220300.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	7.123	<.0000	<.0000
Stddev	.3916	.177	.0438	.0010
%RSD	.0958	2.487	9.874	.0026
#1	<.0000	7.248	<.0000	<.0000
#2	<.0000	6.998	<.0000	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	627900.	<.0000	<.0000	<.0000
Stddev	356.	.1659	.4544	2.357
%RSD	.0567	10.91	32.52	3.171
#1	628100.	<.0000	<.0000	< .0000
#2	627600.	<.0000	<.0000	< .0000

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	<.0000	169700.	.5360	<.0000
Stddev	2.225	1151.	2.521	.8160
%RSD	5.288	.6783	470.4	2.060
#1	< .0000	170500.	2.319	<.0000
#2	< .0000	168800.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	499300.	<.0000
Stddev	2.864	43.89	123.	.0100
%RSD	31.33	1.022	.0247	.5416
#1	< .0000	< .0000	499400.	<.0000
#2	< .0000	< .0000	499300.	<.0000

Sample Name: ICSA-2 Run Time: 03/13/03 15:53

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	<.0000	2891.
Stddev	.1337	4.125	4.001	92.
%RSD	1.539	9.339	.8780	3.198
#1	<.0000	< .0000	< .0000	2956.
#2	<.0000	< .0000	< .0000	2825.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	15.02
Stddev	2.392	.1172	5.260	2.82
%RSD	.4400	2.815	7.013	18.79
#1	< .0000	<.0000	< .0000	13.02
#2	< .0000	<.0000	< .0000	17.01

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3.031	16.47	1650000.	<.0000
Stddev	1.169	.97	2958.	.9944
%RSD	38.57	5.903	.1793	44.98
#1	2.204	15.78	1648000.	<.0000
#2	3.857	17.16	1652000.	<.0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000
Stddev	.4303	.9058	.7882	1.219
%RSD	3.225	6.363	7.697	.9866
#1	<.0000	<.0000	<.0000	< .0000
#2	<.0000	<.0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	4.036
Stddev	773.3	.1944	.797
%RSD	.2714	.0400	19.75
#1	< .0000	<.0000	3.472
#2	< .0000	<.0000	4.599

Method: SHER Sample Name: ICSAB-2 Operator:
Comment:
Run Time: 03/13/03 16:01 Type: Unk Mode: CONC Corr.Fact: 1.000000

Run Status: User Aborted

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	1048.	535900.	<.0000	229100.
Stddev	3.	970.	3.772	800.
%RSD	.2897	.1811	.2390	.3491
#1	1050.	536600.	< .0000	228600.
#2	1045.	535300.	< .0000	229700.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	439.0	595.0	<.0000
Stddev	1.761	.2	1.2	.1036
%RSD	.4225	.0512	.1943	.2963
#1	< .0000	438.8	595.8	<.0000
#2	< .0000	439.1	594.2	<.0000

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	624400.	1149.	575.8	467.4
Stddev	539.	4.	2.6	2.7
%RSD	.0864	.3190	.4580	.5845
#1	624800.	1146.	573.9	469.3
#2	624100.	1151.	577.6	465.5

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	409.8	169400.	<.0000	<.0000
Stddev	1.3	235.	.1681	.1286
%RSD	.3265	.1390	2.549	.3349
#1	410.7	169600.	<.0000	<.0000
#2	408.8	169200.	<.0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	495400.	544.4
Stddev	.6682	26.58	1492.	1.5
%RSD	11.45	.6140	.3012	.2734
#1	<.0000	< .0000	496400.	543.3
#2	<.0000	< .0000	494300.	545.4

Sample Name: ICSAB-2 Run Time: 03/13/03 16:01

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	1114.	2979.
Stddev	.4385	1.727	6.	42.
%RSD	5.671	2.471	.5729	1.424
#1	<.0000	< .0000	1110.	2949.
#2	<.0000	< .0000	1119.	3009.

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	909.8	<.0000	<.0000	<.0000
Stddev	7.4	5.075	10.31	14.09
%RSD	.8121	162.1	18.58	64.49
#1	904.6	.4583	< .0000	< .0000
#2	915.0	< .0000	< .0000	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	1.278	18.13	1723000.	<.0000
Stddev	1.382	3.33	7211.	2.130
%RSD	108.1	18.34	.4186	2.795
#1	.3006	20.49	1718000.	< .0000
#2	2.254	15.78	1728000.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	542.5	333.2
Stddev	.6423	.0001	.4	4.5
%RSD	4.555	.0002	.0804	1.339
#1	<.0000	<.0000	542.8	336.4
#2	<.0000	<.0000	542.2	330.1

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	1033.	4.270
Stddev	621.1	4.	.332
%RSD	13.60	.3862	7.778
#1	< .0000	1031.	4.035
#2	< .0000	1036.	4.505

Method: SHER Sample Name: CCV-4 Operator:
Comment:
Run Time: 03/13/03 16:11 Type: Unk Mode: CONC Corr.Fact: 1.000000

Run Status: User Aborted

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	476.0	2122.	2106.	9741.
Stddev	2.1	3.	9.	135.
%RSD	.4408	.1371	.4365	1.382
#1	474.6	2120.	2113.	9646.
#2	477.5	2124.	2100.	9837.

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	2079.	1857.	2015.	8.891
Stddev	10.	2.	272.	1.914
%RSD	.4614	.0933	13.51	21.53
#1	2086.	1859.	2207.	10.24
#2	2073.	1856.	1822.	7.538

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2262.	1970.	2120.	1965.
Stddev	276.	8.	9.	10.
%RSD	12.18	.3871	.4283	.5158
#1	2457.	1975.	2127.	1972.
#2	2067.	1965.	2114.	1958.

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	2010.	1964.	<.0000	<.0000
Stddev	2.	8.	11.42	.3000
%RSD	.0991	.4179	1.164	.5524
#1	2008.	1970.	< .0000	<.0000
#2	2011.	1958.	< .0000	<.0000

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	10290.	4396.	2041.	2195.
Stddev	40.	18.	248.	10.
%RSD	.3912	.4056	12.18	.4508
#1	10320.	4409.	2217.	2202.
#2	10260.	4384.	1865.	2188.

Sample Name: CCV-4 Run Time: 03/13/03 16:11

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	2713.	2208.	2100.	547.1
Stddev	12.	308.	268.	9.0
%RSD	.4308	13.96	12.78	1.645
#1	2721.	2426.	2290.	540.8
#2	2705.	1990.	1910.	553.5

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	2075.	1945.	2057.	10490.
Stddev	9.	9.	9.	2.
%RSD	.4239	.4583	.4230	.0212
#1	2081.	1952.	2063.	10490.
#2	2069.	1939.	2050.	10490.

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	3323.	3058.	42610.	<.0000
Stddev	18.	1.	89.	1.204
%RSD	.5302	.0328	.2081	.3345
#1	3335.	3058.	42680.	< .0000
#2	3310.	3057.	42550.	< .0000

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	2357.	1939.	1978.
Stddev	2.144	245.	5.	15.
%RSD	141.3	10.38	.2689	.7358
#1	< .0000	2531.	1943.	1989.
#2	< .0000	2184.	1936.	1968.

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	1764000.	2088.	2.815
Stddev	12460.	10.	.531
%RSD	.7066	.4934	18.86
#1	1773000.	2095.	3.191
#2	1755000.	2080.	2.440

Method: SHER Sample Name: CCB-4 Operator:
Comment:
Run Time: 03/13/03 16:20 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Ag3280	Al3082	As1937	Au2427
Line	328.068 {102}	308.215 {109}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	60.50	3.348	255.2
Stddev	.3004	10.53	3.584	44.3
%RSD	24.98	17.40	107.1	17.37
#1	<.0000	53.05	5.882	223.9
#2	<.0000	67.95	.8130	286.5

Elem	B_2496	Ba4934	Be3130	Bi1902
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}
Units	ppb	ppb	ppb	ppm
Avg	.6270	6.247	1.262	6.329
Stddev	.2597	.193	.021	2.845
%RSD	41.42	3.088	1.695	44.95
#1	.8106	6.383	1.277	8.340
#2	.4434	6.110	1.247	4.317

Elem	Ca3179	Cd2288	Co2286	Cr3578
Line	317.933 {105}	228.802 {147}	228.616 {147}	357.869 { 94}
Units	ppb	ppb	ppb	ppb
Avg	2.922	<.0000	<.0000	5.591
Stddev	1.450	.0629	.0750	2.634
%RSD	49.62	9.781	428.2	47.10
#1	3.947	<.0000	.0355	3.729
#2	1.897	<.0000	<.0000	7.453

Elem	Cu3247	Fe2599	Ge2068	In2306
Line	324.754 {103}	259.940 {129}	206.866 {162}	230.606 {146}
Units	ppb	ppb	ppm	ppb
Avg	.5208	<.0000	<.0000	4.793
Stddev	.2156	.3056	5.295	.815
%RSD	41.40	72.92	185.7	17.00
#1	.6732	<.0000	< .0000	5.369
#2	.3683	<.0000	.8926	4.217

Elem	K_7664	Li6103	Mg3838	Mn2576
Line	766.490 { 44}	610.362 { 55}	383.826 { 87}	257.610 {131}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	6.942	<.0000
Stddev	1.470	4.385	15.14	.0567
%RSD	21.60	1.657	218.1	11.06
#1	< .0000	< .0000	17.65	<.0000
#2	< .0000	< .0000	< .0000	<.0000

Sample Name: CCB-4 Run Time: 03/13/03 16:20

Elem	Mo2020	Na5889	Ni2316	Os1898
Line	202.030 {166}	588.995 { 57}	231.604 {145}	189.865 {176}
Units	ppb	ppb	ppb	ppm
Avg	<.0000	<.0000	.2601	<.0000
Stddev	.3432	.2160	.0723	42.41
%RSD	164.4	.2040	27.81	122.8
#1	.0339	<.0000	.3113	< .0000
#2	<.0000	<.0000	.2090	< .0000

Elem	Pb2203	Sb2068	Se1960	Si2881
Line	220.353 {152}	206.833 {162}	196.090 {171}	288.158 {116}
Units	ppb	ppb	ppb	ppb
Avg	<.0000	3.025	1.768	<.0000
Stddev	3.387	.427	1.020	8.450
%RSD	69.03	14.11	57.65	107.0
#1	< .0000	3.327	1.048	< .0000
#2	< .0000	2.723	2.489	< .0000

Elem	Sn1899	Sr3464	Ta2400	Te2142
Line	189.989 {176}	346.446 { 97}	240.063 {140}	214.281 {157}
Units	ppb	ppb	ppb	ppm
Avg	.4258	1.470	<.0000	<.0000
Stddev	1.240	1.109	356.1	2.769
%RSD	291.2	75.41	15.01	1097.
#1	1.302	2.254	< .0000	< .0000
#2	< .0000	.6862	< .0000	1.705

Elem	Ti3361	Tl1908	V_2924	V_3102
Line	336.121 {100}	190.864 {176}	292.402 {115}	310.230 {108}
Units	ppb	ppb	ppb	ppb
Avg	.0749	<.0000	<.0000	<.0000
Stddev	.7503	1.632	.9443	2.365
%RSD	1001.	17.34	49.91	2.577
#1	<.0000	< .0000	<.0000	< .0000
#2	.6055	< .0000	<.0000	< .0000

Elem	W_2397	Zn2138	Zr3391
Line	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000
Stddev	238.8	.0063	.1327
%RSD	3.111	1.843	20.19
#1	< .0000	<.0000	<.0000
#2	< .0000	<.0000	<.0000

HG-C-62

Element: Hg Seq. No.: 40 AS Loc.: 18 Date: 03/12/2003
Sample ID: MEGUI0119

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0104	-0.0104	-0.0001	-0.0023	0.0001	03:41:21	No
2	-0.0055	-0.0055	-0.0001	-0.0014	0.0001	03:41:50	No
Mean:	-0.0079	-0.0079	-0.0001				
SD :	0.00347	0.00347	0.0000				
%RSD:	43.8	43.8	43.7717				

Element: Hg Seq. No.: 41 AS Loc.: 4 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.410	2.410	0.0257	0.1537	0.0259	03:43:03	No
2	2.449	2.449	0.0261	0.1567	0.0263	03:43:32	No
Mean:	2.429	2.429	0.0259				
SD :	0.02745	0.02745	0.0003				
%RSD:	1.1	1.1	1.1157				

QC failed, value greater than upper limit for Hg.

Element: Hg Seq. No.: 42 AS Loc.: 4 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.430	2.430	0.0259	0.1553	0.0261	03:44:46	No
2	2.416	2.416	0.0258	0.1520	0.0260	03:45:15	No
Mean:	2.423	2.423	0.0259				
SD :	0.00987	0.00987	0.0001				
%RSD:	0.4	0.4	0.4024				

QC failed, value greater than upper limit for Hg.
Maximum retries after QC failure exceeded, current analysis method stopped.

Method Name: mercury
Method Description:
Element: Hg

Date: 03/12/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear
Wavelength: 253.7 nm
Sample Info Name: HG-C-62.SIF Results Data Set Name: HG-C-62

Element: Hg Seq. No.: 43 AS Loc.: 1 Date: 03/12/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

Method Name: mercury
Method Description:
Element: Hg

Date: 03/12/2003
Technique:FI-MHS
Calibration Type:
Hg, Zero Intercept: Nonlinear

380

Wavelength: 253.7 nm
Sample Info Name: HG-C-62.SIF Results Data Set Name: HG-C-62

Element: Hg Seq. No.: 43 AS Loc.: 1 Date: 03/12/2003
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0000	-0.0069	0.0000	04:06:45	No
2			0.0001	0.0004	0.0001	04:07:14	No
Mean:			0.0001				
SD :			0.0001				
%RSD:			70.2410				

Auto-zero performed.

Element: Hg Seq. No.: 44 AS Loc.: 2 Date: 03/12/2003
Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0052	0.0298	0.0052	04:08:27	No
2			0.0051	0.0298	0.0052	04:08:56	No
Mean:			0.0051				
SD :			0.0001				
%RSD:			1.2776				

[Hg] Standard number 1 applied. [0.5000]
Correlation Coefficient: 1.00000 Slope: 0.01025

Element: Hg Seq. No.: 45 AS Loc.: 3 Date: 03/12/2003
Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0104	0.0636	0.0105	04:10:09	No
2			0.0104	0.0633	0.0104	04:10:38	No
Mean:			0.0104				
SD :			0.0000				
%RSD:			0.4187				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.01011

Element: Hg Seq. No.: 46 AS Loc.: 4 Date: 03/12/2003
Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0255	0.1531	0.0256	04:11:51	No
2			0.0261	0.1559	0.0261	04:12:20	No
Mean:			0.0258				
SD :			0.0004				
%RSD:			1.5317				

Calibration curve rolls over above the highest standard.
[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99943 Slope: 0.00933

Element: Hg Seq. No.: 47 AS Loc.: 5 Date: 03/12/2003
Sample ID: 5.00 ppb

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Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0519	0.3059	0.0520	04:13:35	No
2			0.0526	0.3082	0.0527	04:14:04	No
Mean:			0.0523				
SD :			0.0004				
%RSD:			0.8590				

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99194 Slope: 0.01110

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Element: Hg Seq. No.: 48 AS Loc.: 6 Date: 03/12/2003
Sample ID: 10.0 ppb

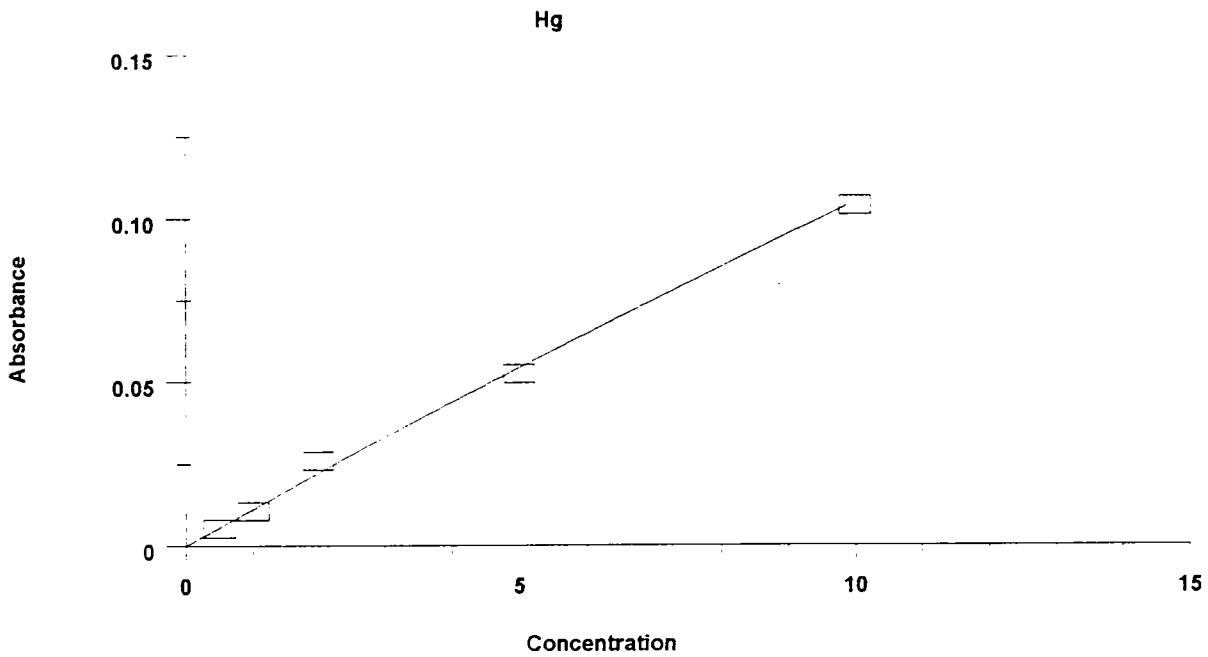
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1030	0.6056	0.1030	04:15:20	No
2			0.1038	0.6096	0.1039	04:15:49	No
Mean:			0.1034				
SD :			0.0006				
%RSD:			0.6088				

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99866 Slope: 0.01125

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0001	----	----	----	----
0.5 ppb	0.0051	0.5000	0.4568	0.00007	1.3
1.00 ppb	0.0104	1.0000	0.9298	0.00004	0.4
2.00 ppb	0.0258	2.0000	2.331	0.00040	1.5
5.00 ppb	0.0523	5.0000	4.814	0.00045	0.9
10.0 ppb	0.1034	10.0000	9.880	0.00063	0.6
Correlation Coefficient: 0.99866		Slope:	0.01125	----	

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Element: Hg Seq. No.: 49 AS Loc.: 4 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.396	2.396	0.0265	0.1622	0.0266	04:17:09	No
2	2.367	2.367	0.0262	0.1609	0.0262	04:17:39	No
Mean:	2.381	2.381	0.0263				
SD :	0.02071	0.02071	0.0002				
%RSD:	0.9	0.9	0.8543				

QC value within specified limits.

Element: Hg Seq. No.: 50 AS Loc.: 1 Date: 03/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0140	0.0140	0.0002	0.0017	0.0002	04:18:51	No
2	0.0134	0.0134	0.0002	0.0015	0.0002	04:19:20	No
Mean:	0.0137	0.0137	0.0002				
SD :	0.00046	0.00046	0.0000				
%RSD:	3.4	3.4	3.3516				

QC value within specified limits.

Element: Hg Seq. No.: 51 AS Loc.: 9 Date: 03/12/2003
Sample ID: PB-W

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.5590	0.5590	0.0063	0.0360	0.0063	04:20:31	No
2	0.1542	0.1542	0.0017	0.0090	0.0018	04:21:00	No

Mean:	0.3566	0.3566	0.0041
SD :	0.2862	0.2862	0.0032
%RSD:	80.3	80.3	80.1238

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 52 AS Loc.: 9 Date: 03/12/2003
Sample ID: PB-W

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1871	0.1871	0.0021	0.0081	0.0022	04:22:11	No
2	0.0827	0.0827	0.0009	0.0020	0.0010	04:22:40	No
Mean:	0.1349	0.1349	0.0015				
SD :	0.07383	0.07383	0.0008				
%RSD:	54.7	54.7	54.6991				

Element: Hg Seq. No.: 53 AS Loc.: 10 Date: 03/12/2003
Sample ID: MEGDD0134

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0606	0.0606	0.0007	0.0056	0.0008	04:23:52	No
2	0.0210	0.0210	0.0002	-0.0008	0.0003	04:24:21	No
Mean:	0.0408	0.0408	0.0005				
SD :	0.02801	0.02801	0.0003				
%RSD:	68.7	68.7	68.6835				

Element: Hg Seq. No.: 54 AS Loc.: 11 Date: 03/12/2003
Sample ID: MEGDD0134 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1843	0.1843	0.0021	0.0070	0.0022	04:25:33	No
2	0.2038	0.2038	0.0023	0.0118	0.0024	04:26:03	No
Mean:	0.1940	0.1940	0.0022				
SD :	0.01381	0.01381	0.0002				
%RSD:	7.1	7.1	7.1091				

Element: Hg Seq. No.: 55 AS Loc.: 12 Date: 03/12/2003
Sample ID: MEGDD0120

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0959	0.0959	0.0011	0.0130	0.0012	04:27:16	No
2	0.0424	0.0424	0.0005	0.0018	0.0006	04:27:45	No
Mean:	0.0692	0.0692	0.0008				
SD :	0.03780	0.03780	0.0004				
%RSD:	54.7	54.7	54.6265				

Element: Hg Seq. No.: 56 AS Loc.: 13 Date: 03/12/2003
Sample ID: MEGDD0120 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0769	0.0769	0.0009	0.0086	0.0009	04:28:59	No
2	0.1160	0.1160	0.0013	0.0122	0.0014	04:29:29	No
Mean:	0.0964	0.0964	0.0011				
SD :	0.02763	0.02763	0.0003				

%RSD: 28.7 28.7 28.6317

Element: Hg Seq. No.: 57 AS Loc.: 14 Date: 03/12/2003
Sample ID: MEGDD0132

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2039	0.2039	0.0023	0.0139	0.0024	04:30:45	No
2	0.1497	0.1497	0.0017	0.0090	0.0018	04:31:14	No
Mean:	0.1768	0.1768	0.0020				
SD :	0.03836	0.03836	0.0004				
%RSD:	21.7	21.7	21.6696				

Element: Hg Seq. No.: 58 AS Loc.: 15 Date: 03/12/2003
Sample ID: MEGDD0132 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0815	0.0815	0.0009	0.0049	0.0010	04:32:30	No
2	0.0884	0.0884	0.0010	0.0065	0.0011	04:32:59	No
Mean:	0.0850	0.0850	0.0010				
SD :	0.00487	0.00487	0.0001				
%RSD:	5.7	5.7	5.7248				

Element: Hg Seq. No.: 59 AS Loc.: 16 Date: 03/12/2003
Sample ID: MEGDD0240

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4356	0.4356	0.0049	0.0267	0.0050	04:34:16	No
2	0.3779	0.3779	0.0042	0.0207	0.0043	04:34:46	No
Mean:	0.4067	0.4067	0.0046				
SD :	0.04077	0.04077	0.0005				
%RSD:	10.0	10.0	9.9943				

Element: Hg Seq. No.: 60 AS Loc.: 17 Date: 03/12/2003
Sample ID: MEGDD0240 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.3154	0.3154	0.0035	0.0205	0.0036	04:36:00	No
2	0.3089	0.3089	0.0035	0.0187	0.0035	04:36:29	No
Mean:	0.3121	0.3121	0.0035				
SD :	0.00456	0.00456	0.0001				
%RSD:	1.5	1.5	1.4560				

Element: Hg Seq. No.: 61 AS Loc.: 18 Date: 03/12/2003
Sample ID: MEGUI0119

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0085	0.0085	0.0001	-0.0045	0.0002	04:37:39	No
2	0.0160	0.0160	0.0002	-0.0011	0.0003	04:38:08	No
Mean:	0.0123	0.0123	0.0001				
SD :	0.00531	0.00531	0.0001				
%RSD:	43.3	43.3	43.2577				

Element: Hg Seq. No.: 62 AS Loc.: 4 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.922	1.922	0.0213	0.1255	0.0214	04:39:29	No
2	1.880	1.880	0.0209	0.1205	0.0209	04:39:58	No
Mean:	1.901	1.901	0.0211				
SD :	0.03006	0.03006	0.0003				
%RSD:	1.6	1.6	1.5585				

QC value within specified limits.

Element: Hg Seq. No.: 63 AS Loc.: 1 Date: 03/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0071	-0.0071	-0.0001	-0.0030	0.0000	04:41:10	No
2	0.0218	0.0218	0.0002	0.0031	0.0003	04:41:40	No
Mean:	0.0073	0.0073	0.0001				
SD :	0.02048	0.02048	0.0002				
%RSD:	279.1	279.1	279.0980				

QC value within specified limits.

Element: Hg Seq. No.: 64 AS Loc.: 19 Date: 03/12/2003
Sample ID: MEGUI0119F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0022	-0.0022	0.0000	-0.0030	0.0001	04:42:52	No
2	-0.0069	-0.0069	-0.0001	-0.0043	0.0000	04:43:21	No
Mean:	-0.0045	-0.0045	-0.0001				
SD :	0.00330	0.00330	0.0000				
%RSD:	72.8	72.8	72.7872				

Element: Hg Seq. No.: 65 AS Loc.: 20 Date: 03/12/2003
Sample ID: MEGDIM0237

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0103	-0.0103	-0.0001	-0.0033	0.0000	04:44:33	No
2	-0.0091	-0.0091	-0.0001	-0.0009	0.0000	04:45:02	No
Mean:	-0.0097	-0.0097	-0.0001				
SD :	0.00084	0.00084	0.0000				
%RSD:	8.7	8.7	8.6867				

Element: Hg Seq. No.: 66 AS Loc.: 21 Date: 03/12/2003
Sample ID: MEGDIM0237 D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0154	0.0154	0.0002	0.0014	0.0003	04:46:14	No
2	0.0200	0.0200	0.0002	0.0011	0.0003	04:46:43	No
Mean:	0.0177	0.0177	0.0002				
SD :	0.00326	0.00326	0.0000				
%RSD:	18.4	18.4	18.4365				

Element: Hg Seq. No.: 67 AS Loc.: 22 Date: 03/12/2003

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Sample ID: MEGDIM0237 S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.290	1.290	0.0144	0.0832	0.0145	04:47:55	No
2	1.240	1.240	0.0138	0.0811	0.0139	04:48:24	No
Mean:	1.265	1.265	0.0141				
SD :	0.03578	0.03578	0.0004				
%RSD:	2.8	2.8	2.8016				

Element: Hg Seq. No.: 68 AS Loc.: 23 Date: 03/12/2003
Sample ID: MEGDIM0237 F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0092	-0.0092	-0.0001	-0.0055	0.0000	04:49:37	No
2	0.0285	0.0285	0.0003	0.0021	0.0004	04:50:07	No
Mean:	0.0097	0.0097	0.0001				
SD :	0.02662	0.02662	0.0003				
%RSD:	275.8	275.8	275.8941				

Element: Hg Seq. No.: 69 AS Loc.: 24 Date: 03/12/2003
Sample ID: MEGDIM0237 F D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0032	0.0032	0.0000	-0.0006	0.0001	04:51:22	No
2	0.0424	0.0424	0.0005	0.0043	0.0006	04:51:52	No
Mean:	0.0228	0.0228	0.0003				
SD :	0.02769	0.02769	0.0003				
%RSD:	121.5	121.5	121.4502				

Element: Hg Seq. No.: 70 AS Loc.: 25 Date: 03/12/2003
Sample ID: MEGDIM0237 F S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0539	0.0539	0.0006	0.0044	0.0007	04:53:06	No
2	0.0007	0.0007	0.0000	-0.0017	0.0001	04:53:35	No
Mean:	0.0273	0.0273	0.0003				
SD :	0.03767	0.03767	0.0004				
%RSD:	137.9	137.9	137.9435				

Element: Hg Seq. No.: 71 AS Loc.: 26 Date: 03/12/2003
Sample ID: MEGDSH8617

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0127	-0.0127	-0.0001	-0.0090	-0.0001	04:54:49	No
2	0.0491	0.0491	0.0006	0.0059	0.0006	04:55:18	No
Mean:	0.0182	0.0182	0.0002				
SD :	0.04370	0.04370	0.0005				
%RSD:	240.4	240.4	240.4147				

Element: Hg Seq. No.: 72 AS Loc.: 27 Date: 03/12/2003
Sample ID: MB-338

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	µg/L	µg/L	Signal	Area	Height		Stored
1	0.0604	0.0604	0.0007	0.0066	0.0008	04:56:32	No
2	0.0058	0.0058	0.0001	0.0001	0.0001	04:57:02	No
Mean:	0.0331	0.0331	0.0004				
SD :	0.03857	0.03857	0.0004				
%RSD:	116.5	116.5	116.4484				

==========

Element: Hg Seq. No.: 73 AS Loc.: 28 Date: 03/12/2003
Sample ID: 030311027-001F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0010	0.0010	0.0000	-0.0058	0.0001	04:58:17	No
2	0.0443	0.0443	0.0005	0.0023	0.0006	04:58:46	No
Mean:	0.0227	0.0227	0.0003				
SD :	0.03065	0.03065	0.0003				
%RSD:	135.2	135.2	135.2086				

==========

Element: Hg Seq. No.: 74 AS Loc.: 4 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.897	1.897	0.0210	0.1254	0.0211	05:00:01	No
2	1.921	1.921	0.0213	0.1246	0.0214	05:00:30	No
Mean:	1.909	1.909	0.0212				
SD :	0.01695	0.01695	0.0002				
%RSD:	0.9	0.9	0.8751				

QC value within specified limits.

==========

Element: Hg Seq. No.: 75 AS Loc.: 1 Date: 03/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0164	0.0164	0.0002	-0.0008	0.0003	05:01:42	No
2	-0.0020	-0.0020	0.0000	-0.0029	0.0001	05:02:12	No
Mean:	0.0072	0.0072	0.0001				
SD :	0.01300	0.01300	0.0001				
%RSD:	180.8	180.8	180.7960				

QC value within specified limits.

==========

Element: Hg Seq. No.: 76 AS Loc.: 29 Date: 03/12/2003
Sample ID: 030311027-002F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0064	-0.0064	-0.0001	-0.0040	0.0000	05:03:26	No
2	0.0189	0.0189	0.0002	0.0012	0.0003	05:03:56	No
Mean:	0.0062	0.0062	0.0001				
SD :	0.01786	0.01786	0.0002				
%RSD:	286.5	286.5	286.5432				

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Element: Hg Seq. No.: 77 AS Loc.: 30 Date: 03/12/2003
Sample ID: 030311027-002F D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	0.0678	0.0678	0.0008	0.0065	0.0008	05:05:12	No
2	0.0300	0.0300	0.0003	0.0024	0.0004	05:05:41	No
Mean:	0.0489	0.0489	0.0006				
SD :	0.02672	0.02672	0.0003				
%RSD:	54.6	54.6	54.6098				

Element: Hg Seq. No.: 78 AS Loc.: 31 Date: 03/12/2003
Sample ID: 030311027-002F S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.637	1.637	0.0182	0.1076	0.0183	05:06:57	No
2	1.549	1.549	0.0172	0.0995	0.0173	05:07:26	No
Mean:	1.593	1.593	0.0177				
SD :	0.06252	0.06252	0.0007				
%RSD:	3.9	3.9	3.8776				

Element: Hg Seq. No.: 79 AS Loc.: 32 Date: 03/12/2003
Sample ID: 030311027-003F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0651	0.0651	0.0007	0.0062	0.0008	05:08:39	No
2	0.0218	0.0218	0.0002	0.0020	0.0003	05:09:08	No
Mean:	0.0435	0.0435	0.0005				
SD :	0.03062	0.03062	0.0003				
%RSD:	70.4	70.4	70.3713				

Element: Hg Seq. No.: 80 AS Loc.: 33 Date: 03/12/2003
Sample ID: 030311027-004F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0151	0.0151	0.0002	0.0017	0.0002	05:10:18	No
2	0.0113	0.0113	0.0001	0.0013	0.0002	05:10:47	No
Mean:	0.0132	0.0132	0.0001				
SD :	0.00272	0.00272	0.0000				
%RSD:	20.6	20.6	20.6106				

Element: Hg Seq. No.: 81 AS Loc.: 34 Date: 03/12/2003
Sample ID: 030311027-005F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0156	0.0156	0.0002	0.0023	0.0003	05:11:57	No
2	0.0361	0.0361	0.0004	0.0032	0.0005	05:12:26	No
Mean:	0.0259	0.0259	0.0003				
SD :	0.01449	0.01449	0.0002				
%RSD:	56.0	56.0	56.0076				

Element: Hg Seq. No.: 82 AS Loc.: 35 Date: 03/12/2003
Sample ID: 030311027-006F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0058	0.0058	0.0001	-0.0013	0.0001	05:13:36	No
2	0.0192	0.0192	0.0002	0.0011	0.0003	05:14:05	No
Mean:	0.0125	0.0125	0.0001				

SD : 0.00946 0.00946 0.0001
%RSD: 75.7 75.7 75.6983

Element: Hg Seq. No.: 83 AS Loc.: 36 Date: 03/12/2003
Sample ID: 030311027-007F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0147	0.0147	0.0002	0.0006	0.0002	05:15:18	No
2	0.0376	0.0376	0.0004	0.0022	0.0005	05:15:47	No
Mean:	0.0262	0.0262	0.0003				
SD :	0.01617	0.01617	0.0002				
%RSD:	61.8	61.8	61.7978				

Element: Hg Seq. No.: 84 AS Loc.: 37 Date: 03/12/2003
Sample ID: 030311027-008F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1338	0.1338	0.0015	0.0111	0.0016	05:16:59	No
2	0.1026	0.1026	0.0012	0.0075	0.0012	05:17:28	No
Mean:	0.1182	0.1182	0.0013				
SD :	0.02205	0.02205	0.0002				
%RSD:	18.7	18.7	18.6364				

Element: Hg Seq. No.: 85 AS Loc.: 38 Date: 03/12/2003
Sample ID: 030311027-009F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0070	0.0070	0.0001	-0.0001	0.0002	05:18:40	No
2	0.0370	0.0370	0.0004	0.0038	0.0005	05:19:09	No
Mean:	0.0220	0.0220	0.0002				
SD :	0.02119	0.02119	0.0002				
%RSD:	96.4	96.4	96.4117				

Element: Hg Seq. No.: 86 AS Loc.: 4 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.931	1.931	0.0214	0.1275	0.0215	05:20:22	No
2	1.992	1.992	0.0221	0.1323	0.0222	05:20:51	No
Mean:	1.962	1.962	0.0218				
SD :	0.04293	0.04293	0.0005				
%RSD:	2.2	2.2	2.1565				

QC value within specified limits.

Element: Hg Seq. No.: 87 AS Loc.: 1 Date: 03/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0138	0.0138	0.0002	-0.0010	0.0002	05:22:03	No
2	0.0134	0.0134	0.0002	0.0002	0.0002	05:22:32	No
Mean:	0.0136	0.0136	0.0002				
SD :	0.00024	0.00024	0.0000				
%RSD:	1.7	1.7	1.7409				

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QC value within specified limits.

Element: Hg Seq. No.: 88 AS Loc.: 39 Date: 03/12/2003
Sample ID: 030311019-001E

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0277	0.0277	0.0003	0.0003	0.0004	05:23:44	No
2	0.0138	0.0138	0.0002	0.0007	0.0002	05:24:13	No
Mean:	0.0208	0.0208	0.0002				
SD :	0.00979	0.00979	0.0001				
%RSD:	47.1	47.1	47.1365				

Element: Hg Seq. No.: 89 AS Loc.: 40 Date: 03/12/2003
Sample ID: PB-S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0395	0.0395	0.0004	0.0025	0.0005	05:25:26	No
2	0.0340	0.0340	0.0004	0.0015	0.0005	05:25:55	No
Mean:	0.0368	0.0368	0.0004				
SD :	0.00384	0.00384	0.0000				
%RSD:	10.5	10.5	10.4488				

Element: Hg Seq. No.: 90 AS Loc.: 41 Date: 03/12/2003
Sample ID: LCS-S 0.2/1000

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.679	3.679	0.0403	0.2483	0.0404	05:27:10	No
2	3.749	3.749	0.0410	0.2478	0.0411	05:27:39	No
Mean:	3.714	3.714	0.0406				
SD :	0.04953	0.04953	0.0005				
%RSD:	1.3	1.3	1.2968				

Element: Hg Seq. No.: 91 AS Loc.: 42 Date: 03/12/2003
Sample ID: 0311F01 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	8.374	8.374	0.0886	0.5380	0.0887	05:28:53	No
2	8.025	8.025	0.0851	0.5120	0.0852	05:29:22	No
Mean:	8.200	8.200	0.0868				
SD :	0.2466	0.2466	0.0025				
%RSD:	3.0	3.0	2.8306				

Element: Hg Seq. No.: 92 AS Loc.: 43 Date: 03/12/2003
Sample ID: 0311F01 1/50 D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	11.02	11.02	0.1144	0.6990	0.1144	05:30:36	No
Sample absorbance is greater than that of the highest standard.							
2	10.04	10.04	0.1050	0.6326	0.1051	05:31:05	No
Mean:	10.53	10.53	0.1097				
SD :	0.6881	0.6881	0.0066				
%RSD:	6.5	6.5	6.0507				

Element: Hg Seq. No.: 93 AS Loc.: 44 Date: 03/12/2003
Sample ID: 0311F01 1/50 S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.057	9.057	0.0953	0.5817	0.0954	05:32:20	No
2	8.687	8.687	0.0917	0.5497	0.0918	05:32:49	No
Mean:	8.872	8.872	0.0935				
SD :	0.2614	0.2614	0.0026				
%RSD:	2.9	2.9	2.7598				

Element: Hg Seq. No.: 94 AS Loc.: 45 Date: 03/12/2003
Sample ID: 0311F02 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4726	0.4726	0.0053	0.0398	0.0054	05:34:05	No
2	0.2600	0.2600	0.0029	0.0191	0.0030	05:34:34	No
Mean:	0.3663	0.3663	0.0041				
SD :	0.1503	0.1503	0.0017				
%RSD:	41.0	41.0	40.9364				

Precision (%RSD or SD) greater than specified limit. Repeating measurement.

Element: Hg Seq. No.: 95 AS Loc.: 45 Date: 03/12/2003
Sample ID: 0311F02 1/50

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1347	0.1347	0.0015	0.0114	0.0016	05:35:50	No
2	0.1262	0.1262	0.0014	0.0089	0.0015	05:36:19	No
Mean:	0.1305	0.1305	0.0015				
SD :	0.00598	0.00598	0.0001				
%RSD:	4.6	4.6	4.5777				

Element: Hg Seq. No.: 96 AS Loc.: 1 Date: 03/12/2003
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.991	1.991	0.0221	0.1326	0.0222	05:37:35	No
2	2.062	2.062	0.0229	0.1369	0.0229	05:38:04	No
Mean:	2.027	2.027	0.0225				
SD :	0.05027	0.05027	0.0005				
%RSD:	2.5	2.5	2.4426				

QC value within specified limits.

Element: Hg Seq. No.: 97 AS Loc.: 1 Date: 03/12/2003
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0214	0.0214	0.0002	0.0011	0.0003	05:39:16	No
2	0.0186	0.0186	0.0002	0.0005	0.0003	05:39:45	No
Mean:	0.0200	0.0200	0.0002				
SD :	0.00196	0.00196	0.0000				
%RSD:	9.8	9.8	9.8191				

QC value within specified limits.

Date	Sample ID	Initial wt/vol.	Final wt/vol.	Analyte Method	Tech	Comments
3/12/03	PB-W	100mL	100mL	Hg-A1	SR	LCS(3)C
	MEGDX0120					
	MEGDD0120F					
	MEGDD0132					
	MEGDD0132F					
	MEGDD0134					
	MEGDD0134F					
	MEGDD0240					
	MEGDD0240F					
	MEGDM0237					
	MEGDM0237DD					
	MEGDM0237DL					
	MEGDM0237F					
	MEGDM0237FDD					
	MEGDM0237FDL					
	MEGDSH8617					
	MEGLL0119					
	MEGLL0119F					

Date	Sample ID	Initial wt/vol.	Final wt/vol.	Analyt. Method	Tech.	Comments
3/13/03	FB-W	100 mls	100 mls	ICP	SM	LE5C3C
	LCSW					
	MEGDDC120					
	MEGDDC120F					
	MEGDDC132F					
	MEGDDC134					
	MEGDDC134F					
	MEGDDC240					
	MEGDDC240F					
	MEGDMC237					
	MEGDMC237DUP					
	MEGDMC237SPK					
	MEGDMC237F					
	MEGDMC237FDUP					
	MEGDMC237FSPK					
	MEGDC4301P					
	MEGLLMC119					
	MEGLLMC119F					

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ANALYSIS

U.S. EPA - CLP

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0120

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-02

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0134

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-09

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U J		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0240

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-04

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U~~J~~		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U~~J~~		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-01

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDSH8617

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-05

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	80	J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUIM0119

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Lab Sample ID: 030228H-03

Level (Low/Med): Low Date Received: 2/28/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	12	J		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	40	41	103	30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	306	102	300	309	103	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 1) - CONV

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	30	31	103	30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	308	103	300	308	103	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

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FORM II (Part 1) - CONV

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2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Initial Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols				30	31	103	EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	307	102	300	305	102	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

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U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

Analyte	Continuing Calibration			Continuing Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols							EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	300	306	102	300	303	101	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

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FORM II (Part 1) - CONV

U.S. EPA - CLP

2A
CRQL STANDARDS FOR CONVENTIONALS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.:MEGDD0120

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L 3/6 3/8

Analyte	Initial Calibration TRUE	Found	% R	Initial Calibration TRUE	Found	% R	Method
TKN as N							EPA 351.3
Ammonia, as N							EPA 350.1
Nitrate							EPA 353.1
COD							EPA 410.4
BOD 5							EPA 405.1
TOC							EPA 415.2
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310.1
Total Phenols	2	2	100				EPA 420.1
Chloride							EPA 300.0
Bromide							EPA 300.0
Amenable Cyanide							SM 4500 CN G
Specific Conductance							EPA 120.1
Cyanide	10	7.0	70	10	7.7	77	EPA 335.3
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.1
Hexavalent Chromium							SW 7196

Comments _____

FORM II (Part 2) - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols	2	U	2	U	2	U	2	U	2	U	EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

FORM III - CONV

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Preparation Blank Matrix: Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration 1	C	2	C	3	C	Prep. Blank	C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 353.1
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											EPA 415.2
TDS											EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols			2	U							EPA 420.1
Chloride											EPA 300.0
Bromide											EPA 300.0
Amenable Cyanide											SM 4500 CN G
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 335.3
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.1
Hexavalent Chromium											SW 7196

Comments _____

_____

_____

FORM III - CONV

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

MEGDIM0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Level (Low/Med): Low

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	75-125	53		2	U	60	88		
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	75-125	84		10	U	100	84		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

FORM V (Part 1) - CONV

U.S. EPA - CLP

6
DUPLICATES

MEGDIM0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG No.: MEGDD0120

Matrix (soil/water): Water Level (Low/Med): Low

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols	20	2	U	2	U	NC		
Chloride								
Bromide								
Amenable Cyanide								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH								
Turbidity								
Color								
Hexavalent Chromium								

Comments _____

FORM VI - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG: MEGDD0120

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols	40	41	103						
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	261	255	98						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

_____

_____

FORM VII - CONV

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0310 SAS No.: SDG: MEGDD0120

Aqueous LCS Source:

Solid LCS Source:

Concentration Units : ug/L

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits		% R
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Amenable Cyanide									
Specific Conductance									
Cyanide	261	264	101						
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments _____

_____

_____

FORM VII - CONV

RAW QC

DATA

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

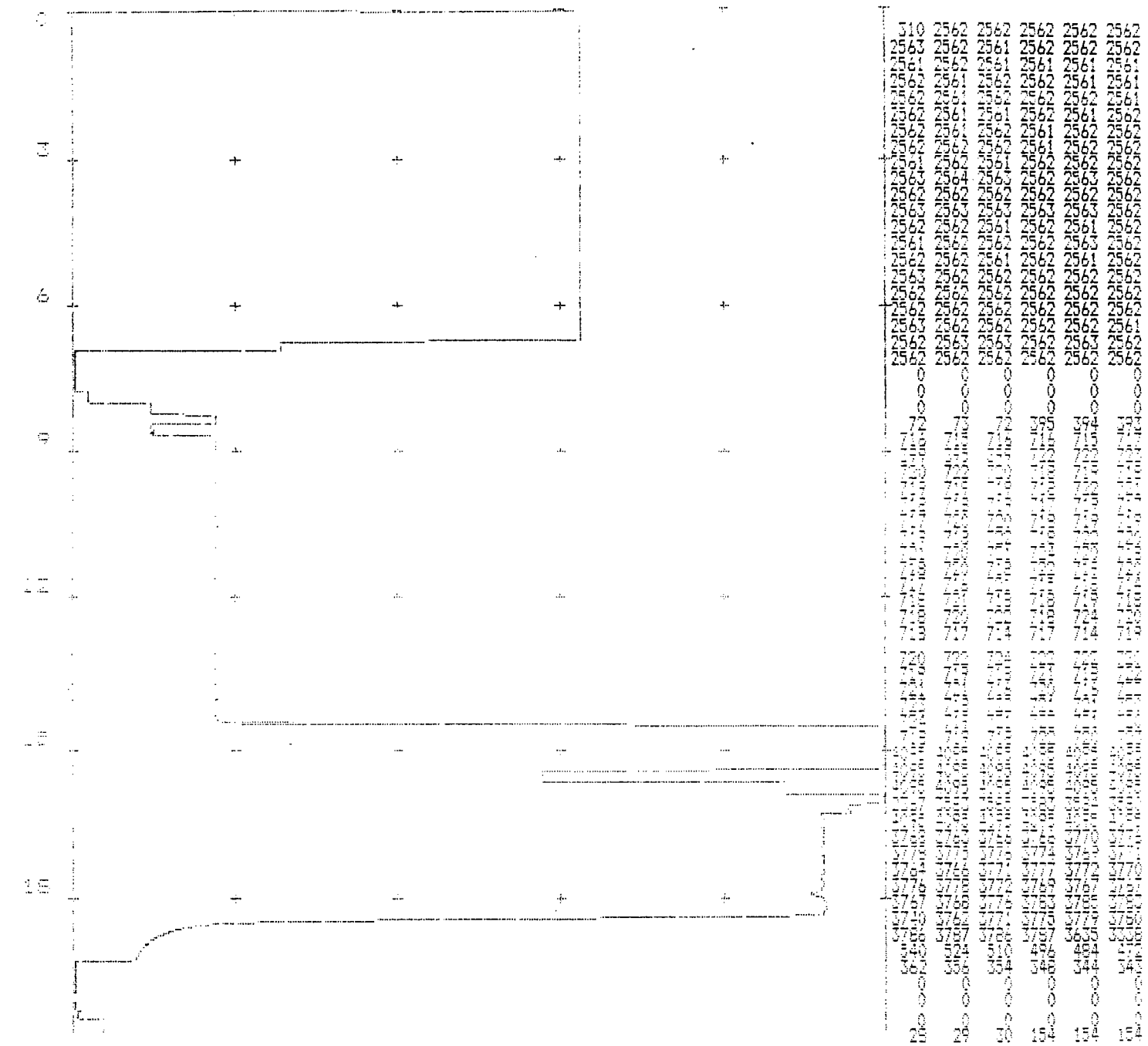
SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	495.33
500.0 PPB	497.50
400.0 PPB	400.28
200.0 PPB	204.38
100.0 PPB	101.22
50.00 PPB	50.37
10.00 PPB	7.83
500.0 PPB	499.60
100.0 PPB	99.17
100.0 PPB	99.28
ICV 200 PPB	302.20
ICB	-3.83
CCC1	7.02
CB	-3.99
LCS DUP 261UG/L	254.50

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
CCV	309.29
CCB	0.99
030228 H01	1.86
030228 H01 DUP	0.74
030228 H01 SPK	84.03
030228 H02	2.25
030228 H03	12.28
030228 H04	-0.74
030228 H05	79.71 ✓
030228 H07	4.52
CCV	307.51
CCB	-0.91
030306242-001	27.79
CCV	307.59
CCB	-1.77
200.0 PPB	201.15
500.0 PPB	497.53

CN03a6

Chart minimum: 0%, maximum 100%
Active analyses: 2



Base and gain found. They are:
Channel 2: base 62, gain 29, rel. abs. 0.44. Actual low 4%, high 89%.
Actual lag time: 7.7 min. Base and gain were changed from 100 13.



Input file B:CYANIDE.INP has been saved to disk.

Samples/hr 360 Samples/cal 1.0000 Recycle N

Sample time 0020 Wash time 1010 Base Corr Y

Raw output N

Anal	Flt	Chem	Concent.	Correl.	Correl.	User Name	Units	Calib
			Inv Base	Dilution				Base Ir
1		N	.111100	.110000	.000000	cyanide	ug/l	Y
2		N	.111100	.101000	.100000			Y
3			.1111	.11010	.000001			Y
4		N	.111100	.000000	.000000			Y

Calibrant values

1	.111100	.111111	.111111	.111111	.111111	.111111	.111111	.111111
2	.111100	.111111	.111111	.111111	.111111	.111111	.111111	.111111
3	.111100	.111111	.111111	.111111	.111111	.111111	.111111	.111111
4	.111100	.111111	.111111	.111111	.111111	.111111	.111111	.111111

Technicon TRAACS 800 System Editor

Second Screen

Prn to resample 2 Old cal file name Dual Probe System N

Run Comment

Tray Protocol

P,60>1,W1,2,G4,20B>7,1G3,3B1,E

Batch Seq # 002

# of tubes to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

Z Score Z Res E A E Is F Rc Yi S Ar fi 9 DIR C ConDe

Terminal TE-100 Sit System Editor

Batch no. Tit Third Screen

Disk	Res-S	Dwell	Type	Sample ID	Assign	Dilution	Spike
1	.	1	S	SOLN PPB.....	1.000000	1.000000	N
2	2	1	S	200.0 PPB	1.000000	1.000000	N
3	3	1	S	100.0 PPB	1.000000	1.000000	N
4	4	1	S	50.00 PPB	1.000000	1.000000	N
5	5	1	S	25.00 PPB	1.000000	1.000000	N
6	6	1	S	10.00 PPB	1.000000	1.000000	N
7	11	1	S	ICV 300 PPB	1.000000	1.000000	N
8	12	1	S	ICB	1.000000	1.000000	N
9	13	1	S	CRDL	1.000000	1.000000	N
10	14	1	S	PB	1.000000	1.000000	N
11	15	1	S	LCS DC= 261UE/L	1.000000	1.000000	N
12	16	1	S	ZN	1.000000	1.000000	N
13	17	1	S	CD	1.000000	1.000000	N
14	18	1	S	030225 H01	1.000000	1.000000	N
15	19	1	S	030225 H01 DUP	1.000000	1.000000	N
16	20	1	S	030225 H01 PDS	1.000000	1.000000	N

17	21	1	R	CCV105 H11	1.000000	1.000000	N
18	22	1	B	ICV122 H12	1.000000	1.000000	N
19	23	1	B	CCB26 H04	1.000000	1.000000	N
20	24	1	B	CCB28 H05	1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
1

Technicon TRAACS 800 System Editor

Goto ---> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	B	CCB28 H09.....	1.000000	1.000000	N
22	26	1	B	CCV	1.000000	1.000000	N
23	27	1	B	CCB	1.000000	1.000000	N
24	28	1	S	930918042-001	1.000000	1.000000	N
25	29	1	S	TCL	1.000000	1.000000	N
26	30	1	S	TCB	1.000000	1.000000	N
27					1.000000	1.000000	N
28					1.000000	1.000000	N
29					1.000000	1.000000	N
31					1.000000	1.000000	N
31					1.000000	1.000000	N
32					1.000000	1.000000	N
33					1.000000	1.000000	N
34					1.000000	1.000000	N
35					1.000000	1.000000	N
36					1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

Sample id for the specified cup

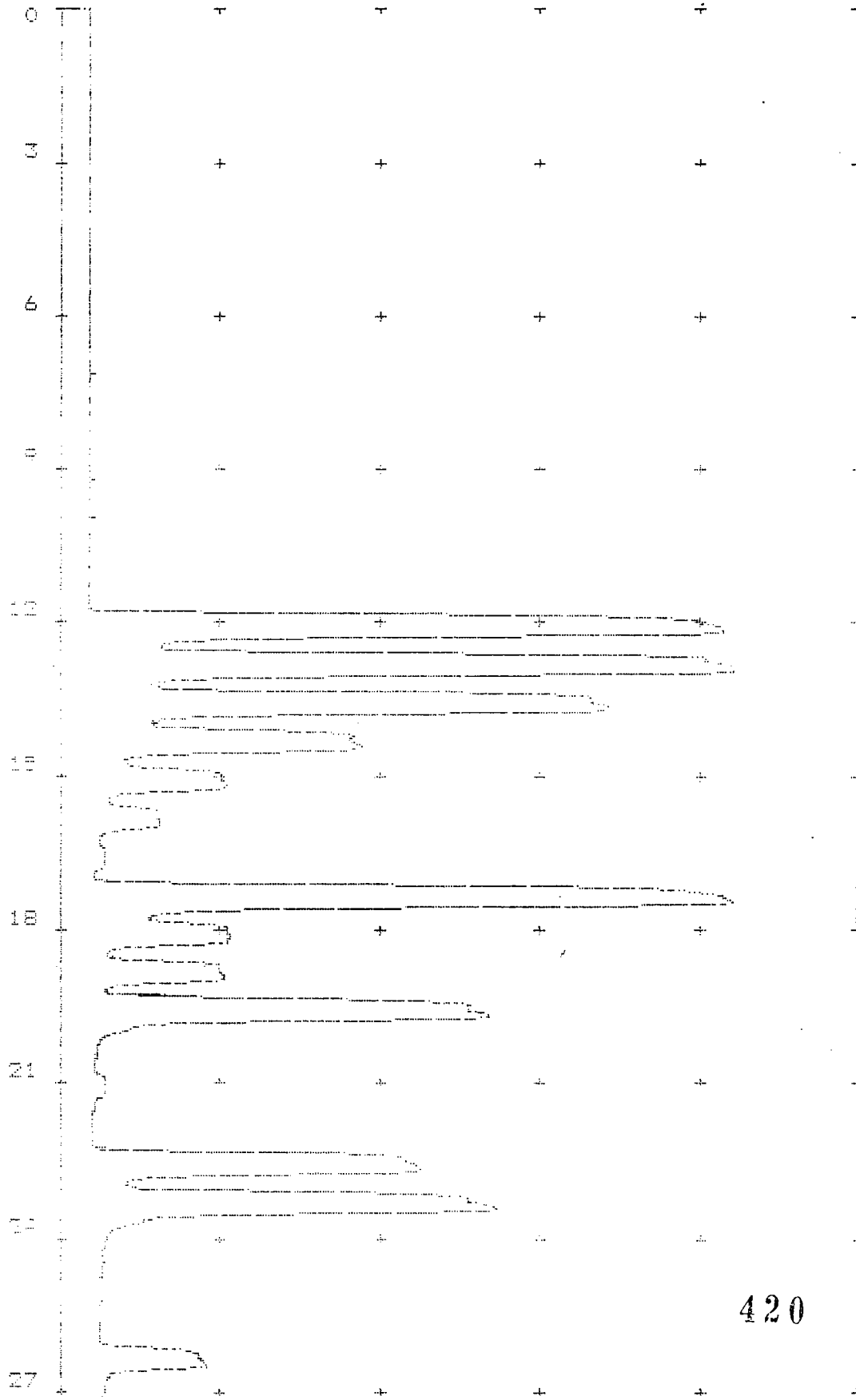
1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe
1

Check dilution QV, continue (CR)

Input Filename: B:CYANIDE.INP
Title: [illegible] Date: 02-Jan-90
Operator: MAC

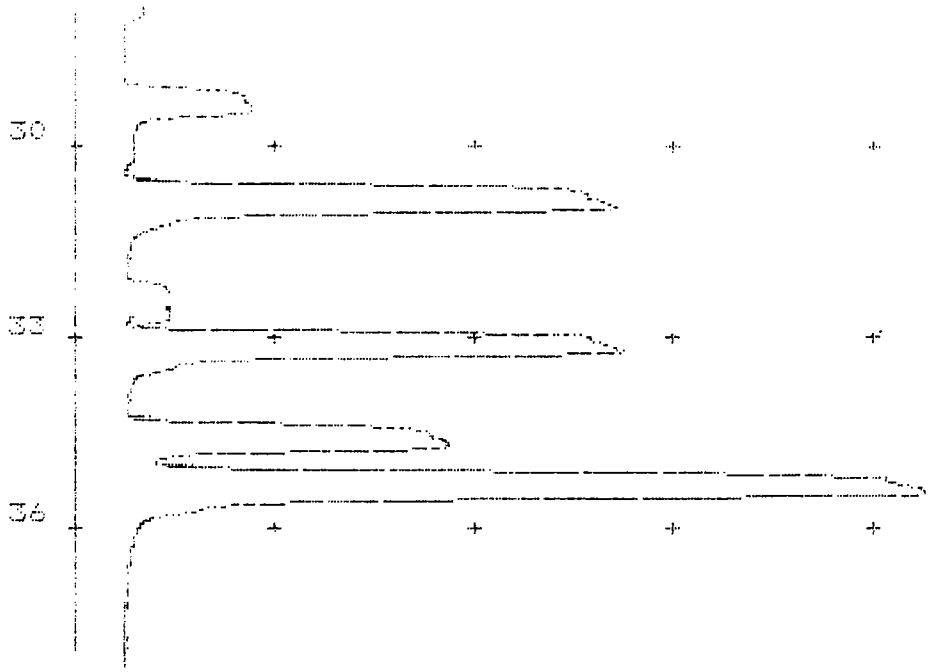
Comments:

There are 122616064 (bytes) free on disk.
File B:CN0006.CHR will take approximately 6480 (bytes).



Channels 2
Base: 62
Gain: 25
cyanide
ug/l

	Init base				150	
PK	1 DP	1 typ P				N
	Rel Abs				0.41	
PK	2 DP	1 typ C				N
PK	3 DP	2 typ C				N
PK	4 DP	3 typ C				N
PK	5 DP	4 typ C				
PK	6 DP	5 typ C				
PK	7 DP	6 typ C			8.087	M
PK	8 DP	1 typ H			495.2	
PK	9 DP	4 typ L			104.0	
PK	10 DP	4 typ L			100.0	
PK	11 DP	7 typ S			305.4	N
PK	12 DP	8 typ S			0.6526	M
PK	13 DP	9 typ S			8.057	M
PK	14 DP	10 typ S			-1.555	M
PK	15 DP	11 typ S			254.1	N
PK	16 DP	12 typ S			311.7	N
PK	17 DP	13 typ S			6.418	M
PK	18 DP	14 typ S			4.142	M
PK	19 DP	15 typ S			3.232	M
PK	20 DP	16 typ S			86.22	



PK	22	CP	18	typ	S	15.37	M
PK	23	CP	19	typ	S	2.777	M
PK	24	CP	20	typ	S	82.88	
PK	25	CP	21	typ	S	9.300	M
PK	26	CP	22	typ	S	310.1	N
PK	27	CP	23	typ	S	6.721	M
PK	28	CP	24	typ	S	32.21	
PK	29	CP	25	typ	S	311.4	N
PK	30	CP	26	typ	S	6.569	M
PK	31	CP	3	typ	I	205.6	N
PK	32	CP	1	typ	G	503.4	N

Last base 202

Time: 13:01; Date: 03-06-103
Operator: MAC

Comments:

Channels 2
Base: 60
Gain: 28

cyanide
ug/l
Base drift correction made
Carryover correction made
Gain drift correction made
... Init base 181

PK	1	CP	1	typ	P	496.2	N
	Rel Abs					0.41	
PK	2	CP	1	typ	C	497.5	N
PK	3	CP	2	typ	C	400.2	N
PK	4	CP	3	typ	C	204.9	N
PK	5	CP	4	typ	C	101.2	
PK	6	CP	5	typ	C	50.37	
PK	7	CP	6	typ	C	7.832	M
PK	8	CP	1	typ	H	499.6	
PK	9	CP	4	typ	L	99.17	
PK	10	CP	4	typ	L	99.28	
PK	11	CP	7	typ	S	306.2	N
PK	12	CP	8	typ	S	-3.623	M
PK	13	CP	9	typ	S	7.024	M
PK	14	CP	10	typ	S	-3.986	M
PK	15	CP	11	typ	S	254.5	N
PK	16	CP	12	typ	S	309.3	N
PK	17	CP	13	typ	S	0.9921	M
PK	18	CP	14	typ	S	1.856	M
PK	19	CP	15	typ	S	0.7401	M
PK	20	CP	16	typ	S	84.03	
PK	21	CP	17	typ	S	2.282	M
PK	22	CP	18	typ	S	12.25	M
PK	23	CP	19	typ	S	-0.7410	M
PK	24	CP	20	typ	SS	79.70	
PK	25	CP	21	typ	S	4.621	M

```
PK   27 CP   23 typ S      -0.9326 M
PK   28 CP   24 typ S        27.75
PK   29 CP   25 typ S        307.6 M
PK   30 CP   26 typ S       -1.771 M
PK   31 CP    3 typ I        201.2 N
PK   32 CP    1 typ G        497.5 N
   Last base                  202

Sample statistics
 Anal level    cups          avg        std dev        cv

    1   all     20          84.77          129       152%

  Anal 1:  Linear    fit
           Carryover factor:      1.10%.

Chart saved to file B:CN0306.CHR.

Text file B:CN0306.TXT has been saved to disk.
```

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 AMMONIA ~~AMMONIA~~ CYANIDE
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.01
	1.00
500.0 PPB	493.02
500.0 PPB	497.42
400.0 PPB	400.31
200.0 PPB	204.29
100.0 PPB	102.47
50.00 PPB	50.83
10.00 PPB	7.04
500.0 PPB	496.77
100.0 PPB	100.40
100.0 PPB	100.49
ICV 300 PPB	307.17
ICB	-1.53

423

FB	-1.04
LCS DOH 261UG/L	264.45

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
CCV	305.43
CCB	-0.79
[illegible]	0.13
[illegible]	7.20
[illegible]	-1.79
[illegible]	-2.29
[illegible]	37.16
[illegible]	1.51
[illegible]	-2.56
[illegible]	-0.14
[illegible]	46079.09
[illegible]AC	4261.09
CCV	306.37
CCB	-1.52
[illegible]	7.41
[illegible]	-0.46
[illegible]	-1.90
[illegible]	0.33
[illegible]	70.76
[illegible]	0.31
[illegible]	-2.87

Free CN-
46 - 4.2 =
42 mg/l

424

CCV	302.69
CCB	-1.77

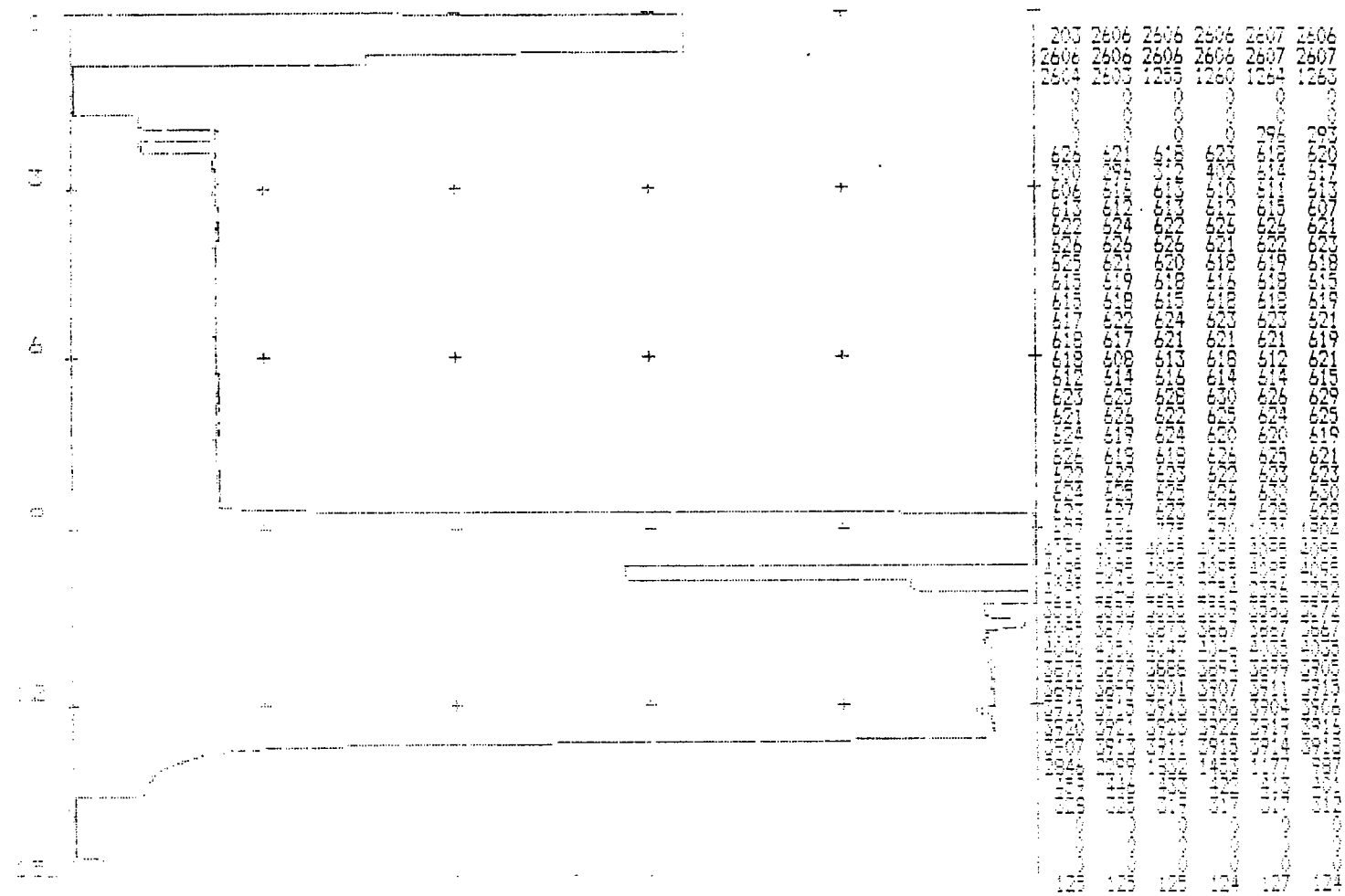
Page No. 2
05/08/03

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID	CHANNEL #2 ~~AMMONIA~~ CYANIDE
200.0 PPB	197.43
500.1 PPB	497.42

CN0310

Chart minimum: 0%, maximum 100%
Active analyses: 2



Base and gain found. Time area
Channel 2: base 61, gain 26, rel. abs. 0.44, Actual low 3%, high 72%.
Actual lag time: 8.1 min. Base and gain were changed from 100 13.

Input file B:CYANIDE.INP has been saved to disk.

First Screen

File Name	B:CYANIDE.INP	Analysis	1	2	3	4	
# of anal.	1	Channel	2	2	3	4	
Samples/hr	080	Sample/wash	2.0000			Packing	N
Sample time	0030	Wash time	0015			Base Corr	Y
						Raw outout	N

Inv	Base	Dilution	Base in

Anal	Fit	Chem	Concent.	Carryover	Carryover	Chem Name	Units	Calib
1	L	N	.000000	.000000	.000000	overide	ug/l	Y
2	L	N	.000000	.000000	.000000			Y
3	L	N	.000000	.000000	.000000			Y
4	L	N	.000000	.000000	.000000			Y

Calibrant values

Anal	1	2	3	4	5	6	7	8
1	500.0000	400.0000	200.0000	100.0000	50.00000	10.00000	.000000	.000000
2	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
3	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000
4	.000000	.000000	.000000	.000000	.000000	.000000	.000000	.000000

Name of file to be read or written (8 characters,no spaces).

E Edit F Pas E X E it F Pr fi e Ar fi ^ DIR J ConDe

Tektronix 7854CE Bus System Editor

Second Screen

= to reserve E Enter cal file name Dual Probe System ^

Run Comment

Tray Protocol

P,6D>1,H@1,2L@4,29S>7,I@3,3@1,E

Gain peak # 002

# of cups to resample after offscale (0-2), 0=NO RESAMPLE/AUTODILUTION

2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 9 DIR 0 ConDe

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
1	1	4	P	500.0 PPB.....	1.000000	1.000000	N
2	3	1	C	400.0 PPB	1.000000	1.000000	N
3	4	2	C	200.0 PPB	1.000000	1.000000	N
4	5	2	C	100.0 PPB	1.000000	1.000000	N
5	6	1	C	50.00 PPB	1.000000	1.000000	N
6	7	1	C	10.00 PPB	1.000000	1.000000	N
7	11	1	B	ICV 200 PPB	1.000000	1.000000	N
8	12	1	B	ICB	1.000000	1.000000	N
9	13	1	B	CRI	1.000000	1.000000	N
10	14	1	B	PB	1.000000	1.000000	N
11	15	1	B	LCS CCH 251UG/L	1.000000	1.000000	N
12	16	1	B	CCV	1.000000	1.000000	N
13	17	1	B	CCB	1.000000	1.000000	N
14	18	1	S	030229 H02 W&D	1.000000	1.000000	N
15	19	1	S	030226 H05 W&D	1.000000	1.000000	N
16	20	1	S	030229038001	1.000000	1.000000	N
17	21	1	S	030229038002	1.000000	1.000000	N
18	22	1	S	030229038003	1.000000	1.000000	N
19	23	1	S	030301[illegible]067	1.000000	1.000000	N
20	24	1	S	030306029001	1.000000	1.000000	N

428

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDe

Setup ---: 00% Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
21	25	1	S	0303060290G2...	1.000000	1.000000	N
22	26	1	S	0303030D0001	1.000000	100.000000	N
23	27	1	S	0303030D0001AD	1.000000	100.000000	N
24	28	1	S	DDV	1.000000	1.000000	N
25	29	1	S	DDE	1.000000	1.000000	N
26	30	1	S	0303020D3005	1.000000	1.000000	N
27	31	1	S	0303030D8006	1.000000	1.000000	N
28	32	1	S	0302Z8 F01	1.000000	1.000000	N
29	33	1	S	0303030401D001	1.000000	1.000000	N
30	34	1	S	0303030140011W&D	1.000000	10.000000	N
31	35	1	S	[illegible]	1.000000	1.000000	N
32	36	1	S	[illegible]	1.000000	1.000000	N
33	37	1	S	[illegible]	1.000000	1.000000	N
34	38	1	S	DDV	1.000000	1.000000	N
35	39	1	S	DDE	1.000000	1.000000	N
36					1.000000	1.000000	N
37					1.000000	1.000000	N
38					1.000000	1.000000	N
39					1.000000	1.000000	N
40					1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edome 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Bc Ub 8 Bc Sm 9 DIR 0 ConDe

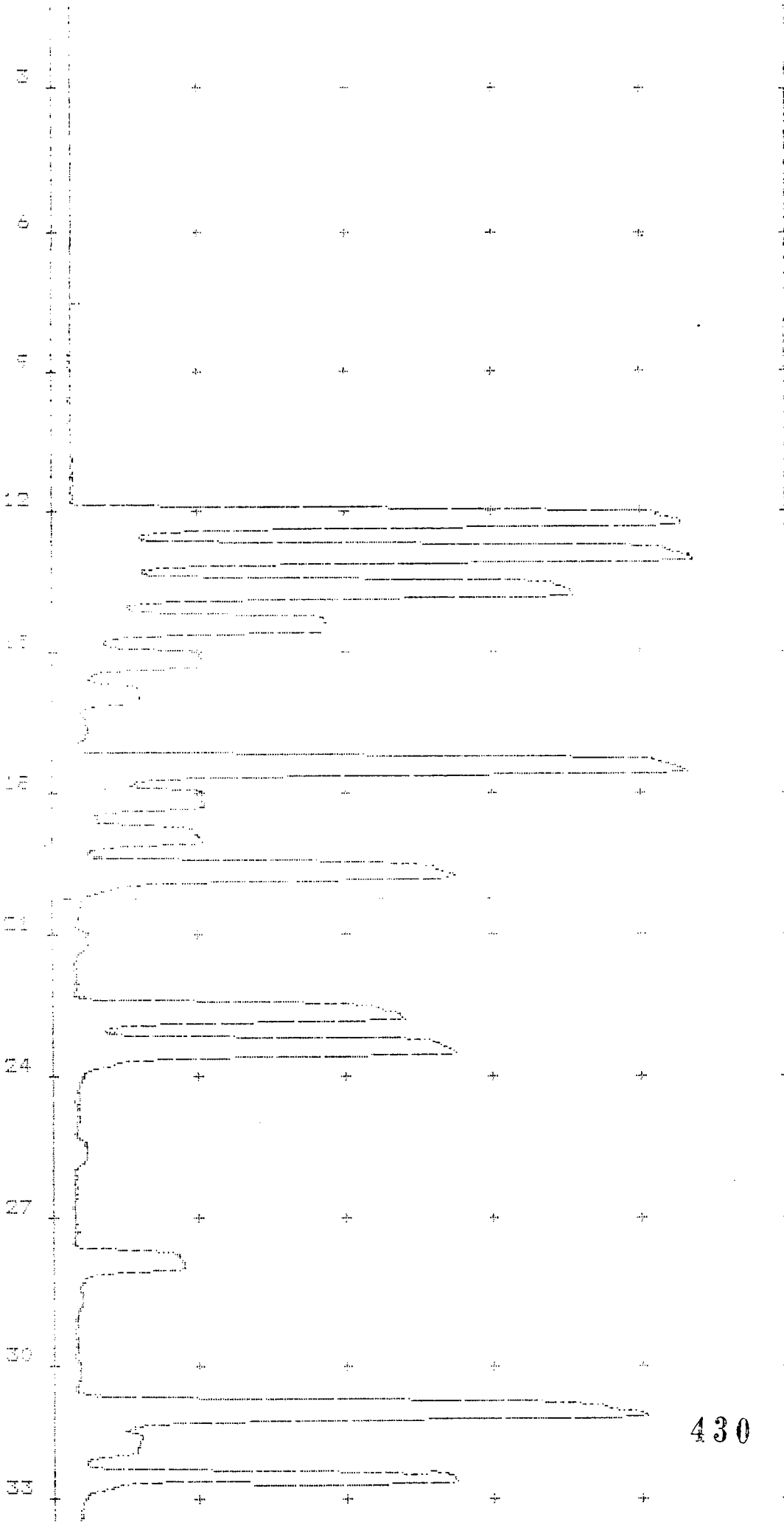
Chart minimum: 0%, maximum 100%
Active analyses: 2

Input Filename: B:CYANIDE.INP
Time: 18:01; Date: 03-04-1[illegible]
Diameter: MED

Comment:

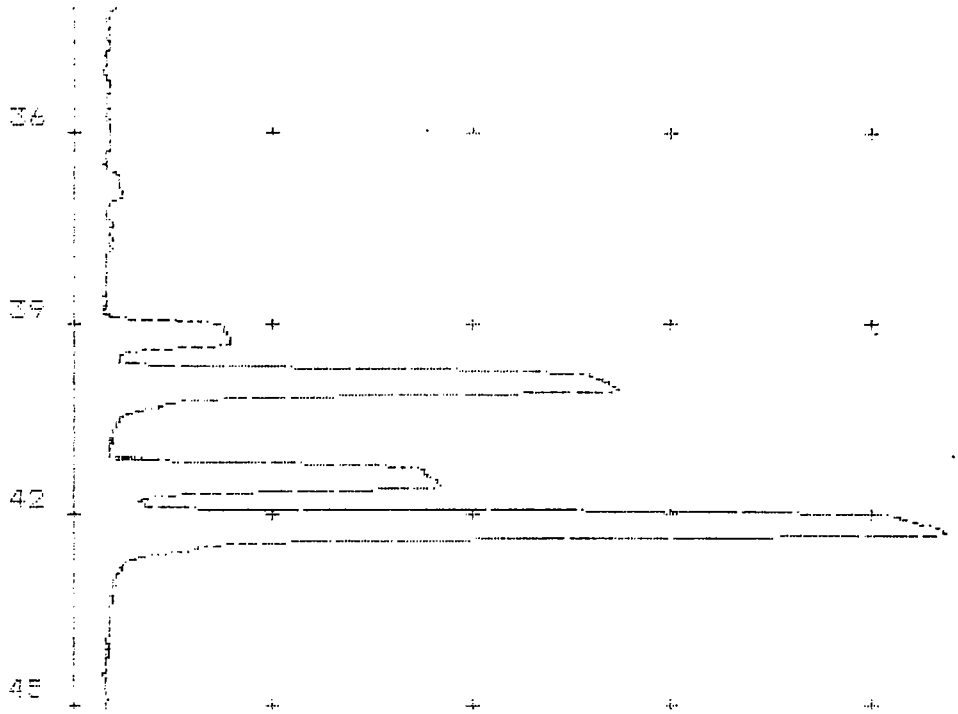
There are 121875[illegible] (bytes) free on disk.
File B:CNOI10.CHR will take approximately 7605 (bytes).

0 1 Channels



Init base 111

PK	1	CP	1	typ P	N
Rel Ags					0.41
PK	2	CP	1	typ P	N
PK	3	CP	2	typ P	N
PK	4	CP	3	typ P	
PK	5	CP	4	typ P	
PK	6	CP	5	typ P	
PK	7	CP	6	typ P	7.040 M
PK	8	CP	1	typ B	492.2 M
PK	9	CP	8	typ B	105.7
PK	10	CP	8	typ B	106.4
PK	11	CP	7	typ B	218.3 M
PK	12	CP	8	typ B	1.259 M
PK	13	CP	9	typ B	7.762 M
PK	14	CP	10	typ B	-0.7842 M
PK	15	CP	11	typ B	260.4 M
PK	16	CP	12	typ B	305.5 M
PK	17	CP	13	typ B	2.415 M
PK	18	CP	14	typ B	0.6810 M
PK	19	CP	15	typ B	7.762 M
PK	20	CP	16	typ B	-0.9087 M
PK	21	CP	17	typ B	-1.487 M
PK	22	CP	18	typ B	67.24
PK	23	CP	19	typ B	2.860 M
PK	24	CP	20	typ B	-1.776 M
PK	25	CP	21	typ B	0.9700 M
PK	26	CP	22	typ B	457.9
PK	27	CP	23	typ B	47.65
PK	28	CP	24	typ B	305.5 B



PK	30	CP	26	typ S	8.918 M
PK	31	CP	27	typ S	1.259 M
PK	32	CP	28	typ S	-0.1961 M
PK	33	CP	29	typ S	3.126 M
PK	34	CP	30	typ S	8.918 M
PK	35	CP	31	typ S	2.960 M
PK	36	CP	32	typ S	-0.7642 M
PK	37	CP	33	typ S	72.65
PK	38	CP	34	typ S	302.9 N
PK	39	CP	35	typ S	3.292 M
PK	40	CP	3	typ I	198.1
PK	41	CP	1	typ S	497.2
Last base					137

Time: 19:21 Date: 03-05-103
Datebase: MAC

Centers

[illegible]

[illegible]

[illegible]

PK	26	CP	22	typ	B	460.8
PK	27	CP	23	typ	B	42.51
PK	28	CP	24	typ	B	306.4 B
PK	29	CP	25	typ	B	-1.332 M
PK	30	CP	26	typ	B	7.410 M
PK	31	CP	27	typ	B	-0.4377 M
PK	32	CP	28	typ	B	-1.932 M
PK	33	CP	29	typ	B	0.0291 M
PK	34	CP	30	typ	B	7.076 M
PK	35	CP	31	typ	B	0.5132 M
PK	36	CP	32	typ	B	-2.868 M
PK	37	CP	33	typ	B	71.15
PK	38	CP	34	typ	B	302.7 M
PK	39	CP	35	typ	B	-1.769 M
PK	40	CP	3	typ	B	197.4
PK	41	CP	1	typ	B	497.4
Last base						137

Sample statistics

Anal	level	cups	avg	std dev	cv
1	all	29	74.49	135	181%

Anal 1: linear fit
Carryover factor: 0.90%.

Chart saved to file B:CHC11.CHT.

Data file B:CHC11.DAT was also saved to disk.

URS/Dames & Moore

016

T. Phenols ASP 460nm spec 610

3.13.03 LS

sample ID	vol dist	vol used	abs	ug/L corr	ug/L final
BK			0.000		
2 ug/L			0.015		
10			0.060	r² 0.9981	
20			0.112		
40			0.239		
50			0.316		
ICV 40 ug/L			0.257	41	41
ICB			0.000		
CRDL 2 ug/L			0.009	2.0	2.0
PBK			0.000		
LCS 40 ug/L			0.252	41	41
CCV 30 ug/L			0.191	31	31
CCB			0.000		
022J01 MB 117	50	50	0.009	2.0	2.0
2 DD243			0.015	3.0	3.0
3 DD238			0.002	< 2	< 2
4 DD014			< 0.001		
5 DD129			0.002		
6 dup			0.004		
022DG1 MB110			< 0.001	< 2	< 2
2 SH 8601			< 0.001		
3 DD0121			< 0.001		
4 SH0121			0.028	5.0	5.0
CCV			0.192	31	31
CCB			0.000		
022DG5 DD0125	50	50	< 0.001	< 2	< 2
6 DD0115			0.002		
7 IM0123			0.019	4.0	4.0
7 MS/MSD			0.017	3.4	3.4
022HC01 SH 3011			< 0.001	< 2	< 2
2 DD0132			0.015	3.0	3.0
3 DD0131			< 0.001	< 2	< 2
4 dup			0.005		
SH 3016			< 0.001		
022HC01 IM0237			< 0.001	< 2	< 2
CCV			0.192	31	31
CCB			0.000		

433

ZR3 / Vermeys + Moore

D

TPhenol ASP cont p D-16

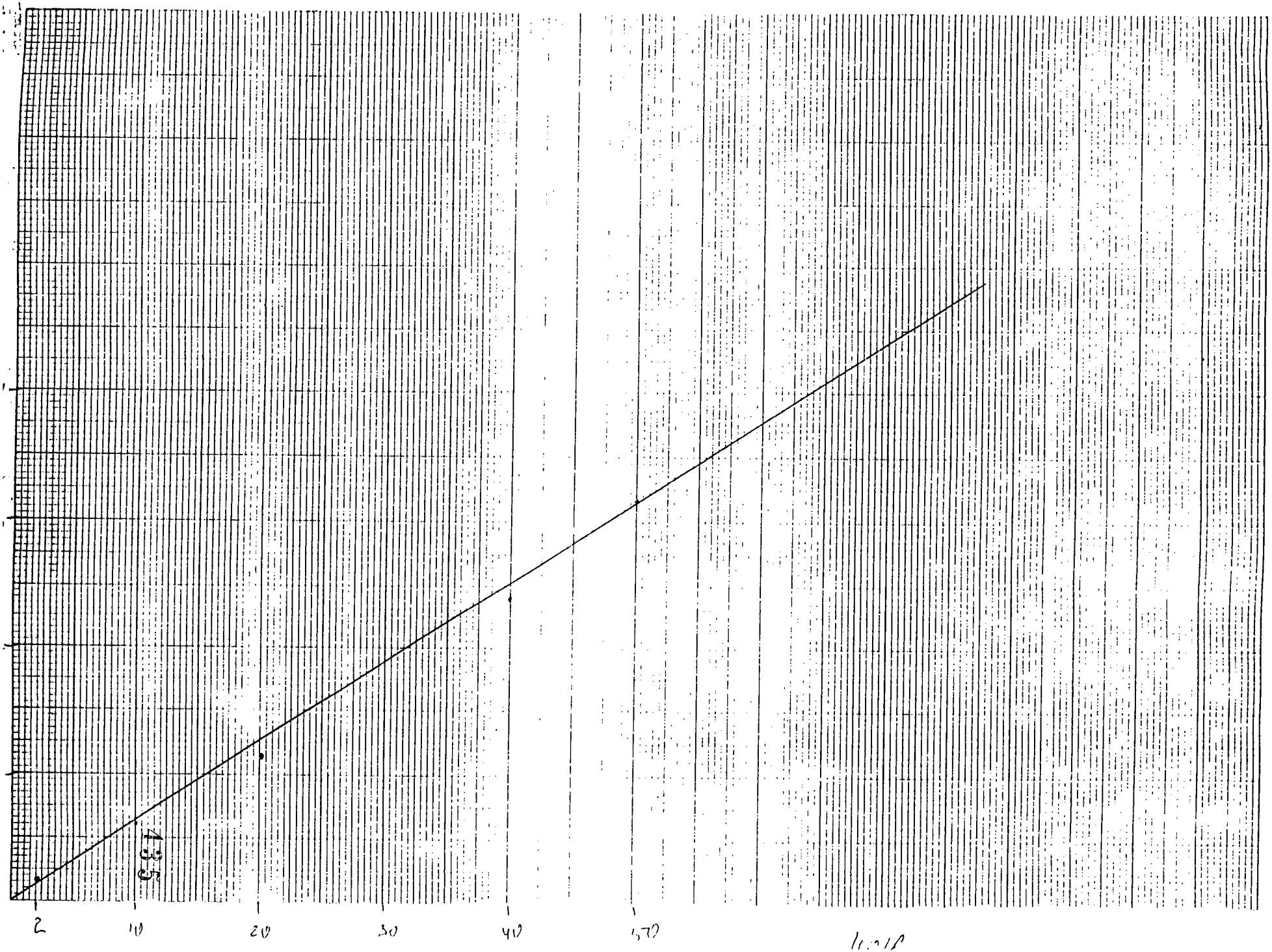
3-13-03 LS

Sample #	Vol ml/sf	Vol Liters	abc	ug/L conc	ug/g dry wt
0228 HCl ms/msd	500	500	<0.001	< 2	< 2
2 DD920			<0.001		
3 2MB119			0.002		
4 DD020			<0.001		
5 SH 8017			0.006	~~0.002~~ 2	~~0.002~~ 2
9 DD0134			<0.001	< 2	< 2
Rinse 40 ug/L			0.254	41	41 A = 102%
50 ug/L 0220 GC ?	50	500	0.381	62	62 sp = $\frac{62-4}{60} \times 100\% = 97\%$
0 ug/L 0228 HCl	↓	↓	0.327	53	53 sp = 88%
CCV			0.191	31	31
CCB			0.000		

T, Phenol 8 460nm spec 6/12

1.9.03 18

r = 0.9981



Cyanide Distillation

Sample ID	Vol/Amt		Apparatus	Tech/Date
030220 G07 dup	50		1	MAE 3/3
030220 G07 spike	50		2	
~~030220~~ Blank, Rinse	50		3	
Blank, Rinse	50		4	
030220 G01 W&D	50	HEAT ON: 1555	5	
030224 C03	50		6	
030224 C04	50		7	
030224 C05	50		8	
030225 02 03	50		9	
030225 C27 01	50		10	
030220037-001	50		1	MAE 3/4
030224017-001			2	
030225003-001		HEAT ON: 1530	3	
030225003-002			4	
030227029-001			5	
030228001-003			6	
030225003-003	3.5g		7	
~~030~~ DOH 5511 (26.4 ug/l	50		8	
030220 G07 Spike	50		9	
prep blank	50		10	
030228 H01	50		1	MAE 3/5
030228 H01 dup			2	
030228 H01 spike		HEAT ON: 1535	3	
030228 H02			4	
030228 H03			5	
030228 H04			6	
030228 H05			7	
030228 H09			8	
DOH 5511 CN⁻ (26 ug/l			9	
030305042-001			10	

Cyanide Distillation

Sample ID	Vol/Amt	Apparatus	Tech/Date
030226042 001	3.0g	1	MMC 3/6
prep blank	50	2	
030304021 004		3	
030305022-002	HEAT ON: 1205	4	
030305022-001		5	
030305022 003		6	
030226033-001 WD		7	
030305052-004		8	
030305052-005		9	
030305022-005		10	
030228 H03 WD	50	1	MMC 3/10
030228 H05 WD		2	
LCS DOH 5511 (261 ug/L)		3	
Blank, Prep	HEAT ON 1220	4	
030228038 001		5	
030228038 002		6	
030228038 003		7	
030305022 007		8	
030306029 001		9	
030306029 002		10	
030303030 001	5mL	1	MMC 3/10
030303030 001 AC		2	
030228038 005	50	3	
030228038006		4	
030228 F01		5	
030304013 001	HEAT ON 1600	6	
030303014-001 WD		7	
030304023 001		8	
030304031-001		9	
030304031 002 spke		10	

Customer Sample ID Vol # Date Tech

IRS
- Dam
Sch. Int
Stiefel

0228H02 DD0120 8
0228H03 IM0119 8
4 DD0240 8
5 SH8617 C
9 DD0134 8
0228019-002A 024-001
0228023-005F Wetlan

500
1 3.5.03 CJ
2
3
4
5
6
7

Enviro
Scien
Hennepin

0224008 1B mw-1
2B — 2
3B — 3
5B — 5
6 dup of -5
Dup 6
0224017-005B 002 Day 4

500
1 3.6.03 KS
2
3
4
5
6
7

Sch.
Int

0303015-004A 75-001
5A 76-001
6A 77-001
0304011-002A 78-001
0305027-002B 82-01A
3A 79-001
4B 81-01A

500
1 3.7.03 CJ
2
3
4
5
6
7

Int 0306018-002B 80-001
Paper 0306011-004A RAW
BBH 0306005-001G TESW
002C RSW
Ajcam 0305015-004F 01A
MPEC 0303025-001A Ref
Reading 0305022-005B

500
1 3.7.03 CJ
2
3
4
5
6
7

Int 0307023-002A 83-001
Little Diversy 0304014-001C
Prop 0305011-003A Ref
Hamb. 0305019-005A New Incub. 3
Bev. 0304031-001C
Rockliu Co 0228 FOI Lead
St Croix 0225003-003A

500
1 3.10.03 KS
2
3
4
5
6
7
Salm

438

Adirondack Environmental Services, Inc.
Experience is the solution
314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

May 9, 2003

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, New York 12065

Attention: Eriko Fujita

RE: NYSEG Mechanicville Data Packages

Dear Ms. Fujita:

Several samples were submitted for analysis from the NYSEG Mechanicville site in February 2003. After the data packages were received by and reviewed you asked if any Methyl-tert-butyl ether (MTBE) was present. Based on a Tentatively Identified Compound (TIC) search of the samples submitted **none** of the samples contained MTBE.

If you should have any other questions regarding this project, please feel free to contact us.

Sincerely,

Christopher Hess
Quality Assurance Manager

RECEIVED
MAY 12 2003

Adirondack Environmental Services, Inc.®
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314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

June 09, 2003

Eriko Fujita
URS/Dames & Moore
646 Plank Road
Clifton Park, NY 12065

TEL: (518) 688-0015
FAX: (518) 688-0022

RE: M'Ville/MGP Site

Order No.: 030602014

Dear Eriko Fujita:

Adirondack Environmental Services, Inc received 3 samples on 6/2/2003 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

ELAP#: 10709
AIHA#: 100307

Tara Daniels
Laboratory Manager

RECEIVED
JUN 10 2003

Adirondack Environmental Services, Inc

Date: *09-Jun-03*

CLIENT: URS/Dames & Moore
Project: M'Ville/MGP Site
Lab Order: 030602014

Lab ID: 030602014-001
Client Sample ID: MEGDD0133
Collection Date: 5/29/2003
Matrix: WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS		**E624**				Analyst: **AJ**
Methyl tert-butyl ether	< 50	50		µg/L	10	6/5/2003
Chloromethane	< 100	100		µg/L	10	6/5/2003
Bromomethane	< 100	100		µg/L	10	6/5/2003
Vinyl chloride	< 100	100		µg/L	10	6/5/2003
Chloroethane	< 100	100		µg/L	10	6/5/2003
Methylene Chloride	< 50	50		µg/L	10	6/5/2003
Acetone	< 100	100		µg/L	10	6/5/2003
Carbon disulfide	< 100	100		µg/L	10	6/5/2003
1,1-Dichloroethene	< 50	50		µg/L	10	6/5/2003
1,1-Dichloroethane	< 50	50		µg/L	10	6/5/2003
cis-1,2-Dichloroethene	< 50	50		µg/L	10	6/5/2003
trans-1,2-Dichloroethene	< 50	50		µg/L	10	6/5/2003
Chloroform	< 50	50		µg/L	10	6/5/2003
1,2-Dichloroethane	< 50	50		µg/L	10	6/5/2003
2-Butanone	< 100	100		µg/L	10	6/5/2003
1,1,1-Trichloroethane	< 50	50		µg/L	10	6/5/2003
Carbon tetrachloride	< 50	50		µg/L	10	6/5/2003
Bromodichloromethane	< 50	50		µg/L	10	6/5/2003
1,2-Dichloropropane	< 50	50		µg/L	10	6/5/2003
cis-1,3-Dichloropropene	< 50	50		µg/L	10	6/5/2003
Trichloroethene	< 50	50		µg/L	10	6/5/2003
Dibromochloromethane	< 50	50		µg/L	10	6/5/2003
1,1,2-Trichloroethane	< 50	50		µg/L	10	6/5/2003
Benzene	1100	50		µg/L	10	6/5/2003
trans-1,3-Dichloropropene	< 50	50		µg/L	10	6/5/2003
Bromoform	< 50	50		µg/L	10	6/5/2003
2-Hexanone	< 100	100		µg/L	10	6/5/2003
4-Methyl-2-pentanone	< 100	100		µg/L	10	6/5/2003
Tetrachloroethene	< 50	50		µg/L	10	6/5/2003
1,1,2,2-Tetrachloroethane	< 50	50		µg/L	10	6/5/2003
Toluene	110	50		µg/L	10	6/5/2003
Chlorobenzene	< 50	50		µg/L	10	6/5/2003
Ethylbenzene	290	50		µg/L	10	6/5/2003
Styrene	< 50	50		µg/L	10	6/5/2003
m,p-Xylene	130	50		µg/L	10	6/5/2003
o-Xylene	80	50		µg/L	10	6/5/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *09-Jun-03*

CLIENT: URS/Dames & Moore
Project: M'Ville/MGP Site
Lab Order: 030602014

Lab ID: 030602014-002
Client Sample ID: MEGDIM0135
Collection Date: 5/30/2003
Matrix: WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS		**E624**				Analyst: **AJ**
Methyl tert-butyl ether	< 25	25		µg/L	5	6/5/2003
Chloromethane	< 50	50		µg/L	5	6/5/2003
Bromomethane	< 50	50		µg/L	5	6/5/2003
Vinyl chloride	< 50	50		µg/L	5	6/5/2003
Chloroethane	< 50	50		µg/L	5	6/5/2003
Methylene Chloride	< 25	25		µg/L	5	6/5/2003
Acetone	< 50	50		µg/L	5	6/5/2003
Carbon disulfide	< 50	50		µg/L	5	6/5/2003
1,1-Dichloroethene	< 25	25		µg/L	5	6/5/2003
1,1-Dichloroethane	< 25	25		µg/L	5	6/5/2003
cis-1,2-Dichloroethene	< 25	25		µg/L	5	6/5/2003
trans-1,2-Dichloroethene	< 25	25		µg/L	5	6/5/2003
Chloroform	< 25	25		µg/L	5	6/5/2003
1,2-Dichloroethane	< 25	25		µg/L	5	6/5/2003
2-Butanone	< 50	50		µg/L	5	6/5/2003
1,1,1-Trichloroethane	< 25	25		µg/L	5	6/5/2003
Carbon tetrachloride	< 25	25		µg/L	5	6/5/2003
Bromodichloromethane	< 25	25		µg/L	5	6/5/2003
1,2-Dichloropropane	< 25	25		µg/L	5	6/5/2003
cis-1,3-Dichloropropene	< 25	25		µg/L	5	6/5/2003
Trichloroethene	< 25	25		µg/L	5	6/5/2003
Dibromochloromethane	< 25	25		µg/L	5	6/5/2003
1,1,2-Trichloroethane	< 25	25		µg/L	5	6/5/2003
Benzene	280	25		µg/L	5	6/5/2003
trans-1,3-Dichloropropene	< 25	25		µg/L	5	6/5/2003
Bromoform	< 25	25		µg/L	5	6/5/2003
2-Hexanone	< 50	50		µg/L	5	6/5/2003
4-Methyl-2-pentanone	< 50	50		µg/L	5	6/5/2003
Tetrachloroethene	< 25	25		µg/L	5	6/5/2003
1,1,2,2-Tetrachloroethane	< 25	25		µg/L	5	6/5/2003
Toluene	550	25		µg/L	5	6/5/2003
Chlorobenzene	< 25	25		µg/L	5	6/5/2003
Ethylbenzene	900	25		µg/L	5	6/5/2003
Styrene	< 25	25		µg/L	5	6/5/2003
m,p-Xylene	560	25		µg/L	5	6/5/2003
o-Xylene	340	25		µg/L	5	6/5/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *09-Jun-03*

CLIENT: URS/Dames & Moore
Project: M'Ville/MGP Site
Lab Order: 030602014

Lab ID: 030602014-003
Client Sample ID: TB030529/Lot#072
Collection Date: 5/29/2003
Matrix: WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANICS		**E624**				Analyst: **AJ**
Methyl tert-butyl ether	< 5.0	5.0		µg/L	1	6/3/2003
Chloromethane	< 10	10		µg/L	1	6/3/2003
Bromomethane	< 10	10		µg/L	1	6/3/2003
Vinyl chloride	< 10	10		µg/L	1	6/3/2003
Chloroethane	< 10	10		µg/L	1	6/3/2003
Methylene Chloride	< 5.0	5.0		µg/L	1	6/3/2003
Acetone	< 10	10		µg/L	1	6/3/2003
Carbon disulfide	< 10	10		µg/L	1	6/3/2003
1,1-Dichloroethene	< 5.0	5.0		µg/L	1	6/3/2003
1,1-Dichloroethane	< 5.0	5.0		µg/L	1	6/3/2003
cis-1,2-Dichloroethene	< 5.0	5.0		µg/L	1	6/3/2003
trans-1,2-Dichloroethene	< 5.0	5.0		µg/L	1	6/3/2003
Chloroform	< 5.0	5.0		µg/L	1	6/3/2003
1,2-Dichloroethane	< 5.0	5.0		µg/L	1	6/3/2003
2-Butanone	< 10	10		µg/L	1	6/3/2003
1,1,1-Trichloroethane	< 5.0	5.0		µg/L	1	6/3/2003
Carbon tetrachloride	< 5.0	5.0		µg/L	1	6/3/2003
Bromodichloromethane	< 5.0	5.0		µg/L	1	6/3/2003
1,2-Dichloropropane	< 5.0	5.0		µg/L	1	6/3/2003
cis-1,3-Dichloropropene	< 5.0	5.0		µg/L	1	6/3/2003
Trichloroethene	< 5.0	5.0		µg/L	1	6/3/2003
Dibromochloromethane	< 5.0	5.0		µg/L	1	6/3/2003
1,1,2-Trichloroethane	< 5.0	5.0		µg/L	1	6/3/2003
Benzene	< 5.0	5.0		µg/L	1	6/3/2003
trans-1,3-Dichloropropene	< 5.0	5.0		µg/L	1	6/3/2003
Bromoform	< 5.0	5.0		µg/L	1	6/3/2003
2-Hexanone	< 10	10		µg/L	1	6/3/2003
4-Methyl-2-pentanone	< 10	10		µg/L	1	6/3/2003
Tetrachloroethene	< 5.0	5.0		µg/L	1	6/3/2003
1,1,2,2-Tetrachloroethane	< 5.0	5.0		µg/L	1	6/3/2003
Toluene	< 5.0	5.0		µg/L	1	6/3/2003
Chlorobenzene	< 5.0	5.0		µg/L	1	6/3/2003
Ethylbenzene	< 5.0	5.0		µg/L	1	6/3/2003
Styrene	< 5.0	5.0		µg/L	1	6/3/2003
m,p-Xylene	< 5.0	5.0		µg/L	1	6/3/2003
o-Xylene	< 5.0	5.0		µg/L	1	6/3/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

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314 North Pea[illegible]eet
Albany, New Yo[illegible]2207
518-434-4546/4[illegible]0891 FAX
A full ser[illegible]e analytical research laboratory offering solutions to environmental concerns

CHAIN OF CUSTODY RECORD

Client Name: URS	**Address** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Erika Fujita	**Project Name (Location)** MOHAWK MGP SITE	**Samplers: (Names)** ERIC LOVENDUSKI
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	MEGDD0133	5/29/03	1535	A (P)	W		X	2	VOCs + MTBE 8260
002	MEGDIM0135	5/30/03	1315	A (P)	W		X	2	VOCs + MTBE 8260
003	TB030529/Lot#072	5/29/03	/	A P	TB		X	1	VOC + MTBE 8260
				A P					
				A P					
	030602 014			A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
E. Sovinski	Betty Nibbs	6/07/03 1000
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		6/7/03 12:24

TEMPERATURE Ambient or (Chilled)
Notes: _____

PROPERLY PRESERVED (Y) N
Notes: _____

RECEIVED WITHIN HOLDING TIMES (Y) N
Notes: _____

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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TERMS, CONDITIONS & LIMITATIONS

All Services rendered by **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.**, nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or non-performance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed as irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.**, its employees agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

SEDIMENT
RESULTS

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

RECEIVED
SEP 12 2002

Purchase Order #: 30309T195#4

Report date: 09/11/02
Number of samples analyzed: 6
AES Project ID: 020828AH
Invoice #: 246267

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore HR-1 (0-2) 8/29/02 Date Sampled: 08/27/02
CLIENT'S SAMPLE ID: MEHR00020201 Date sample received: 08/28/02
AES sample #: 020828AH01 Samples taken by: E. Lovenduski Location: M-Ville MGP
MATRIX: Sediment composite

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Organic Carbon	EPA-9060	55,400	ug/g	MC-R-44	09/04/02
Cyanide,Total	EPA-9012	<1.3	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.3	ug/g	MC-K	09/05/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Phenanthrene	EPA-8270	1100	ug/kg	MT-CE-15	09/10/02
Anthracene	EPA-8270	420	ug/kg	MT-CE-15	09/10/02
Fluoranthene	EPA-8270	1200	ug/kg	MT-CE-15	09/10/02
Pyrene	EPA-8270	1500	ug/kg	MT-CE-15	09/10/02
Chrysene	EPA-8270	680	ug/kg	MT-CE-15	09/10/02
Benzo(b)fluoranthene	EPA-8270	480	ug/kg	MT-CE-15	09/10/02
Benzo(k)fluoranthene	EPA-8270	380	ug/kg	MT-CE-15	09/10/02
Benzo(a)pyrene	EPA-8270	550	ug/kg	MT-CE-15	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	420	ug/kg	MT-CE-15	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(g,h,i)perylene	EPA-8270	330	ug/kg	MT-CE-15	09/10/02
Benzo(a)anthracene	EPA-8270	630	ug/kg	MT-CE-15	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEHR00020201
AES sample #: 020828AH01
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP
composite

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore HR-3 (0-2) 8/27/02 Date Sampled: 08/27/02
CLIENT'S SAMPLE ID: MEHR00020203 Date sample received: 08/28/02
AES sample #: 020828AH02 Samples taken by: E. Lovenduski Location: M-Ville MGP
MATRIX: Sediment composite

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Organic Carbon	EPA-9060	9680	ug/g	MC-R-44	09/04/02
Cyanide,Total	EPA-9012	<1.1	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.1	ug/g	MC-K	09/05/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEHR00020203
AES sample #: 020828AH02
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP
composite

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore HR-5 (1-7) 8/29/02 Date Sampled: 08/27/02
CLIENT'S SAMPLE ID: MEHR01070205 Date sample received: 08/28/02
AES sample #: 020828AH03 Samples taken by: E. Lovenduski Location: M-Ville MGP
MATRIX: Sediment composite

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Organic Carbon	EPA-9060	160,000	ug/g	MC-R-44	09/04/02
Cyanide,Total	EPA-9012	<2.2	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<2.2	ug/g	MC-K	09/05/02
Naphthalene	EPA-8270	900	ug/kg	MT-CE-15	09/10/02
Acenaphthylene	EPA-8270	400	ug/kg	MT-CE-15	09/10/02
Acenaphthene	EPA-8270	1500	ug/kg	MT-CE-15	09/10/02
Fluorene	EPA-8270	930	ug/kg	MT-CE-15	09/10/02
Phenanthrene	EPA-8270	3700	ug/kg	MT-CE-15	09/10/02
Anthracene	EPA-8270	1100	ug/kg	MT-CE-15	09/10/02
Fluoranthene	EPA-8270	2200	ug/kg	MT-CE-15	09/10/02
Pyrene	EPA-8270	5900	ug/kg	MT-CE-15	09/10/02
Chrysene	EPA-8270	2400	ug/kg	MT-CE-15	09/10/02
Benzo(b)fluoranthene	EPA-8270	1700	ug/kg	MT-CE-15	09/10/02
Benzo(k)fluoranthene	EPA-8270	1300	ug/kg	MT-CE-15	09/10/02
Benzo(a)pyrene	EPA-8270	2300	ug/kg	MT-CE-15	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	1300	ug/kg	MT-CE-15	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(g,h,i)perylene	EPA-8270	1500	ug/kg	MT-CE-15	09/10/02
Benzo(a)anthracene	EPA-8270	2300	ug/kg	MT-CE-15	09/10/02
2-Methylnaphthalene	EPA-8270	900	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEHR01070205
AES sample #: 020828AH03
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP
composite

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore HR-4 (0-5) 8/27/02 Date Sampled: 08/27/02
CLIENT'S SAMPLE ID: MEHR00050204 Date sample received: 08/28/02
AES sample #: 020828AH04 Samples taken by: E. Lovenduski Location: M-Ville MGP
MATRIX: Sediment composite

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Organic Carbon	EPA-9060	112,000	ug/g	MC-R-44	09/04/02
Cyanide,Total	EPA-9012	<1.4	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.4	ug/g	MC-K	09/05/02
Naphthalene	EPA-8270	550	ug/kg	MT-CE-15	09/10/02
Acenaphthylene	EPA-8270	620	ug/kg	MT-CE-15	09/10/02
Acenaphthene	EPA-8270	1000	ug/kg	MT-CE-15	09/10/02
Fluorene	EPA-8270	880	ug/kg	MT-CE-15	09/10/02
Phenanthrene	EPA-8270	6600	ug/kg	MT-CE-15	09/10/02
Anthracene	EPA-8270	1500	ug/kg	MT-CE-15	09/10/02
Fluoranthene	EPA-8270	4900	ug/kg	MT-CE-15	09/10/02
Pyrene	EPA-8270	9800	ug/kg	MT-CE-15	09/10/02
Chrysene	EPA-8270	2700	ug/kg	MT-CE-15	09/10/02
Benzo(b)fluoranthene	EPA-8270	2000	ug/kg	MT-CE-15	09/10/02
Benzo(k)fluoranthene	EPA-8270	1900	ug/kg	MT-CE-15	09/10/02
Benzo(a)pyrene	EPA-8270	2600	ug/kg	MT-CE-15	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	1500	ug/kg	MT-CE-15	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(g,h,i)perylene	EPA-8270	1700	ug/kg	MT-CE-15	09/10/02
Benzo(a)anthracene	EPA-8270	2900	ug/kg	MT-CE-15	09/10/02
2-Methylnaphthalene	EPA-8270	430	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEHR00050204
AES sample #: 020828AH04
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP
composite

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran		EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore MR-2(0-3) 8/30/02 Date Sampled: 08/27/02
CLIENT'S SAMPLE ID: MEHR00030202 Date sample received: 08/28/02
AES sample #: 020828AH05 Samples taken by: E. Lovenduski Location: M-Ville MGP
MATRIX: Sediment composite

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Organic Carbon	EPA-9060	18,000	ug/g	MC-R-44	09/04/02
Cyanide,Total	EPA-9012	<1.1	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.1	ug/g	MC-K	09/05/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEHR00030202
AES sample #: 020828AH05
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP composite

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-08/27/02
AES sample #: 020828AH06
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP
composite

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Total Organic Carbon	EPA-9060	24,500	ug/g	MC-R-44	09/04/02
Cyanide,Total	EPA-9012	<1.4	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.4	ug/g	MC-K	09/05/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Acenaphthene	EPA-8270	1100	ug/kg	MT-CE-15	09/10/02
Fluorene	EPA-8270	800	ug/kg	MT-CE-15	09/10/02
Phenanthrene	EPA-8270	2300	ug/kg	MT-CE-15	09/10/02
Anthracene	EPA-8270	470	ug/kg	MT-CE-15	09/10/02
Fluoranthene	EPA-8270	950	ug/kg	MT-CE-15	09/10/02
Pyrene	EPA-8270	2400	ug/kg	MT-CE-15	09/10/02
Chrysene	EPA-8270	780	ug/kg	MT-CE-15	09/10/02
Benzo(b)fluoranthene	EPA-8270	600	ug/kg	MT-CE-15	09/10/02
Benzo(k)fluoranthene	EPA-8270	430	ug/kg	MT-CE-15	09/10/02
Benzo(a)pyrene	EPA-8270	850	ug/kg	MT-CE-15	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	470	ug/kg	MT-CE-15	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02
Benzo(g,h,i)perylene	EPA-8270	580	ug/kg	MT-CE-15	09/10/02
Benzo(a)anthracene	EPA-8270	820	ug/kg	MT-CE-15	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-08/27/02
AES sample #: 020828AH06
Samples taken by: E. Lovenduski
MATRIX: Sediment
Date Sampled: 08/27/02
Date sample received: 08/28/02
Location: M-Ville MGP
composite

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Dibenzofuran		EPA-8270	<330	ug/kg	MT-CE-15	09/10/02

APPROVED BY:
Report date: 09/11/02

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314 North Pearl Street
Albany, New York 12207
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CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Eriko Fujita	Mechanicville MGP SITE	Eric Lovenduski
Client Phone No: 688-0015	**PO Number:**	**Samplers: (Signature)**
Client Fax No: 688-0012	30309T195#4	EJ Lovenduski

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020828 AH01	MEHR00020201	8/27/02	1150	(A) P	Sed.	x		1	See Below
AH02	MEHR00020203	8/27/02	1300	A (P)	Sed.	x		1	See Below
AH03	MEHR01070205	8/27/02	1400	A (P)	Sed.	x		1	See Below
AH04	MEHR00050204	8/27/02	1530	A (P)	Sed	x		1	See Below
AH05	MEHR00030202	8/27/02	1605	A (P)	Sed	x		1	See Below
AH06	DUP-08/27/02	8/27/02	/	A P	Sed	x		1	See Below
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks

SVOCs (PAHs): EPA 8270
Cyanide: Total - EPA 9012/335.3
Weak acid dissociable SM4500I
Total Organic Carbon: Lloyd-Kahn Method

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski		8/28/02 1400
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		8/28/02 1:50

TEMPERATURE
Ambient or (Chilled)
Notes:

PROPERLY PRESERVED
(Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

RECEIVED
SEP 13 2002

Purchase Order #: 30309T195#4

Report date: 09/12/02
Number of samples analyzed: 8
AES Project ID: 020828AI
Invoice #: 246270

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore AK-9 (0-1) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00010207 Date sample received: 08/28/02
AES sample #: 020828AI01 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.8	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.8	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	23,500	ug/g	MC-R-44	09/04/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010207
AES sample #: 020828AI01
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	830	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010207
AES sample #: 020828AI01 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	600	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	420	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	2000	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	530	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	1100	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	2000	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	480	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	470	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	350	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	500	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	870	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010207
AES sample #: 020828AI01 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic	EPA-6010	<0.44	ug/g	SM-I-4E-18	09/06/02
Barium	EPA-6010	39.3	ug/g	SM-I-4E-18	09/06/02
Cadmium	EPA-6010	<0.44	ug/g	SM-I-4E-18	09/06/02
Chromium	EPA-6010	3.02	ug/g	SM-I-4E-18	09/06/02
Lead	EPA-6010	15.1	ug/g	SM-I-4E-18	09/06/02
Mercury	EPA-7471	<0.035	ug/g	KH-HG-B-78	09/06/02
Selenium	EPA-6010	<0.44	ug/g	SM-I-4E-18	09/06/02
Silver	EPA-6010	<1.75	ug/g	SM-I-4E-18	09/06/02
Aluminum	EPA-6010	5470	ug/g	SM-I-4E-18	09/06/02
Antimony	EPA-6010	<5.26	ug/g	SM-I-4E-18	09/06/02
Copper	EPA-6010	10.6	ug/g	SM-I-4E-18	09/06/02
Iron	EPA-6010	8440	ug/g	SM-I-4E-18	09/06/02
Nickel	EPA-6010	6.40	ug/g	SM-I-4E-18	09/06/02
Manganese	EPA-6010	554	ug/g	SM-I-4E-18	09/06/02
Vanadium	EPA-6010	7.54	ug/g	SM-I-4E-18	09/06/02
Zinc	EPA-6010	52.1	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010207
AES sample #: 020828AI01
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acid Volatile Sulfide	AVS/SEM	<3	ug/g	MC-K-18	09/11/02
Cadmium-AVS/SEM Extract	AVS/SEM	<0.22	ug/g	SM-I-4E-18	09/06/02
Copper-AVS/SEM Extract	AVS/SEM	7.09	ug/g	SM-I-4E-18	09/06/02
Lead-AVS/SEM Extract	AVS/SEM	11.2	ug/g	SM-I-4E-18	09/06/02
Mercury-AVS/SEM Extract	AVS/SEM	<0.035	ug/g	KH-HG-B-78	09/06/02
Nickel-AVS/SEM Extract	AVS/SEM	2.71	ug/g	SM-I-4E-18	09/06/02
Zinc-AVS/SEM Extract	AVS/SEM	33.3	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore AK-3 (0-2) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00020203 Date sample received: 08/28/02
AES sample #: 020828AI02 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.2	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.2	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	2530	ug/g	MC-R-44	09/04/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00020203
AES sample #: 020828AI02
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00020203
AES sample #: 020828AI02
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00020203
AES sample #: 020828AI02
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic		EPA-6010	<0.30	ug/g	SM-I-4E-18	09/06/02
Barium		EPA-6010	18.3	ug/g	SM-I-4E-18	09/06/02
Cadmium		EPA-6010	<0.30	ug/g	SM-I-4E-18	09/06/02
Chromium		EPA-6010	2.24	ug/g	SM-I-4E-18	09/06/02
Lead		EPA-6010	6.61	ug/g	SM-I-4E-18	09/06/02
Mercury		EPA-7471	<0.024	ug/g	KH-HG-B-78	09/06/02
Selenium		EPA-6010	<0.30	ug/g	SM-I-4E-18	09/06/02
Silver		EPA-6010	<1.21	ug/g	SM-I-4E-18	09/06/02
Aluminum		EPA-6010	3810	ug/g	SM-I-4E-18	09/06/02
Antimony		EPA-6010	<3.64	ug/g	SM-I-4E-18	09/06/02
Copper		EPA-6010	3.94	ug/g	SM-I-4E-18	09/06/02
Iron		EPA-6010	7700	ug/g	SM-I-4E-18	09/06/02
Nickel		EPA-6010	5.39	ug/g	SM-I-4E-18	09/06/02
Manganese		EPA-6010	293	ug/g	SM-I-4E-18	09/06/02
Vanadium		EPA-6010	5.64	ug/g	SM-I-4E-18	09/06/02
Zinc		EPA-6010	30.2	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00020203
AES sample #: 020828AI02
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acid Volatile Sulfide	AVS/SEM	9.0	ug/g	MC-K-18	09/11/02
Cadmium-AVS/SEM Extract	AVS/SEM	<0.152	ug/g	SM-I-4E-18	09/06/02
Copper-AVS/SEM Extract	AVS/SEM	2.32	ug/g	SM-I-4E-18	09/06/02
Lead-AVS/SEM Extract	AVS/SEM	2.93	ug/g	SM-I-4E-18	09/06/02
Mercury-AVS/SEM Extract	AVS/SEM	<0.024	ug/g	KH-HG-B-78	09/06/02
Nickel-AVS/SEM Extract	AVS/SEM	1.28	ug/g	SM-I-4E-18	09/06/02
Zinc-AVS/SEM Extract	AVS/SEM	12.1	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore AK-1 (6-1) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00010201 Date sample received: 08/28/02
AES sample #: 020828AI03 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.2	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.2	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	2240	ug/g	MC-R-44	09/09/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010201
AES sample #: 020828AI03
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010201
AES sample #: 020828AI03
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010201
AES sample #: 020828AI03
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic	EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Barium	EPA-6010	18.9	ug/g	SM-I-4E-18	09/06/02
Cadmium	EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Chromium	EPA-6010	2.58	ug/g	SM-I-4E-18	09/06/02
Lead	EPA-6010	0.98	ug/g	SM-I-4E-18	09/06/02
Mercury	EPA-7471	<0.024	ug/g	KH-HG-B-78	09/06/02
Selenium	EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Silver	EPA-6010	<1.23	ug/g	SM-I-4E-18	09/06/02
Aluminum	EPA-6010	3440	ug/g	SM-I-4E-18	09/06/02
Antimony	EPA-6010	<3.68	ug/g	SM-I-4E-18	09/06/02
Copper	EPA-6010	3.67	ug/g	SM-I-4E-18	09/06/02
Iron	EPA-6010	6570	ug/g	SM-I-4E-18	09/06/02
Nickel	EPA-6010	4.97	ug/g	SM-I-4E-18	09/06/02
Manganese	EPA-6010	179	ug/g	SM-I-4E-18	09/06/02
Vanadium	EPA-6010	4.94	ug/g	SM-I-4E-18	09/06/02
Zinc	EPA-6010	29.8	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore AK.O (U-1) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00010202 Date sample received: 08/28/02
AES sample #: 020828AI04 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.4	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.4	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	5420	ug/g	MC-R-44	09/09/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010202
AES sample #: 020828AI04
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010202
AES sample #: 020828AI04 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010202
AES sample #: 020828AI04 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic	EPA-6010	<0.34	ug/g	SM-I-4E-18	09/06/02
Barium	EPA-6010	24.6	ug/g	SM-I-4E-18	09/06/02
Cadmium	EPA-6010	<0.34	ug/g	SM-I-4E-18	09/06/02
Chromium	EPA-6010	3.16	ug/g	SM-I-4E-18	09/06/02
Lead	EPA-6010	5.06	ug/g	SM-I-4E-18	09/06/02
Mercury	EPA-7471	<0.027	ug/g	KH-HG-B-78	09/06/02
Selenium	EPA-6010	<0.34	ug/g	SM-I-4E-18	09/06/02
Silver	EPA-6010	<1.34	ug/g	SM-I-4E-18	09/06/02
Aluminum	EPA-6010	4400	ug/g	SM-I-4E-18	09/06/02
Antimony	EPA-6010	<4	ug/g	SM-I-4E-18	09/06/02
Copper	EPA-6010	8.82	ug/g	SM-I-4E-18	09/06/02
Iron	EPA-6010	8040	ug/g	SM-I-4E-18	09/06/02
Nickel	EPA-6010	6.80	ug/g	SM-I-4E-18	09/06/02
Manganese	EPA-6010	207	ug/g	SM-I-4E-18	09/06/02
Vanadium	EPA-6010	6.39	ug/g	SM-I-4E-18	09/06/02
Zinc	EPA-6010	37.4	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore AK-4 (0-1) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00010204 Date sample received: 08/28/02
AES sample #: 020828AI05 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.2	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.2	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	1900	ug/g	MC-R-44	09/09/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010204
AES sample #: 020828AI05
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010204
AES sample #: 020828AI05
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010204
AES sample #: 020S28AI05
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic	EPA-6010	<0.30	ug/g	SM-I-4E-18	09/06/02
Barium	EPA-6010	22.7	ug/g	SM-I-4E-18	09/06/02
Cadmium	EPA-6010	<0.30	ug/g	SM-I-4E-18	09/06/02
Chromium	EPA-6010	3.71	ug/g	SM-I-4E-18	09/06/02
Lead	EPA-6010	0.35	ug/g	SM-I-4E-18	09/06/02
Mercury	EPA-7471	<0.024	ug/g	KH-HG-B-78	09/06/02
Selenium	EPA-6010	<0.30	ug/g	SM-I-4E-18	09/06/02
Silver	EPA-6010	<1.18	ug/g	SM-I-4E-18	09/06/02
Aluminum	EPA-6010	4340	ug/g	SM-I-4E-18	09/06/02
Antimony	EPA-6010	<3.5	ug/g	SM-I-4E-18	09/06/02
Copper	EPA-6010	10.5	ug/g	SM-I-4E-18	09/06/02
Iron	EPA-6010	8410	ug/g	SM-I-4E-18	09/06/02
Nickel	EPA-6010	6.47	ug/g	SM-I-4E-18	09/06/02
Manganese	EPA-6010	315	ug/g	SM-I-4E-18	09/06/02
Vanadium	EPA-6010	6.70	ug/g	SM-I-4E-18	09/06/02
Zinc	EPA-6010	25.6	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore AK-5 (0-1) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00010205 Date sample received: 08/28/02
AES sample #: 020828AI06 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.2	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.2	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	3150	ug/g	MC-R-44	09/10/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010205
AES sample #: 02082SAI06 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	1300	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010205
AES sample #: 020828AI06 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	530	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	620	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	330	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	380	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	380	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010205
AES sample #: 020828AI06 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic	EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Barium	EPA-6010	27.7	ug/g	SM-I-4E-18	09/06/02
Cadmium	EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Chromium	EPA-6010	3.06	ug/g	SM-I-4E-18	09/06/02
Lead	EPA-6010	9.19	ug/g	SM-I-4E-18	09/06/02
Mercury	EPA-7471	<0.025	ug/g	KH-HG-B-78	09/06/02
Selenium	EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Silver	EPA-6010	<1.25	ug/g	SM-I-4E-18	09/06/02
Aluminum	EPA-6010	4540	ug/g	SM-I-4E-18	09/06/02
Antimony	EPA-6010	<3.75	ug/g	SM-I-4E-18	09/06/02
Copper	EPA-6010	5.00	ug/g	SM-I-4E-18	09/06/02
Iron	EPA-6010	875	ug/g	SM-I-4E-18	09/06/02
Nickel	EPA-6010	7.06	ug/g	SM-I-4E-18	09/06/02
Manganese	EPA-6010	538	ug/g	SM-I-4E-18	09/06/02
Vanadium	EPA-6010	6.44	ug/g	SM-I-4E-18	09/06/02
Zinc	EPA-6010	29.7	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010205
AES sample #: 020828AI06
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acid Volatile Sulfide	AVS/SEM	<3	ug/g	MC-K-18	09/11/02
Cadmium-AVS/SEM Extract	AVS/SEM	<0.16	ug/g	SM-I-4E-18	09/06/02
Copper-AVS/SEM Extract	AVS/SEM	3.40	ug/g	SM-I-4E-18	09/06/02
Lead-AVS/SEM Extract	AVS/SEM	4.96	ug/g	SM-I-4E-18	09/06/02
Mercury-AVS/SEM Extract	AVS/SEM	<0.025	ug/g	KH-HG-B-78	09/06/02
Nickel-AVS/SEM Extract	AVS/SEM	5.38	ug/g	SM-I-4E-18	09/06/02
Zinc-AVS/SEM Extract	AVS/SEM	22.9	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore AK-6 (0-1) 8/28/02 Date Sampled: 08/28/02
CLIENT'S SAMPLE ID: MEAK00010206 Date sample received: 08/28/02
AES sample #: 020828AI07 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	1.3	ug/g	LS-C-20	09/04/02
Cyanide,Total	EPA-9012	<1.2	ug/g	MC-K	09/05/02
Cyanide,Free (weak & dissoc.)	SM 4500 I	<1.2	ug/g	MC-K	09/05/02
Total Organic Carbon	EPA-9060	6180	ug/g	MC-R-44	09/10/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010206
AES sample #: 020828AI07 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Naphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010206
AES sample #: 020828AI07 Samples taken by: E.L./J.H.
MATRIX: Sediment

Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Acenaphthylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Acenaphthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluorene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Phenanthrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Chrysene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(b)fluoranthene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(k)fluorantnene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Indeno(1,2,3-cd)pyrene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzo(a,h)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(g,h,i)perylene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Benzo(a)anthracene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
2-Methylnaphthalene	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
Dibenzofuran	EPA-8270	<330	ug/kg	MT-CE-14	09/10/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEAK00010206
AES sample #: 020828AI07 Samples taken by: E.L./J.H. Location: M-Ville MGP
MATRIX: Sediment grab
Date Sampled: 08/28/02
Date sample received: 08/28/02

continued:

PARAMETER	PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1242		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1248		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260		EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic		EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Barium		EPA-6010	19.2	ug/g	SM-I-4E-18	09/06/02
Cadmium		EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Chromium		EPA-6010	1.92	ug/g	SM-I-4E-18	09/06/02
Lead		EPA-6010	1.88	ug/g	SM-I-4E-18	09/06/02
Mercury		EPA-7471	<0.025	ug/g	KH-HG-B-78	09/06/02
Selenium		EPA-6010	<0.31	ug/g	SM-I-4E-18	09/06/02
Silver		EPA-6010	<1.24	ug/g	SM-I-4E-18	09/06/02
Aluminum		EPA-6010	3300	ug/g	SM-I-4E-18	09/06/02
Antimony		EPA-6010	<3.72	ug/g	SM-I-4E-18	09/06/02
Copper		EPA-6010	4.09	ug/g	SM-I-4E-18	09/06/02
Iron		EPA-6010	6630	ug/g	SM-I-4E-18	09/06/02
Nickel		EPA-6010	4.81	ug/g	SM-I-4E-18	09/06/02
Manganese		EPA-6010	253	ug/g	SM-I-4E-18	09/06/02
Vanadium		EPA-6010	4.80	ug/g	SM-I-4E-18	09/06/02
Zinc		EPA-6010	23.8	ug/g	SM-I-4E-18	09/06/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-08/28/02
AES sample #: 020828AI08
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Phenols, Total	EPA-9065	<0.2	ug/g	LS-C-20	09/04/02
Chloromethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromomethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Vinyl Chloride	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Chloroethane	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Methylene Chloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Acetone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Carbon Disulfide	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1-Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloroethene Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chloroform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2 Dichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Butanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
1,1,1-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Carbon Tetrachloride	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Vinyl Acetate	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromodichloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,2-Dichloropropane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
trans-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-08/28/02
AES sample #: 020828AI08
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Trichloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Dibromochloromethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2-Trichloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Benzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
cis-1,3-Dichloropropene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
2-Chloroethylvinylether	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Bromoform	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
4-Methyl-2-pentanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
2-Hexanone	EPA-8260	<10	ug/kg	MG-CB-19	09/04/02
Tetrachloroethene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
1,1,2,2-Tetrachloroethane	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Toluene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Chlorobenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Ethylbenzene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Styrene	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
Xylenes,Total	EPA-8260	<5	ug/kg	MG-CB-19	09/04/02
PCB-1016	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1221	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1232	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1242	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: DUP-08/28/02
AES sample #: 020828AI08
Samples taken by: E.L./J.H.
MATRIX: Sediment
Date Sampled: 08/28/02
Date sample received: 08/28/02
Location: M-Ville MGP
grab

continued:

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
PCB-1248	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1254	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
PCB-1260	EPA-8082	<1	ug/g	KF-PCBAK35	08/30/02
Arsenic	EPA-6010	<0.42	ug/g	SM-I-4E-18	09/06/02
Barium	EPA-6010	38.7	ug/g	SM-I-4E-18	09/06/02
Cadmium	EPA-6010	<0.42	ug/g	SM-I-4E-18	09/06/02
Chromium	EPA-6010	2.83	ug/g	SM-I-4E-18	09/06/02
Lead	EPA-6010	4.94	ug/g	SM-I-4E-18	09/06/02
Mercury	EPA-7471	<0.033	ug/g	KH-HG-B-78	09/06/02
Selenium	EPA-6010	<0.42	ug/g	SM-I-4E-18	09/06/02
Silver	EPA-6010	<1.77	ug/g	SM-I-4E-18	09/06/02
Aluminum	EPA-6010	5520	ug/g	SM-I-4E-18	09/06/02
Antimony	EPA-6010	<5	ug/g	SM-I-4E-18	09/06/02
Copper	EPA-6010	8.75	ug/g	SM-I-4E-18	09/06/02
Iron	EPA-6010	8450	ug/g	SM-I-4E-18	09/06/02
Nickel	EPA-6010	6.30	ug/g	SM-I-4E-18	09/06/02
Manganese	EPA-6010	532	ug/g	SM-I-4E-18	09/06/02
Vanadium	EPA-6010	7.47	ug/g	SM-I-4E-18	09/06/02
Zinc	EPA-6010	42.0	ug/g	SM-I-4E-18	09/06/02

APPROVED BY:
Report date: 09/12/02

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314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	Samplers: (Names)
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	Eric Lovenduski / John Hawley
Send Report To:	**Project Name (Location)**	**Samplers: (Signature)**
Erika Fujita	Mechanicville MGP SITE	EJ Lovenduski
Client Phone No: 688-0015	**PO Number:**	
Client Fax No: 688-0022	30309T195 #4	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
020828 AI01	MEAK00010207	8/28/02	0945	(A) P	SED	X		3	See Below plus AVS/SEM
AI02	MEAK00020203	8/28/02	1012	(A) P	SED		X	3	See Below plus AVS/SEM
AI03	MEAK00010201	8/28/02	1021	(A) P	SED		X	2	See Below
AI04	MEAK00010202	8/28/02	1017	(A) P	SED		X	2	See Below
AI05	MEAK00010204 ~~MEAK00010004~~ (L1)	8/28/02	1026	(A) P	SED		X	2	See Below
AI06	MEAK00010205	8/28/02	1031	(A) P	SED		X	3	See Below plus AVS/SEM
AI07	MEAK00010206	8/28/02	1035	(A) P	SED		X	2	See Below
AI08	DUP-08/28/02	8/28/02	/	A P	SED		X	2	Phenols, Metals, VOCs, PCBs
				A P					
				A P					
				A P					
				A P					
Metals: Al Sb (As) Ba Ca Cr Co Cu Fe (Pb) Mn Mo				A P					
	Hg Se Ag V Zn			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks VOCs: EPA 8260
SVOCs: PAHs 8270, Phenols 9065/420.1
Cyanide: Total - 9012/335.3 ; weak acid dissociable SM4500I
Metals: EPA 6010 series
PCBs: EPA 8082
Total organic Carbon: Lloyd-Kahn Method

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJ Lovenduski		8/28/02 1400
Relinquished by: (Signature)	**Received for Laboratory by:**	**Date/Time**
		8/28/02 1:50

TEMPERATURE Ambient or (Chilled)
Notes:

PROPERLY PRESERVED (Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

NAPL
RESULTS

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 (#5)

Report date: 09/13/01
Number of samples analyzed: 2
AES Project ID: 010823 S
Invoice #: 231766

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEPS--0110
AES sample #: 010823 S01 Samples taken by: EL/CM
MATRIX: Oil

Date Sampled: 08/22/01
Date sample received: 08/23/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Specific Gravity	ASTM 1298-67	0.9886	g/ml	MC-J-11	09/06/01
Viscosity,Kinematic	ASTM D445	13.058	cSt @25C	PL-D-49	09/06/01
Reactivity	SW-846 Sec.7.3	Non	Reactive	MC-H	09/06/01
Cyanide	EPA-9012	<1	ug/g	MC-H	09/06/01
Sulfide	EPA-9034	344	ug/g	MC-J-11	09/06/01
Corrosivity	SW-846	Non	Corosive	LS-X-4	09/06/01
Ignitability	EPA-600S4-85	138	°F	PL-F-26	09/06/01
TCLP Extraction	EPA-1311	Complete		SO	08/24/01
Benzene-TCLP Extraction	EPA-8021	6700	ug/l	SO-C	08/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEPS--0126
AES sample #: 010823 S02 Samples taken by: EL/CM MATRIX: Oil

Date Sampled: 08/22/01
Date sample received: 08/23/01
Location: NYSEG-Mechanicv grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Specific Gravity	ASTM 1298-67	0.9953	g/ml	MC-J-11	09/06/01
Viscosity,Kinematic	ASTM D445	<10	cSt @23C	MC-D-50	09/07/01
Reactivity	SW-846 Sec.7.3	Non	Reactive	MC-H	09/06/01
Cyanide	EPA-9012	<1	ug/g	MC-H	09/06/01
Sulfide	EPA-9034	256	ug/g	MC-J-11	09/06/01
Corrosivity	SW-846	Non	Corosive	LS-X-4	09/06/01
Ignitability	EPA-600S4-85	>200	°F	PL-F-26	09/06/01
TCLP Extraction	EPA-1311	Complete		SO	08/24/01
Benzene-TCLP Extraction	EPA-8021	3300000	ug/l	SO-C	08/27/01

APPROVED BY: Natasha Ko
Report date: 09/13/01

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) EL/CM
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EL/CM
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010823 S01	MEPS--0110	8/22/01	1230 A (P)	Oil		X	2	See Below (MW 10D)
S02	MEPS--0126	8/22/01	1330 A (P)	OIL		X		See Below (MW 26-S)

Attention!!!
SAMPLES ARE 100% PRODUCT
USE VERY HIGH LEVEL OF CARE & CAUTION

Turnaround Time Request: ☐ 1 Day ☐ 3 Day ☐ Normal ☐ 2 Day ☐ 5 Day	Special Instructions/Remarks: Viscosity @ 55°F, Specific Gravity, Weftability, Reactivity, Corrosivity	Ignitability, TCLP benzene
CC Report To:		
Relinquished by: (Signature)	Received by: (Signature)	Date/Time 8/27/01 11:10
Relinquished by: (Signature)	Received for Laboratory by: M. L	Date/Time 8/23/01 1205

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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LABORATORY REPORT

for

URS/Dames & Moore
646 Plank Road
Suite 202
Clifton Park, NY 12065

Attention: Eriko Fujita

Purchase Order #: 30309T194 (#5)
Updated Report 9/20

Report date: 09/20/01
Number of samples analyzed: 2
AES Project ID: 010823 S
Invoice #: 231766

ELAP ID#: 10709

AIHA ID#: 100307

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEPS--0110
AES sample #: 010823 S01 Samples taken by: EL/CM MATRIX: Oil

Date Sampled: 08/22/01
Date sample received: 08/23/01
Location: NYSEG-Mechanicv grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Specific Gravity	ASTM 1298-67	0.9886	g/ml	MC-J-11	09/06/01
Viscosity,Kinematic	ASTM D445	13.058	cSt @25C	PL-D-49	09/06/01
Reactivity	SW-846 Sec.7.3	Non	Reactive	MC-H	09/06/01
Cyanide	EPA-9012	<1	ug/g	MC-H	09/06/01
Sulfide	EPA-9034	344	ug/g	MC-J-11	09/06/01
Corrosivity	SW-846	Non	Corosive	LS-X-4	09/06/01
Ignitability	EPA-600S4-85	138	°F	PL-F-26	09/06/01
TCLP Extraction	EPA-1311	Complete		SO	08/24/01
Benzene-TCLP Extraction	EPA-8021	3300000	ug/l	SO-C	08/27/01

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CLIENT: URS/Dames & Moore
CLIENT'S SAMPLE ID: MEPS--0126
AES sample #: 010823 S02 Samples taken by: EL/CM
MATRIX: Oil

Date Sampled: 08/22/01
Date sample received: 08/23/01
Location: NYSEG-Mechanicv
grab

PARAMETER PERFORMED	METHOD	RESULT	UNITS	NOTEBK REF	TEST DATE
Specific Gravity	ASTM 1298-67	0.9953✓	g/ml	MC-J-11	09/06/01
Viscosity,Kinematic	ASTM D445	<10 ✓	cSt @23C	MC-D-50	09/07/01
Reactivity	SW-846 Sec.7.3	Non ✓	Reactive	MC-H	09/06/01
Cyanide	EPA-9012	<1 ✓	ug/g	MC-H	09/06/01
Sulfide	EPA-9034	256 ✓	ug/g	MC-J-11	09/06/01
Corrosivity	SW-846	Non ✓	Corosive	LS-X-4	09/06/01
Ignitability	EPA-600S4-85	>200 ✓	°F	PL-F-26	09/06/01
TCLP Extraction	EPA-1311	Complete ✓		SO	08/24/01
Benzene-TCLP Extraction	EPA-8021	6700	ug/l	SO-C	08/27/01

APPROVED BY: Christopher Hess
Report date: 09/20/01

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314 North Pearl Street
Albany, New York 12207
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CHAIN OF CUSTODY RECORD

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Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) NYSEG-Mechanicville	Samplers: (Names) EL/CM
Client Phone No: 688-0015	PO Number: 30309T194 (#5)	Samplers: (Signature) EL/CM
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
010823 501	MEPS--0110	8/22/01	1230	A (P)	Oil		X	2	See Below (MW10
502	MEPS--0126	8/22/01	1330	A (P)	Oil		X		See Below (MW26
	★ Attention!!! SAMPLES ARE 100% PRODUCT USE VERY HIGH LEVEL OF CARE & CAUTION ★								

Turnaround Time Request: ☐ 1 Day ☐ 3 Day ☐ Normal ☐ 2 Day ☐ 5 Day	Special Instructions/Remarks: Viscosity @ 55°F, Specific Gravity, Wettability, Reactivity, Corrosivity, Ignitability, TCLP benzene	
CC Report To:		
Relinquished by: (Signature)	Received by: (Signature) E. Williams	Date/Time 8/27/01 11:10
Relinquished by: (Signature)	Received for Laboratory by: M. L	Date/Time 8/23/01 1205

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Environmental Forensic Report

Mechanicville

SDG: UR010417, UR021003



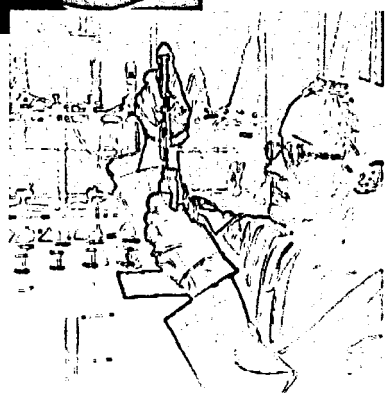
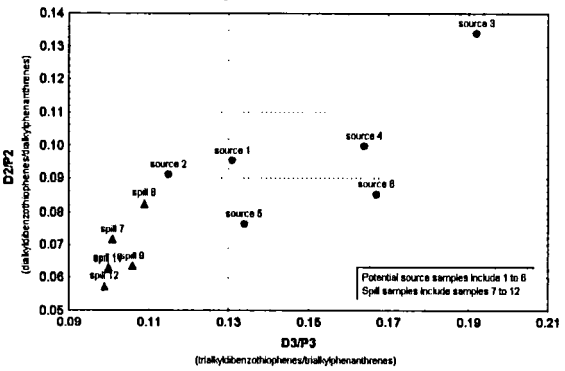


Figure 1. Double Ratio Plot



Report To:

URS
646 Plank Road, Suite 202
Clifton Park, NY 12065

Report By:

META Environmental, Inc.
49 Clarendon Street
Watertown, MA 02472

November 6, 2002

Identifying and allocating sources of pollutants in complex environments.

META Environmental, Inc.
ENGINEERING & CHEMISTRY

Final Laboratory Report

META Environmental, Inc.
49 Clarendon Street
Watertown, MA 02472

Phone: 617-923-4662
Fax: 617-923-4610
e-Mail: dcraig@metaenv.com

Certification

This certifies that this package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed herein. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Director and Quality Assurance Officer, as verified by the following signatures.

David R. Craig — Date: 11/6/02
Laboratory Director, META Environmental, Inc.

David M. Mauro — Date: 11/6/02
Quality Assurance Officer, META Environmental, Inc.

Sample Delivery Group Narrative

Project: Mechanicville

Client: URS
646 Plank Road, Suite 202
Clifton Park, NY 12065

Report Contact: Eriko Fujita

Date of Receipt: 4/17/01, 10/03/02

Sample Summary:

The samples received for this project are summarized in the attached sample login forms.

META Project Number: U03003-60

Chain of Custody

Samples were received in good condition. The internal temperatures of the shipment containers were as follows:

Sample received 4/17/2001	10.3°C
Sample received 10/03/2002	4.8°C

Internal chain of custody procedures were followed after sample receipt. Samples were stored in a locked refrigerator. A sample custody logbook contains the record of sample removal from the secure sample storage area to the sample preparation laboratory. The custody record for the sample extracts is present on the sample extraction logbook page.

The disposal of samples and extracts will be authorized 1 month after the release of this data report. Sample disposal will be documented.

Methods

The samples were prepared by solvent extraction (EPA 3570) using dichloromethane (DCM). The extracts were spiked with internal standard and analyzed by GC/FID (EPA 8100 mod.) and GC/MS (EPA 8270 mod.).

Results

Sample results were presented in summary forms (CLP Form 1 equivalent) which follow this narrative.

Quality Control

Analyte Flags

The detection limits were determined as the sample equivalent of the lowest linear initial calibration standard. Analytes measured between 50% and 100% of the lowest standard were reported as "estimated" and flagged with the letter "J." No value was reported above the calibration range. Undetected analytes were flagged with the letter, "U." Analytes marked with a "B" were detected in the associated blank and should be reviewed for a possible positive bias. No deviations were thought significant enough to compromise the integrity of the reported values.

Holding Times

The soil samples were frozen upon receipt on 4/17/01 in anticipation of later sediment sampling. Upon receipt of the sediment samples, the soils were thawed and all the samples were extracted within seven days of sediment sampling. All extracts were stored at 4°C ± 2° C prior to analysis. All extracts were analyzed within 40 days of sample preparation.

Blanks

No target analytes were present above the detection limits in the blank.

Internal Standards

Internal standards were recovered within acceptable QC limits (50%-200%) relative to the continuing calibration standards.

Interpretation

Sample MESB00020116
This sample contained low concentrations of a few PAHs, but did not contain any recognizable hydrocarbon patterns.

Sample MESB12140116
This sample contained pyrogenic and petrogenic substances (see definitions). The pattern of PAHs, especially the ratios of fluoranthene to pyrene and dibenzofuran to fluorene indicate that this sample contains MGP tar, probably from a carburetted water gas (CWG) process. The reduced concentration of naphthalene relative to other PAHs indicates that this material has been moderately weathered.

The petroleum is indicated by an unresolved complex mixture (UCM or "hump") which eluted from approximately decane (C10 - 9 minutes) to hexacosane (C26 - 27 minutes). Examples of common petroleum products with these features include middle distillates such as diesel and #2 fuel oils.

Sample MESB14160116
This sample contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs are consistent with MGP tar, probably CWG. The reduced concentration of naphthalene relative to other PAHs indicates that this material has been subject to mild to moderate weathering.

The petroleum is indicated by a UCM from approximately decane (C10 - 9 minutes) to hexacosane (C26 - 27 minutes). Examples of common petroleum products with these features include middle distillates such as diesel and #2 fuel oils.

Sample MESB16180118
This sample contained pyrogenic and petrogenic substances. The patterns and ratios of hydrocarbons are similar to those found in samples MESB12140116 and MESB14160116.

Sample MEMW16160R1
This sample contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs are consistent with MGP tar, probably CWG. The presence of MAHs and high concentration of naphthalene relative to other PAHs indicate that this material is relatively unweathered.

The petroleum is indicated by a UCM from approximately decane (C10 - 9 minutes) to hexacosane (C26 - 27 minutes). Examples of common petroleum products with these features include middle distillates such as diesel and #2 fuel oils.

Sample MEAK00010201
This sample contained low concentrations of a few PAHs, but did not contain any recognizable hydrocarbon patterns.

Sample MEAK00010205

This sample contained a pyrogenic substance. The patterns and ratios of PAHs are consistent with MGP tar, probably CWG. The high concentration of naphthalene relative to other PAHs indicates that this material is relatively unweathered.

Sample MEAK00010207

This sample contained pyrogenic and petrogenic substances. The patterns and ratios of PAHs are consistent with MGP tar, probably CWG. The presence of MAHs and high concentration of naphthalene relative to other PAHs indicate that this material is relatively unweathered.

The petroleum is indicated by a UCM from approximately decane (C10 - 9 minutes) to hexacosane (C26 - 27 minutes). Examples of common petroleum products with these features include middle distillates such as diesel and #2 fuel oils.

Discussion

With the exception of samples MESB00020116 and MEAK00010201, all the samples contained pyrogenic substances consistent with MGP tar from a CWG process. The diagnostic ratios (Table 1 & Figure 1) and ion fingerprints (Appendix E) show that the materials in these samples are reasonably similar, indicating that they share a common source in spite of the variability of the degree of weathering.

Definitions

Pyrogenic substances are complex mixtures of primarily hydrocarbons produced from organic matter subjected to high temperatures but with insufficient oxygen for complete combustion. Pyrogenic materials are produced by fires, internal combustion engines, and furnaces. They also are formed when coke or gas are produced from coal or oil. Coal-tar based products, such as roofing, pavement sealers, waterproofing, pesticides, and some shampoos contain pyrogenic materials.

Petrogenic substances include crude oil and crude oil derivatives such as gasoline, heating oil, and asphalt.

Pitch is the semi-solid or solid material consisting of high molecular weight hydrocarbons that remain following coal tar distillation.

References

1 "Chemical Source Attribution at Former MGP Sites," EPRI Report 1000728, December 2000.

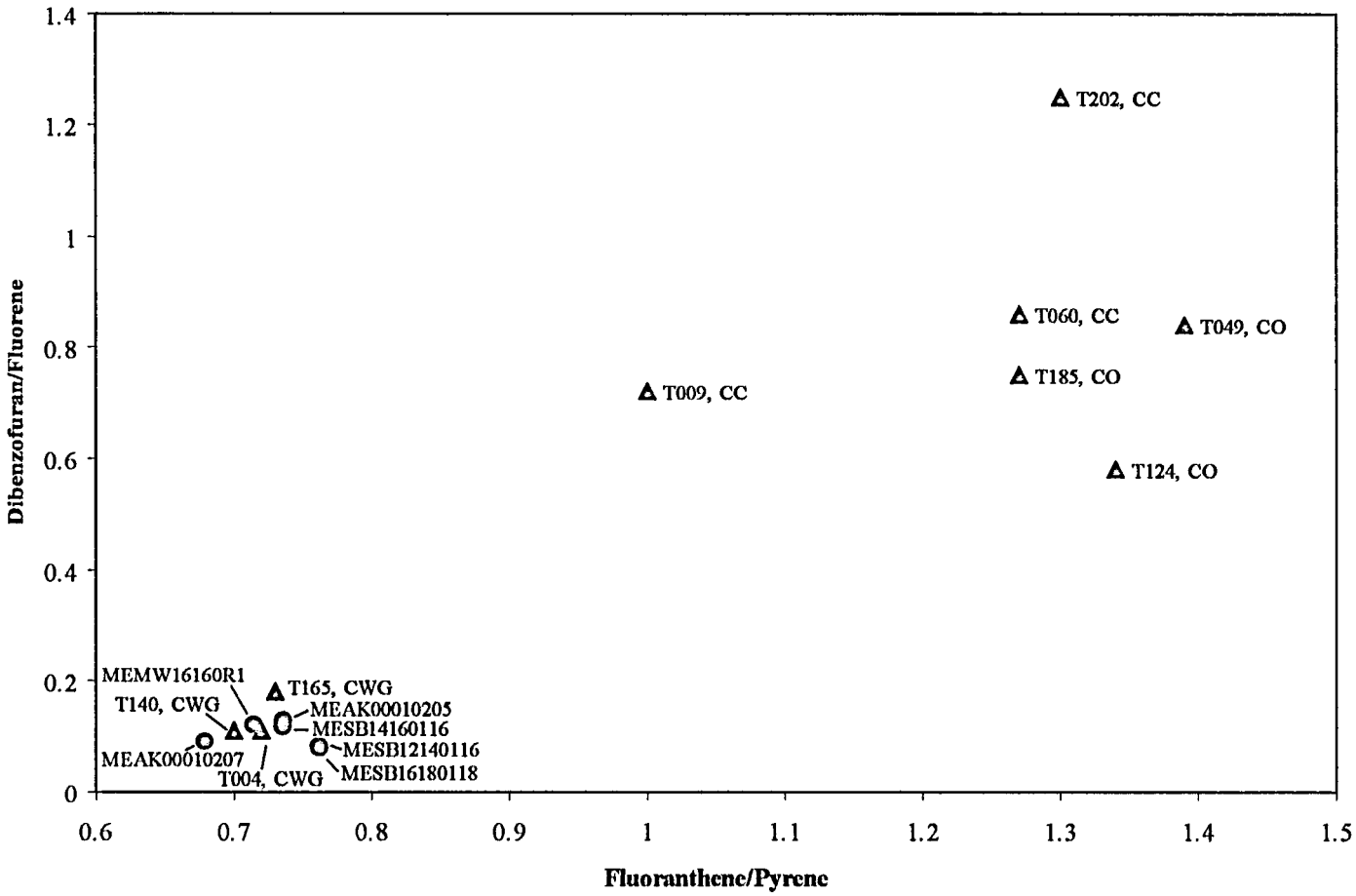
Table 1
Source and Weathering Ratios

Sample	Fl/Py	D/F	C17/Pris	C18/Phy	Pris/Phy	C3D/C3PA	C2D/C2PA
MESB00020116	0.63	ND	1.36	1.66	1.57	ND	ND
MESB12140116	0.76	0.08	0.67	0.10	0.14	0.51	0.21
MESB14160116	0.74	0.12	0.08	0.03	1.33	0.53	0.23
MESB16180118	0.76	0.08	0.08	0.02	1.45	0.48	0.21
MEMW16160R1	0.71	0.12	2.35	2.65	1.54	0.35	0.14
MEAK00010201	1.30	ND	5.75	2.98	1.22	ND	ND
MEAK00010205	0.74	0.13	1.05	0.76	1.40	0.58	0.19
MEAK00010207	0.68	0.09	1.94	2.14	1.51	0.41	0.17

Ratios:

Fl/Py	fluoranthene/pyrene
D/F	dibenzofuran/fluorene
C17/Pris	septadecane/pristane
C18/Phy	octadecane/phytane
Pris/Phy	pristane/phytane
C3D/C3PA	trialkyldibenzothiophenes/trialkylphenanthrenes/anthracenes
C2D/C2PA	dialkyldibenzothiophenes/dialkylphenanthrenes/anthracenes

Figure 1
Selected Source Ratios



TXXX	Tar Sample from META's in house source library
CC	Coal Carbonization Tar
CO	Coke Oven Tar
CWG	Carburetted Water Gas Tar
O	Site Sample

Appendix A

Chains of Custody

META ENVIRONMENTAL SAMPLE RECEIPT

Lab ID	Field ID	Matrix	Analysis	Date Sampled	Date Received	Client/ Project	Container/ Storage
UR010417-01	MESB00020116	Soil		04/03/01	04/17/01	U03003-60	8oz. jar
UR010417-02a,b	MESB12140116	Soil		04/03/01	04/17/01	U03003-60	2x8oz. jar
UR010417-03	MESB14160116	Soil		04/03/01	04/17/01	U03003-60	8oz. jar
UR010417-04	MESB16180118	Soil		04/04/01	04/17/01	U03003-60	8oz. jar
UR010417-05a,b	MEMW161601R1	Soil		04/13/01	04/17/01	U03003-60	2x8oz. jar

4/17/01

Job No. 11035-606

CHAIN OF CUSTODY RECORD

~~GENERATOR INFORMATION~~ LABORATORY

Facility Meta Environmental

Address 49 Clarendon St.
Watertown, MA 02472

Telephone (617) 923-4662

COLLECTOR INFORMATION

Collected by Eric Lavenduski (URS Corp)

Address 646 Plank Road Suite 207
Clifton Park NY 12065

Telephone (518) 688-0015

SAMPLE INFORMATION

No.	DEPTH	TYPE	DATE	TIME
B				
URO10417-01 MESB00020116		GRAB	4/3/01	—
-02 a,b MESB12140116		GRAB	4/3/01	
-03 MESB14160116		GRAB	4/3/01	—
-04 MESB16180118		GRAB	4/4/01	—
-05 a,b MEMW16160IR1		GRAB	4/13/01	—

~~Suspected Waste Constituents~~ COMMENTS Please freeze for later analysis.
Any questions, please contact Eriko Fujita - 518-688-0015

Field Conditions/Remarks

* Sample - 05b, -02a, -03 - repacked in a new jar (8oz).

SAMPLE ALLOCATION

Name Meta Environmental

Address 49 Clarendon Street
Watertown, MA 02472

Telephone (617) 923-4662

___ sample received intact

___ sample received damaged or missing (describe on back)

Recd @ 10.3°C

Darcy Berhane (Signature) 4/17/01 (Date)

CHAIN OF POSSESSION

(*) Sample URO10417-05b Decant liquid from can

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
1. Please Call when Recieved					
2. EJ Sonerdusky	4/16/01	1330			
3.					
4.					

Distribution

White-w/shipment-for consignee files
Blue-w/shipment-forward to ~~Dames & Moore~~ URS
Attn: Eriko Fujita

Pink-with report
Goldenrod-Dames & Moore - Job File

~~Dames & M~~
URS

META ENVIRONMENTAL SAMPLE RECEIPT

Lab ID	Field ID	Matrix	Analysis			Date Sampled	Date Received	Client/ Project	Container/ Storage
UR021003-01a,b	MEAK00010201	Soil	2508	4007	4008	10/2/2002	10/3/2002	U03003-60	2X8oz. Jar
UR021003-02a,b	MEAK00010205	Soil	2508	4007	4008	10/2/2002	10/3/2002	U03003-60	2X8oz. Jar
UR021003-03a,b	MEAK00010207	Soil	2508	4007	4008	10/2/2002	10/3/2002	U03003-60	2X8oz. Jar

Dinny 10/3/02

CHAIN-OF-CUSTODY RECORD

WHITE COPY-Original (Accompanies Samples) YELLOW COPY-Collector PINK COPY-Project Manager

SAMPLE ID	DATE	TIME	SAMPLE MATRIX	SAMPLE BOTTLE SIZE/TYPE/PRES. G=GLASS P=PLASTIC	Total Number of Bottles	Analysis Required: Hydrocarbon Fingerprint Extended Profiles	Extended PAH Fingerprint Extended Profiles						COMMENTS:	Laboratory ID
MEAK00010201	10/02/02	1445	SED	G	2	x	x			UR021003-01mb				
MEAK00010205	10/02/02	1455	SED	G	2	x	x				-02mb		** THESE SAMPLES	
MEAK00010207	10/02/02	1510	SED	G	2	x	x				-03mb		* MAY CONTAIN FREE PRODUCT	

RELINQUISHED BY: (Signature) DATE/TIME
EJ Sondiola 10/02/02 1635

RECEIVED BY: (Signature)
Please call when received

RELINQUISHED BY: (Signature) DATE/TIME

RECEIVED BY: (Signature)
Diane Bertrand 10/03/02 9:30am

RELINQUISHED BY: (Signature) DATE/TIME

RECEIVED BY: (Signature)
rec'd @ 4°C

JOB NO.: 11171858.00000

PROJECT: Mechanicville MGP Site

LOCATION: Mechanicville, NY

COLLECTOR: Eric Lavenduski DATE OF COLLECTION 10/02/02

ANALYTICAL LABORATORY: Meta Environmental, Inc

LABORATORY CONTACT: David Mauro

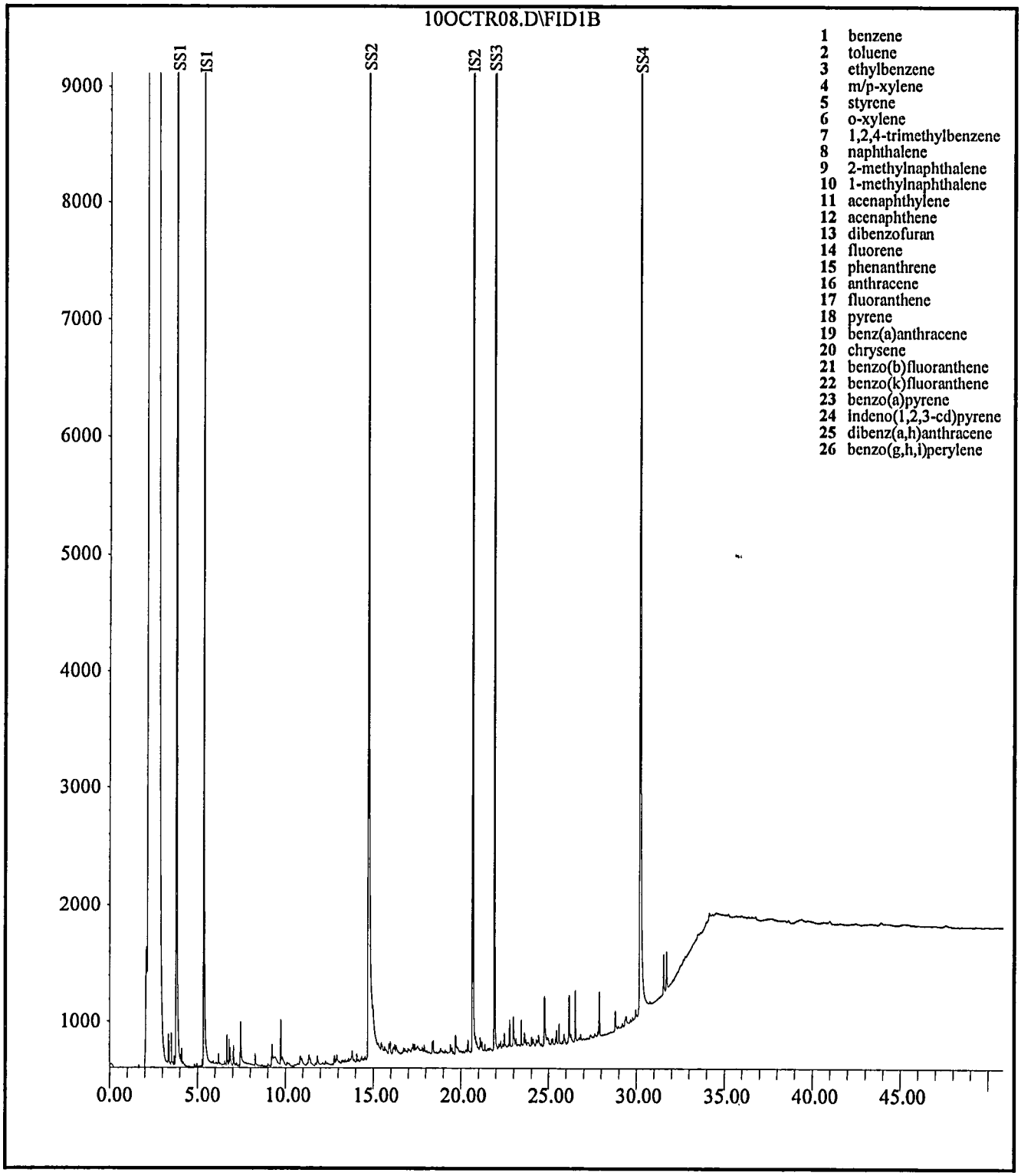
URS ~~D&M~~ CONTACT: Eriko Fujita PHONE: 518-688-0015

URS
646 Plank Road, Suite 202
Clifton Park, NY 12065
(518) 688-0015 Fax (518) 688-0022

Appendix B

GC/FID Fingerprints

GC/FID Fingerprint

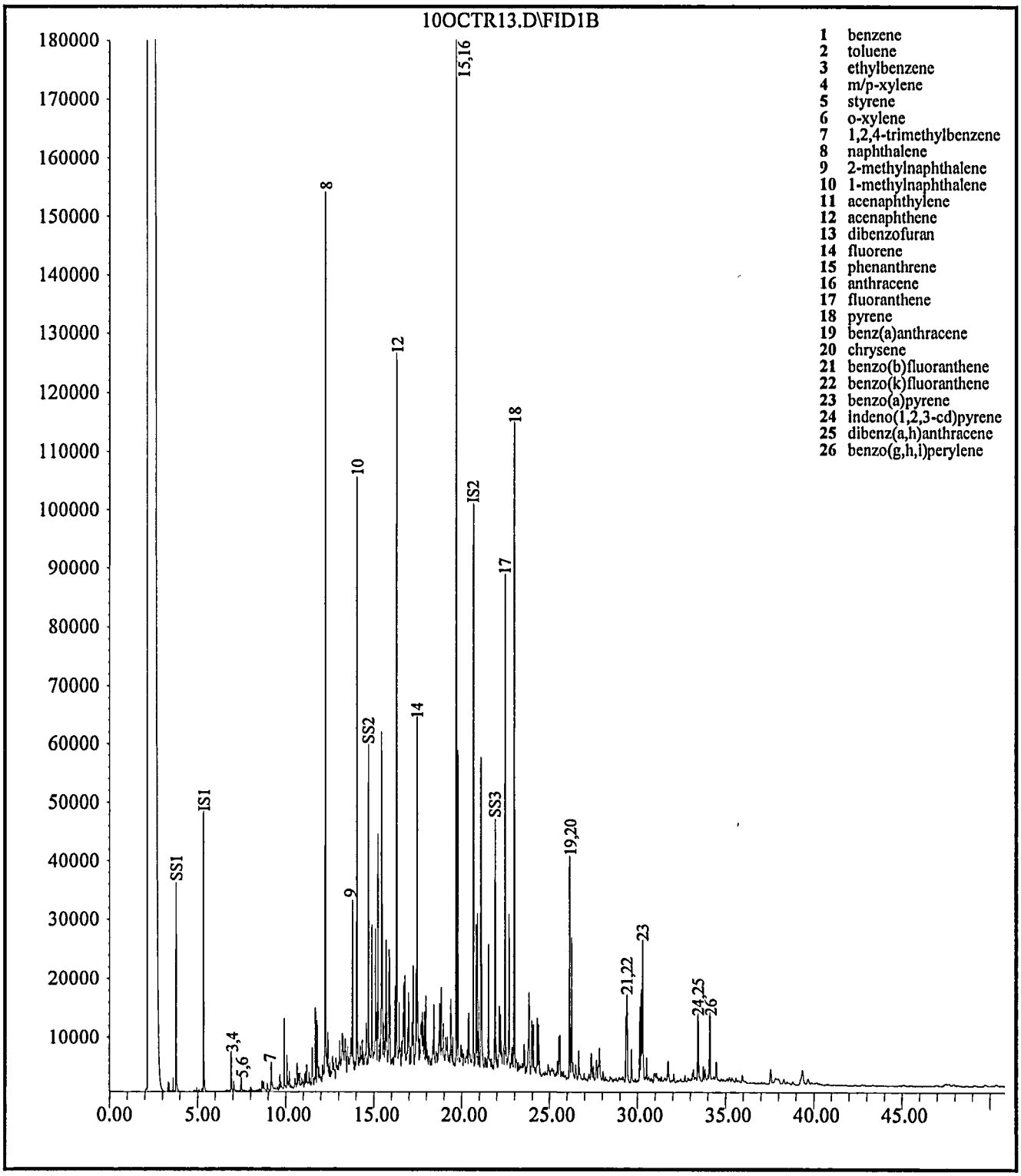


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane
SS4 -- benzo(a)pyrene-d12

Field ID:	MESB00020116
Laboratory ID:	UR010417-01
Method:	MET4007D

META

GC/FID Fingerprint

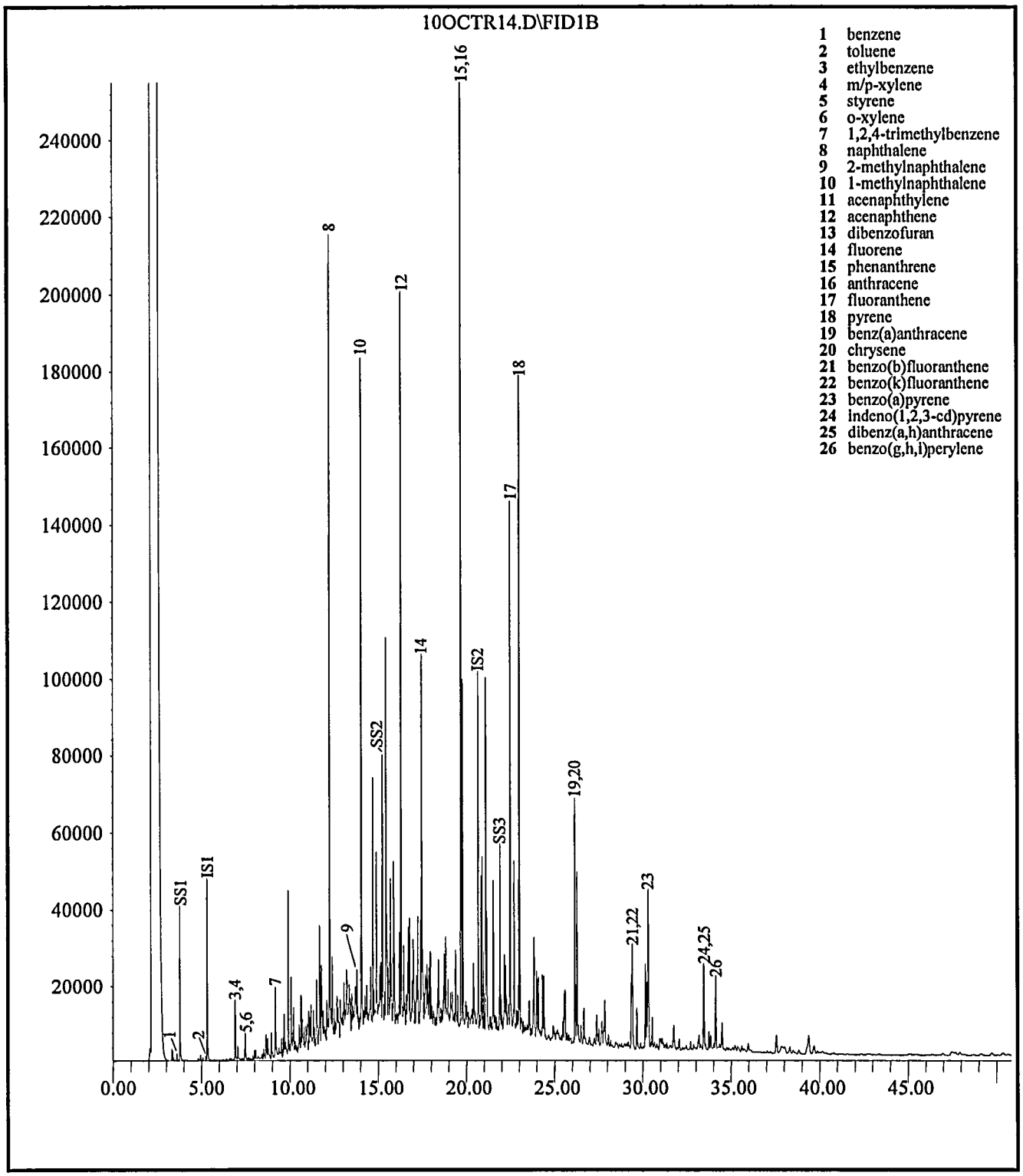


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**MESB12140116**
Laboratory ID:	UR010417-02
Method:	MET4007D

META

GC/FID Fingerprint

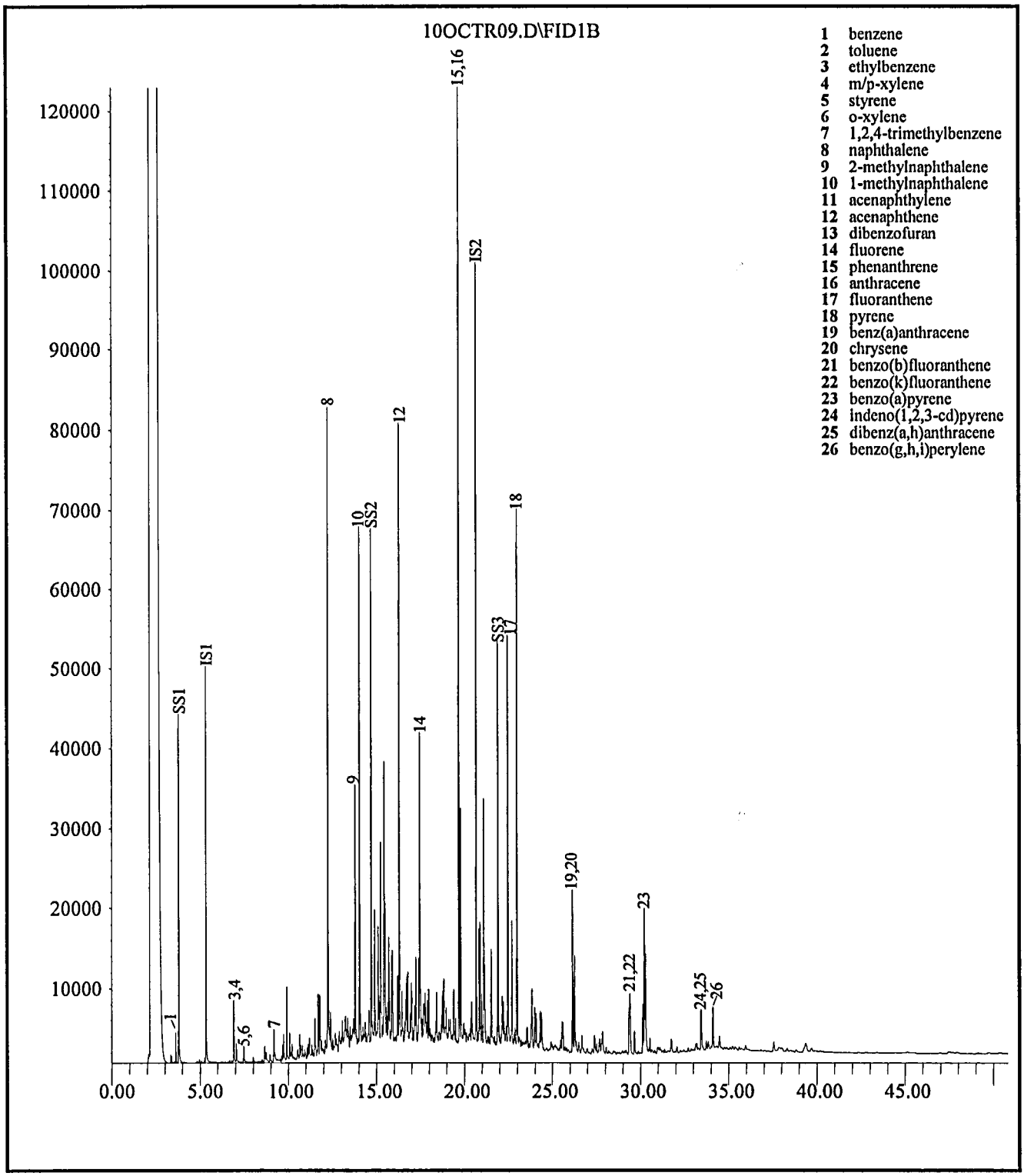


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**MESB14160116**
Laboratory ID:	UR010417-03
Method:	MET4007D

META

GC/FID Fingerprint

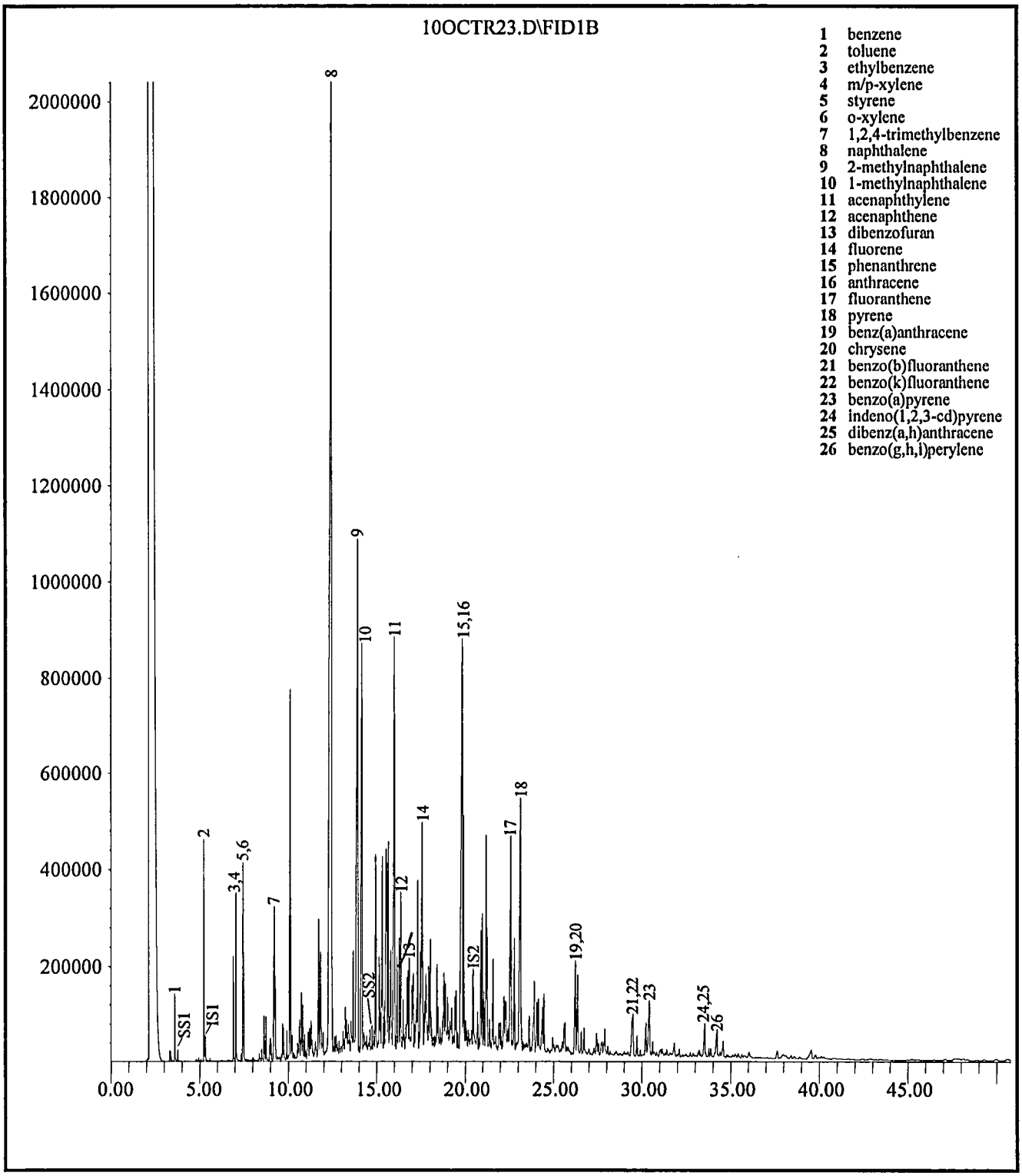


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**MESB16180118**
Laboratory ID:	UR010417-04
Method:	MET4007D

META

GC/FID Fingerprint

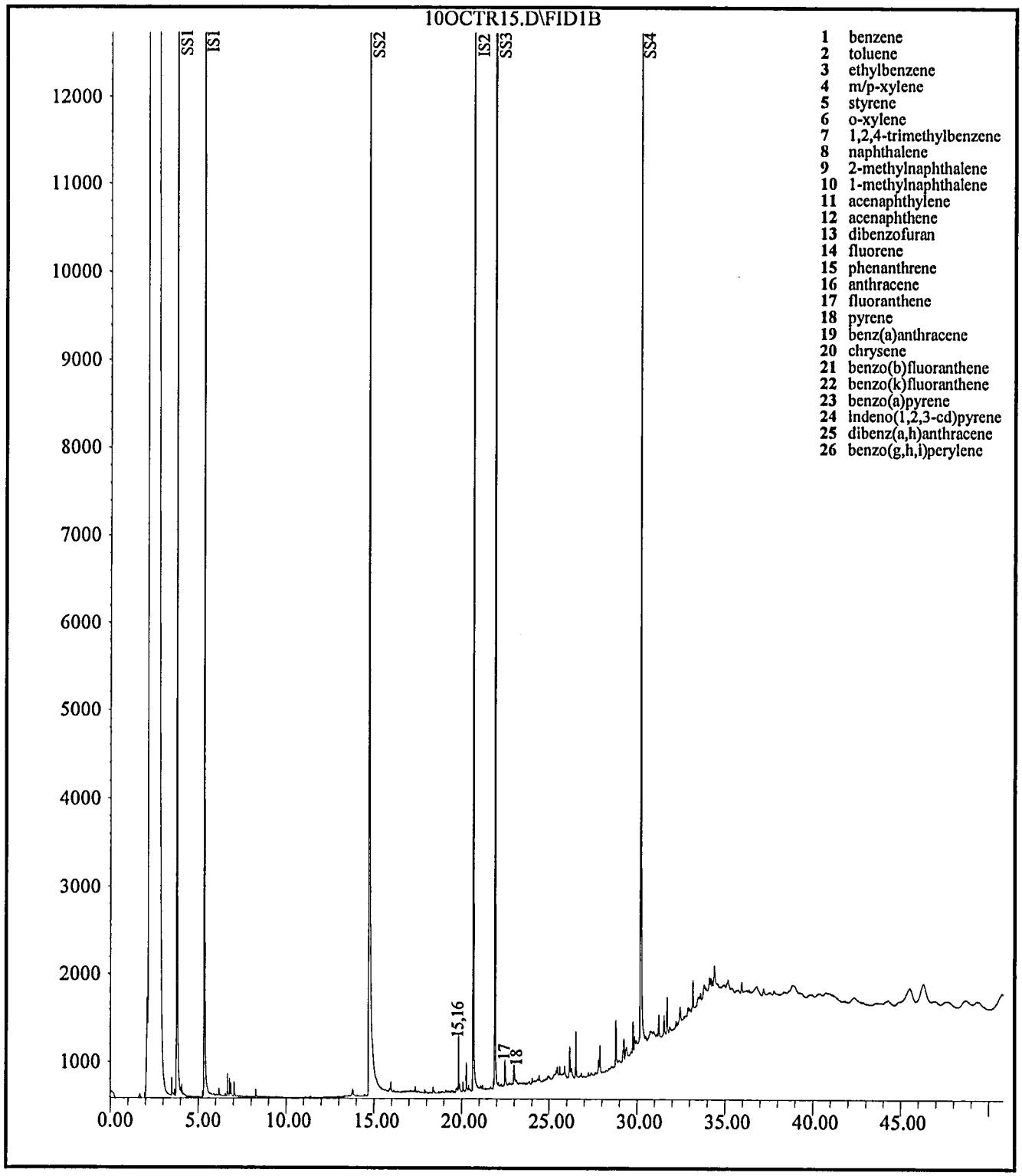


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**MEMW161601R1**
Laboratory ID:	UR010417-05
Method:	MET4007D

META

GC/FID Fingerprint

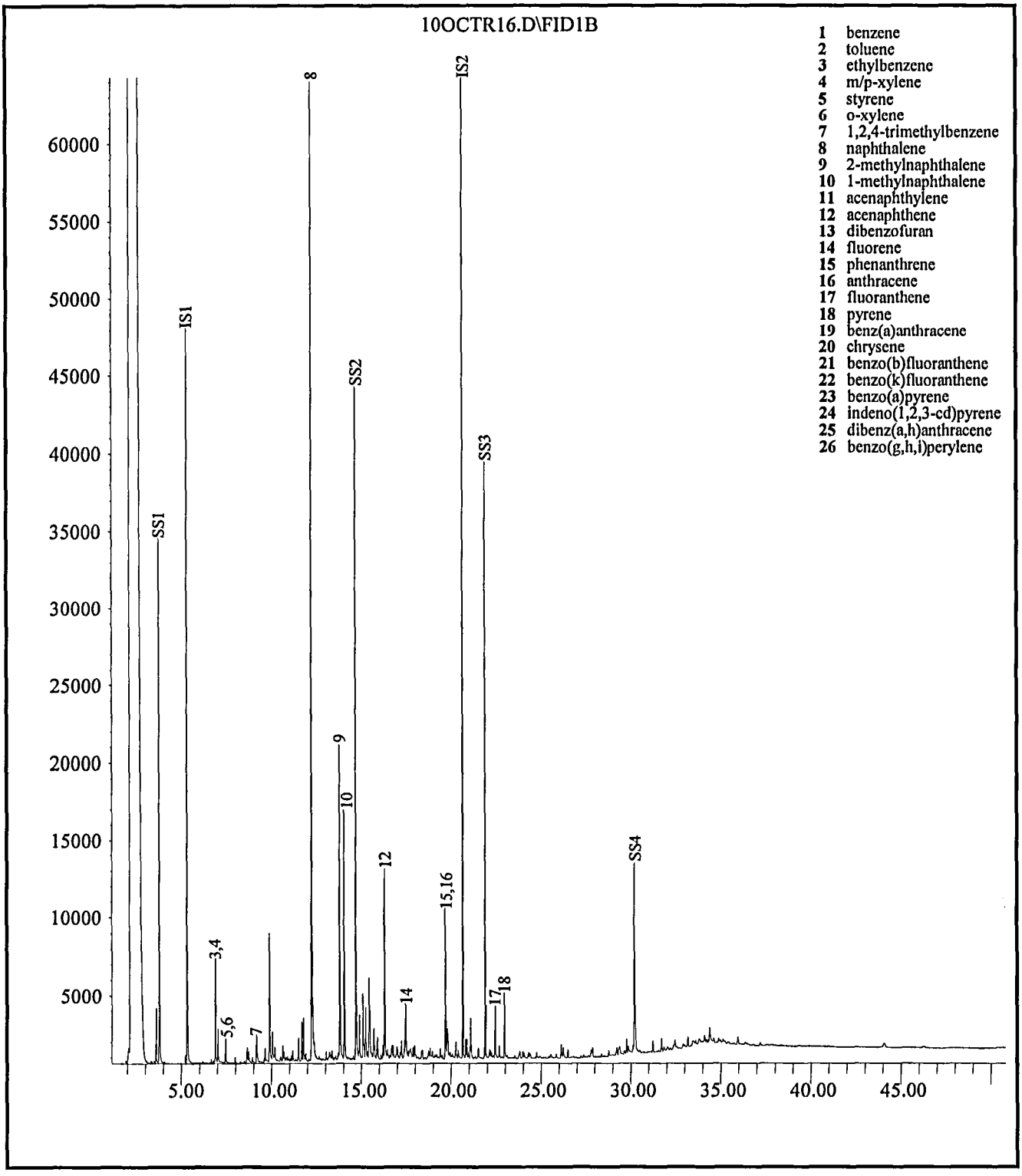


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane
SS4 – benzo(a)pyrene-d12

Field ID:	**MEAK00010201**
Laboratory ID:	UR021003-01
Method:	MET4007D

META

GC/FID Fingerprint

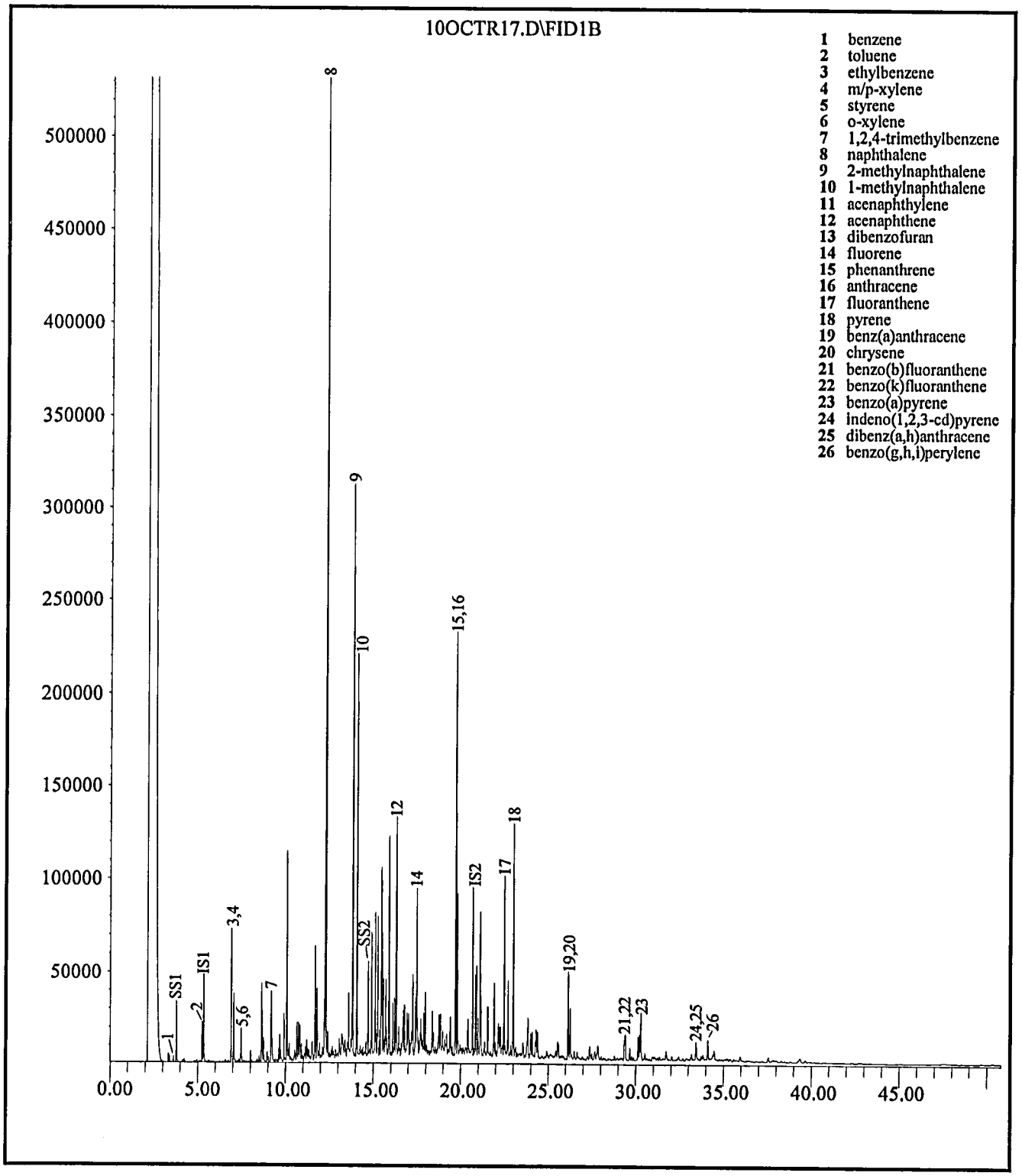


IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane
SS4 – benzo(a)pyrene-d12

Field ID:	**MEAK00010205**
Laboratory ID:	UR021003-02
Method:	MET4007D

META

GC/FID Fingerprint



IS1 - 2,4-difluorotoluene
IS2 - o-terphenyl
SS1 - fluorobenzene
SS2 - 2-fluorobiphenyl
SS3 - 5α-androstane

Field ID:	**MEAK00010207**
Laboratory ID:	UR021003-03
Method:	MET4007D

META

Appendix C

Chemical Concentrations

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB00020116

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
Lab ID:	UR010417-01	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	25OCT21.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	4/3/2001	Decanted:	No	
Date Received:	4/17/2001	Sample Size:	2.048	g
Date Prepared:	10/9/2002	%Solid:	93%	
Date Cleanup:		Extract Volume:	1.5	mL
Date Analyzed:	26 Oct 2002 6:37 am	Prep DF:	1	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	KP	Injection Volume:	0.001	mL
		Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene		U	0.08	0.04	
Toluene	0.07	J	0.08	0.04	
Ethylbenzene		U	0.08	0.04	
m/p-Xylenes		U	0.08	0.04	
Styrene	0.40		0.08	0.04	
o-Xylene		U	0.08	0.04	
1,2,4-Trimethylbenzene		U	0.08	0.04	
Naphthalene	0.10		0.08	0.04	
2-Methylnaphthalene	0.05	J	0.08	0.04	
1-Methylnaphthalene	0.06	J	0.08	0.04	
Acenaphthylene	0.09		0.08	0.04	
Acenaphthene	0.08		0.08	0.04	
Dibenzofuran		U	0.08	0.04	
Fluorene	0.12		0.08	0.04	
Phenanthrene	0.37		0.08	0.04	
Anthracene	0.08		0.08	0.04	
Fluoranthene	0.15		0.08	0.04	
Pyrene	0.24		0.08	0.04	
Benz[a]anthracene	0.08	J	0.08	0.04	
Chrysene	0.10		0.08	0.04	
Benzo[b]fluoranthene	0.08		0.08	0.04	
Benzo[k]fluoranthene	0.08		0.08	0.04	
Benzo(e)pyrene	0.09		0.08	0.04	
Benzo[a]pyrene	0.09		0.08	0.04	
Perylene		U	0.08	0.04	
Indeno[1,2,3-cd]pyrene	0.09		0.08	0.04	
Dibenz[a,h]anthracene		U	0.08	0.04	
Benzo[g,h,i]perylene	0.13		0.08	0.04	
ALKYLATED PAHs:					
C0 - Benzene		U	0.08	0.04	
C1 - Benzene	0.08		0.08	0.04	
C2 - Benzene	0.07	J	0.08	0.04	
C3 - Benzene	0.11		0.08	0.04	
C4 - Benzene	0.08	J	0.08	0.04	
C5 - Benzene		U	0.08	0.04	
C0 - Naphthalene	0.10		0.08	0.04	
C1 - Naphthalene	0.07	J	0.08	0.04	
C2 - Naphthalene	0.25		0.08	0.04	
C3 - Naphthalene	0.13		0.08	0.04	
C4 - Naphthalene	0.05	J	0.08	0.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB00020116

		Preparation Method:	EPA 3570	
		Cleanup Method(s):		
Client:	URS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
Project:	Mechanicville	Matrix:	Soil	
		Preservation:	None	
Lab ID:	UR010417-01	Decanted:	No	
File ID:	25OCT21.D			
		Sample Size:	2.048	g
Date Sampled:	4/3/2001	%Solid:	93%	
Date Received:	4/17/2001	Extract Volume:	1.5	mL
Date Prepared:	10/9/2002	Prep DF:	1	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	26 Oct 2002 6:37 am	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	0.12		0.08	0.04	
C1 - Fluorene	0.10		0.08	0.04	
C2 - Fluorene	0.05	J	0.08	0.04	
C3 - Fluorene		U	0.08	0.04	
C0 - Phenanthrene/Anthracene	0.45		0.08	0.04	
C1 - Phenanthrene/Anthracene	0.17		0.08	0.04	
C2 - Phenanthrene/Anthracene	0.08		0.08	0.04	
C3 - Phenanthrene/Anthracene		U	0.08	0.04	
C4 - Phenanthrene/Anthracene		U	0.08	0.04	
C0 - Dibenzothiophene		U	0.08	0.04	
C1 - Dibenzothiophene		U	0.08	0.04	
C2 - Dibenzothiophene		U	0.08	0.04	
C3 - Dibenzothiophene		U	0.08	0.04	
C0 - Fluoranthene/Pyrene	0.45		0.08	0.04	
C1 - Fluoranthene/Pyrene	0.14		0.08	0.04	
C2 - Fluoranthene/Pyrene	0.07	J	0.08	0.04	
C3 - Fluoranthene/Pyrene		U	0.08	0.04	
C0 - Benz(a)anthracene/Chrysene	0.18		0.08	0.04	
C1 - Benz(a)anthracene/Chrysene	0.06	J	0.08	0.04	
C2 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C3 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C4 - Benz(a)anthracene/Chrysene		U	0.08	0.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	131%	50%	150%
2-Fluorobiphenyl	135%	50%	120%
5a-Androstane	119%	50%	120%
Benzo(a)pyrene-d12	82%	50%	120%

FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	Not Spiked	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB12140116

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
Lab ID:	UR010417-02	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	28OCT12.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	4/3/2001	Decanted:	No	
Date Received:	4/17/2001	Sample Size:	2.283	g
Date Prepared:	10/9/2002	%Solid:	79%	
Date Cleanup:		Extract Volume:	1.5	mL
Date Analyzed:	28 Oct 2002 10:18 pm	Prep DF:	1	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	KP	Injection Volume:	0.001	mL
		Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	1.97		0.08	0.04	
Toluene	0.63		0.08	0.04	
Ethylbenzene	7.77		0.08	0.04	
m/p-Xylenes	2.23		0.08	0.04	
Styrene	1.38		0.08	0.04	
o-Xylene	2.40		0.08	0.04	
1,2,4-Trimethylbenzene	1.68		0.08	0.04	
Naphthalene	71.8	D	0.08	0.04	
2-Methylnaphthalene	25.2		0.08	0.04	
1-Methylnaphthalene	77.1		0.08	0.04	
Acenaphthylene	11.6		0.08	0.04	
Acenaphthene	54.8	D	0.08	0.04	
Dibenzofuran	4.50		0.08	0.04	
Fluorene	57.2		0.08	0.04	
Phenanthrene	110	D	0.08	0.04	
Anthracene	42.3		0.08	0.04	
Fluoranthene	70.1		0.08	0.04	
Pyrene	92.0		0.08	0.04	
Benz[a]anthracene	32.8		0.08	0.04	
Chrysene	29.1		0.08	0.04	
Benzo[b]fluoranthene	15.9		0.08	0.04	
Benzo[k]fluoranthene	17.2		0.08	0.04	
Benzo(e)pyrene	15.5		0.08	0.04	
Benzo[a]pyrene	28.8		0.08	0.04	
Perylene	4.39		0.08	0.04	
Indeno[1,2,3-cd]pyrene	11.3		0.08	0.04	
Dibenz[a,h]anthracene	3.17		0.08	0.04	
Benzo[g,h,i]perylene	14.6		0.08	0.04	
ALKYLATED PAHs:					
C0 - Benzene	1.97		0.08	0.04	
C1 - Benzene	0.77		0.08	0.04	
C2 - Benzene	15.4		0.08	0.04	
C3 - Benzene	16.0		0.08	0.04	
C4 - Benzene	23.1		0.08	0.04	
C5 - Benzene	10.2		0.08	0.04	
C0 - Naphthalene	71.8	D	0.08	0.04	
C1 - Naphthalene	65.0		0.08	0.04	
C2 - Naphthalene	79.6		0.08	0.04	
C3 - Naphthalene	27.5		0.08	0.04	
C4 - Naphthalene	8.05		0.08	0.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB12140116

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
		Analysis Method:	GC/MS (EPA 8270 Mod.)	
Lab ID:	UR010417-02	Matrix:	Soil	
File ID:	28OCT12.D	Preservation:	None	
		Decanted:	No	
Date Sampled:	4/3/2001	Sample Size:	2.283	g
Date Received:	4/17/2001	%Solid:	79%	
Date Prepared:	10/9/2002	Extract Volume:	1.5	mL
Date Cleanup:		Prep DF:	1	
Date Analyzed:	28 Oct 2002 10:18 pm	Analysis DF:	1	
Instrument:	GC/MS Ins	Injection Volume:	0.001	mL
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	57.2		0.08	0.04	
C1 - Fluorene	31.4		0.08	0.04	
C2 - Fluorene	8.42		0.08	0.04	
C3 - Fluorene	3.20		0.08	0.04	
C0 - Phenanthrene/Anthracene	139	D	0.08	0.04	
C1 - Phenanthrene/Anthracene	53.8		0.08	0.04	
C2 - Phenanthrene/Anthracene	17.4		0.08	0.04	
C3 - Phenanthrene/Anthracene	3.41		0.08	0.04	
C4 - Phenanthrene/Anthracene	0.79		0.08	0.04	
C0 - Dibenzothiophene	9.57		0.08	0.04	
C1 - Dibenzothiophene	6.15		0.08	0.04	
C2 - Dibenzothiophene	3.73		0.08	0.04	
C3 - Dibenzothiophene	1.73		0.08	0.04	
C0 - Fluoranthene/Pyrene	190		0.08	0.04	
C1 - Fluoranthene/Pyrene	44.0		0.08	0.04	
C2 - Fluoranthene/Pyrene	9.32		0.08	0.04	
C3 - Fluoranthene/Pyrene	1.72		0.08	0.04	
C0 - Benz(a)anthracene/Chrysene	62.6		0.08	0.04	
C1 - Benz(a)anthracene/Chrysene	10.2		0.08	0.04	
C2 - Benz(a)anthracene/Chrysene	2.59		0.08	0.04	
C3 - Benz(a)anthracene/Chrysene	0.47		0.08	0.04	
C4 - Benz(a)anthracene/Chrysene	0.16		0.08	0.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	100%	50%	150%
2-Fluorobiphenyl	119%	50%	120%
5a-Androstane	125%	50%	120%
Benzo(a)pyrene-d12	68%	50%	120%
FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	Not Spiked	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB14160116

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
Lab ID:	UR010417-03	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	28OCT13.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	4/3/2001	Decanted:	No	
Date Received:	4/17/2001	Sample Size:	2.183	g
Date Prepared:	10/9/2002	%Solid:	83%	
Date Cleanup:		Extract Volume:	1.3	mL
Date Analyzed:	28 Oct 2002 11:28 pm	Prep DF:	1	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	KP	Injection Volume:	0.001	mL
		Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	1.20		0.07	0.04	
Toluene	0.91		0.07	0.04	
Ethylbenzene	12.8		0.07	0.04	
m/p-Xylenes	3.27		0.07	0.04	
Styrene	2.13		0.07	0.04	
o-Xylene	5.30		0.07	0.04	
1,2,4-Trimethylbenzene	4.01		0.07	0.04	
Naphthalene	89.0	D	0.07	0.04	
2-Methylnaphthalene	9.12		0.07	0.04	
1-Methylnaphthalene	73.7	D	0.07	0.04	
Acenaphthylene	20.5		0.07	0.04	
Acenaphthene	85.1	D	0.07	0.04	
Dibenzofuran	6.31		0.07	0.04	
Fluorene	53.8	D	0.07	0.04	
Phenanthrene	166	D	0.07	0.04	
Anthracene	56.8		0.07	0.04	
Fluoranthene	100	D	0.07	0.04	
Pyrene	136	D	0.07	0.04	
Benz[a]anthracene	47.5		0.07	0.04	
Chrysene	42.3		0.07	0.04	
Benzo[b]fluoranthene	22.9		0.07	0.04	
Benzo[k]fluoranthene	27.7		0.07	0.04	
Benzo(e)pyrene	23.5		0.07	0.04	
Benzo[a]pyrene	45.6		0.07	0.04	
Perylene	7.65		0.07	0.04	
Indeno[1,2,3-cd]pyrene	20.4		0.07	0.04	
Dibenz[a,h]anthracene	5.78		0.07	0.04	
Benzo[g,h,i]perylene	24.2		0.07	0.04	
ALKYLATED PAHs:					
C0 - Benzene	1.20		0.07	0.04	
C1 - Benzene	1.09		0.07	0.04	
C2 - Benzene	26.4		0.07	0.04	
C3 - Benzene	37.6		0.07	0.04	
C4 - Benzene	58.0		0.07	0.04	
C5 - Benzene	20.8		0.07	0.04	
C0 - Naphthalene	89.0	D	0.07	0.04	
C1 - Naphthalene	69.9		0.07	0.04	
C2 - Naphthalene	98.8		0.07	0.04	
C3 - Naphthalene	41.0		0.07	0.04	
C4 - Naphthalene	13.3		0.07	0.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB14160116

		Preparation Method:	EPA 3570	
		Cleanup Method(s):		
Client:	URS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
Project:	Mechanicville	Matrix:	Soil	
		Preservation:	None	
Lab ID:	UR010417-03	Decanted:	No	
File ID:	28OCT13.D			
		Sample Size:	2.183	g
Date Sampled:	4/3/2001	%Solid:	83%	
Date Received:	4/17/2001	Extract Volume:	1.3	mL
Date Prepared:	10/9/2002	Prep DF:	1	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	28 Oct 2002 11:28 pm	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	53.8	D	0.07	0.04	
C1 - Fluorene	45.2		0.07	0.04	
C2 - Fluorene	13.0		0.07	0.04	
C3 - Fluorene	5.32		0.07	0.04	
C0 - Phenanthrene/Anthracene	211	D	0.07	0.04	
C1 - Phenanthrene/Anthracene	75.6		0.07	0.04	
C2 - Phenanthrene/Anthracene	26.4		0.07	0.04	
C3 - Phenanthrene/Anthracene	5.40		0.07	0.04	
C4 - Phenanthrene/Anthracene	1.10		0.07	0.04	
C0 - Dibenzothiophene	13.4		0.07	0.04	
C1 - Dibenzothiophene	9.15		0.07	0.04	
C2 - Dibenzothiophene	6.03		0.07	0.04	
C3 - Dibenzothiophene	2.88		0.07	0.04	
C0 - Fluoranthene/Pyrene	273	D	0.07	0.04	
C1 - Fluoranthene/Pyrene	64.8		0.07	0.04	
C2 - Fluoranthene/Pyrene	13.9		0.07	0.04	
C3 - Fluoranthene/Pyrene	2.89		0.07	0.04	
C0 - Benz(a)anthracene/Chrysene	90.9		0.07	0.04	
C1 - Benz(a)anthracene/Chrysene	14.2		0.07	0.04	
C2 - Benz(a)anthracene/Chrysene	3.93		0.07	0.04	
C3 - Benz(a)anthracene/Chrysene	0.69		0.07	0.04	
C4 - Benz(a)anthracene/Chrysene	0.24		0.07	0.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	89%	50%	150%
2-Fluorobiphenyl	99%	50%	120%
5a-Androstane	119%	50%	120%
Benzo(a)pyrene-d12	64%	50%	120%
FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	1%	50%	150%
1-Chlorooctadecane	10%	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB16180118

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
		Analysis Method:	GC/MS (EPA 8270 Mod.)	
Lab ID:	UR010417-04	Matrix:	Soil	
File ID:	28OCT03.D	Preservation:	None	
		Decanted:	No	
Date Sampled:	4/4/2001	Sample Size:	2.152	g
Date Received:	4/17/2001	%Solid:	81%	
Date Prepared:	10/9/2002	Extract Volume:	1.2	mL
Date Cleanup:		Prep DF:	1	
Date Analyzed:	28 Oct 2002 12:32 pm	Analysis DF:	1	
Instrument:	GC/MS Ins	Injection Volume:	0.001	mL
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	2.10		0.07	0.03	
Toluene	0.42		0.07	0.03	
Ethylbenzene	5.94		0.07	0.03	
m/p-Xylenes	2.10		0.07	0.03	
Styrene	0.68		0.07	0.03	
o-Xylene	1.52		0.07	0.03	
1,2,4-Trimethylbenzene	0.95		0.07	0.03	
Naphthalene	48.1		0.07	0.03	
2-Methylnaphthalene	21.6		0.07	0.03	
1-Methylnaphthalene	38.7		0.07	0.03	
Acenaphthylene	5.62		0.07	0.03	
Acenaphthene	41.0		0.07	0.03	
Dibenzofuran	2.44		0.07	0.03	
Fluorene	29.6		0.07	0.03	
Phenanthrene	110	D	0.07	0.03	
Anthracene	22.2		0.07	0.03	
Fluoranthene	38.0		0.07	0.03	
Pyrene	49.9		0.07	0.03	
Benz[a]anthracene	18.2		0.07	0.03	
Chrysene	15.7		0.07	0.03	
Benzo[b]fluoranthene	8.90		0.07	0.03	
Benzo[k]fluoranthene	9.45		0.07	0.03	
Benzo(e)pyrene	8.43		0.07	0.03	
Benzo[a]pyrene	16.2		0.07	0.03	
Perylene	2.39		0.07	0.03	
Indeno[1,2,3-cd]pyrene	5.37		0.07	0.03	
Dibenz[a,h]anthracene	1.68		0.07	0.03	
Benzo[g,h,i]perylene	6.31		0.07	0.03	
ALKYLATED PAHs:					
C0 - Benzene	2.10		0.07	0.03	
C1 - Benzene	0.50		0.07	0.03	
C2 - Benzene	11.8		0.07	0.03	
C3 - Benzene	10.4		0.07	0.03	
C4 - Benzene	12.4		0.07	0.03	
C5 - Benzene	5.21		0.07	0.03	
C0 - Naphthalene	48.1		0.07	0.03	
C1 - Naphthalene	38.5		0.07	0.03	
C2 - Naphthalene	39.1		0.07	0.03	
C3 - Naphthalene	12.8		0.07	0.03	
C4 - Naphthalene	3.78		0.07	0.03	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MESB16180118

		Preparation Method:	EPA 3570	
		Cleanup Method(s):		
Client:	URS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
Project:	Mechanicville	Matrix:	Soil	
		Preservation:	None	
Lab ID:	UR010417-04	Decanted:	No	
File ID:	28OCT03.D			
		Sample Size:	2.152	g
Date Sampled:	4/4/2001	%Solid:	81%	
Date Received:	4/17/2001	Extract Volume:	1.2	mL
Date Prepared:	10/9/2002	Prep DF:	1	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	28 Oct 2002 12:32 pm	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	29.6		0.07	0.03	
C1 - Fluorene	14.4		0.07	0.03	
C2 - Fluorene	4.15		0.07	0.03	
C3 - Fluorene	1.57		0.07	0.03	
C0 - Phenanthrene/Anthracene	139	D	0.07	0.03	
C1 - Phenanthrene/Anthracene	28.0		0.07	0.03	
C2 - Phenanthrene/Anthracene	8.82		0.07	0.03	
C3 - Phenanthrene/Anthracene	1.79		0.07	0.03	
C4 - Phenanthrene/Anthracene	0.37		0.07	0.03	
C0 - Dibenzothiophene	4.96		0.07	0.03	
C1 - Dibenzothiophene	3.16		0.07	0.03	
C2 - Dibenzothiophene	1.87		0.07	0.03	
C3 - Dibenzothiophene	0.86		0.07	0.03	
C0 - Fluoranthene/Pyrene	103		0.07	0.03	
C1 - Fluoranthene/Pyrene	22.8		0.07	0.03	
C2 - Fluoranthene/Pyrene	4.31		0.07	0.03	
C3 - Fluoranthene/Pyrene	0.70		0.07	0.03	
C0 - Benz(a)anthracene/Chrysene	34.3		0.07	0.03	
C1 - Benz(a)anthracene/Chrysene	5.23		0.07	0.03	
C2 - Benz(a)anthracene/Chrysene	1.16		0.07	0.03	
C3 - Benz(a)anthracene/Chrysene	0.24		0.07	0.03	
C4 - Benz(a)anthracene/Chrysene	0.14		0.07	0.03	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	79%	50%	150%
2-Fluorobiphenyl	99%	50%	120%
5a-Androstane	120%	50%	120%
Benzo(a)pyrene-d12	87%	50%	120%

FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	Not Spiked	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEMW161601R1

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
Lab ID:	UR010417-05	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	28OCT14.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	4/13/2001	Decanted:	No	
Date Received:	4/17/2001	Sample Size:	2.073	g
Date Prepared:	10/9/2002	%Solid:	80%	
Date Cleanup:		Extract Volume:	2	mL
Date Analyzed:	29 Oct 2002 12:38 am	Prep DF:	10	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	KP	Injection Volume:	0.001	mL
		Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	90.2		1.20	0.60	
Toluene	352		1.20	0.60	
Ethylbenzene	165		1.20	0.60	
m/p-Xylenes	287		1.20	0.60	
Styrene	380		1.20	0.60	
o-Xylene	130		1.20	0.60	
1,2,4-Trimethylbenzene	72.9		1.20	0.60	
Naphthalene	6,410	D	1.20	0.60	
2-Methylnaphthalene	2,740	D	1.20	0.60	
1-Methylnaphthalene	1,630	D	1.20	0.60	
Acenaphthylene	1,190		1.20	0.60	
Acenaphthene	206		1.20	0.60	
Dibenzofuran	102		1.20	0.60	
Fluorene	842		1.20	0.60	
Phenanthrene	2,630	D	1.20	0.60	
Anthracene	564		1.20	0.60	
Fluoranthene	800		1.20	0.60	
Pyrene	1,120		1.20	0.60	
Benz[a]anthracene	377		1.20	0.60	
Chrysene	308		1.20	0.60	
Benzo[b]fluoranthene	150		1.20	0.60	
Benzo[k]fluoranthene	159		1.20	0.60	
Benzo(e)pyrene	148		1.20	0.60	
Benzo[a]pyrene	288		1.20	0.60	
Perylene	38.1		1.20	0.60	
Indeno[1,2,3-cd]pyrene	88.6		1.20	0.60	
Dibenz[a,h]anthracene	29.0		1.20	0.60	
Benzo[g,h,i]perylene	121		1.20	0.60	
ALKYLATED PAHs:					
C0 - Benzene	90.2		1.20	0.60	
C1 - Benzene	424		1.20	0.60	
C2 - Benzene	654		1.20	0.60	
C3 - Benzene	478		1.20	0.60	
C4 - Benzene	274		1.20	0.60	
C5 - Benzene	68.1		1.20	0.60	
C0 - Naphthalene	6,410	D	1.20	0.60	
C1 - Naphthalene	2,790	D	1.20	0.60	
C2 - Naphthalene	1,110		1.20	0.60	
C3 - Naphthalene	322		1.20	0.60	
C4 - Naphthalene	81.0		1.20	0.60	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEMW161601R1

		Preparation Method:	EPA 3570	
		Cleanup Method(s):		
Client:	URS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
Project:	Mechanicville	Matrix:	Soil	
		Preservation:	None	
Lab ID:	UR010417-05	Decanted:	No	
File ID:	28OCT14.D			
		Sample Size:	2.073	g
Date Sampled:	4/13/2001	%Solid:	80%	
Date Received:	4/17/2001	Extract Volume:	2	mL
Date Prepared:	10/9/2002	Prep DF:	10	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	29 Oct 2002 12:38 am	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	842		1.20	0.60	
C1 - Fluorene	488		1.20	0.60	
C2 - Fluorene	106		1.20	0.60	
C3 - Fluorene	36.8		1.20	0.60	
C0 - Phenanthrene/Anthracene	3,290	D	1.20	0.60	
C1 - Phenanthrene/Anthracene	841		1.20	0.60	
C2 - Phenanthrene/Anthracene	239		1.20	0.60	
C3 - Phenanthrene/Anthracene	40.8		1.20	0.60	
C4 - Phenanthrene/Anthracene	6.59		1.20	0.60	
C0 - Dibenzothiophene	84.6		1.20	0.60	
C1 - Dibenzothiophene	67.6		1.20	0.60	
C2 - Dibenzothiophene	34.3		1.20	0.60	
C3 - Dibenzothiophene	14.4		1.20	0.60	
C0 - Fluoranthene/Pyrene	153	D	1.20	0.60	
C1 - Fluoranthene/Pyrene	624		1.20	0.60	
C2 - Fluoranthene/Pyrene	114		1.20	0.60	
C3 - Fluoranthene/Pyrene	12.8		1.20	0.60	
C0 - Benz(a)anthracene/Chrysene	696		1.20	0.60	
C1 - Benz(a)anthracene/Chrysene	119		1.20	0.60	
C2 - Benz(a)anthracene/Chrysene	27.7		1.20	0.60	
C3 - Benz(a)anthracene/Chrysene	4.07		1.20	0.60	
C4 - Benz(a)anthracene/Chrysene	1.43		1.20	0.60	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	55%	50%	150%
2-Fluorobiphenyl	75%	50%	120%
5a-Androstane	97%	50%	120%
Benzo(a)pyrene-d12	52%	50%	120%
FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	Not Spiked	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEAK00010201

Client:	URS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
Project:	Mechanicville	Matrix:	Soil	
		Preservation:	None	
Lab ID:	UR021003-01	Decanted:	No	
File ID:	25OCT22.D			
		Sample Size:	2.196	g
Date Sampled:	10/2/2002	%Solid:	72%	
Date Received:	10/3/2002	Extract Volume:	1.3	mL
Date Prepared:	10/9/2002	Prep DF:	1	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	26 Oct 2002 7:48 am	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Preparation Method: EPA 3570

Cleanup Method(s):

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene		U	0.08	0.04	
Toluene	0.10		0.08	0.04	
Ethylbenzene		U	0.08	0.04	
m/p-Xylenes		U	0.08	0.04	
Styrene		U	0.08	0.04	
o-Xylene		U	0.08	0.04	
1,2,4-Trimethylbenzene		U	0.08	0.04	
Naphthalene	0.05	J	0.08	0.04	
2-Methylnaphthalene		U	0.08	0.04	
1-Methylnaphthalene		U	0.08	0.04	
Acenaphthylene		U	0.08	0.04	
Acenaphthene		U	0.08	0.04	
Dibenzofuran		U	0.08	0.04	
Fluorene		U	0.08	0.04	
Phenanthrene	0.12		0.08	0.04	
Anthracene		U	0.08	0.04	
Fluoranthene	0.30		0.08	0.04	
Pyrene	0.23		0.08	0.04	
Benz[a]anthracene	0.12		0.08	0.04	
Chrysene	0.17		0.08	0.04	
Benzo[b]fluoranthene	0.17		0.08	0.04	
Benzo[k]fluoranthene	0.13		0.08	0.04	
Benzo(e)pyrene	0.11		0.08	0.04	
Benzo[a]pyrene	0.13		0.08	0.04	
Perylene		U	0.08	0.04	
Indeno[1,2,3-cd]pyrene	0.13		0.08	0.04	
Dibenz[a,h]anthracene		U	0.08	0.04	
Benzo[g,h,i]perylene	0.16		0.08	0.04	
ALKYLATED PAHs:					
C0 - Benzene		U	0.08	0.04	
C1 - Benzene	0.12		0.08	0.04	
C2 - Benzene	0.07	J	0.08	0.04	
C3 - Benzene		U	0.08	0.04	
C4 - Benzene		U	0.08	0.04	
C5 - Benzene		U	0.08	0.04	
C0 - Naphthalene	0.05	J	0.08	0.04	
C1 - Naphthalene		U	0.08	0.04	
C2 - Naphthalene		U	0.08	0.04	
C3 - Naphthalene		U	0.08	0.04	
C4 - Naphthalene		U	0.08	0.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEAK00010201

		Preparation Method:	EPA 3570	
		Cleanup Method(s):		
Client:	URS	Analysis Method:	GC/MS (EPA 8270 Mod.)	
Project:	Mechanicville	Matrix:	Soil	
		Preservation:	None	
Lab ID:	UR021003-01	Decanted:	No	
File ID:	25OCT22.D			
		Sample Size:	2.196	g
Date Sampled:	10/2/2002	%Solid:	72%	
Date Received:	10/3/2002	Extract Volume:	1.3	mL
Date Prepared:	10/9/2002	Prep DF:	1	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	26 Oct 2002 7:48 am	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene		U	0.08	0.04	
C1 - Fluorene		U	0.08	0.04	
C2 - Fluorene		U	0.08	0.04	
C3 - Fluorene		U	0.08	0.04	
C0 - Phenanthrene/Anthracene	0.14		0.08	0.04	
C1 - Phenanthrene/Anthracene		U	0.08	0.04	
C2 - Phenanthrene/Anthracene		U	0.08	0.04	
C3 - Phenanthrene/Anthracene		U	0.08	0.04	
C4 - Phenanthrene/Anthracene		U	0.08	0.04	
C0 - Dibenzothiophene		U	0.08	0.04	
C1 - Dibenzothiophene		U	0.08	0.04	
C2 - Dibenzothiophene		U	0.08	0.04	
C3 - Dibenzothiophene		U	0.08	0.04	
C0 - Fluoranthene/Pyrene	0.54		0.08	0.04	
C1 - Fluoranthene/Pyrene	0.05	J	0.08	0.04	
C2 - Fluoranthene/Pyrene	0.06	J	0.08	0.04	
C3 - Fluoranthene/Pyrene		U	0.08	0.04	
C0 - Benz(a)anthracene/Chrysene	0.30		0.08	0.04	
C1 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C2 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C3 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C4 - Benz(a)anthracene/Chrysene		U	0.08	0.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	113%	50%	150%
2-Fluorobiphenyl	123%	50%	120%
5a-Androstane	111%	50%	120%
Benzo(a)pyrene-d12	73%	50%	120%

FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	Not Spiked	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: **MEAK00010205**

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
Lab ID:	UR021003-02	Analysis Method:	GC/MS (EPA 8270 Mod.)	
File ID:	25OCT23.D	Matrix:	Soil	
		Preservation:	None	
Date Sampled:	10/2/2002	Decanted:	No	
Date Received:	10/3/2002	Sample Size:	2.572	g
Date Prepared:	10/9/2002	%Solid:	77%	
Date Cleanup:		Extract Volume:	1.5	mL
Date Analyzed:	26 Oct 2002 8:58 am	Prep DF:	1	
Instrument:	GC/MS Ins	Analysis DF:	1	
Operator:	KP	Injection Volume:	0.001	mL
		Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	3.52		0.08	0.04	
Toluene	0.73		0.08	0.04	
Ethylbenzene	9.60		0.08	0.04	
m/p-Xylenes	3.66		0.08	0.04	
Styrene	0.08		0.08	0.04	
o-Xylene	2.40		0.08	0.04	
1,2,4-Trimethylbenzene	1.12		0.08	0.04	
Naphthalene	71.4		0.08	0.04	
2-Methylnaphthalene	27.2		0.08	0.04	
1-Methylnaphthalene	19.5		0.08	0.04	
Acenaphthylene	0.91		0.08	0.04	
Acenaphthene	12.6		0.08	0.04	
Dibenzofuran	0.73		0.08	0.04	
Fluorene	5.68		0.08	0.04	
Phenanthrene	10.0		0.08	0.04	
Anthracene	2.24		0.08	0.04	
Fluoranthene	2.67		0.08	0.04	
Pyrene	3.63		0.08	0.04	
Benz[a]anthracene	0.97		0.08	0.04	
Chrysene	0.93		0.08	0.04	
Benzo[b]fluoranthene	0.60		0.08	0.04	
Benzo[k]fluoranthene	0.60		0.08	0.04	
Benzo(e)pyrene	0.62		0.08	0.04	
Benzo[a]pyrene	1.07		0.08	0.04	
Perylene	0.17		0.08	0.04	
Indeno[1,2,3-cd]pyrene	0.55		0.08	0.04	
Dibenz[a,h]anthracene	0.19		0.08	0.04	
Benzo[g,h,i]perylene	0.77		0.08	0.04	
ALKYLATED PAHs:					
C0 - Benzene	3.52		0.08	0.04	
C1 - Benzene	0.88		0.08	0.04	
C2 - Benzene	19.2		0.08	0.04	
C3 - Benzene	11.6		0.08	0.04	
C4 - Benzene	7.32		0.08	0.04	
C5 - Benzene	0.98		0.08	0.04	
C0 - Naphthalene	71.4		0.08	0.04	
C1 - Naphthalene	29.9		0.08	0.04	
C2 - Naphthalene	11.8		0.08	0.04	
C3 - Naphthalene	2.03		0.08	0.04	
C4 - Naphthalene	0.39		0.08	0.04	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEAK00010205

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
		Analysis Method:	GC/MS (EPA 8270 Mod.)	
Lab ID:	UR021003-02	Matrix:	Soil	
File ID:	25OCT23.D	Preservation:	None	
		Decanted:	No	
		Sample Size:	2.572	g
Date Sampled:	10/2/2002	%Solid:	77%	
Date Received:	10/3/2002	Extract Volume:	1.5	mL
Date Prepared:	10/9/2002	Prep DF:	1	
Date Cleanup:		Analysis DF:	1	
Date Analyzed:	26 Oct 2002 8:58 am	Injection Volume:	0.001	mL
Instrument:	GC/MS Ins			
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	5.68		0.08	0.04	
C1 - Fluorene	1.97		0.08	0.04	
C2 - Fluorene	0.38		0.08	0.04	
C3 - Fluorene	0.13		0.08	0.04	
C0 - Phenanthrene/Anthracene	12.2		0.08	0.04	
C1 - Phenanthrene/Anthracene	2.67		0.08	0.04	
C2 - Phenanthrene/Anthracene	0.73		0.08	0.04	
C3 - Phenanthrene/Anthracene	0.12		0.08	0.04	
C4 - Phenanthrene/Anthracene		U	0.08	0.04	
C0 - Dibenzothiophene	0.52		0.08	0.04	
C1 - Dibenzothiophene	0.38		0.08	0.04	
C2 - Dibenzothiophene	0.14		0.08	0.04	
C3 - Dibenzothiophene	0.07	J	0.08	0.04	
C0 - Fluoranthene/Pyrene	7.15		0.08	0.04	
C1 - Fluoranthene/Pyrene	1.55		0.08	0.04	
C2 - Fluoranthene/Pyrene	0.32		0.08	0.04	
C3 - Fluoranthene/Pyrene	0.05	J	0.08	0.04	
C0 - Benz(a)anthracene/Chrysene	1.92		0.08	0.04	
C1 - Benz(a)anthracene/Chrysene	0.35		0.08	0.04	
C2 - Benz(a)anthracene/Chrysene	0.08		0.08	0.04	
C3 - Benz(a)anthracene/Chrysene		U	0.08	0.04	
C4 - Benz(a)anthracene/Chrysene		U	0.08	0.04	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	126%	50%	150%
2-Fluorobiphenyl	131%	50%	120%
5a-Androstane	113%	50%	120%
Benzo(a)pyrene-d12	75%	50%	120%

FRACTIONATION SURROGATE COMPOUNDS:			
2,5-Dibromotoluene	Not Spiked	50%	150%
2-Bromonaphthalene	Not Spiked	50%	150%
1-Chlorooctadecane	Not Spiked	50%	150%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEAK00010207

Client:	URS	Preparation Method:	EPA 3570
Project:	Mechanicville	Cleanup Method(s):	
Lab ID:	UR021003-03	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	28OCT04.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	10/2/2002	Decanted:	No
Date Received:	10/3/2002	Sample Size:	1.908 g
Date Prepared:	10/9/2002	%Solid:	48%
Date Cleanup:		Extract Volume:	1.6 mL
Date Analyzed:	28 Oct 2002 1:43 pm	Prep DF:	10
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	KP	Injection Volume:	0.001 mL
		Batch QC:	UR021009-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	3.19		1.77	0.88	
Toluene	24.8		1.77	0.88	
Ethylbenzene	78.1		1.77	0.88	
m/p-Xylenes	44.7		1.77	0.88	
Styrene	5.78		1.77	0.88	
o-Xylene	20.0		1.77	0.88	
1,2,4-Trimethylbenzene	14.4		1.77	0.88	
Naphthalene	808		1.77	0.88	
2-Methylnaphthalene	414		1.77	0.88	
1-Methylnaphthalene	255		1.77	0.88	
Acenaphthylene	127		1.77	0.88	
Acenaphthene	137		1.77	0.88	
Dibenzofuran	12.7		1.77	0.88	
Fluorene	140		1.77	0.88	
Phenanthrene	382		1.77	0.88	
Anthracene	111		1.77	0.88	
Fluoranthene	150		1.77	0.88	
Pyrene	221		1.77	0.88	
Benz[a]anthracene	77.6		1.77	0.88	
Chrysene	65.3		1.77	0.88	
Benzo[b]fluoranthene	32.9		1.77	0.88	
Benzo[k]fluoranthene	33.4		1.77	0.88	
Benzo(e)pyrene	33.1		1.77	0.88	
Benzo[a]pyrene	65.8		1.77	0.88	
Perylene	7.94		1.77	0.88	
Indeno[1,2,3-cd]pyrene	17.4		1.77	0.88	
Dibenz[a,h]anthracene	5.63		1.77	0.88	
Benzo[g,h,i]perylene	22.8		1.77	0.88	
ALKYLATED PAHs:					
C0 - Benzene	3.19		1.77	0.88	
C1 - Benzene	29.9		1.77	0.88	
C2 - Benzene	173		1.77	0.88	
C3 - Benzene	161		1.77	0.88	
C4 - Benzene	83.2		1.77	0.88	
C5 - Benzene	15.6		1.77	0.88	
C0 - Naphthalene	808		1.77	0.88	
C1 - Naphthalene	433		1.77	0.88	
C2 - Naphthalene	219		1.77	0.88	
C3 - Naphthalene	60.3		1.77	0.88	
C4 - Naphthalene	15.1		1.77	0.88	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MEAK00010207

Client:	URS	Preparation Method:	EPA 3570
Project:	Mechanicville	Cleanup Method(s):	
Lab ID:	UR021003-03	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	28OCT04.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	10/2/2002	Decanted:	No
Date Received:	10/3/2002	Sample Size:	1.908 g
Date Prepared:	10/9/2002	%Solid:	48%
Date Cleanup:		Extract Volume:	1.6 mL
Date Analyzed:	28 Oct 2002 1:43 pm	Prep DF:	10
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	KP	Injection Volume:	0.001 mL
		Batch QC:	UR021009-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene	140		1.77	0.88	
C1 - Fluorene	88.6		1.77	0.88	
C2 - Fluorene	21.3		1.77	0.88	
C3 - Fluorene	5.93		1.77	0.88	
C0 - Phenanthrene/Anthracene	491		1.77	0.88	
C1 - Phenanthrene/Anthracene	160		1.77	0.88	
C2 - Phenanthrene/Anthracene	47.5		1.77	0.88	
C3 - Phenanthrene/Anthracene	8.26		1.77	0.88	
C4 - Phenanthrene/Anthracene	1.54	J	1.77	0.88	
C0 - Dibenzothiophene	16.9		1.77	0.88	
C1 - Dibenzothiophene	16.7		1.77	0.88	
C2 - Dibenzothiophene	8.14		1.77	0.88	
C3 - Dibenzothiophene	3.41		1.77	0.88	
C0 - Fluoranthene/Pyrene	444		1.77	0.88	
C1 - Fluoranthene/Pyrene	122		1.77	0.88	
C2 - Fluoranthene/Pyrene	23.9		1.77	0.88	
C3 - Fluoranthene/Pyrene	4.20		1.77	0.88	
C0 - Benz(a)anthracene/Chrysene	145		1.77	0.88	
C1 - Benz(a)anthracene/Chrysene	26.3		1.77	0.88	
C2 - Benz(a)anthracene/Chrysene	6.13		1.77	0.88	
C3 - Benz(a)anthracene/Chrysene	1.05	J	1.77	0.88	
C4 - Benz(a)anthracene/Chrysene	1.08	J	1.77	0.88	
EXTRACTION SURROGATE COMPOUNDS:	%R		Min	Max	
Fluorobenzene	57%		50%	150%	
2-Fluorobiphenyl	76%		50%	120%	
5a-Androstane	94%		50%	120%	
Benzo(a)pyrene-d12	68%		50%	120%	
FRACTIONATION SURROGATE COMPOUNDS:					
2,5-Dibromotoluene	Not Spiked		50%	150%	
2-Bromonaphthalene	Not Spiked		50%	150%	
1-Chlorooctadecane	Not Spiked		50%	150%	

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	URS	Preparation Method:	EPA 3570
Project:	Mechanicville	Cleanup Method(s):	
Lab ID:	UR021009-SB	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	18OCT04.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	2 g
Date Prepared:	10/9/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	1.1 mL
Date Analyzed:	18 Oct 2002 1:28 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	KP	Injection Volume:	0.001 mL
		Batch QC:	UR021009-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene		U	0.06	0.03	
Toluene		U	0.06	0.03	
Ethylbenzene		U	0.06	0.03	
m/p-Xylenes		U	0.06	0.03	
Styrene		U	0.06	0.03	
o-Xylene		U	0.06	0.03	
1,2,4-Trimethylbenzene		U	0.06	0.03	
Naphthalene		U	0.06	0.03	
2-Methylnaphthalene		U	0.06	0.03	
1-Methylnaphthalene		U	0.06	0.03	
Acenaphthylene		U	0.06	0.03	
Acenaphthene		U	0.06	0.03	
Dibenzofuran		U	0.06	0.03	
Fluorene		U	0.06	0.03	
Phenanthrene		U	0.06	0.03	
Anthracene		U	0.06	0.03	
Fluoranthene		U	0.06	0.03	
Pyrene		U	0.06	0.03	
Benz[a]anthracene		U	0.06	0.03	
Chrysene		U	0.06	0.03	
Benzo[b]fluoranthene		U	0.06	0.03	
Benzo[k]fluoranthene		U	0.06	0.03	
Benzo(e)pyrene		U	0.06	0.03	
Benzo[a]pyrene		U	0.06	0.03	
Perylene		U	0.06	0.03	
Indeno[1,2,3-cd]pyrene		U	0.06	0.03	
Dibenz[a,h]anthracene		U	0.06	0.03	
Benzo[g,h,i]perylene		U	0.06	0.03	
ALKYLATED PAHs:					
C0 - Benzene		U	0.06	0.03	
C1 - Benzene		U	0.06	0.03	
C2 - Benzene		U	0.06	0.03	
C3 - Benzene		U	0.06	0.03	
C4 - Benzene		U	0.06	0.03	
C5 - Benzene		U	0.06	0.03	
C0 - Naphthalene		U	0.06	0.03	
C1 - Naphthalene		U	0.06	0.03	
C2 - Naphthalene		U	0.06	0.03	
C3 - Naphthalene		U	0.06	0.03	
C4 - Naphthalene		U	0.06	0.03	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	URS	Preparation Method:	EPA 3570
Project:	Mechanicville	Cleanup Method(s):	
Lab ID:	UR021009-SB	Analysis Method:	GC/MS (EPA 8270 Mod.)
File ID:	18OCT04.D	Matrix:	Soil
		Preservation:	None
Date Sampled:		Decanted:	No
Date Received:		Sample Size:	2 g
Date Prepared:	10/9/2002	%Solid:	100%
Date Cleanup:		Extract Volume:	1.1 mL
Date Analyzed:	18 Oct 2002 1:28 pm	Prep DF:	1
Instrument:	GC/MS Ins	Analysis DF:	1
Operator:	KP	Injection Volume:	0.001 mL
		Batch QC:	UR021009-SB

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
C0 - Fluorene		U	0.06	0.03	
C1 - Fluorene		U	0.06	0.03	
C2 - Fluorene		U	0.06	0.03	
C3 - Fluorene		U	0.06	0.03	
C0 - Phenanthrene/Anthracene		U	0.06	0.03	
C1 - Phenanthrene/Anthracene		U	0.06	0.03	
C2 - Phenanthrene/Anthracene		U	0.06	0.03	
C3 - Phenanthrene/Anthracene		U	0.06	0.03	
C4 - Phenanthrene/Anthracene		U	0.06	0.03	
C0 - Dibenzothiophene		U	0.06	0.03	
C1 - Dibenzothiophene		U	0.06	0.03	
C2 - Dibenzothiophene		U	0.06	0.03	
C3 - Dibenzothiophene		U	0.06	0.03	
C0 - Fluoranthene/Pyrene		U	0.06	0.03	
C1 - Fluoranthene/Pyrene		U	0.06	0.03	
C2 - Fluoranthene/Pyrene		U	0.06	0.03	
C3 - Fluoranthene/Pyrene		U	0.06	0.03	
C0 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C1 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C2 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C3 - Benz(a)anthracene/Chrysene		U	0.06	0.03	
C4 - Benz(a)anthracene/Chrysene		U	0.06	0.03	

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	81%	50%	150%
2-Fluorobiphenyl	118%	50%	120%
5a-Androstane	81%	50%	120%
Benzo(a)pyrene-d12	77%	50%	120%

Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	URS	Preparation Method:	EPA 3570	
Project:	Mechanicville	Cleanup Method(s):		
		Analysis Method:	GC/MS (EPA 8270 Mod.)	
Lab ID:	UR021009-SBS	Matrix:	Soil	
File ID:	18OCT06.D	Preservation:	None	
		Decanted:	No	
Date Sampled:		Sample Size:	2	g
Date Received:		%Solid:	100%	
Date Prepared:	10/9/2002	Extract Volume:	1.2	mL
Date Cleanup:		Prep DF:	1	
Date Analyzed:	18 Oct 2002 3:51 pm	Analysis DF:	1	
Instrument:	GC/MS Ins	Injection Volume:	0.001	mL
Operator:	KP	Batch QC:	UR021009-SB	

Analyte:	Concentration mg/kg	Q	RL mg/kg	EDL mg/kg	Comments
PAH COMPOUNDS:					
Benzene	16.7		0.06	0.03	66.8%
Toluene	19.1		0.06	0.03	76.4%
Ethylbenzene	20.4		0.06	0.03	81.6%
m/p-Xylenes	18.7		0.06	0.03	74.8%
Styrene	22.7		0.06	0.03	90.8%
o-Xylene	19.5		0.06	0.03	78.0%
1,2,4-Trimethylbenzene	23.9		0.06	0.03	95.6%
Naphthalene	23.7		0.06	0.03	94.8%
2-Methylnaphthalene	26.6		0.06	0.03	106.4%
1-Methylnaphthalene	25.9		0.06	0.03	103.6%
Acenaphthylene	25.4		0.06	0.03	101.6%
Acenaphthene	28.3		0.06	0.03	113.2%
Dibenzofuran	25.3		0.06	0.03	101.2%
Fluorene	24.5		0.06	0.03	98.0%
Phenanthrene	24.6		0.06	0.03	98.4%
Anthracene	23.0		0.06	0.03	92.0%
Fluoranthene	20.1		0.06	0.03	80.4%
Pyrene	20.4		0.06	0.03	81.6%
Benz[a]anthracene	18.1		0.06	0.03	72.4%
Chrysene	19.1		0.06	0.03	76.4%
Benzo[b]fluoranthene	22.8		0.06	0.03	91.2%
Benzo[k]fluoranthene	23.3		0.06	0.03	93.2%
Benzo[a]pyrene	19.9		0.06	0.03	79.6%
Indeno[1,2,3-cd]pyrene	23.8		0.06	0.03	95.2%
Dibenz[a,h]anthracene	20.6		0.06	0.03	82.4%
Benzo[g,h,i]perylene	24.0		0.06	0.03	96.0%

EXTRACTION SURROGATE COMPOUNDS:	%R	Min	Max
Fluorobenzene	84%	50%	150%
2-Fluorobiphenyl	119%	50%	120%
5a-Androstane	93%	50%	120%
Benzo(a)pyrene-d12	93%	50%	120%

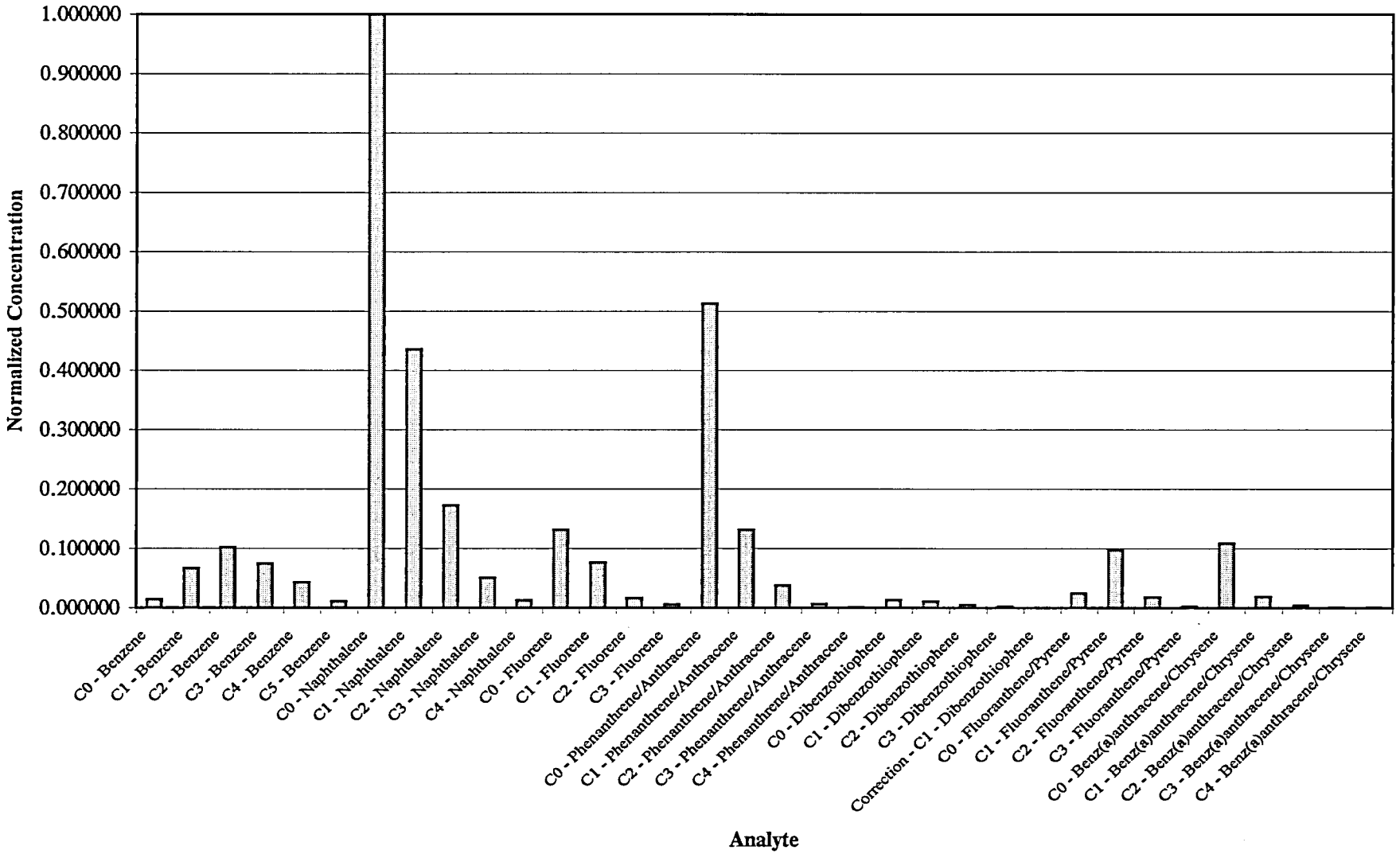
Qualifiers:

B	Analyte detected in the blank
D	Analyte reported from a diluted extract
U	Undetected above the detection limit
J	Estimated value detected between the reporting and detection limits
E	Estimated value detected above calibration range
RL	Reporting limit is the sample equivalent of the lowest linear calibration concentration
EDL	Estimated detection limit is 50% of the RL

Appendix D

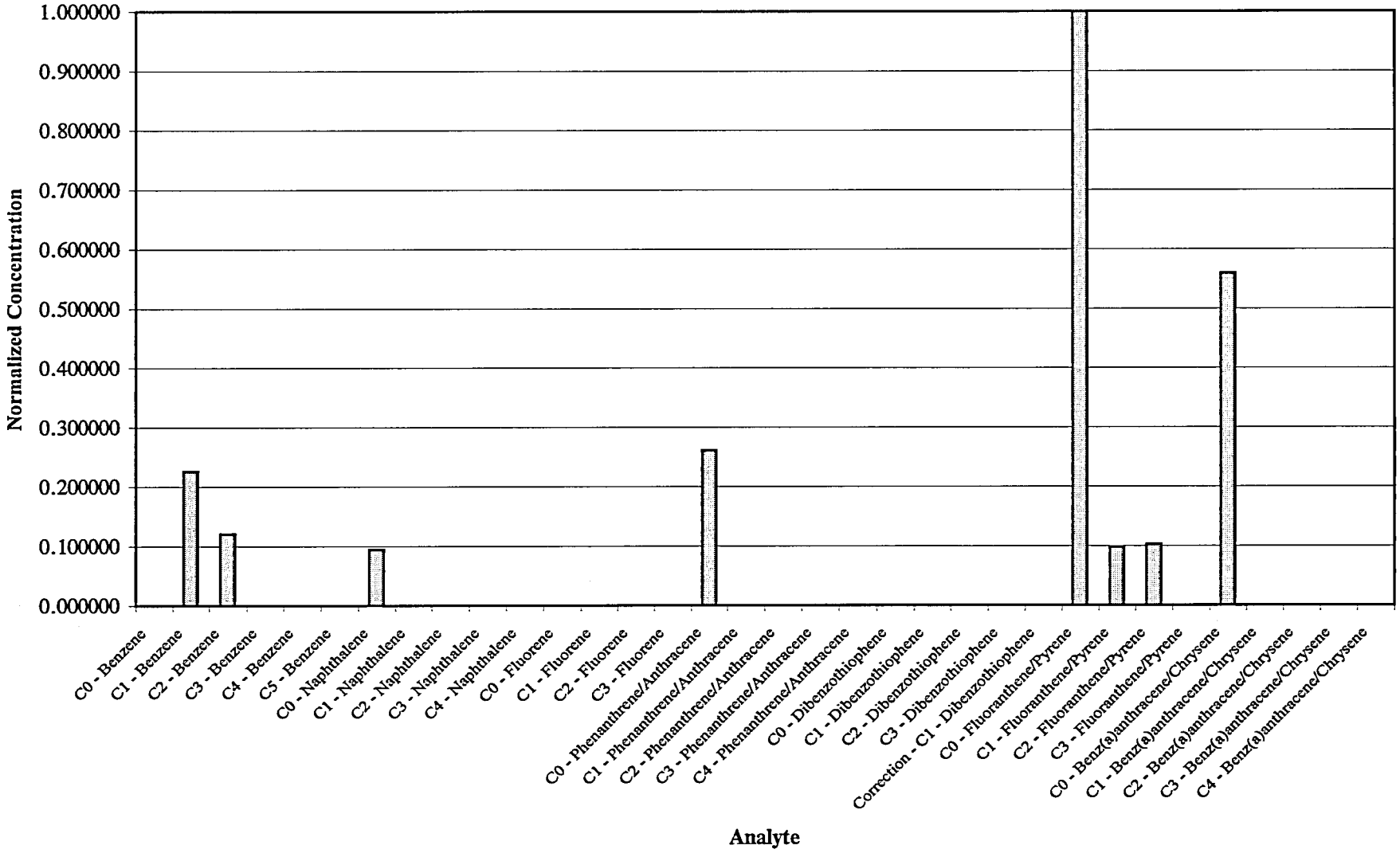
Extended PAH Profiles – Bar Graphs

MEMW161601R1



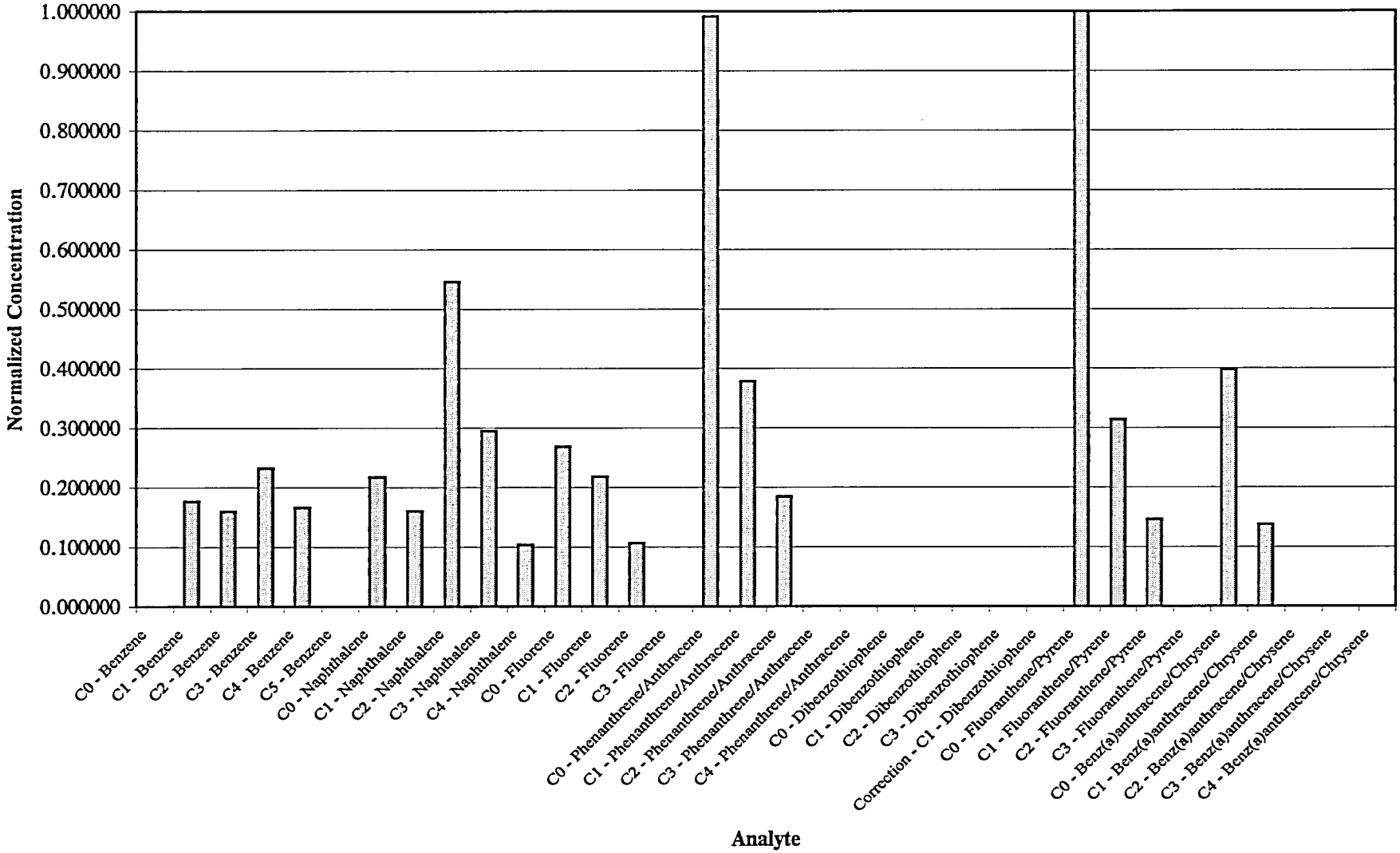
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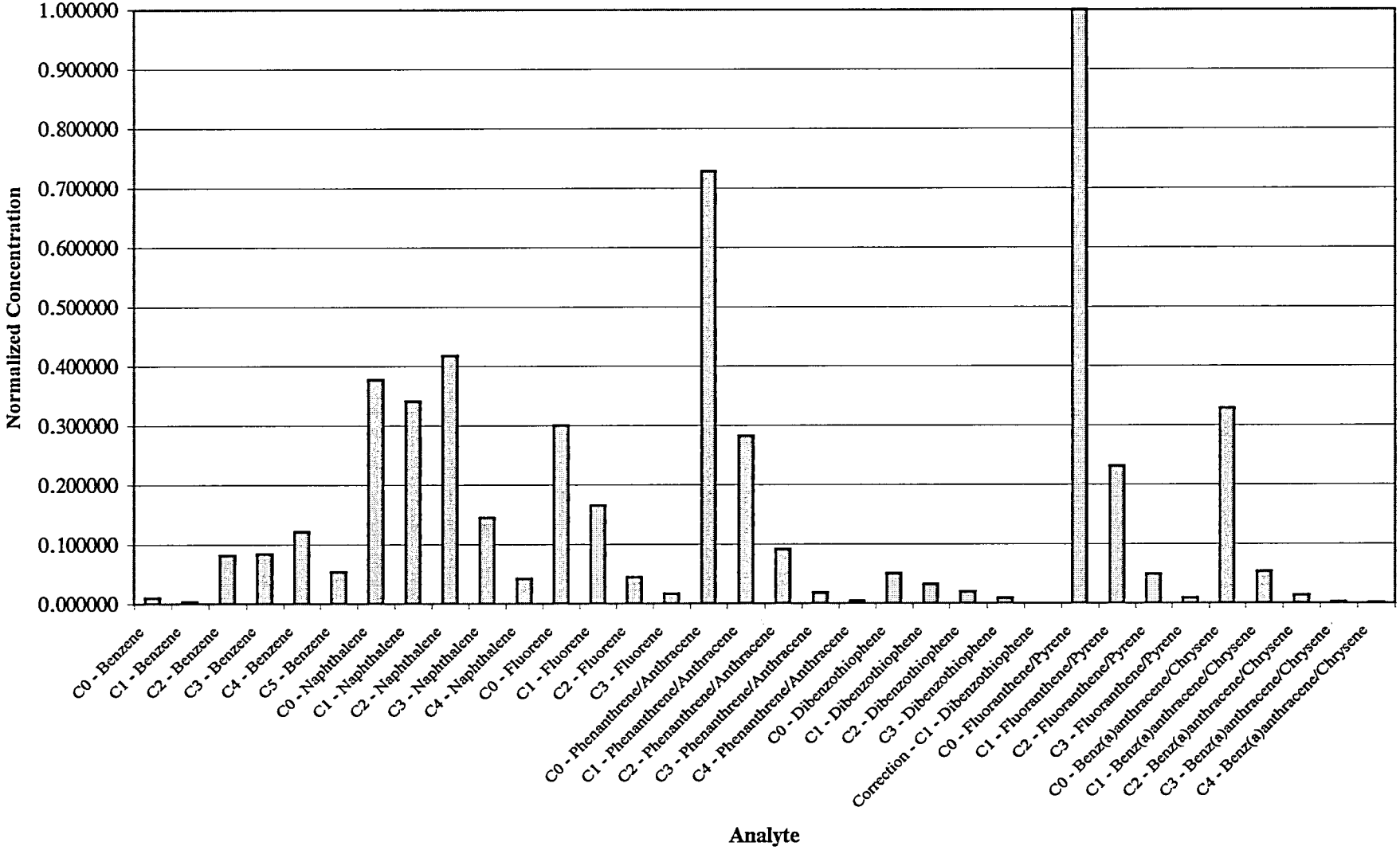
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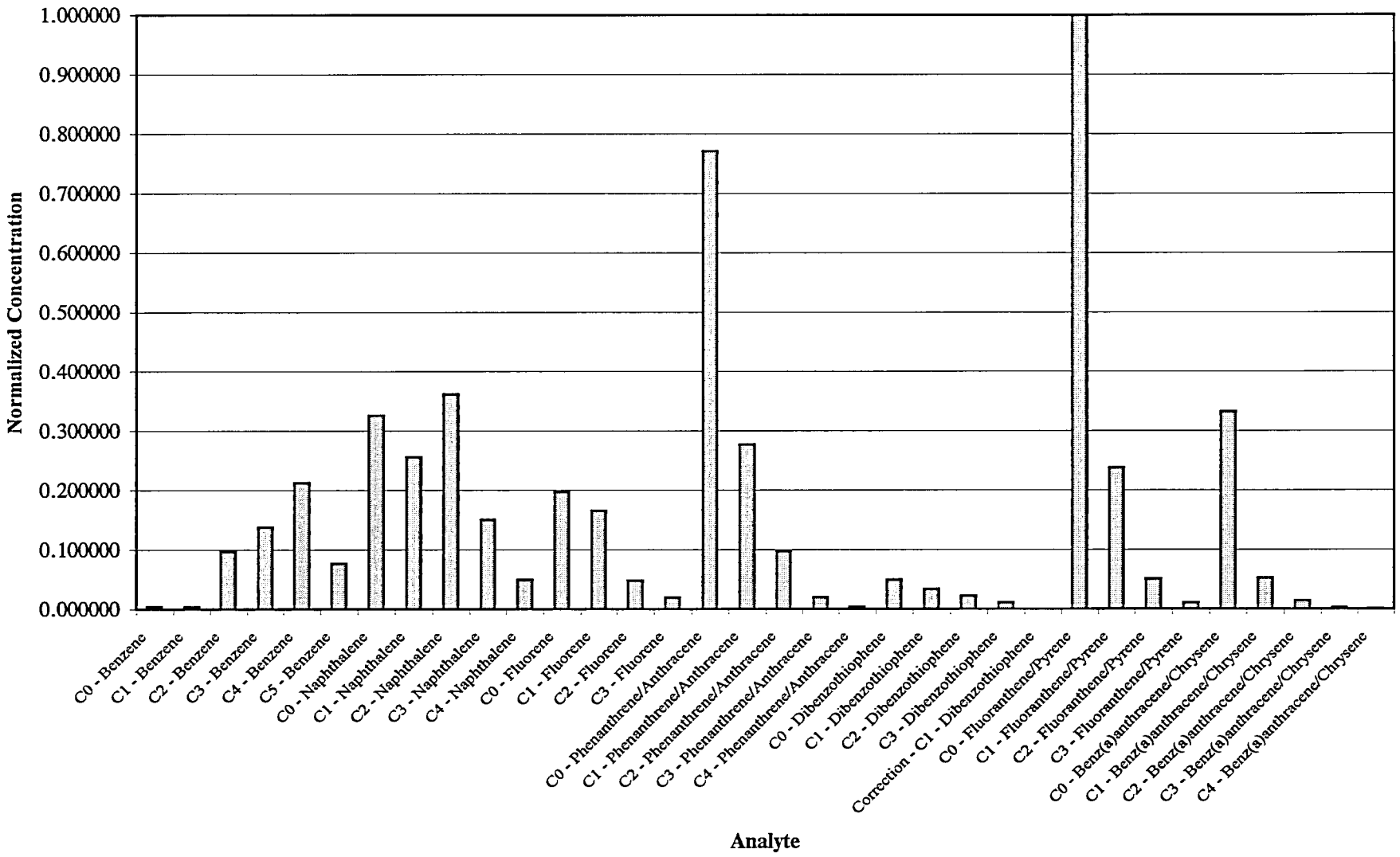
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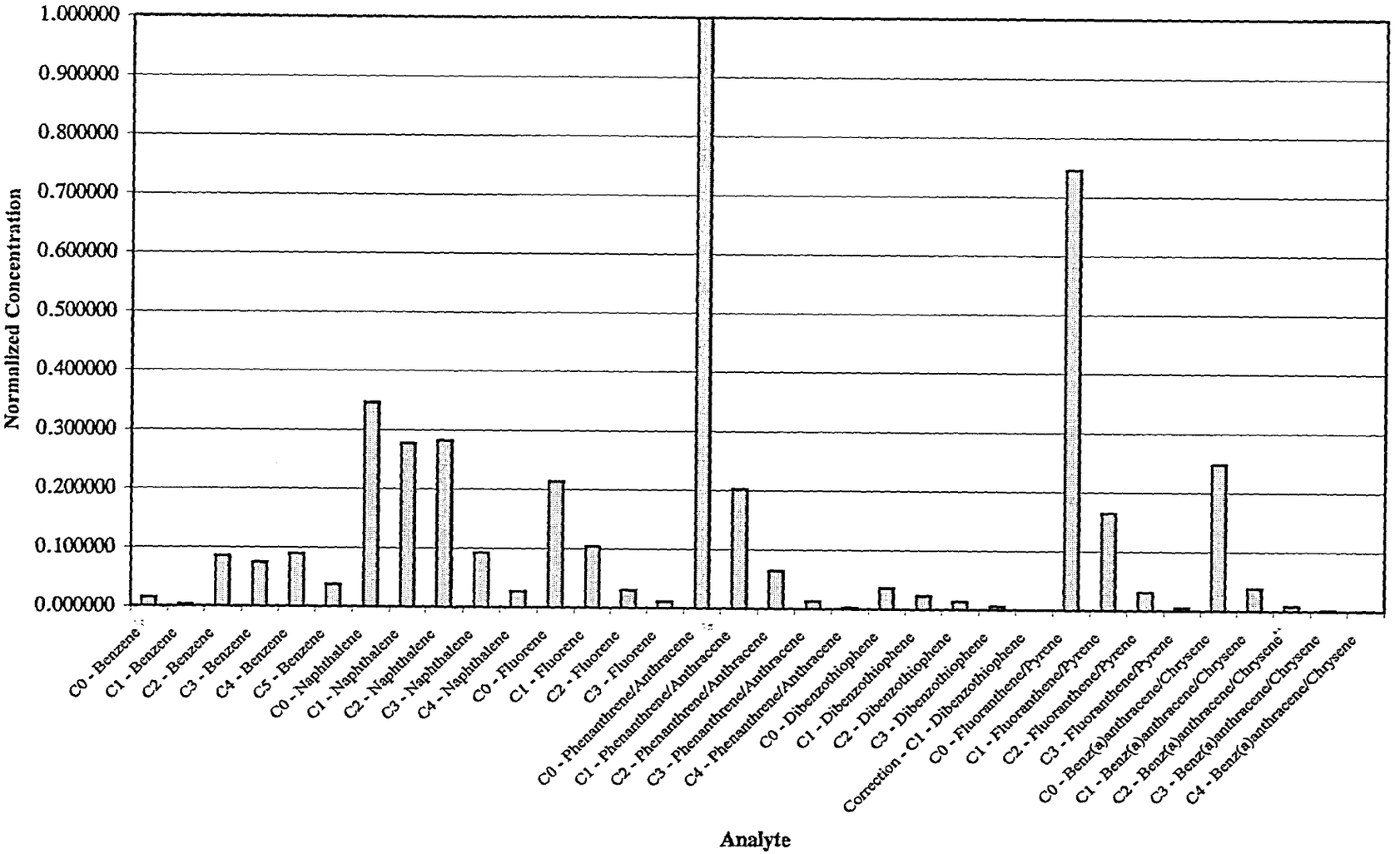
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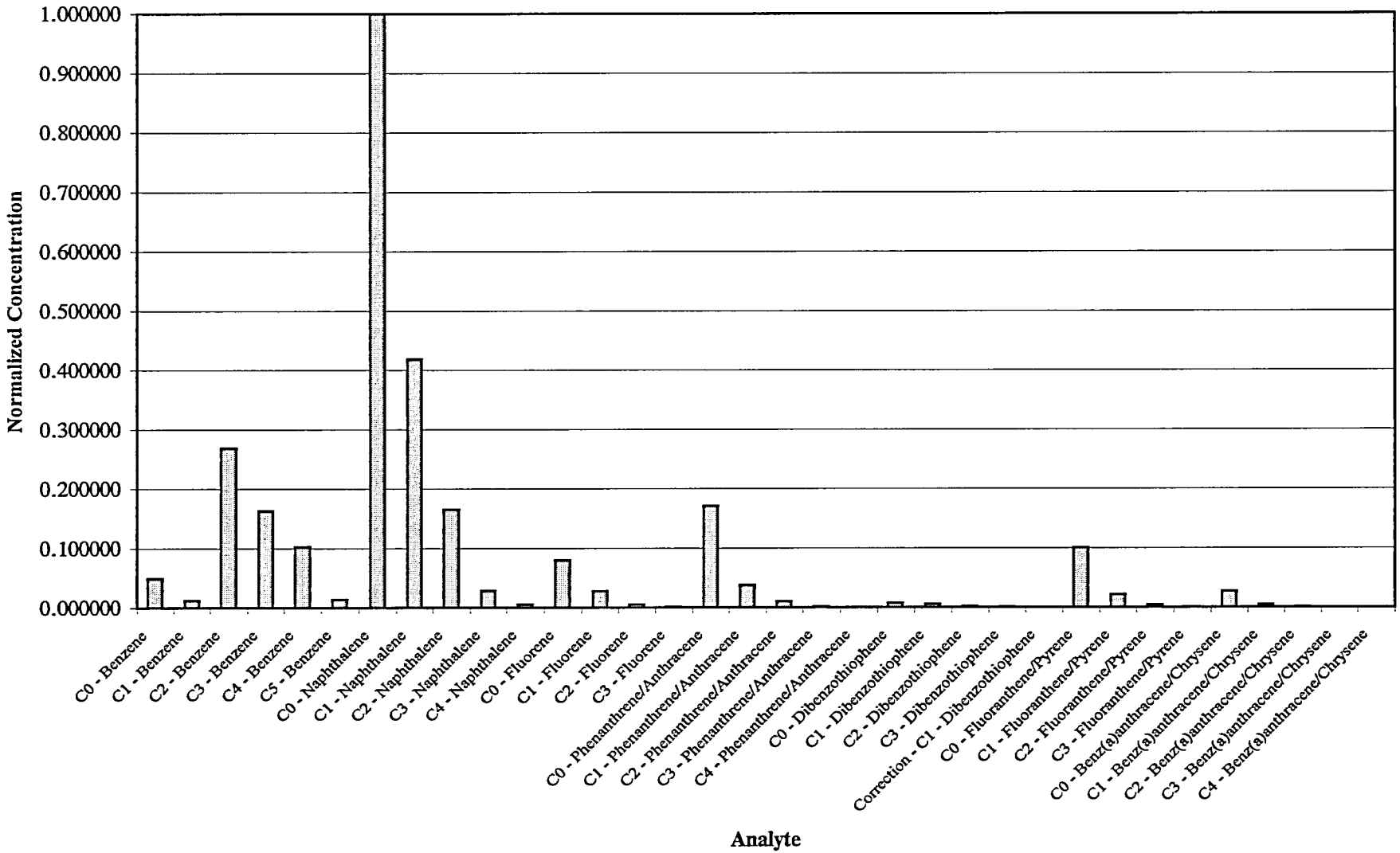
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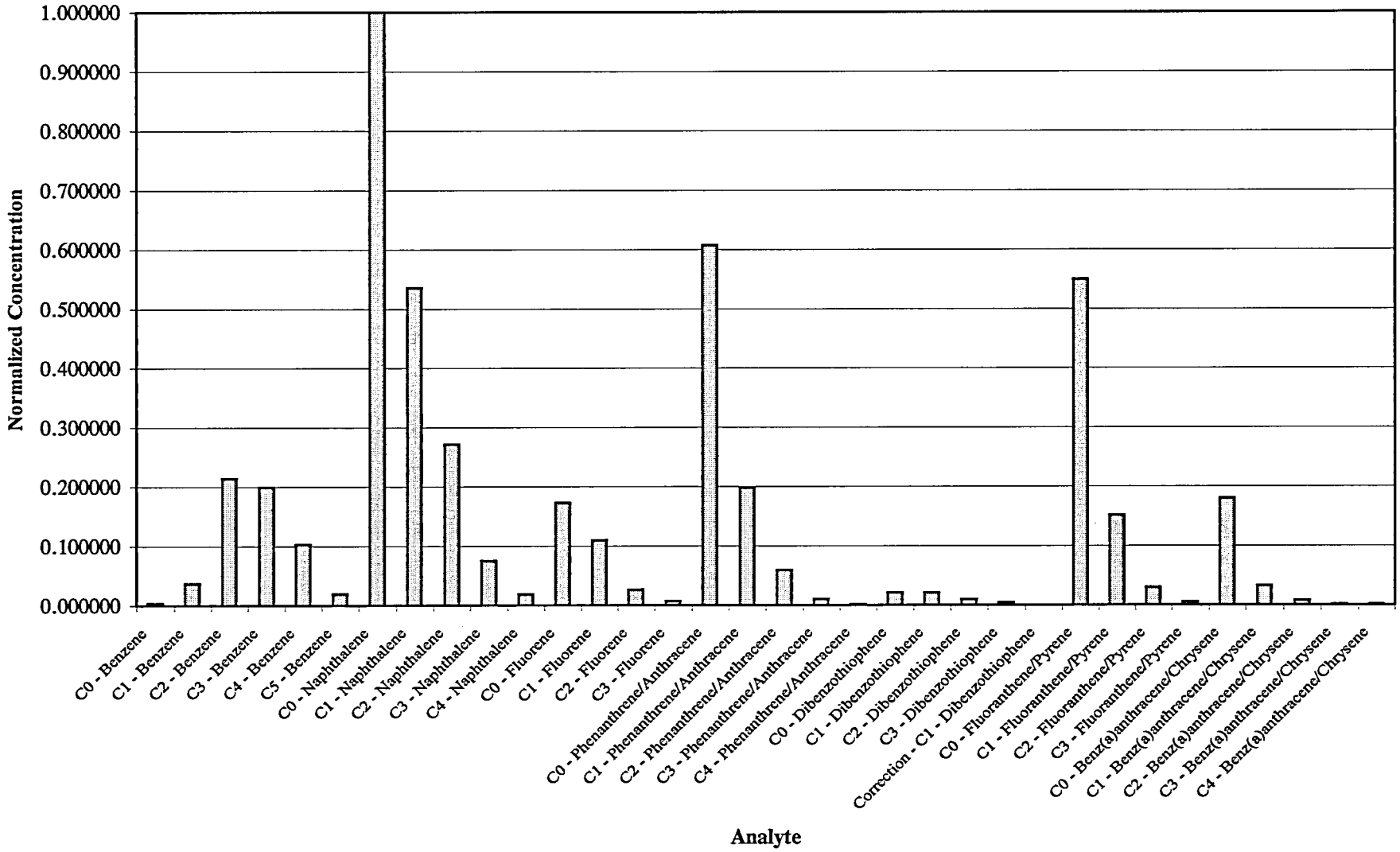
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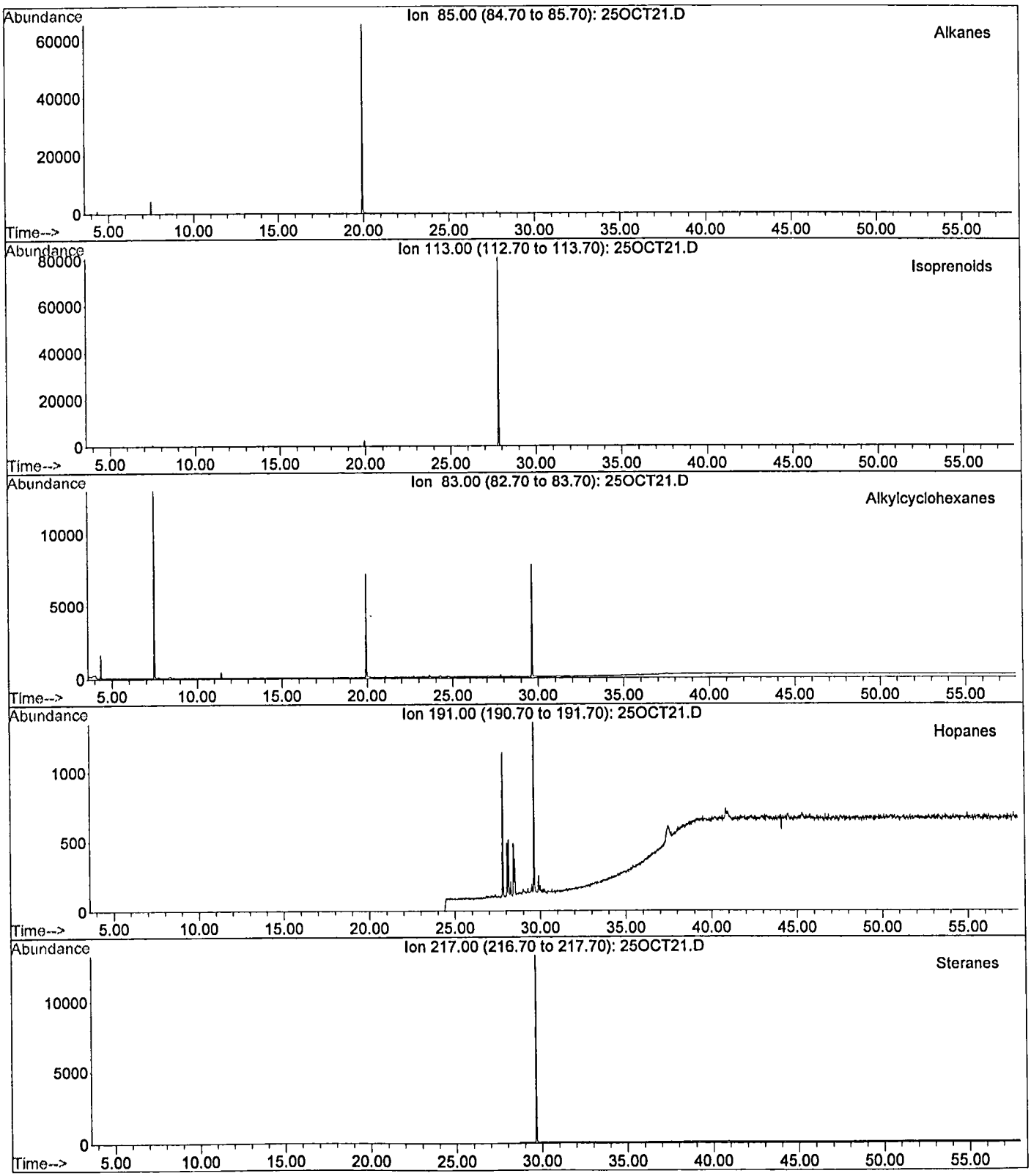


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Appendix E

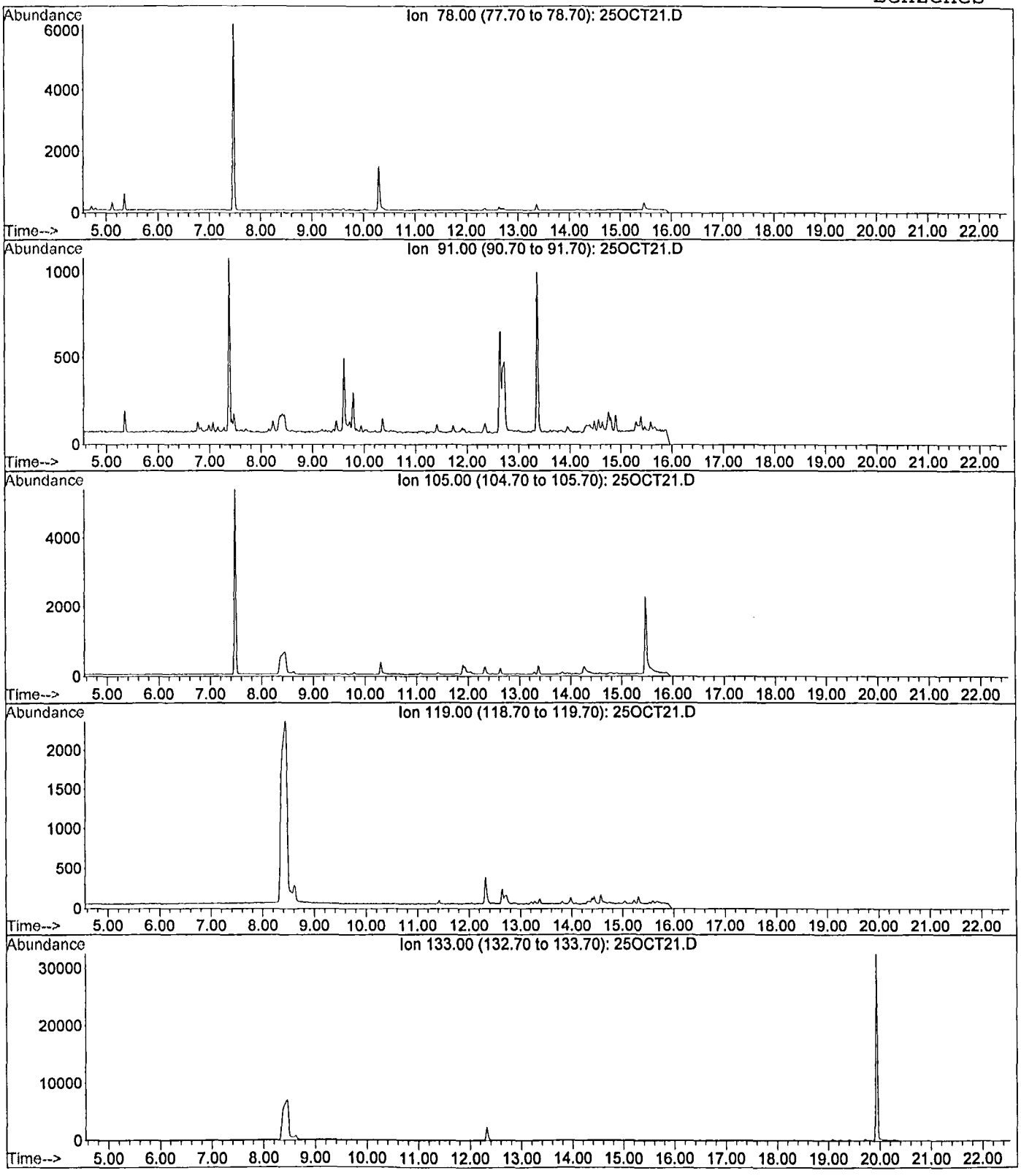
Extracted Ion Current Profiles (EICs)

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Instrument: GC/MS Ins Operator: KP



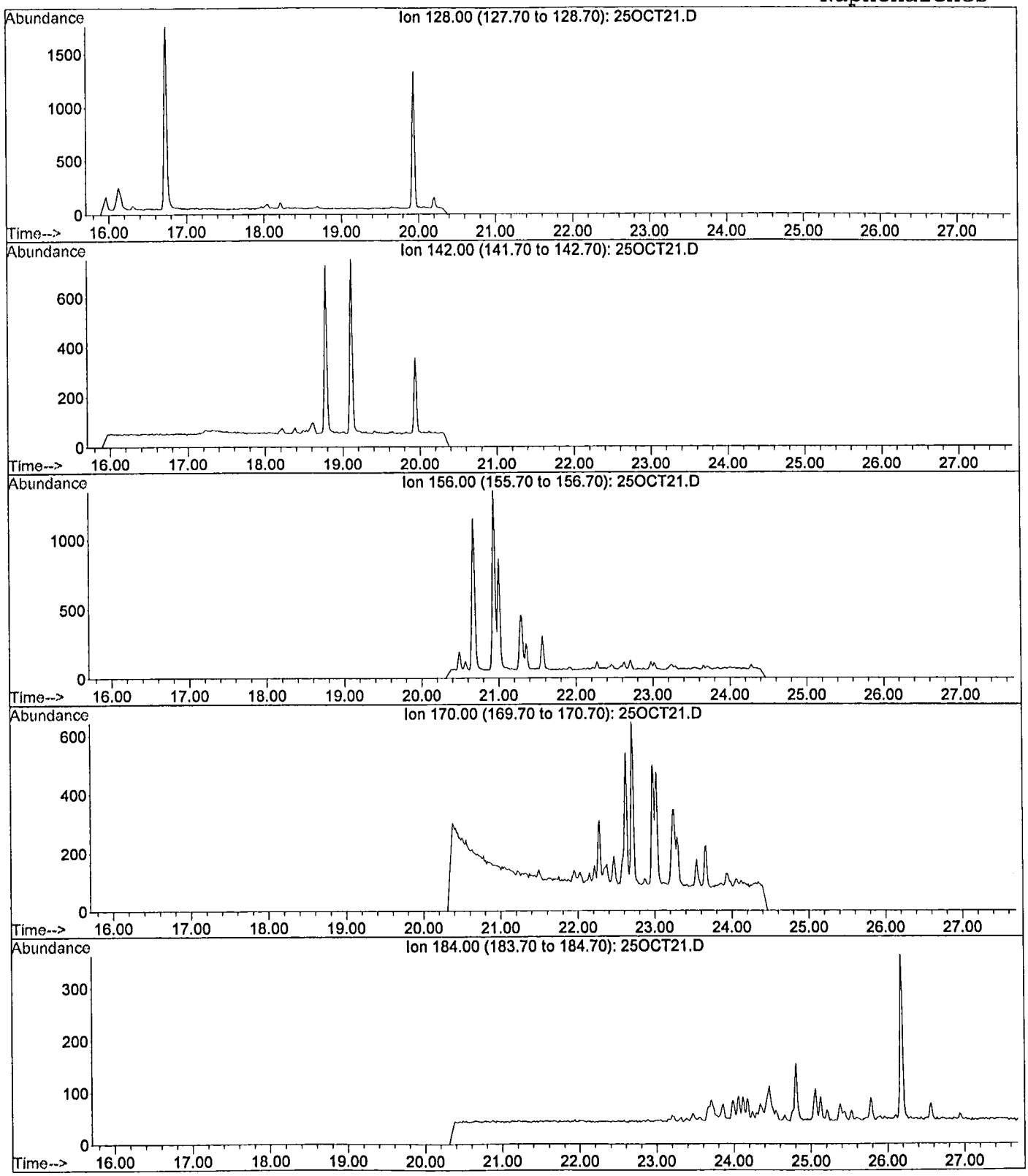
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Benzenes



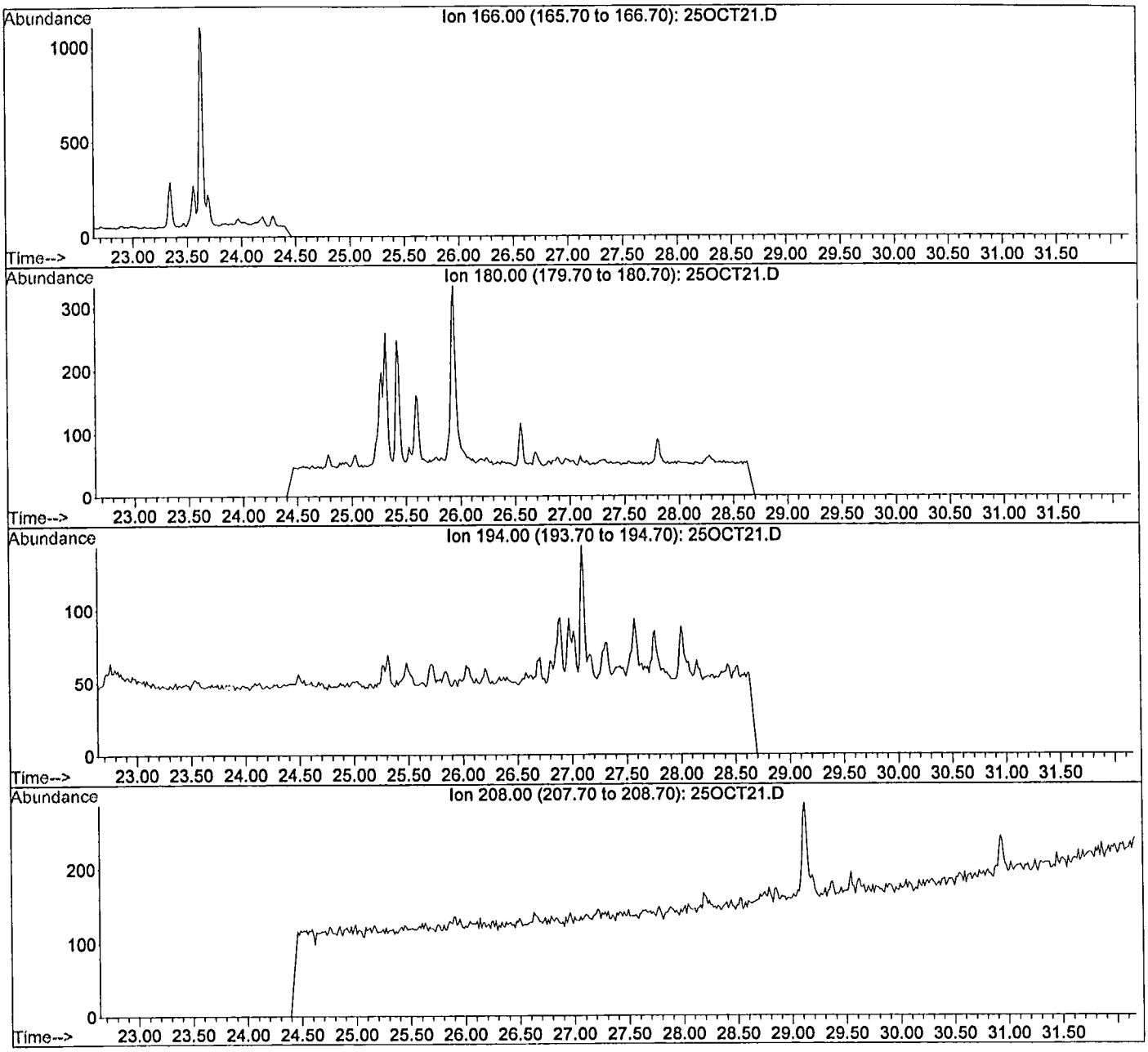
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Naphthalenes



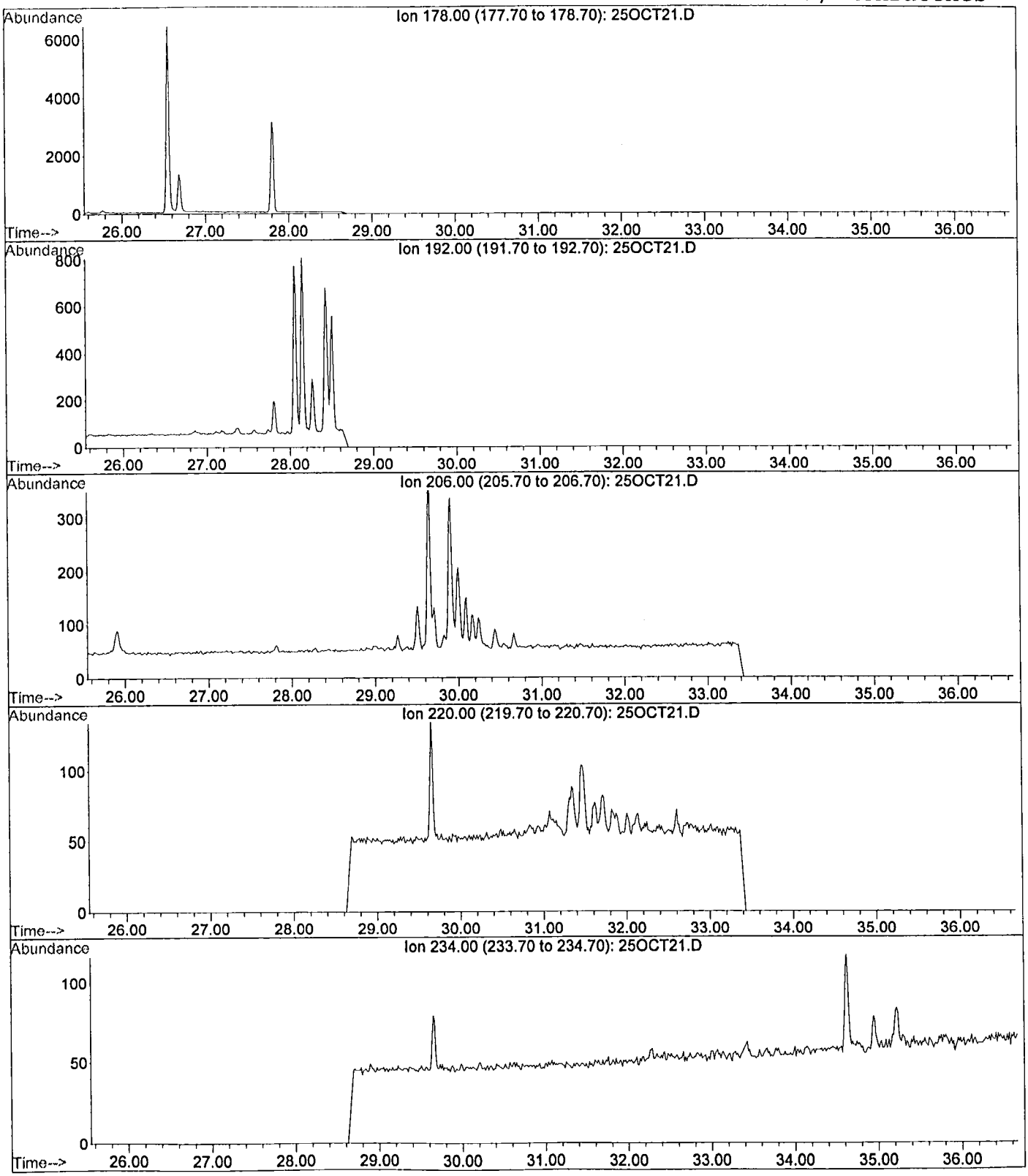
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Fluorenes



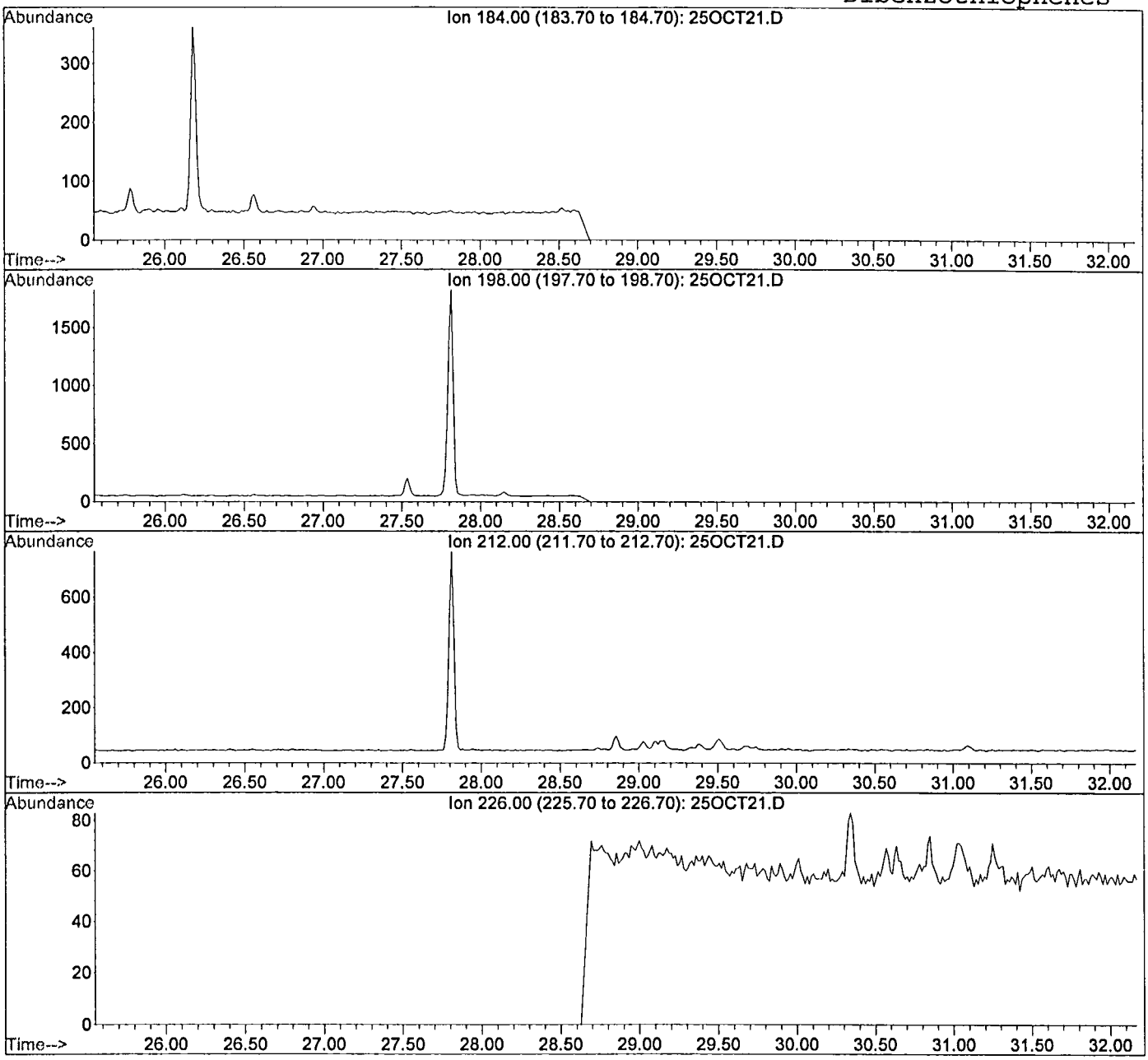
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Instrument: GC/MS Ins Operator: KP

Phenanthrenes/Anthracenes



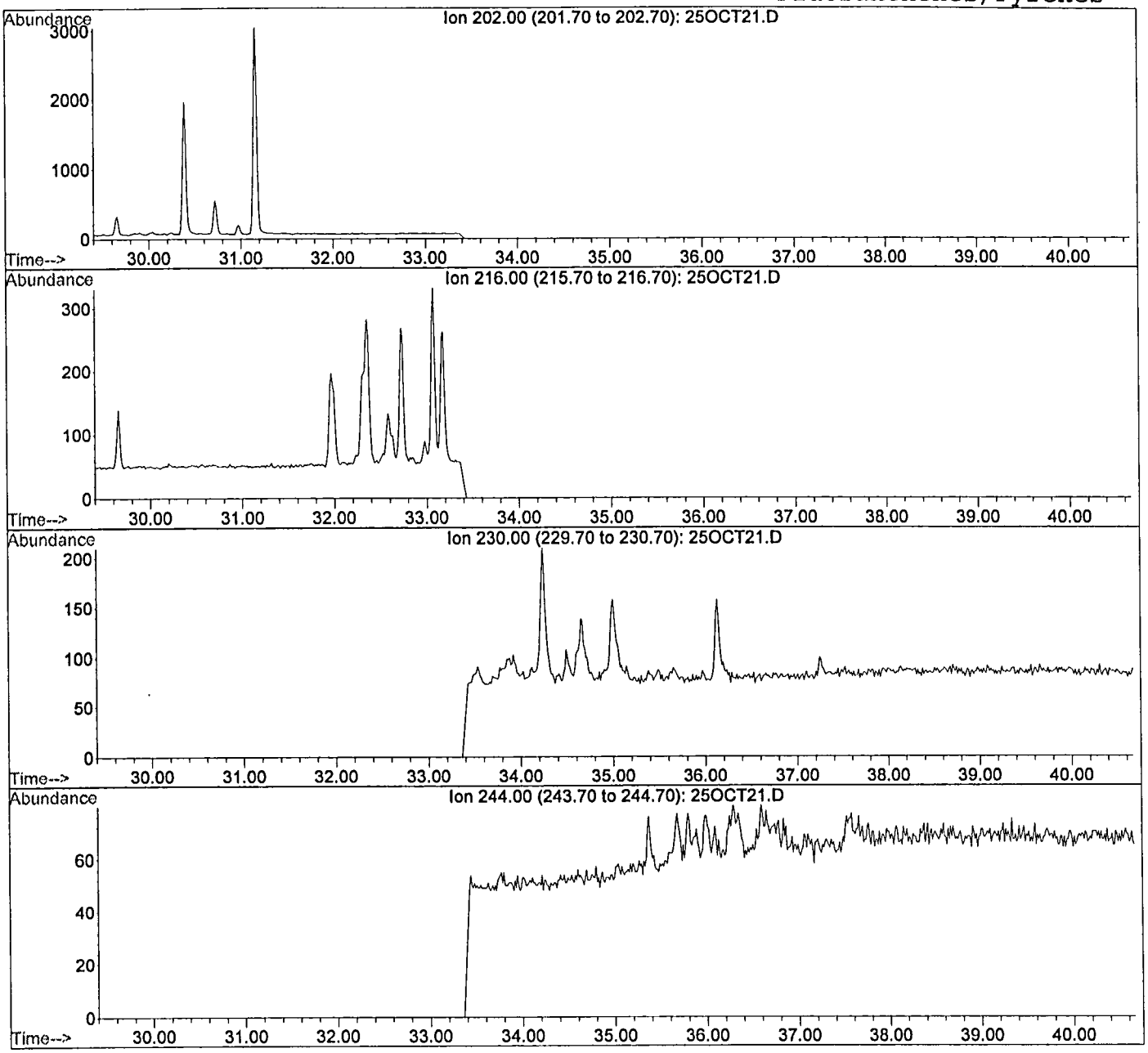
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Instrument: GC/MS Ins Operator: KP

Dibenzothiophenes



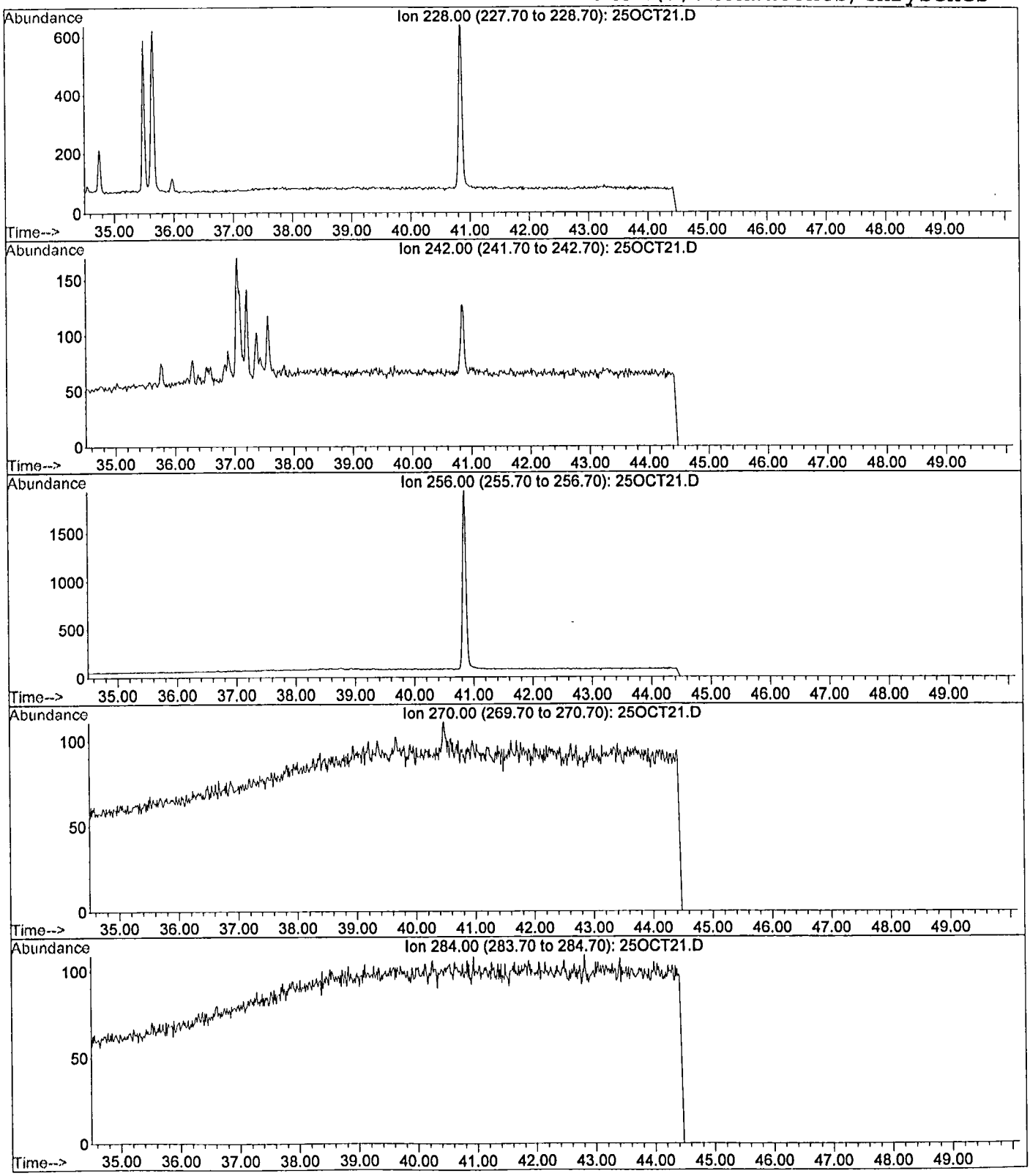
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Fluoranthenes/Pyrenes

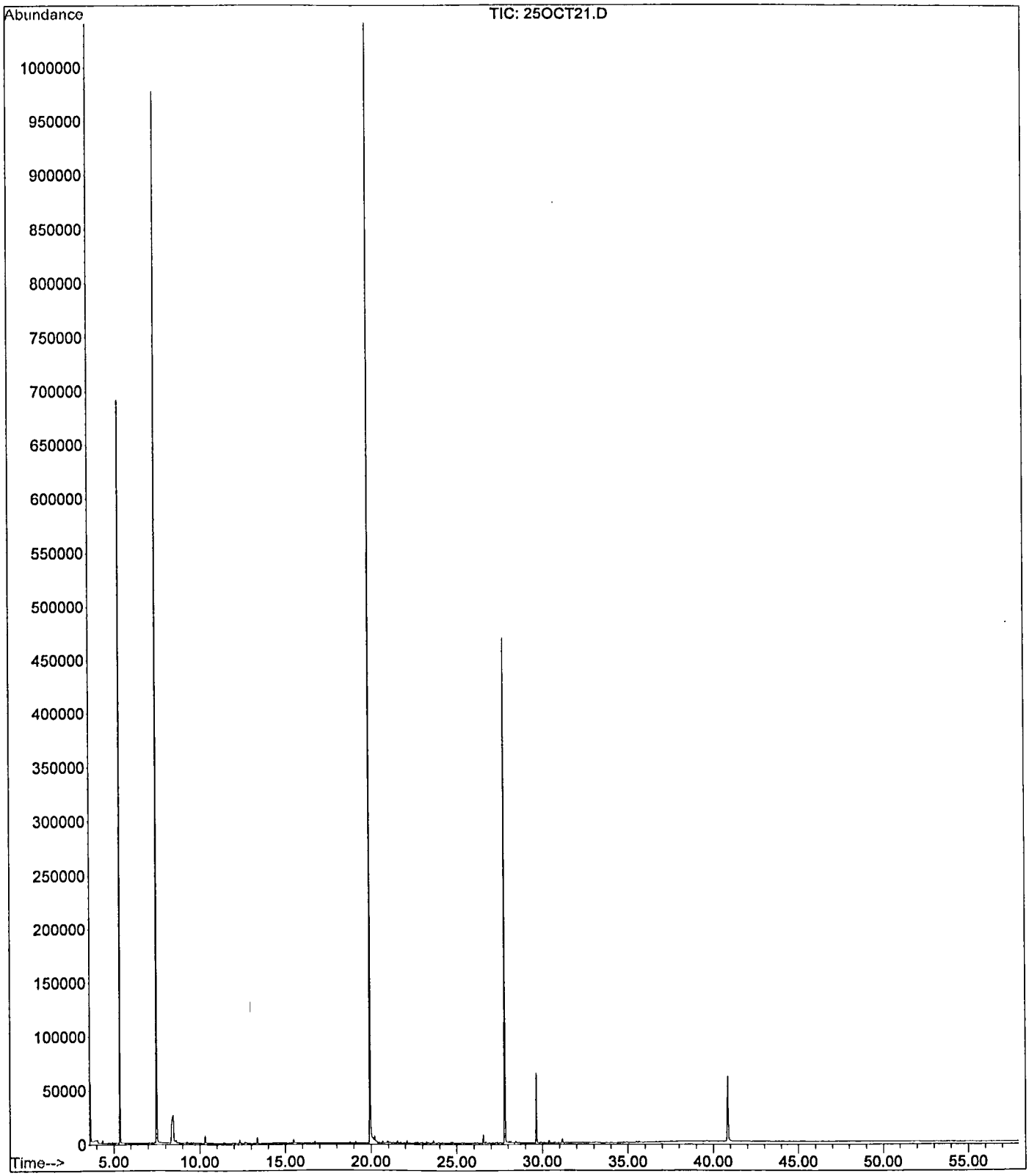


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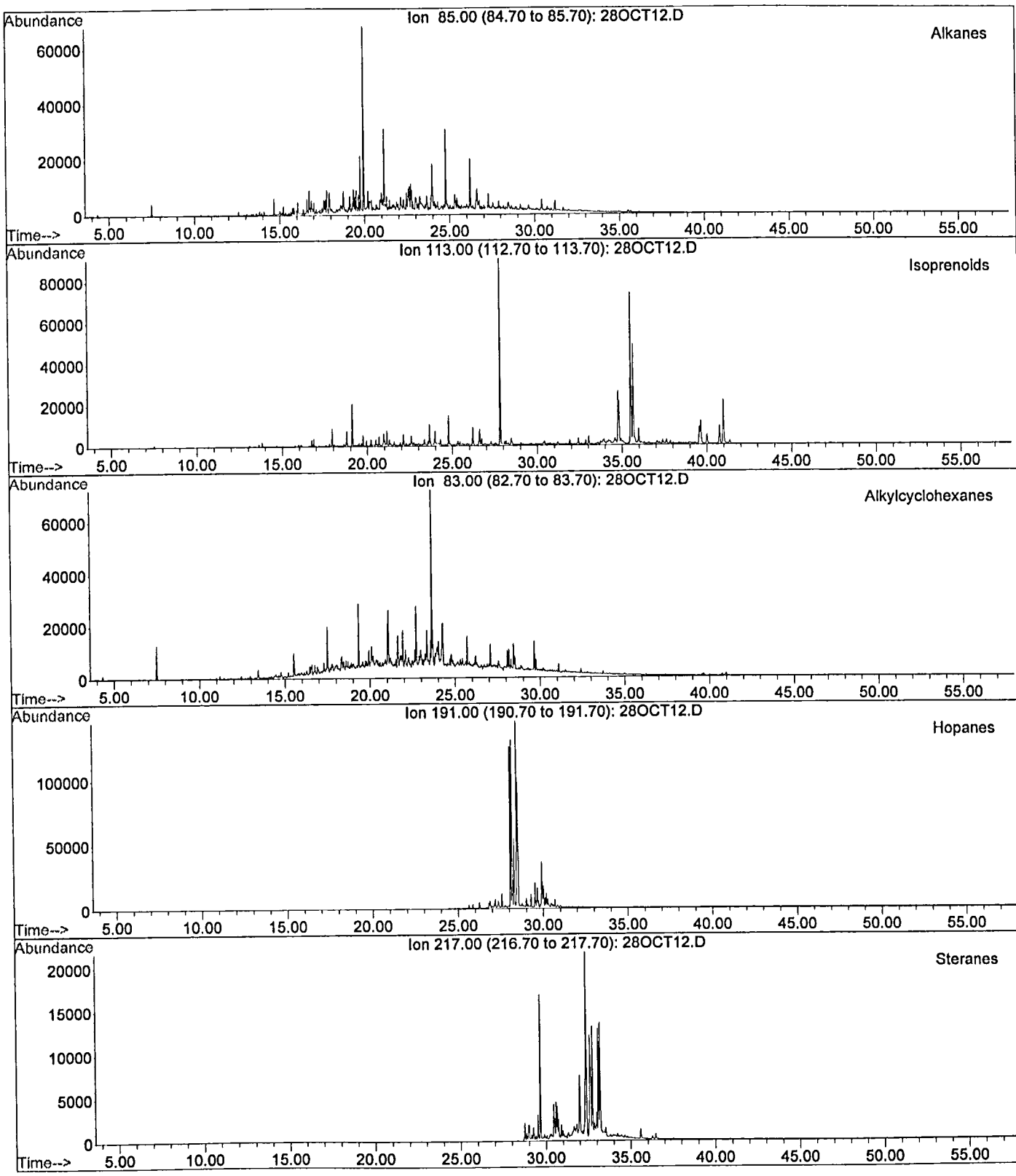
Benz(a)anthracenes/Chrysenes



Field ID:
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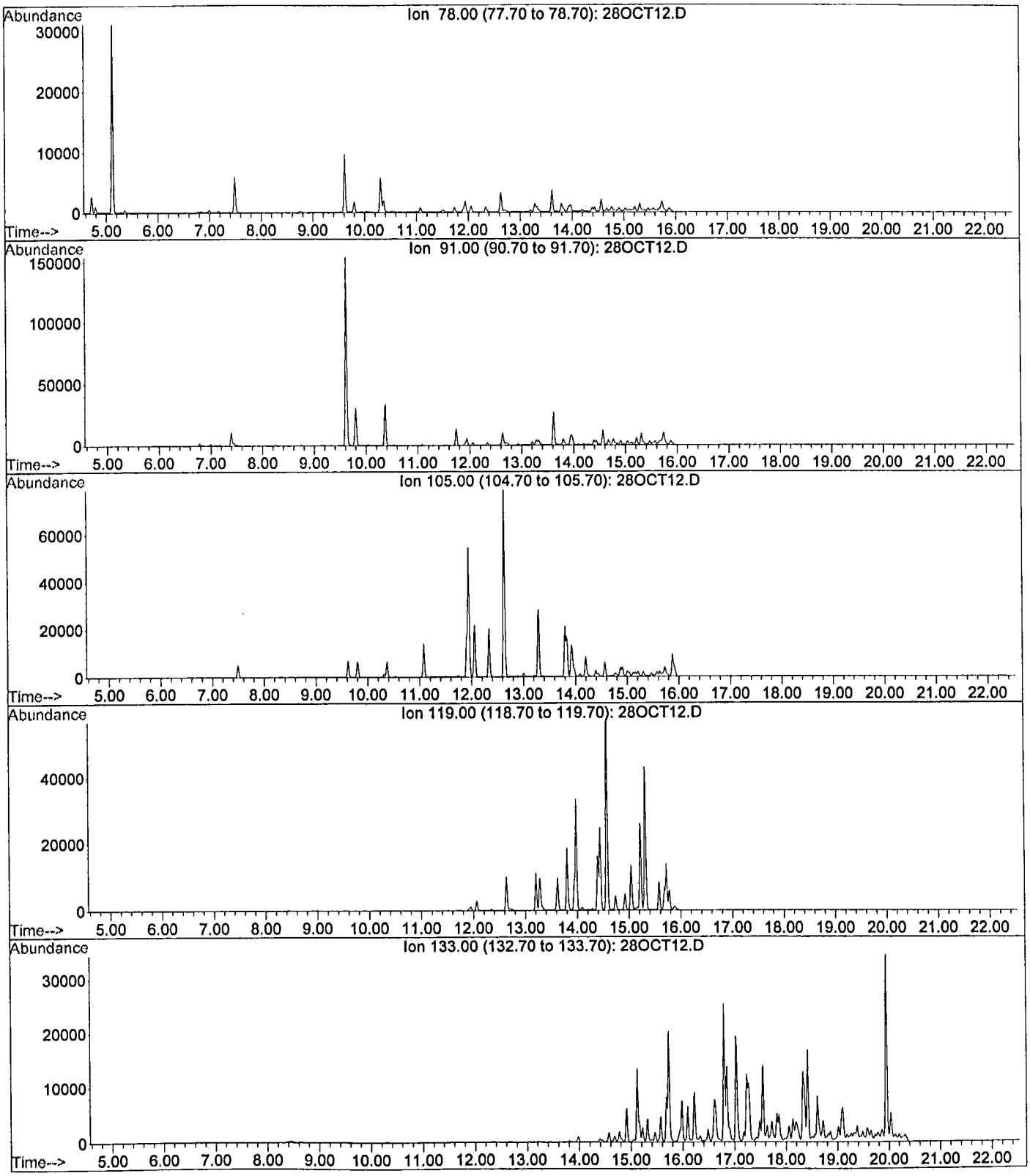


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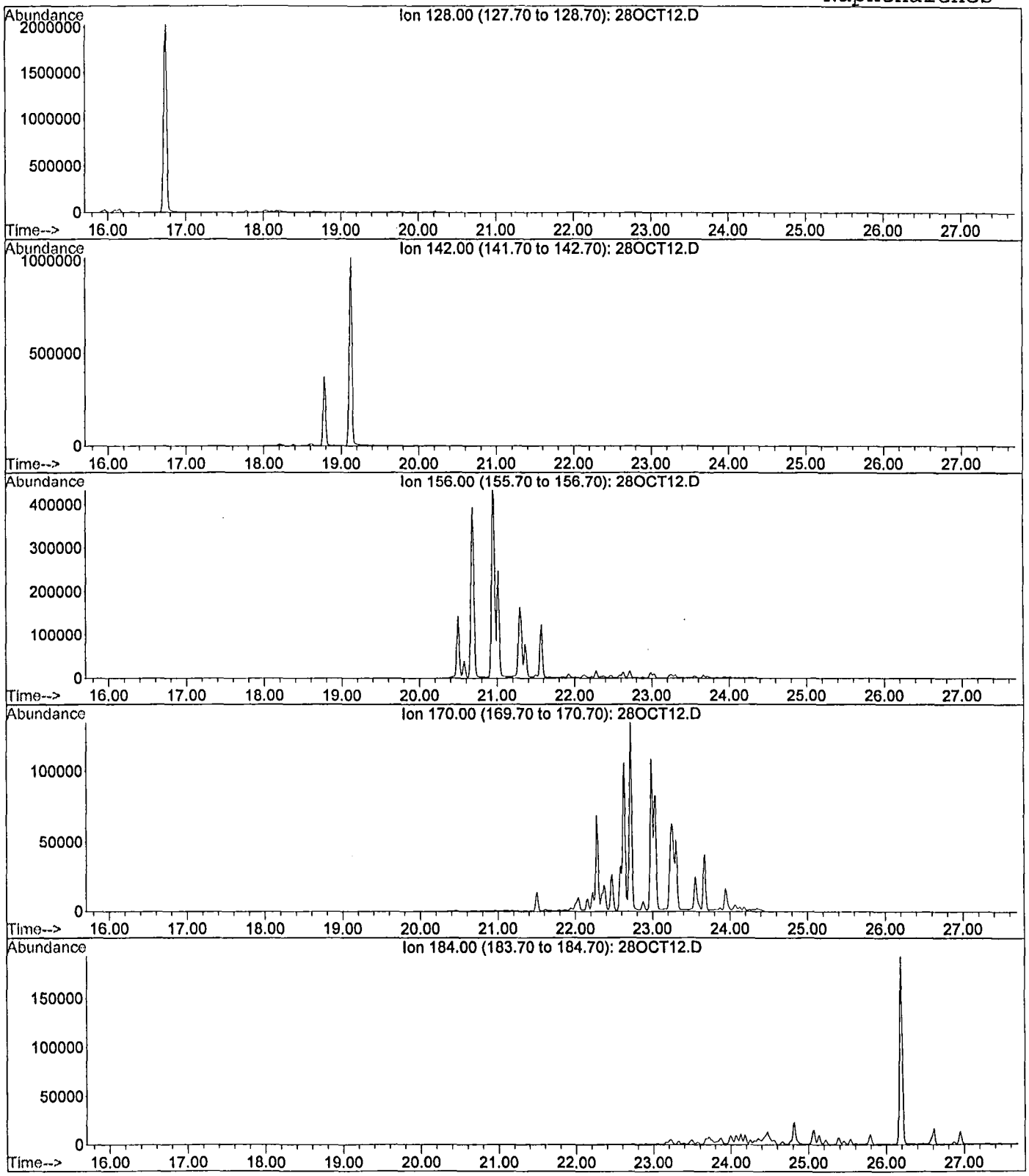
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Instrument: GC/MS Ins Operator: KP

Benzenes



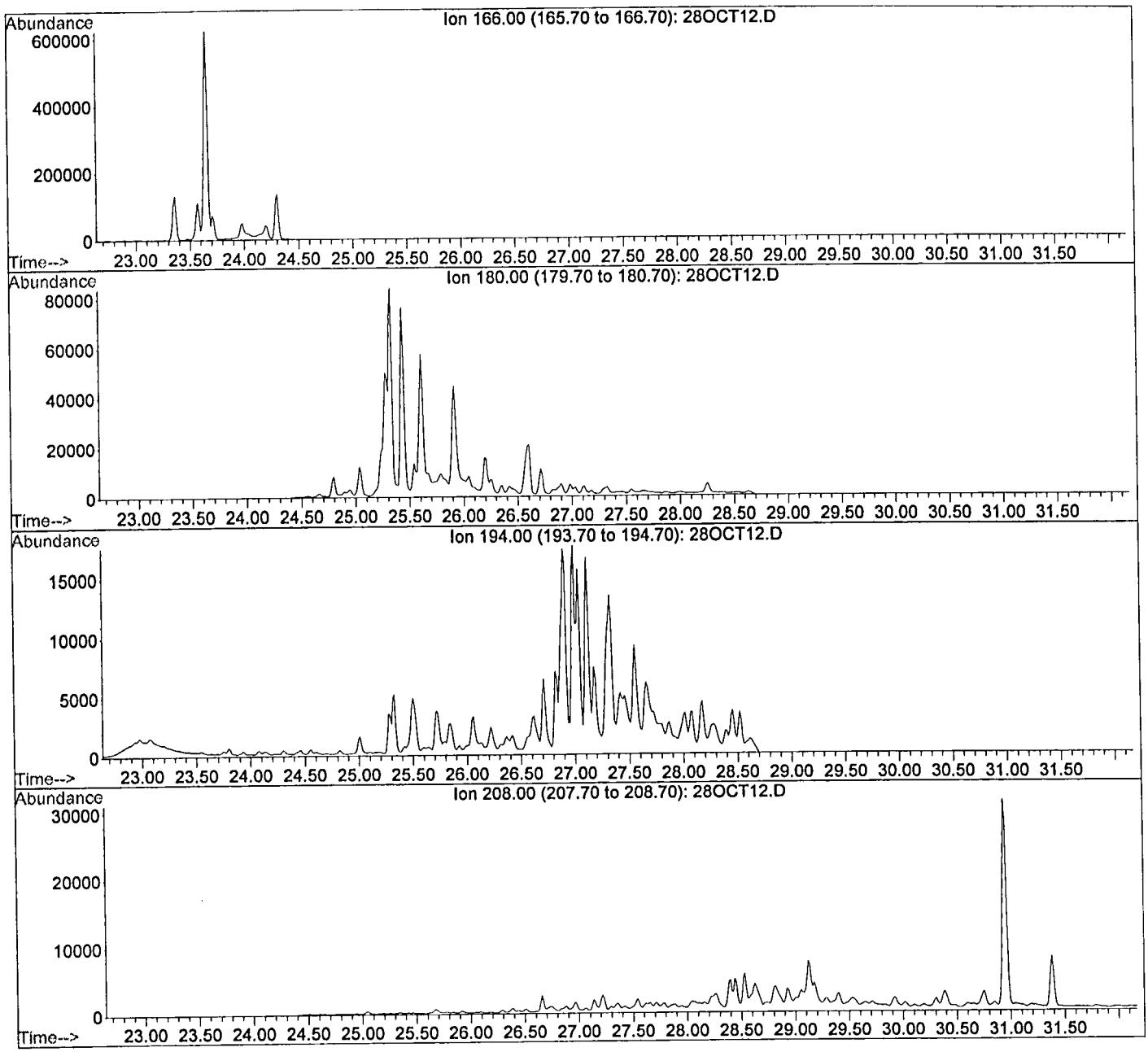
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Instrument: GC/MS Ins Operator: KP

Naphthalenes



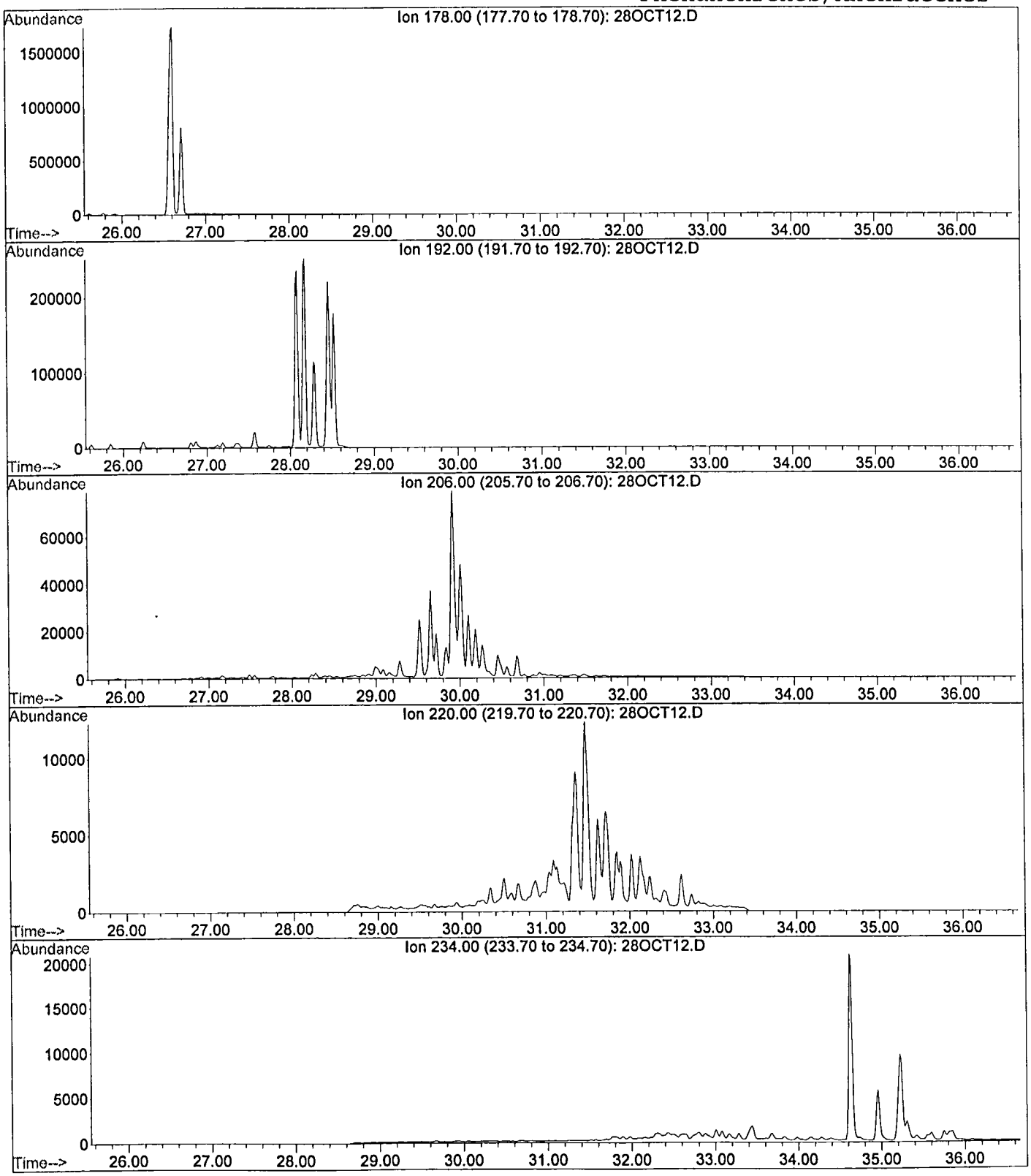
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Instrument: GC/MS Ins Operator: KP

Fluorenes



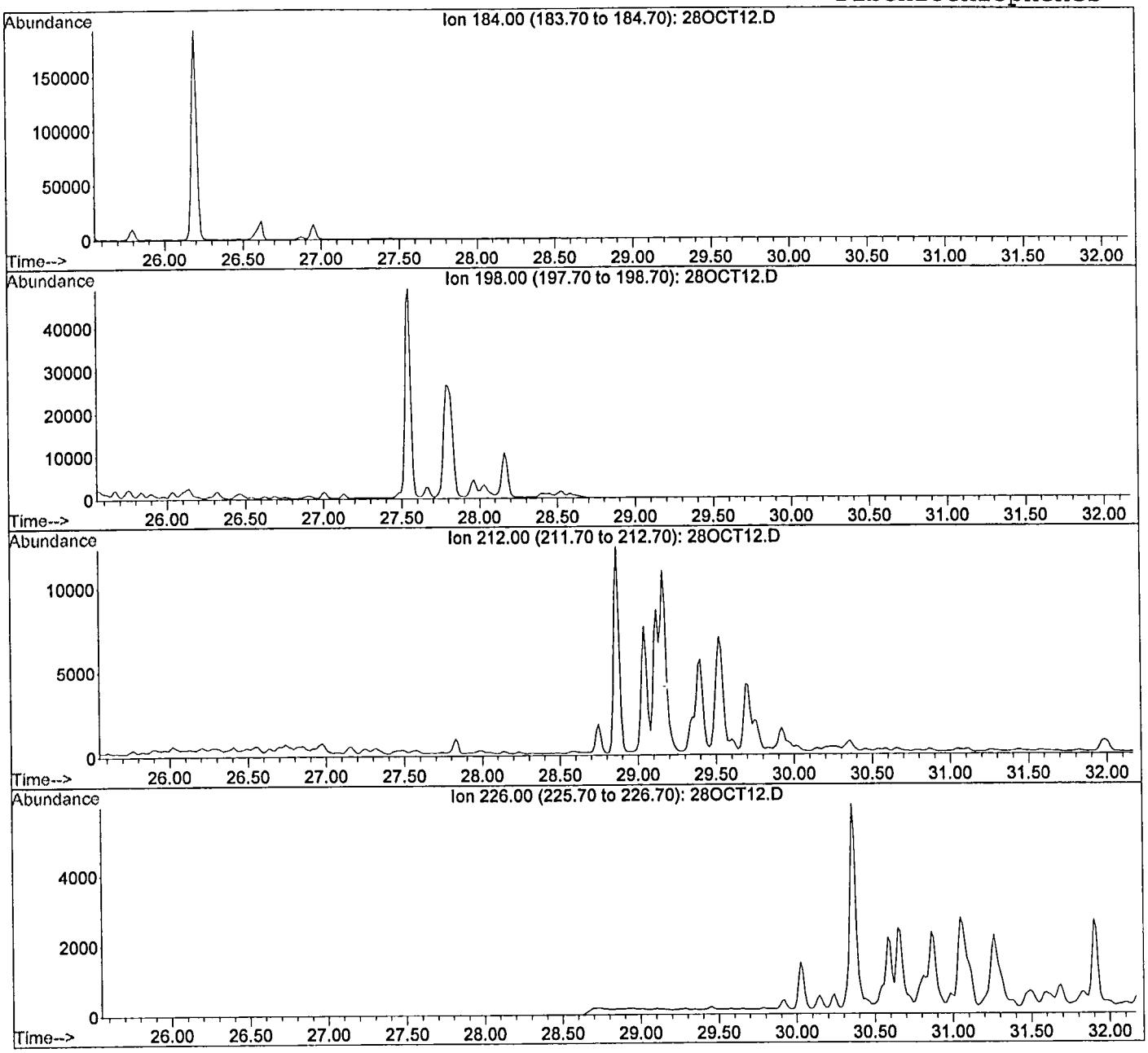
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Instrument: GC/MS Ins Operator: KP

Phenanthrenes/Anthracenes



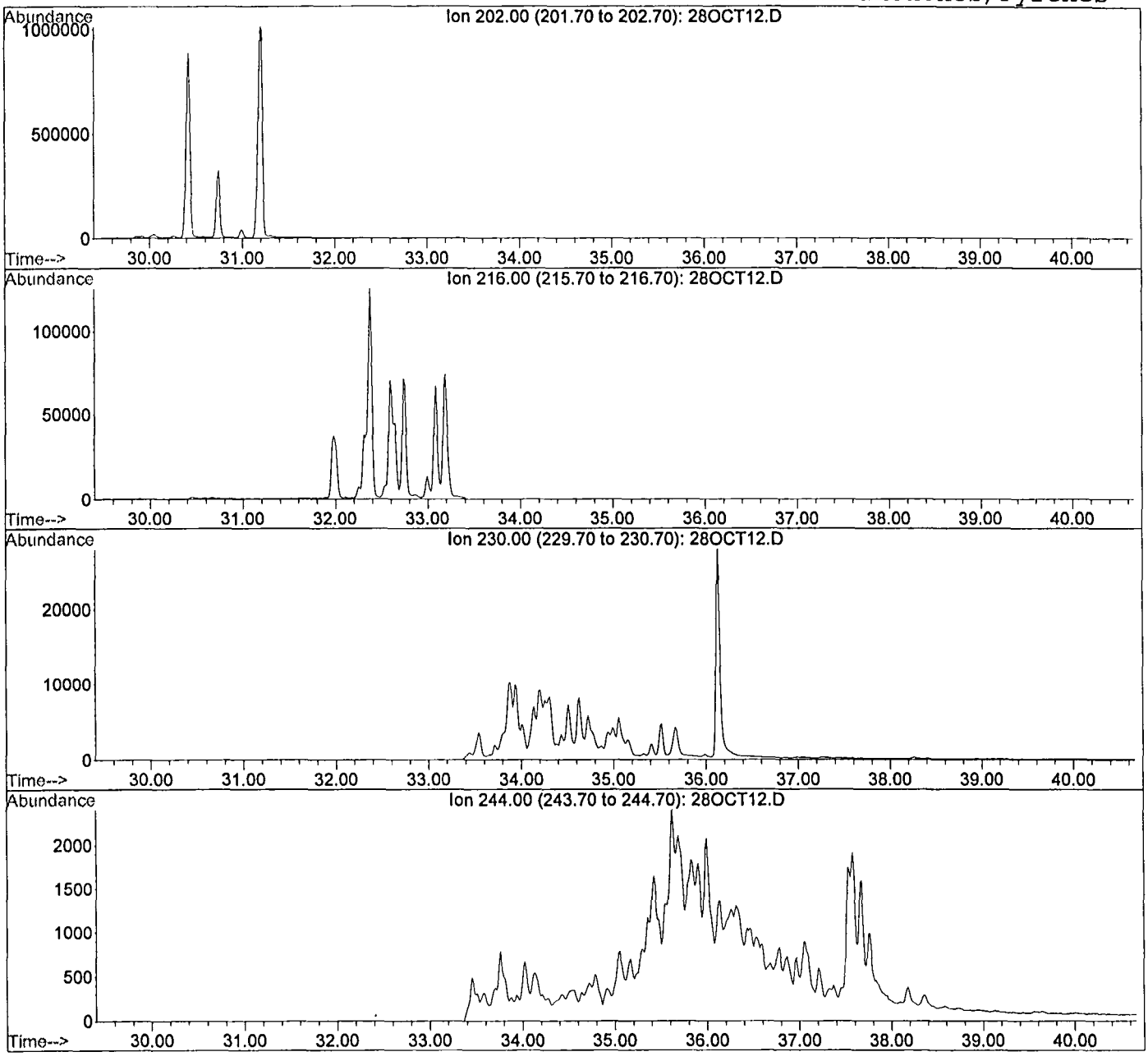
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Dibenzothiophenes



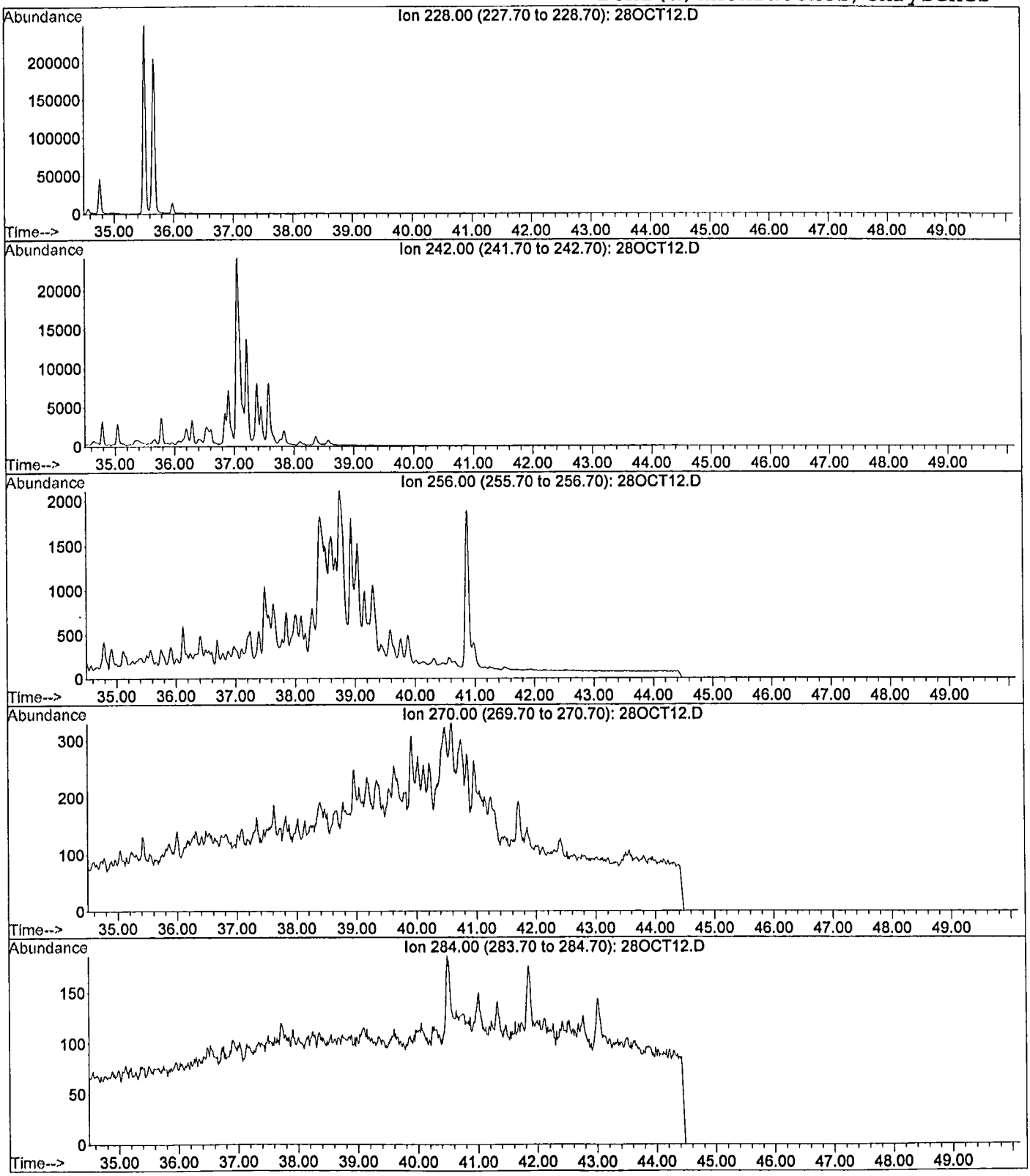
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Instrument: GC/MS Ins Operator: KP

Fluoranthenes/Pyrenes

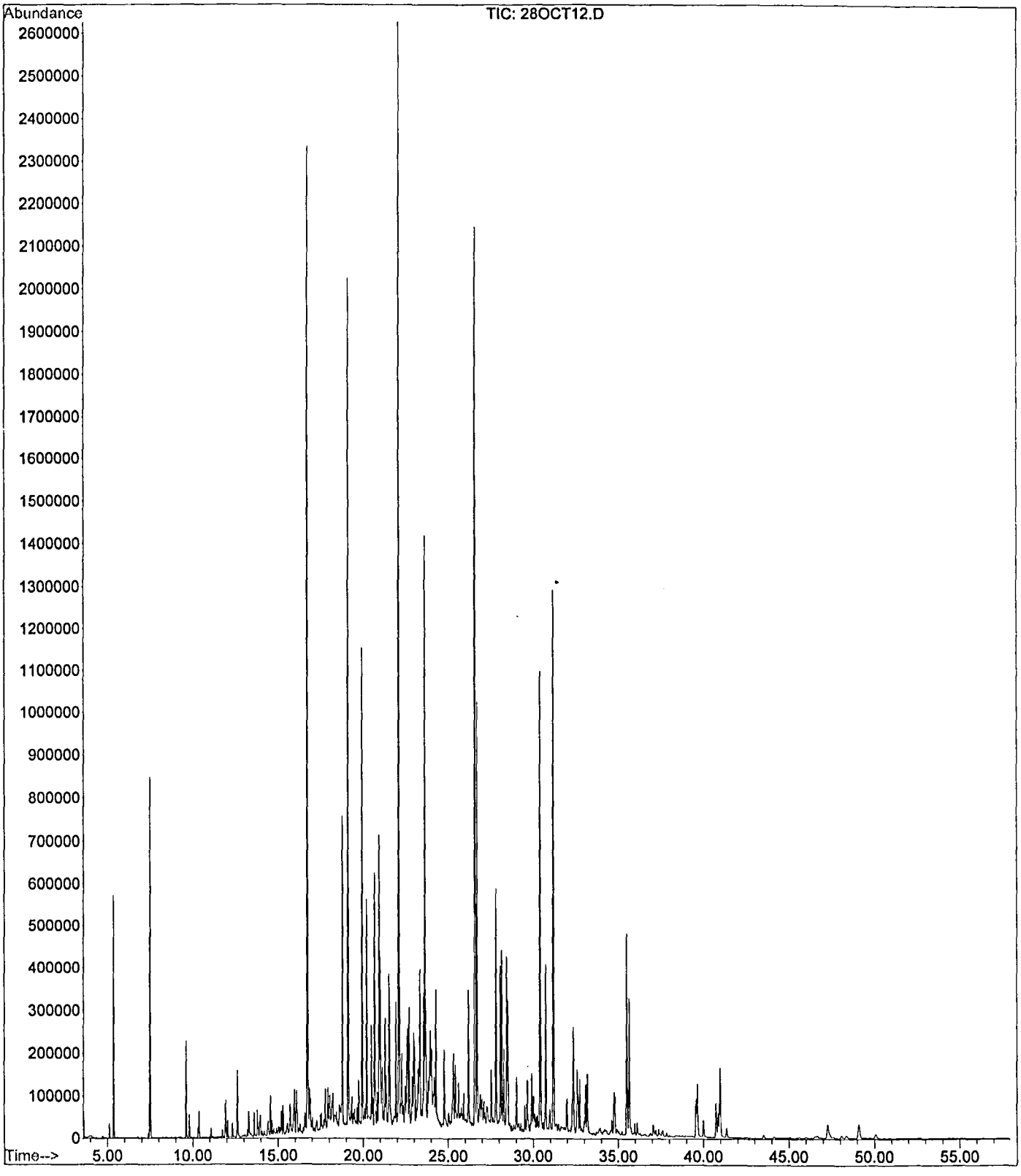


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Instrument: GC/MS Ins Operator: KP

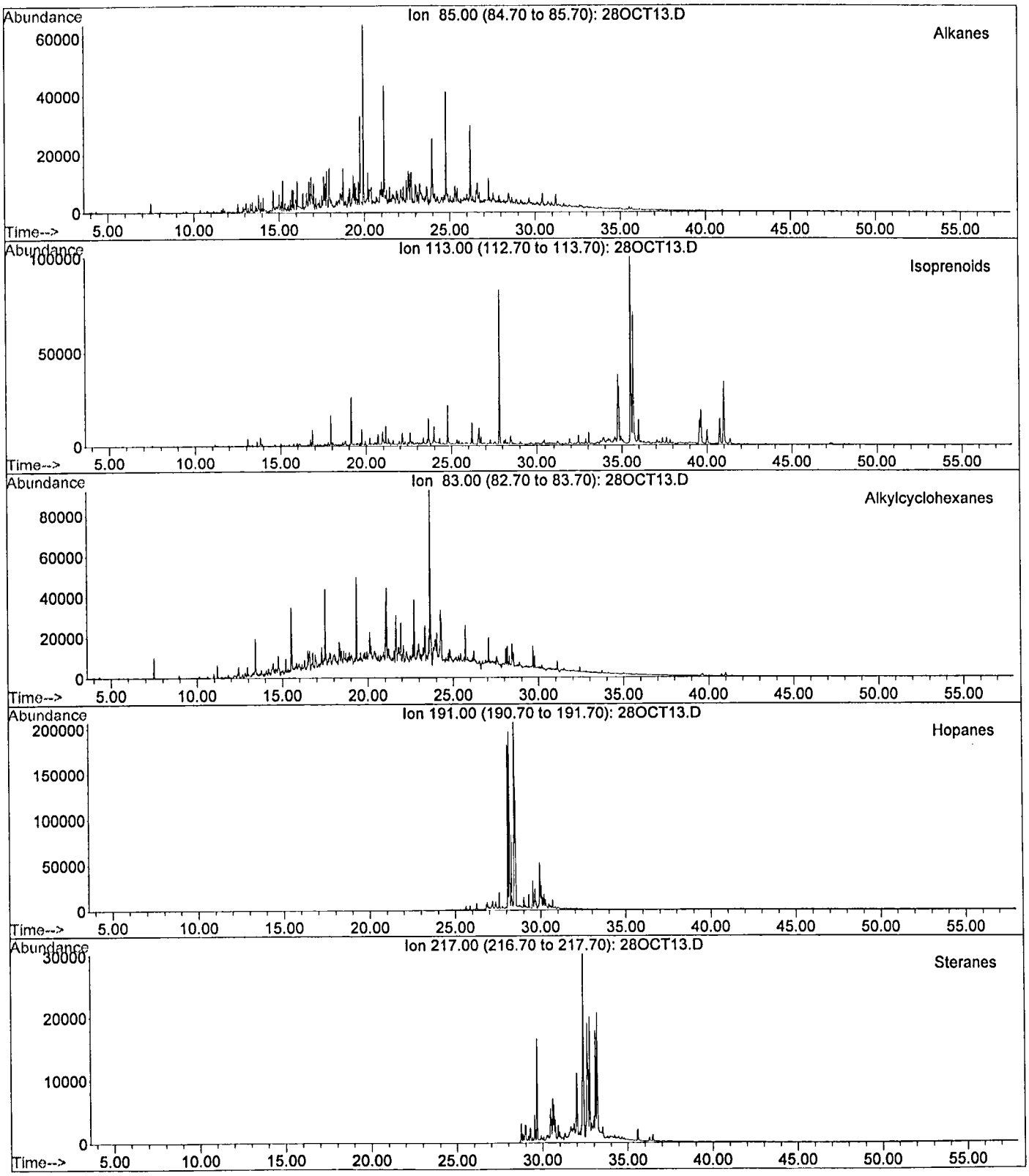
Benz(a)anthracenes/Chrysenes



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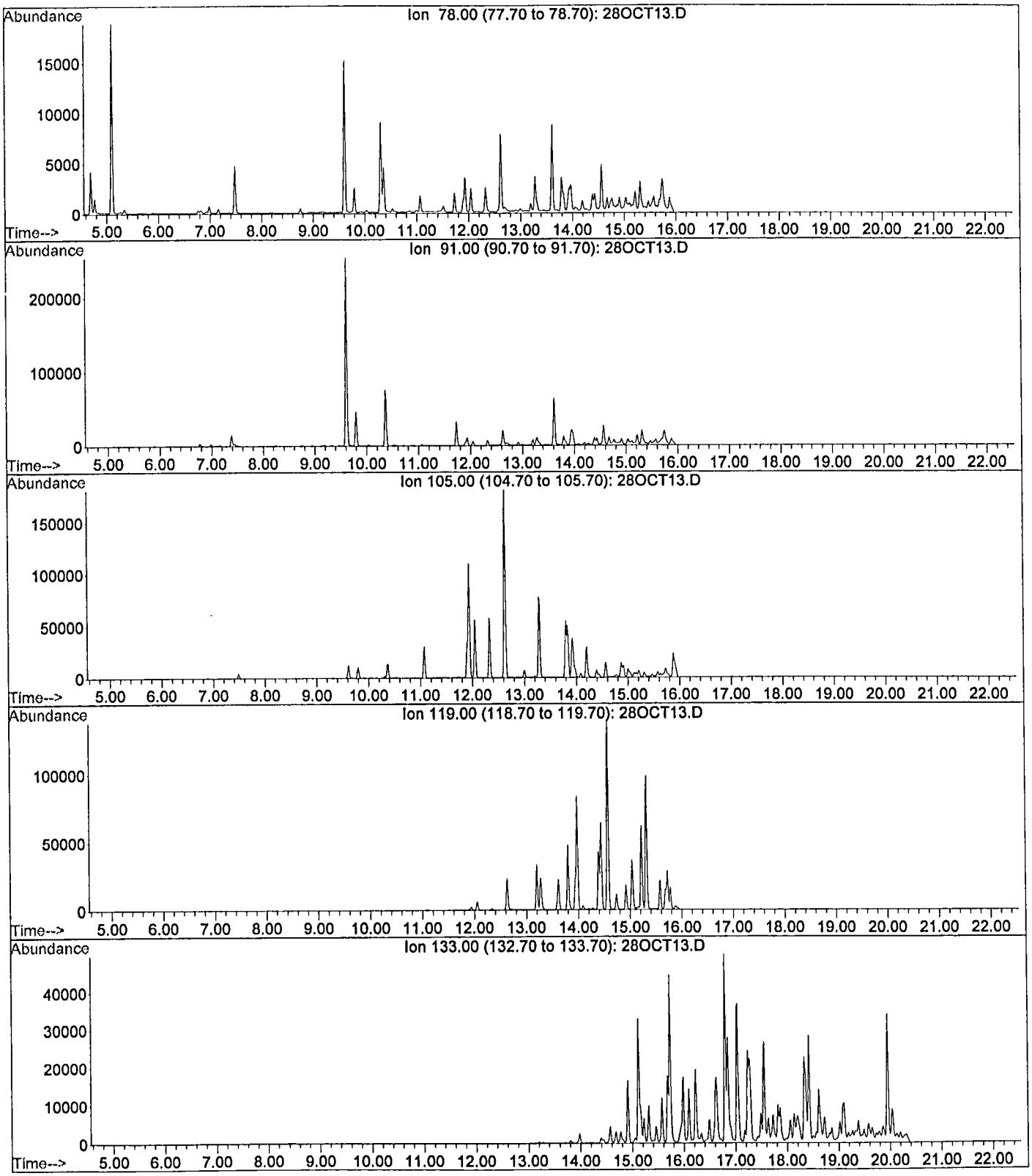


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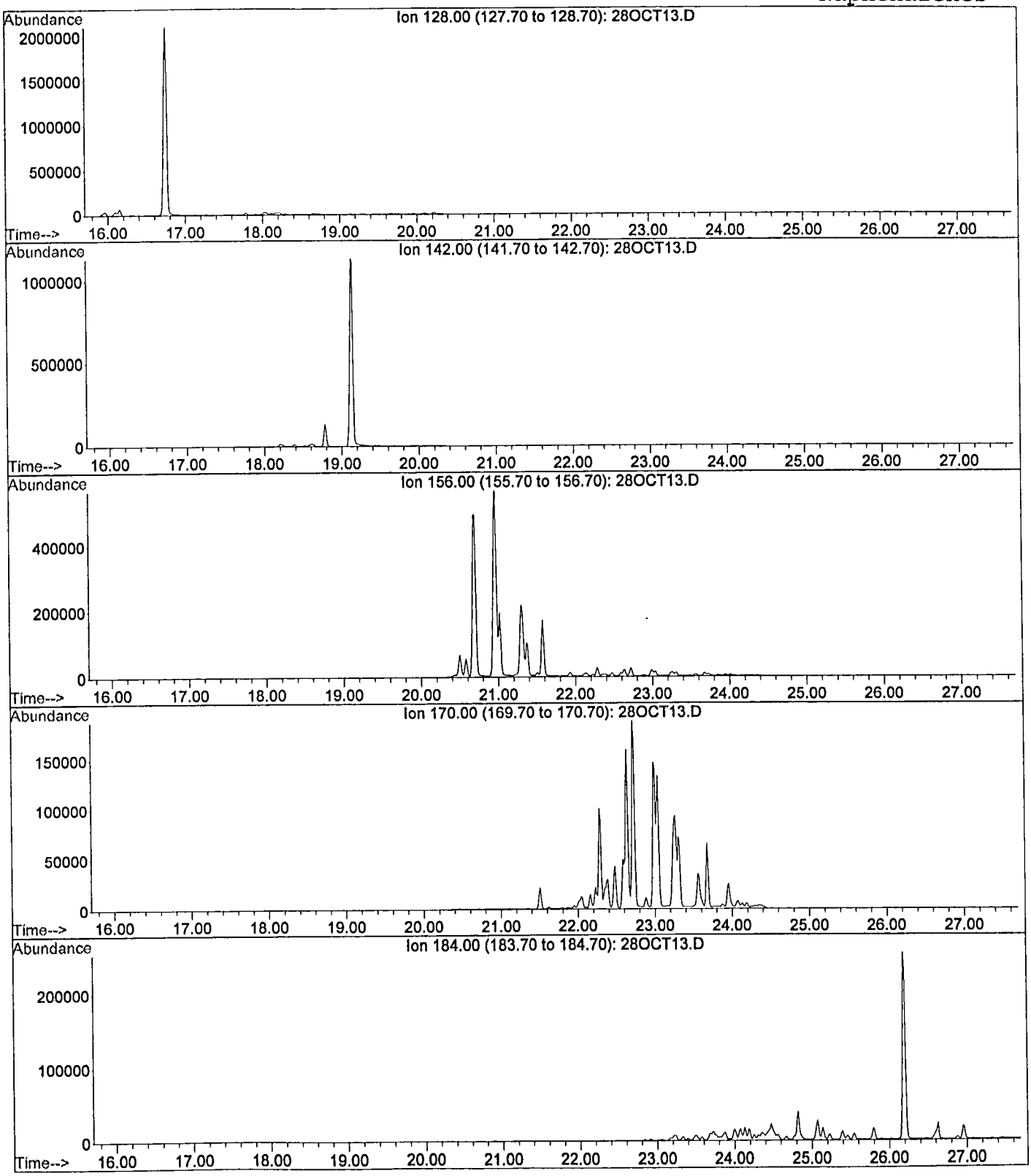
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Benzenes



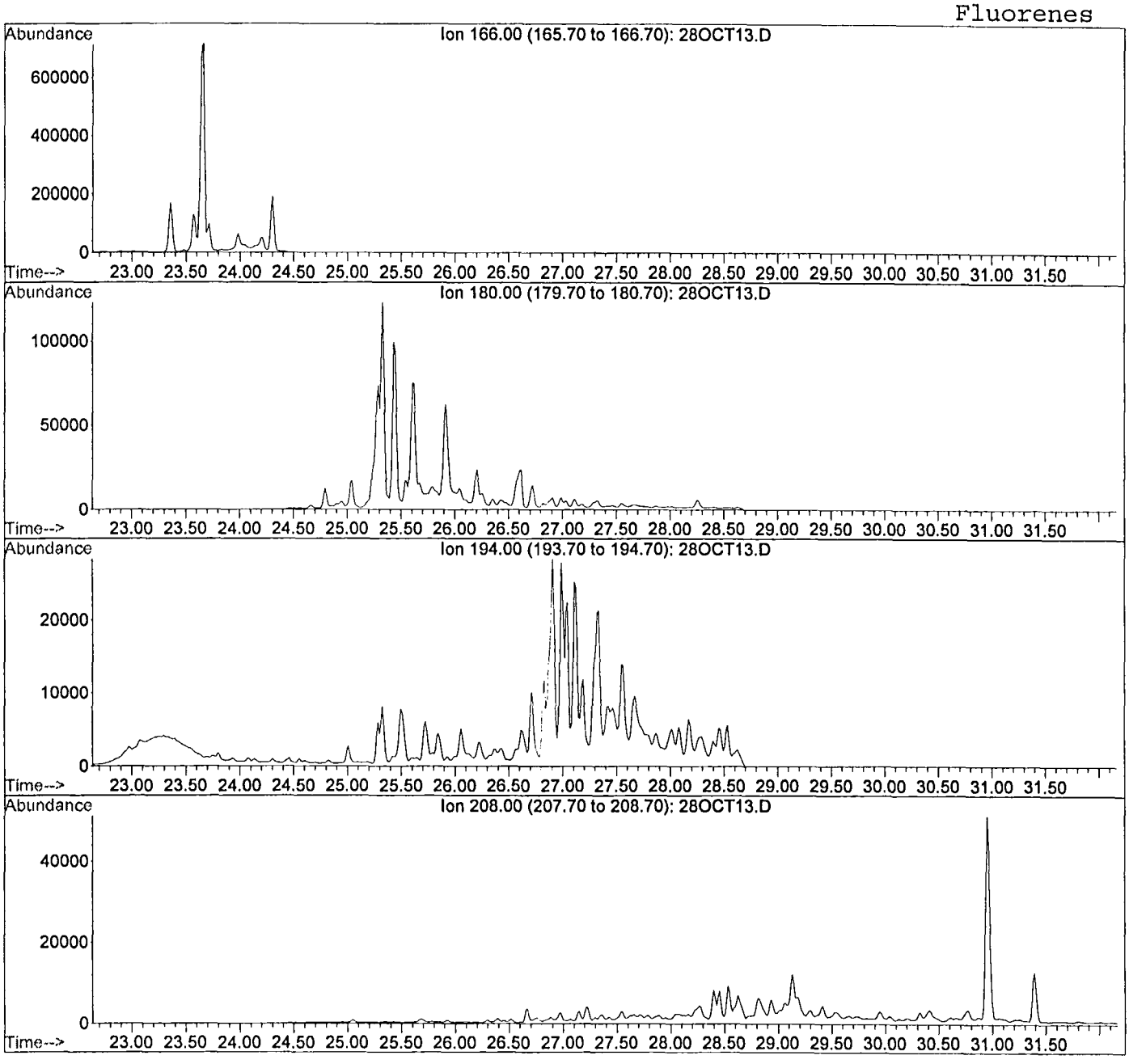
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Naphthalenes



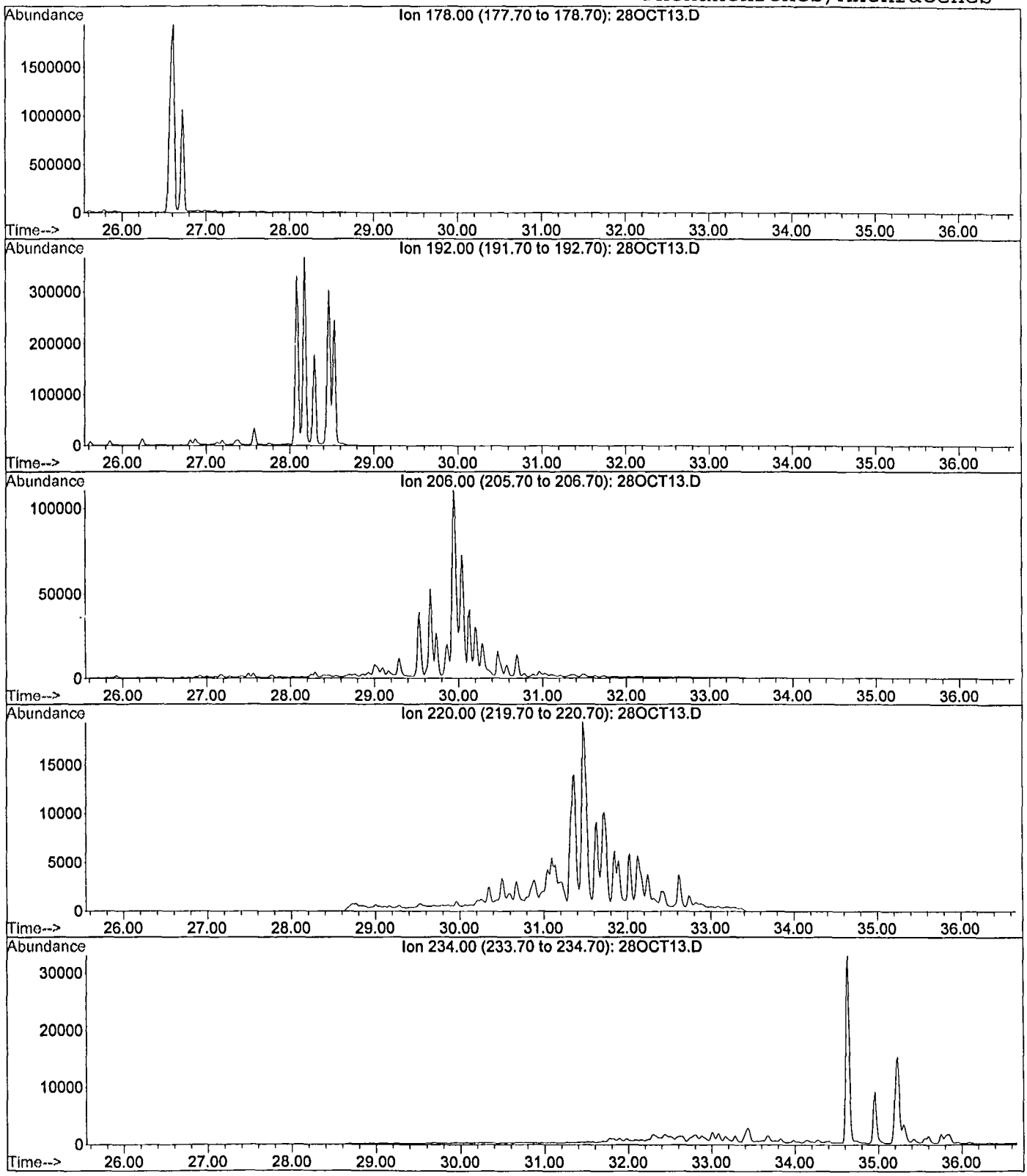
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Fluorenes



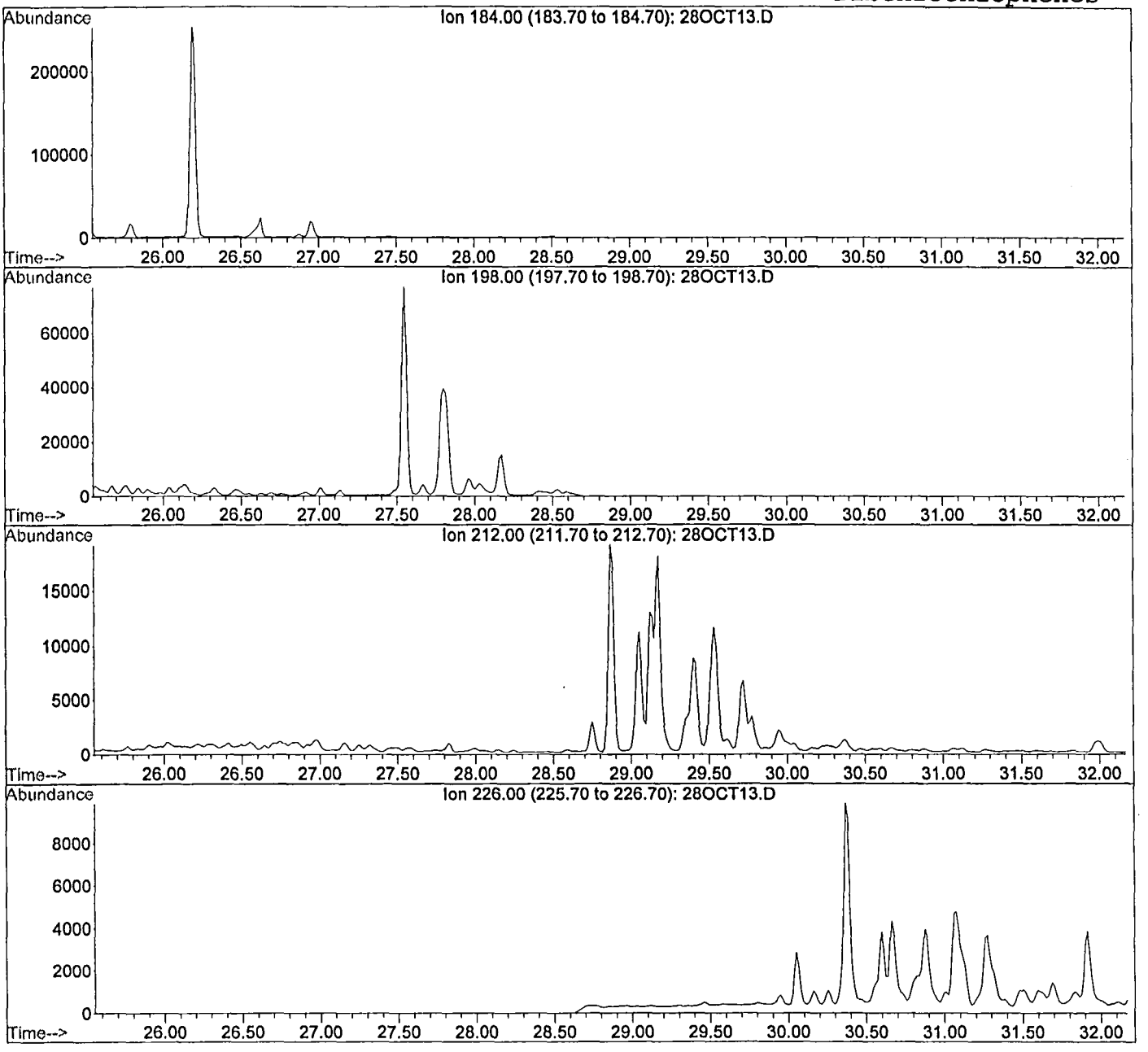
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Phenanthrenes/Anthracenes



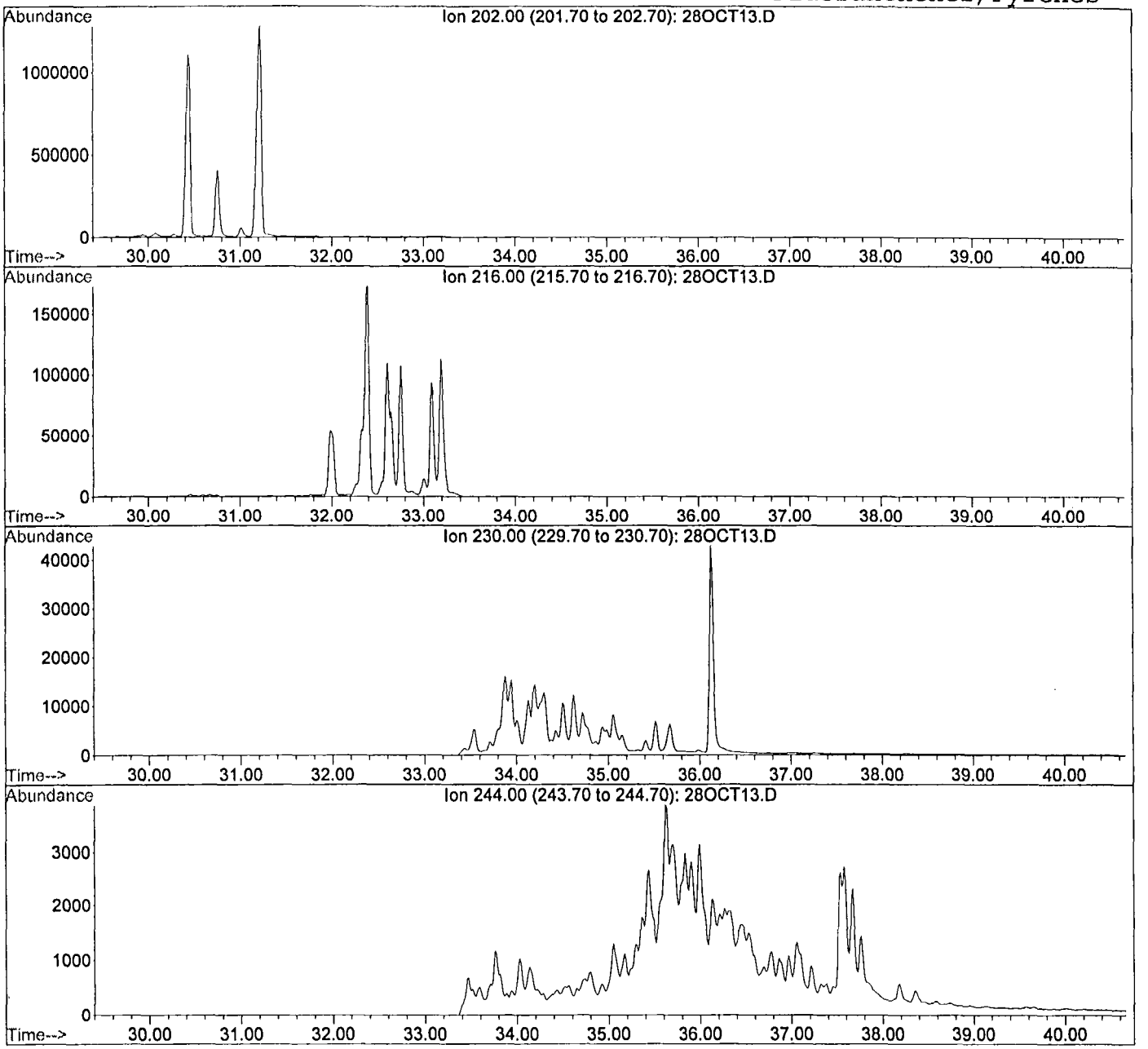
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Dibenzothiophenes



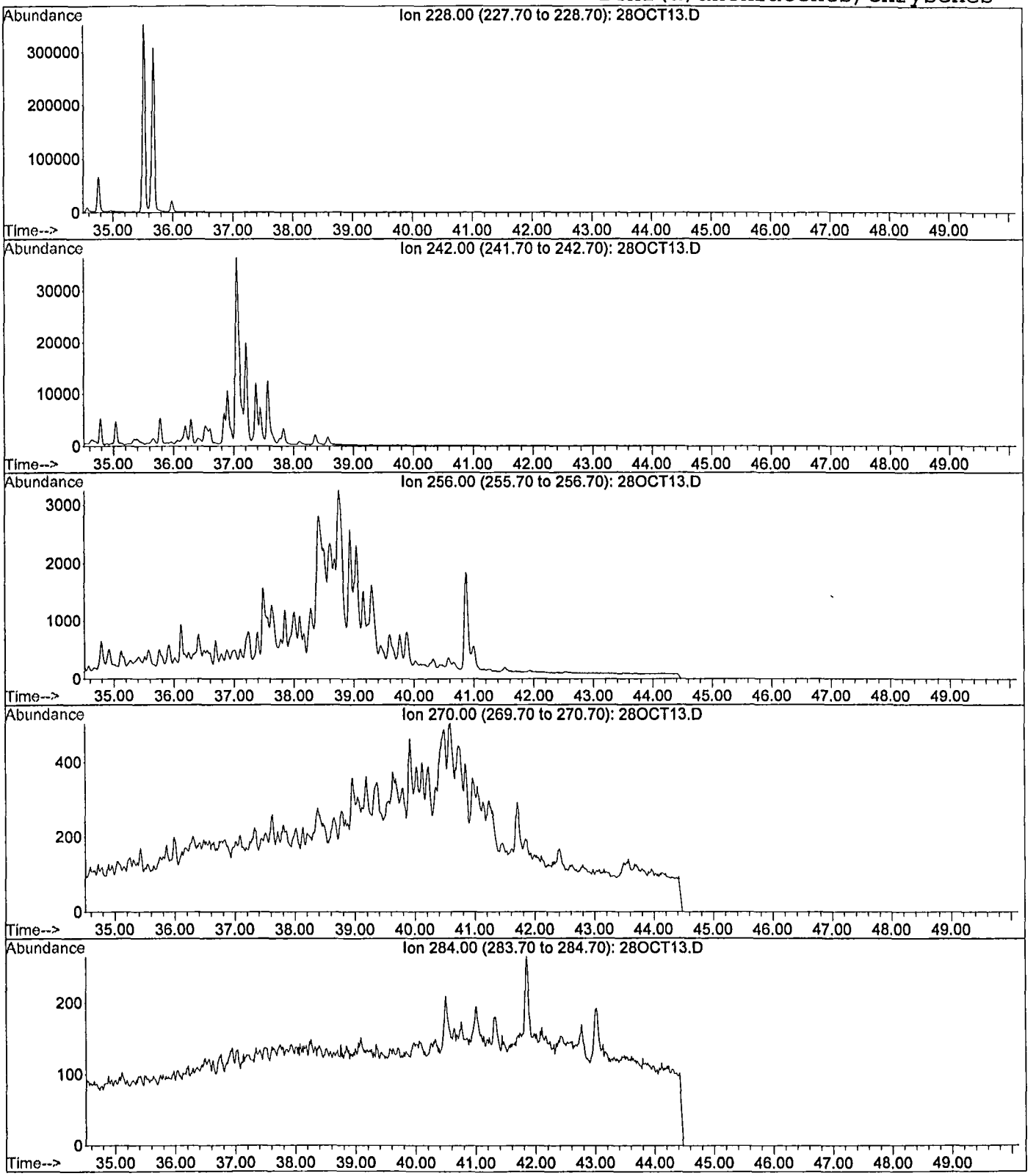
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Fluoranthenes/Pyrenes

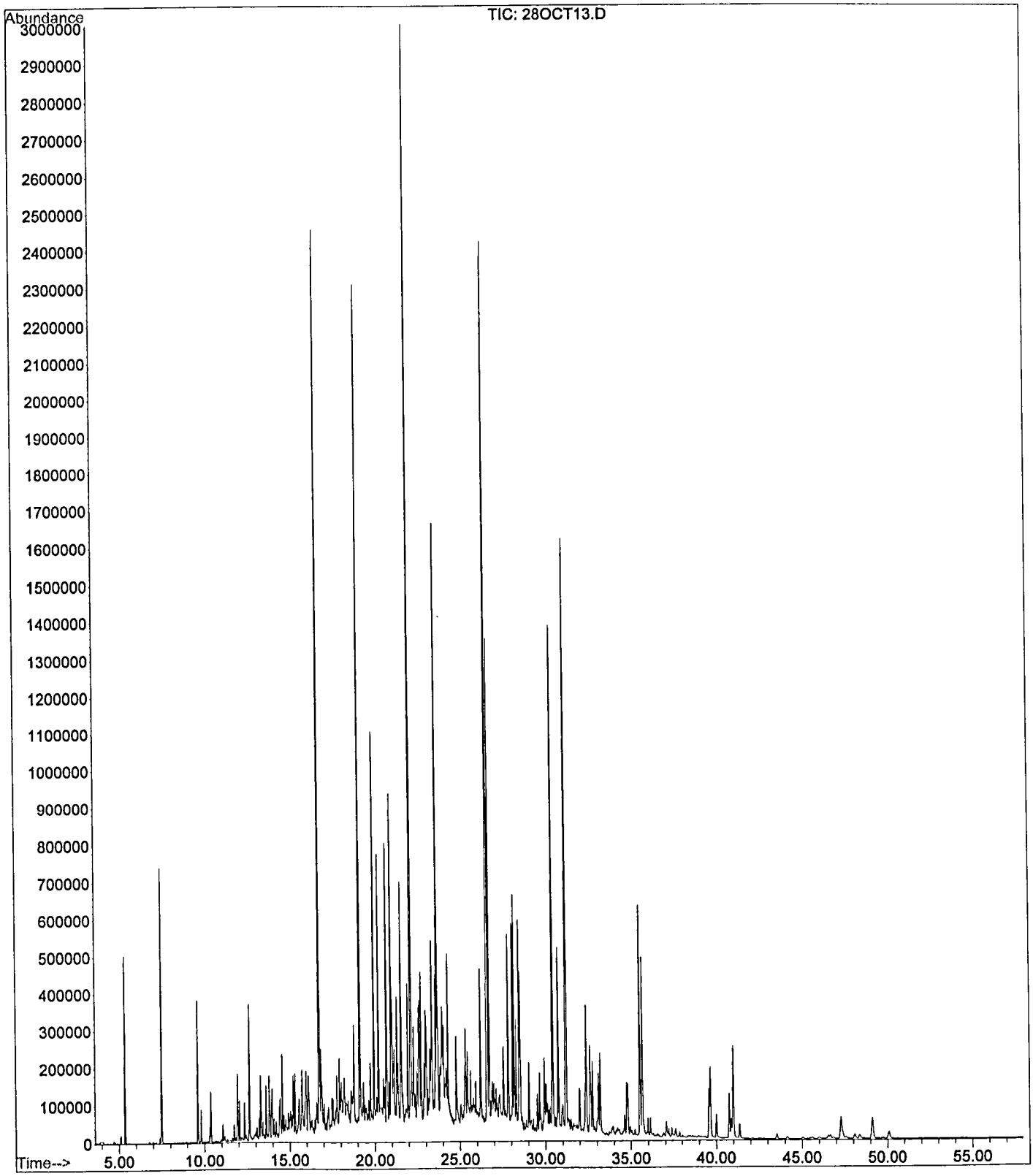


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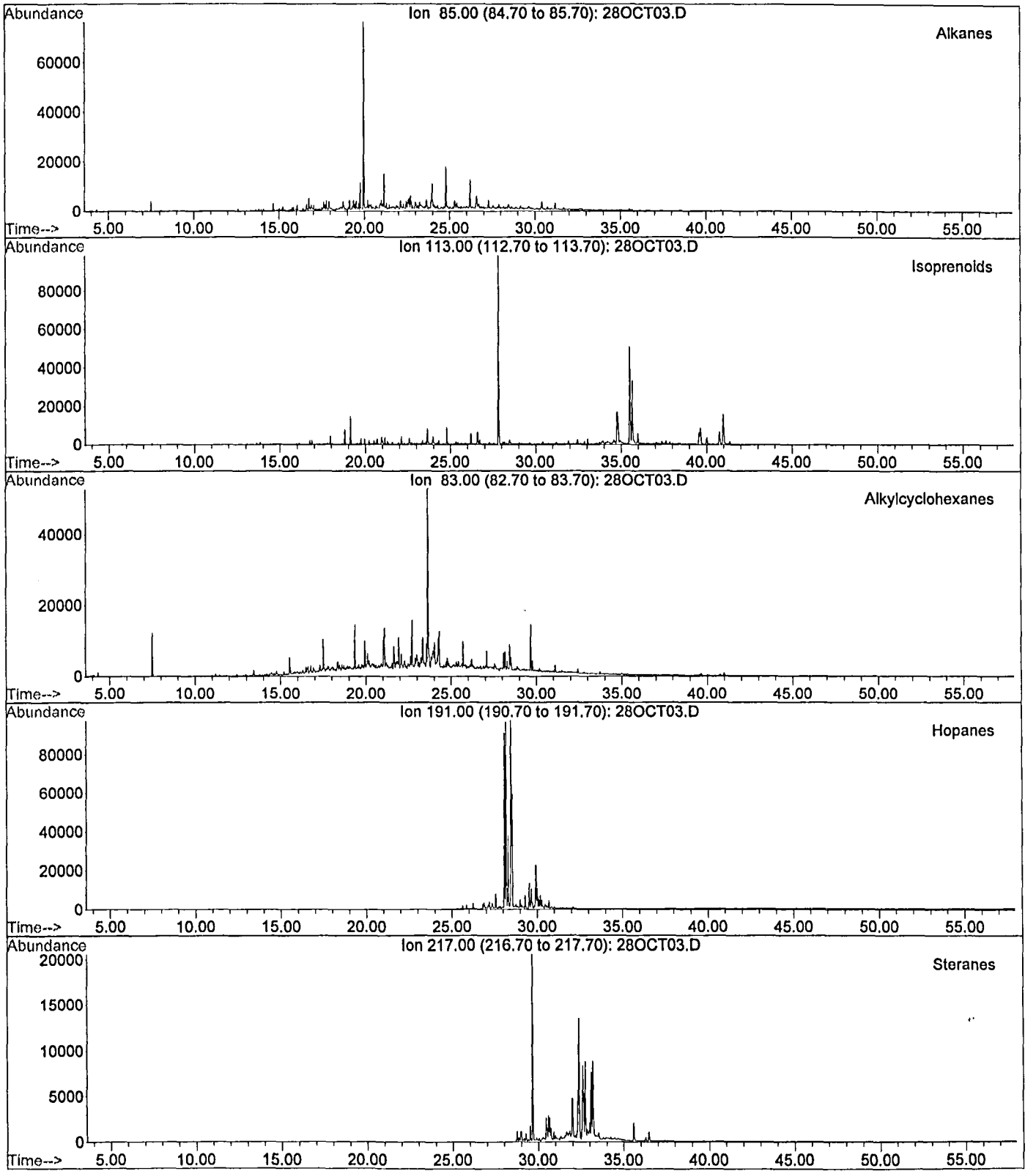
Benz(a)anthracenes/Chrysenes



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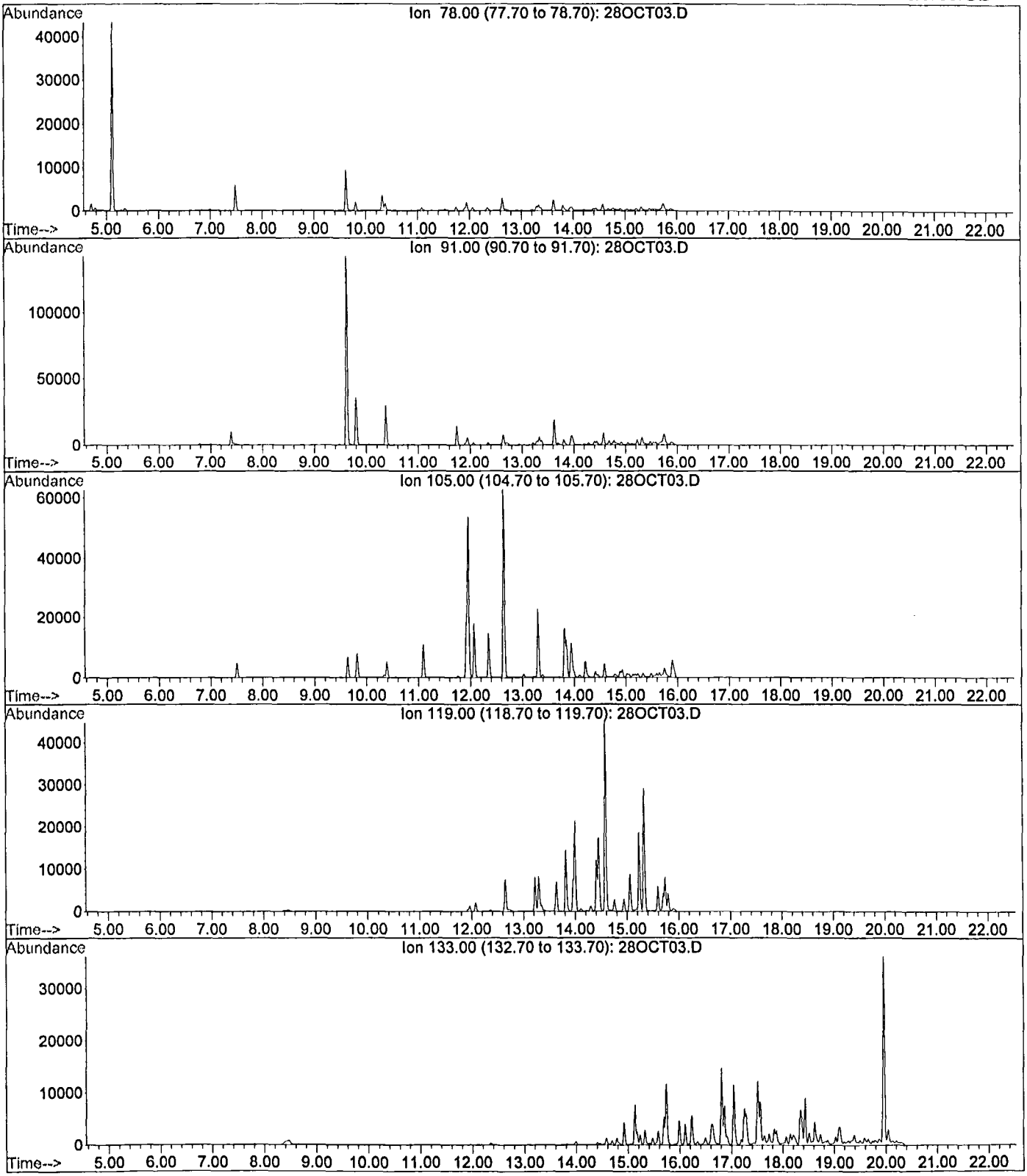


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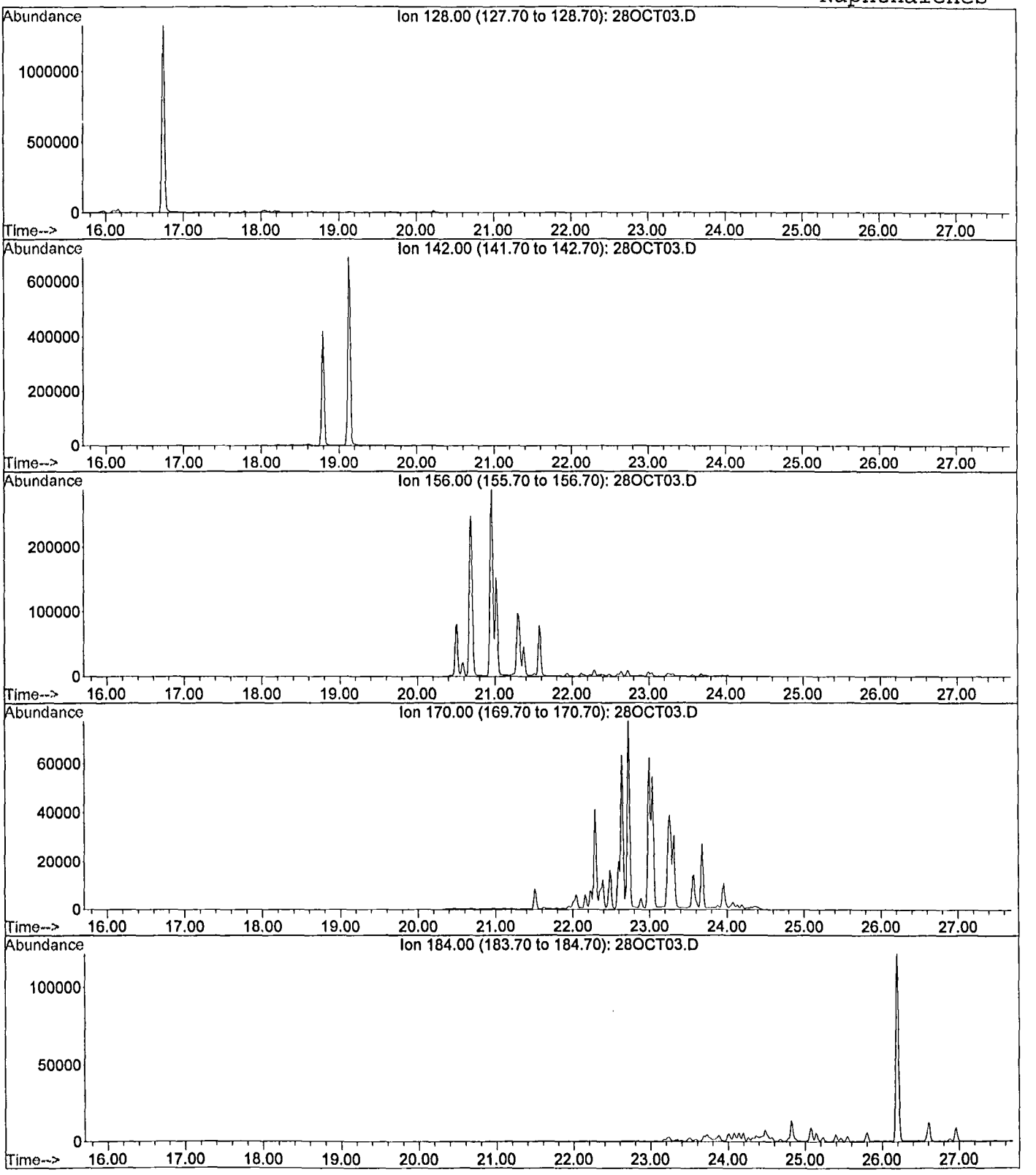
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Benzenes



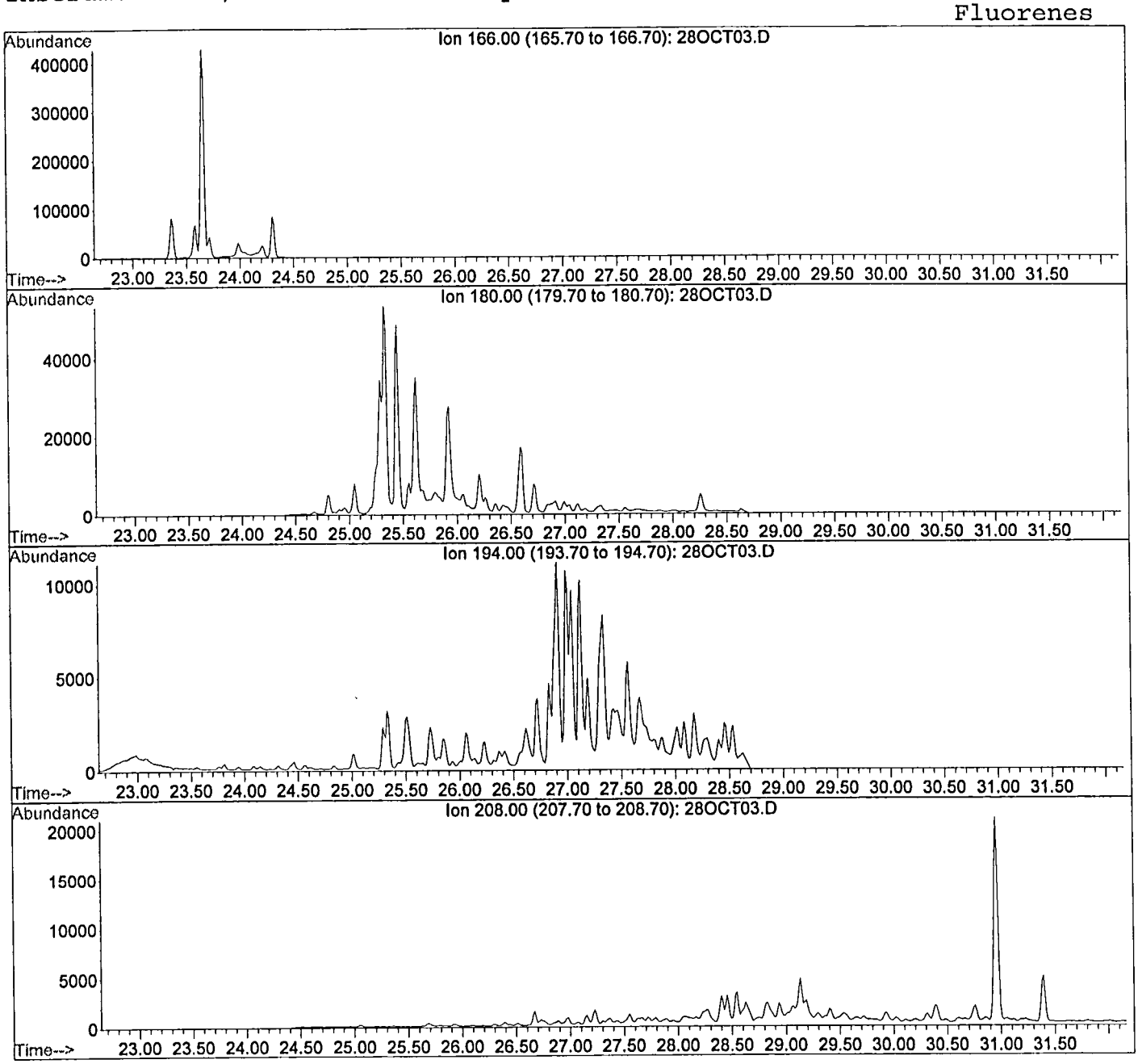
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Naphthalenes



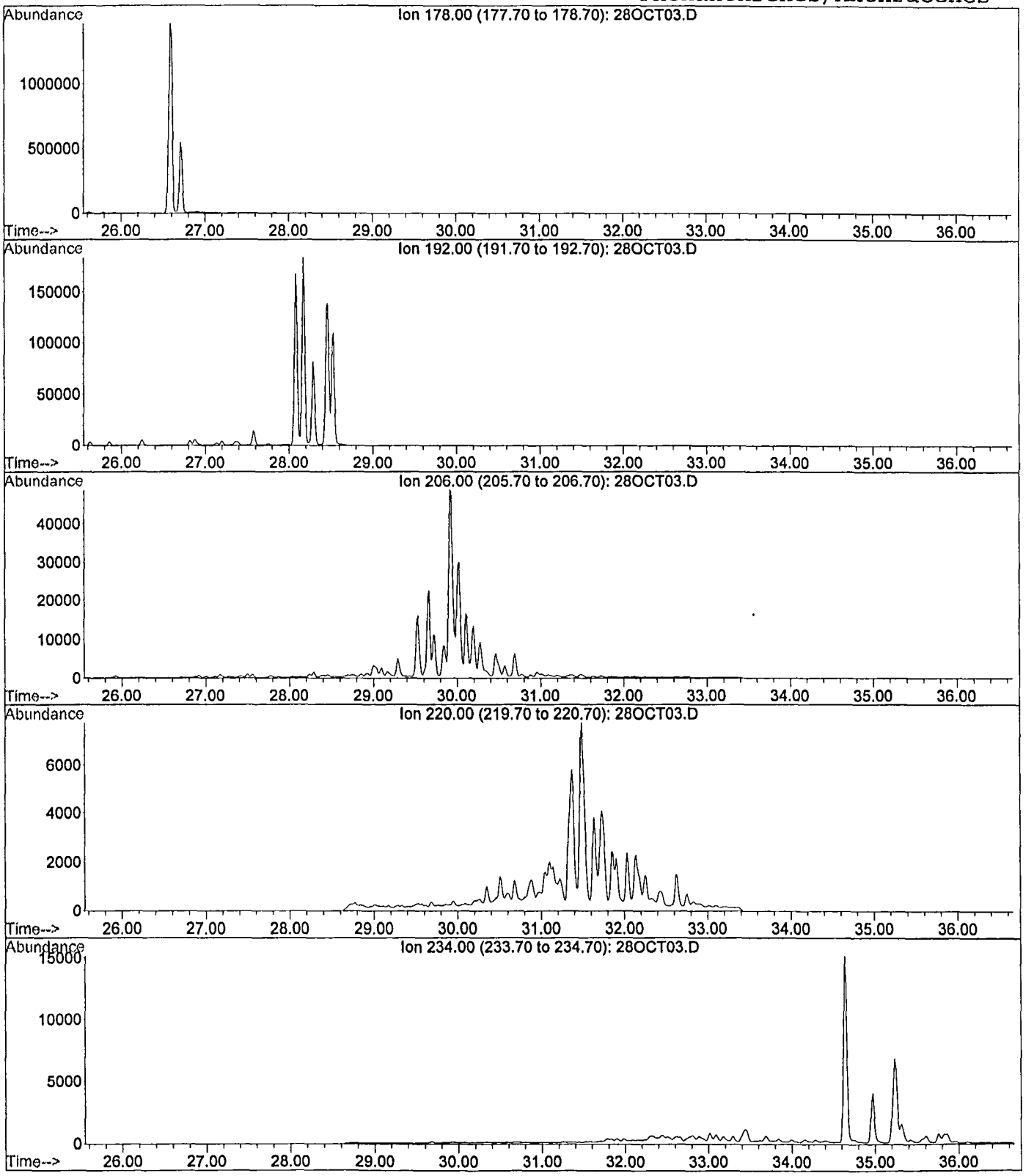
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Fluorenes



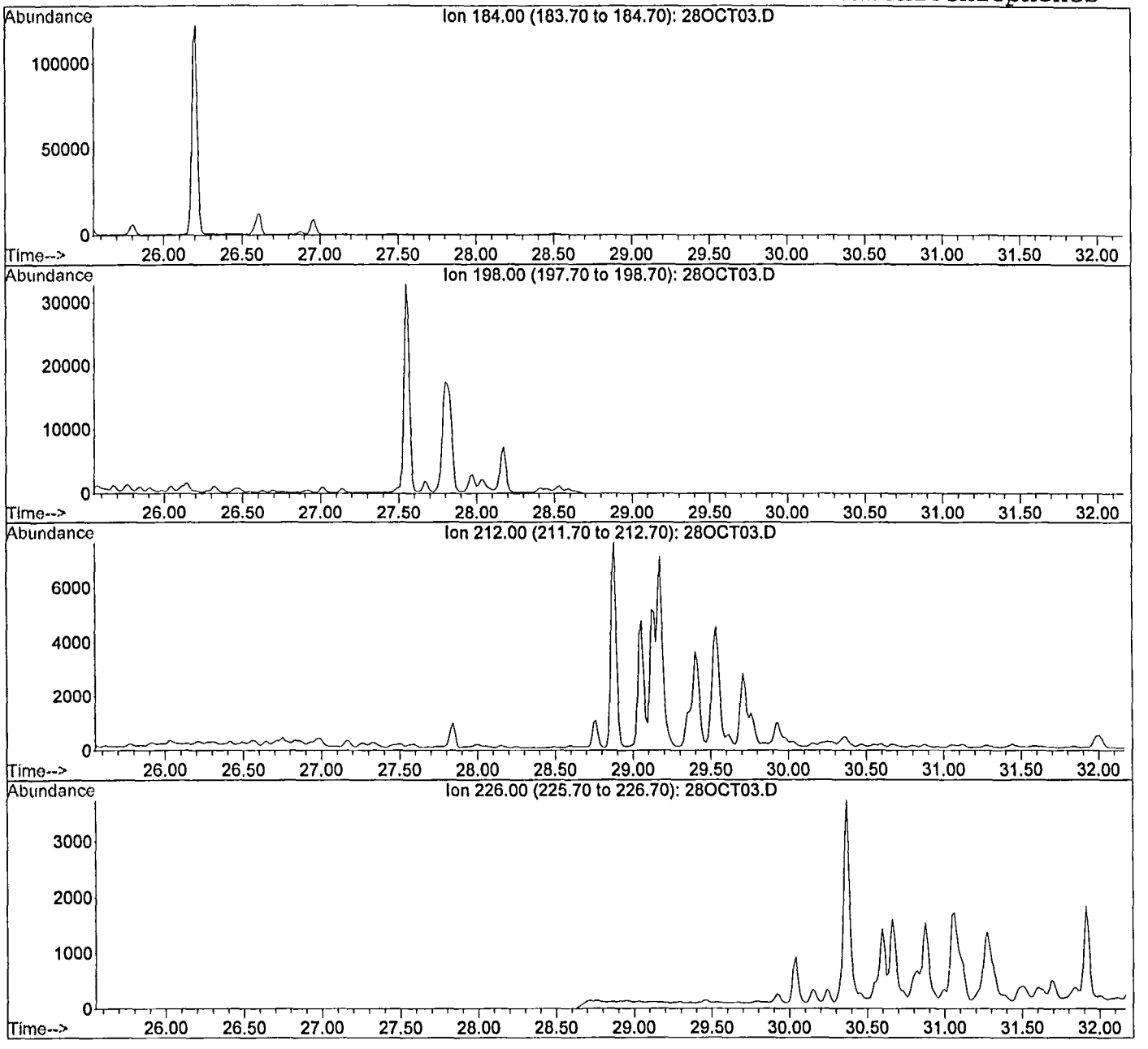
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Phenanthrenes/Anthracenes



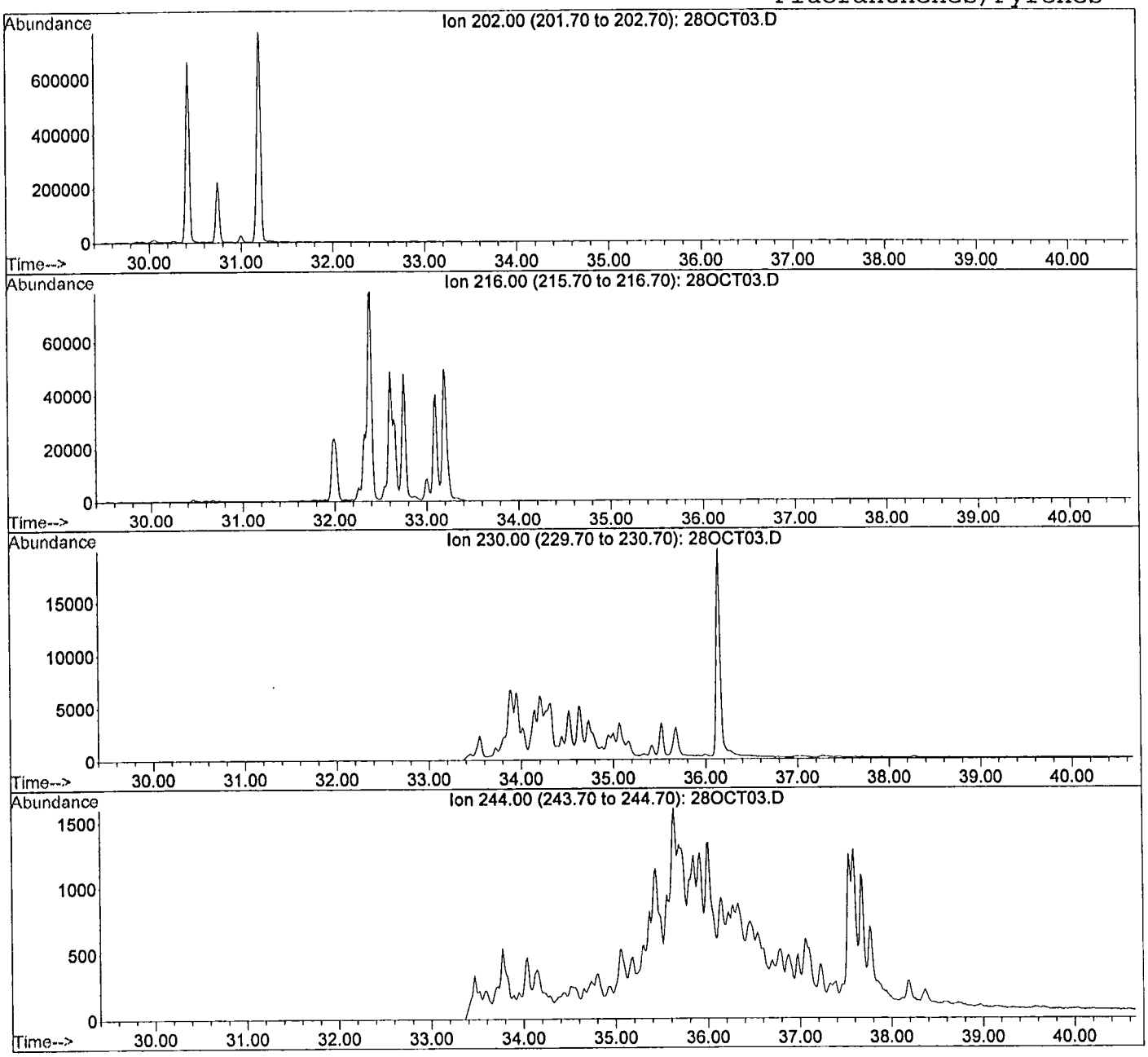
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Dibenzothiophenes



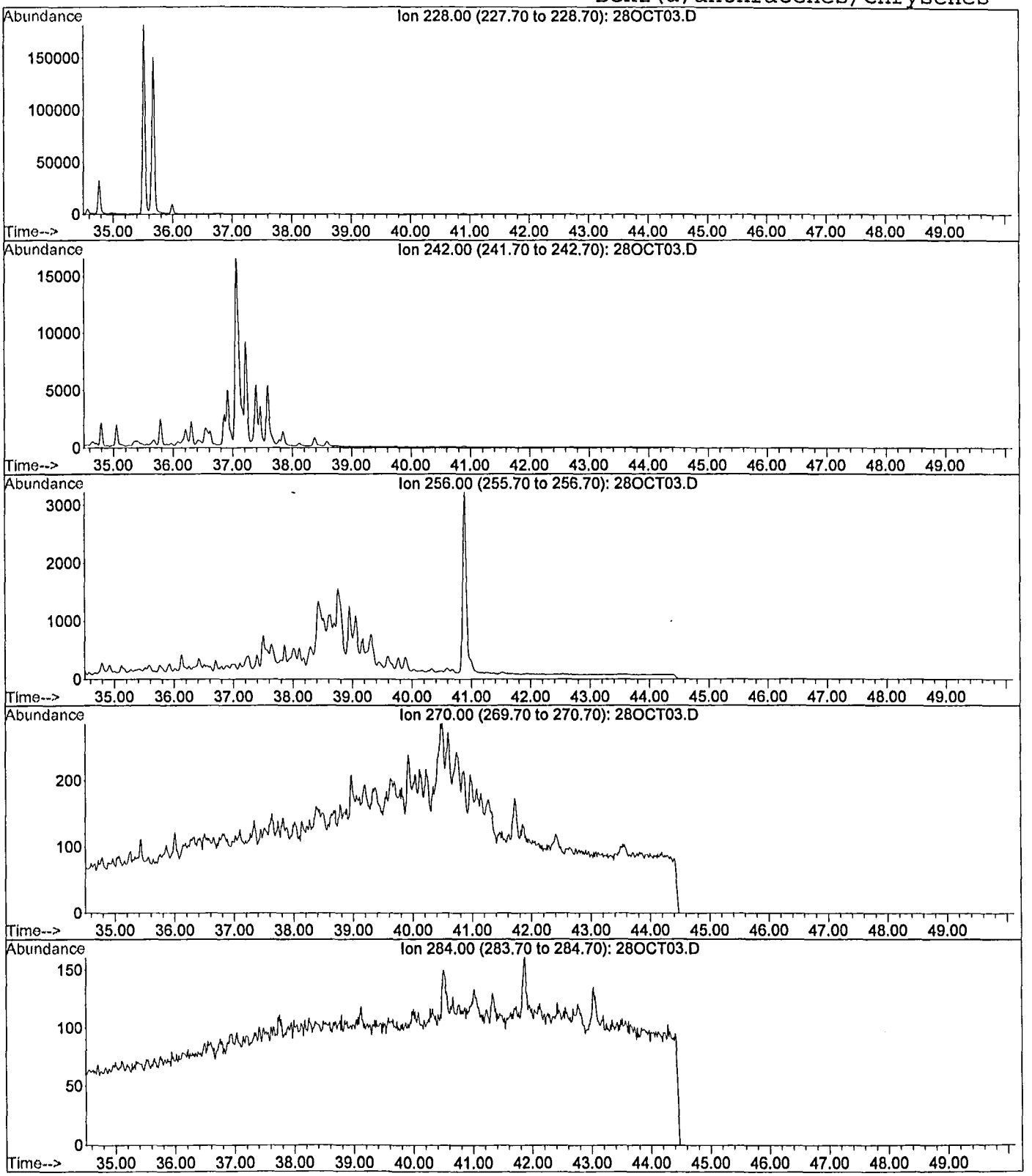
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Fluoranthenes/Pyrenes

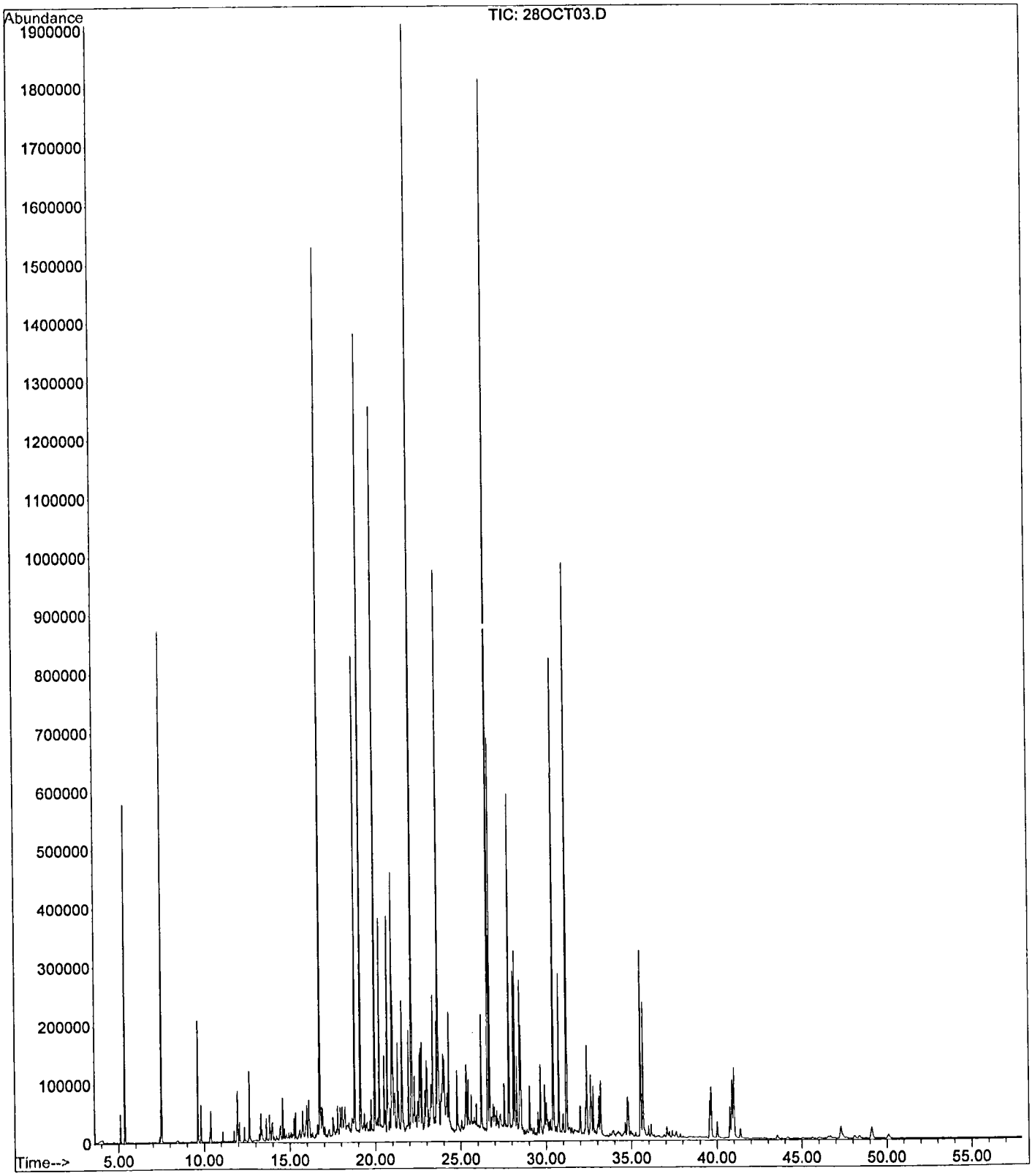


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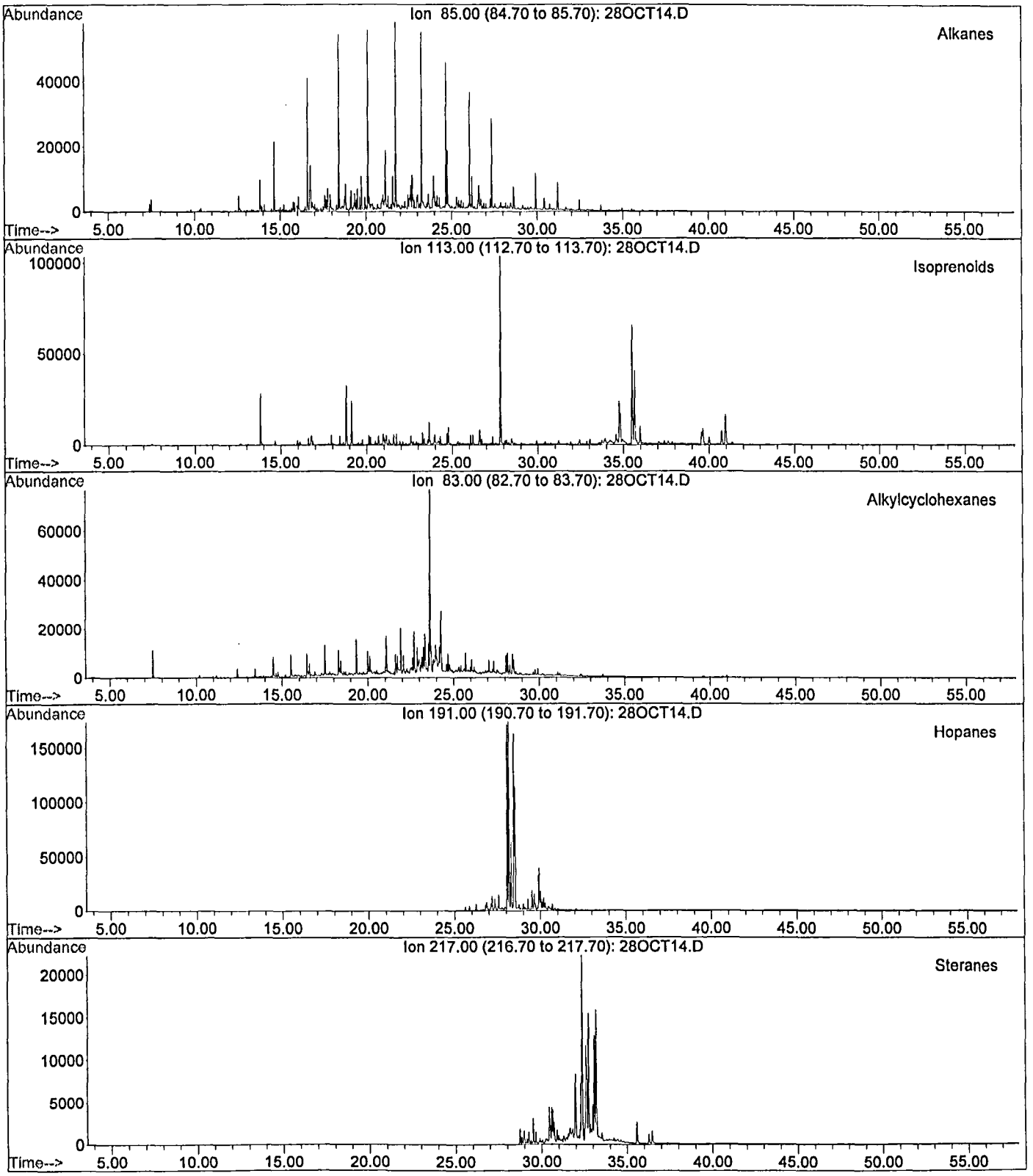
Benz(a)anthracenes/Chrysenes



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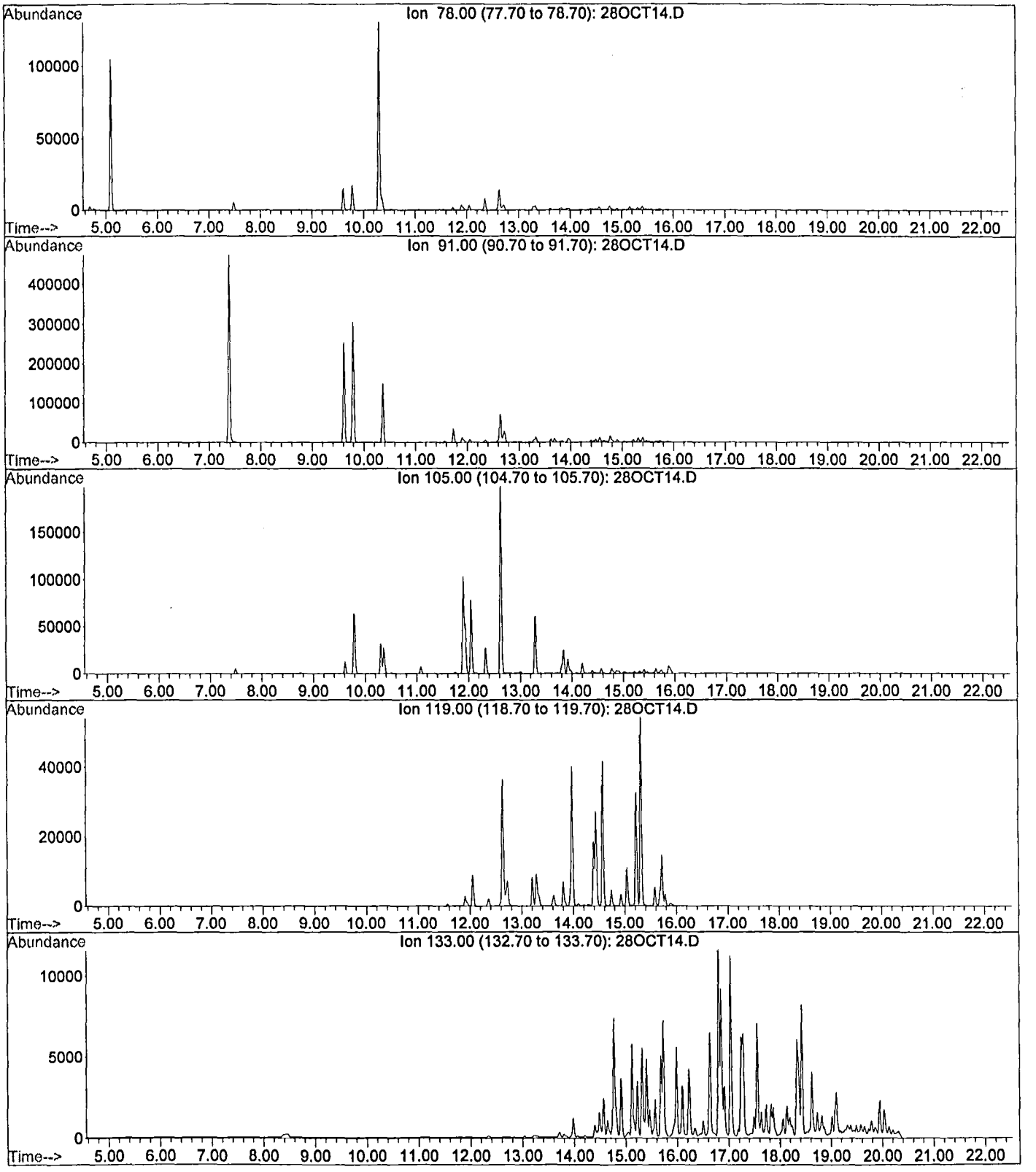


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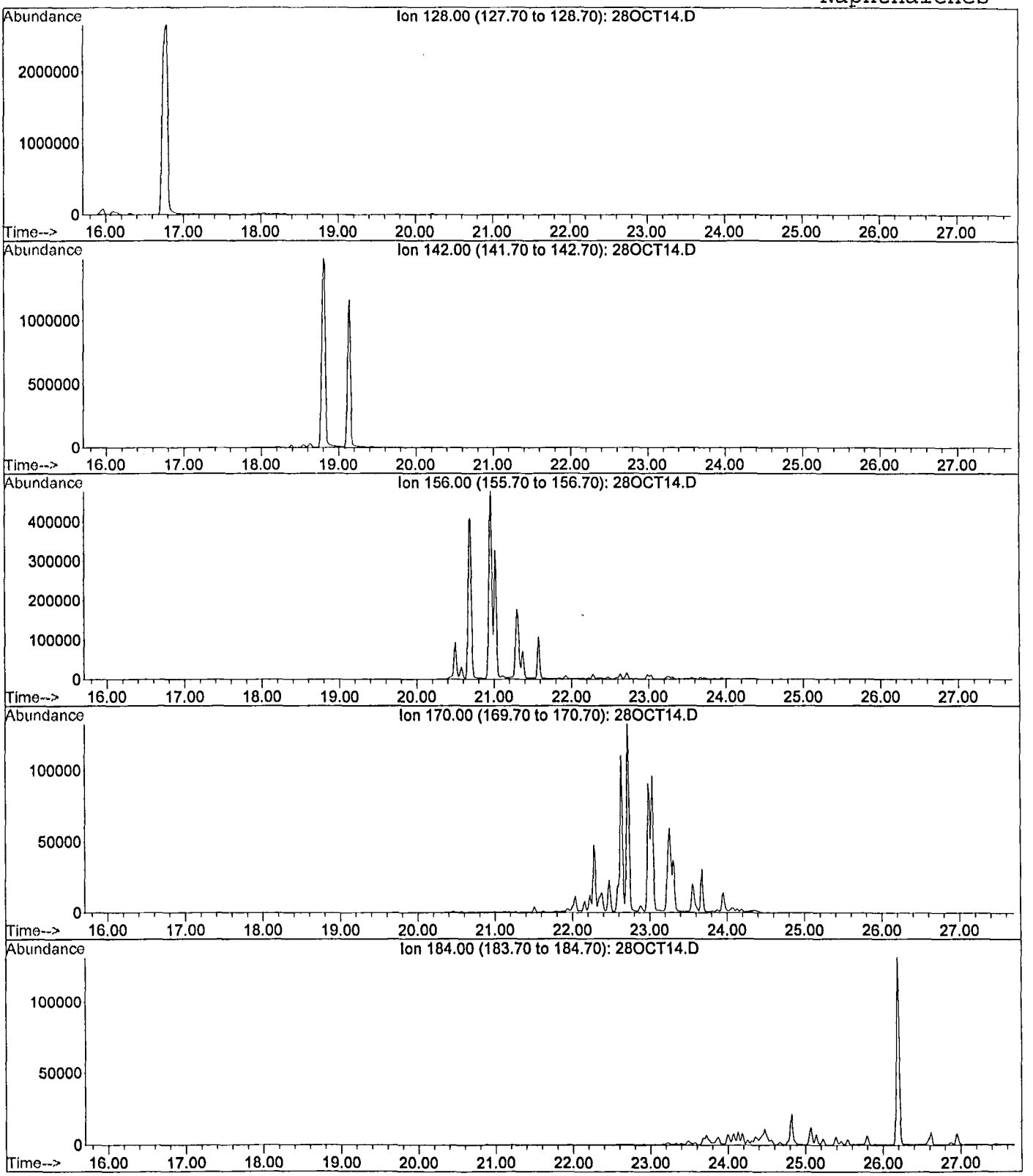
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Benzenes



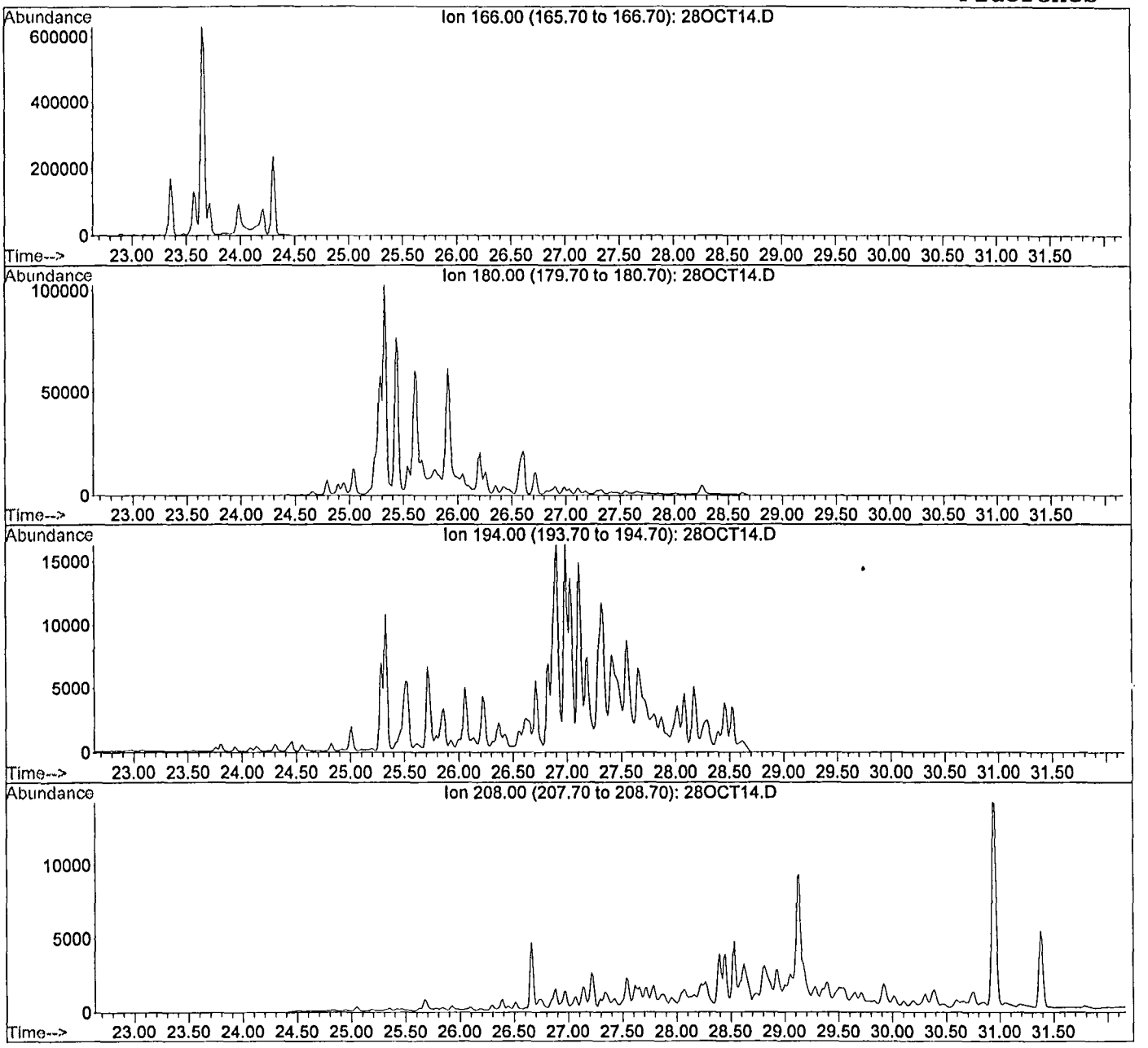
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Naphthalenes



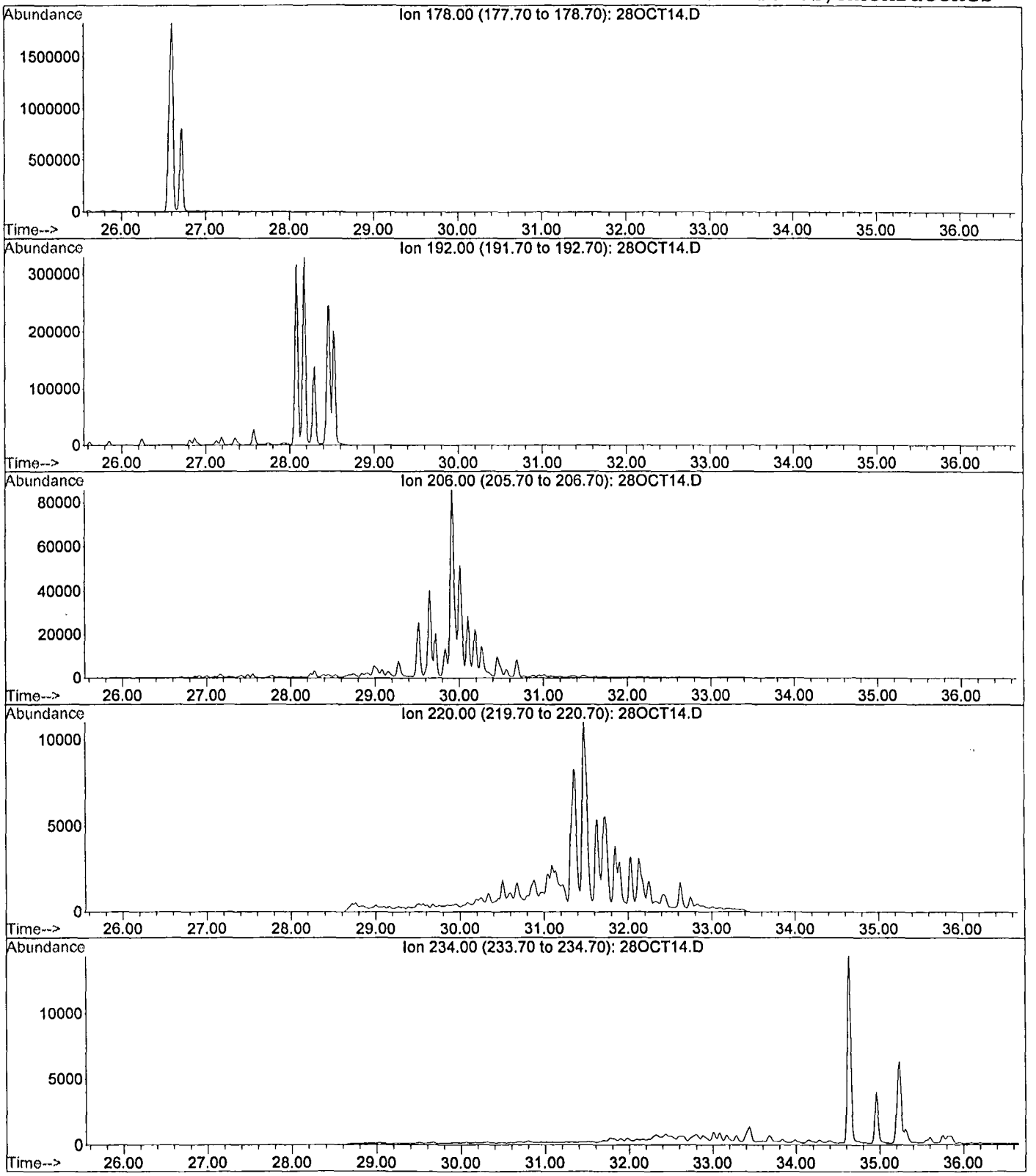
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Fluorenes



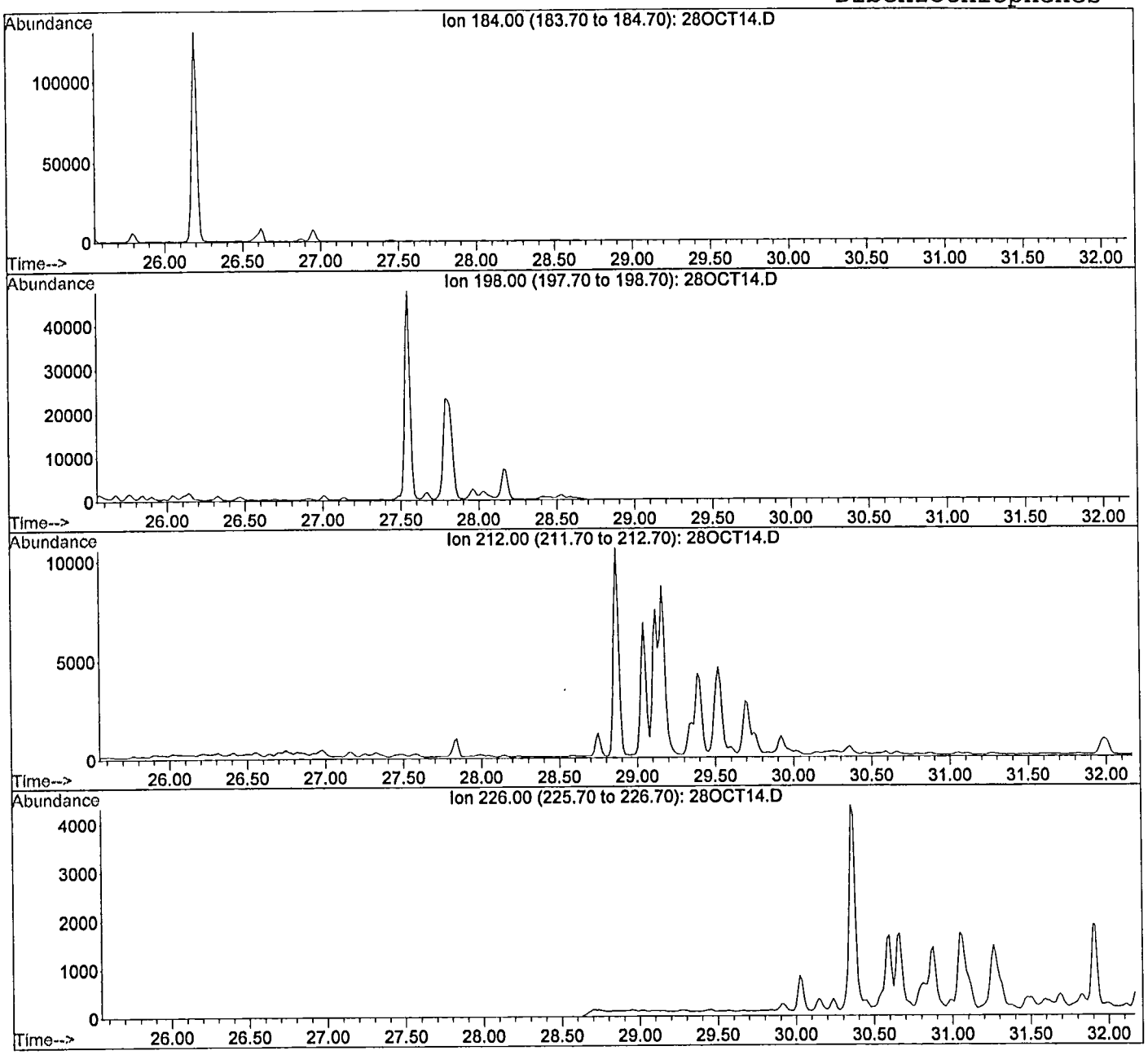
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Instrument: GC/MS Ins Operator: KP

Phenanthrenes/Anthracenes



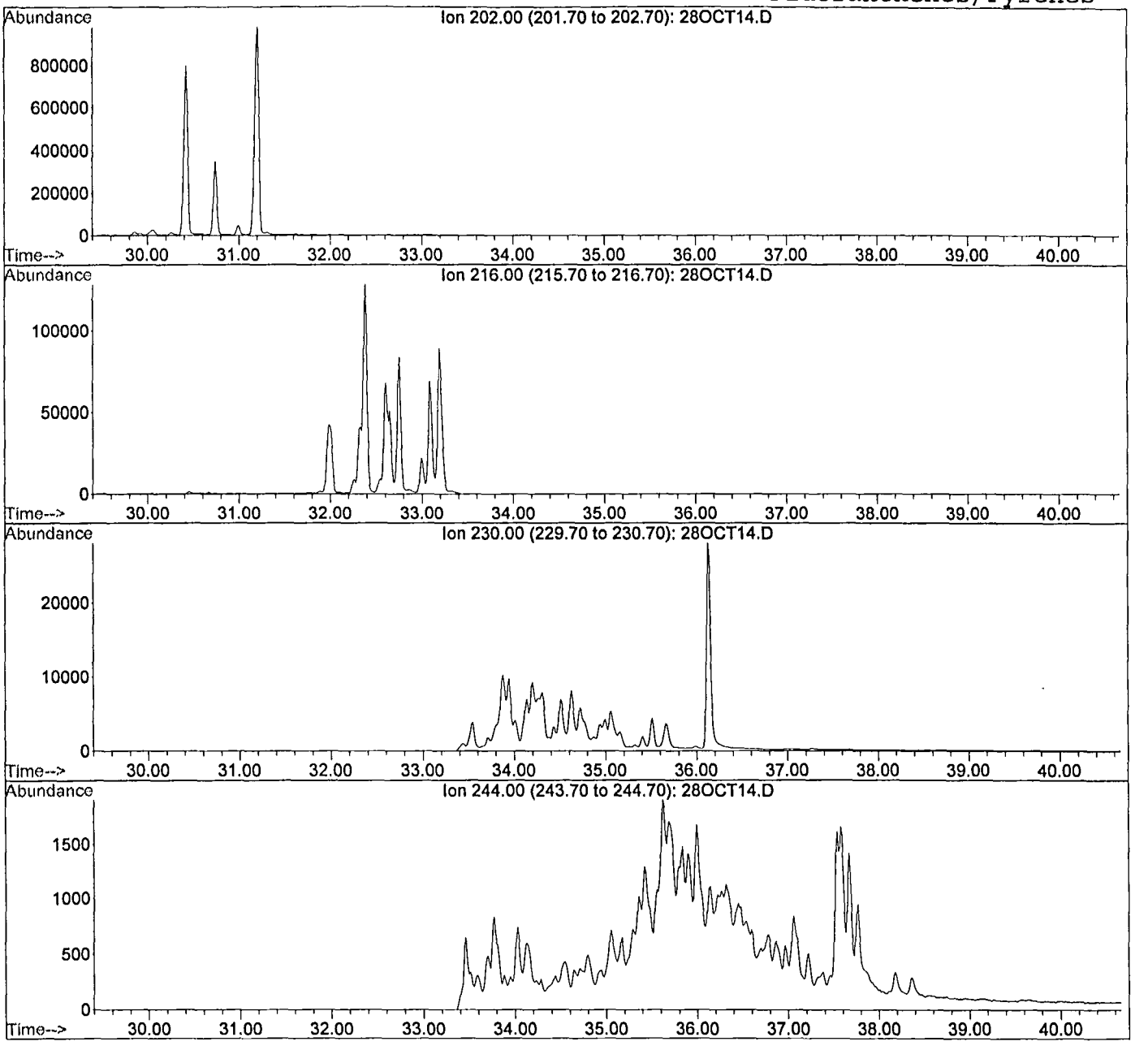
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Instrument: GC/MS Ins Operator: KP

Dibenzothiophenes



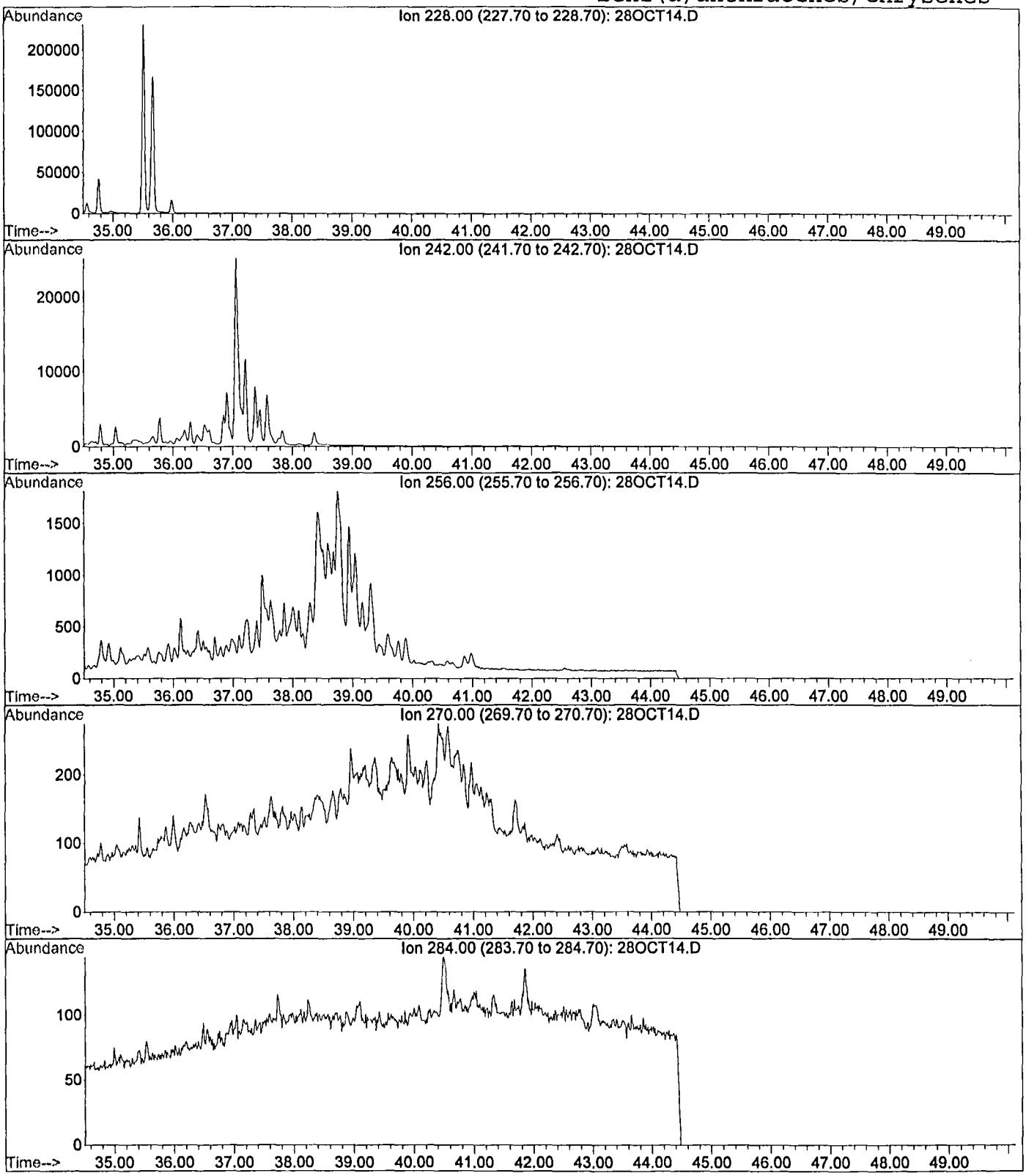
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Fluoranthenes/Pyrenes

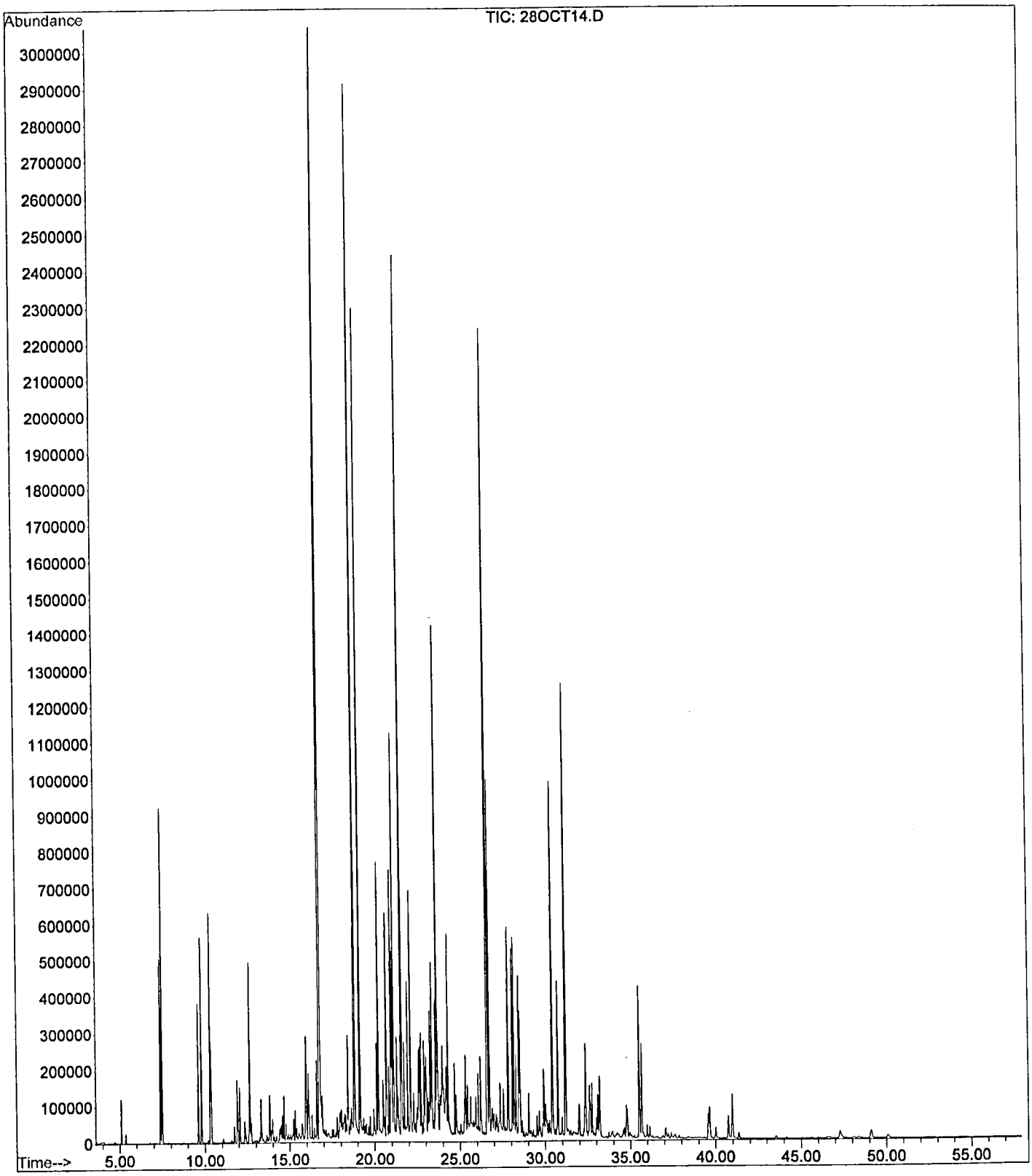


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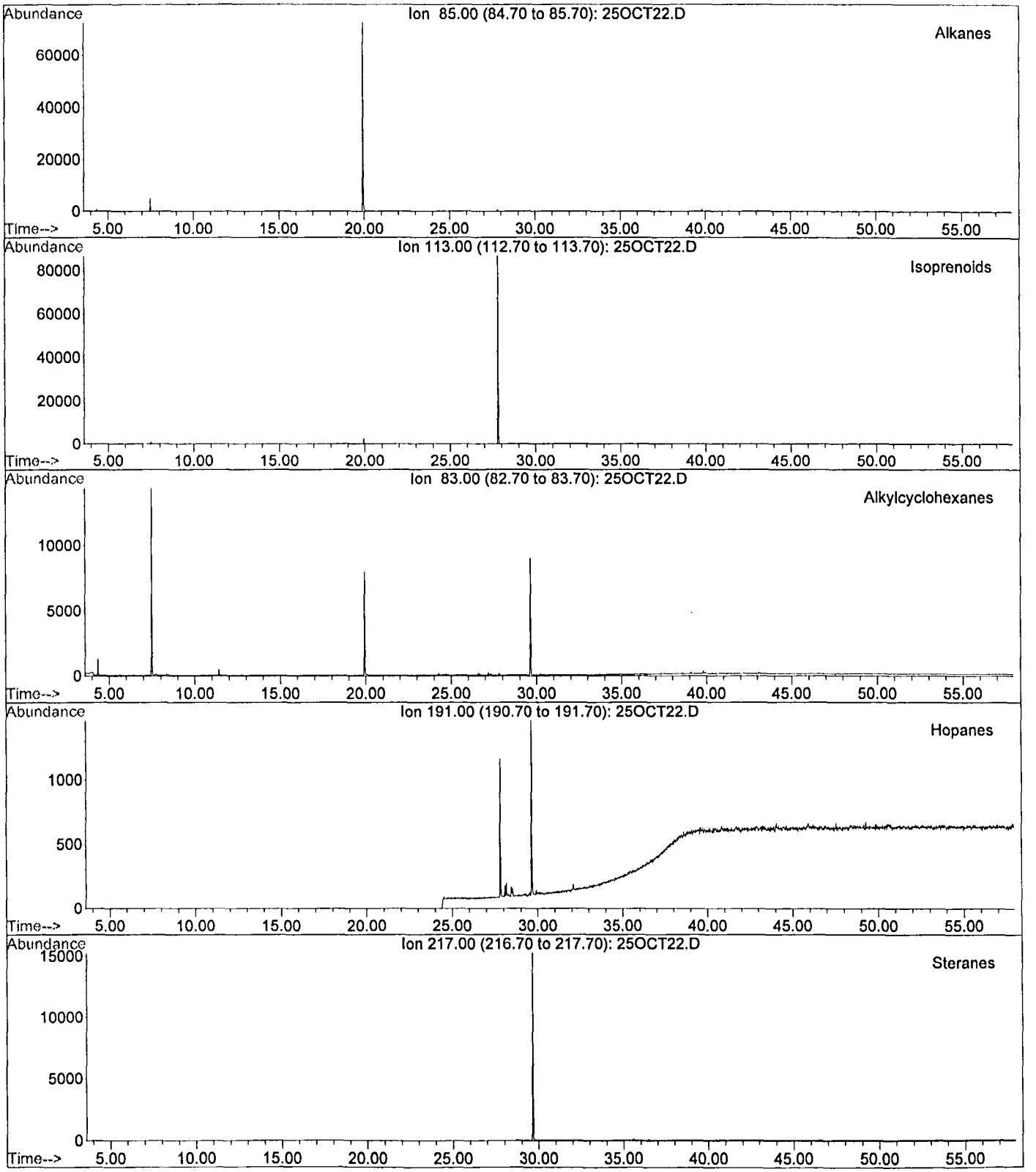
Benz(a)anthracenes/Chrysenes



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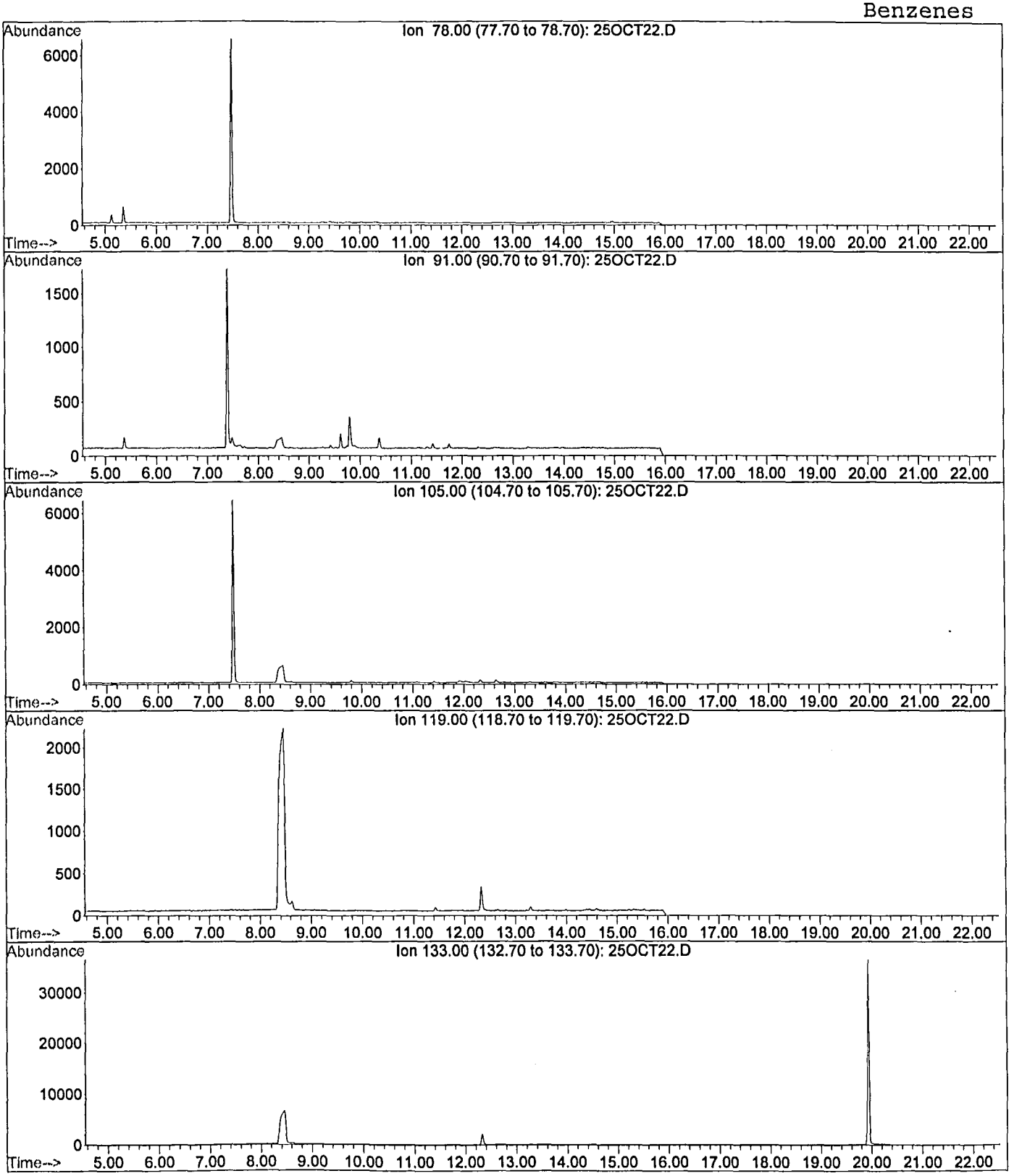


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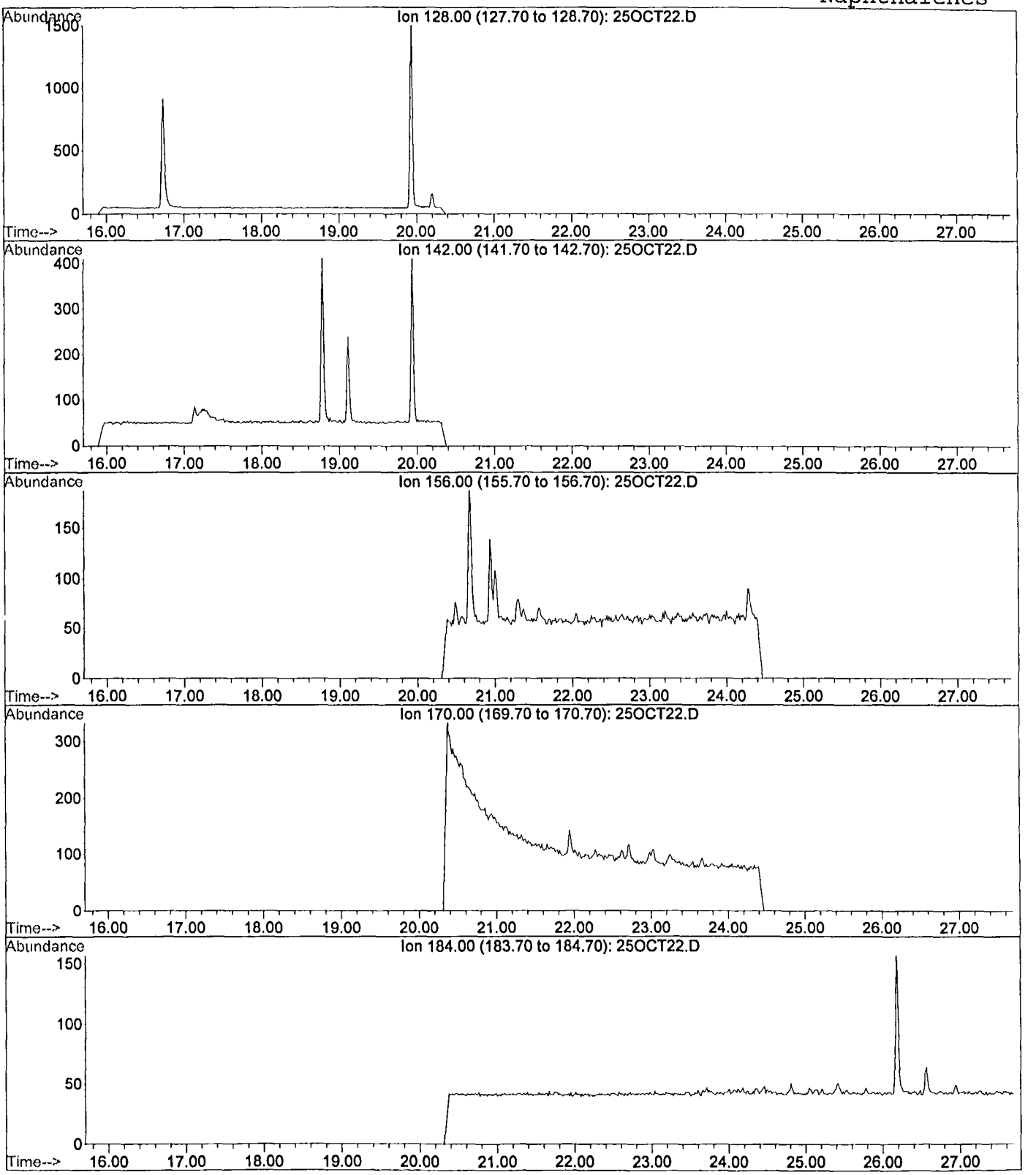
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Benzenes



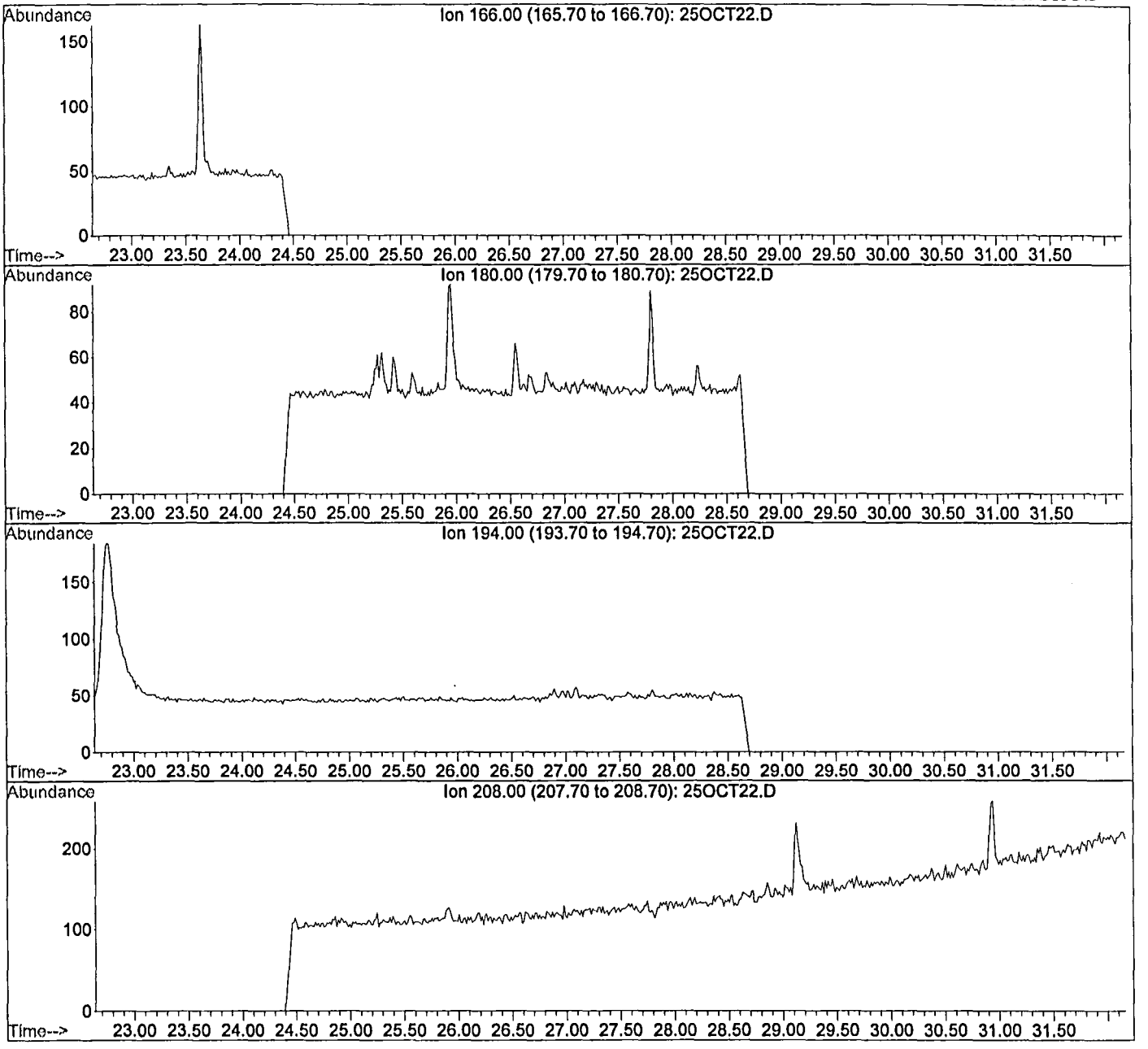
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Naphthalenes



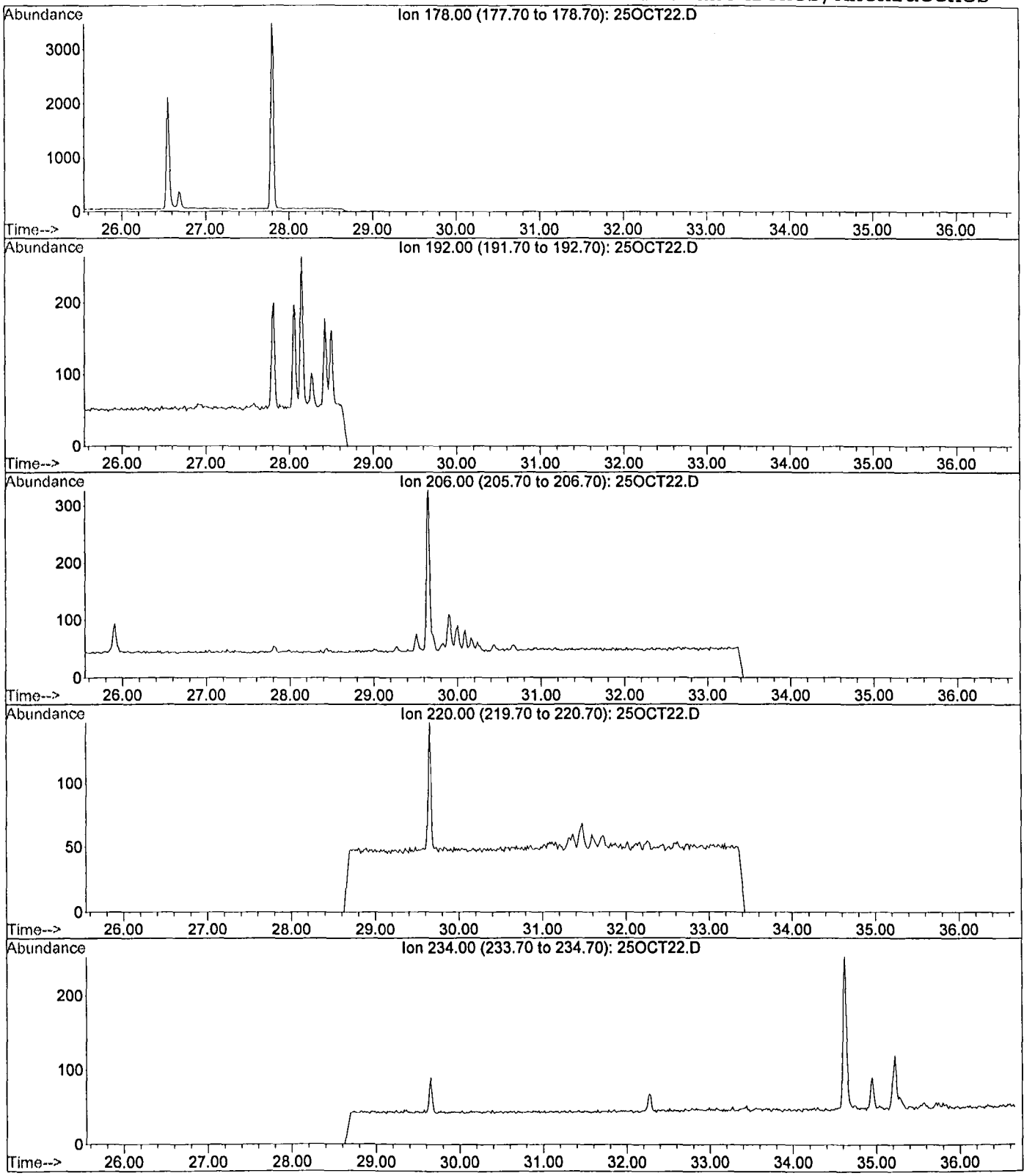
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Fluorenes



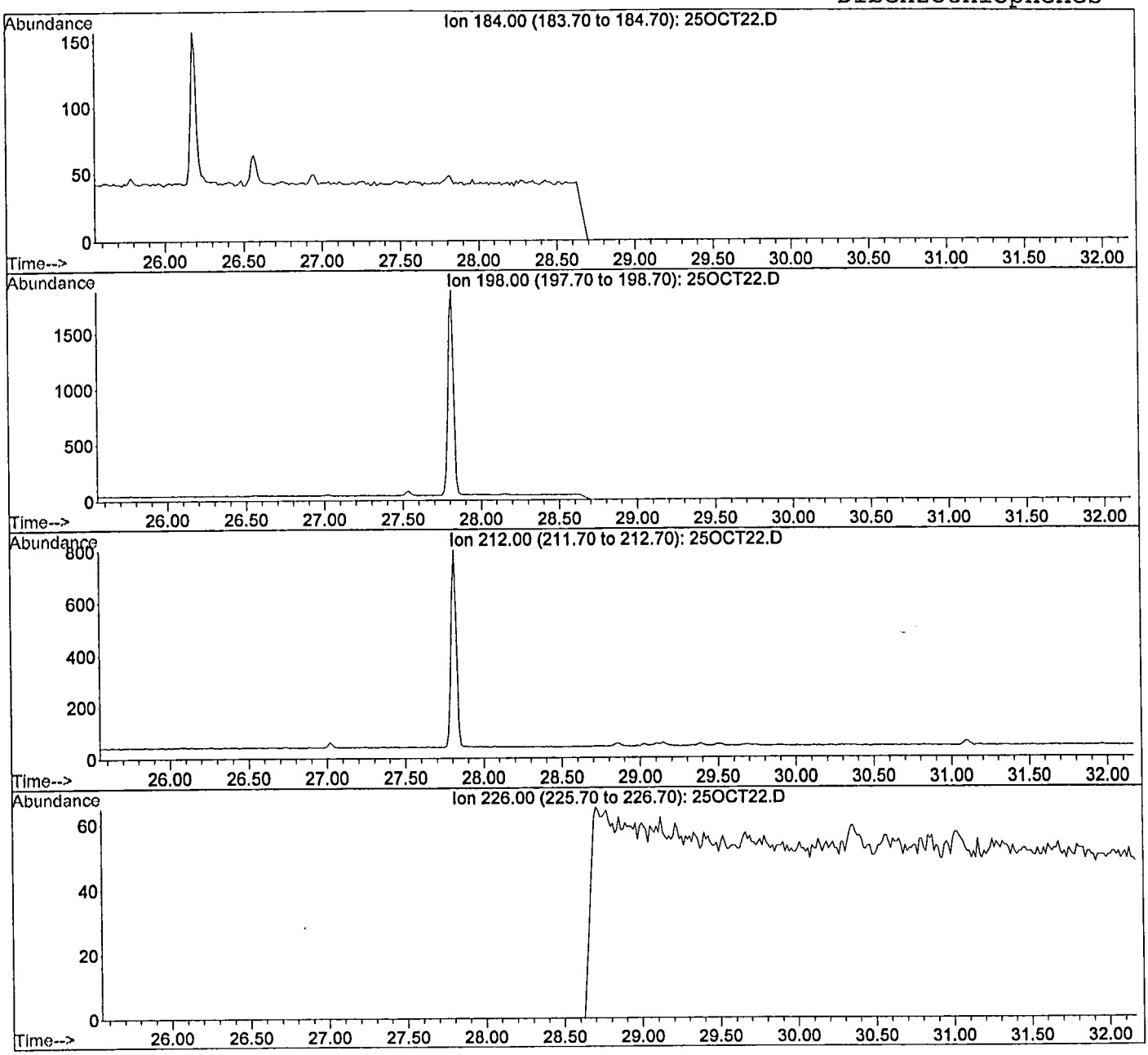
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Phenanthrenes/Anthracenes



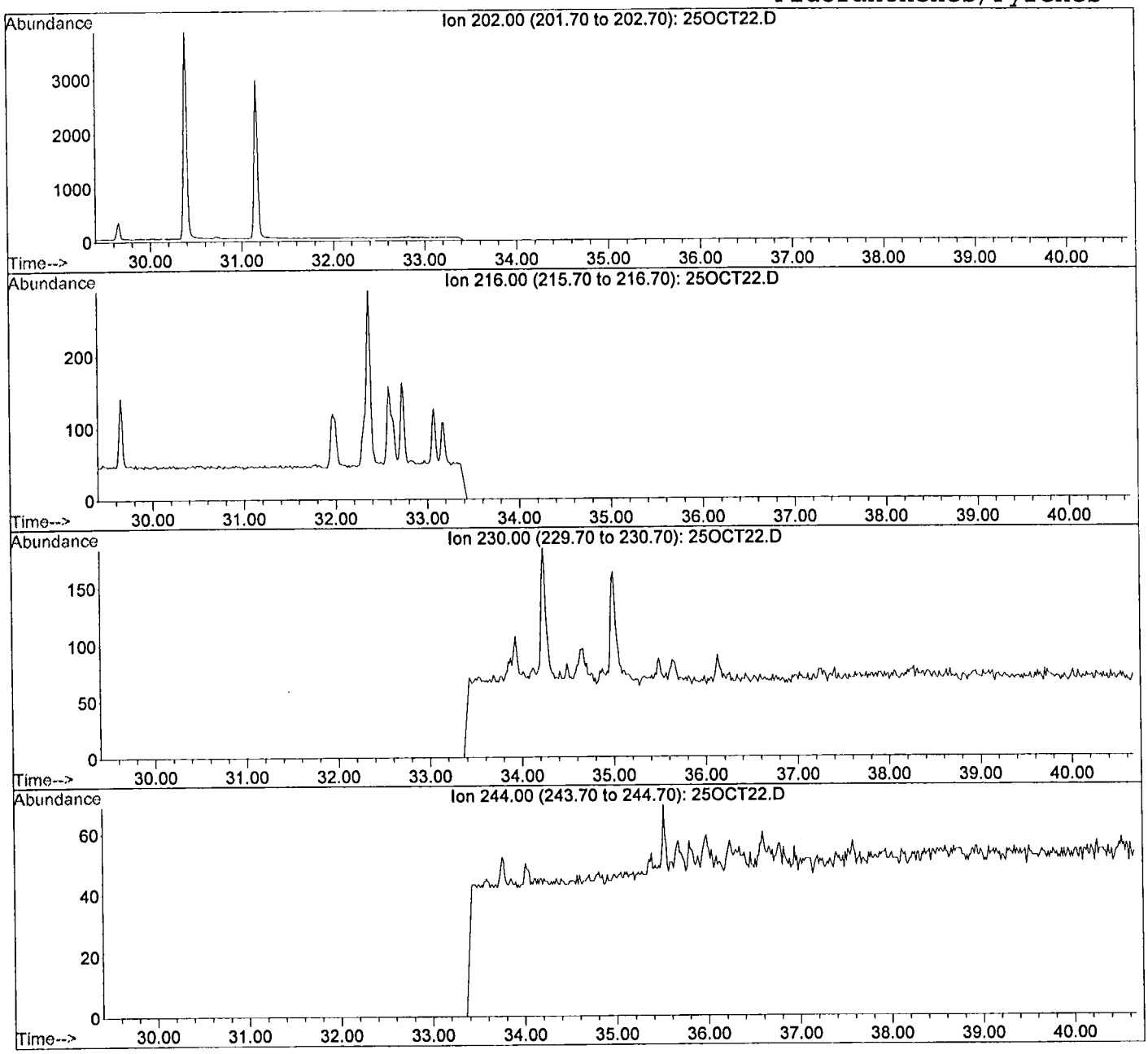
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Dibenzothiophenes



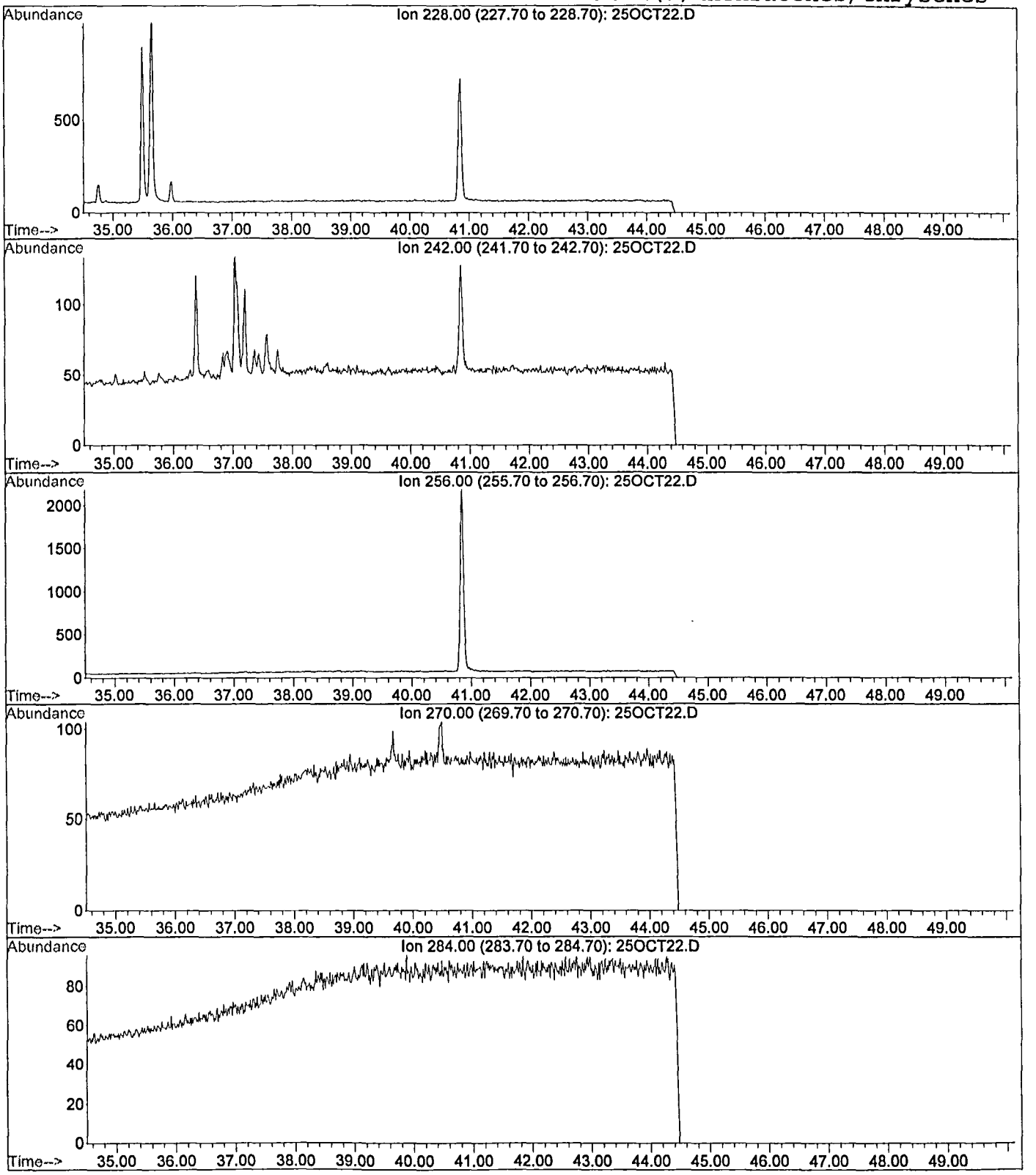
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Fluoranthenes/Pyrenes

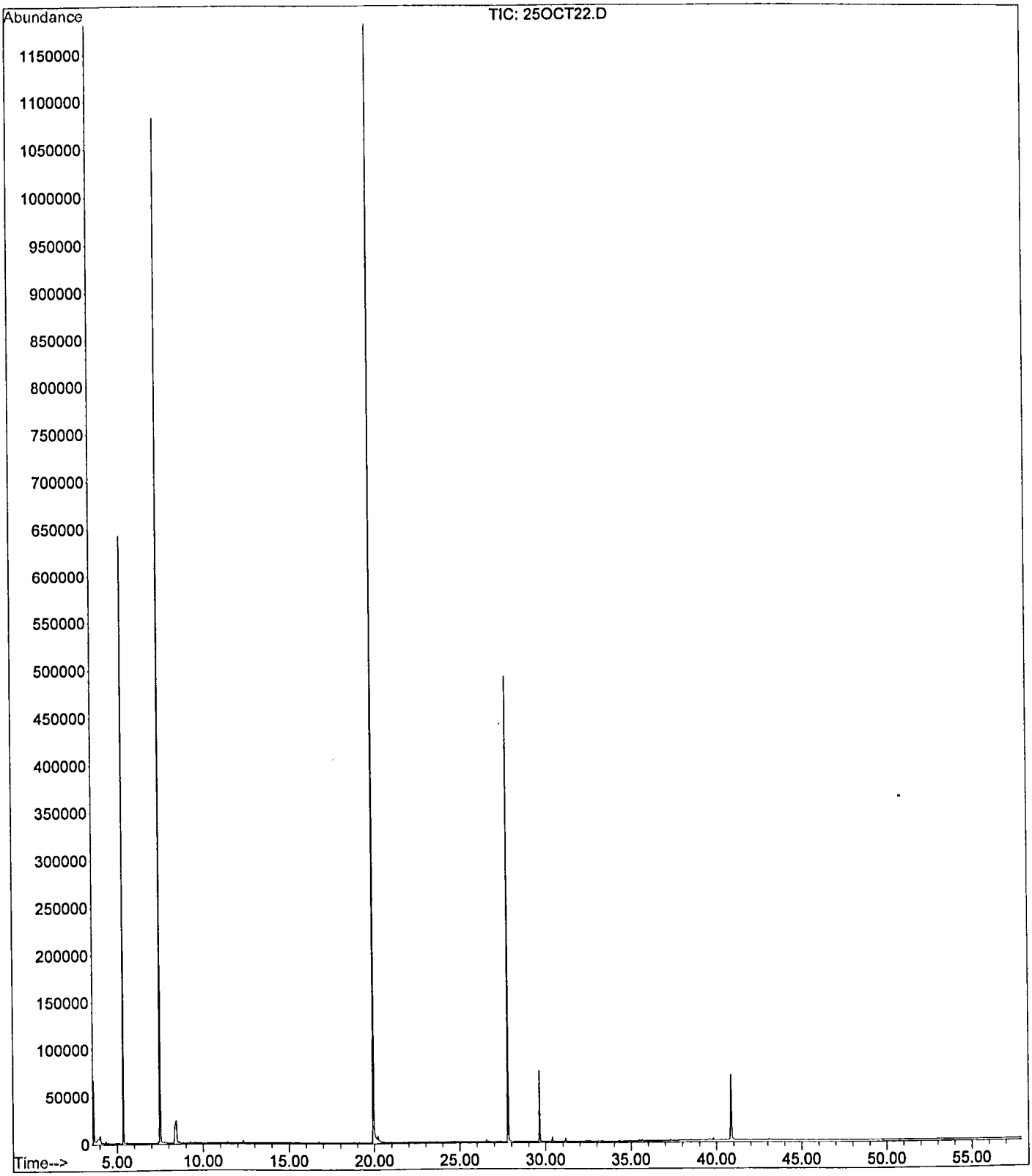


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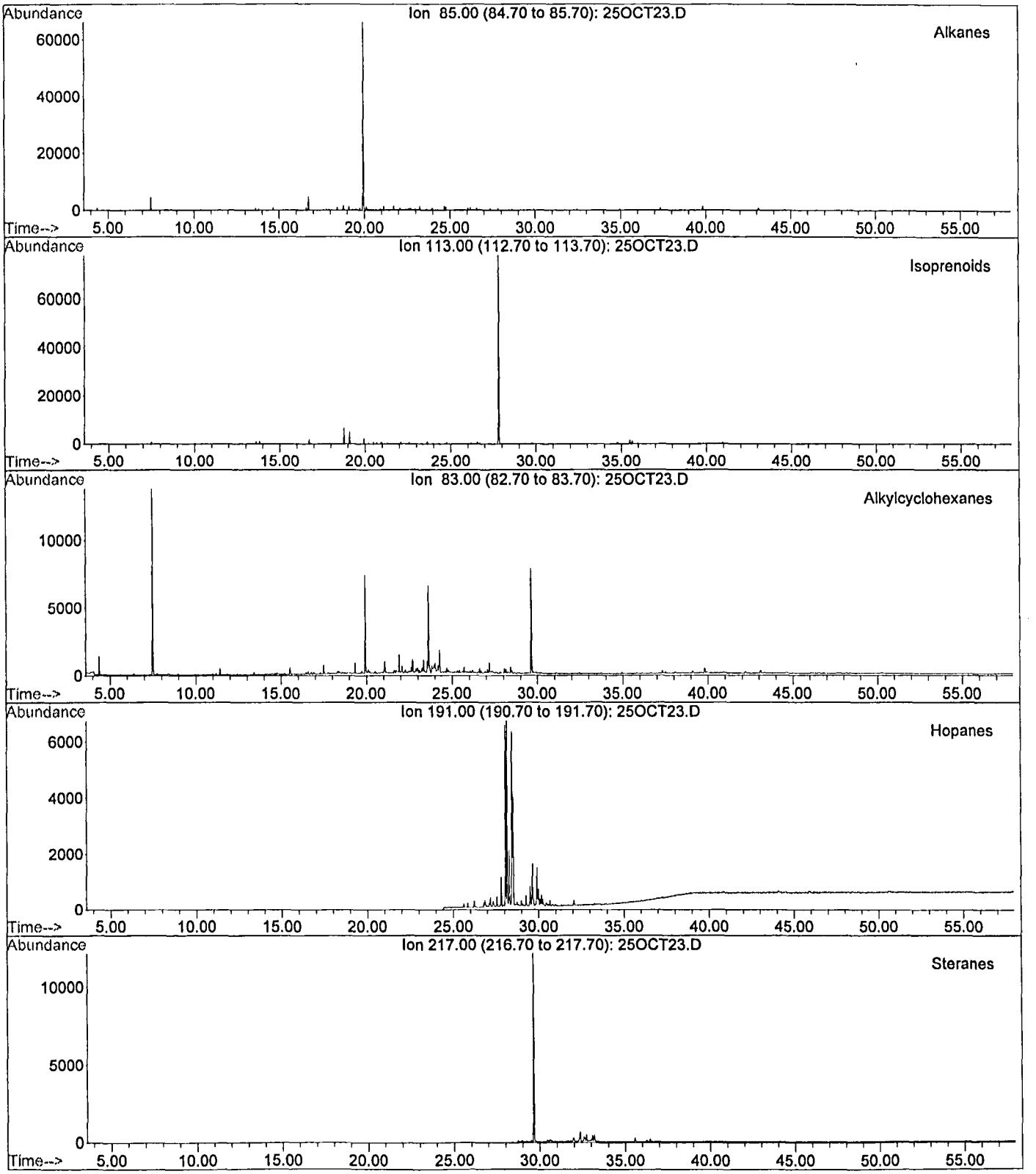
Benz(a)anthracenes/Chrysenes



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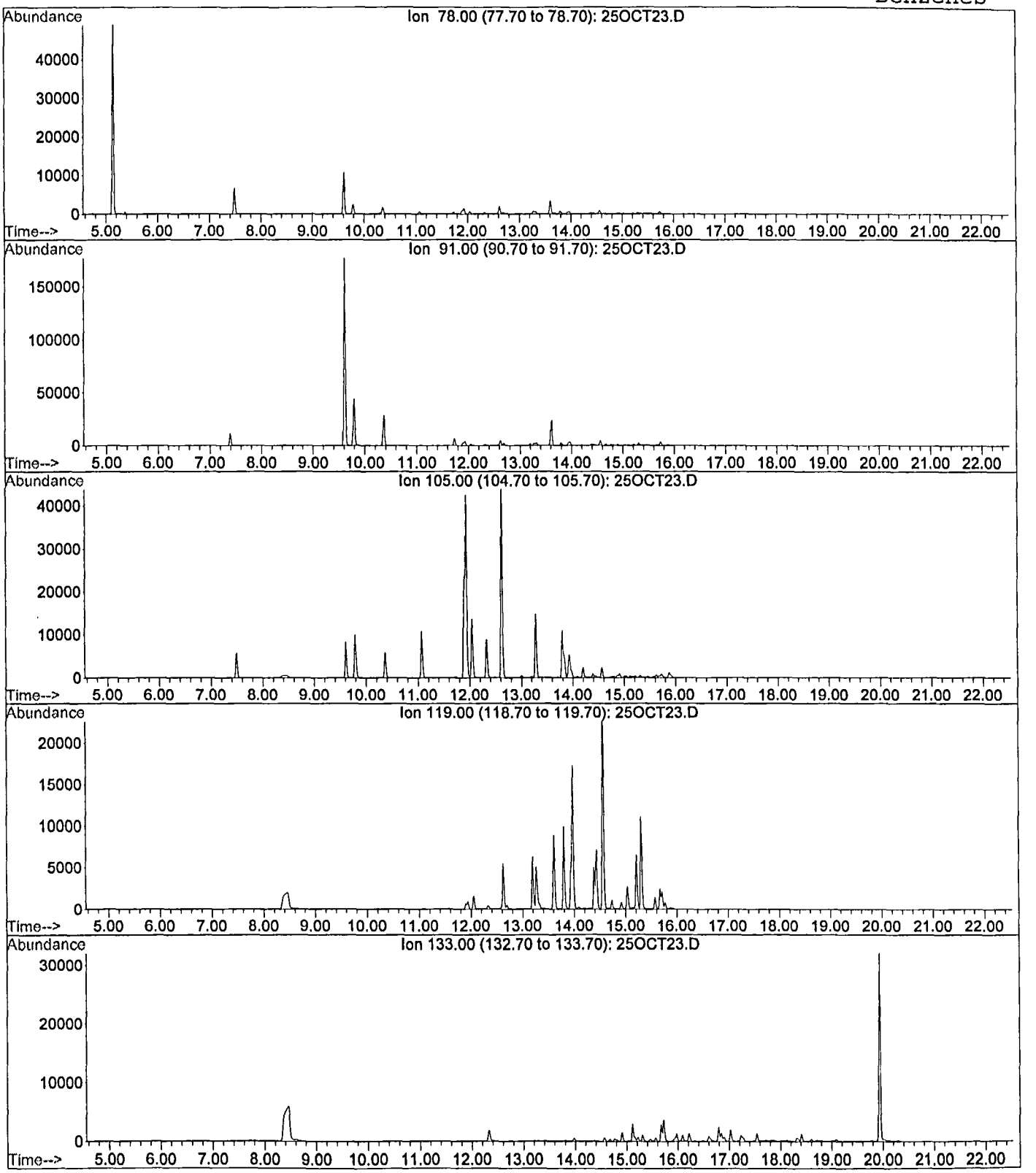


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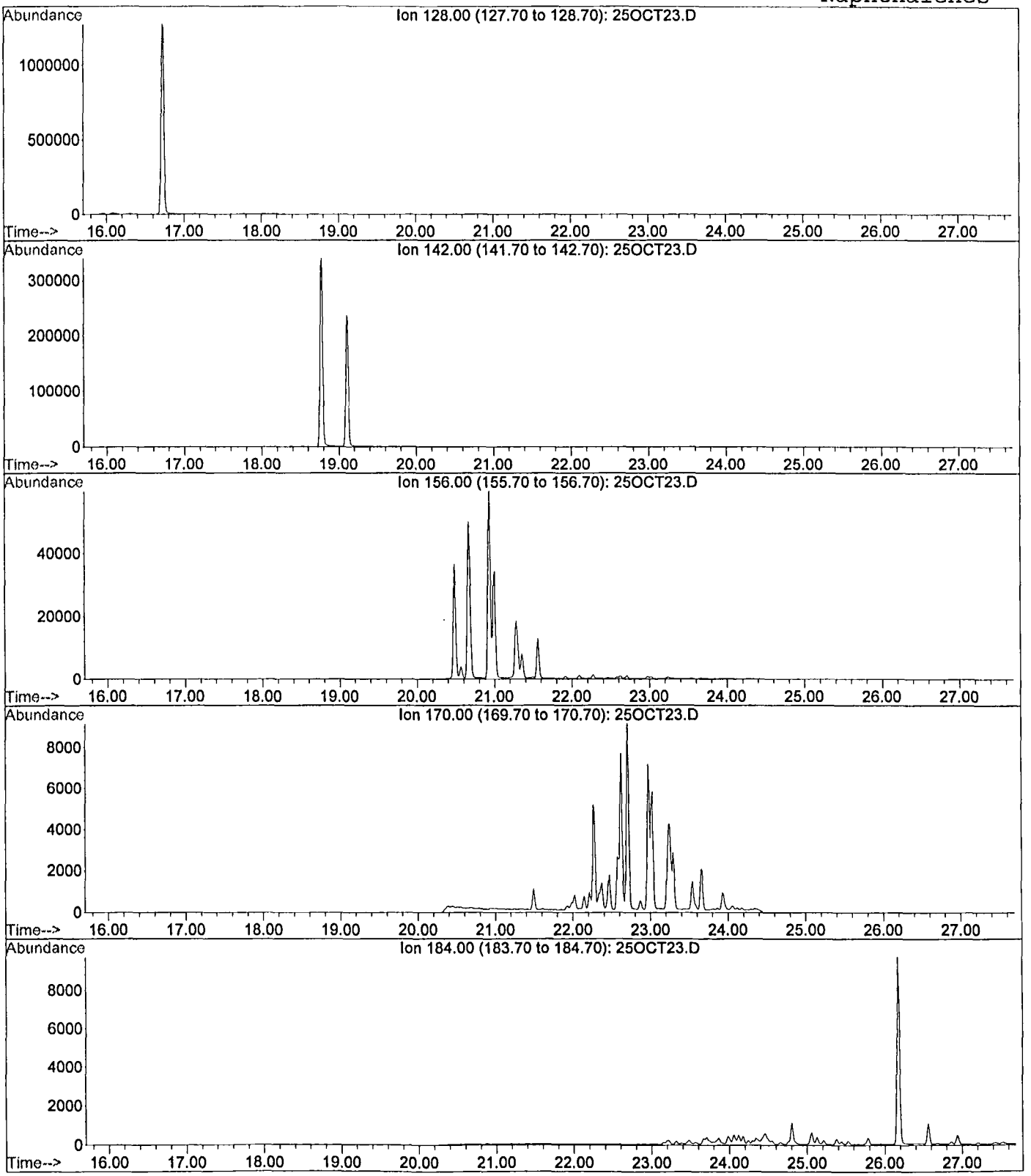
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Instrument: GC/MS Ins Operator: KP

Benzenes



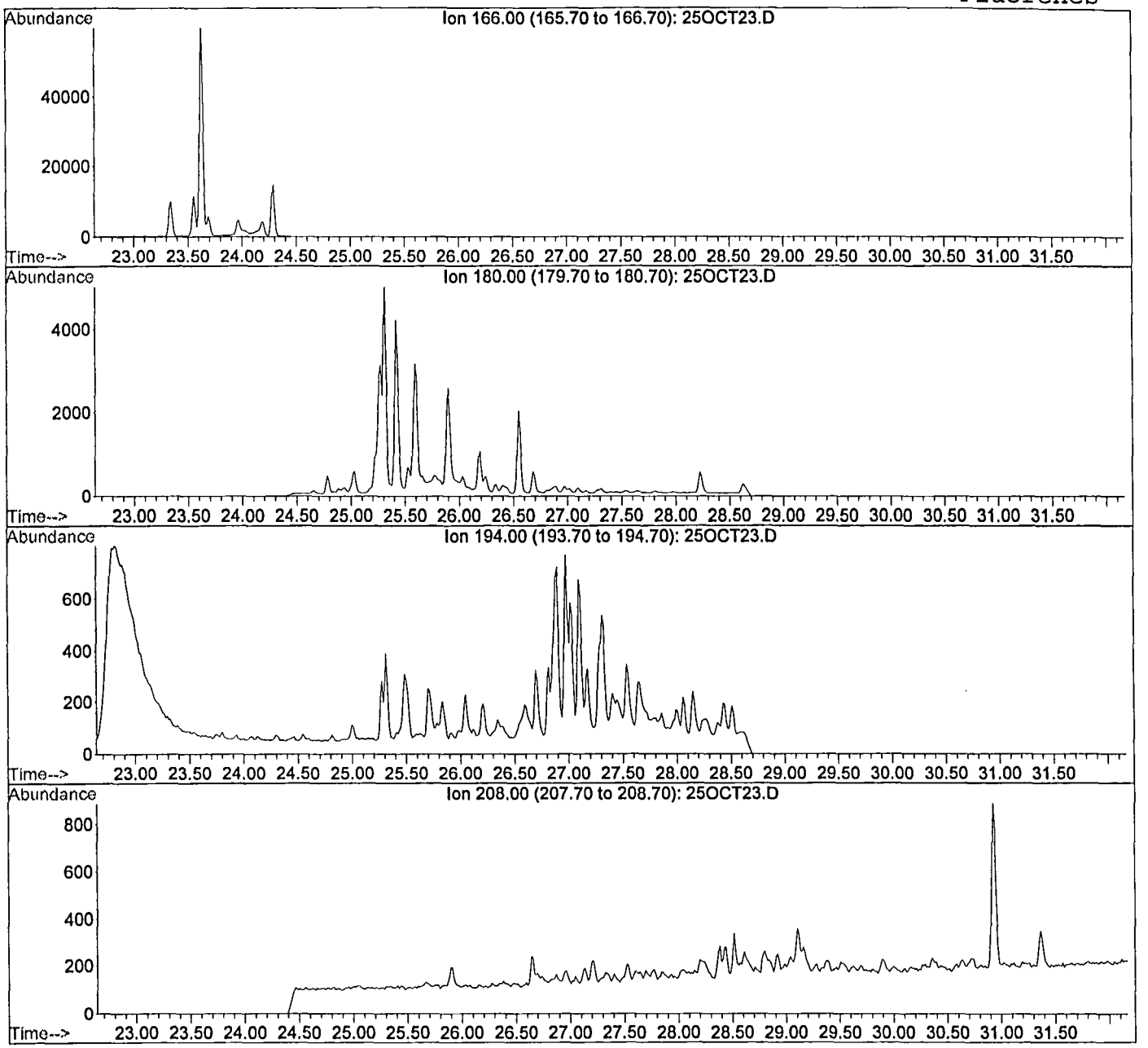
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Lab ID: UR021003-02
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Acquired: 26 Oct 2002 8:58 am using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: KP

Naphthalenes



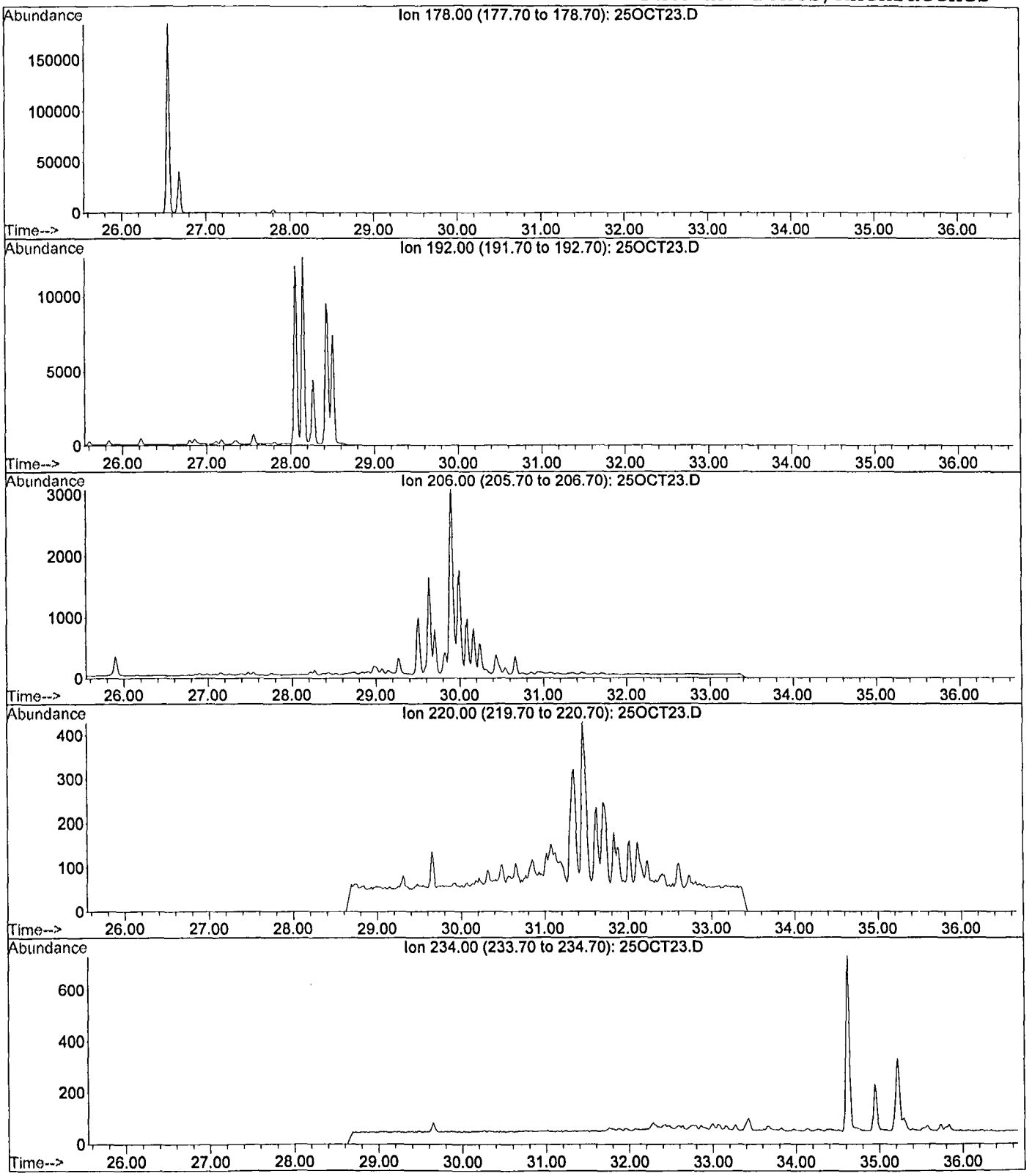
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Instrument: GC/MS Ins Operator: KP

Fluorenes



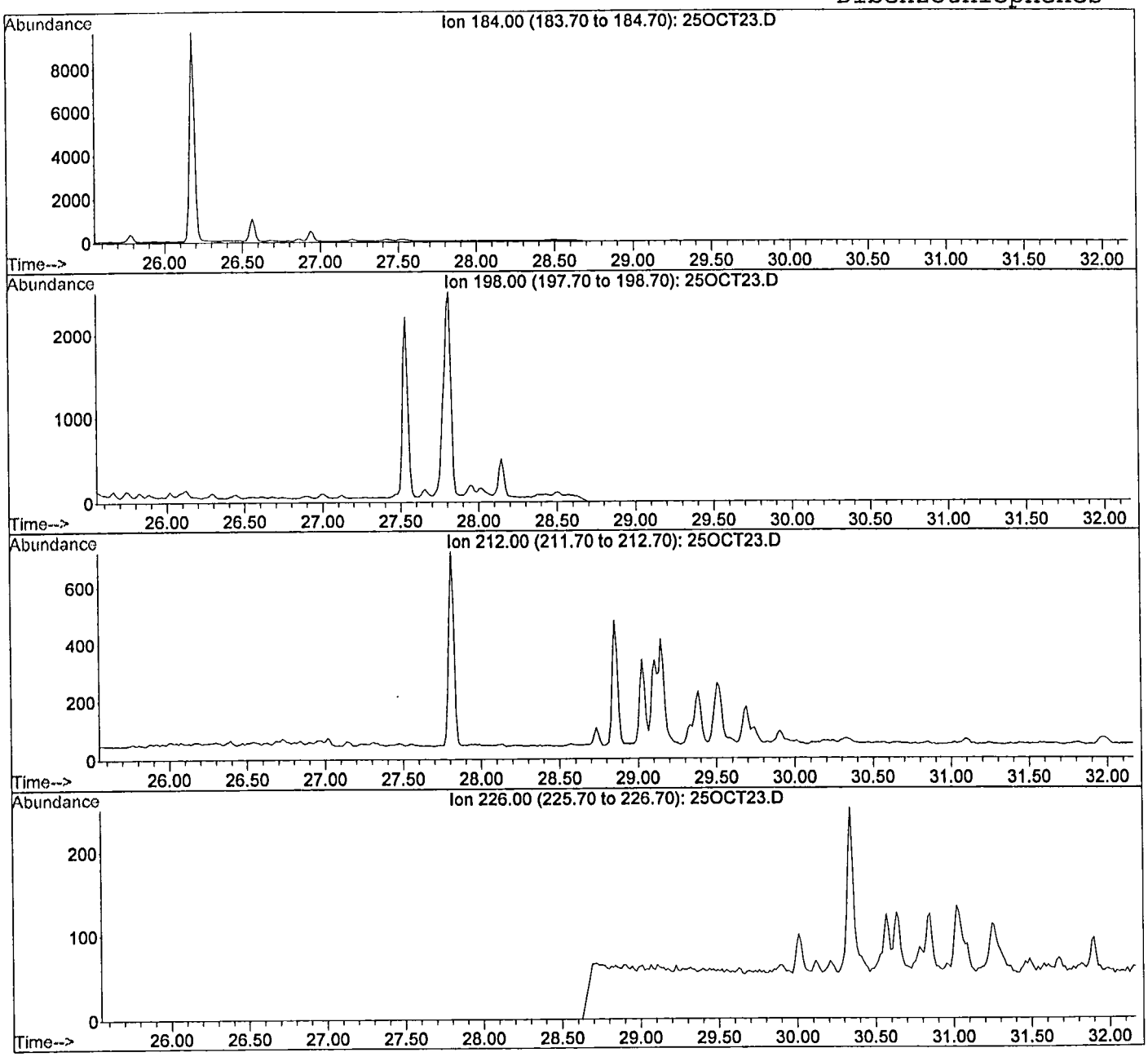
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Instrument: GC/MS Ins Operator: KP

Phenanthrenes/Anthracenes



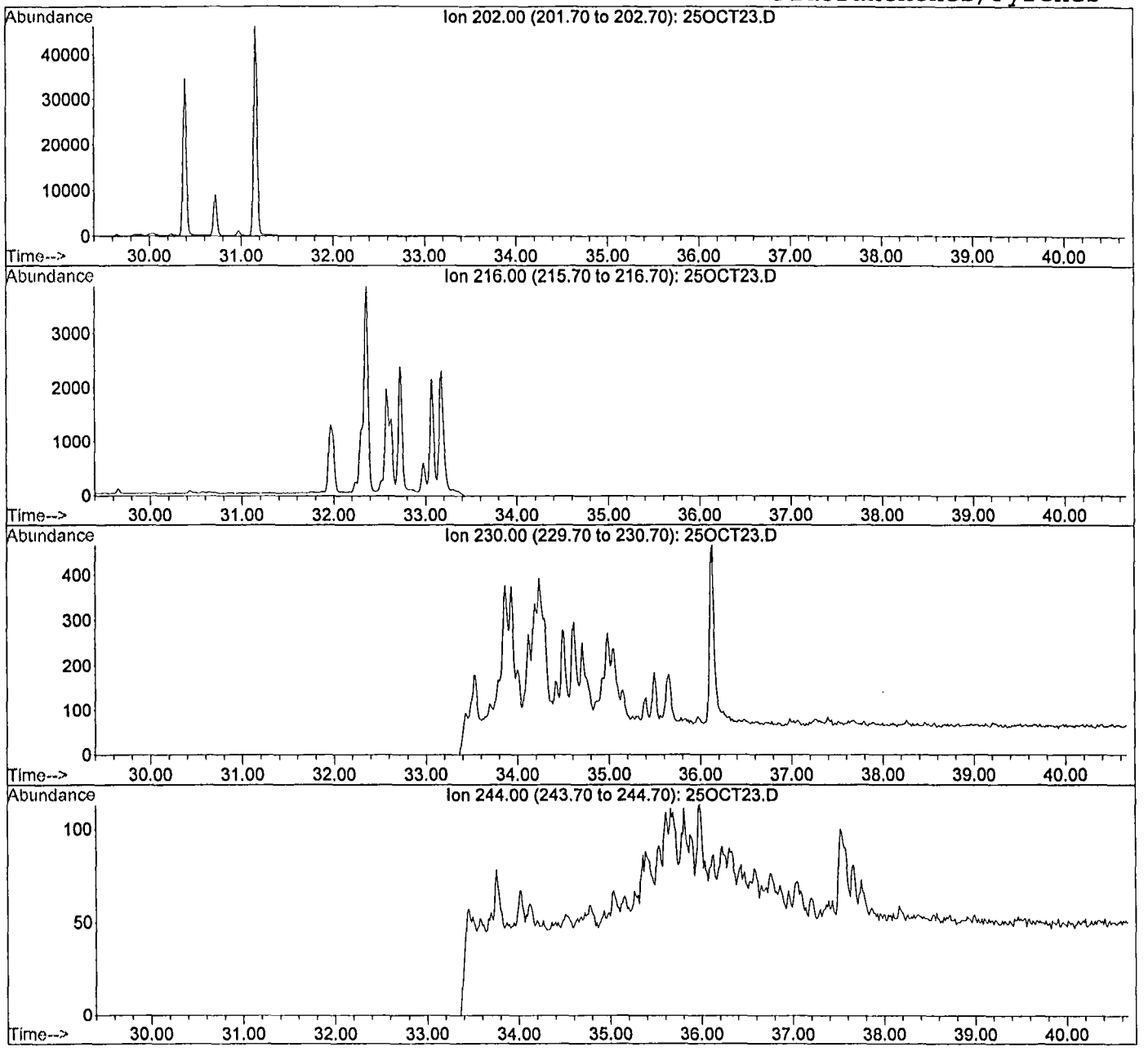
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Instrument: GC/MS Ins Operator: KP

Dibenzothiophenes



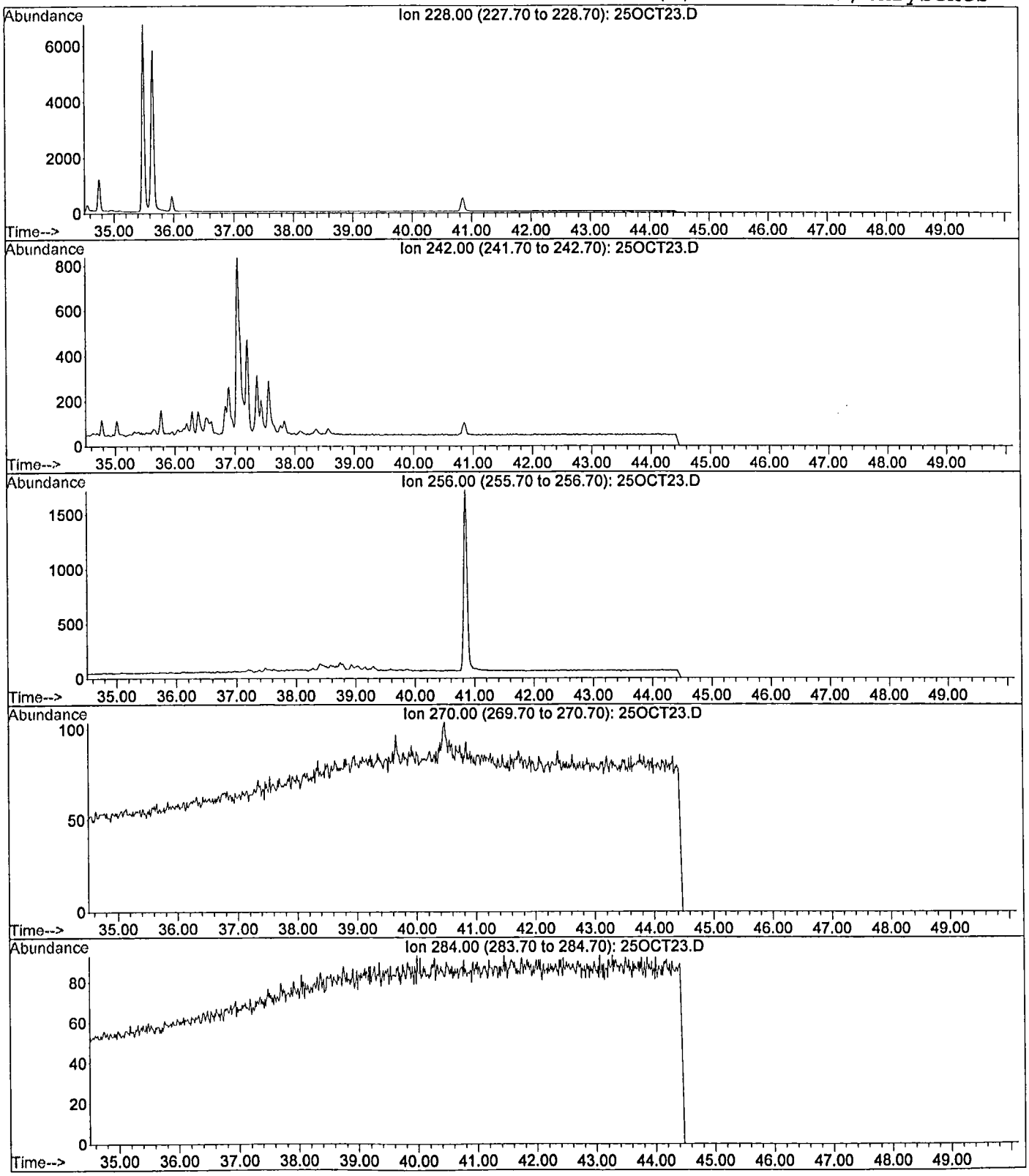
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Instrument: GC/MS Ins Operator: KP

Fluoranthenes/Pyrenes

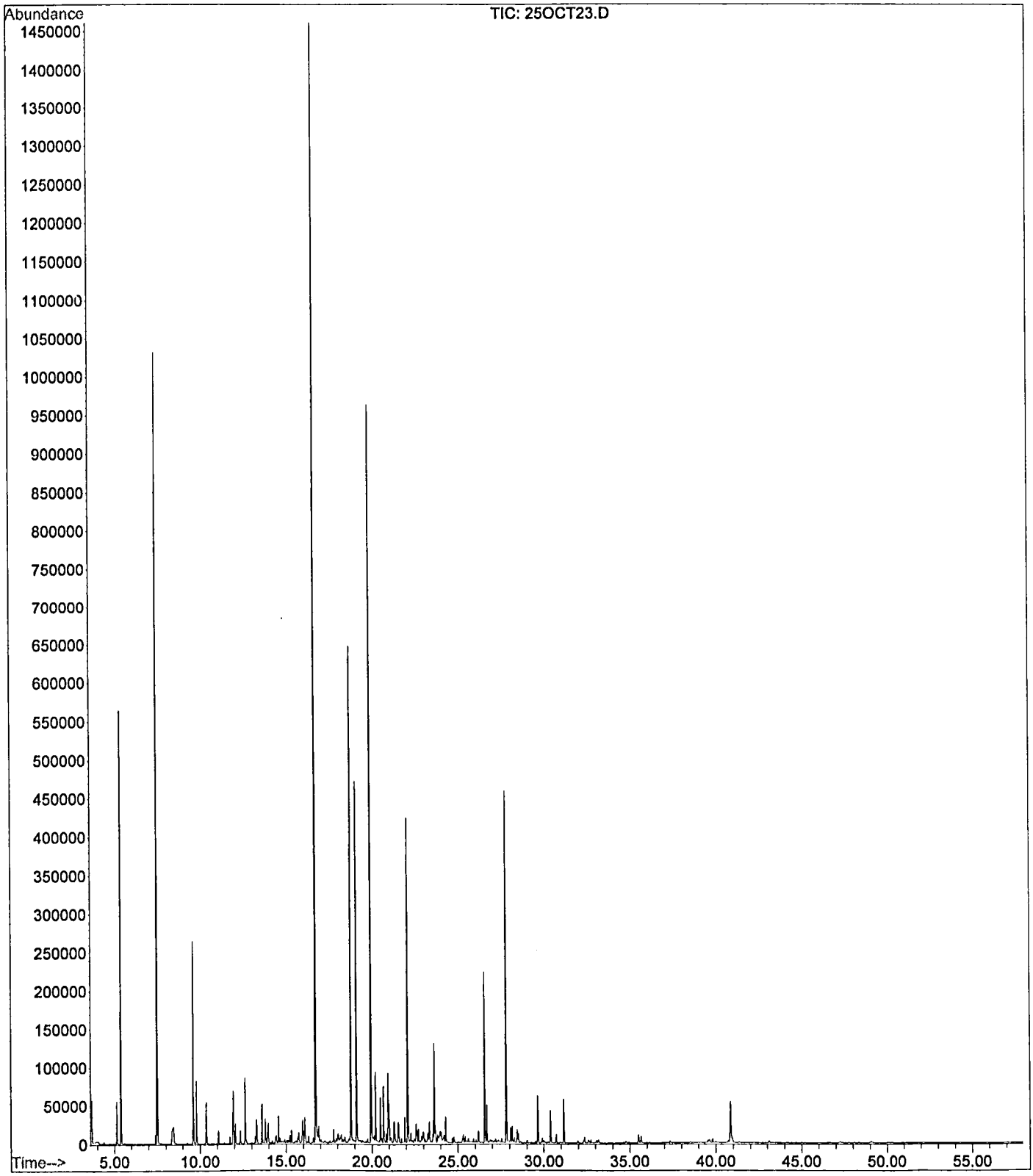


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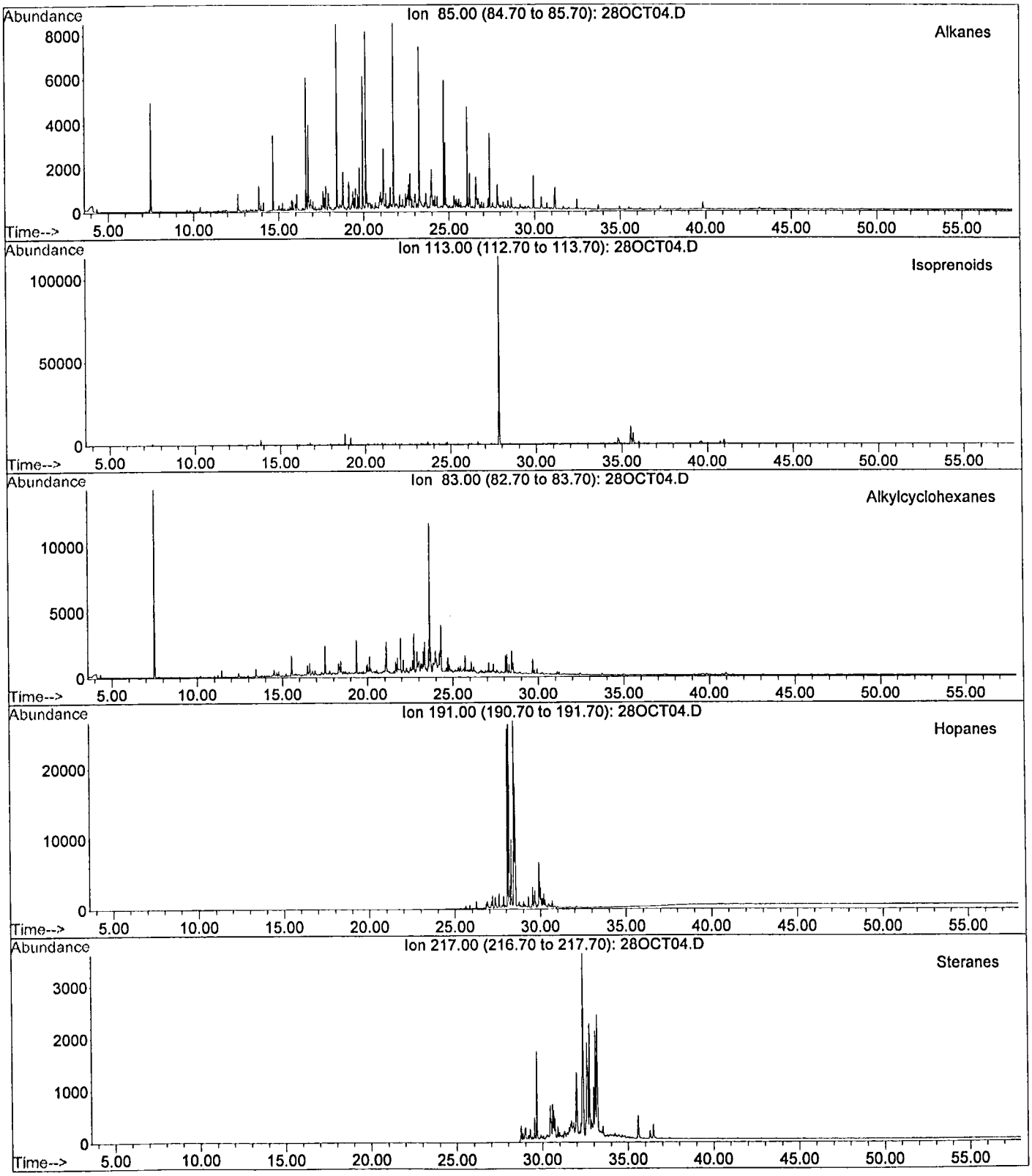
Benz(a)anthracenes/Chrysenes



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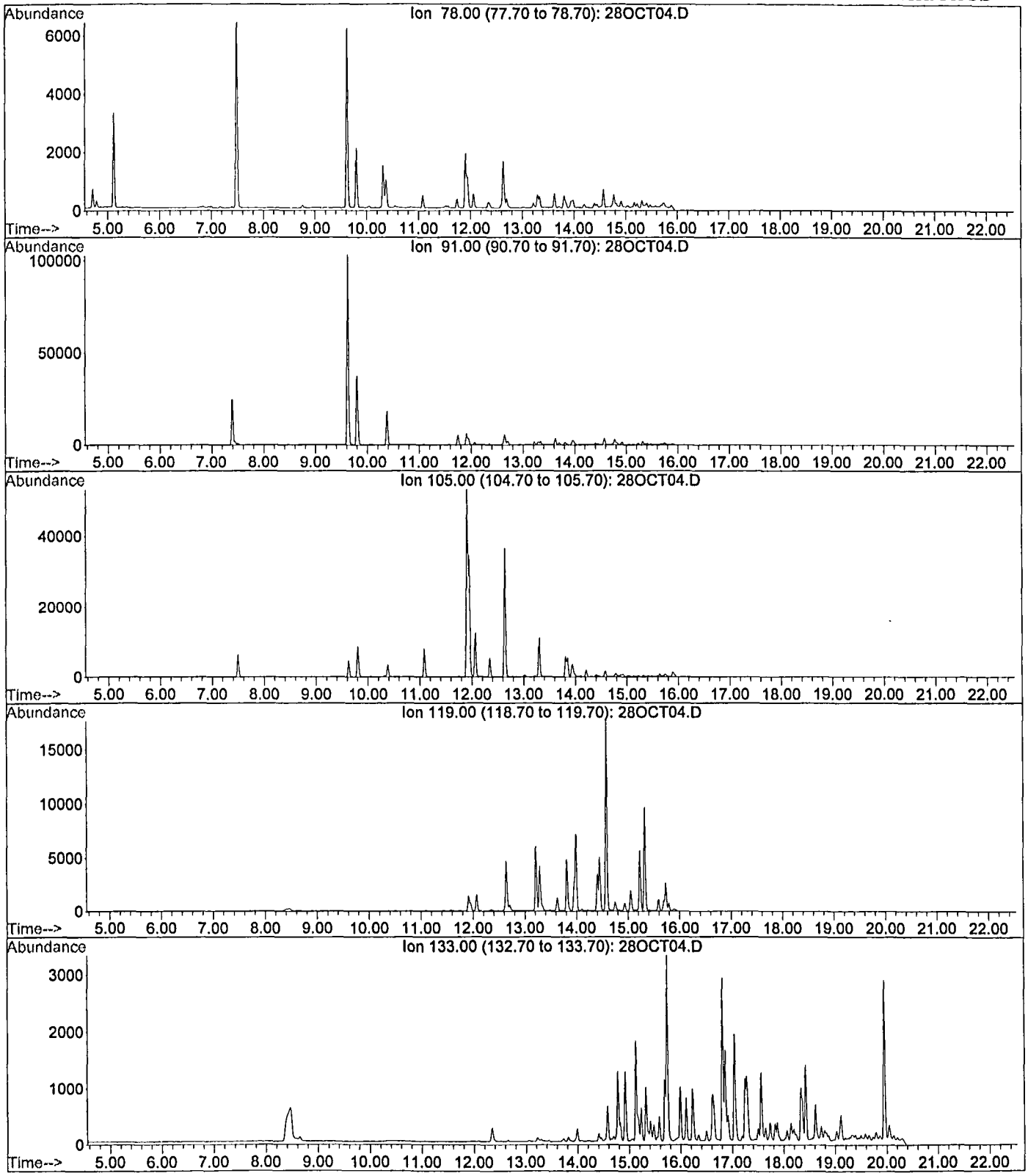


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Instrument: GC/MS Ins Operator: KP



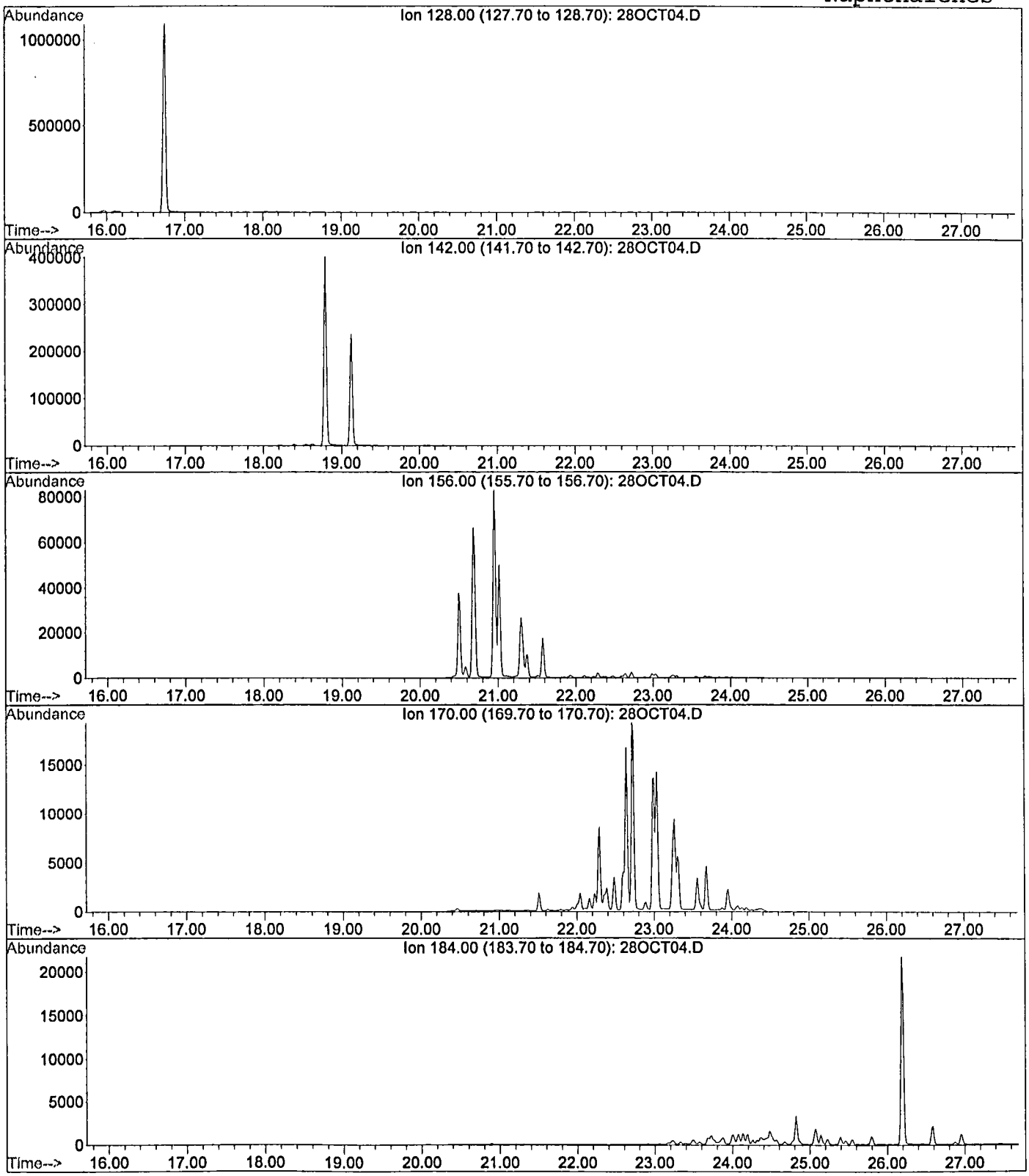
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Instrument: GC/MS Ins Operator: KP

Benzenes



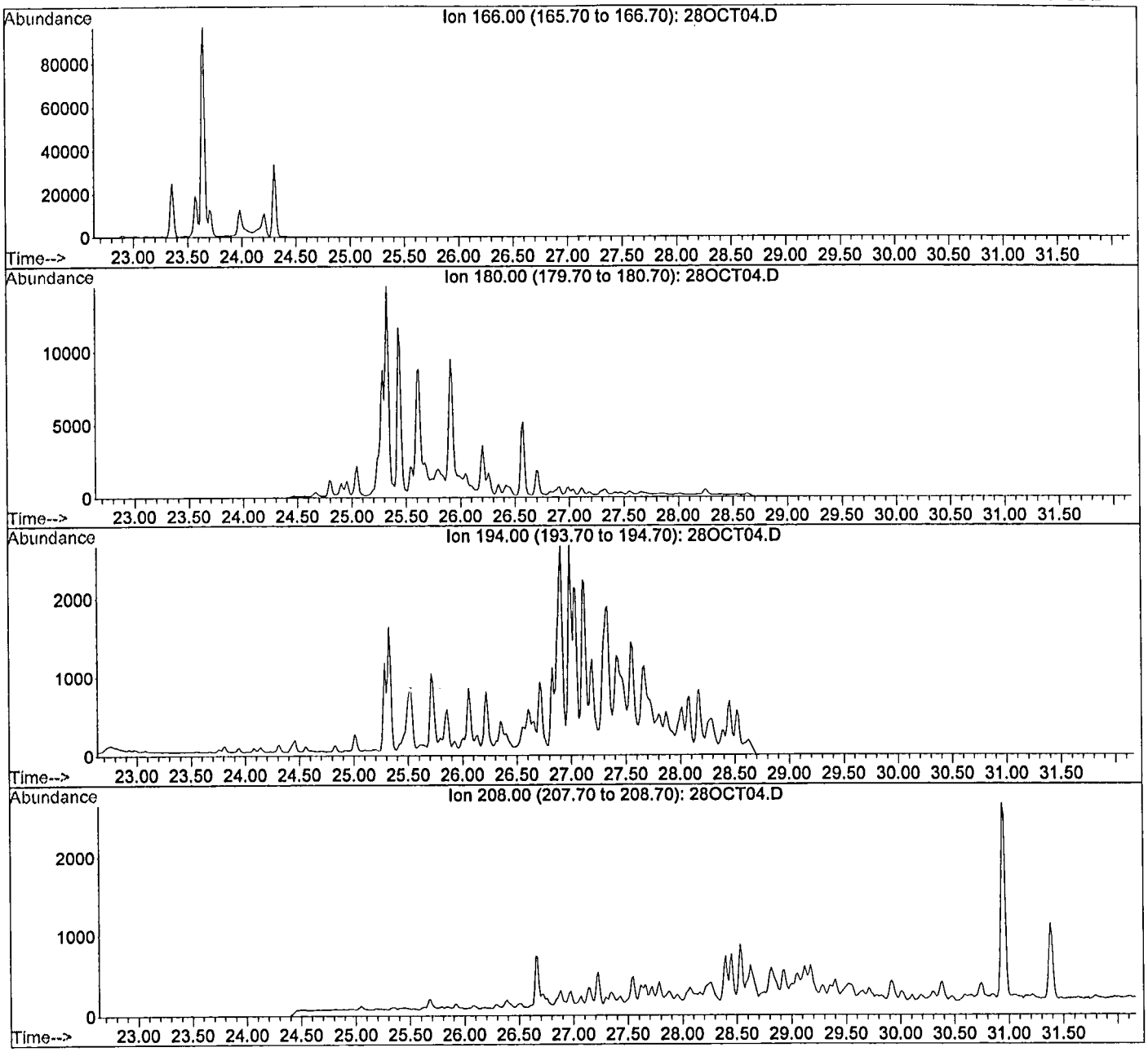
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Instrument: GC/MS Ins Operator: KP

Naphthalenes



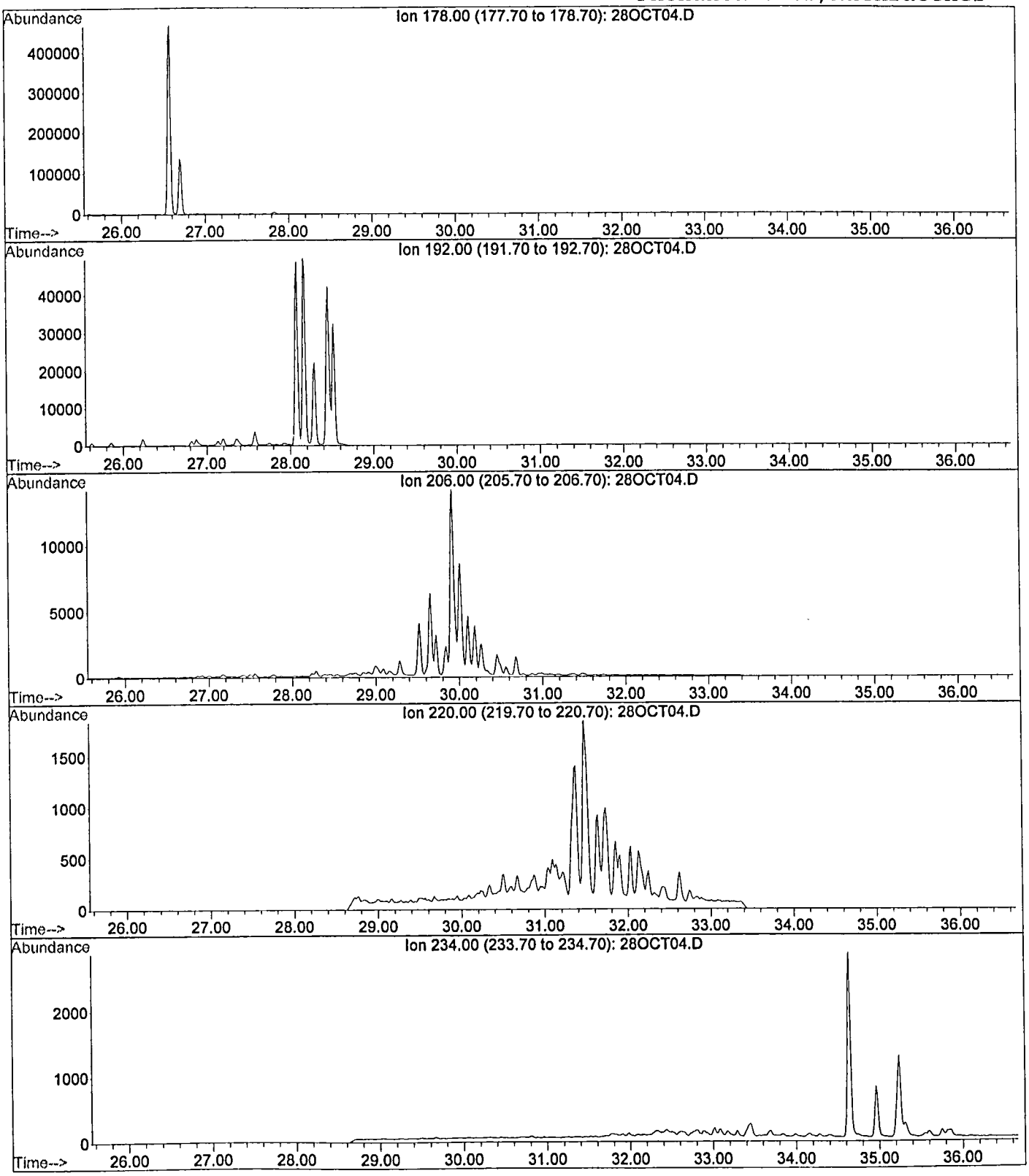
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Instrument: GC/MS Ins Operator: KP

Fluorenes



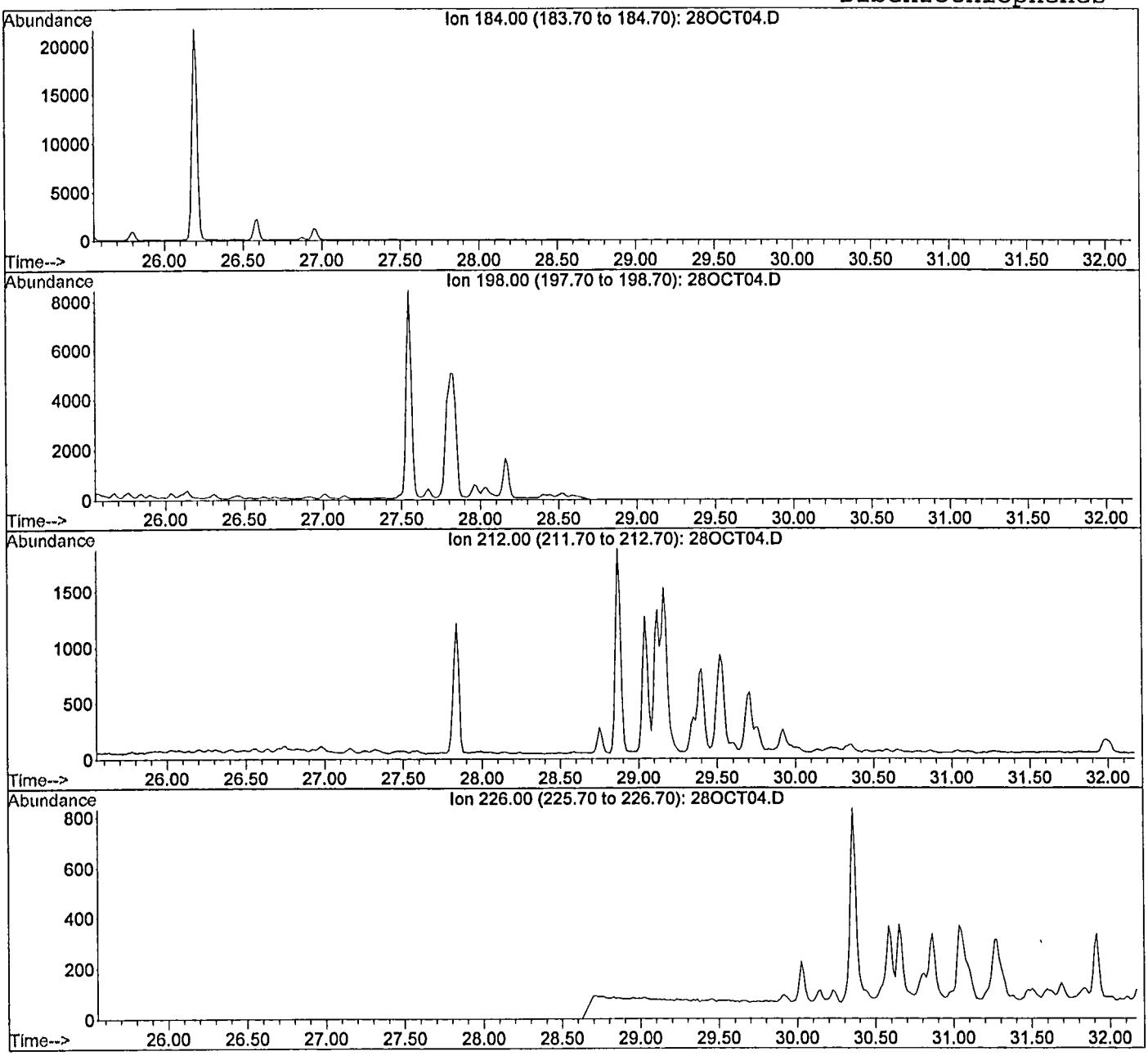
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Acquired: 28 Oct 2002 1:43 pm using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: KP

Phenanthrenes/Anthracenes



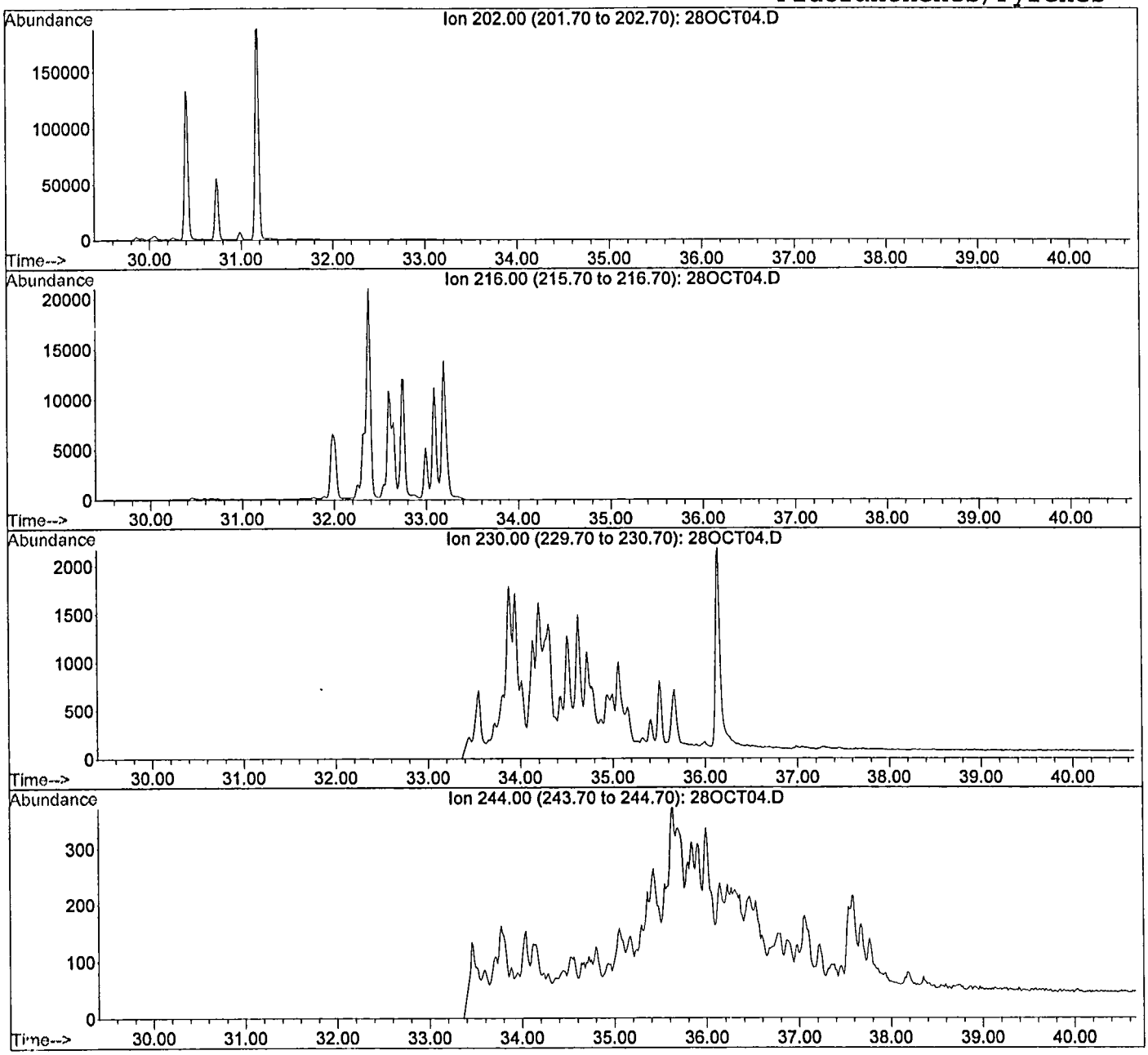
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Acquired: 28 Oct 2002 1:43 pm using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: KP

Dibenzothiophenes



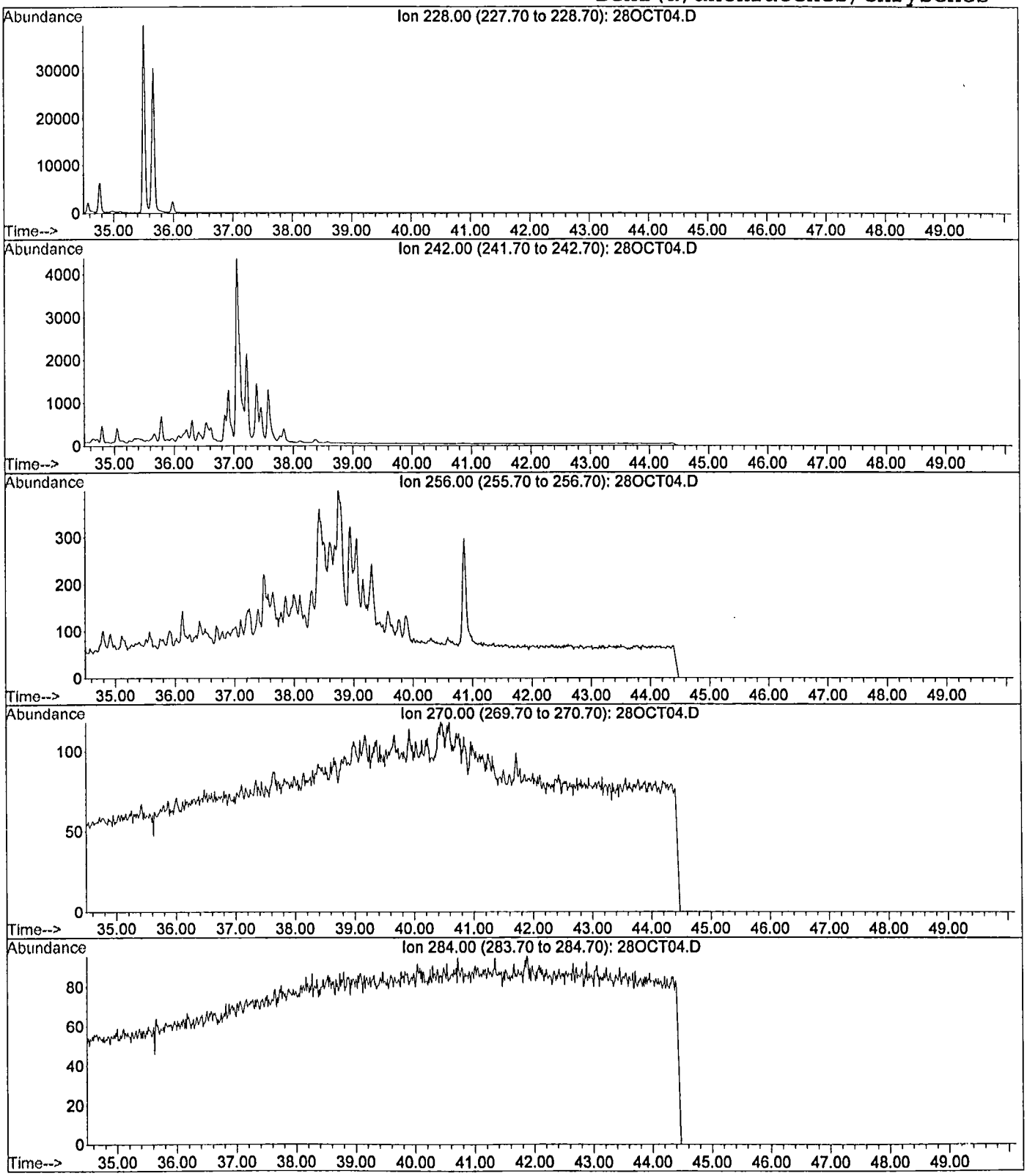
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Instrument: GC/MS Ins Operator: KP

Fluoranthenes/Pyrenes

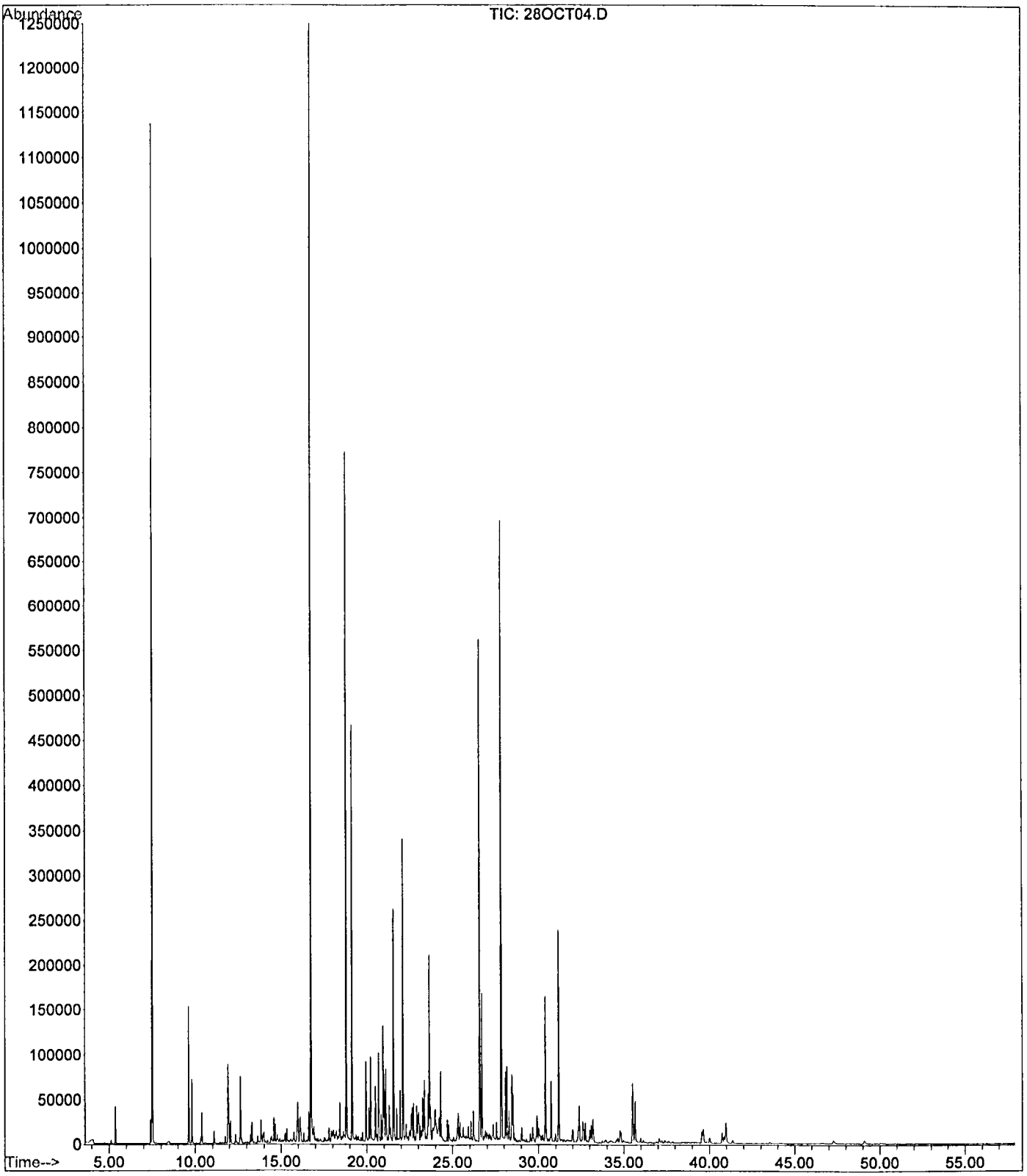


Field ID:
Lab ID: UR021003-03 1:10
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Acquired: 28 Oct 2002 1:43 pm using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: KP

Benz(a)anthracenes/Chrysenes



Field ID:
Lab ID: UR021003-03 1:10
File: G:\2\DATA\021028\28OCT04.D
Acquired: 28 Oct 2002 1:43 pm using AcqMethod SIM4008Z
Instrument: GC/MS Ins Operator: KP



NYSEG

New York State Electric & Gas Corporation

Mechanicville Central Avenue
Former Manufactured Gas Plant
Mechanicville, New York

SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT
APPENDICES G - K
SEPTEMBER 2004

VOL. V OF V



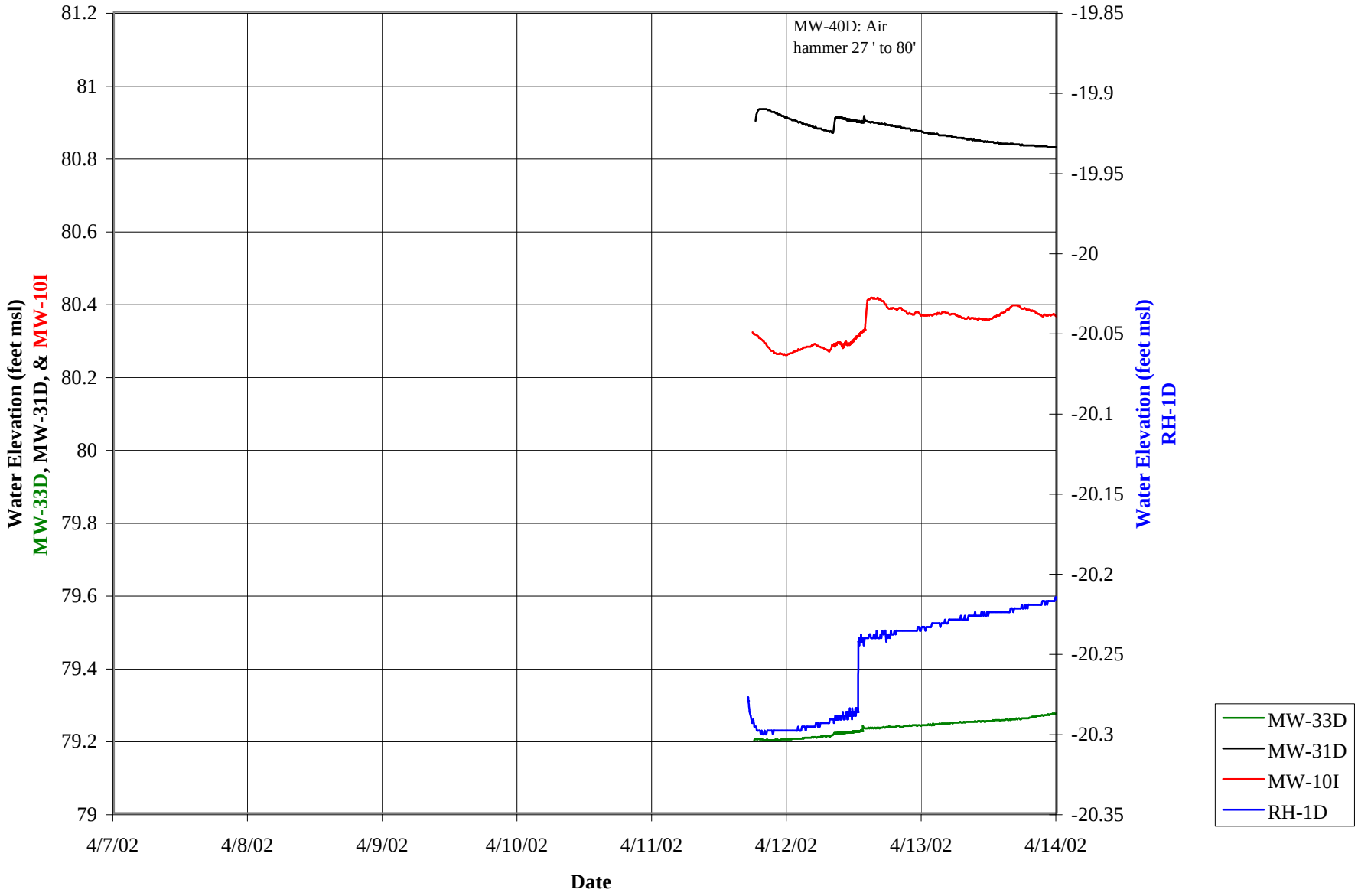
Prepared For:
New York State Electric & Gas Corporation
Kirkwood Industrial Park
Binghamton, New York

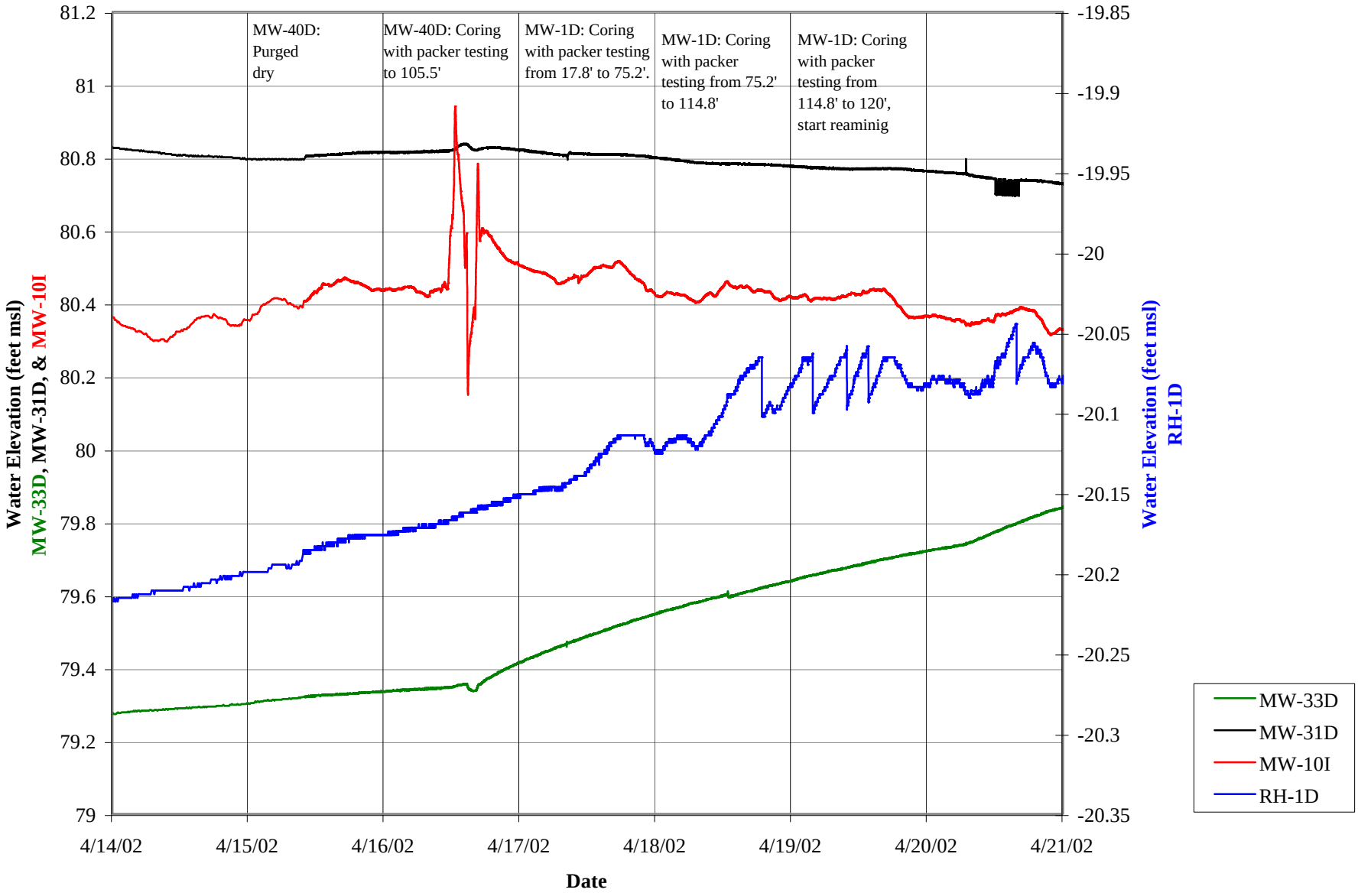
URS

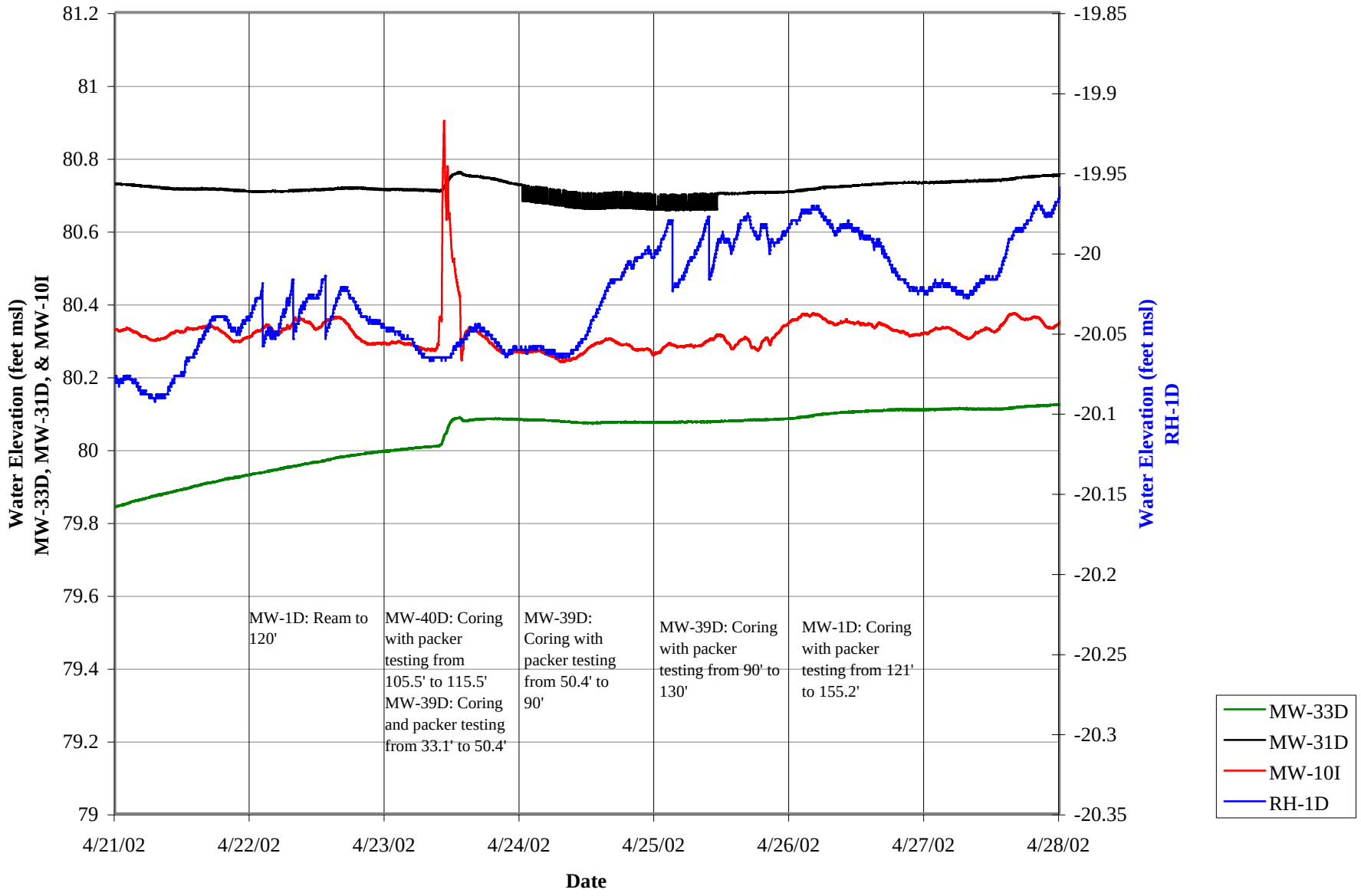
URS Corporation - New York
28 Corporate Drive, Suite 200
Clifton Park, New York 12065

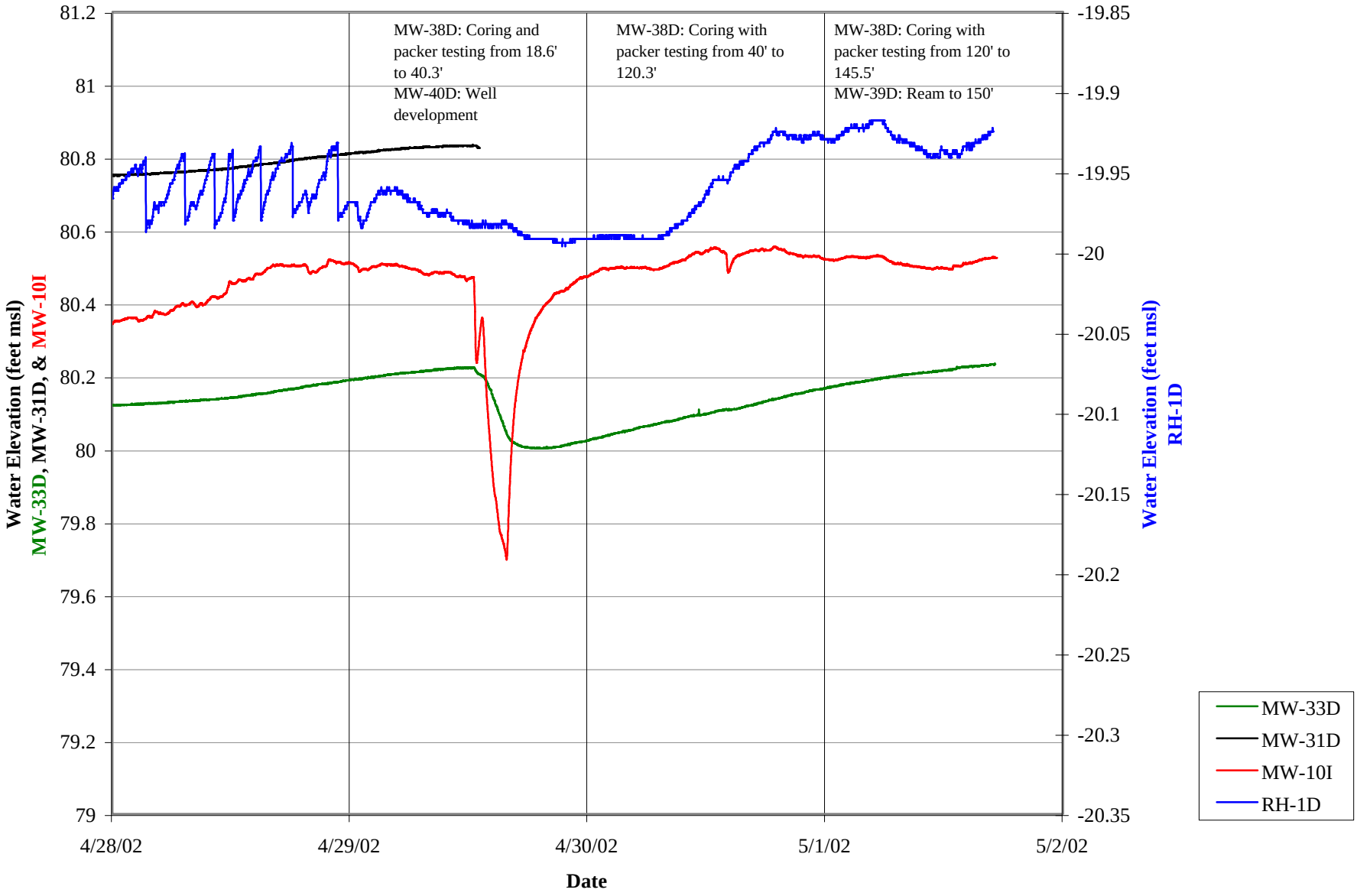
APPENDIX G

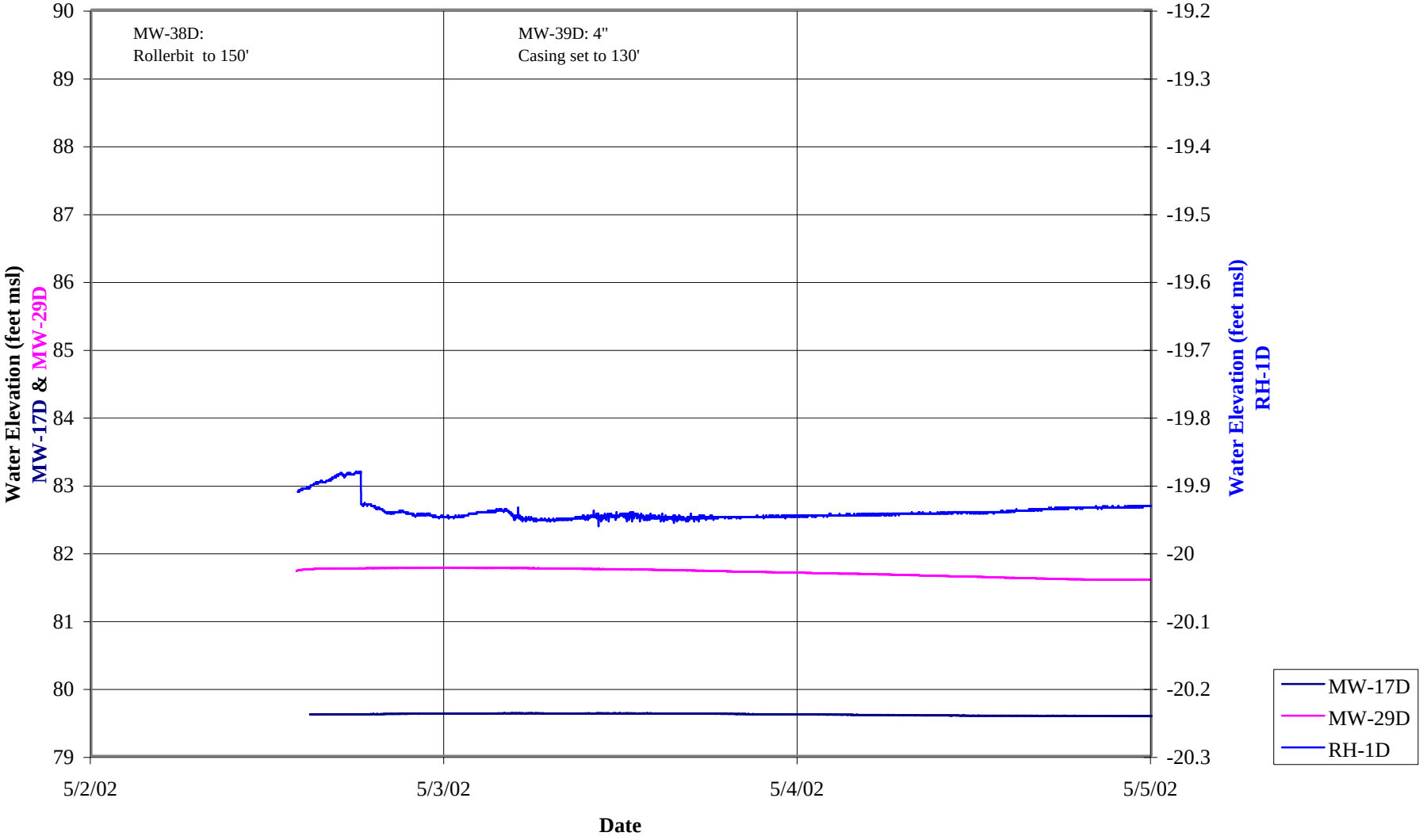
SUMMARY OF WATER LEVEL CHANGES DURING DRILLING

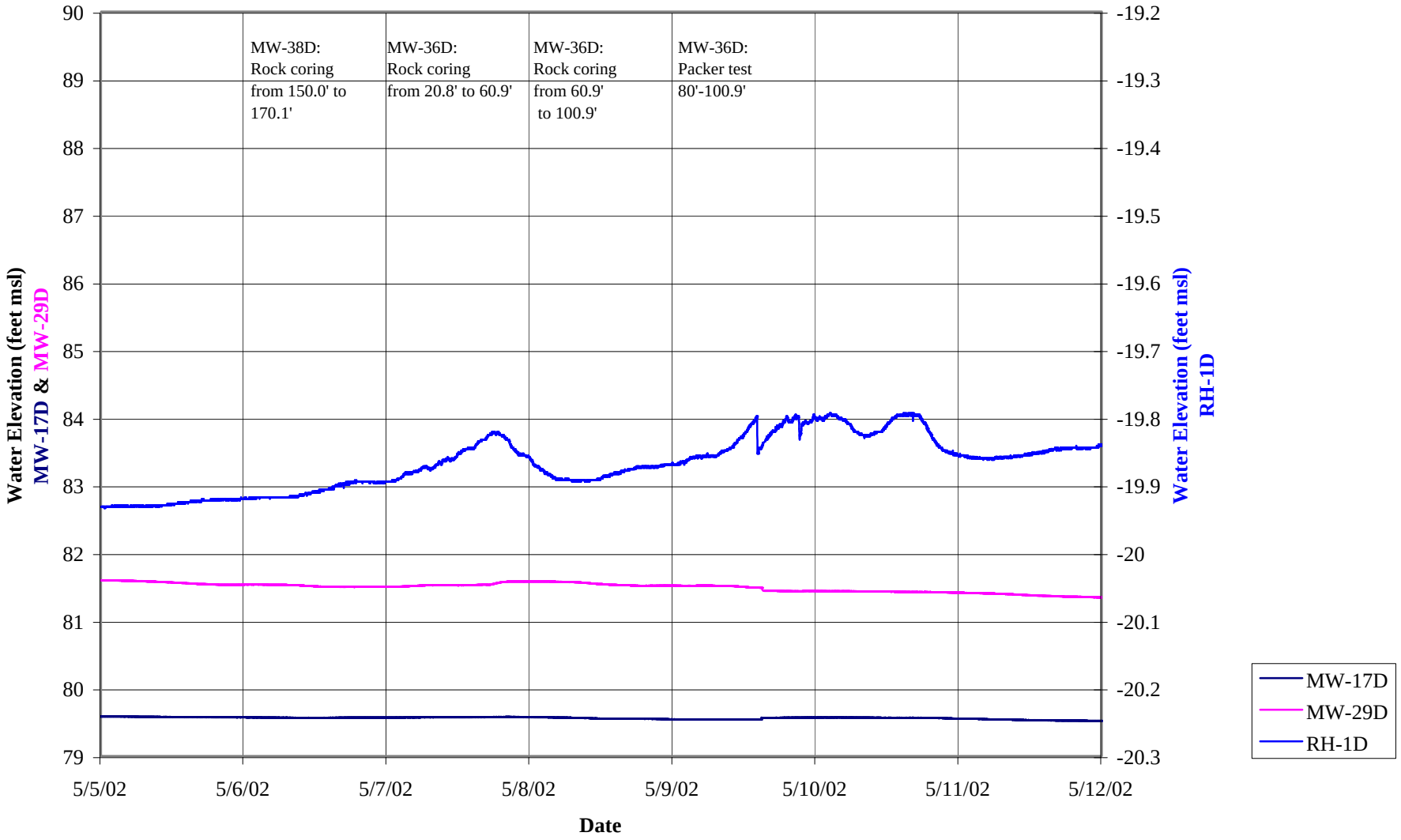

MW-40D: Air hammer 27 ' to 80'
Water Elevation (feet msl)
MW-33D, MW-31D, & MW-10I
Water Elevation (feet msl)
RH-1D
81.2
81
80.8
80.6
80.4
80.2
80
79.8
79.6
79.4
79.2
79
-19.85
-19.9
-19.95
-20
-20.05
-20.1
-20.15
-20.2
-20.25
-20.3
-20.35
4/7/02
4/8/02
4/9/02
4/10/02
4/11/02
4/12/02
4/13/02
4/14/02
Date
MW-33D
MW-31D
MW-10I
RH-1D

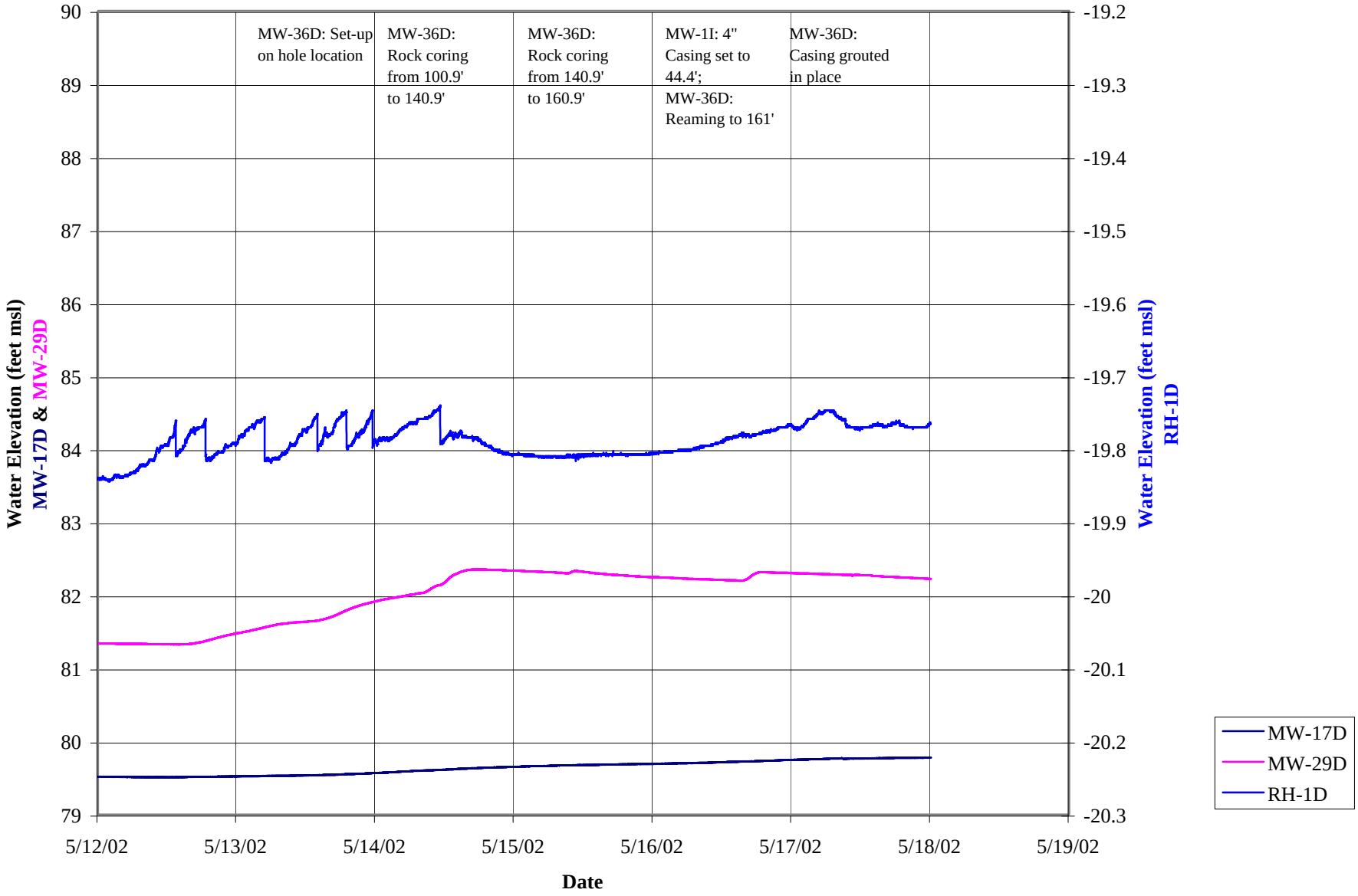

MW-40D: Purged dry
MW-40D: Coring with packer testing to 105.5'
MW-1D: Coring with packer testing from 17.8' to 75.2'.
MW-1D: Coring with packer testing from 75.2' to 114.8'
MW-1D: Coring with packer testing from 114.8' to 120', start reaminig
Water Elevation (feet msl)
MW-33D, MW-31D, & MW-10I
Water Elevation (feet msl)
RH-1D
81.2
81
80.8
80.6
80.4
80.2
80
79.8
79.6
79.4
79.2
79
-19.85
-19.9
-19.95
-20
-20.05
-20.1
-20.15
-20.2
-20.25
-20.3
-20.35
4/14/02
4/15/02
4/16/02
4/17/02
4/18/02
4/19/02
4/20/02
4/21/02
Date
MW-33D
MW-31D
MW-10I
RH-1D

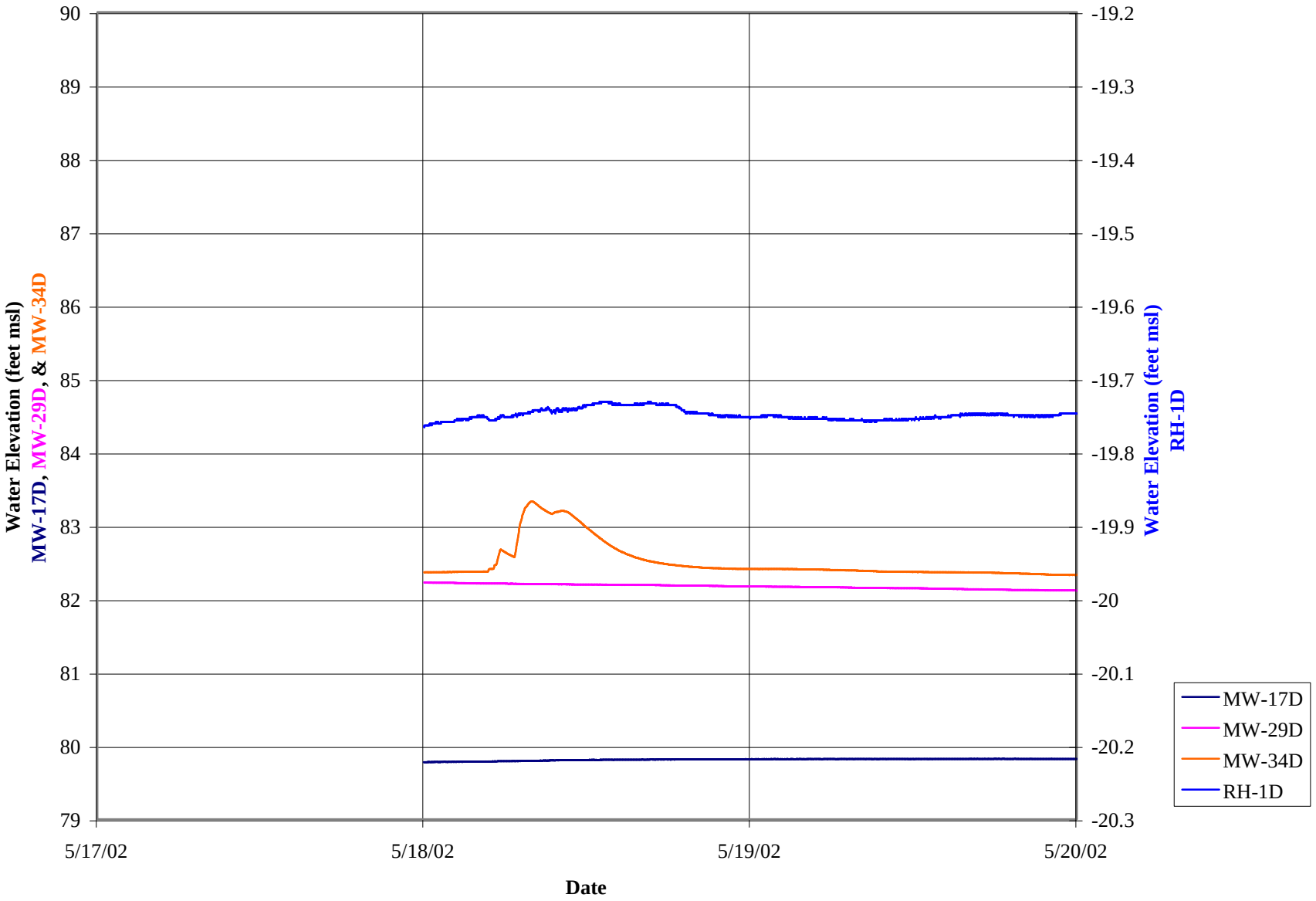

Water Elevation (feet msl)
MW-33D, MW-31D, & MW-10I
Water Elevation (feet msl)
RH-1D
81.2
81
80.8
80.6
80.4
80.2
80
79.8
79.6
79.4
79.2
79
-19.85
-19.9
-19.95
-20
-20.05
-20.1
-20.15
-20.2
-20.25
-20.3
-20.35
4/21/02
4/22/02
4/23/02
4/24/02
4/25/02
4/26/02
4/27/02
4/28/02
Date
MW-1D: Ream to 120'
MW-40D: Coring with packer testing from 105.5' to 115.5'
MW-39D: Coring and packer testing from 33.1' to 50.4'
MW-39D: Coring with packer testing from 50.4' to 90'
MW-39D: Coring with packer testing from 90' to 130'
MW-1D: Coring with packer testing from 121' to 155.2'
MW-33D
MW-31D
MW-10I
RH-1D

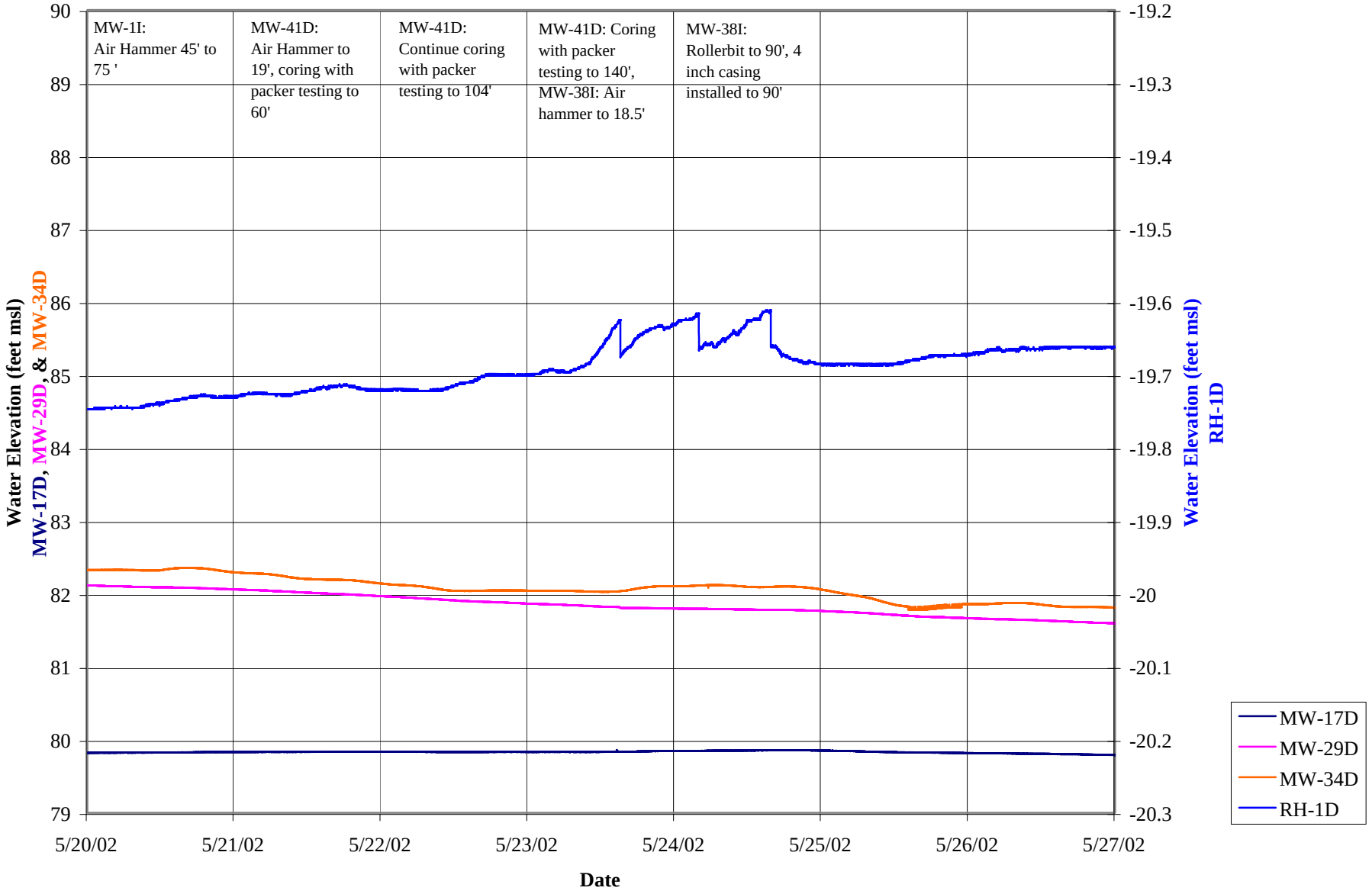

MW-38D: Coring and packer testing from 18.6' to 40.3'
MW-40D: Well development
MW-38D: Coring with packer testing from 40' to 120.3'
MW-38D: Coring with packer testing from 120' to 145.5'
MW-39D: Ream to 150'
Water Elevation (feet msl)
MW-33D, MW-31D, & MW-10I
Water Elevation (feet msl)
RH-1D
81.2
81
80.8
80.6
80.4
80.2
80
79.8
79.6
79.4
79.2
79
-19.85
-19.9
-19.95
-20
-20.05
-20.1
-20.15
-20.2
-20.25
-20.3
-20.35
4/28/02
4/29/02
4/30/02
5/1/02
5/2/02
Date
MW-33D
MW-31D
MW-10I
RH-1D

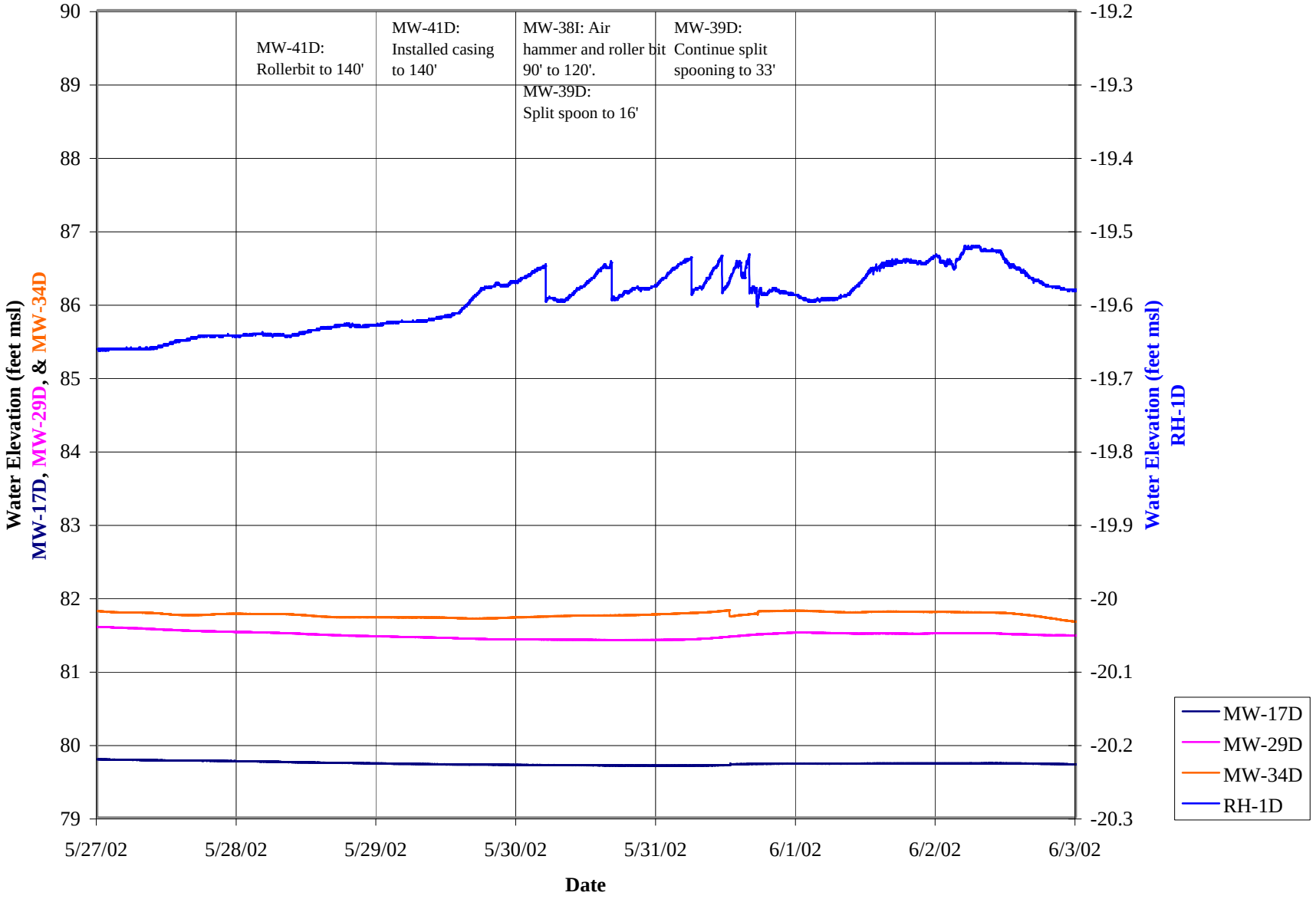

MW-38D:
Rollerbit to 150'
MW-39D: 4"
Casing set to 130'
Water Elevation (feet msl)
MW-17D & MW-29D
Water Elevation (feet msl)
RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
5/2/02
5/3/02
5/4/02
5/5/02
Date
MW-17D
MW-29D
RH-1D

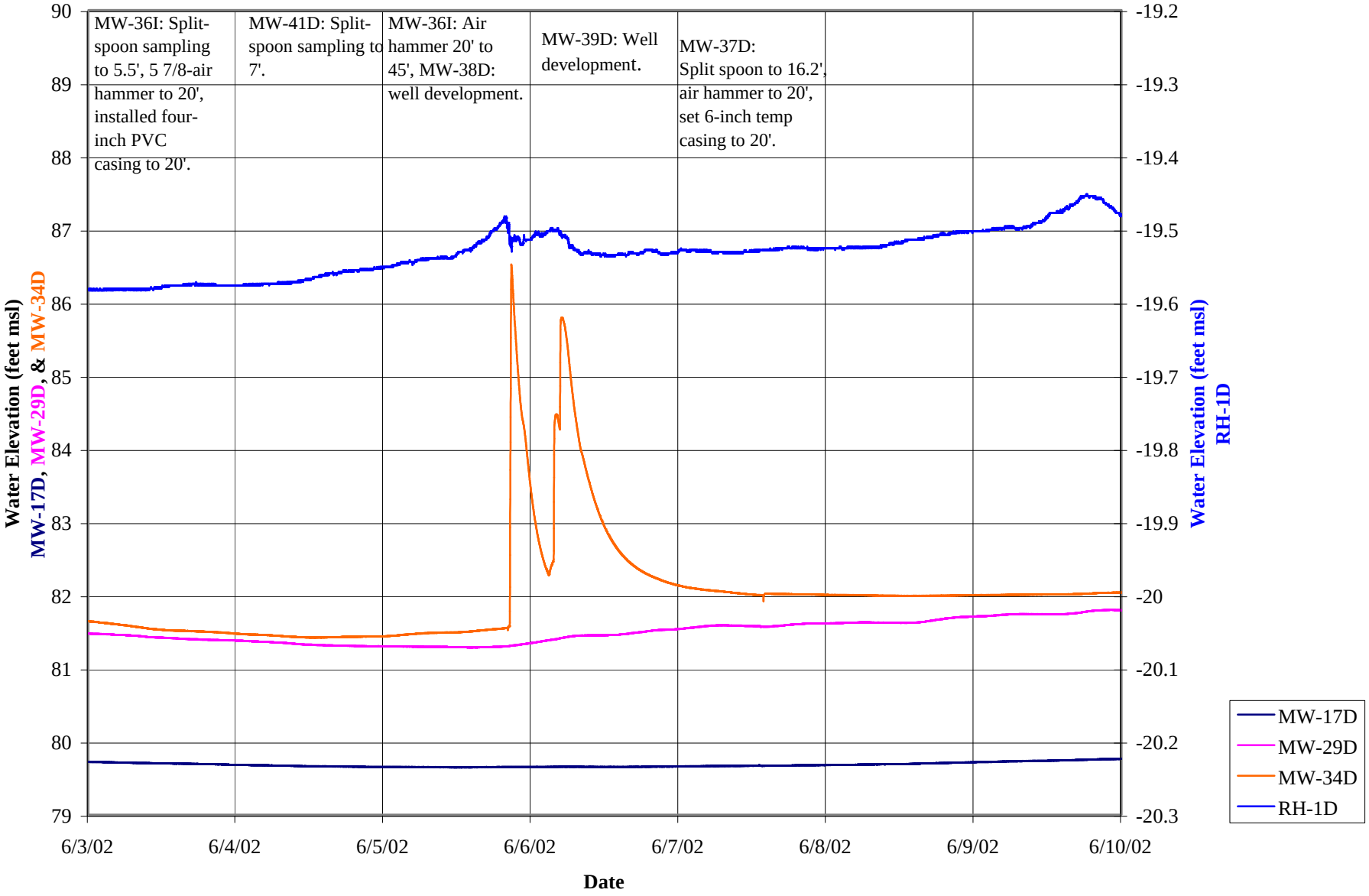

MW-38D:
Rock coring
from 150.0' to
170.1'
MW-36D:
Rock coring
from 20.8' to 60.9'
MW-36D:
Rock coring
from 60.9'
to 100.9'
MW-36D:
Packer test
80'-100.9'
Water Elevation (feet msl)
MW-17D & MW-29D
Water Elevation (feet msl)
RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
5/5/02
5/6/02
5/7/02
5/8/02
5/9/02
5/10/02
5/11/02
5/12/02
Date
MW-17D
MW-29D
RH-1D

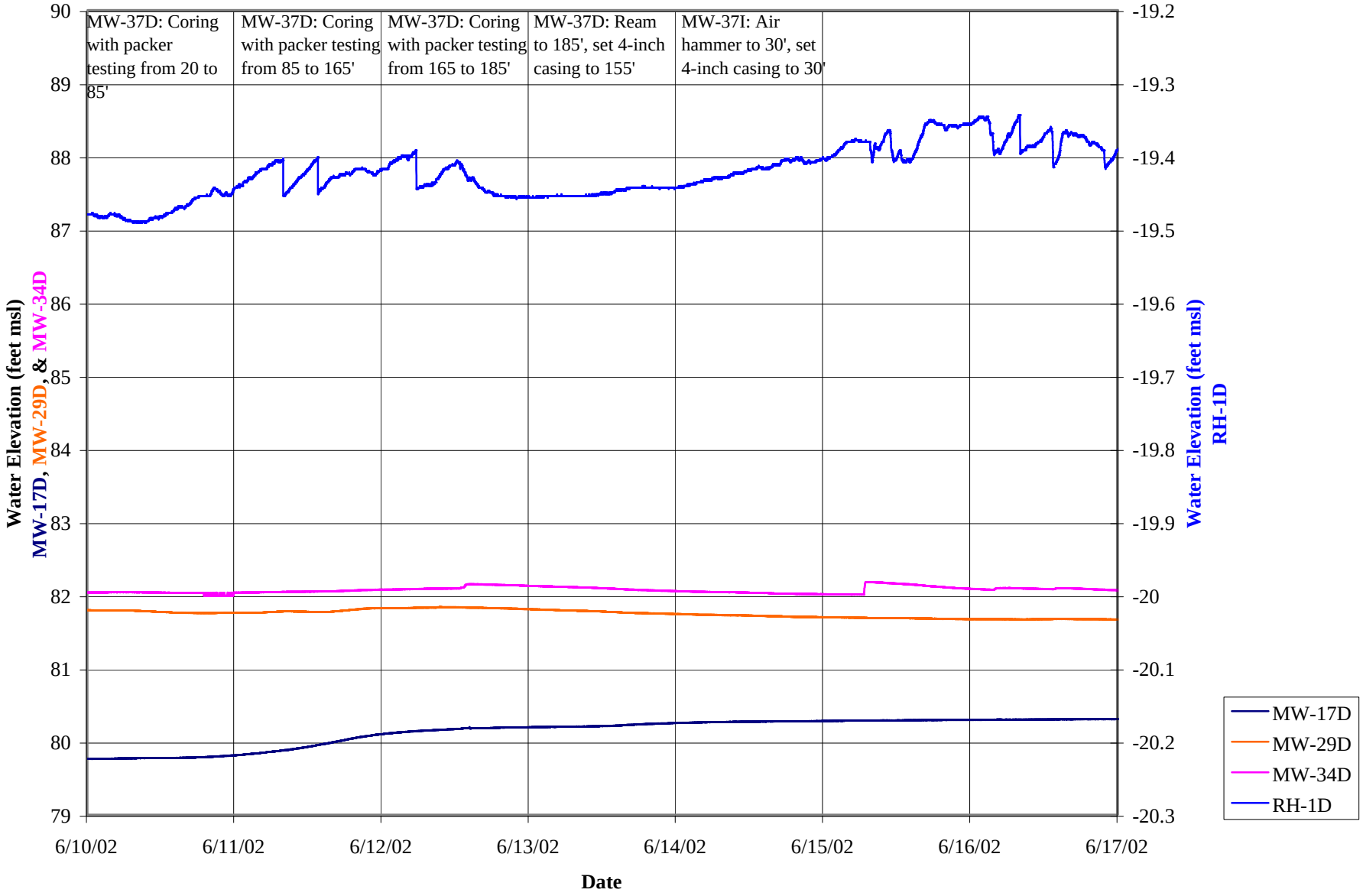

MW-36D: Set-up on hole location
MW-36D: Rock coring from 100.9' to 140.9'
MW-36D: Rock coring from 140.9' to 160.9'
MW-1I: 4" Casing set to 44.4';
MW-36D: Reaming to 161'
MW-36D: Casing grouted in place
Water Elevation (feet msl)
MW-17D & MW-29D
Water Elevation (feet msl)
RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
5/12/02
5/13/02
5/14/02
5/15/02
5/16/02
5/17/02
5/18/02
5/19/02
Date
MW-17D
MW-29D
RH-1D

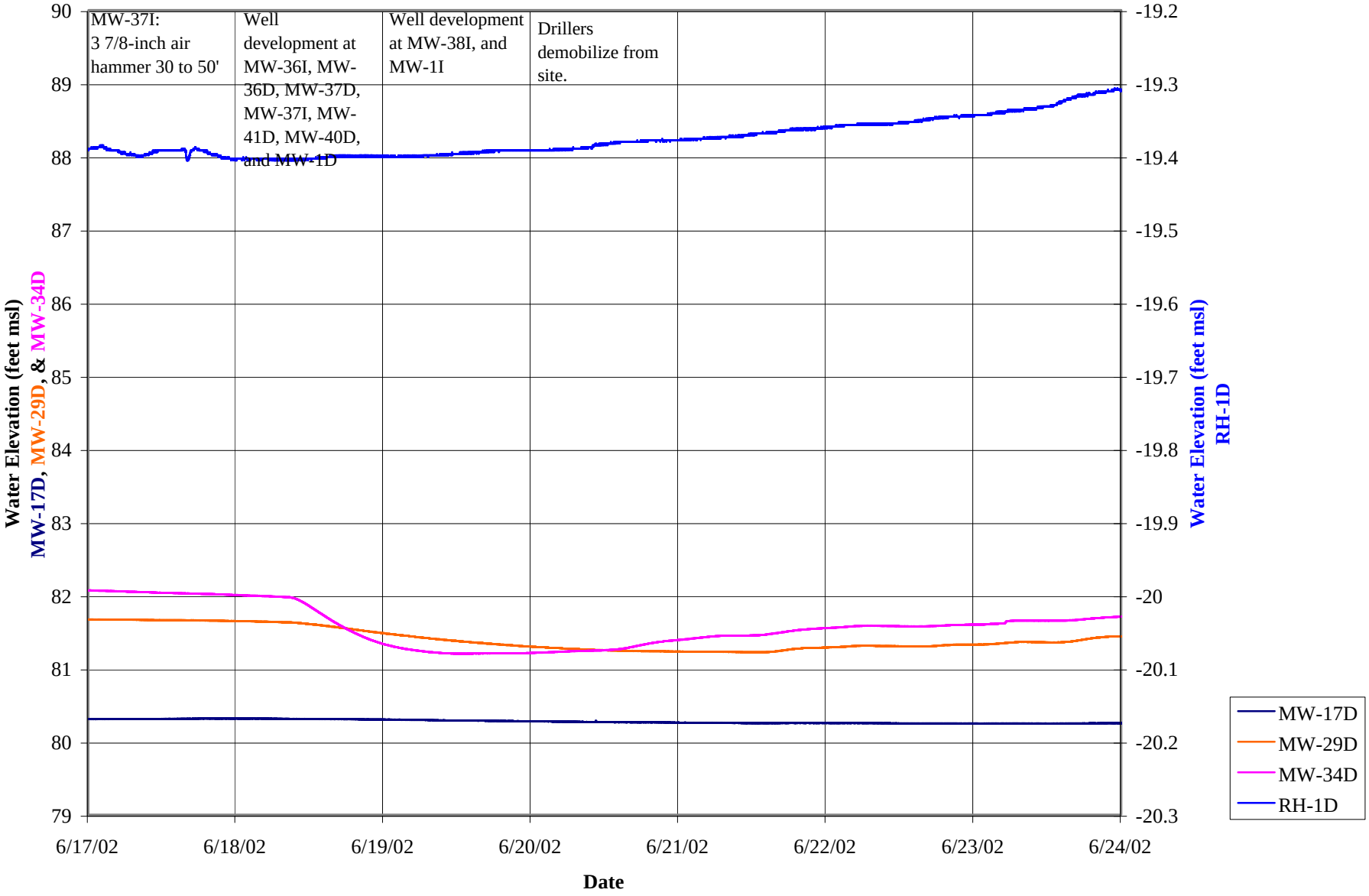

Water Elevation (feet msl)
MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl)
RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
5/17/02
5/18/02
5/19/02
5/20/02
Date
MW-17D
MW-29D
MW-34D
RH-1D

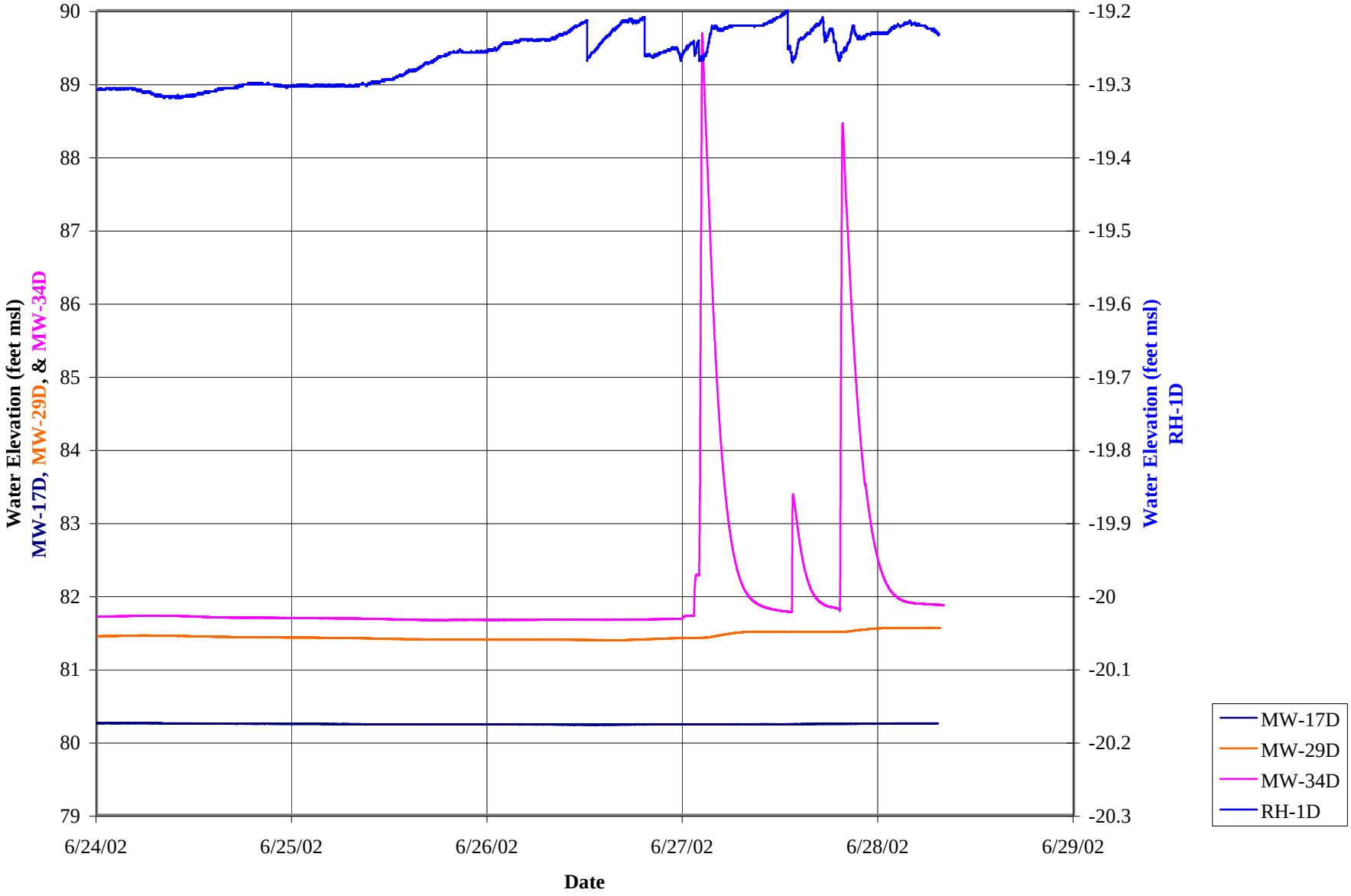

MW-1I: Air Hammer 45' to 75 '
MW-41D: Air Hammer to 19', coring with packer testing to 60'
MW-41D: Continue coring with packer testing to 104'
MW-41D: Coring with packer testing to 140', MW-38I: Air hammer to 18.5'
MW-38I: Rollerbit to 90', 4 inch casing installed to 90'
Water Elevation (feet msl) MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl) RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
5/20/02
5/21/02
5/22/02
5/23/02
5/24/02
5/25/02
5/26/02
5/27/02
Date
MW-17D
MW-29D
MW-34D
RH-1D


MW-41D: Rollerbit to 140'
MW-41D: Installed casing to 140'
MW-38I: Air hammer and roller bit 90' to 120'.
MW-39D: Split spoon to 16'
MW-39D: Continue split spooning to 33'
Water Elevation (feet msl) MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl) RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
5/27/02
5/28/02
5/29/02
5/30/02
5/31/02
6/1/02
6/2/02
6/3/02
Date
MW-17D
MW-29D
MW-34D
RH-1D


MW-36I: Split-spoon sampling to 5.5', 5 7/8-air hammer to 20', installed four-inch PVC casing to 20'.
MW-41D: Split-spoon sampling to 7'.
MW-36I: Air hammer 20' to 45', MW-38D: well development.
MW-39D: Well development.
MW-37D: Split spoon to 16.2', air hammer to 20', set 6-inch temp casing to 20'.
Water Elevation (feet msl) MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl) RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
6/3/02
6/4/02
6/5/02
6/6/02
6/7/02
6/8/02
6/9/02
6/10/02
Date
MW-17D
MW-29D
MW-34D
RH-1D


MW-37D: Coring with packer testing from 20 to 85'
MW-37D: Coring with packer testing from 85 to 165'
MW-37D: Coring with packer testing from 165 to 185'
MW-37D: Ream to 185', set 4-inch casing to 155'
MW-37I: Air hammer to 30', set 4-inch casing to 30'
Water Elevation (feet msl) MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl) RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
6/10/02
6/11/02
6/12/02
6/13/02
6/14/02
6/15/02
6/16/02
6/17/02
Date
MW-17D
MW-29D
MW-34D
RH-1D


MW-37I:
3 7/8-inch air hammer 30 to 50'
Well development at MW-36I, MW-36D, MW-37D, MW-37I, MW-41D, MW-40D, and MW-1D
Well development at MW-38I, and MW-1I
Drillers demobilize from site.
Water Elevation (feet msl)
MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl)
RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
6/17/02
6/18/02
6/19/02
6/20/02
6/21/02
6/22/02
6/23/02
6/24/02
Date
MW-17D
MW-29D
MW-34D
RH-1D


Water Elevation (feet msl)
MW-17D, MW-29D, & MW-34D
Water Elevation (feet msl)
RH-1D
90
89
88
87
86
85
84
83
82
81
80
79
-19.2
-19.3
-19.4
-19.5
-19.6
-19.7
-19.8
-19.9
-20
-20.1
-20.2
-20.3
6/24/02
6/25/02
6/26/02
6/27/02
6/28/02
6/29/02
Date
MW-17D
MW-29D
MW-34D
RH-1D

APPENDIX H
GROUNDWATER SAMPLING DATA SHEETS

URS

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-31S
Page 1 of ____

Field Personnel:
EL
CM

Date: 6/11/01
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 19.65 feet

Depth to Water Surface Before Purging (from top of casing): -17.53 feet

Height of Water Column: = 2.12 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x ~~.153~~ .163

Volume of Water Column Before Purging: = ~~0.353~~ gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) ____ gallons

12. = 1032 / x = .26 gal

1.25 x .26 = .330 x 3 = .990

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # ____

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
0950	1.25	DRY	1.30	14.0	7.07	NA	NA	29.2

Total Volume of Water Purged: .33 gallons/liters

VOCs/Total Phenols Cyanide PAH

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 19.6' feet
- Color: Clear Odor: None Sheen/Appearance: No/Transparent

Notes:

Well was purged with disposable bailer. Went dry after 1.25 Liters
Returned @ 1600 to SAMPLE - Filled 1 VOA well went dry
Bailer (Disposible) - Returned on 6/12/01 @ 0850 Filled 2 VOA vials and 0.5 L (1L glass) For VOCs/Total Phenols
(peristaltic Pump) Returned on 6/13/01 @ 0830 Filled 1. 8oz plastic For Cyanide
↳ Returned on 6/13/01 @ 1330 FILLED 1. 1L GLASS FOR PAH

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-1
Page 1 of ___

Field Personnel: EL

Date: 9/19/01
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 20.2 feet

Depth to Water Surface Before Purging (from top of casing): - 7.96 feet

Height of Water Column: = 12.24 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 1.99 gallons

Volume of Water Equal to three Well Volumes: 5.98 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # Trip ✓

Time	Well Volumes (Gallons/ Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
0820	2.0	NA	1.21	13.2	6.59	—	—	54.9
0826	2.7	NA	1.18	13.3	6.88	—	—	56.6
0832	3.0	NA	1.09	13.3	6.88	—	—	61.6
0837	4.0	NA	1.19	13.5	6.89	—	—	76.0
0843	4.5	NA	1.15	13.3	6.89	—	—	78.2
0851	5.5	NA	1.17	13.6	6.89	—	—	89.5
0901	6.5	NA	1.15	13.9	6.95	—	—	86.3
1428	SAMPLE	NA	950 us	15.9	7.15	—	—	100

Total Volume of Water Purged: 6.5 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~19.0 feet
- Color: orange Odor: No
- Sheen/Appearance: No/cloudy or orange

Notes:
Pump on 0902. VOC sample collected @ 0900 w/ Kit @ Pump
Remaining samples collected @ 1428
- PAH
- Phenols
- Cyanide
- Metals
- Metals filtered

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-2

Page 1 of ___

Field Personnel: EL

Date: 9/17/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 16.2' feet

Depth to Water Surface Before Purging (from top of casing): - 1.69' feet

Height of Water Column: = 14.51 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 2.36 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 7.09 gallons

Purging Method: Bladder Pump/(Waterra Pump)/Peristaltic Pump Meter # Trip Check

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1117	0.0	NA	700	20.5	6.8			
1124	4.0	NA	522	19.7	7.35			96
1132	5.0	NA	566	18.4	7.15			72.7
1136	7.0	NA	569	18.4	7.30			40.6
1140	9.0	NA	576	19.2	7.15			7.5
			592.5	18.8	7.23	NM	NM	24.1

Total Volume of Water Purged: 9.5 (gallons)/liters

Sampling Data:

- Sampling Method: (pumping) Bailer or Pump (VOCs)
- Depth of Pump intake or bailer: ~ 15' feet
- Color: Slight yellowish Odor: NONE Sheen/Appearance: No/(Slightly) cloudy

Notes:

Pump on @ 1117
VOC sample collected @ 1143
PAH/PHENOLS/METALS/CYANIDE SAMPLES COLLECTED @ 1420
MEGUSHB502

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-2I

Page 1 of ___

Field Personnel: EL

Date: 9/17/-1

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 32.2 feet

Depth to Water Surface Before Purging (from top of casing): - 2.18 feet

Height of Water Column: = 30.02 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 44.1 gallons

Volume of Water Equal to three Well Volumes: 132.3 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump / Waterra Pump / Peristaltic Pump Meter # Trip Check

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1213	0.6	7.18	607	21.6	7.11	—	—	1.45
1230	10.0	—	630	19.2	6.81	—	—	2.86
1248	20.0	—	628	19.3	7.17	—	—	3.05
1300	30.0	—	524	19.0	7.13	—	—	4.85
1345	36.0	—	501	20.0	8.47	—	—	6.54
1416	41.2	—	535	19.9	8.58	—	—	12.20
1450	44.0	—	580	19.8	8.67	—	—	14.36
9/18 1200			0.89mS	18.5	6.61			1.47

Total Volume of Water Purged: 45 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 30 feet
- Color: Clear Odor: No Sheen/Appearance: No/Transparent

Notes:
Pump on @ 1213. well went dry @ 45gal pump off @ 1500 - clear no odor
SAMPLE COLLECTED 9/18/01 @ 1200
MEGUIM0102 Metals
PAH
Phenols
VOCs
Cyanide $ 152025303540

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-10I
Page 1 of ___

Field Personnel: EL

Date: 9/26/01
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 43.00 feet

Depth to Water Surface Before Purging (from top of casing): - 12.51 feet

Height of Water Column: = 30.49 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 44.8 gallons

Volume of Water Equal to three Well Volumes: 134.3 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter #

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1025	20	NA	1088	12.95	6.34	0.09	121.0	9.2
1114	40	NA	1061	12.97	6.48	-0.05	32.2	4.9
1145	55	NA	1051	12.82	6.41	-0.05	-62.3	4.9
1207	65	NA	1052	12.98	6.29	-0.01	-81.9	3.7
1229	75	NA	1054	13.63	6.11	-0.27	-100	4.8
1310	85	NA	1064	12.90	6.07	-0.26	-108.1	4.2
1350	95	NA	1071	12.88	6.13	-0.17	-153.6	2.9
1409	105	NA	1076	12.92	6.59	-0.35	-211.8	3.2
1425	105	NA	1078	12.90	7.02	-0.54	-241.0	3.8
1440	115	NA	1083	12.82	6.55	-0.53	-231.3	2.8
1504	125	NA	1086	12.86	6.49	-0.51	-231.2	2.8
1512	130	NA	1086	12.84	6.77	-0.56	-238.3	2.9
1525	135	NA	1090	12.88	7.06	-0.09	-254.8	2.8
			1089	12.86	6.77	-0.39	-241.4	3.86

Total Volume of Water Purged: 135 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~42 feet

- Color: Clear Odor: Strong Sulfur Sheen/Appearance: No/Trasparent

Notes:
Pump on @ 0930 "MEGDUP01110"
Collected VOC Sample w/ pump & kit @ 1525
9/27/01 Returned & collected remaining samples w/a disposable bailer @ 1100
PAH
Phenols
Cyanide
Metals
Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-11

Field Personnel: EL

Date: 9/19/01
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 18.00 feet

Depth to Water Surface Before Purging (from top of casing): - 3.58 feet

Height of Water Column: = 14.42 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 2.35 gallons

Volume of Water Equal to three Well Volumes: 7.05 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump (Waterra Pump) Peristaltic Pump Meter # VV

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1041	2.0	NA	581	18.6	6.50	—	—	1.84
1046	3.0	NA	627	17.7	6.86	—	—	1.10
1052	4.0	NA	672	17.5	6.90	—	—	1.82
1057	5.0	NA	689	18.0	6.84	—	—	1.04
1102	6.0	NA	684	~~18~~ 17.9	6.89	—	—	1.18
1107	7.0	NA	724	17.4	6.93	—	—	0.67
1112	8.0	NA	726	18.2	6.89	—	—	0.45
1345	SAMPLE	NA	619	20.0	7.61	—		21.4

Total Volume of Water Purged: 8 (gallons / liters)

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~17' feet

- Color: Clear Odor: No Sheen/Appearance: No / Transparent

Notes:
Pump on @ 1030
Collected VOC Sample @ 1115 - VOC Kit w/ Pump
Collected remaining Samples @ 1345 w/ disp. bailer
Metals
Cyanide
PAH
Phenols

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-145
Page 1 of 1

Field Personnel: E.L

Date: 10/15/01
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 25.3 feet

Depth to Water Surface Before Purging (from top of casing): -16.00 feet

Height of Water Column: = 9.30 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 1.52 gallons

Volume of Water Equal to three Well Volumes: 4.5 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 77052

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
0839	1	NA	1340	14.47	6.54	3.80	25.1	105
0842	1.5	NA	1350	14.42	6.55	3.64	15.6	135
0847	2.0	NA	1365	14.41	6.56	3.45	10.9	213
0851	2.5	NA	1377	14.39	6.55	3.32	25.4	323
0855	3.0	NA	1389	14.43	6.56	3.19	22.5	440
0859	3.5	NA	1406	14.43	6.57	3.05	11.7	425
0902	4.0	NA	1409	14.40	6.57	3.00	9.2	500
0906	4.5	NA	1420	14.38	6.57	2.94	10.6	495
			1414.5	14.39	6.59	8.97	9.9	497.5

Total Volume of Water Purged: 5.0 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~24 feet
- Color: Cloudy Brown Odor: MGP/Purifier Sheen/Appearance: No/Cloudy Brown

Notes:
Pump on @ 0827
TCC VOC sample collected @ 0910 w/ Pump & Kit
Returned 1100 - collected Remaining samples w/ DISP. BAILER
- PAH
MEGDSH0114 - Phenols
MS 011015 - Cyanide
MSD 011015 - Metals
- F.F. Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-14D

Page 1 of ___

Field Personnel: EL

Date: 9/25/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 121.7' feet

Depth to Water Surface Before Purging (from top of casing): - 91.5 feet

Height of Water Column: = 30.2 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x 0.653

Volume of Water Column Before Purging: = 19.7 gallons

Volume of Water Equal to three Well Volumes: 59.2 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 81632

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1218	10	NA	~~13.19~~ 2141	13.18	7.66	0.13	117.2	26.7
1228	15	NA	~~[illegible]~~ 2129	13.30	7.72	0.01	101.2	20.4
1242	19	NA	2136	13.49	7.80	-0.24	94.7	—
			2136	13.49	7.80	-0.24	94.7	NM

Total Volume of Water Purged: 19 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~ 121' feet
- Color: Cloudy Grey Odor: None
- Sheen/Appearance: No/Cloudy Grey

Notes:

Pump on @ 1200 // Pump off @ 1242 - DRY

9/26/01 Returned @ 1900 Collected SAMPLES w/ Disp. Bailer PAH
Phenols
TCL VOCs
Cyanide
Metals
Filtered Metals

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105.8'

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-15D
Page 1 of ___

Field Personnel: EC

Date: 10/3/01
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 108.7 feet

Depth to Water Surface Before Purging (from top of casing): -66.00 feet

Height of Water Column: =42.7 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x ~~0.1632~~ 0.6528

Volume of Water Column Before Purging: = 27.9 gallons

Volume of Water Equal to three Well Volumes: 84 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 77052

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1045	10	NA	~~12.6~~ 1268	12.75	8.93	0.37	-295.1	49.5
1106	20	NA	1169	13.17	9.41	0.46	-232.1	68.7
			1169	13.17	9.41	0.46	-232.1	68.7

Total Volume of Water Purged: 82.1.5 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~107.5 feet
- Color: Yellowish Odor: None Sheen/Appearance: No / Cloudy yellow

Notes:
Pump on @ 1025 well went dry @ 1118 - 21.5 gal
Returned 10/4/01 collected samples w/ a disposable bailer @ 0900
"MEGDD015" VOCs
PAH
Phenols
Cyanide
Metals
F.F. Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-16

Page 1 of ____

Field Personnel: EG

Date: 10/4/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 16.00 feet

Depth to Water Surface Before Purging (from top of casing): - 2.85 feet

Height of Water Column: = 13.15 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 2.14 gallons

Volume of Water Equal to three Well Volumes: 6.4 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 77052

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
959	1.0	NA	726	17.19	7.15	4.38	-193.1	358
1003	2.0	NA	725	17.48	7.18	3.38	-203.4	195
1009	3.0	NA	724	17.64	7.20	2.77	-210.5	173
1014	4.0	NA	724	17.73	7.22	2.28	-220.1	128
1019	5.0	NA	723	17.73	7.24	1.90	-225.2	123
1026	6.0	NA	723	17.76	7.26	1.56	-230.7	97.3
1031	7.0	NA	723	17.72	7.27	1.30	-239.6	89.5
1039	8.0	NA	725	17.74	7.30	1.09	-246.0	98.2
			724	17.74	7.28	1.32	-238.8	94.7

Total Volume of Water Purged: 8 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 15.5 feet

- Color: Cloudy Brown Odor: Sl. Swampy

Sheen/Appearance: No/ Cloudy Brown

Notes:

Pump on @ 0954 collected VOC samples @ 1042 w/ Sampling Kit
~~MEGDT~~
~~MEGDH~~ "MEGUSH9316"
Returned @ 1345 to collect remaining samples w/ Disp. bailer
PAH
Phenols
Cyanide
Metals
Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-17D

Page 1 of

Field Personnel: EL

Date: 9/2 10/1/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 142.5 feet

Depth to Water Surface Before Purging (from top of casing): - 59.8 feet

Height of Water Column: =82.7 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x1.469

Volume of Water Column Before Purging: =121.5 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 36.5 gallons

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 91637

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1042	20	NA	1749	14.33	9.54	.52	-3.8	~~2.5+~~ >200
1210	40	NA	1702	14.22	8.50	—	-158.7	>200
1315	60	NA	1562	13.73	~~8.88~~	—	-26.3	>200
10/2→ 1238	80	NA	1428	13.13	11.08	0.19	-213.0	>200
1321	100	NA	1687	13.09	12.01	0.29	-227.8	42
			1559.5	13.11	11.55	0.24	-217.9	>200

Total Volume of Water Purged: 118 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~140 feet
- Color: Cloudy Grey Odor: None Sheen/Appearance: No/Cloudy Grey

Notes:

Pump on @ 0830, off @ 0835 - power supply melted pump back on @ 0945 w/ generator. 1340, stopped pumping, pump off. Tubing removed, foot valve cleaned, tubing replaced, still no water removed, DTW = 100' bgs. /// Returned 10/2/01 @ 1150 - inserted 10' 2" SCH 40 PVC screen (0.020") w/ 130' x 2" PVC riser. Inserted tubing into pvc, pump on @ 1155. 1400 well wont dry @ ~~1255~~ 1150 gal. DTW = 135.0' bgs. Returned 10/3/01 collected samples w/ disp. bailer → VOCs @ 0950

PAH
Phenols
Cyanide
Metals
Field Filtered Metals

TH

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-17

Page 1 of ___

Field Personnel: EL

Date: 9/27/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 22.50 feet

Depth to Water Surface Before Purging (from top of casing): -14.25 feet

Height of Water Column: = 8.25 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 1.34 gallons

Volume of Water Equal to three Well Volumes: 4.03 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 8632

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
0900	1 Gal	NA	1616	16.20	6.69	2.12	96.0	>200
0910	1.5	NA	1626	16.50	6.53	2.74	113.6	125
0915	2.0	NA	1621	16.52	6.64	2.15	113.2	108
0916	2.5	NA	1618	16.47	6.64	1.62	114.4	122
0921	3.0	NA	1620	16.54	6.64	1.99	115.2	120
0925	3.5	NA	1620	16.53	6.63	2.68	115.9	115
0928	4.0	NA	1618	16.55	6.63	1.87	117.2	84.5
0931	4.5	NA	1621	16.52	6.63	1.79	118.2	68.0
0934	5.0	NA	1619	16.56	6.43	3.75	119.5	66.3
			1619	16.54	6.56	1.80	118.3	72.9

Total Volume of Water Purged: 5.5 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~21.5 feet
- Color: Cloudy Brown Odor: NONE Sheen/Appearance: NONE / Cloudy brown

Notes:

Pump on @ 0850 "MEGDSH9317"
TCL VOC sample collected @ 0938
1430 - Remaining Samples collected w/a disposable bailer
PAH
Phenols
Cyanide
Metals
Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-17I

Field Personnel: EL

Date: 9/17/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 45.20 feet

Depth to Water Surface Before Purging (from top of casing): -15.05 feet

Height of Water Column: =29.95 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 44 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 132 gallons

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 81632

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1245	8	NA	2668	14.21	6.65	~~3.57~~ 2.29	-11.7	16.8
1319	16	NA	2660	14.75	6.67	—	-27.3	11.8
1359	24	NA	2614	14.18	6.19	—	35.8	10.8
1426	30	NA	2540	14.09	6.27	—	68.9	12.0
1455	~~38~~	NA	2463	14.31	6.23	—	12.9	12.5
1520	41.5	NA	2437	15.02	6.80	—	-47.5	12.9
			2450	14.67	6.52	NM	-17.3	12.7

Total Volume of Water Purged: 41.5 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~44 feet
- Color: cloudy Grey Odor: no Sheen/Appearance: No / Cloudy Grey

Notes:

Pump on @ 1212 well went dry @ 41.5 gal @ 1520, pump off.
Returned on 9/28/01 @ 0930. Collected ~~remaining~~ samples w/ disp. bailer

"MEGDIM0117

PAH
Phenols
Cyanide
Metals
Field Filtered Metals
TCL VOCs

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-18

Page 1 of 1

Field Personnel: EL

Date: 9/27/21

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 38.00 feet

Depth to Water Surface Before Purging (from top of casing): - 14.49 feet

Height of Water Column: = 23.51 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 3.8 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 11.5 gallons

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 81632

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1021	2	NA	1466	14.4	6.46	0.02	33.2	78.5
1032	4	NA	1486	14.19	6.27	-2.19	48.0	94.3
1047	6	NA	1514	14.13	6.34	-2.14	56.7	106.9
1104	8	NA	1547	14.14	6.39	-2.27	64.9	77.7
1119	10	NA	1558	14.10	6.68	-2.39	37.8	38.3
1131	12	NA	1574	13.87	6.52	-4.36	39.2	31.3
			1566	13.99	6.66	-3.38	38.5	34.8

Total Volume of Water Purged: 12.5 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~37 feet
- Color: Cloudy Grey Odor: Sulfur Sheen/Appearance: NS/Cloudy Grey

Notes:

Pump on @ 1008 "MEGDD8318"

VOC sample collected w/ Pump Kit @ 1135

PAH ← Remaining Sample collected @ 1445 w/disposable bailer

Phenols

Cyanide

Metals 9.8

Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-19I

Page 1 of

Field Personnel: EL

Date: 9/18/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 38.5 feet

Depth to Water Surface Before Purging (from top of casing): - 11.95 feet

Height of Water Column: = 26.55 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 39 gallons

Volume of Water Equal to three Well Volumes: 117 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # Trip Check

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1220	3	NA	1.32ms	16.2	6.56	—	—	8.58
1335	15	NA	1.15ms	14.3	6.67	—	—	131
1415	26	NA	1.05	15.8	6.69	—	—	5.14
1442	55	NA	1.06	14.7	6.89	—	—	3.53
1456	65	NA	1.08	14.4	6.96	—	—	2.79
1508	75	NA	1.09	14.0	6.90	—	—	2.85
1530	85	NA	1.09	13.9	6.88	—	—	1.98
1543	95	NA	1.10	13.5	6.85	—	—	1.85
1601	105	NA	1.09	13.5	6.80	—	—	2.22
1616	115	NA	1.11	13.5	6.89	—	—	2.20
9/19/01 935	115	12.17'	1.19	13.3	6.75			1.89

Total Volume of Water Purged: 117 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump (intake) or bailer: ~36 feet
- Color: clear Odor: No Sheen/Appearance: No/transparent

Notes:

Pump on @ 1314 VOC sample collected @ 1620
Returned 9/19/01 0935
COLLECT PAH
Phenols
Cyanide
Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-202

Page 1 of ___

Field Personnel: EL

Date: 10/09/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 113.30 feet

Depth to Water Surface Before Purging (from top of casing): -17.45 feet

Height of Water Column: = 95.85 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x 0.6528

Volume of Water Column Before Purging: = 62.6 gallons

Volume of Water Equal to three Well Volumes: 188 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter #

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
631	15	NA	816	11.41	9.73	0.92	-125.9	246
726	25	NA	827	11.58	9.71	0.73	-125.8	295
1017	40	NA	829	11.97	9.76	0.86	-147.4	164
1100	55	NA	833	11.85	9.05	0.11	-184.5	129
1130	62.5							
			831	11.91	9.41	0.49	-165.95	146.5

Total Volume of Water Purged: 62.5 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 161' feet Btoc

- Color: Brown/green Odor: NO Sheen/Appearance: NO/ Brown/bl. green

Notes:

Pump on @ 0800 Well went dry @ 1130 - 62.5 gal pump off
Returned 10/10/01 @ 0730 to collect samples w/ disp bailer
TCL VOCs
PAH's
Phenols
Cyanide
Metals
F.F. Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-215

Page 1 of ___

Field Personnel: EL

Date: 9/24/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): ~~18~~ 14.8 feet

Depth to Water Surface Before Purging (from top of casing): -8.30 feet

Height of Water Column: = 6.5 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 1.05 gallons

Volume of Water Equal to three Well Volumes: 3.2 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 4632

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1501	0.5	NA	552	18.02	7.73	2.17	-79.7	3.44
1504	1.0	NA	404	18.52	9.37	1.85	-147.7	1.75
1507	1.5	NA	402	18.69	9.76	1.83	-181.6	0.84
1510	2.0	NA	421	18.80	9.24	1.74	-170.2	0.92
1513	2.5	NA	464	18.72	8.44	1.62	-123	0.80
1517	3.0	NA	502	18.76	7.92	1.48	-89.7	0.73
1521	3.5	NA	511	19.05	7.73	1.48	-79.2	0.67
9/25/01 0800	—	8.39'	644	18.64	7.66	—	—	3.02

Total Volume of Water Purged: 3.5 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~74.0' feet BTOC
- Color: clear Odor: slight, musty Sheen/Appearance: no/clear slight white suspended matter

Notes:

Pump on @ 1456 TCL VOC sample collected @ 1530 w/ Kit for w/ pump

Returned on 9/25/01 @ 0800 Collected samples w/ Bailer

"MEGDSH01Z1"

PAH

Phenols

Metals

Cyanide

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-21D

Page 1 of ___

Field Personnel: EL

Date: 9/24/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 61.90' feet BTOC

Depth to Water Surface Before Purging (from top of casing): -12.25 feet

Height of Water Column: =49.55 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x0.653

Volume of Water Column Before Purging: =32.4 gallons

Volume of Water Equal to three Well Volumes: 97.0 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 81632

	Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
	1130	10	NA	2013.0	13.08	6.73	0.85	-5.4	11.8
	1151	20	NA	2000	12.94	7.03	1.44	-44.5	10.1
	1210	30	NA	1988	12.87	7.03	1.28	-54.0	6.2
	1230	40	NA	1980	12.77	7.00	0.07	-66.2	2.3
	1255	50	NA	1978	12.87	6.96	4.18	-70.3	3.56
	1313	60	NA	1968	12.81	6.93	4.19	-74.3	0.95
	1332	70	NA	1959	12.70	6.90	4.56	-76.6	1.59
	1353	80	NA	1940	12.86	6.81	7.78	-79.0	1.42
	1412	90	NA	1930	12.79	6.77	11.65	-77.9	1.53
	1431	100	NA	1918	12.85	6.71	20.86	-80.0	1.57
9/25/01	0730	—	12.24	1190	13.04	7.55	—	—	10.3

Total Volume of Water Purged: 105 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~60.5 feet BTOC
- Color: clear Odor: Sulfur Sheen/Appearance: No/Trasparent

Notes:

Pump on @ 1112 VOC sample collected @ 1435 w Voc Kit

9/25/01 DTW 12.24' @ 0729 Collected Samples for PAH, Phenols, Metals, Cyanide w/ Bailer

"MEGDD0121"

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

23

WELL NO: MW-25D

Page 1 of 1

Field Personnel: EL

90

Date: 9/24/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 82.50 feet BTOC

Depth to Water Surface Before Purging (from top of casing): - 77.83 feet

Height of Water Column: = 4.67 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x 0.653

Volume of Water Column Before Purging: = 3.04 gallons

Volume of Water Equal to three Well Volumes: 9.15 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 81637

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
935	1.5	NA	1889	14.09	9.63	4.42	155	7300

Total Volume of Water Purged: 2 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~82.5 feet
- Color: Clear/GY Odor: Slight Sulfur
- Sheen/Appearance: No/Cloudy Grey

Notes:

Pump on @ 0930 Pump off @ 941 - well dry @ 2.0 6.42 "MEGPD0123"

9/25/01 - Collected Samples For VOCs & Cyanide 9/25/01 @ 0835 w/ Bailer - well went dry.

Returned 9/27/01 / Collected Metals Sample & ½ Liter for phenols

Returned 9/25/01 Collected ~ 0.2 Liters added to phenol bottles, sending out VOCs, Cyanide, metals and Phenols for analysis.

Returned 10/5/01 Collected PAH & Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-25S

Page 1 of ___

Field Personnel: EL

Date: 9/26/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 28.0 feet

Depth to Water Surface Before Purging (from top of casing): - 13.45 feet

Height of Water Column: = 14.55 feet

Well Diameter (d): 2 inches

Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 2.4 gallons

Volume of Water Equal to three Well Volumes: 7.1 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # ___

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)

Total Volume of Water Purged: ___ gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ___ feet
- Color: Odor: Sheen/Appearance:

Notes:

Pump on @ 0816
Pump off @ 0825 b/c Sheens & NAPL in purge water, well NOT sampled
Total volume purged = 2 gal

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-28I

Page 1 of 1

Field Personnel: EC

Date: 10/2/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 28.65 feet

Depth to Water Surface Before Purging (from top of casing): - 14.30 feet

Height of Water Column: = 14.35 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 2.34 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 7.02 gallons

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # 77052

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1037	1	NA	893	15.07	6.82	2.80	-145.4	13.75
1042	2	NA	818	14.68	6.85	2.69	-165.0	14.85
1047	3	NA	811	14.71	7.05	2.16	-174.1	39.6
1052	4	NA	845	14.66	6.77	1.86	-179.0	31.0
1055	5	NA	861	14.64	6.93	1.55	-179.6	28.1
			853	14.62	6.95	1.71	-179.3	26.6

Total Volume of Water Purged: 5.5 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~28 feet

- Color: clear Odor: NONE Sheen/Appearance: No/Clear

Notes:

Pump on @ 1029 // Pump off @ 1101 - well dry @ 5.5 gal
Returned on 10/3/01 @ 0830 collected SAMPLES w/ Disp. Bailer
VOCs
PAH
Phenols
Cyanide
Metals
→ MEEDIM0128
→ Also
MS 011003
MSD 011003

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-29D

Page 1 of ___

Field Personnel: EL

Stickup + 2.9 = 113.9

Date: 9/20/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 113.90 feet

Depth to Water Surface Before Purging (from top of casing): - 6.85 feet

Height of Water Column: 107.05 → = ~~NM~~ feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 157.3 gallons

Volume of Water Equal to three Well Volumes: 472 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # ✓✓✓

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
724	55	NA	1.35	14.8	8.73	—	—	2.69
1025	70	NA	1.34	14.5	8.07	—	—	50.5
1140	90	NA	1.25	15.9	8.31	—	—	3.56
1234	110	NA	1.23	14.8	8.76	—	—	6.95
1329	130	NA	0.95	14.4	8.91	—	—	6.8
1445	145	NA	722 µs	15.8	8.87	—	—	29.8
9/21 0754	~~145~~ 160	83.35	817 µs	14.9	8.55	—	—	40.0
			969.5	15.1	8.71	NM	NM	34.4

Total Volume of Water Purged: 160 gallons/~~liters~~

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~111 feet BTOC

- Color: Brownish Odor: NONE Sheen/Appearance: NO / cloudy Brown

Notes:

Pump on @ 0700
Well pumped dry @ ~ 160 gal. pump off @ 1500
9/21/01 0700 DTW = 85.35' BTOC
Sampled w/ Bailer TCL VOCs
Metals
Cyanide
PAH
Phenols

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DOWN

URS

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-32D

Page 1 of

Field Personnel: EL

Date: 9/19/01

Job No.: 11035-606

Location: NYSEG Mechanicville

111.5 + 2.4' stickup = 113.9

Total Well Depth (from top of casing): 113.9 HL 5 feet

Depth to Water Surface Before Purging (from top of casing): - 87.12 feet BTOC

Height of Water Column: = 26.78 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 39.3 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 118.0 gallons

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter #

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1220	5	NA	5.50	14.7	12.04			14.5
1232	10	NA	5.62	17.7	12.14			16.78
1242	15	NA	5.50	16.9	12.15			7.85
1250	20	NA	5.68	17.1	12.23			7.82
1307	30	NA	5.50	17.7	12.24			11.65
			5.59	12.4	12.29	NM	NM	9.94

Total Volume of Water Purged: _____ gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: _____ feet
- Color: Odor: Sheen/Appearance:

Notes: Pump on @ 1201 well pumped dry @ 37 gal pump off @ 1330
Returned 9/20/01 @ 1100 DTW = 112.5'
Returned 9/21/01 @ 0800 DTW = 112.0'
Returned 9/24/01 @ 0755 DTW = 111.45' SAMPLED w/bailer for VOCs @ 1000
PAH
Phenols
Cyanide
Metals
Filtered Metals
"MEGD00132"

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-34D

Page 1 of ___

Field Personnel: EL

Date: 10/3/01

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 120.5 feet

Depth to Water Surface Before Purging (from top of casing): -12.3 feet

Height of Water Column: =108.2 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x 0.6528

Volume of Water Column Before Purging: = 70.6 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 212. gallons

Purging Method: Bladder Pump/~~Waterra Pump~~/Peristaltic Pump Meter # 77052

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1325	20	NA	1107	13.53	9.28	0.66	-288.1	228
1420	40	NA	1112	13.61	9.63	-0.25	-273.0	32.4
1510	60	NA	1103	13.49	9.05	0.07	-265.6	40.5
1600	80	NA	1113	13.05	9.08	0.81	-273.7	98.6
			1108	13.27	9.07	0.44	-269.65	44.55

Total Volume of Water Purged: 85 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake ~~or bailer~~: ~119' feet
- Color: Cloudy Grey Odor: None

Sheen/Appearance: None/Cloudy Grey

Notes: Pump on @ 1245 well ran dry @ ~85 gal. pump off @ 1690
Returned 10/4/01 @ 1240 collected samples w/ disposable bailer
"MEGDD0134" VOCs
PAH
Phenols
Cyanide
Metals
Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-1

Field Personnel:
E Lovenduski
CM

Date: 2/19/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 20.2 feet

Depth to Water Surface Before Purging (from top of casing): - 8.56 feet

Height of Water Column: = 11.64 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408): x 0.163

Volume of Water Column Before Purging: = 1.9 gallons

Volume of Water Equal to three Well Volumes: 5.7 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
0930	9.30	0.7	602	10.25	6.11	570	0.68	429
0935	9.95	2.7	609	10.58	6.70	430	0.75	286
0940	10.13	6.0	608	10.55	6.80	419	1.25	209
0945	10.13	10.0	595	10.49	6.90	208	1.51	193
0950	10.13	13.0	591	10.42	6.91	155	1.52	185

Total Volume of Water Purged: 13.5 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: [illegible] feet
- Sample Date/Time: 2/19/03 1000
- Color: Cloudy, reddish orange
- Odor: ND
- Sheen/Appearance: ND, cloudy

Notes: Pump on @ 0927 Sample for VOC PAH Phenols Cyanide Metals FE Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-2

Field Personnel:
E Lovenduski

Date: 2/12/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 16.2' feet

Depth to Water Surface Before Purging (from top of casing): - 3.95 feet

Height of Water Column: = 12.25 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408): x 0.163

Volume of Water Column Before Purging: = 2.0 gallons

Volume of Water Equal to three Well Volumes: 6.0 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump (Peri pump)

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
857	4.95	0.5	451	7.97	6.51	385	0.44	7.8
0902	4.95	1.0	448	6.87 7.48	6.88	210	0.22	19.8
0907	5.19	2.1	445	7.78	6.94	205	0.18	37.9
0912	5.20	3.1	445	7.77	5.85	137	0.62	163.0
0917	5.26	4.1	445	7.58	6.74	127	0.17	80.0
0922	5.28	5.0	445	7.71	6.87	82.3	0.16	62.5
0927	5.28	5.6	446	7.68	6.93	43.8	0.15	61.2
0932	5.30	6.3	445	7.70	6.95	67.8	0.15	56.9

Total Volume of Water Purged: 6.3 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or (bailer): ~15 feet
- Sample Date/Time: 2/12/03 0940
- Color: clear
- Odor: ND
- Sheen/Appearance: no/clear

Notes: Pump on @ 0852 SAMPLED on 2/12/03 @ 0940 for
TCL VOCs
PAHs
Phenols
Cyanide
Metals
Field Filtered Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-21

Page 1 of ___

Field Personnel: EL

Date: 2/5/03

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 32.2 feet

Depth to Water Surface Before Purging (from top of casing): - 4.45 feet

Height of Water Column: = 27.75 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 41 gallons

Volume of Water Equal to three Well Volumes: 122.3 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump/(Grundfos) Meter # YSI

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1355	15 gal	15.42	466	11.77	7.54	-0.17	-98.9	225
1400	23 gal	20.9	467	11.09	7.63	-0.24	-107.2	230
1405	32 gal	28.6	467	10.76	7.71	0.26	-123.4	265

Total Volume of Water Purged: 42 (gallons/liters)

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or bailer: ~30 feet BTC
- Color: Orange Odor: ND Sheen/Appearance: No/cloudy, sa

Notes:

Pump on @ 1350 Purge water - Orange, slight Phenols sheen, no odor.
Off @ 1405 ~42 gal.
Sampled for - Phenols 2/6/03 @ 0815
PAH
Cyanide
TKN
Metals
Fe Metals

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GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-10I

Field Personnel:
E Lovenduski
CM

Date: 2/18/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 43 feet

Depth to Water Surface Before Purging (from top of casing): - 12.37 feet

Height of Water Column: = 30.63 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408): x 1.47

Volume of Water Column Before Purging: = 45.0 gallons

Volume of Water Equal to three Well Volumes: 135 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1340	17.35	20	562	12.73	6.99	198	0.10	-113.6
1350	18.23	39	483	12.59	7.10	555	-0.12	-173.3
1400	18.61	60	525	12.70	7.04	450	-0.11	-212.6
1410	18.69	80	543	12.75	7.06	358	-0.15	-226.9
1420	18.86	100	551	12.90	7.03	179	-0.64	-223.6
1430	19.06	120	554	12.94	7.05	126	-0.45	-233.6
1440	19.34	140	557	12.89	7.06	143	-0.22	-265.2
1445	19.36	150	558	12.91	7.05	150	-0.21	-272.0

Total Volume of Water Purged: 150 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: feet
- Sample Date/Time: 2/18/03 / 1500
- Color: GREY
- Odor: SULFUR
- Sheen/Appearance:

Notes: PUMP ON @ 1350 END PURGE @ 1446 150 GALLONS REMOVED
SAMPLED FOR
VOCs
PAH
Phenols
Cyanide
Mtls
F. F. Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-11

Field Personnel:
E Lovenduski

Date: 2/20/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 18.0 feet

Depth to Water Surface Before Purging (from top of casing): -4.26 feet

Height of Water Column: =13.74 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408): x 0.163

Volume of Water Column Before Purging: = 2.24 gallons

Volume of Water Equal to three Well Volumes: 6.72 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1445	7.05	1.7	646	9.14	5.36	93	0.17	84.3
1450	7.45	2.6	695	9.55	6.19	28.5	0.15	33.5
1455	7.45	4.0	710	9.66	6.59	15.4	0.12	-9.3
1500	~~7.65~~ 7.67	5.0	—	10.12	6.69	86.9	0.54	-1.9
1505	8.27	6.2	—	9.95	6.73	10.9	0.14	-20
1510	8.96	7.0	—	9.99	6.75	5.04	0.11	-29.2

Total Volume of Water Purged: 7.2 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or (bailer): ~17 feet
- Sample Date/Time: 2/20/03 @ 1515
- Color: cloudy brown
- Odor: swampy
- Sheen/Appearance: NO / cloudy

Notes: Pump on @ 1440 SAMPLED FOR
TCL VOCs
PAH
Phenols
Cyanide
Metals
Field Filtered Metals
→ DUP-02/20/03

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-4D

Field Personnel: E Lovenduski, cm

Date: 2/17/03
Job No.: 11171860
Location: Mechanicville

wx: Cloudy 2°F

Total Well Depth (from top of casing): 121.67 feet

Depth to Water Surface Before Purging (from top of casing): - 11.75 feet

Height of Water Column: = 107.92 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x 0.653

Volume of Water Column Before Purging: = 72 gallons

Volume of Water Equal to three Well Volumes: 215 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
0949	36.5	17	925	11.90	8.91	130	0.40	-232
0959	45.2	28	907	10.70	9.70	90	0.23	-348
1009	53.5	35	905	11.48	9.37	64	0.41	-213
1019	64.2	43	905	12.33	9.68	59	0.30	-285
1029	77.8	53	901	12.27	9.78	70	0.24	-347
1039	92.7	63	893	12.51	9.75	111	0.28	-344
1049	107.9	78	929	12.89	9.73	162	1.45	-153

Total Volume of Water Purged: 83 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~120 feet
- Sample Date/Time: 2/17/03 1030
- Color: Cloudy
- Odor: N/S
- Sheen/Appearance: N/S

Notes: Pump on @ 0938 pump off @ 1055 purged 83 gal dry
Sampled for
PAH
VOC
Phenols
Cyanide
Metals
F.F. Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-15D

Field Personnel:
E Lovenduski
CM

Date: 2/19/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 105.8 feet

Depth to Water Surface Before Purging (from top of casing): -10.49 feet

Height of Water Column: =95.31 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x 0.653

Volume of Water Column Before Purging: =62.2 gallons

Volume of Water Equal to three Well Volumes: 187 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/(Submersible Pump)

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1044	31.0	17	802	11.89	7.25	62	-0.15	240
1054	48.9	34	802	12.10	9.52	55	0.04	-386
1104	63.2	52	802	12.47	9.56	62	0.04	-379
1114	90.3	55	801	12.74	9.55	175	0.09	-276

Total Volume of Water Purged: 62 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or (bailer): ~105 feet
- Sample Date/Time: 2/20/03 0900
- Color: Cloudy brown
- Odor: ND
- Sheen/Appearance: ND/Cloudy brown

Notes: Pump on 1034 pump off 1117
Sampled for
VOCs
PAH
Phenols
Cyanide
Metals
F.F. Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-16

Field Personnel: E Lovenduski

Date: 2/24/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 16.0 feet

Depth to Water Surface Before Purging (from top of casing): - 3.48 feet

Height of Water Column: = 12.52 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) x 0.163

Volume of Water Column Before Purging: = 2.04 gallons

Volume of Water Equal to three Well Volumes: 6.1 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/(Submersible Pump)

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or (µmhos))	Temp. (°F or (°C))	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1352	6.7	1.5	610	7.69	6.61	51	0.44	228.3
1356	7.42	2.6	619	7.99	7.07	15.9	0.46	43.4
1400	7.67	3.2	617	7.92	7.02	7.92	0.33	-20.6
1404	7.86	4.0	603	8.21	7.26	4.96	0.33	-39.2
1409	7.91	4.4	603	8.72	7.31	4.61	0.29	-52.3
1412	7.85	4.9	598	8.79	7.25	4.52	0.30	-65.3
1416	7.98	5.2	567	8.93	7.31	2.52	0.26	-69.8
1420	7.98	5.5	589	7.91	7.37	2.17	0.20	-79.5
1424	7.96	5.9	591	8.85	7.37	1.84	0.21	-86.4

Total Volume of Water Purged: 6.3 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or bailer: 15 feet
- Sample Date/Time: 2/24/03 1430
- Color: Clear
- Odor: Sulfur
- Sheen/Appearance: No/Clear

Notes: Pump on @ 1348 Sampled for
FP VOCs
PAHs
Phenols
Cyanide
Metals
F.F. Metals

URS

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-17

Page 1 of

Field Personnel: EL

Date: ~~2/6/03~~ 2/27/03

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 22.5' feet

Depth to Water Surface Before Purging (from top of casing): EST. -14.0 feet

Could not measure dtw b/c ice is inside riser so that indicator would not fit inside well. Ice is around 5/8" thk in side of well. Sampled well w/ peri pump + 3/8" tubing inside of 5/8" tubing

Height of Water Column: = 8.5 feet

Well Diameter (d): 2 inches

Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 1.4 gallons

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) 4.2 gallons

Purging Method: Bladder Pump/Waterra Pump/(Peristaltic Pump)

Meter # YSI

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1252	0.1	—	715	10.67	6.59	1.18	-43.5	>1000
1302	1.0	—	911	12.47	6.67	0.23	36.5	103
1312	1.5	—	909	12.28	6.60	0.37	64.2	18.3
1322	2.25	—	909	12.35	6.68	0.23	64.1	10.5
1332	3.0	—	908	12.45	6.68	0.23	64.4	13.0
1342	3.75	—	908	12.08	6.68	0.20	65.2	9.1
1352	4.3	—	912	12.31	6.68	0.20	64.0	20.8

Total Volume of Water Purged: 4.3 (gallons/liters)

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump (intake) or bailer: ~21.5 feet
- Color: clear Odor: ND
- Sheen/Appearance: ND/clear

Notes:

2/6/03 - Elk element filled w/ ice 2/27/03 Pump on 1215

Sampled for 2/27/03@ 1355

VOCs

PAH

Phenols

Cyanide

Metals

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Clifton Park, NY 12065
Tel: 518.688.0015

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-17I

Field Personnel:
E Lovenduski
CM

Date: 2/13/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 45.0 feet

Depth to Water Surface Before Purging (from top of casing): -14.58 feet

Height of Water Column: =30.42 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408): x 1.469

Volume of Water Column Before Purging: = 44.68 gallons

Volume of Water Equal to three Well Volumes: 134 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or mmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1215	17.1	4	1194	13.28	6.56	110	0.80	-66.0
1230	27.7	14	1188	13.60	6.74	98	1.55	-73.0
1235	36.7	35	1005	13.15	7.02	107	1.28	-117.3
1240	43.0	43	1019	13.26	7.05	120	1.42	-111.7

Total Volume of Water Purged: 45 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 43 feet
- Sample Date/Time: 2/14/03 0830
- Color: SL. cloudy grey
- Odor: slight sulfide odor
- Sheen/Appearance: NO/ cloudy

Notes: 1223 Pump on pump off @ 1243 @ 45 gal
SAMPLED FOR:
TCL VOCs
PAH
Phenols
Cyanide
Metals
Field Filtered Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-17D

Field Personnel:
E Lovenduski
CM

Date: 2/11/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 142.5 feet

Depth to Water Surface Before Purging (from top of casing): - 11.75 feet

Height of Water Column: = 130.75 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408): x 1.469

Volume of Water Column Before Purging: = 192 gallons

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	
1125	25.8	16.0	838	12.25	6.96	224	~~1.20~~ 0.20	-120	
1135	36.4	36.0	838	12.33	7.17	495	0.27	-145.1	
1145	44.5	43.0	838	12.41	6.78	320	0.05	-269	
* 1200		53.0	850	11.82	5.92	335	———	-46.5	Pump off
1210	56.8	62.0	843	12.64	8.77	768	3.49	-291.2	
* 1220	66.2	80.0							bad lead cable
1230	68.2	85.0	945	12.95	7.18	225	0.52	-62	
1240	85.01	112.0	843	12.91	9.26	67.9	0.13	-282	
1250	99.2	134.0	840	13.13	8.56	82	0.13	-127	
1300	109.7	153.0	838	13.34	8.51	93	-0.10	-25.6	
1310	118.0	162.0	836	13.49	9.32	106	0.28	-131.1	
1320	126.1	175.0	836	13.64	9.37	98	0.31	-117.0	

Total Volume of Water Purged: 173 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or (bailer): ~141' feet
- Sample Date/Time: 2/12/03 1310
- Color: Cloudy grey
- Odor: ND
- Sheen/Appearance: NO/Cloudy, Grey

Notes: Pump on @ 1115 - Bottom is very silty!
SAMPLED FOR TCL VOCs
PAH
Phenols
Cyanide
Metals
Field Filtered Metals

174 plus

TIME	DTW	Well volumes	Sp. Cond	Temp	pH	Turb	DO	ORP
1330	134	189	820	13.72	8.20	105	0.77	63.6
1335 END PURGE								

URS

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-18
Page 1 of ___

Field Personnel: EL

Date: 2/6/03
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 38 feet

Depth to Water Surface Before Purging (from top of casing): -14.20 feet

Height of Water Column: = 23.8 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408) = x 0.163

Volume of Water Column Before Purging: = 3.9 gallons

Volume of Water Equal to three Well Volumes: 11.6 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump/Grundfos Meter # YSI

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1410	0.5	18.35	292	13.24	9.44	1.13	-69.0	315
1414	1.5	23.70	291	14.41	8.22	4.69	73.5	156
1418	3.1	29.25	320	14.69	7.71	6.54	117.1	147
1422	4.1	31.20	370	14.70	7.29	4.31	140.2	295
1426	5.2	36.9	415	15.57	8.32	1.90	110.0	263

Total Volume of Water Purged: 5.4 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~36 feet BTOC
- Color: Turb = 23 clear Odor: ND
- Sheen/Appearance: ND

Notes:
Pump on @ 1407 Dry @ 1427 - 5.4 gal Sampled on 2/7/03 @ 1115 for
TCL VOCs
Phenols
PAHs
Gen. Chem
Metals

URS Corporation
646 Plank Road, Suite 202
Clifton Park, NY 12065
Tel: 518.688.0015

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-19I

Field Personnel:
E Lovenduski
SM

Date: 2/26/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 38.5 feet

Depth to Water Surface Before Purging (from top of casing): - 11.81 feet

Height of Water Column: = 26.69 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408): x 1.469

Volume of Water Column Before Purging: = 39.2 gallons

Volume of Water Equal to three Well Volumes: 117.6 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1119	17.05	22	1071	12.53	6.75	603	2.61	121
1129	17.58	40	1150	12.52	6.73	348	2.11	121.2
1139	19.10	55	1177	12.51	6.72	430	2.04	119.6
1149	20.77	80	1210	12.63	6.72	541	2.01	134.2
1159	21.18	100	1243	12.68	6.73	304	2.30	142.2
1209	21.35	120	1254	12.71	6.77	185	2.45	145.3

Total Volume of Water Purged: 120 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 37 feet
- Sample Date/Time: 2/26/03 1220
- Color: Cloudy red
- Odor: ND
- Sheen/Appearance: ND/Red

Notes: Pump on @ 1109 Sampled For
TCL VOCs
PAH
Phenols
Cyanide
Metals
FF Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-20D

Field Personnel:
E Lovenduski
CM

Date: 2/26/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 110.1 feet

Depth to Water Surface Before Purging (from top of casing): -16.18 feet

Height of Water Column: = 83.92 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x 0.653

Volume of Water Column Before Purging: = 55 gallons

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/(Submersible Pump)

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or (µmhos))	Temp. (°F or (°C))	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1010	39.3	17	426	11.38	11.00	69	0.26	57.6
1020	63.6	32	423	11.73	10.88	76	0.10	30.1
1030	83.7	45	420	12.11	10.82	91	0.08	14.1

Total Volume of Water Purged: 55 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or bailer: ~110 feet
- Sample Date/Time: 2/26/03 @ 1030
- Color: Cloudy Grey
- Odor: NO
- Sheen/Appearance: NO/ Cloudy

Notes: Pump on 1000 dry @ 1039 - 55 gal - pump off
Sampled for
VOCs
PAH
Phenols
Cyanide
Metals
T.P. Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-21S

Field Personnel:
E Lovenduski
CM

Date: 2/19/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 12.0 feet

Depth to Water Surface Before Purging (from top of casing): -8.45 feet

Height of Water Column: = 3.55 feet

Well Diameter (d): 2 inches Gals per ft: $(d^2 \times 0.0408)$: x 0.163

Volume of Water Column Before Purging: = 0.57 gallons

Volume of Water Equal to three Well Volumes: 1.74 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1158	10.6	0.5	331	8.42	5.83	113	2.81	156.2
1205	11.05	2.0	334	9.29	7.02	33	0.66	20.1
1310	11.23	2.5	356	9.28	7.08	7.6	0.72	34.1

Total Volume of Water Purged: 2.8 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 12 feet
- Sample Date/Time: 2/19/03 1325
- Color: Cloudy brown
- Odor: Purifier odor (NAPTHALENE-MOTHBALL)
- Sheen/Appearance: NO/cloudy

Notes: Pump on @ 1253 Pump off @ 1313 - dry
SAMPLED for
TCL VOCs
PAH
Phenols
Cyanide
Metals
F. F. Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-21D

Field Personnel:
E Lovenduski
CM

Date: 2/19/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 61.9 feet

Depth to Water Surface Before Purging (from top of casing): -11.76 feet

Height of Water Column: =50.14 feet

Well Diameter (d): 4 inches Gals per ft: $(d^2 \times 0.0408)$: x 0.653

Volume of Water Column Before Purging: =32.7 gallons

Volume of Water Equal to three Well Volumes: 98 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1139	13.85	10	942	11.76	6.38	53	0.14	-77.1
1149	16.75	32	907	11.87	6.98	106	0.04	-124.5
1159	18.05	55	782	11.89	6.06	200	-0.45	32.2
1209	18.80	75	767	11.92	6.88	174	-0.04	-27.6
1219	20.4	95	755	11.90	6.27	121	-0.59	27.6
1229	20.7	105	748	11.92	6.24	102	-0.90	47.6

Total Volume of Water Purged: 110 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~60 feet
- Sample Date/Time: 2/19/03 - 1240
- Color: Sl. cloudy grey
- Odor: SULFUR/SEWER
- Sheen/Appearance: ND/cloudy

Notes: Pump @ 1134 Sampled for
VOCs
PAH
Phenols
BTEX
Metals
FF Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-23D

Field Personnel:
E Lovenduski
CM

Date: 2/17/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 82.50 feet

Depth to Water Surface Before Purging (from top of casing): -50.80 feet

Height of Water Column: = 31.7 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x 0.653

Volume of Water Column Before Purging: = 20.7 gallons

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or (µmhos))	Temp. (°F or (°C))	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1335	56.9	4	1318	11.68	7.82	208	0.69	-101.1
1340	59.7	8	1306	12.13	7.95	202	0.70	-115.6
1345	66.2	16	1189	12.32	8.65	322	0.78	-155.8
1350	79.0	20	1182	12.48	8.71	314	0.81	-160.4

Total Volume of Water Purged: 21 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or (bailer): 82 feet
- Sample Date/Time: 2/19/03 @ 1510
- Color: Cloudy brown
- Odor: ND
- Sheen/Appearance: ND / cloudy

Notes: Pump @ 1330 dry @ 1351
SAMPLED FOR
TCL VOCs
PAH
Phenols
Cyanide
Metals
F.F. Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-28I

Field Personnel:
E Lovenduski
CM

Date: 2/19/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 28.65 feet

Depth to Water Surface Before Purging (from top of casing): - 14.13 feet

Height of Water Column: = 14.52 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408): x 0.163

Volume of Water Column Before Purging: = 2.4 gallons

Volume of Water Equal to three Well Volumes: 7.1 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1350	18.88	1.0	555	12.28	6.48	46	1.23	10.8
1355	23.95	4.0	540	12.58	7.12	36	1.93	-50.8

Total Volume of Water Purged: 7.0 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or bailer: 28 feet
- Sample Date/Time: 2/20/03 0915
- Color: Clear
- Odor: ND
- Sheen/Appearance: ~~Slight~~ ND/Clear

Notes: Purged 1348 - Dry @ 1358 - purged 7.0 gal.
SAMPLED FOR
TCL VOCs
PAH
Phenols } MS 030219
Cyanide
Metals } MSD 030219

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-29D

Field Personnel:
E Lovenduski
CM

Date: 2/17/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 111.0 feet

Depth to Water Surface Before Purging (from top of casing): - 5.5 feet

Height of Water Column: =105.5 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) x 1.469

Volume of Water Column Before Purging: = 155 gallons

Volume of Water Equal to three Well Volumes: 465 gallons
(Volume of Column by 3.0) -

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1145	21.3	30	589	11.84	8.70	96	0.23	-339
1155	35.2	48	589	11.82	7.50	40	0.18	-226
1205	45.5	68	589	11.85	9.10	24	0.22	-361
1215	53.5	83	586	11.90	8.37	31	0.09	-217
1225	61.4	93	582	12.04	8.73	32	0.29	-164
1235	69.5	108	582	12.17	9.09	39	0.25	-174
1245	79.2	125	582	12.21	9.02	47	0.25	-199
1255	89.4	139	582	12.25	9.70	76	0.17	-290
1305	102.4	159	582	12.24	9.16	118	0.24	-282
1315	111.8	172	584	12.50	9.74	125	0.34	-149

Total Volume of Water Purged: 179 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~110 feet
- Sample Date/Time: 2/18/03 1130
- Color: Gry.
- Odor: NP
- Sheen/Appearance: NO

113.2 SD 82.50

Notes: Pump on 1135 pump off 1317 purged 179 gal
Sampled for
VOCs
PAH
Phenols
Cyanide
Metals
T.F. Metals
DUP 02/18/03

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-315

Field Personnel:
E Lovenduski

Date: 2/20/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 19.55 feet

Depth to Water Surface Before Purging (from top of casing): -17.45 feet

Height of Water Column: = 2.10 feet

Well Diameter (d): 2 inches Gals per ft: $(d^2 \times 0.0408)$: x 0.163

Volume of Water Column Before Purging: = 0.34 gallons = 1.29 l

Volume of Water Equal to three Well Volumes: 1.0 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)

Total Volume of Water Purged: _____ gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: _____ feet
- Sample Date/Time: _____
- Color: _____
- Odor: _____
- Sheen/Appearance: _____

Notes: Purged ~1.5 Liters-dry

2/28/03 DRY - NOT SAMPLED

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-31D

Field Personnel:
E Lovenduski

Date: 2/20/03
Job No.: 11171860
Location: Mechanicville

16.2 Total Well Depth (from top of casing): 150 feet

Depth to Water Surface Before Purging (from top of casing): -17.85 feet

Height of Water Column: =132.15 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408): x 0.163

Volume of Water Column Before Purging: =21.5 gallons

Volume of Water Equal to three Well Volumes: 65 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1155	38.3	3.2	643	12.11	7.92	352	0.32	127
1200	62.5	11.0	620	12.45	8.10	234	0.13	113
1205	82.5	20.0	611	12.84	8.39	186	0.09	35.9
1210	98.0	32.0	574	12.91	8.45	162	0.20	-0.4
1215	PUMP	SHUT	OFF					
1225	PUMP	ON						
1230	109.6	42.5	557	12.96	8.11	193	1.22	40.8
1235	133.3	50	538	13.29	8.10	186	3.80	58.1

Total Volume of Water Purged: 56 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~~145~~ feet
- Sample Date/Time: 2/21/03 1000
- Color: Sl. Cloudy
- Odor: ND
- Sheen/Appearance: no/Sl. Cloudy

Notes: 1151 - Pump on - Pump off 1239 - dry SAMPLED FOR
VOCs
PAH
Phenols
Cyanide
Met-ls
F. F. Met-ls
4, 8, 12, 16, 20, 24, 28, 32, 36
40, 44, 48, 52

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-32D

Field Personnel:
E Lovenduski
CM

Date: 2/20/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 111.5 feet

Depth to Water Surface Before Purging (from top of casing): -80.32 feet

Height of Water Column: =31.18 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) x 1.469

Volume of Water Column Before Purging: =46 gallons

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump (Submersible Pump)

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or mmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1014	84.4	6.0	2083	11.82	7.08	126	-0.45	21.8
1019	92.4	18.0	2089	11.91	11.61	89	0.13	-47.5
1024	98.7	25.0	2090	12.02	11.96	118	0.18	-75.3
1029	106.7	40	2087	12.14	12.06	258	0.28	-90.8

Total Volume of Water Purged: 45 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or bailer: ~111 feet
- Sample Date/Time: See below
- Color: Cloudy brown
- Odor: ND
- Sheen/Appearance: ND/Cloudy

Notes: Pump on @ 1009 - pump off @ 1032 - purged 45 gal dry
2/21/03 Sampled for 1030
VOCs
Phenols
Cyanide
Metals (unfiltered)
SAMPLED 2/25/03 @ 1200 FOR PAH
SAMPLED 2/28/03 @ 1110 for F.F. Metals

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-34D

Page 1 of

Field Personnel: EJL

Date: 2/28/03

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 120.5 feet

Depth to Water Surface Before Purging (from top of casing): -10.5 feet

Height of Water Column: =110.0 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x 0.653

Volume of Water Column Before Purging: = 71.83 gallons

Volume of Water Equal to three Well Volumes: 215 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump (Sub Pump) Meter # YSI

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
0834	18	36.4	120	12.28	9.19	0.09	-313	74.5
0844	26	54.3	147	12.52	9.10	0.07	-379	77.5
0854	38	63.0	186	12.61	9.03	0.06	-386	67.0
0904	43	71.7	235	12.97	8.86	0.05	-373	63.9
0914	50	80.5	241	13.03	8.66	0.05	-352	69.4
0924	65	96.7	213	13.41	8.59	0.04	-338	72.3
0934	77	115.2	225	13.54	8.51	0.05	-307	80.9

Total Volume of Water Purged: 79 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~115 feet
- Color: cloudy/tan Odor: ND
- Sheen/Appearance: no - cloudy

Notes: Pump on @ 0824 - Off @ 0934 - 79 gal - 1 day

SAMPLED 2/28/03 @ 1230

VOCs

PAH

Phenols

Cyanide

Metals

Ft. Metals

URS Corporation
646 Plank Road, Suite 202
Clifton Park, NY 12065
Tel: 518.688.0015

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-36I

Field Personnel:
E Lovenduski
C M

Date: 2/11/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 45.16 feet

Depth to Water Surface Before Purging (from top of casing): - 11.91 feet

Height of Water Column: = 33.25 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x 0.653

Volume of Water Column Before Purging: = 21.7 gallons

Volume of Water Equal to three Well Volumes: 65.1 gallons
(Volume of Column by 3.0)

Purging Method: Bailer Waterra Pump Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
0955	18.68	8	344	13.90	7.72	194	1.59	30.2
1000	27.05	14	321	13.80	8.10	140	0.38	-2.1
1005	38.5	20	316	13.71	8.10	85.3	0.69	13.2

Total Volume of Water Purged: 25 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~44 feet
- Sample Date/Time: 2/12/03 @ 1125
- Color: SL cloudy grey
- Odor: ND
- Sheen/Appearance: No/cloudy

Notes: Pump on @ 0950 pump off @ 1008 - well is dry
SAMPLED FOR TCL VOCs
PAH
Phenols
Cyanide
Metals
Field Filtered Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-36D

Field Personnel:
E Lovenduski

Date: 2/10/03
Job No.: 11171860
Location: Mechanicville

4" Riser - 0'-140' bgs
6" open hole 140'-160.93

Total Well Depth (from top of casing): 140' feet 160.93

Depth to Water Surface Before Purging (from top of casing): -11.47 feet -146.00

Height of Water Column: = 128.53 feet 20.93

Well Diameter (d): 4/6 inches Gals per ft: (d^2 x 0.0408) x 0.653 x 1.469

Volume of Water Column Before Purging: =83.9 gallons + 30.7 = 115

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1420	28.65	10	537	12.18	7.11	56.8	-0.03	-10.9
1430	57.1	30	461	12.24	7.35	95.4	-0.07	-62.5
1440	81.5	45	460	12.56	7.43	106	0.13	-92.2
1450	106.9	60	462	13.04	7.43	215	0.12	-101.1
1500	135.1	80	461	13.48	7.46	134	0.13	-101.3
1510	150.9	100	462	13.63	7.52	80.3	0.18	-94.9

Total Volume of Water Purged: 118 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 155 feet
- Sample Date/Time: 2/11/03 @ 1025
- Color: Sl. Cloudy
- Odor: Sulfur
- Sheen/Appearance: No/ sl. cloudy grey

Notes: Pump on @ 1415, pump off @ 1517, well dry
SAMPLES on 2/11/03 for
TCL VOCs
PAHs
Phenols
Cyanide
Metals
Field Filtered Metals

URS

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-37I

Page 1 of ___

Field Personnel: EL

Date: 2/6/03

Job No.: 11035-606

Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 49.85 feet

Depth to Water Surface Before Purging (from top of casing): - 15.40 feet

Height of Water Column: = 34.45 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408) = x 0.653

Volume of Water Column Before Purging: = 22.4 gallons

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump/~~Sub pump~~ Meter # YSI

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm (or µmhos))	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1129	8	28.3	551	13.56	6.01	0.07	90.10	130

Total Volume of Water Purged: 22 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump Intake or ~~Bailer~~: ~48 feet
- Color: Slightly cloudy grey Odor: ND Sheen/Appearance: ND / sl. cloudy

Notes:

2/6/03 - Roadbox is filled with ice - cannot access well.
2/24/03 - Returned - thawed out roadbox - pump on @ 1124
Pump off @ 1124 - dry.
2/25/03 SAMPLED W/ BAILER @ 1030 SAMPLED FOR VOC, PAH, PHENOLS, METALS, CYANIDE
FIELD FILTERED METALS
MS/MSD ALSO COLLECTED FOR ABOVE ANALYSIS

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Tel: 518.688.0015

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-37D
Page 1 of ____

Field Personnel: FL

4" Riser 0-155.5'
6" O.H. 155.5'-185.25'

Date: 2/6/03
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 155.5' ~~185.25~~ feet (MANSCAN: 185.25)

Depth to Water Surface Before Purging (from top of casing): ~~9.79~~ 9.79 feet - 155.50

Height of Water Column: = 145.71 feet 29.75

Well Diameter (d): 4/6 inches

Gals per ft: (d^2 x 0.0408) = x 0.623 1.469 GPF

Volume of Water Column Before Purging: = 95.1 gallons ~~43.69~~ = 139.1 (1 vol.)

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) _____ gallons

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump/Kemmerer Meter # YSI

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1050	7	21.3	967	12.29	8.67	0.29	-69.7	241
1100	22	46.3	1050	12.33	9.03	0.32	-137.8	178
1110	40	67.7	1052	12.44	9.03	0.38	-166.8	150
1120	50	82.5	1055	12.61	9.05	0.27	-215.6	108
1130	67	106.4	1055	12.83	9.05	0.22	-243.4	128
1140	78	121.2	1053	13.17	9.05	0.33	-252.7	295
1150	90	142.1	1057	13.20	9.04	0.12	-261.7	101
1200	99	156.6	1059	13.50	9.05	0.07	-266.7	81.8
1210	116	162.9	1065	13.60	9.05	0.21	-269.7	106.0
1220	130	172.7	1072	13.58	9.02	0.25	-254.2	125
1230	145	181.2	1076	13.83	9.00	1.78	-198.3	232

Total Volume of Water Purged: 150 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: _____ feet 1180'
- Color: Gry Odor: sulfur
- Sheen/Appearance: N/ Chunky Sludge

Notes:

Pump on @ 1046. Well is dry @ 150 gal. pump off.

Sampled on 2/7/03 for @ 1100 for
TCL VOCs
PAHs
Phenols
Cyanide
Metals
F.F. Mtls

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Tel: 518.688.0015

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-38D

Field Personnel:
E Lovenduski
CM

Date: 2/14/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 169.95 feet

Depth to Water Surface Before Purging (from top of casing): -5.88 feet

Height of Water Column: =164.07 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x0.653

Volume of Water Column Before Purging: = 107.13 gallons

Volume of Water Equal to three Well Volumes: 321 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
0955	7.18	19	3121	11.96	6.11	6.7	0.13	38.2
1005	7.53	39	3125	12.04	6.30	1.7	-0.18	53.8
1015	7.73	59	3133	12.07	6.35	1.9	-0.30	54.3
1025	7.92	80	3140	12.11	6.44	1.7	-0.20	41.8
1035	8.24	100	3147	12.17	6.47	4.2	-0.26	43.1
1045	8.40	120	3154	12.14	6.39	8.4	-0.38	51.7
1055	8.55	140	3159	12.09	6.98	7.0	0.18	2.2
1105	8.67	160	3156	12.20	6.45	6.0	-0.14	40.8
1115	8.76	180	3156	12.24	6.37	5.2	-0.35	55.1
1125	8.91	200	3158	12.30	6.42	3.9	-0.47	48.5
1135	9.00	220	3163	12.24	6.44	3.5	-0.36	49.4

Total Volume of Water Purged: 385 gallons OVER

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or Bailer: 168 feet
- Sample Date/Time: 2/14/03 1300
- Color: Clear
- Odor: ND
- Sheen/Appearance: ND/clear

Notes: Pump on @ 0945 SAMPLED FOR
TCL VOCs
PAH
Phenols
Cyanide
Metals
~~Field filtered Metals~~

TIME	∇	VOL.	SpCond	Temp	pH	Turb	DO	ORP
1145	9.09	240	3162	12.16	6.36	3.47	-0.50	61.0
1155	9.17	260	3168	12.21	6.37	2.84	-0.34	48.5
1205	9.23	280	3171	12.15	6.34	2.25	-0.42	56.9
1215	9.28	300	3179	12.12	6.34	2.2	-0.53	57.7
1225	9.34	320	3185	12.19	6.96	1.9	0.11	1.9
1230	9.37	330	3188	12.19	6.66	1.8	0.11	7.0

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-39D

Field Personnel:
E Lovenduski

4" Riser 0 - 130'
6" Open hole - 130'

Date: 2/10/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 130' feet — 145.45' − 130.00' = 15.45'

Depth to Water Surface Before Purging (from top of casing): -11.42 feet

Height of Water Column: = 113.58 feet

Well Diameter (d): 4/6 inches — Gals per ft: (d^2 x 0.0408): x 0.653 — x 1.469

Volume of Water Column Before Purging: = 74.1 gallons — 22.7 gal | 96.8 gal

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) _____ gallons

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1020	30.02	10	684	12.93	6.86	310	0.26	7.8
1030	39.7	17	679	13.31	6.11	175	0.31	24.8
1040	56.7	30	669	13.37	6.29	405	0.24	-8.4
1050	64.6	42	659	13.51	6.14	475	0.22	-1.6
1100	78.3	53	666	13.59	6.05	570	0.20	-5.2
1110	94.8	66	661	13.82	6.32	561	0.28	-16.7
1120	103.0	77	649	14.01	6.19	341	0.34	-20.1
1130	123.4	95	655	14.04	6.23	512	0.29	-10.2
1140	131.2	~~134~~ 110	627	14.36	7.69	309	0.86	-88.0
1150	140.3	125	624	14.37	8.02	235	1.61	-99.2

Total Volume of Water Purged: 146 gallons

Sampling Data:
- Sampling Method: (Bailer) or Pump
- Depth of Pump intake or (bailer): ~140 feet
- Sample Date/Time: 2/11/03 0855
- Color: Grey
- Odor: Sulfur
- Sheen/Appearance: NO / Cloudy/Grey

Notes: Pump on @ 1212 Pump off @ 1156 - purged 146 gal.
Sampled for:
TCL VOCs
PAH
Phenols
Cyanide
Metals
Field Filtered Metals

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-40D

Field Personnel:
E Lovenduski
CM

Date: 2/26/03
Job No.: 11171860
Location: Mechanicville



Total Well Depth (from top of casing): 169.65 feet

Depth to Water Surface Before Purging (from top of casing): -22.95 feet

Height of Water Column: =146.7 feet

Well Diameter (d): 2 inches Gals per ft: (d^2 x 0.0408): x0.163

Volume of Water Column Before Purging: =23.9 gallons

Volume of Water Equal to three Well Volumes: _____ gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

20% drawdown
standard tool
200 psi
PINE
225/week
Roger
Data from S.R. Grieco - BAILER

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1309	41.4	7	1862	11.82	6.30	401	1.25	18.1
1314	56.3	10	1787	11.65	7.10	321	2.76	59.2
1319	81.1	14	1775	12.39	7.22	237	2.77	74.3
1324	105.4	18	1777	12.74	7.25	253	2.71	87.2
1329	113.3	22	1781	12.12	7.28	290	2.11	96.0
1334	141.8	26	1777	13.71	7.31	539	1.36	58.4
1339	158.9	30	1738	14.15	7.35	470	0.99	53.0

Total Volume of Water Purged: 31 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: ~165 feet
- Sample Date/Time: 2/27/03 @ 1110
- Color: Cloudy white/grey
- Odor: ND
- Sheen/Appearance: ND/Cloudy

Notes: Pump on @ 1304 Sampled for
VOC
PAH
Phenols
Cyanide
Metals
T.F. Metals

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-41D

Page 1 of ___

Field Personnel: EL

Date: 2/5/03

Job No.: 11035-606

Location: NYSEG Mechanicville

4" Casing to 120'
6" open hole 120-138.65

Total Well Depth (from top of casing): 120' → ~~138.65~~ feet — 6" open hole - 120'-138.65 = 18.65' in 6"

Depth to Water Surface Before Purging (from top of casing): -15.03 feet — 1.469 gal/ft.

Height of Water Column: = 104.97 feet — 27.4 gal in 6"

Well Diameter (d): 4/6 inches

Gals per ft: (d^2 x 0.0408) = x 0.653

Volume of Water Column Before Purging: = 68.5 gallons + 27.4 = 95.9 gal

Volume of Water Equal to three Well Volumes: (Volume of Column by 3.0) _____ gallons = 288 gal

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump/Grundfos — Meter # YSI

Time	Well Volumes (Gallons/Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1054	8.0	27.9	1357	12.37	7.68	0.11	-24.9	752
1104	16.0	42.4	1375	12.38	7.66	0.01	-31.3	365
1114	24.0	54.5	1365	12.37	7.66	0.00	-33.0	244
1124	32.0	64.3	1373	12.42	7.65	0.01	-25.2	184
1134	40.0	72.8	1355	12.08	7.65	0.02	-26.6	258
1144	42.0	74.2	1342	12.92	7.66	-0.01	-43.4	502
1154	56.0	96.5	1378	12.38	7.73	-0.04	-69.8	326
1204	67.0	105.5	1348	13.44	7.66	-0.10	-67.6	780
1214	80.0	122.0	1373	13.95	7.70	-0.22	-81.5	750
1224	95.0	129.3	1383	13.47	7.65	0.21	-84.0	635

Pump slowed. Turned up to 2.5

Total Volume of Water Purged: 106 gallons/liters

Sampling Data:

- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: _____ feet
- Color: Odor: Sheen/Appearance:

Notes:

Pump on @ 1047 Grundfos Rediflow II set @ 160 200
Well dry at 1233 purged 106 gal. Descr. of purge water - Cloudy, grey no VOCs detected.
Returned on 2/6/03 @ 0900 sampled for
TCL VOCs
PAH
Phenols
Cyanide
Metals
FE metals

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Tel: 518.688.0015

GROUNDWATER SAMPLING DATA SHEET

NYSEG Former MGP site
Mechanicville, NY

WELL NO: MW-43D

Field Personnel:
E Lovenduski
CM

Date: 2/13/03
Job No.: 11171860
Location: Mechanicville

Total Well Depth (from top of casing): 147.55 feet

Depth to Water Surface Before Purging (from top of casing): -14.14 feet

Height of Water Column: =133.41 feet

Well Diameter (d): 4 inches Gals per ft: (d^2 x 0.0408): x 0.653

Volume of Water Column Before Purging: = 87.1 gallons

Volume of Water Equal to three Well Volumes: 261 gallons
(Volume of Column by 3.0)

Purging Method: Bailer/Waterra Pump/Submersible Pump

Time	Depth To Water feet	Well Volumes (Gallons)	Specific Conduct. (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)
1303	17.4	3	560	12.10	6.33	210	0.42	-35.5
1313	27.9	25	552	12.23	6.96	175	0.70	-74.8
1323	30.2	40	526	12.30	7.25	134	0.42	-138.6
1333	35.2'	58	480	12.35	7.25	195	-0.03	-231.6
1343	39.55 -	74	467	12.35	7.23	97	-0.01	-256.4
1353	41.10'	98	461	12.34	7.24	93	-0.06	-280.5
1403	42.9'	115	455	12.35	7.23	86	-0.23	-271.0
1413	44.15	122	451	12.37	7.23	89	-0.29	-246.3
1423	45.29	140	449	12.36	7.23	56	-0.08	-277.8
1433	45.92	160	448	12.37	7.23	142	-0.15	-271.3
1443	46.46	180	446	12.39	7.22	58	-0.14	-266.7

Total Volume of Water Purged: 265 gallons

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 145 feet
- Sample Date/Time: 2/13/03 1530
- Color: Sl. Cloudy, grey
- Odor: Strong sulfur
- Sheen/Appearance: No/cloudy

Notes: Pump on @ 1300 SAMPLED FOR
TCL VOCs
PAH
Phenols
Cyanide
Metals
Field Filtered Metals

TIME	DTW	Gallons	Sp. Cond	°C	pH	Turbid	DO	ORP
1453	47.50	212	446	12.37	7.22	70	0.00	-303.9
1503	48.08	235	445	12.40	7.22	65	0.02	-307.9
1513	48.58	258	445	12.41	7.27	62	0.03	-301.6

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GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-33D
Page 1 of 2

Field Personnel: ESL

Date: 5/29/03
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 141.0 feet

Depth to Water Surface Before Purging (from top of casing): - 13.12 feet

Height of Water Column: =127.88 feet

Well Diameter (d): 6 inches Gals per ft: (d^2 x 0.0408) = x 1.469

Volume of Water Column Before Purging: = 187.9 gallons

Volume of Water Equal to three Well Volumes: 563.5 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump/Grundfos Meter # 77052

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1225	2.5	13.10	636	15.14	7.76			56
1230	5.0	13.35	NO PARAMETERS	COLLECTED	- XYZ on	water.		—
1235	7.5	13.55	"	"	"	"	"	—
1240	10.0	13.59	NO PARAMETERS -	SHEEN ON	WATER			—
1245	12.5	13.70	"	"	"	"	"	—
1250	15.0	14.00	"	"	"	"	"	—
1255	19.0	14.5	"	"	"	"	"	—
1300	21.5	14.85						—
1305	24.5	15.09						—
1310	27.5	15.75						—
1315	9.0 GAL	16.18	738	14.74	7.43			46.5
1320	9.5	16.55	729	14.33	6.71			36.5
1325	10.0	17.04	711	14.31	7.19			32.5

5,5,4,6

OVER

Total Volume of Water Purged: 23 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump intake or bailer: 135 feet
- Color: clear Odor: sl. MGP Sheen/Appearance: NO/Clear

Notes:
Pump one 1220
- XYZ on initial purge water - small blobs of coal tar.
SAMPLED @ 1535 - 2 40 ml y/less vials w/HCl for VOC+MTBE 8260

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Tel: 518.688.0015

MW-33D pg 2 of 2

TIME	VOLUME	DTW	SP COND	TEMP	pH	Turbidity
1330	10.5	17.32	731	14.29	7.22	31.5
1335	11.0	17.69	730	14.44	7.23	29.2
1340	11.5	17.95	723	14.10	7.64	29.7
1345	12.0	18.18	720	14.15	7.18	39.5
1350	12.5	18.45	720	13.91	7.68	31.7
1355	13.0	18.89	715	14.01	7.91	30.9
1400	13.5	19.17	717	14.22	8.05	30.4
1405	14.0	19.45	~~714~~ 714	14.21	8.14	30.9
1410	14.5	19.77	715	14.52	8.26	30.7
1415	15.0	20.15	709	14.07	8.32	29.9
1420	15.5	20.40	706	14.27	8.49	30.9
1425	15.9	20.73	700	14.22	8.69	28.6
1430	16.5	21.05	695	14.00	8.80	29.3
1430	17.0	21.55	693	13.78	8.82	29.9
1435	17.5	21.78	692	14.09	8.85	30.7
1440	18.0	22.00	692	14.33	8.88	30.1
1445	18.5	22.20	691	14.21	8.94	25.5
1450	18.8	22.42	693	1455	9.00	25.5
1455	19.5	22.85	691	14.45	9.00	18.9
1500	20.0	23.33	691	14.63	9.04	27.5
1505	20.5	23.64	687	14.70	9.06	25.2
1510	20.9	23.86	686	15.05	9.10	28.7
1515	21.5	24.09	687	14.56	9.09	24.9
1520	22.0	24.35	686	15.08	9.12	18.5
1525	22.5	24.67	685	14.97	9.14	17.6
1530	23.0	25.03	686	14.95	9.13	17.9

END OF PURGE

URS

GROUNDWATER SAMPLING DATA SHEET
NYSEG-Mechanicville, NY

WELL NO: MW-35I

Field Personnel: EJL

Date: 5/30/03
Job No.: 11035-606
Location: NYSEG Mechanicville

Total Well Depth (from top of casing): 36.95 feet

Depth to Water Surface Before Purging (from top of casing): - 5.15 feet

Height of Water Column: = 31.80 feet

Well Diameter (d): 8 inches Gals per ft: (d^2 x 0.0408) = x 2.61

Volume of Water Column Before Purging: = 83 gallons

Volume of Water Equal to three Well Volumes: 249 gallons
(Volume of Column by 3.0)

Purging Method: Bladder Pump/Waterra Pump/Peristaltic Pump Meter # _____

Time	Well Volumes (Gallons / Liters)	Depth to Water (feet)	SC (mmhos/cm or µmhos)	Temp. (°F or °C)	pH (SU)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Turbidity (NTU)
1041	0.7	5.05	Sheen on water - NO PARAMETERS					
1046	0.9	5.20	"	" "	"	"		
1051	1.2	5.31	"	" "	"	"		
1056	1.4	5.45	636	12.91	7.46			29.8
1101	1.7	5.56	651	12.75	7.43			17.90
1106	2.1	5.67	643	12.90	7.43			32.8
1111	2.4	5.79	648	12.95	7.42			29.7
1116	2.7	5.90	649	13.02	7.43			19.65
1121	3.0	6.00	645	13.16	7.43			19.90
1126	3.4	6.11	645	13.23	7.45			18.91
1131	3.8	6.22	640	13.17	7.44			19.20
1136	4.2	6.32	643	13.10	7.43			19.30
1141	4.7	6.44	643	13.41	7.41			17.60

* DTW change ↑ B/C added 1" PVC tubing to well

Total Volume of Water Purged: 11 gallons/liters

Sampling Data:
- Sampling Method: Bailer or Pump
- Depth of Pump (Intake) or bailer: 25.0 feet BTOC
- Color: Clear Odor: MGP
- Sheen/Appearance: NS/Clear

Notes: Pump on @ 1036
SAMPLED @ 1315 FOR VOCs + MTBE (VOAs w/HCl)

URS Corporation
646 Plank Road, Suite 202
Clifton Park, NY 12065
Tel: 518.688.0015

MW-35I Pg 2 of 2

TIME	DTW	VOLUME	SpCond	pH	TEMP	TURB
1146	6.52	5.0	647	7.35	13.36	13.62
1151	6.61	5.3	643	7.29	13.45	12.35
1156	6.66	5.6	647	7.32	13.36	13.68
1201	6.73	5.9	645	7.35	13.54	13.67
1206	6.80	6.2	647	7.41	13.14	13.52
1211	6.86	6.6	646	7.45	13.47	9.80
1216	6.94	6.9	646	7.31	13.26	6.45
1221	7.05	7.2	647	7.42	13.25	6.04
1226	7.11	7.6	648	7.33	13.25	10.25
1231	7.23	8.0	648	7.25	13.40	9.27
1236	7.31	8.4	648	7.27	13.55	8.40
1241	7.36	8.8	647	7.45	13.27	5.25
1246	7.37	9.2	648	7.39	13.42	3.60
1251	7.39	9.6	644	7.32	13.43	2.15
1256	7.39	9.9	650	7.24	13.12	1.46
1301	7.42	10.3	650	7.26	13.35	0.90
1306	7.53	10.6	652	7.36	13.35	0.94
1311	7.58	11.0	650	7.30	13.32	0.82

END OF PURGE

APPENDIX I
DATA VALIDATION

LIMITED DATA REVIEW SUMMARY

NYSEG MECHANICVILLE SITE

Thirty three water samples, two matrix spike/matrix spike duplicate (MS/MSD) pairs, two field duplicates, and six trip blanks were collected on February 06-28, 2003 from the NYSEG Mechanicville site, Mechanicville, NY. The samples were sent to Adirondack Environmental Services, Inc. of Albany, NY. The samples were analyzed in accordance with New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) 1995 for Target Compound List (TCL) Volatile Organic Compounds (VOC) by United States Environmental Protection Agency (USEPA) method 8260, Polynuclear Aromatic Hydrocarbons (PAHs) by USEPA method 8270, Total and Dissolved Metals by USEPA method 6010, Total and Dissolved Mercury by USEPA method 7470, Cyanide by Methods for the Chemical Analysis of Water and Wastes (MCAWW) 335.3, Total Phenols by MCAWW 310.1 and Amenable Cyanide by method 4500CNG (Standard Methods for the Examination of Water and Wastewater, 20^{th} edition, 1998). Not all samples were analyzed for all parameters. All samples were received at Adirondack intact, under proper chain-of-custody (COC) and temperature (i.e., 4°C +/- 2°C).

A limited data review was performed for completeness, holding times, and compliance with the referenced methods. The data was qualified following the guidelines presented in USEPA Region II *Standard Operating Procedure (SOP) for the Validation of Organic Data Acquired Using SW-846 Method 8260B*, SOP HW-24, Revision 1, June 1999; USEPA Region II *SOP for the Validation of Organic Data Acquired Using SW-846 Method 8270C*, SOP HW-22, Revision 2, June 2001; and USEPA Region II *Evaluation of Metals Data for the CLP Program*, SOP HW-2, Revision 11, January 1992. The COCs are presented in Appendix A. The validated Form Is are presented in Appendix B. Definitions of data qualifiers are presented at the end of this text. Only data requiring qualification is discussed in this summary.

VOCs

The initial calibration (ICAL) standards analyzed on 2/14/03 exhibited a relative standard deviation (%RSD) that exceeded the QC limit (i.e., >15%) for VOC methylene chloride. The detected results for methylene chloride were qualified as estimated ("J") in samples MEGDIM0236 and the trip blank (TB030207).

The percent difference (%D) between the ICAL average relative response factor (RRF) and the continuing calibration (CCAL) RRF (2/19/03, 2/26/03, and 2/27/03) exceeded the QC limit (i.e., >20%) for several VOCs. Acetone, choromethane, 1,1-dichloroethane, 1,2-dichloroethane, 4-methyl-2-pentanone, 2-hexanone, chloroethane, methylene chloride, acetone, carbon disulfide, 1,1-dichloroethene, 1,2-dichloroethene-cis, bromodichloromethane, 1,2-dichloropropane, cis-1, 3-dichloropropane, dibromochloromethane, 1,1,2-trichloroethane, trans-1, 3-dichloropropene, bromoform and/or 1,1,2,2-tetrachloroethane were qualified as estimated ("UJ" or "J") in samples DUP021803, DUP022003, MEGCD0115, MEGCIM0102, MEGDD014, MEGDD0117, MEGDD0120, MEGDD0121, MEGDD0123, MEGDD0129, MEGCD0131, MEGDD0132, MEGDD0134, MEGDD0236, MEGDD0237, MEGDD0238, MEGDD0239, MEGDD0240, MEGDD0241, MEGDD0243, MEGDIM0110, MEGDIM0117, MEGDIM0128, MEGDIM0236, MEGDIM0237, MEGDIM8618, MEGDSH8617, MEGSH0121, MEGUIM0119, MEGUSH8601,

MEGUSH8602, MEGUSH8611, MEGUSH8616, Trip Blank (TB) 030207, TB030212, TB030218, TB030220, TB030224, and TB030227.

The recoveries of internal standards (ISs) 1,4-difluorobenzene and chlorobenzene were below the lower QC limit in sample MEGDD0237. All compounds associated with these ISs were qualified as estimated ("UJ"), unless previously qualified due to the calibration outlier.

The recovery of surrogate toluene-d8 was greater than the QC limit (i.e., >110%) in sample MEGUIM0119. The detected result (i.e., chloroform) was qualified as estimated ("J").

No other data qualifications were made, and all other data are usable as reported.

PAHs

The %D between the ICAL average RRF and the CCAL RRF (2/19/03, 2/28/03, 3/19/03, 3/29/03, 3/30/03) exceeded the QC limit (i.e., >20%) for pyrene, benzo (g, h, i) perylene, dibenzo (a, h) anthracene, 2-methylnaphthalene, and/or benzo (k) fluoranthene. These compounds were qualified as estimated ("UJ" or "J") in samples MEGCIM0102, MEGDD0117, MEGDD0132, MEGDD0134, MEGDD0238, MEGDD0240, MEGDD0241, MEGDD0243, MEGDIM0117, MEGDIM0236, MEGDSH0121, and MEGUSH8616.

No other data qualifications were made, and all other data are usable as reported.

METALS

The continuing calibration verifications (CCVs) for aluminum (Al) on the ICP run of 2/20/03 exceeded the upper QC limit (i.e., > 110%). The detected Al results in samples MEGCIM0102, MEGCIM0102 (filtered), MEGDD0241, MEGDD0237, MEGDD0237 (filtered), and MEGDIM8618 were qualified as estimated ("J").

The metals contract required detection limit (CRDL) standards associated with samples MEGCIM0102 (filtered), MEGDD0132 (filtered), MEGDD0134 (filtered), MEGDD0240, MEGDD0240 (filtered), MEGDD0241 (filtered), MEGDIM0237, MEGDIM0237 (filtered), MEGDSH8617, MEGUIM0119, and MEGUIM0119 (filtered) exhibited a high recovery (i.e., >120%) for nickel (Ni), manganese (Mn), lead (Pb), selenium (Se), and/or vanadium (V). The detected Ni, Mn, Pb, Se and/or V results in these samples were qualified as estimated ("J").

The metals CRDL standards associated with samples MEGDD0117, MEGDD0117 (filtered), MEGDD0236, MEGDD0236 (filtered), MEGDD0239, MEGDD0239 (filtered), MEGDIM0236, MEGDIM0236 (filtered), MEGUIM0119, MEGUSH8602, and MEGUSH8602 (filtered) exhibited a high recovery (i.e., >120%) for Pb and chromium (Cr), and a low recovery (i.e.<80%) for Se. The Pb, Cr, and/or Se results in these samples were qualified as estimated ("J" or "UJ").

The metals CRDL standards associated with samples MEGDD0132 (filtered) and MEGUIM0119 exhibited a low recovery (i.e., <80%) for Pb. The Pb results in these samples were qualified as estimated ("UJ").

The recovery of Iron (Fe) was below the QC limit (i.e., <80%) in the ICSAB samples analyzed on the ICP run of 2/28/03. The concentration of Fe in sample MEGDD0117 was greater than the concentration of Fe in the ICSAB samples, therefore the Fe result in sample MEGDD0117 was qualified as estimated ("J"). All other samples analyzed on this ICP run exhibited Fe concentrations well below the ICSAB concentration, therefore no qualification was necessary.

The recoveries of Fe and Zinc (Zn) were below the QC limit (i.e., <80%) in the ICSAB samples analyzed on the ICP run of 3/30/03. Since the concentration of Fe in samples DUP021803, MEGDD014, MEGDD0129, MEGDIM0110, MEGDIM0117, and MEGUSH8601 was greater than the concentration of Fe in the ICSAB samples, the Fe and Zn results in these samples have been qualified as estimated ("J").

The recoveries of antimony (Sb), arsenic (As), nickel (Ni), Se, and silver (Ag) were below 30% in the total MS sample associated with samples DUP021803, DUP022003, MEGCD0131, MEGDD014, MEGDD0115, MEGDD0121, MEGDD0123, MEGDD0129, MEGDD0132, MEGDD0238, MEGDD0243, MEGDIM0110, MEGDIM0117, MEGDIM0128, MEGDSH0121, MEGUSH8601, MEGUSH8611, and MEGUSH8616. In accordance with the validation guidelines the results for Sb, As, Ni, Se, and Ag were rejected ("R") in these samples.

The recoveries of Hg and Se were below 30% in the filtered MS sample associated with samples MEGDD0120 (filtered), MEGDD0132 (filtered), MEGDD0134 (filtered), MEGDD0240 (filtered), MEGDIM0237 (filtered), and MEGUIM0119 (filtered). In accordance with the validation guidelines the results for Hg and Se were rejected ("R") in these samples.

The recoveries of Al and Pb grossly exceeded the QC limit (i.e., >150%) in the filtered MS sample associated with samples MEGDD0120 (filtered), MEGDD0134 (filtered), MEGDD0240 (filtered), MEGDIM0237 (filtered), and MEGUIM0119 (filtered). In accordance with the validation guidelines the detected results for Al and Pb were rejected ("R") in these samples.

The recoveries of As, Mn, and Zn were above the QC limit (i.e., >125%) in the filtered MS sample associated with samples MEGDD0120 (filtered), MEGDD0132 (filtered), MEGDD0134 (filtered), MEGDD0240 (filtered), MEGDIM0237 (filtered), and MEGUIM0119 (filtered). In accordance with the validation guidelines the detected results for As, Mn, and Zn were qualified as estimated ("J") in these samples.

The recoveries of Al and As grossly exceeded the QC limit (i.e., >150%) in the total MS sample associated with samples MEGDD0120, MEGDD0134, MEGDD0240, MEGDIM0237, MEGDSH8617, and MEGUIM0119. In accordance with the validation guidelines the detected results for Al and As were rejected ("R") in these samples.

The recoveries of Hg and Se were below the QC limit (i.e., <75%) in the total MS sample associated with samples MEGDD0120, MEGDD0134, MEGDD0240, MEGDIM0237, MEGDSH8617, and MEGUIM0119. In accordance with the validation guidelines the results for Hg and Se were qualified as estimated ("J" or "UJ") in these samples.

The recoveries of Pb and Hg were below the QC limit (i.e., <75%) in the total MS sample associated with samples DUP021803, DUP022003, MEGCD0131, MEGDD014, MEGDD0115, MEGDD0121, MEGDD0123, MEGDD0129, MEGDD0132, MEGDD0238, MEGDD0243,

MEGDIM0110, MEGDIM0117, MEGDIM0128, MEGDSH0121, MEGUSH8601, MEGUSH8611, and MEGUSH8616. In accordance with the validation guidelines the results for Pb and Hg were qualified as estimated ("J" of "UJ") in these samples.

The recoveries of As, Hg, Pb, Se, and Ag were below the QC limit (i.e., <75%) in the filtered MS sample associated with samples DUP021803 (filtered), DUP022003 (filtered), MEGCD0131 (filtered), MEGDD014 (filtered), MEGDD0115 (filtered), MEGDD0121 (filtered), MEGDD0123 (filtered), MEGDD0129 (filtered), MEGDIM0110 (filtered), MEGDIM0117 (filtered), MEGDSH0121 (filtered), MEGUSH8601 (filtered), and MEGUSH8611 (filtered). In accordance with the validation guidelines the results for As, Hg, Pb, Se, and Ag were qualified as estimated ("J" or "UJ") in these samples.

The percent difference (%D) of the serial dilution performed on total metals sample MEGDIM0110 exceeded the QC limit (i.e., >10%) for Cr, Fe and Zn. The Cr, Fe, and/or Zn results in samples DUP021803, DUP022003, MEGCD0131, MEGDD014, MEGDD0115, MEGDD0121, MEGDD0123, MEGDD0129, MEGDD0132, MEGDD0238, MEGDD0243, MEGDIM0110, MEGDIM0117, MEGDIM0128, MEGDSH0121, MEGUSH8601, MEGUSH8611, and MEGUSH8616 have been qualified as estimated ("J"), if the sample concentration was greater than ten times the instrument detection limit.

The %D of the serial dilution performed on filtered metals sample MEGDIM0237 exceeded the QC limit (i.e., >10%) for Fe. The Fe results in samples MEGDD0120 (filtered), MEGDD0134 (filtered), and MEGDIM0237 (filtered) have been qualified as estimated ("J").

The %RPD between the concentration of total metals Al, Ba, Cu, Mn, and V in sample MEGDD0129 and field duplicate DUP021803 exceeded the QC limit (i.e., >50%RPD). In accordance with the validation guidelines the total Al, Ba, Cu, Mn, and V results in these samples have been qualified as estimated ("J").

The %RPD between the concentration of filtered metals Al and Fe in sample MEGDD0129 and field duplicate DUP021803 exceeded the QC limit (i.e., >50%RPD). In accordance with the validation guidelines the filtered Al and Fe results in these samples have been qualified as estimated ("J").

The %RPD between the concentration of total metal V in sample MEGUSH8611 and field duplicate DUP022003 exceeded the QC limit (i.e., >50%RPD). In accordance with the validation guidelines the total V results in these samples have been qualified as estimated ("J").

The %RPD between the concentration of filtered metals Ba and Zn in sample MEGUSH8611 and field duplicate DUP022003 exceeded the QC limit (i.e., >50%RPD). In accordance with the validation guidelines the filtered Ba and Zn results in these samples have been qualified as estimated ("J").

The %D between the concentration of total Ba and filtered Ba in sample MEGDD0115 exceeded the QC limit (i.e., filtered concentration>total concentration by more than 10%). In accordance with the validation guidelines the total and filtered Ba results in these samples have been qualified as estimated ("J").

The %D between the concentration of total Zn and filtered Zn in sample MEGDD0240 and MEGDIM0237 exceeded the QC limit (i.e., filtered concentration>total concentration by more than 10%). In accordance with the validation guidelines the total and filtered Zn results in these samples have been qualified as estimated ("J").

The %D between the concentration of total Zn and filtered Zn in sample MEGUIM0119 grossly exceeded the QC limit (i.e., filter concentration >total concentration by more than 50%). In accordance with the validation guidelines the total and filtered Zn results in these samples have been rejected ("R).

No other data qualifications were made, and all other data are usable as reported.

WET CHEMISTRY

The CCVs for cyanide (analysis date 2/20/03 and 02/27/03) exhibited %Rs that were below the lower QC limit (i.e., < 85%). The undetected total and amenable cyanide results in samples MEGDD0115, MEGDD0121, MEGDD0123, MEGDD0132, MEGDD0239, MEGDIM0110, MEGDIM0128, MEGDSH0121, MEGUSH8601, and MEGUSH8611 were qualified as estimated ("UJ").

The cyanide CRDL standards associated with samples MEGDD0120, MEGDD0134, MEGDD0240, MEGDIM0237, MEGSH8617, and MEGUIM0119 exhibited a low recovery (i.e., <80%) for cyanide. The total and amenable cyanide results in these samples were qualified as estimated ("J" or "UJ").

cc: M. Gutmann
File: 11171861 (AD-1)

DEFINITIONS OF DATA QUALIFIERS

U – The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

D – Results reported from a secondary dilution analysis.

R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet qualify control criteria. The presence or absence of the analyte cannot be verified.

APPENDIX A
CHAIN-OF-CUSTODIES

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX
A full service analytical research laboratory offering solutions to environmental concerns

CHAIN OF CUSTODY RECORD

ASP Category B deliverable

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	M'VILLE MGP SITE	Eric Lovendusk. / Chris McMahon
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	3030971194 #5	

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
030228 H01	MEGDIM0237	2/25/03	1030 A P	W		x	8	See Below
	MS 030225	2/25/03	1030 A P	W		x	7	
	MSD 030225	2/25/03	1030 A P	W		x	7	
H02	MEGDD0120	2/27/03	1000 A P	W		x	9	
H03	MEGUIM0119	2/26/03	1220 A P	W		x	9	
H04	MEGDD0240	2/27/03	1110 A P	W		x	9	
H05	MEGDSH8617	2/27/03	1355 A P	W		x	7	No filt. met.
H06	TB 030227	2/27/03	/ A P	TB		x	2	TCL VOCs
H07	MEGDD0132	2/25/03	1200 A P	W		x	1	PAH-8270
H08	MEGDD0132	2/28/03	1110 A P	W		x	1	Field Filtered Metals
H09	MEGDD0134	2/28/03	1230 A P	W		x	9	See Below
			A P					
			A P					
			A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAH - 8270
TCL VOCs - 8260
Cyanide - Total 9012/335.3; Weak acid dissociable SM4500I
Total Phenols 9065/420.1
Metals: 6010 series - Al, Sb, As, Ba, Cd, Cr, Cu, Fe, Pb, Ni, Mn, Hg, Se, Ag, V, Zn
Field Filtered Samples @ 250 ml

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Eric Lovendusk		2/28/03 1430
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	MLP	2/28/03 2:36

Temperature	Properly Preserved	Received Within Holding Times
Ambient or Chilled (9°C)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road, Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) M'VILLE MGP Site	Samplers: (Names) EJL/CM
Client Phone No: 688-0015	PO Number: 30309/154#5	
Client Fax No: 688-0022		Samplers: (Signature)

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
	MEGDIM0117 ✓J01	2/14/03	0830	(A) P	W		x	7	See Below
	MEGDD0243 ✓J02	2/13/03	1530	A (P)	W		x	7	See Below
	MEGDD0238 ✓J03	2/14/03	1300	(A) P	W		x	6	See Below
	MEGDD0114 ✓J04	2/18/03	1030	A P	W		x	7	See Below
FD →	MEGDD0129 ✓J05	2/18/03	1130	A P	W		x	7	See Below
	DUP 02/18/03 J06	2/18/03	/	A P	W		x	7	See Below
	TB 030218 J07	2/18/03	/	A P	TB		x	1	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

030218 J

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAH - ~~8260~~ 8270
Total Phenols: 9065/420.1
TCL VOCs: 8260
Cyanide: Total 9012/335.3; Weak acid dissociable SM4500I
Metals: 6010 - RCRA 8 metals
- Samples 750NTU have seperate filtered sample

Relinquished by: (Signature)	Received by: (Signature) Betty Hutton	Date/Time 2/18/03 - 3:00
Relinquished by: (Signature)	Received for Laboratory by: M L	Date/Time 2/18/03 412

Temperature: Ambient or (Chilled)
Notes:

Properly Preserved: (Y) N
Notes:

Received Within Holding Times: (Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: URS	Address: 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Eriko Fujita	Project Name (Location) M'VILLE MGP SITE	Samplers: (Names) EL/CM
Client Phone No: 688-0015	PO Number: 30307719445	Samplers: (Signature)
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
G01	MEGDIM0110	2/18/03	1500	A (P)	W		x	7	See Below
G02	MEGUSH8601	2/19/03	1000	A P	W		x	7	
G03	MEGDD0121	2/19/03	1240	A (P)	W		x	7	
G04	MEGDSH0121	2/19/03	1325	A (P)	W		x	7	
G05	MEGDD0123	2/19/03	1510	A (P)	W		x	7	
G06	MEGDD0115	2/20/03	0900	A P	W		x	7	
G07	MEGDIM0128	2/20/03	0915	A P	W		x	6	
	MS 030219	2/20/03	0915	A P	W		x	6	
	MSD 030219	2/20/03	0915	A P	W		x	6	
G08	TB 030220	2/20/03	/	A P	TB W		x	1	TCL VOCs 8260
				A P					
				A P					
	030220 G			A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAH 8270
Total Phenols: 9065/420.1
TCL VOCs: 8260 ✓
Cyanide: Total 9012/335.3 Weak acid dissociable SM4500I ✓
Metals: 6010 - RCRA 8 metals ✓

Relinquished by: (Signature)	Received by: (Signature) Betty	Date/Time 2/20/03 0935
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time 2/20/03 12 16

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	Mechanicville MGP site	ERIC LOVEJOVSKI / Chris McMahon
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30307T194 #5	EJF

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
030212 M01	MEGDD0239	2/11/03	0855	(A) P	W		x	7	See Below
M02	MEGDD0236	2/11/03	1025	(A) P	W		x	7	See Below
M03	MEGUSH8602	2/12/03	0940	(A) P	W		x	7	See Below
M04	MEGDIM0236	2/12/03	1125	(A) P	W		x	7	See Below
M05	MEGDD0117	2/12/03	1310	(A) P	W		x	7	See Below
M06	TB 030212	2/12/03	/	A (P)	TB		x	2	TCL VOCs 8260
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:

☐ 1 Day ☐ 3 Day ☒ Normal

☐ 2 Day ☐ 5 Day

Special Instructions/Remarks

TCL VOCs - 8260
PAHs - 8270
TOTAL Phenols - 9065/420.1
Cyanide - Total - 9012/335.3; Weak acid dissociable - SM 4500I
Metals - 6010 RCRA 8 metals
Field Filtered samples for turbidity >50 NTUs

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		2/12/03 14:15
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time

TEMPERATURE	PROPERLY PRESERVED	RECEIVED WITHIN HOLDING TIMES
Ambient or Chilled	Y N	Y N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

Adirondack Environmental Services, Inc.®
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
URS	646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To:	Project Name (Location)	Samplers: (Names)
Erika Fujita	Mechanicville MGP site	Eric Lovendusk:
Client Phone No: 688-0015	PO Number:	Samplers: (Signature)
Client Fax No: 688-0022	30309T194#5	EJS

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
	MEGDD0241 J01	2/6/03		A P	W		x	7	See Below
	MEGCIM0102 J02	2/6/03	0315	(A) P	W		x	7	See Below
	MEGDD0237 J03	2/7/03	1100	A P	W		x	7	See Below
	MEGDIM8618 J04	2/7/03	1115	A P	W		x	6	See Below (NO filtered metals)
	TB030207 J05	2/7/03	/	A P	TB		x	1	TCL VOCs
	030207 J			A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
PAHs: 8270
Total Phenols: 9065/420.1
TCL VOCs: 8260
Cyanide: Total (9012/335.3); Weak acid dissociable (SM4500I)
Metals: 6010 - RCRA 8 metals / Field Filtered metals (6010)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
EJS		2/7/03 1215
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	ML	2/7/03 3:06

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes:	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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25175 101

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314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

A full service analytical research laboratory offering solutions to environmental concerns

CHAIN OF CUSTODY RECORD

Client Name: URS	**Address:** 646 Plank Road Suite 202 Clifton Park, NY 12065	
Send Report To: Erika Fujita	**Project Name (Location)** M'VILLE MGP SITE	**Samplers: (Names)** Eric Lovenduski
Client Phone No: 688-0015	**PO Number:** 30309T194#5	**Samplers: (Signature)**
Client Fax No: 688-0022		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
030224 (*) C01	MEGUSH8611	2/20/03	1515	A P	W		X	7	See Below
C02	MEGDD0132	2/21/03	1030	A P	W		X	5	Phenols, TCL VOCs, Metals, Cyanide
C03	MEGCD0131	2/21/03	1000	(A) P	W		X	7	See Below
(*) C04	DUP-02/20/03	2/20/03	—	A P	W		X	7	See Below
C05	MEGUSH8616	2/24/03	1430	A (P)	W		X	6	See Below
C06	TB 030224	2/24/03	/	A P	TB		X	1	TCL VOCs 8260
				A P					
* FIELD DUP				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					
				A P					

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

CC Report To:

Special Instructions/Remarks
VOCs (TCL): 8260
PAHs - 8270
Phenols: 9065/4Z0.1
Cyanide: total 9012/335.3, Weak acid dissociable SM4500I
metals 6010 - 8 RCRA Metals - if >50NTU samples have filtered samples.

Relinquished by: (Signature)	**Received by: (Signature)** Betty Mathis	**Date/Time** 2/24/03 1530
Relinquished by: (Signature)	**Received for Laboratory by:** M L	**Date/Time** 2/24/03 1435

TEMPERATURE
Ambient or (Chilled)
Notes:

PROPERLY PRESERVED
(Y) N
Notes:

RECEIVED WITHIN HOLDING TIMES
(Y) N
Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

APPENDIX B
VALIDATED FORM I'S

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGCIM0102

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGCIM0102
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0476
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 4/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0117

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0117
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0484
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0236

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0236
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0481
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0237
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0477
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0239
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0480
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	43.	
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 022303

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0241
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0475
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-Pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

amk 6/26/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0236

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0236
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0483
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 4/23/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM8618
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0478
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8602

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8602
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0482
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 6/23/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB030207

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: TB030207
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0479
Level: (low/med) LOW Date Received: 02/07/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

FORM I VOA 3/90

AMK 68303

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030212

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102
Matrix: (soil/water) WATER Lab Sample ID: TB030212
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0485
Level: (low/med) LOW Date Received: 02/12/03
% Moisture: not dec._____ Date Analyzed: 02/19/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

Amrs 6/23/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGCIM0102

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0403

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U UJ
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 6/23/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0117

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0476

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 6/26/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0236

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: B0470

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0237

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0237

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: B0467

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0239

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: B0469

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0241

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0402

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

AMK 6/23/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0236

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0236

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0475

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 6/23/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM8618

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM8618

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0468

Level: (low/med) LOW Date Received: 02/07/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/12/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/27/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	1.	J
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	2.	J
129-00-0	Pyrene	1.	J
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	.9	J
205-99-2	Benzo(b)fluoranthene	.8	J
207-08-9	Benzo(k)fluoranthene	.8	J
50-32-8	Benzo(a)pyrene	.6	J
193-39-5	Indeno(1,2,3-cd)pyrene	.6	J
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0305 SAS No.: SDG No.: MEGCIM0102

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8602

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0474

Level: (low/med) LOW Date Received: 02/12/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/18/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCIM0102

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGCIM0102_

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1650		J	P
7440-36-0	Antimony	3.1	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	458			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	56100			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	847			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	56.7			P
7440-42-8	Boron				NR

AMK 4/23/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGCIM0102 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGCIM0102_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13.3	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	3.0	B		P
7440-39-3	Barium	294			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.2	B		P
7439-89-6	Iron	12.1	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	614			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	6.0		J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	6.2	B		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0117__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	520000			P
7440-36-0	Antimony	21.0	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	8280			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	1530			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1630			P
7439-89-6	Iron	1670000		J	P
7439-92-1	Lead	2.2	B	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	21900			P
7439-97-6	Mercury	0.94			AV
7440-02-0	Nickel	637			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	501			P
7440-66-6	Zinc	1990			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0117 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0117_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	112	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.1	B		P
7440-39-3	Barium	466			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	315			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	9.3	B		P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

Amk 4/4/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0236__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	560			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1740			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1110			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	166			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.9	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	5	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0236 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0236_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.3	B		P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.7	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	46.9	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	155			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0237

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0237__

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8610		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	627			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.3			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	16800			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	172			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	14.6	B		P
7440-66-6	Zinc	46.2			P
7440-42-8	Boron				NR

Amk 6/3/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0237 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0237_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27.3	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.5	B		P
7440-39-3	Barium	436			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.1	B		P
7439-89-6	Iron	13.7	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	12.8	B		P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.58	B		P
7440-42-8	Boron				NR

AMK 62303

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0239__

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	47000			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1790			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	67.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	68.3			P
7439-89-6	Iron	63300			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	732			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	61.4			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	5	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	65.8			P
7440-66-6	Zinc	126			P
7440-42-8	Boron				NR

Amk 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0239 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0239_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.6	B		P
7440-39-3	Barium	434			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	13.3	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	29.0			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.3	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0241__

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3660		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1890			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	6340			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	79.9			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	14.4	B		P
7440-42-8	Boron				NR

AMK 6/8/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0241 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0241_F

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.5	B		P
7440-39-3	Barium	1750			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	5.0	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	38.8			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.9	B	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	6.2	B		P
7440-42-8	Boron				NR

Amk 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0236

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0236_

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21300			P
7440-36-0	Antimony	7.9	B		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	1080			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	56.6		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	55.1			P
7439-89-6	Iron	30800			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	441			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	43.0			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	24.1	B		P
7440-66-6	Zinc	84.2			P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0236 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0236_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	4.1	B		P
7440-38-2	Arsenic	7.9	B		P
7440-39-3	Barium	592			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.7	B	J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	14.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	25.1			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	1.7	B		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM8618

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIMI0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM8618_

Level (low/med): LOW___ Date Received: 02/07/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	730		J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	431			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	1310			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	177			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	86.8			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8602_

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	503			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U		P
7440-39-3	Barium	97.0	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	31.3		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.5	B		P
7439-89-6	Iron	1080			P
7439-92-1	Lead	1.7	B	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	2430			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	11.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8602 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0305 SAS No.: ____ SDG No.: MEGCIM0102

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8602_F

Level (low/med): LOW___ Date Received: 02/12/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	5.0	B		P
7440-39-3	Barium	87.8	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	25.2	B		P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	1920			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	5	P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

amk 6/24/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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CONVENTIONALS ANALYSIS DATA SHEET

MEGCIM0102

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-02

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0117

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-05

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0236

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-02

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0237

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-03

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0239

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-01

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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AMK 6/24/03

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0241

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030207J-01

Level (Low/Med): Low Date Received: 2/7/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0236

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-04

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8602

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0305 SAS No.: SDG No.: MEGCIM0102

Matrix (soil/water): Water Lab Sample ID: 030212M-03

Level (Low/Med): Low Date Received: 2/12/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	19			EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCD0131

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGCD0131
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0599
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD014
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0574
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U J
108-10-1	4-Methyl-2-Pentanone	10.	U J
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

Analyst Initials 2/26/03

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0115

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0115
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0595
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U 3J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0121
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0580
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	~~U~~
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	~~U~~
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	~~U~~
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	11.	
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	~~U~~
108-10-1	4-Methyl-2-Pentanone	10.	~~U~~
591-78-6	2-Hexanone	10.	~~U~~
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	~~U~~
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	4.	J
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	~~U~~
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0123

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0123
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0596
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U GS
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0129
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0589
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane		10.	U
74-83-9	Bromomethane		10.	U
75-01-4	Vinyl Chloride		10.	U
75-00-3	Chloroethane		10.	U
75-09-2	Methylene Chloride		5.	U
67-64-1	Acetone		10.	U
75-15-0	Carbon Disulfide		5.	U
75-35-4	1,1-Dichloroethene		5.	U
75-34-3	1,1-Dichloroethane		5.	U
156-60-5	1,2-Dichloroethene-trans		5.	U
67-66-3	Chloroform		5.	U
107-06-2	1,2-Dichloroethane		5.	U
78-93-3	2-Butanone		10.	U
71-55-6	1,1,1-Trichloroethane		5.	U
56-23-5	Carbon Tetrachloride		5.	U
75-27-4	Bromodichloromethane		5.	U
78-87-5	1,2-Dichloropropane		5.	U
10061-01-5	cis-1,3-Dichloropropene		5.	U
79-01-6	Trichloroethene		5.	U
124-48-1	Dibromochloromethane		5.	U
79-00-5	1,1,2-Trichloroethane		5.	U
71-43-2	Benzene		5.	U
10061-02-6	trans-1,3-Dichloropropene		5.	U
75-25-2	Bromoform		5.	U
108-10-1	4-Methyl-2-Pentanone		10.	U
591-78-6	2-Hexanone		10.	U
127-18-4	Tetrachloroethene		5.	U
79-34-5	1,1,2,2-Tetrachloroethane		5.	U
108-88-3	Toluene		5.	U
108-90-7	Chlorobenzene		5.	U
100-41-4	Ethylbenzene		5.	U
100-42-5	Styrene		5.	U
156-59-2	1,2-Dichloroethene-cis		5.	U
106-42-3	m,p-Xylenes		5.	U
95-47-6	o-Xylene		5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0132

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0132
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0598
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U 55
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	4.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0238

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0238
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0573
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U J
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U J
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U J
108-10-1	4-Methyl-2-Pentanone	10.	U J
591-78-6	2-Hexanone	10.	U J
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U J
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U J
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0243

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDD0243
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0572
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	2.	J
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6b4p3

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0110
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0578
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	1.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0117

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0117
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0571
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U JJ
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U JJ
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U JJ
108-10-1	4-Methyl-2-Pentanone	10.	U JJ
591-78-6	2-Hexanone	10.	U JJ
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U JJ
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U JJ
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDIM0128

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0584
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U SS
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SS
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	1.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U SS
108-10-1	4-Methyl-2-Pentanone	10.	U ↓
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U SS
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U SS
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGSH0121

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGSH0121
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0593
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	2.	J
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	3.	J
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	3.	J
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	7.	
95-47-6	o-Xylene	22.	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8601
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0579
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8611
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0597
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

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1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8616

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8616
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0601
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U 5J
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: DUP021803
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0590
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	5.	U	
67-64-1	Acetone	10.	U	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	CJ
156-60-5	1,2-Dichloroethene-trans	5.	U	
67-66-3	Chloroform	5.	U	
107-06-2	1,2-Dichloroethane	5.	U	CJ
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	CJ
108-10-1	4-Methyl-2-Pentanone	10.	U	↓
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	CJ
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
156-59-2	1,2-Dichloroethene-cis	5.	U	CJ
106-42-3	m,p-Xylenes	5.	U	
95-47-6	o-Xylene	5.	U	

AMK 6/24/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB030218

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030218
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0577
Level: (low/med) LOW Date Received: 02/18/03
% Moisture: not dec._____ Date Analyzed: 02/26/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U SS
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U SS
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U SS
108-10-1	4-Methyl-2-Pentanone	10.	U ↓
591-78-6	2-Hexanone	10.	U ↓
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U SS
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U SS
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030220

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030220
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0609
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	7.	
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB030224

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: TB030224
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0602
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP022003

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0307 SAS No.: SDG No.: MEGCD0131
Matrix: (soil/water) WATER Lab Sample ID: DUP022003
Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C0600
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec._____ Date Analyzed: 02/27/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
156-60-5	1,2-Dichloroethene-trans	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
156-59-2	1,2-Dichloroethene-cis	5.	U
106-42-3	m,p-Xylenes	5.	U
95-47-6	o-Xylene	5.	U

AMK 6/24/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGCD0131

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGCD0131

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0569

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD014

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0539

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0115

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0115

Sample wt/vol: 850.0 (g/mL) ML Lab File ID: B0564

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0121

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: B0544

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	23.	
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	3.	J
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0123

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0123

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0563

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0129

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0129

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0540

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0238

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0238

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0481

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	
91-57-6	2-Methylnaphthalene	3.	J
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	2.	J
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	.7	J
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Amk 6/6/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGDD0243

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDD0243

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0480

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

Amk 4/25/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0110

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: B0542

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	3.	J
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0117

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0117

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: B0479

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 02/28/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
84-74-2	Di-n-butylphthalate	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

Amic 4/28/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDIM0128

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0565

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/18/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGDSH0121

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B0595

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/24/03

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	180.	
91-57-6	2-Methylnaphthalene	20.	
208-96-8	Acenaphthylene	20.	U
83-32-9	Acenaphthene	4.	J
132-64-9	Dibenzofuran	20.	U
86-73-7	Fluorene	20.	U
85-01-8	Phenanthrene	20.	U
120-12-7	Anthracene	20.	U
86-74-8	Carbazole	20.	U
206-44-0	Fluoranthene	20.	U
129-00-0	Pyrene	20.	U
56-55-3	Benzo(a)anthracene	20.	U
218-01-9	Chrysene	20.	U
205-99-2	Benzo(b)fluoranthene	20.	U
207-08-9	Benzo(k)fluoranthene	20.	U
50-32-8	Benzo(a)pyrene	20.	U
193-39-5	Indeno(1,2,3-cd)pyrene	20.	U
53-70-3	Dibenzo(a,h)anthracene	20.	U
191-24-2	Benzo(g,h,i)perylene	20.	U

UJ

(1) - Cannot be separated from diphenylamine

AMK 6/30/03

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8601

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8601

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0543

Level: (low/med) LOW Date Received: 02/20/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/24/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8611

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0568

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MEGUSH8616

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: MEGUSH8616

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: B0579

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
91-20-3	Naphthalene		5.	U
91-57-6	2-Methylnaphthalene		5.	U
208-96-8	Acenaphthylene		5.	U
83-32-9	Acenaphthene		5.	U
132-64-9	Dibenzofuran		5.	U
86-73-7	Fluorene		5.	U
85-01-8	Phenanthrene		5.	U
120-12-7	Anthracene		5.	U
86-74-8	Carbazole		5.	U
206-44-0	Fluoranthene		5.	U
129-00-0	Pyrene		5.	U
56-55-3	Benzo(a)anthracene		5.	U
218-01-9	Chrysene		5.	U
205-99-2	Benzo(b)fluoranthene		5.	U
207-08-9	Benzo(k)fluoranthene		5.	U
50-32-8	Benzo(a)pyrene		5.	U
193-39-5	Indeno(1,2,3-cd)pyrene		5.	U
53-70-3	Dibenzo(a,h)anthracene		5.	U
191-24-2	Benzo(g,h,i)perylene		5.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-1 3/90

AMK 4/28/03

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: DUP021803

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: B0541

Level: (low/med) LOW Date Received: 02/18/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/20/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/17/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	5.	U
91-57-6	2-Methylnaphthalene	5.	U
208-96-8	Acenaphthylene	5.	U
83-32-9	Acenaphthene	5.	U
132-64-9	Dibenzofuran	5.	U
86-73-7	Fluorene	5.	U
85-01-8	Phenanthrene	5.	U
120-12-7	Anthracene	5.	U
86-74-8	Carbazole	5.	U
206-44-0	Fluoranthene	5.	U
129-00-0	Pyrene	5.	U
56-55-3	Benzo(a)anthracene	5.	U
218-01-9	Chrysene	5.	U
205-99-2	Benzo(b)fluoranthene	5.	U
207-08-9	Benzo(k)fluoranthene	5.	U
50-32-8	Benzo(a)pyrene	5.	U
193-39-5	Indeno(1,2,3-cd)pyrene	5.	U
53-70-3	Dibenzo(a,h)anthracene	5.	U
191-24-2	Benzo(g,h,i)perylene	5.	U

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DUP022003

Lab Name: AES, Inc. Contract:

Lab Code: AES Case No.: URS0307 SAS No.: SDG No.: MEGCD0131

Matrix: (soil/water) WATER Lab Sample ID: DUP022003

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: B0570

Level: (low/med) LOW Date Received: 02/24/03

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/26/03

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 03/19/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-20-3	Naphthalene	6.	U
91-57-6	2-Methylnaphthalene	6.	U
208-96-8	Acenaphthylene	6.	U
83-32-9	Acenaphthene	6.	U
132-64-9	Dibenzofuran	6.	U
86-73-7	Fluorene	6.	U
85-01-8	Phenanthrene	6.	U
120-12-7	Anthracene	6.	U
86-74-8	Carbazole	6.	U
206-44-0	Fluoranthene	6.	U
129-00-0	Pyrene	6.	U
56-55-3	Benzo(a)anthracene	6.	U
218-01-9	Chrysene	6.	U
205-99-2	Benzo(b)fluoranthene	6.	U
207-08-9	Benzo(k)fluoranthene	6.	U
50-32-8	Benzo(a)pyrene	6.	U
193-39-5	Indeno(1,2,3-cd)pyrene	6.	U
53-70-3	Dibenzo(a,h)anthracene	6.	U
191-24-2	Benzo(g,h,i)perylene	6.	U

(1) - Cannot be separated from diphenylamine

U.S. EPA - CLP
1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGCD0131

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGCD0131__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	558			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	1480			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.9	B		P
7439-89-6	Iron	3440		E J	P
7439-92-1	Lead	7.7		N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	178			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	59.0		E J	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

_____

_____

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGCD0131 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGCD0131_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	151	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N S	P
7440-39-3	Barium	1610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.9	B		P
7439-89-6	Iron	161			P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	85.6			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	63.7			P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD014___

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5960			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	786			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	18.8	B		P
7439-89-6	Iron	184000		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	677			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~1.0~~	U	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	9.5	B		P
7440-66-6	Zinc	237		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD014 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD014_F_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	S	P
7440-39-3	Barium	2.3	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	4.3	B		P
7439-92-1	Lead	1.3	U	S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	0.30	U		P
7439-97-6	Mercury	0.13	U	S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	W	P
7440-22-4	Silver	1.8	U	W	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0115__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	138	B		P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	443		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.9	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	6.8	B		P
7439-89-6	Iron	32700		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	234			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	8.5	B	E	P
7440-42-8	Boron				NR

amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0115F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0115F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.3	B	N S	P
7440-39-3	Barium	700		S	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	75.8	B		P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3.5	B		P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	10.8	B		P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0121

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0121__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1920			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1530			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	17.0	B		P
7439-89-6	Iron	13600		E J	P
7439-92-1	Lead	1.3	U	~~N~~ J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	505			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

AMK 4/28/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0121F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0121F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	3.5	B	N S	P
7440-39-3	Barium	1390			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	401			P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	463			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	106			P
7440-42-8	Boron				NR

Amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0123

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0123__

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3140			P
7440-36-0	Antimony	~~2.5~~	U	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	U	~~N~~ R	P
7440-39-3	Barium	1130			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.1	B	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	59.0			P
7439-89-6	Iron	21400		E	P
7439-92-1	Lead	1.3	U	~~N~~ U	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	226			P
7439-97-6	Mercury	0.13	U	N	AV
7440-02-0	Nickel	~~1.0~~	U	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	U	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	18.4	B	E	P
7440-42-8	Boron				NR

amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0123F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0123F_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1060			P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N S	P
7440-39-3	Barium	968			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	28.8			P
7439-89-6	Iron	1990			P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	32.9			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	52.1			P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0129__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	113000		J	P
7440-36-0	Antimony	~~34.0~~	~~B~~	J	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	J	P
7440-39-3	Barium	6290		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	800		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1740		J	P
7439-89-6	Iron	1940000		J	P
7439-92-1	Lead	165		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	9590		J	P
7439-97-6	Mercury	0.30		J	AV
7440-02-0	Nickel	~~157~~		J	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	J	P
7440-22-4	Silver	~~1.8~~	~~U~~	J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	166		J	P
7440-66-6	Zinc	1770		J	P
7440-42-8	Boron				NR

Amk 4/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0129 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0129_F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69.6	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	841			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	317		J+	P
7439-92-1	Lead	1.3	U	J+	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	19.5			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	136			P
7440-42-8	Boron				NR

AMK 6/6/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0132

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0132__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	356			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	939			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	7.7	B		P
7439-89-6	Iron	2420		E J	P
7439-92-1	Lead	1.3	U	W J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	27.4			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

Amk 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0238

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0238__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	583			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	163	B		P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.7	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	4.2	B		P
7439-89-6	Iron	2350		J	P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	31.4			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~3.2~~	B	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	16.5	B		P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDD0243

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0243__

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800			P
7440-36-0	Antimony	~~2.5~~	U	R	P
7440-38-2	Arsenic	~~2.2~~	U	R	P
7440-39-3	Barium	1610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper	22.8	B		P
7439-89-6	Iron	20500		J	P
7439-92-1	Lead	3.2		J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	607			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	~~14.4~~	B	R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	R	P
7440-22-4	Silver	~~1.8~~	U	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.4	B		P
7440-66-6	Zinc	57.8		J	P
7440-42-8	Boron				NR

Amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDD0243F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDD0243F_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	4.3	B	J	P
7440-39-3	Barium	1690			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	35.0	B		P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	208			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	UJ	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	50.5			P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0110

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0110_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	322000			P
7440-36-0	Antimony	~~15.4~~	~~B~~	~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	~~N~~ R	P
7440-39-3	Barium	6530			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	782		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1010			P
7439-89-6	Iron	941000		E J	P
7439-92-1	Lead	44.3		N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	11500			P
7439-97-6	Mercury	0.50		N J	AV
7440-02-0	Nickel	~~1.0~~	~~U~~	~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	~~U~~	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	501			P
7440-66-6	Zinc	2460		E J	P
7440-42-8	Boron				NR

AMK 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0110 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0110_F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19.7	B		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	286			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.8	B		P
7439-89-6	Iron	811			P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	398			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U		P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0117

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0117_

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25900			P
7440-36-0	Antimony	~~8.0~~	~~B~~	R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	R	P
7440-39-3	Barium	3480			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	65.3		J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	69.1			P
7439-89-6	Iron	406000		J+	P
7439-92-1	Lead	1.3	U	J+	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	7610			P
7439-97-6	Mercury	0.13	B	J	AV
7440-02-0	Nickel	~~58.5~~		R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	R	P
7440-22-4	Silver	~~1.8~~	~~U~~	R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	33.1	B		P
7440-66-6	Zinc	268		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGDIM0117F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0117F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	936			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	676			P
7439-92-1	Lead	1.3	U	J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3010			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	8.7	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	UJ	P
7440-22-4	Silver	1.8	U	J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	167			P
7440-42-8	Boron				NR

amk 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDIM0128

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDIM0128_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5730			P
7440-36-0	Antimony	~~3.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	2060			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	19.6		E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	20.6	B		P
7439-89-6	Iron	12900		E J	P
7439-92-1	Lead	1.3	U	*N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	327			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	8.8	B		P
7440-66-6	Zinc	321		E J	P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH0121_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4450			P
7440-36-0	Antimony	~~2.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	216			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	101		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	48.5			P
7439-89-6	Iron	6320		E J	P
7439-92-1	Lead	10.7		W J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	3150			P
7439-97-6	Mercury	0.13	U	M J	AV
7440-02-0	Nickel	~~41.5~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	6.9	B		P
7440-66-6	Zinc	623		E J	P
7440-42-8	Boron				NR

Amik 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGDSH0121F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGDSH0121F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.5	B	N J	P
7440-39-3	Barium	726			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	5.2	B		P
7439-89-6	Iron	28.9	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	2850			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	7.9	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	189			P
7440-42-8	Boron				NR

AMK 4/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8601_

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30800			P
7440-36-0	Antimony	~~3370~~		~~N~~ R	P
7440-38-2	Arsenic	~~2.2~~	~~U~~	~~N~~ R	P
7440-39-3	Barium	2610			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	201000		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3040			P
7439-89-6	Iron	927000		E J	P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	161000			P
7439-97-6	Mercury	0.46		N J	AV
7440-02-0	Nickel	~~21500~~		~~N~~ R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	~~U~~	~~N~~ R	P
7440-22-4	Silver	~~1.8~~	~~U~~	~~N~~ R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	101			P
7440-66-6	Zinc	786		E J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8601F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8601F

Level (low/med): LOW___ Date Received: 02/20/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.6	B	N S	P
7440-39-3	Barium	687			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.5	B		P
7439-89-6	Iron	11.6	B		P
7439-92-1	Lead	1.3	U	N S	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	811			P
7439-97-6	Mercury	0.13	U	N S	AV
7440-02-0	Nickel	223			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N S	P
7440-22-4	Silver	1.8	U	N S	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	212			P
7440-42-8	Boron				NR

AMK 4/28/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8611

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8611_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	986			P
7440-36-0	Antimony	~~11.5~~	B	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	749			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	893		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	112			P
7439-89-6	Iron	8800		E J	P
7439-92-1	Lead	1.3	U	W J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	32600			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1550~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~6.4~~		N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	11.1	B	J	P
7440-66-6	Zinc	2950		F J	P
7440-42-8	Boron				NR

AMK 4/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MEGUSH8611 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8611_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.4	B	N J	P
7440-39-3	Barium	779		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	76.2	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	5900			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	127			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	234		J	P
7440-42-8	Boron				NR

AMK 4/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEGUSH8616

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: MEGUSH8616_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.1	B		P
7440-36-0	Antimony	~~8.5~~	U	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	441			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U	E	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	2.7	B		P
7439-89-6	Iron	719		E J	P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	909			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~1.0~~	U	N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U	N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	0.50	U	E	P
7440-42-8	Boron				NR

Amk 6/25/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts:_____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
DUP021803

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP021803

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8100			P
7440-36-0	Antimony	~~2.5~~	U		P
7440-38-2	Arsenic	~~2.2~~	U		P
7440-39-3	Barium	894			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	34.6			P
7439-89-6	Iron	244000			P
7439-92-1	Lead	1.3	U		P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	780			P
7439-97-6	Mercury	0.13	U		AV
7440-02-0	Nickel	~~1.0~~	U		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~2.5~~	U		P
7440-22-4	Silver	~~1.8~~	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	14.1	B		P
7440-66-6	Zinc	343			P
7440-42-8	Boron				NR

AMK 6/5/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP021803 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP021803_F

Level (low/med): LOW___ Date Received: 02/18/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	128	B	J	P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	J	P
7440-39-3	Barium	960			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1.4	U		P
7439-89-6	Iron	1280		J+	P
7439-92-1	Lead	1.3	U	J+	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	26.3			P
7439-97-6	Mercury	0.13	U	J	AV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	J+	P
7440-22-4	Silver	1.8	U	J+	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	139			P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP022003

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1160			P
7440-36-0	Antimony	~~10.5~~	B	N R	P
7440-38-2	Arsenic	~~2.2~~	U	N R	P
7440-39-3	Barium	1030			P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	873		E J	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	173			P
7439-89-6	Iron	7760		E J	P
7439-92-1	Lead	3.1		N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	53600			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	~~2550~~		N R	P
7440-09-7	Potassium				NR
7782-49-2	Selenium	~~10.5~~		N R	P
7440-22-4	Silver	~~1.8~~	U	N R	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	18.8	B	J	P
7440-66-6	Zinc	4300		E J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP022003 F

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0307 SAS No.: ____ SDG No.: MEGCD0131

Matrix (soil/water): WATER_ Lab Sample ID: DUP022003_F

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12.8	U		P
7440-36-0	Antimony	2.5	U		P
7440-38-2	Arsenic	2.2	U	N J	P
7440-39-3	Barium	409		J	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	3.6	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper	3.8	B		P
7439-89-6	Iron	70.7	B		P
7439-92-1	Lead	1.3	U	N J	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese	6020			P
7439-97-6	Mercury	0.13	U	N J	AV
7440-02-0	Nickel	129			P
7440-09-7	Potassium				NR
7782-49-2	Selenium	2.5	U	N J	P
7440-22-4	Silver	1.8	U	N J	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.1	U		P
7440-66-6	Zinc	98.7		J	P
7440-42-8	Boron				NR

AMK 6/26/03

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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CONVENTIONALS ANALYSIS DATA SHEET

MEGCD0131

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-03

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD014

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-04

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0115

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-06

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0123

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-05

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-03

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0129

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-05

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0132

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-02

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	3			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0238

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-03

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDD0243

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-02

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	3			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0117

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-01

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0110

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-01

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	88			EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDIM0128

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-07

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	4			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

MEGDSH0121

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-04

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	5			EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8601

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030220G-02

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8611

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-01

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	UJ		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	UJ		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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AMK 6/26/03

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CONVENTIONALS ANALYSIS DATA SHEET

MEGUSH8616

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-05

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

DUP 021803

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030218J-06

Level (Low/Med): Low Date Received: 2/18/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

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CONVENTIONALS ANALYSIS DATA SHEET

DUP 022003

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0307 SAS No.: SDG No.: MEGCD0131

Matrix (soil/water): Water Lab Sample ID: 030224C-04

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 353.1
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols	2	U		EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Amenable Cyanide	10	U		SM 4500 CN G
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 335.3
pH				EPA 150.1
Turbidity				EPA 180.1
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

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APPENDIX J
FISH AND WILDLIFE IMPACT ANALYSIS



FISH AND WILDLIFE IMPACT ANALYSIS FORMER MANUFACTURED GAS PLANT SITE, MECHANICVILLE, NY

EcoLogic, LLC

October 2002

FISH AND WILDLIFE IMPACT ANALYSIS
FORMER MANUFACTURED GAS PLANT (MGP) SITE,
MECHANICVILLE, NY

Report and Appendices 1-3

October 2002

Prepared for

URS Corporation
646 Plank Road, Suite 202
Clifton Park, NY 12065

Prepared by

EcoLogic, LLC
Atwell Mill Annex, Suite S-2
132 ½ Albany Street
Cazenovia, NY 13035

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FISH AND WILDLIFE IMPACT ANALYSIS
FORMER MANUFACTURED GAS PLANT (MGP) SITE,
MECHANICVILLE, NY

1. INTRODUCTION

Environmental scientists from EcoLogic LLC completed a Fish and Wildlife Impact Assessment (FWIA) at the site of a former manufactured gas plant (MGP) facility in Mechanicville New York. The facility is owned by New York State Electric and Gas (NYSEG) and is under investigation to determine the nature and extent of contamination, if any, associated with the site's former use.

The FWIA was completed in accordance with the criteria outlined in New York State Department of Environmental Conservation (NYSDEC), Division of Fish and Wildlife's *Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites* (1994). Steps I through IIC of the analysis were completed, including the description of the site and fish and wildlife resources and values within a 0.5-mile and 2-mile radius, identification of applicable regulations, identification of contaminants of concern, analysis of contaminant pathways and receptors, and a review of the effects of site-related contaminants on potentially exposed individuals, population and community.

Data were compiled from reviews of published maps and reports; information obtained from state and federal regulatory agencies; a field investigation of the site and the surrounding area on September 10, 2002; and analytical data collected as part of this Supplemental Remedial Investigation (SRI). Technical literature regarding the effects of site-related contaminants on biota was reviewed. A photographic atlas of items described in the following sections is included as Appendix 1. The numbered photographs correspond to the numbered locations indicated on Figure 1.

2. SITE CONDITIONS

2.1 Site Location

The NYSEG MGP site is located in the City of Mechanicville, Saratoga County, New York, (Figure 2) along the southern bank of the Anthony Kill immediately west of North Central Avenue (Figure 3). The

site is situated adjacent to an urban residential area, where it meets a commercial/industrial area. A mix of urban, commercial/industrial development, forested areas and agricultural fields dominates the land within 0.5 and 2 miles from the site. A map showing dominant development/cover types in the study area is included as Figure 4.

2.2 Nature of the Property and Surroundings

The property is essentially rectangular in shape, bordered on two sides by public roads, on one side by the Anthony Kill, and on the fourth side by a railway. The site contains two buildings that are currently vacant. The land surrounding the buildings is a highly compacted mixture of soil and gravel. The vegetated areas of the site have herbaceous and shrub plant communities typical of disturbed sites. The area between the site and the Hudson River, about ¼ mile to the east, is completely developed. To the north of the site is the Anthony Kill; North Central Avenue bounds the site on the east, Ferris Lane is the southern boundary, and railroad tracks border the site to the west.

2.3 Topographic Features

The NYSEG MGP site is on a relatively flat, level piece of land at an elevation of approximately 95 feet above mean sea level (msl), and 15 - 20 feet above the Anthony Kill. The topography within a 0.5-mile radius is relatively flat. The topography within a 2-mile radius includes the relatively flat, level floor of the Hudson River Valley, and terraces to the north and south of Mechanicville that are over 300 feet above msl.

2.4 Surface Drainage Patterns

The NYSEG MGP site drains primarily to the northeast into the Anthony Kill. The surrounding area within a 2-mile radius drains in many directions; however, the entire 2-mile radius is within the watershed of the Hudson River. From the border of the subject property, the nearest waterway is the Anthony Kill, which constitutes the northern perimeter of the site. The Anthony Kill flows east to southeast into the Hudson River, which flows into Upper New York Bay.

3. ECOLOGICAL COMMUNITIES

The dominant ecological communities were identified within a 0.5-mile radius and within a 2-mile radius of the former MGP site. The results of this survey are outlined below. Diversity of vegetation was fairly low due to the developed nature of the area. There was no evidence of stressed vegetation within the area of study.

3.1 Within 0.5 mile radius

3.1.1 Riparian corridor

The Anthony Kill riparian corridor extends for 10 - 20 feet on both sides of the stream. This corridor is isolated from any other natural areas except directly across from the site, where there is a successional old field community. Deciduous tall shrubs, wild grape vine, and mature specimens of cottonwood and maple dominate the riparian vegetation throughout the corridor.

3.1.2 Successional old field

This community occurs in sites that have been cleared for agriculture or development, and later abandoned. This parcel is about 5000 square meters and is currently vacant. Vegetation on the site includes a mixture of grasses and low growing (shrub) vegetation (spotted knapweed, goldenrod, New England aster, evening primrose, wild grape vine, foxtail) in the eastern two-thirds of the parcel, with taller shrubs (sumac, raspberry, common mullein, goldenrod) and trees (maples, cottonwood) bordering the Anthony Kill and towards the western third of the parcel.

3.2 Within 2 mile radius

In addition to old fields as described above, other ecological communities found within a 2-mile radius of the former MGP site include the following:

3.2.1 Wetland habitats

Directly south of the site, along the railroad tracks and Hudson River, there are a series of regulated wetlands designated ME-16 and ME-17. ME-16 is a class 3 wetland comprising 22.8 acres. ME-17 is a series of class 2 wetlands comprising a total of 66.6 acres. Class 2 wetlands are those emergent marshes where purple loosestrife and/or phragmites constitute less than 2/3 of the cover type. Class 3 wetlands can

be emergent marshes where purple loosestrife and/or phragmites constitute greater than 2/3 of the cover type, or other types of wetlands. A field visit identified the ME-16 wetland as an emergent marsh with greater than 2/3 cover type dominated by phragmites and/or purple loosestrife.

3.2.2 Emergent marsh

Characteristic plants in emergent marshes include cattails, purple loosestrife, swamp loosestrife, arrowheads, reeds, bur-reeds, pickerel-weed, wildrice, water plantain, bulrushes, and arrow-arum. Emergent marshes offer a variety of habitat for wildlife including amphibians (eastern American toad, northern spring peeper, green frog, salamanders) and birds (red-winged blackbird, marsh wren, common yellowthroat).

3.3 Fish and Wildlife

The developed nature and industrial commercial use of the site degrades the site itself in terms of wildlife habitat; however, the surrounding area provides a wide variety of habitat for many wildlife species. Wildlife typically found in urban, suburban, and rural agricultural areas is most likely to be present in the vicinity of the project site. A list of wildlife species that are likely to use the area at some time of year is presented below. Species that were observed on or near the site during field activities are listed in italics.

3.3.1 Birds

Mourning Dove
Song Sparrow
Gray Catbird
American Crow
Black Capped Chickadee
Common Grackle
Mallard
Wild Turkey
Red-tailed Hawk
Coopers Hawk
Short-eared Owl
Ruby-throated Hummingbird
Common Flicker
Tree Swallow
White-breasted Nuthatch
Blue-gray Gnatcatcher
Warblers
Eastern Meadowlark
Northern Cardinal
Common Yellowthroat

European Starling
House Sparrow
Mockingbird
Red Winged Blackbird
House Wren
House Finch
Black Duck
Northern Harrier
Sharp-shinned Hawk
Red-shouldered Hawk
Long-eared Owl
Chimney Swift
Red-bellied Woodpecker
Barn Swallow
Brown Creeper
Cedar Waxwing
Bobolink
Northern Oriole
American Goldfinch

American Robin
Downy Woodpecker
Rock Dove
Blue Jay
Dark eyed Junco
Canada Goose
Belted Kingfisher
Turkey Vulture
Kestrel
Great Horned Owl
Screech Owl
Hairy Woodpecker
Eastern Kingbird
Tufted Titmouse
Eastern Bluebird
Red-eyed Vireo
Common Grackle
Brown-headed Cowbird
Marsh Wren

3.3.2 Mammals

White-tailed Deer
House Mouse
Raccoon
Mole
Cottontail Rabbit
Norway Rat
Woodchuck
Gray Squirrel
Meadow Vole
Muskrat

3.3.3 Herptiles

Common Snapping Turtle
Eastern Box Turtle
Spring Peeper
Eastern Garter Snake
American Toad
Salamanders
Northern Water Snake
Green Frog

3.3.4 Fish

The Anthony Kill is a small stream, providing feeding, spawning, cover, and dispersal habitat for a variety of fish species. According to the NYSDEC Division of Fish, Wildlife, and Marine Resources, there are no records of fish kills in the Anthony Kill. The stream varies in width, but is ±15 feet wide near the subject site. Based on field observations, depth varies in the study area from less than 1 foot near shore to about 1 - 2 feet in the channel. These observations were made in late September and early October 2002 during a period of relatively low flow conditions. The following fish species are part of the community of the Anthony Kill (based on Smith, 1995, and field observations (October 10, 2002):

American eel
Alewife
Brown bullhead
White sucker
Hog sucker
Carp
Cutlips minnow
Silvery minnow
Emerald shiner
Common shiner
Golden shiner
Bluntnose minnow
Fathead minnow
Brown trout
Banded killifish
Rock bass
Pumpkinseed
Bluegill
Smallmouth bass
Tessellated darter
Logperch

3.4 Rare, Threatened, Endangered, and Special Concern Species

Requests were made to the NYSDEC Natural Heritage Program (NHP) for information regarding rare, threatened, endangered, or special concern species on the site or within the 2-mile radius area. NHP records indicate that no rare, threatened, endangered, or species of special concern are known to be on or within 2 miles of the subject site (Appendix 2).

3.5 Value of Fish and Wildlife Resources

There is little valuable terrestrial wildlife habitat on the site itself; however, the lands within the 2-mile radius provide a wide range of habitats, from open agricultural and pasture fields, to forested areas, to intensive urban development (City of Mechanicville). This area provides food, cover, water, and dispersal space resources to a wide variety of wildlife.

Remaining habitat is divided among suburban developed areas, which favor urban wildlife species such as squirrels, raccoons, mice, rats, and cosmopolitan bird species commonly found at backyard bird feeders, and open agricultural lands and forests which provide habitat for more rural species such as deer, turkey, and neotropical migrant songbirds. The site provides little value to wildlife, but the surrounding area is particularly valuable for the variety of habitat that it provides.

As described above, the site adjoins the Anthony Kill. This stream segment is classified D, meaning its designated best use is for fishing. Class D waters shall be suitable for secondary contact recreation, although other factors may limit the use for these purposes. There is no regulatory indication that water quality or habitat conditions in this segment of the stream threaten or preclude attainment of the designated best use. That is, the NYSDEC compendia of waterbody segments with known water quality problems {e.g. the State's 303(d) and 305 (b) lists} do not include the Anthony Kill.

The primary value to humans of the natural resources surrounding the NYSEG MGP site lies in development and recreational opportunities. The area is already partially developed in residential and commercial industrial corridors, but large tracts of open agricultural land and some forest remain in the outlying areas. The suburban and urban areas present opportunities for expanding and renovating developed areas, while the open lands and forests provide for continued agricultural, forestry, and recreational pursuits of the region. The site itself offers little due to its size and location in a developed corridor. However, valuable natural resources can be found in close proximity. The Anthony Kill offers recreational angling opportunities as well as a peaceful contrast to the adjacent commercial and suburban corridor.

4. PATHWAY ANALYSIS

The pathway and receptor analysis examines which media are contaminated, which chemicals are involved, the spatial extent and concentrations of chemicals measured during the site investigation, and what (non-human) organisms might be exposed to the chemicals. To assess whether fish and wildlife species are potentially at risk from the existing site conditions, EcoLogic scientists have reviewed reports that relate levels of chemicals with an adverse impact on fish and wildlife receptors. Site data are compared with these benchmark values. This approach helps define the spatial extent of potentially hazardous contamination, which media are contaminated, and the species potentially at risk from contamination.

Review of the Mechanicville former MGP site data indicates that there are elevated concentrations of target compounds present in certain media that may be accessible to fish and wildlife receptors. An analysis of the likelihood and importance of pathways of exposure and the wildlife receptors is presented in Table 1. The challenge for completing this analysis is to draw technically defensible conclusions regarding the potential for specific chemical compounds to partition into the terrestrial or aquatic food web. Because data are limited, it is necessary to extrapolate from limited studies. The following documents were reviewed as part of this analysis:

- USEPA Region 4 Ecological Risk Assessment Bulletins (Supplement to Risk Assessment Guidance for Superfund)
- NYS guidance documents
- Toxicological benchmarks for screening contaminants of potential concern for effects on sediment-associated biota: 1997 revision (Department of Energy report ES/ER/TM-95/R4).

4.1 Exposure to shallow (surface) soils (0-0.5 feet)

Results of the RI indicate that concentrations of some target compounds in shallow soils exceed the EPA's recommended screening values and, in some cases, the NYS recommended soil cleanup objectives. The contaminants of concern include benzo(a)pyrene, total phenols, and metals. Wildlife communities can be exposed to site-related contaminants present in shallow soils by several mechanisms:

- Wind and water transport (erosion) of contaminated soil particles to nearby surface water.

- Direct ingestion, inhalation, or dermal absorption of contaminants present in soil by resident or transient wildlife.
- Vegetative uptake of contaminants from soil and related food web effects.
- Food web effects of ingesting soil organisms containing elevated body burden of contaminants.

Wind and water transport is the only pathway of exposure determined to be complete and potentially important at the former Mechanicville MGP site. Given the limited extent of contamination and the developed nature of the site, the other three pathways were determined to be potentially complete but unlikely to be important.

4.2 Exposure to sub-surface soils (0.5-4 feet)

It is unlikely that wildlife could be exposed to subsurface soils at depths greater than 4 feet. Sub-surface test pit samples at the Mechanicville former MGP site were taken at depths ranging from 0.5 to 4 feet. Contaminants of concern include semi-volatile organic compounds, total phenols, cyanide, and metals. This pathway was determined to be unlikely to be complete and unlikely to be of ecological importance because of the limited nature of potential exposure to subsurface soils.

4.3 Exposure to surface water sediments

Results of the RI field investigations indicate that concentrations of a limited number of target compounds in stream sediments exceed the NYSDEC sediment quality criteria, which have been developed to protect benthic organisms against acute and chronic toxicity effects. The contaminants of concern measured in stream sediments adjacent to the site include total phenols and manganese.

Wildlife may be exposed to sediment-borne contaminants through various mechanisms as described in Table 1, including:

- Ingestion and absorption by resident macroinvertebrates.
- Partitioning to overlying water.
- Food web effects on higher organisms.

Ingestion and absorption by the resident macroinvertebrate community were determined to be complete and important, given the elevated concentrations of certain target compounds in stream sediments at the

site and downstream, and the sessile nature of these organisms. A benthic macroinvertebrate survey was conducted on September 10, 2002, by EcoLogic, LLC staff. Results of this survey are presented in Appendix 3. The other two exposure pathways were determined to be complete but unlikely to be important given the limited extent of contamination, the open nature of the system, and the mobility of higher organisms (fish, birds, mammals).

Sediment quality is a significant component of the aquatic environment; sediments provide habitat for benthic animals, and moderate the partitioning of several classes of chemicals with the overlying water. Predicting the fate and toxicity of chemicals in sediments is complicated by the potential for chemicals to bind to sediment. The total chemical content in the sediment is not an adequate predictor of biological availability of chemicals, as the same total quantity of a chemical in different sediments can cause different biological effects. However, the potential toxicity of certain classes of chemicals can be predicted in sediments of different composition by normalizing the quantity of chemical by the amount of total organic carbon (for non-ionic organic compounds) and acid volatile sulfide (AVS) for divalent toxic metals: copper, cadmium, lead,, nickel, zinc, and mercury in aquatic sediments (DiToro *et al*. 1991).

The concentrations of organic compounds detected in the Anthony Kill sediments were analyzed and reported in units of µg of contaminant per g organic carbon. Based on this calculation, only total phenols were detected at concentrations above screening levels at sediment site 6. For semivolatile organic compounds (SVOCs), only sites 5 and 7 show concentrations above detection levels. Total phenols were present above detection levels only at site 6.

For sediment metals, the extent of contamination may be assessed by comparing downstream concentrations to background concentrations. Based on this analysis, only manganese exhibited a statistically significant higher concentration downstream of the site as compared to upstream (background) samples. Molar sums for simultaneously extracted metals (SEM) analyses and molar ratios of SEM to AVS are presented in Table 6. When the ratio of SEM to AVS is greater than one, the potential for biological toxicity effects can be seen. The SEM:AVS ratio at site 3 is slightly higher than 1, but the macroinvertebrate data presented in Figure 5 do not clearly show higher toxic effects at site 3.

4.4 Exposure to surface waters

Previous site investigations conducted from 1986 – 1988 tested for the presence and concentrations of target compounds in the surface waters of the Anthony Kill at four locations upstream and downstream of the former Mechanicville MGP site. Of the SVOCs, only four compounds (2-methylnaphthalene, bis(2-ethylhexyl)phthalate, acenaphthene and acenaphthylene) were present above the analytical limit of detection. However, no exceedences of ambient water quality standards were reported. No other contaminants of concern were determined to be present in surface water samples.

Because of the trace levels of contamination found in surface waters it was concluded that this pathway is potentially complete but unlikely to be important.

4.5 Exposure to Groundwater

Site-related contaminants have the potential to migrate off site through surface runoff or groundwater transport. The Anthony Kill is a regional groundwater discharge area and also receives surface runoff from a considerably large and developed drainage basin, including the former MGP site. The stream effectively precludes groundwater and surface water runoff from affecting any area to the north. Considering the prevailing northward groundwater and surface runoff direction, areas east, west, and south of the site are not particularly susceptible to groundwater or runoff impacts. With respect to surface runoff, it is further noted that storm sewers servicing the study area intercept the majority of surface flows and convey runoff away from adjacent resource areas.

However, groundwater and surface runoff from the site represent transport mechanisms that could potentially affect aquatic resources within the Anthony Kill, as either seepage via groundwater or surface runoff from storm sewer outfalls. Since no stormwater outfalls were identified within several hundred feet of the study area either upstream or downstream, groundwater is viewed as the primary transport mechanism for site contaminants, potentially affecting water and sediment quality of the Anthony Kill and downstream Hudson River.

Results of the RI field investigations indicate that concentrations of several target compounds in groundwater exceed NYSDEC standards or guidance value. The contaminants of concern include several VOCs, SVOCs, metals and total phenols.

Because of the proximity of the former Mechanicville MGP site to the Anthony Kill, groundwater seepage into the river sediments is a complete and potentially important pathway.

5. CRITERIA-SPECIFIC ANALYSIS

Consistent with Step II-B of the NYSDEC FWIA guidance document, contaminants present at this site were compared with regulatory standards or guidance criteria of the NYSDEC, where available, or with other published sources. The criteria/screening values used for this analysis are summarized in Table 2. Note that the criteria-specific analysis is directed at pathways and receptors considered complete and most likely to be important, the resident macroinvertebrate community directly affected by sediment contamination.

5.1 Semi-volatile organic compounds (SVOCs)

Results from the SVOC sample analysis (Table 3) for the sediment sites were normalized for the amount of organic carbon found at in each sediment sample. These results are presented in Table 4 with data for all PAHs broken down into Low Molecular Weight (LMW) and High Molecular Weight (HMW). The sum of all results in these categories was used to compare against the published screening values for Total PAHs, Total LMW PAHs, and Total HMW PAHs.

These results were compared with the criteria/screening values in Table 2 to determine where exceedences occurred. Any exceedences found are marked with an "*" in Table 4.

With the exception of total phenols at site 6, no SVOCs were found in exceedence of published criteria or screening values. The normalized results were compared first to NYSDEC sediment quality criteria; if none was available, they were compared to the EPA Region 4 screening values or the EPA Office of Solid Waste and Emergency Response ecotoxicological thresholds, as available, in that order.

5.2 Metals

Metals detected in stream sediments are presented in Table 5. Of those, only manganese shows levels higher than published criteria. There is also a statistically significant (P=0.05) difference between upstream and downstream concentrations of manganese in this system.

6. TOXIC EFFECTS ANALYSIS

In this section, the toxic effects of site-related contaminants are reviewed. The list of compounds includes: hydrocarbons and PAH, phenols, and manganese.

According to Albers (1995), "trophic level increases in accumulation of hydrocarbons have not been observed in aquatic ecosystems." This is presumably because aquatic and terrestrial mammals, reptiles, and amphibians can metabolize hydrocarbons very efficiently. Albers cautions that the observation might be due, in part, to the fact that the effects of hydrocarbons on fish and some aquatic invertebrates have been studied more completely.

In the terrestrial environment several studies have demonstrated that plant uptake of PAHs in contaminated soils is minimal. Porta *et al*. (1999) conducted a study of phytotoxicity in a site that had been contaminated by an oil spill. They grew corn and rice plants in soils with four levels of PAH contamination. Results from their study showed no apparent uptake of soil PAHs by plants. Corn plants showed signs of stress at total petroleum hydrocarbon content above 2000 mg/kg. As described in Section 3, there were no visual signs of stress on terrestrial vegetation at or near the former Mechanicville MGP site.

Aquatic sediments in the Anthony Kill showed low levels of organic contamination, with only total phenols exceeding the screening value at one site. Brent and Herricks (1998) studied the post-exposure effects of phenol on *Ceriodaphnia dubia* (a water column invertebrate). The researchers found that, for exposures below 1000 mg/l, these organisms recovered rapidly after transfer to clean water. Since only one site exhibited elevated sediment phenol levels, the Anthony Kill system can be compared to a situation where brief exposure to contamination may cause sub-lethal effects of short duration. During the Visual Stream Habitat Assessment, site 6 was found to be on the borderline between poor and fair

conditions (Figure 5A) while all other sites had fair or better conditions. This assessment of physical conditions characterized this site as poor macroinvertebrate habitat, regardless of contamination levels.

Manganese was found to exceed sediment screening criteria at sites 5 and 7. However, a review of the literature did not result in any reports of manganese toxicity in freshwater sediments. Manganese in water is regulated as a "secondary contaminant" in water supplies, considered important for aesthetic considerations but not as a toxic substance. Elevated concentrations of manganese in groundwater may be associated with reducing conditions that mobilize the metal from the soil matrix. It is not considered to be an important structuring element of the Anthony Kill biological community.

7. CONCLUSIONS

The Supplemental Remedial Investigation has documented the following conditions in the Anthony Kill at the former Mechanicville MGP site:

- Total phenols concentrations in sediments above chronic benthic criteria or screening levels at one site;
- Manganese levels found in the Anthony Kill sediments near the former Mechanicville MGP site exceed the NYSDEC LEL criteria at two sites;
- Water column concentrations of target compounds mostly below detection levels;
- Surface soils show concentrations above screening values of benzo(a)pyrene, total phenols, and certain metals;
- Sub-surface soils show concentrations above screening values of several SVOCs, total phenols, and metals;
- Possible continued source of contaminants from groundwater and sub-surface runoff; and,
- An open system where water is constantly renewed and most organisms are not limited to contaminated areas.

Given these environmental conditions, one would expect to find a limited effect of contamination on aquatic or terrestrial organisms. It is possible that the community of benthic organisms in the region of the stream most affected by site conditions is comprised of a reduced biomass of organisms, and/or limited to

those species most tolerant of the residual contamination. This would reduce the mass of contaminant potentially transferred to other organisms through the food web.

8. REFERENCES

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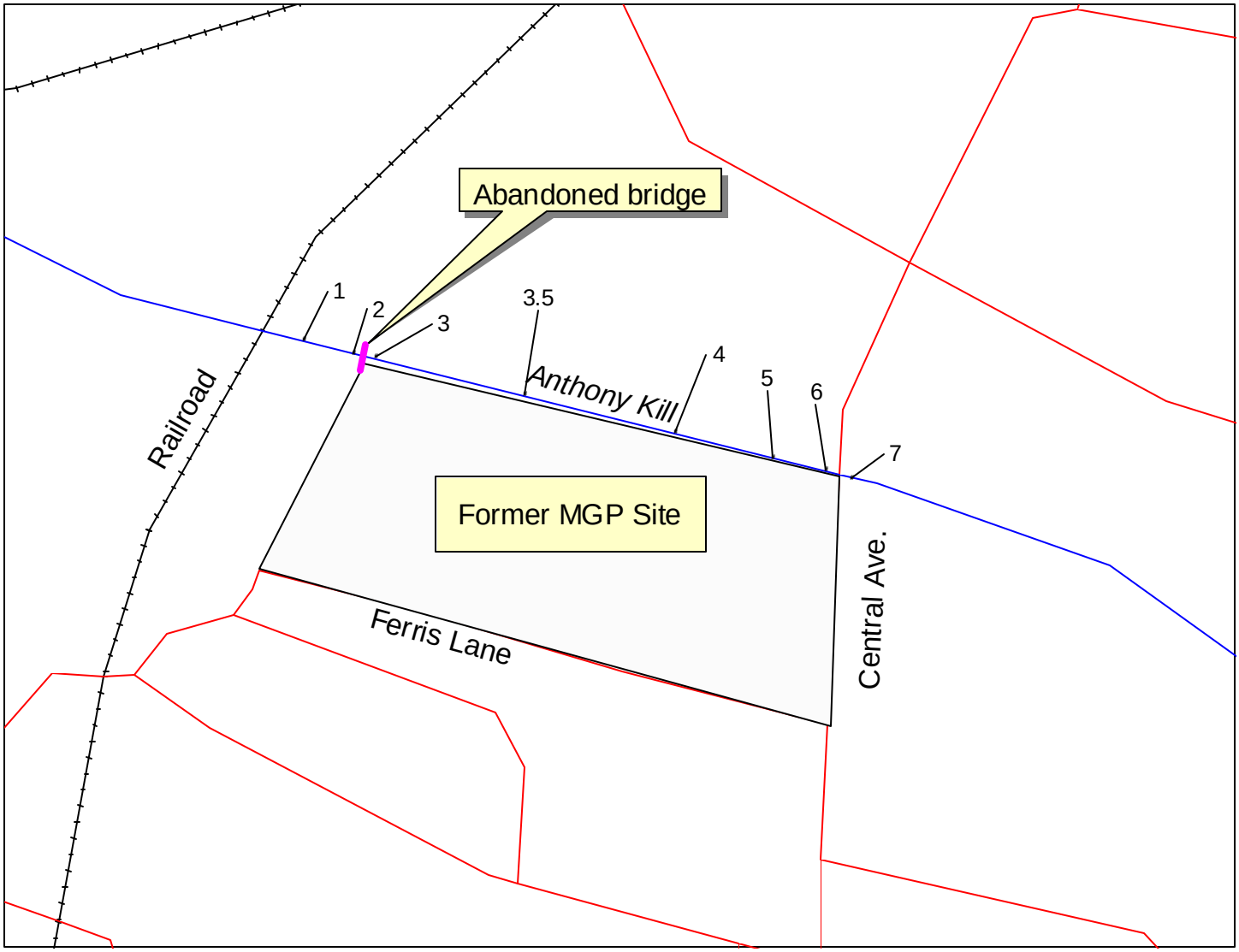
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Figure 1. Visual Stream Assessment Protocol Sites
Former Mechanicville MGP Site



50 0 50 100 150 Meters

N
W E
S

Hydrography
Roads
Railroads

Figure 2. Location of City of Mechanicville, Saratoga County, within New York State.

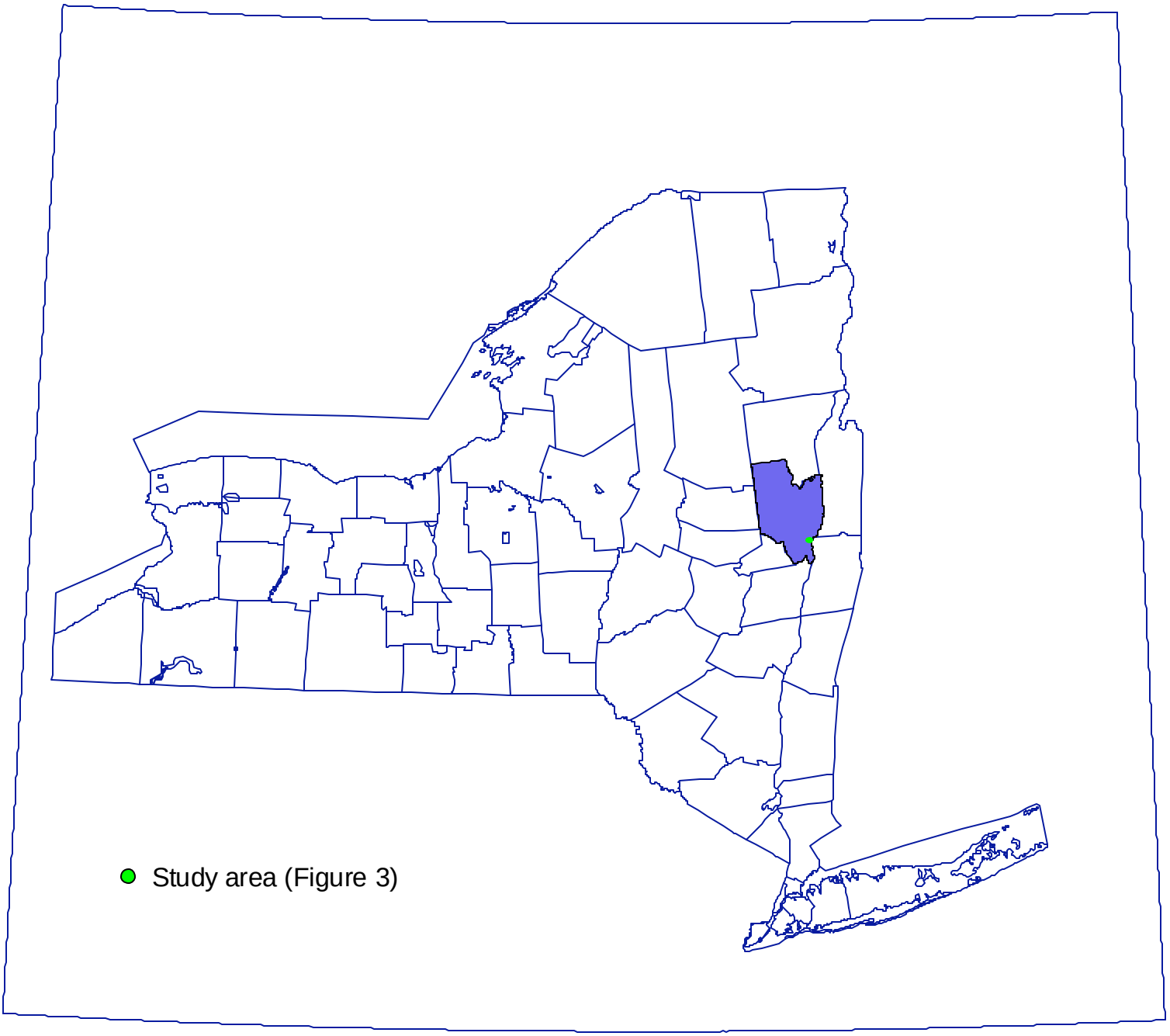
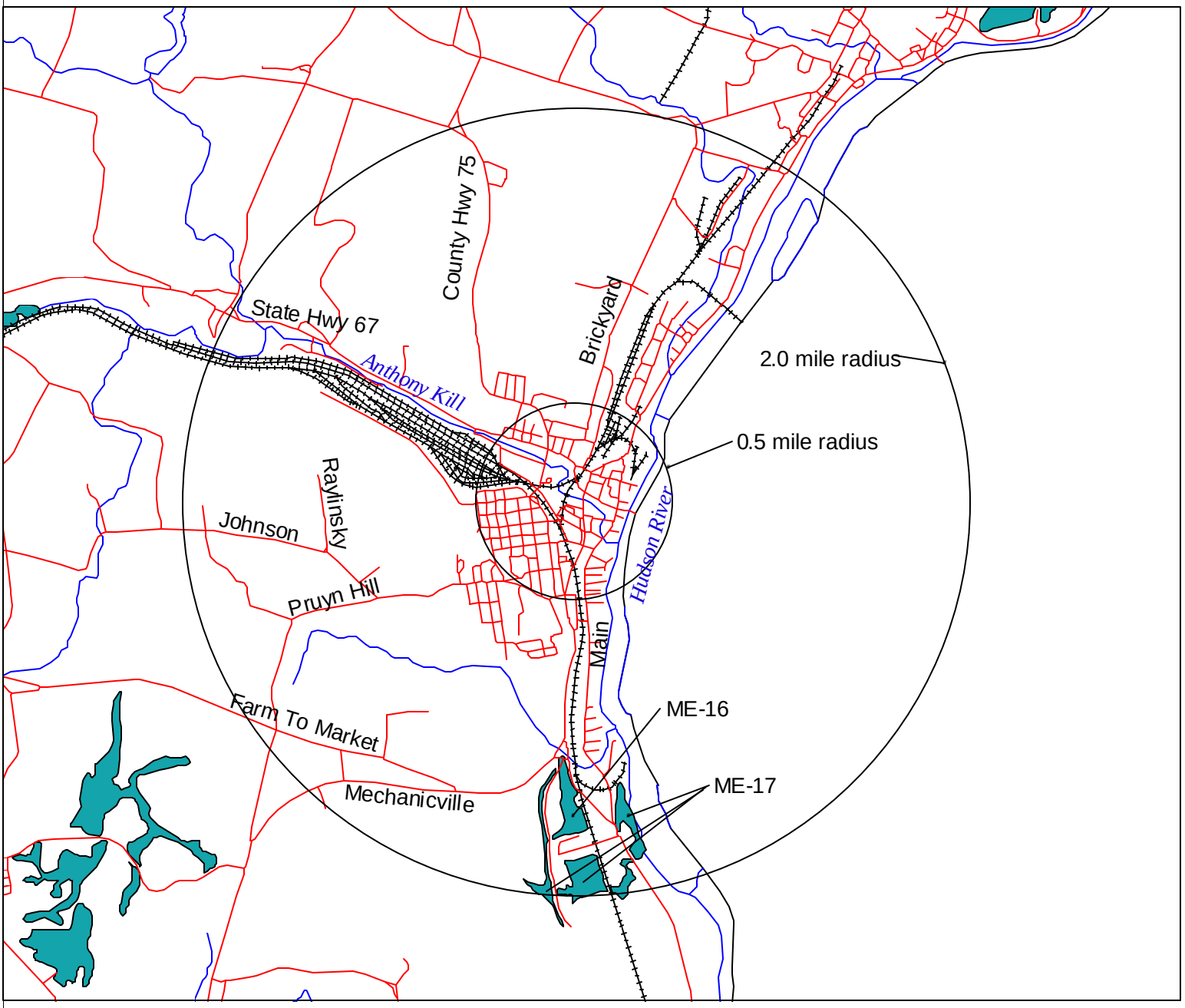


Figure 3. Study area: City of Mechanicville, Saratoga County, New York.

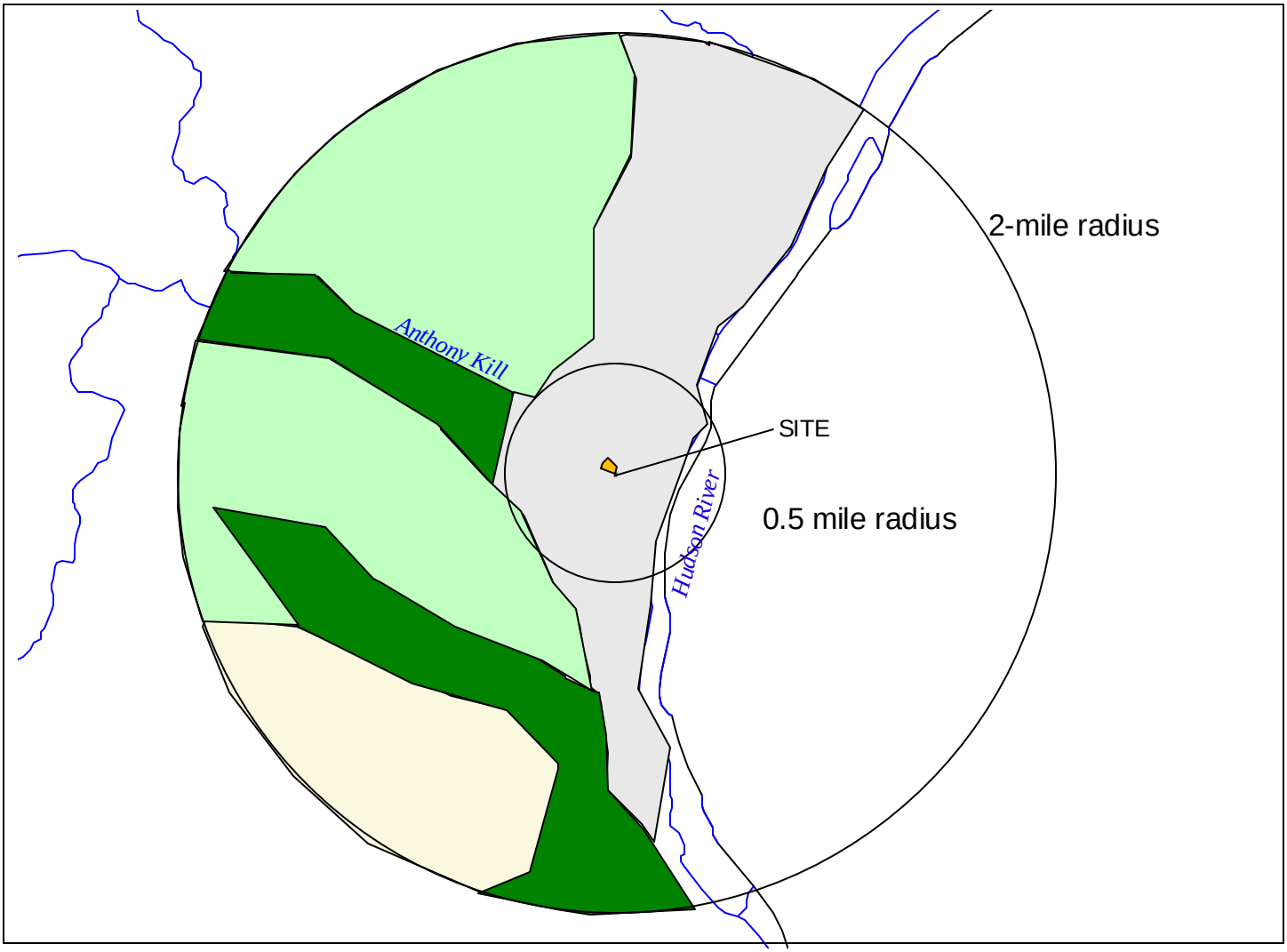


1 0 1 2 Miles

Roads
Railroads
Freshwater wetlands
Hydrography
Saratoga County

N
W E
S

Figure 4. Mechanicville Land Use/ Land Cover



1 0 1 2 Miles

Hydrography
Saratoga County
Farm fields/rural lots
Deciduous forest
Suburban lots
Industrial/commercial/heavily urban
Successional old field

N
W E
S

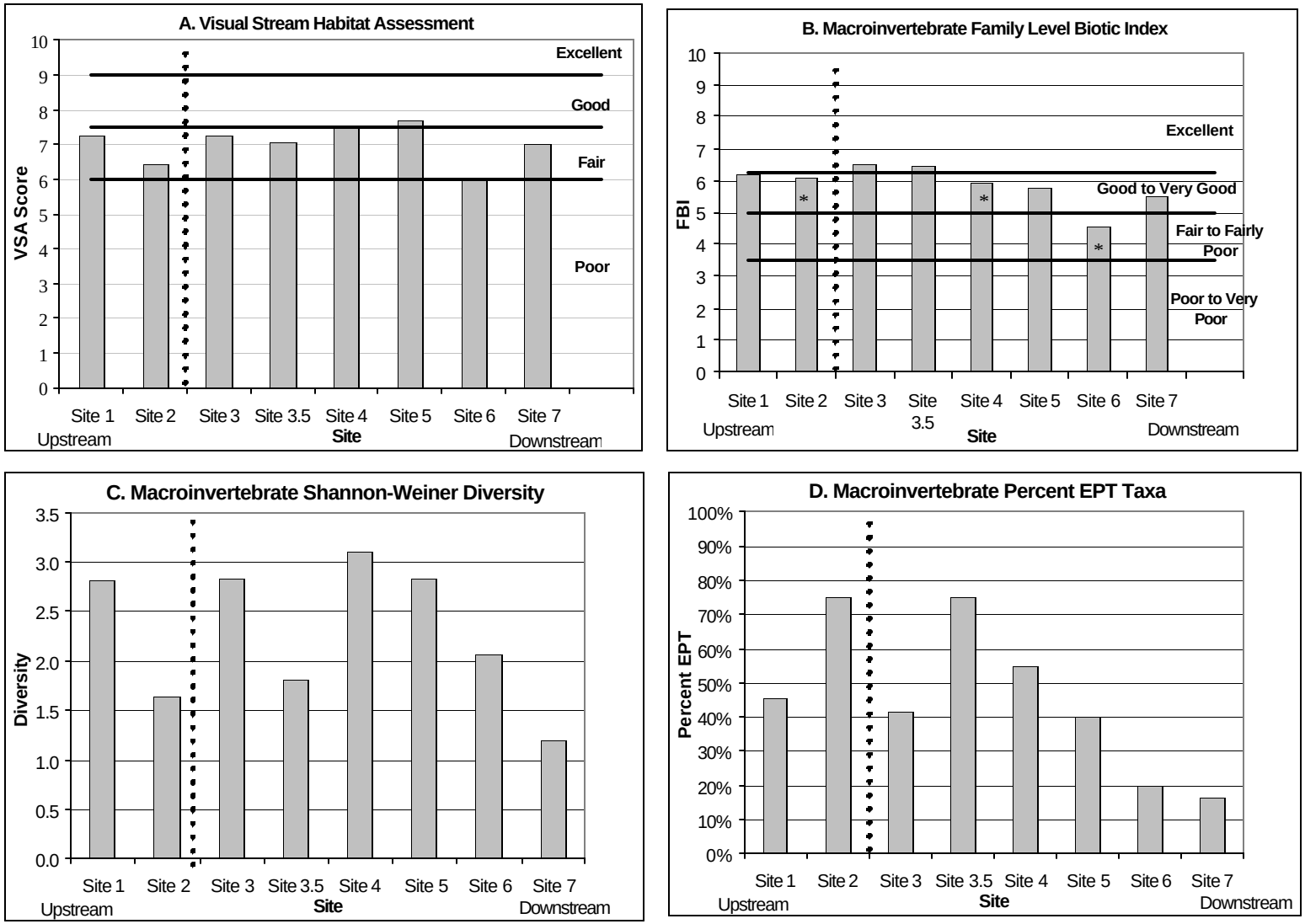


Figure 5. Summary charts of VSA, FBI, diversity and % EPT metrics collected in proximity to the NYSEG Mechanicville New York site. * in Figure B indicates that less than 100 organisms were collected and used in the calculation of the FBI at these sites, therefore results should be viewed with caution. Dashed line between Site 2 and 3 indicates the distinction between sites that are presumably contaminated (downstream of the line) and those that are not (upstream of the line).

Table 1. Summary Of Pathways And Receptors, Fish And Wildlife Impact Analysis
Mechanicville Former MGP Site

Contaminant Source	Pathways of Exposure	Receptors	Completeness and Ecological significance
Surface soils (0 – 0.5 feet)	Loss to surface waters by erosion (wind and water)	Aquatic organisms	Complete, potentially important. Surface soils on the site have elevated SVOC.
	Ingestion, inhalation, dermal absorption by resident and transient wildlife	Soil organisms (earthworms) Burrowing organisms (voles)	Potentially complete, unlikely to be important. Surface soils on the site have elevated SVOC. Wildlife habitat is limited on the developed site.
	Vegetative uptake from soils and related food web effects	Herbivorous wildlife (deer mouse)	Potentially complete, unlikely to be important. Surface soils on the site have elevated SVOC. Wildlife habitat is limited on the developed site.
	Food web effects of ingesting soil organisms	Birds	Potentially complete, unlikely to be important due to limited extent of spatial contamination and limited habitat.
Sub-surface soils (0.5-4 feet)	Ingestion, inhalation, dermal absorption by burrowing wildlife	Meadow vole	Unlikely to be complete, unlikely to be important. Test pits show contamination is higher at depths beyond which wildlife would use. Developed nature of site limits use by wildlife.
Surface water sediments	Ingestion and absorption by resident macroinvertebrates	Aquatic insects and worms	Complete, potentially important
	Partitioning to overlying water	Fish	Complete, unlikely to be important due to limited extent of contamination.
	Food web effects on higher organisms	Mink, heron	Complete, unlikely to be important due to limited extent of contamination.
Surface Waters	Ingestion and absorption by aquatic organisms	Fish	Complete, unlikely to be important (surface water contaminant levels are mostly non-detectable)
Groundwater	Seepage to surface water	Aquatic organisms (especially benthic organisms)	Complete, potentially important

Table 2. Sediment Quality Criteria, Benchmarks, and Screening Values

	Benthic chronic[1] µg/g OC	Acute chronic[1] µg/g OC	Screening value[2] µg/kg	Secondary chronic value[3] µg/kg	ARCS TEC[4] µg/kg dry weight	ARCS PEC[4] µg/kg dry weight	ARCS NEC[4] µg/kg dry weight	Ontario MOE Low[4] µg/kg dry weight	Ontario MOE High[4] µg/kg dry weight
acenaphthene	140								
anthracene	107	986							
benzo(a)anthracene	12	94							
benzo(a)pyrene			330						
chrysene			330						
fluoranthene	1020								
fluorene	8	73							
indeno(1,2,3-cd)pyrene					78	836.66	3800	200	3200
2-methylnaphthalene	34	304							
naphthalene	30	258							
phenanthrene	120								
phenol	0.5								
pyrene	961	8775							
LMW PAHs			330						
HMW PAHs			655						
TOTAL PAHs			1684						

1 = Technical guidance for screening contaminated sediments, NYSDEC 1999

2 = EPA Region 4 Waste management division sediment screening values for hazardous waste sites

3 = EqP derived sediment quality benchmarks, ORNL 1997

4 = Selected toxicity test-and screening level concentration-based sediment quality benchmarks for freshwater sediments, ORNL 1997

Table 3. Total concentration of SVOCs found in samples.

Semivolatile Organic Compounds	AK-1	AK-2	AK-3	AK-4	AK-5	AK-6	AK-7
Acenaphthene					0.53		0.6
Anthracene							0.53
Benzo(a)anthracene							0.5
Benzo(a)pyrene							0.47
Chrysene							0.48
Fluoranthene					0.33		1.1
Fluorene							0.42
Indeno(1,2,3-cd)pyrene							0.35
2-Methylnaphthalene					0.38		0.87
Naphthalene					1.3		0.83
Phenanthrene					0.62		2
Phenols, total						1.3	
Pyrene					0.38		2
LMW PAHs					2.83	ND	5.25
HMW PAHs					0.71	ND	4.9
Total PAHs					3.54	ND	10.15

ND = Not detected.
Blank cells mean concentration was below limit of detection.

Table 4. Results normalized for site-specific TOC content.

Low (LMW) or High (HMW) molecular weight PAHs	Semivolatile Organic Compounds	AK-5	AK-6	AK-7
PAH,LMW	Acenaphthene	1.68		0.26
PAH,LMW	Anthracene			0.23
PAH,LMW	Fluorene			0.18
PAH,LMW	2-Methylnaphthalene	1.21		0.37
PAH,LMW	Naphthalene	4.13		0.35
PAH,LMW	Phenanthrene	1.97		0.85
PAH,HMW	Benzo(a)anthracene			0.21
PAH,HMW	Benzo(a)pyrene			0.20
PAH,HMW	Chrysene			0.20
PAH,HMW	Fluoranthene	1.05		0.47
PAH,HMW	Indeno(1,2,3-cd)pyrene			0.15
PAH, HMW	Pyrene	1.21		0.85
	Phenols, total		2.10*	
	LMW PAHs			
	HMW PAHs			
	Total PAHs	11.2381	ND	4.31915
	TOC (mg/kg)	3150	6180	23500
	%TOC (capped at 3%)	0.315	0.618	2.35

ND = Not detected.
* Concentration exceeds applicable screening value or criteria.

Table 5. Sediment metals results.

Metals (mg/kg)	*NYSDEC LEL-SEL*	EPA Region 4 ppm[(2)]	Upstream AK-1	Upstream AK-2	Site and downstream AK-3	AK-4	AK-5	AK-6	AK-7	AK-7dup
Aluminum	NS		3440	4400	3810	4340	4540	3300	5470	5520
Barium	NS		18.9	24.6	18.3	22.7	27.7	19.2	39.3	38.7
Chromium	26-110	52.3	2.58	3.16	2.24	3.71	3.06	1.92	3.02	2.83
Copper	16-110	18.7	3.67	8.82	3.94	10.5	5	4.09	10.6	8.75
Iron (%)	2% - 4%		0.657	0.804	0.77	0.841	0.0875	0.663	0.844	0.845
Lead	31-110	30.2	0.98	5.06	6.61	0.35	9.19	1.88	15.1	4.94
Manganese	460-1,100		179	207	293	315	**538***	253	**554***	**532***
Nickel	16-50	15.9	4.97	6.8	5.39	6.47	7.06	4.81	6.4	6.3
Vanadium	NS		4.94	6.39	5.64	6.7	6.44	4.8	7.54	7.47
Zinc	120-270	124	29.8	37.4	30.2	25.6	29.7	23.8	52.1	42

(2) = EPA Region 4 Waste management division sediment screening values for hazardous waste sites

LEL = Lowest Effect Level; SEL = Severe Effect Level * Concentration exceeds applicable screening value or criteria.

Table 6. Results of molar sums for SEM analyses and molar ratios of SEM to AVS.

PARAMETER	AK-3 (0-2') 8/28/2002	AK-3 (0-2') 8/28/2002	AK-5 (0-1') 8/28/2002	AK-5 (0-1') 8/28/2002	AK-7 (0-1') 8/28/2002	AK-7 (0-1') 8/28/2002
AVS/SEM	**(mg/kg)**	**(µ mole/g)**	**(mg/kg)**	**(µ mole/g)**	**(mg/kg)**	**(µmole/g)**
Acid Volatile Sulfide	9	0.281	<3	0.047	<3	0.047
Cadmium	<0.152	0.001	<0.16	0.001	<0.22	0.001
Copper	2.32	0.037	3.4	0.054	7.09	0.112
Lead	2.93	0.014	4.96	0.024	11.2	0.054
Mercury	<0.024	0.000	<0.025	0.000	<0.035	0.000
Nickel	1.28	0.022	5.38	0.092	2.71	0.046
Zinc	12.1	0.185	22.9	0.350	33.3	0.509
Total SEM	-	0.258	-	0.520	-	0.722
AVS/SEM Ratio	-	**1.087**	-	**0.090**	-	**0.065**

SEM - simultaneously extracted metals

AVS - Acid volatile sulfides

Appendix 1. Mechanicville Former MGP Site Photo Atlas



Photo 1. Site 1 looking downstream at railroad bridge.



Photo 2. Site 1 looking across stream at Hydrolab water quality meter.



Photo 3. Site 2 looking upstream towards the Site 1 riffle. Inset shows an iron colored seep on the south shore, near the bottom left corner of main photo.



Photo 4. Site 2 looking across stream.



Photo 5. Site 3 looking downstream.



Photo 6. Site 3 looking across stream.



Photo 7. Site 3.5 looking downstream.



Photo 8. Site 4 looking upstream.



Photo 9. Site 4 looking downstream.



Photo 10. Site 5 looking upstream.



Photo 11. Site 5 looking downstream.



Photo 12. Sandbags located on south shore between Sites 5 and 6.



Photo 13. Oil sheen observed on water after sediment disturbance at the west end of sandbags.



Photo 14. Site 6 looking downstream at North Central Ave. bridge.



Photo 15. Site 6 from rip rap area on south shore.



Photo 16. Site 7 looking upstream at North Central Ave. bridge.



Photo 17. Site 7 looking downstream.

Appendix 2. Rare, Threatened and Endangered Species

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **FAX:** (518) 402-8925
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

September 4, 2002

Ana L. Fernandez
EcoLogic
Atwell Mill Annex, Suite S-2
132 ½ Albany Street
Cazenovia, NY 13035

Dear Ms. Fernandez:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to the proposed Remedial Investigation for the Anthony Kill, area as indicated on the map you provided, located in the Town of Mechanicville, Saratoga County.

> We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or endangered elements, natural communities or other significant habitats do not exist on or adjacent to the proposed site, but rather that our files currently do not contain any information which indicates the presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on the presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, signicant natural communities and other significant habitats maintained in the Natural Heritage Databases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Sincerely,

Heidi J. Krahling, Information Services
NY Natural Heritage Program

Enc.
cc: Reg. 5, Wildlife Mgr.
Reg. 5, Fisheries Mgr.

Appendix 3. Aquatic Habitat Survey

STREAM WATER QUALITY AND HABITAT ASSESSMENT, ANTHONY KILL

Physical Habitat and Baseline Water Quality

Habitat assessments were conducted at eight locations on the Anthony Kill in proximity to the NYSEG form MGP site in Mechanicville on September 10, 2002 (Figure 1). Seven of these locations (Sites 1,2,3,4,5,6,7) correspond to the areas where sediment samples were previously been collected and an eighth site (Site 3.5) was located near the center point of the sediment sampling locations. The field team completed the elements of the standard Stream Visual Assessment Protocol (SVAP) at each of the eight sites. In addition, the benthic macroinvertebrate community was sampled and the Family Level Biotic Index (FBI), Shannon-Weiner diversity, and percent EPT taxa were calculated at each site. These indices are discussed below. Water quality parameters of temperature, dissolved oxygen, specific conductance and pH were measured at each site using a calibrated Hydrolab water quality meter.

The SVAP is a methodology developed by the Natural Resource Conservation Service (NRCS) to evaluate the basic physical and habitat characteristics of a stream. The SVAP is based primarily on physical conditions within the assessment areas, standardized as a stream segment extending about 12 times the active steam width. Taken together, the SVAP results and water quality measurements indicate the physical quality and habitat conditions of the stream reaches under investigation. Upstream conditions that affect habitat and water quality, however, may not be revealed by this method. The overall scoring system is as follows:

Table A. Visual Assessment Scores

Condition	Overall Score
Poor	<6.0
Fair	6.1-7.4
Good	7.5-8.9
Excellent	>9.0

The NRCS protocol includes ten elements that were assessed in the field and assigned a numerical score to each element in the field. The elements include:

- Channel condition
- Hydrologic alteration
- Riparian zone
- Bank stability
- Water appearance
- Nutrient enrichment
- Barriers to fish movement
- Instream fish cover
- Pools
- Invertebrate habitat

Macroinvertebrates as Biological Indicators

Macroinvertebrates were temporarily collected from the stream using a kick sample. Ideal habitat for obtaining a kick sample are riffle areas with substrate predominately composed of cobble, gravel and/or sand, water depth of less than 0.5m, and mean water column velocity greater than 0.4m/sec. These habitat characteristics were present at most of the sampling sites. The exceptions were Sites 2 and 6, which were located in sections of the stream with slower water velocity. At these sites the area with the highest velocity was sampled. At all sites, a standard 9 in. x 18 in. D-net with 0.8 mm mesh was used. Three areas in close proximity were sampled by positioning the D-net on the bottom about 0.5 m downstream of the sampler. The sampler used his/her feet to disturb about ½ m^2 of the bottom so that the streambed material, including macroinvertebrates, was carried into the net. Once sampling was completed, the sample was taken to shore and the first 100 organisms, or the entire sample if 100 organisms were not recovered, were sorted from the sample and identified to the family level. Macroinvertebrates were then immediately released alive back to the stream.

Macroinvertebrates are an important component of the aquatic food web. Freshwater macroinvertebrate taxa include aquatic insects (Insecta), worms (Oligochaeta), snails (Gastropoda), clams (Bivalvia), leeches (Hirudinea), and crustaceans (Crustacea). These organisms provide the link in the food web between microscopic organisms and fish, and facilitate the transfer of energy and materials between the terrestrial and aquatic ecosystems.

There are important differences among groups of macroinvertebrates that influence the structure and function of a particular community. Difference in tolerance to environmental conditions is the basis for using these organisms as biological indicators of environmental quality. The biological community integrates the effects of different pollutant stressors and thus provides a holistic measure of their aggregate effect. Benthic macroinvertebrates are good indicators of localized conditions. Because they have limited migration patterns or a sessile mode of life, they are well suited for assessing site-specific impacts of point and nonpoint discharges. Many state agencies use macroinvertebrates as indicators of stream quality.

One important difference between groups of macroinvertebrates is their tolerance to organic (oxygen-demanding) wastes. Macroinvertebrates can be grouped into three broad categories based on their tolerance to organic waste: intolerant, moderately tolerant, and tolerant. The intolerant group includes species of mayflies, stoneflies, caddisflies, riffle beetles, and hellgrammites; the tolerant group includes worms, some midges, leeches, and some snails. The moderately tolerant group includes most snails, sowbugs, scuds, blackflies, craneflies, fingernail clams, dragonflies, and some midges (Welch 1980). What follows is a general description of the major groups of organisms that are of significance to this study.

> **Mayflies; Class Insecta, Order Ephemeroptera.** The mayflies are a primitive insect found in a wide variety of running and standing water habitats. They are aquatic as larvae (nymphs) and briefly terrestrial as adults. Mayflies are unique in that an intermediate fully winged terrestrial life stage (the subimago) occurs between the aquatic nymph stage and the sexually mature winged adult stage (imago). Nymphs are primarily grazers and collectors feeding on a variety of detritus and algae, although some are also filter-feeders and predators. Mayflies typically reach peak abundances in cool clean headwater streams and are generally less abundant and diverse in lakes (Peckarsky et al.

1990). Many are highly susceptible to water pollution and habitat degradation, including low dissolved oxygen, chlorine, ammonia, metals, pesticides and acidity (Bode et al. 1993). For this reason mayflies have proven to be very useful for biomonitoring of water and habitat quality.

Stoneflies; Class Insecta, Order Plecoptera. The stoneflies are close relatives of cockroaches. These organisms have retained the primitive characteristic of possessing tails but have the advanced ability to fold their wings over their back (Peckarsky et al. 1990). Stoneflies are entirely aquatic as nymphs and most are terrestrial as adults. For the most part, stonefly nymphs are either predators (feeding on other invertebrates) or leaf detritivores (feeding on shredded leaves). Most species of stonefly are restricted to flowing waters of relatively high oxygen concentration and their presence is generally considered to be an indicator of good water quality. They are sensitive to many of the same pollutants as mayflies with the exception of acidity (Bode et al. 1993).

Caddisflies; Class Insecta, Order Trichoptera. Caddisflies are a highly advanced and common order that is closely related to the moths and butterflies (Order: *Lepidoptera*), but are adapted for aquatic life as larvae (McCafferty 1983). Many caddisflies build intricate shelters from sand, small stones, leaf fragments, sticks etc. The material and shapes of shelters are generally unique to each taxon. Caddisflies employ a variety of feeding strategies, from strict predation to the construction of intricate nets for filtering detritual particles from the water. Caddisflies are most commonly found in cool water streams, although some species are found in lakes and ponds. Many species are sensitive to pollution, although there are some that are tolerant of polluted conditions and one family is often found in the recovery zones of streams below sewage discharges (Bode et al. 1993). Although caddisflies have a wide range of tolerances, their presence generally indicates good water quality.

Water Beetles; Class Insecta, Order Coleoptera. Beetles as a whole constitute the largest and most highly advanced order of insects with over 30,000 species known in North America (McCafferty 1983). Of these, over 1,000 are either aquatic or semi-aquatic (McCafferty 1983). Water beetles occur over a wide variety of aquatic and semi-aquatic habitats. They can be found in or on the substrate, in or on aquatic macrophytes, or swimming at or beneath the water's surface (McCafferty 1983). Almost all adults are dependent on atmospheric oxygen and must either carry an air bubble with them or have physical adaptations to acquire atmospheric oxygen. Riffle beetles and water pennies are the beetles most commonly found in streams; both usually require swift current and high dissolved oxygen concentrations. Presence of these two species is generally considered to indicate good water quality. There are also many other species of aquatic beetles that live in virtually all common freshwater habitats and have varying degrees of tolerance to pollution (McCafferty 1983).

Midges and Flies; Class Insecta, Order Diptera. The dipterans are one of the largest, most highly evolved, and most diverse groups of aquatic insects (Peckarsky et al. 1990). Some commonly known dipterans include mosquitoes, deerflies, craneflies, blackflies, and midges. Most dipterans spend much of their lives as aquatic larvae that hatch into terrestrial adults. The dipteran family *Chironomidae* is present in almost all freshwater systems and is of special importance not only because of its diversity but because of the ability of some species to tolerate extreme levels of pollution (McCafferty 1983). Some species contain hemoglobin that stores oxygen within the body thus allowing the organism to exist temporarily in habitats with little or no dissolved oxygen (Peckarsky et

al. 1990). These species are typically bright red in color and are commonly referred to as "bloodworms". Bloodworms are highly tolerant of polluted conditions and organic enrichment; some are common in sewage oxidation ponds. In general, the presence of bloodworms or chironomids in large numbers is an indicator of poor water quality (Bode et al. 1993).

Aquatic Worms; Phylum Annelida, Class Oligochaeta. Aquatic worms resemble earthworms but are generally smaller, although some species can reach a length of up to three inches. Most aquatic worms live in silty substrates and among the debris and detritus of fresh waterbodies. They ingest large quantities of soft sediment and utilize the organic fraction for their nutrient and energy source (McCafferty 1983, Peckarsky et al. 1990). Many worms, especially tubificid worms, burrow headfirst into the soft sediments and build vertical tubes from which their posterior end protrudes and undulates in the current (McCafferty 1983). Some worms can tolerate severe levels of pollution and can often be found at high densities in organically polluted waterbodies and are therefore valuable pollution indicators.

Snails; Class Gastropoda. Snails are common in freshwater habitats throughout the northeastern United States (Peckarsky 1990). They are divided into two groups: the prosobranchs and pulmonates (Peckarsky 1990). Respiration in snails occurs by means of gills in the prosobranchs and by a type of lung in the pulmonates (Peckarsky 1990). All snails, to at least some extent, use cutaneous respiration through their body membranes (Ghiretti 1966). Because they respire through gills, the prosobranchs are usually intolerant of low concentrations of dissolved oxygen in their aquatic habitat. The pulmonates, on the other hand, can often tolerate extreme levels of pollution by rising to the surface and breathing air. Most feed on encrusted algae and organic material, but some are detritivores or omnivores (McCafferty 1983).

Sowbugs: Class Crustacea, Order Isopoda. Most sowbugs are either terrestrial or marine, with only about 5% occurring in freshwater (Peckarsky 1990). Sowbugs are primarily scavengers, feeding on dead animal and plant material (Peckarsky 1990). Many can tolerate high organic inputs and the resulting low concentrations of dissolved oxygen (Bode et al. 1993).

Family Level Biotic Index (FBI)

The Family Level Biotic Index (FBI) is a rapid field assessment of stream arthropods used to determine relative degrees of impact from organic pollution (such as those from animal waste or sewage). The FBI is based on the well known Hilsenhoff Biotic Index (HBI) but identifies organisms to the family level in the field instead of identifying to genus or species in the laboratory. Use of the FBI is advantageous for quickly evaluating the general status of the organic pollution in streams (Hilsenhoff 1988). However, the FBI can be less accurate than the HBI. The FBI tends to indicate greater pollution in unpolluted or slightly polluted streams and less pollution in polluted streams. Typical FBI's range from 0 to 10 with lower number indicating better conditions; this scaling convention can lead to confusion when trying to present both SVAP scores and FBI scores as SVAP indicate poorer conditions as numbers get lower. Therefore in this report the inverse FBI value is reported to indicate stream condition (Table B). By using the inverse FBI value, both FBI and SVAP values represent improved condition with increasing numbers.

Table B. Evaluation of water quality using the inversed family-level biotic index values.

FBI	Water Quality	Degree of Organic Pollution
10.00-6.26	Excellent	Organic pollution unlikely
6.25-5.76	Very Good	Possible slight organic pollution
5.75-5.01	Good	Some organic pollution probable
5.00-4.26	Fair	Increased organic pollution likely
4.25-3.51	Fairly Poor	Substantial pollution likely
3.50-2.76	Poor	Very substantial pollution likely
2.72-0.00	Very Poor	Severe organic pollution likely

Percent EPT

Another useful macroinvertebrate metric is the percent contribution of the Orders **E**phemeroptera, **P**lecoptera, and **T**richoptera in a sample (% EPT). These taxa are typically sensitive to water quality and habitat degradation so their proportion in a sample is a useful index of the general health of a stream segment. This metric is simply presented as the percent of the total number of individuals collected at a site that are within the EPT orders.

Shannon-Weiner diversity index

The Shannon-Weiner diversity index (Shannon and Weaver 1949, Weiner 1948) as modified by Weber (1973) was selected to quantify diversity. Diversity is a function of both the number of species present (richness) and the equitability of distribution of individuals within these species (evenness) (Washington 1984). Anthropogenic activities, such as high organic inputs, typically influence the measure of diversity (Brown 1978, Horn 1988). Diversity is greatest when high numbers of taxa are represented in equal proportions. Diversity can help determine if disparity occurs between different sites within the same waterbody. However, much information is lost when using this index because the composition of the community (i.e., are the organisms present tolerant or sensitive to pollution?) is not taken into consideration. For example, a site that contains a diverse assemblage of tolerant organisms would likely not be considered "better" than a site with a less diverse assemblage of sensitive organisms. For this reason diversity is usually utilized with other more descriptive indices that, taken together, can yield a more thorough view of the community.

RESULTS

At the time of the field investigation, water levels were relatively low based upon the observation of bank height and high water marks. The Anthony Kill within the boundaries of the study reach is a shallow, moderately high gradient stream with alternating riffle/pool habitats. Substrate is composed of mostly gravel and cobble on top of coarse sand. Riffles contained high proportions of large cobble and the substrate composition of pools was predominantly sands. Visible oil sheens were observed when walking in the stream at Sites 4 to 6, and in sediments collected in kick samples at Sites 5 and 6.

The stream flows through a riparian zone vegetated with a mixture of hardwoods, shrubs and grasses. There is adequate riparian vegetation in most areas; the vegetation helps stabilize streambanks and provide fish cover. Adjacent to the North Central Avenue Bridge, the riparian zone has had most of its riparian vegetation removed. The streambanks were covered with rip-rap in the vicinity of the road crossing.

Results of the SVAP at eight sites along the stream indicated that habitat conditions ranged from fair to good (Figure 5). In general, barriers to fish movement (there are none), hydrologic alteration and bank stability received high scores at most sites indicating little disturbance of nearshore areas and stream bottom. The most commonly observed problem (as indicated by low SVAP scores) was a general lack of pools in this shallow stream segment and lack of in-stream fish cover.

Water quality in the stream during sampling was within the ranges expected for a freshwater stream in this area and varied little between sites (Table C). Temperature was seasonably warm, dissolved oxygen was high with over 100% saturation and specific conductance and pH were at levels that would not be stressful to fish or invertebrates.

Table C. Water quality measured in the Anthony Kill in September 2002.

Variable	Site 1	Site 2	Site 3	Site 3.5	Site 4	Site 5	Site 6	Site 7
Temperature (C)	22.4	22.1	21.8	21.4	21.4	21.2	21.1	20.5
Dissolved Oxygen (mg/L)	8.4	8.4	8.4	8.1	8.1	8.3	8.3	8.3
Percent Oxygen Saturation	112	113	112	108	108	109	110	108
Specific Conductance (uS)	844	848	850	842	842	855	851	852
pH	8.3	8.3	8.3	8.3	8.3	8.2	8.2	8.2

There was high variability in the macroinvertebrate metrics between sites (Figure 1). In general, however, poorest results were found at Sites 6 and 7, which would be most affected by migration of site-related contaminants. In particular, the percent EPT richness is substantially lower at these sites. The sample collected at Site 6 contained a paucity of macroinvertebrates, only 18 individuals were collected (Table D). The low number of organisms collected at this location makes interpretation of the metrics (particularly FBI, which is typically calculated from a sample of 100 organisms) problematic. The low abundance of macroinvertebrates at this location could be influenced by elevated concentrations of contaminants in the sediment and/or degraded habitat conditions. As described elsewhere, sediment testing did not reveal concentrations of target compounds that exceed thresholds for acute toxicity. Site 6 was located in a low velocity pool with predominantly sand substrate that did not offer ideal kick sampling habitat; it is likely that the poor habitat quality contributed to the reduced abundance and diversity of organisms. The SVAP assessment was lowest at Site 6, indicating poor stream habitat that could affect macroinvertebrate populations.

All three indices (percent EPT, diversity, and FBI) exhibit a general downward trend as the Arthur Kill flows downstream past the former MGP site. This decline is likely to be the result of a combination of habitat degradation and pollution effects as the stream flows through the urban corridor and is influenced by runoff, storm water, and site-related contaminants. No point sources of oxygen-demanding waste enter the Arthur Kill in the region of the former MGP site.

Table D. Number of macroinvertebrates collected during sampling of the Anthony Kill in September 2002.

Scientific Name	Common Name	Site 1	Site 2	Site 3	Site 3.5	Site 4	Site 5	Site 6	Site 7
Oligochaeta	Aquatic Worm	1		1					6
Sphaeriidae	Fingernail Clam						2		
Asellidae	Isopod					6		2	6
Gammaridae	Scud	53	38	2	34	5	14	8	83
Baetidae	Mayfly	8	20	6		16	38		
Heptageniidae	Mayfly						6		
Coenagrionidae	Damselfly					2			1
Aeshnidae	Dragonfly					4			2
Chloroperlidae	Stonefly			3	6				
Perlidae	Stonefly			12					
Psephenus	Water Beatle	6		8		14	8		
Elmidae	Water Beatle			3					
Corydalidae	Hellgramite	6							
Philopotamidae	Caddisfly	15	8	28	28	12	10	2	8
Hydropsychidae	Caddisfly	22	6	43	31	10			
Helicopsychidae	Caddisfly	9				3	6		
Hydroptilidae	Caddisfly	4							
Rhyacophilidae	Caddisfly					3			
Polycentropodidae	Caddisfly					2			
Tipulidae	Cranefly	4		6			4		
Ceratopogonidae	Biting Midges	12					12		
Chironomid-Other	Midges			2			4	4	
Chironomid-Blood Red	Blood Worm			4				2	
Total		140	72	118	99	77	104	18	106

Overall, there is substantial variability in the macroinvertebrate community of the study area in the Anthony Kill. Variability in samples collected upstream of the former MGP site complicates interpretation of results. However, the downward trend of all three macroinvertebrate metrics from upstream to downstream of the former MGP site is consistent with adverse impacts of the site on habitat and sediment quality. These results should be reviewed in concert with the results of the SRI sediment quality testing.

Impacts to Threatened and/or Endangered Species

There are no known threatened or endangered aquatic species occurring within the study area.

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APPENDIX K
COMMUNITY AIR MONITORING PLAN

Air Data

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/2/01 8:19:00 AM	18	4/4/01 6:50:00 AM	39	4/4/01 7:23:00 AM	30	4/4/01 7:56:00 AM	22
4/2/01 8:34:00 AM	14	4/4/01 6:51:00 AM	40	4/4/01 7:24:00 AM	30	4/4/01 7:57:00 AM	23
4/2/01 8:49:00 AM	15	4/4/01 6:52:00 AM	47	4/4/01 7:25:00 AM	30	4/4/01 7:58:00 AM	24
4/2/01 9:04:00 AM	14	4/4/01 6:53:00 AM	37	4/4/01 7:26:00 AM	31	4/4/01 7:59:00 AM	22
4/2/01 9:19:00 AM	13	4/4/01 6:54:00 AM	39	4/4/01 7:27:00 AM	32	4/4/01 8:00:00 AM	22
4/2/01 9:34:00 AM	13	4/4/01 6:55:00 AM	52	4/4/01 7:28:00 AM	30	4/4/01 8:01:00 AM	22
4/2/01 9:49:00 AM	11	4/4/01 6:56:00 AM	143	4/4/01 7:29:00 AM	33	4/4/01 8:02:00 AM	22
4/2/01 10:04:00 AM	12	4/4/01 6:57:00 AM	202	4/4/01 7:30:00 AM	30	4/4/01 8:03:00 AM	23
4/2/01 10:19:00 AM	13	4/4/01 6:58:00 AM	173	4/4/01 7:31:00 AM	30	4/4/01 8:04:00 AM	22
4/2/01 10:34:00 AM	14	4/4/01 6:59:00 AM	147	4/4/01 7:32:00 AM	30	4/4/01 8:05:00 AM	22
4/2/01 10:49:00 AM	15	4/4/01 7:00:00 AM	140	4/4/01 7:33:00 AM	31	4/4/01 8:06:00 AM	23
4/2/01 11:04:00 AM	14	4/4/01 7:01:00 AM	122	4/4/01 7:34:00 AM	31	4/4/01 8:07:00 AM	22
4/2/01 11:19:00 AM	15	4/4/01 7:02:00 AM	106	4/4/01 7:35:00 AM	28	4/4/01 8:08:00 AM	22
4/2/01 11:34:00 AM	15	4/4/01 7:03:00 AM	101	4/4/01 7:36:00 AM	28	4/4/01 8:09:00 AM	22
4/2/01 11:49:00 AM	12	4/4/01 7:04:00 AM	95	4/4/01 7:37:00 AM	28	4/4/01 8:10:00 AM	22
4/2/01 12:04:00 PM	12	4/4/01 7:05:00 AM	89	4/4/01 7:38:00 AM	28	4/4/01 8:11:00 AM	23
4/2/01 12:19:00 PM	12	4/4/01 7:06:00 AM	78	4/4/01 7:39:00 AM	27	4/4/01 8:12:00 AM	20
4/2/01 12:34:00 PM	12	4/4/01 7:07:00 AM	28	4/4/01 7:40:00 AM	26	4/4/01 8:13:00 AM	20
4/2/01 12:49:00 PM	13	4/4/01 7:08:00 AM	27	4/4/01 7:41:00 AM	24	4/4/01 8:14:00 AM	20
4/2/01 1:04:00 PM	12	4/4/01 7:09:00 AM	27	4/4/01 7:42:00 AM	24	4/4/01 8:15:00 AM	21
4/2/01 1:19:00 PM	13	4/4/01 7:10:00 AM	28	4/4/01 7:43:00 AM	25	4/4/01 8:16:00 AM	21
4/2/01 1:34:00 PM	13	4/4/01 7:11:00 AM	28	4/4/01 7:44:00 AM	24	4/4/01 8:17:00 AM	20
4/2/01 1:49:00 PM	13	4/4/01 7:12:00 AM	28	4/4/01 7:45:00 AM	23	4/4/01 8:18:00 AM	21
4/4/01 6:40:00 AM	111	4/4/01 7:13:00 AM	29	4/4/01 7:46:00 AM	22	4/4/01 8:19:00 AM	18
4/4/01 6:41:00 AM	132	4/4/01 7:14:00 AM	30	4/4/01 7:47:00 AM	22	4/4/01 8:20:00 AM	20
4/4/01 6:42:00 AM	166	4/4/01 7:15:00 AM	29	4/4/01 7:48:00 AM	22	4/4/01 8:21:00 AM	19
4/4/01 6:43:00 AM	110	4/4/01 7:16:00 AM	34	4/4/01 7:49:00 AM	22	4/4/01 8:22:00 AM	19
4/4/01 6:44:00 AM	87	4/4/01 7:17:00 AM	32	4/4/01 7:50:00 AM	21	4/4/01 8:23:00 AM	19
4/4/01 6:45:00 AM	83	4/4/01 7:18:00 AM	29	4/4/01 7:51:00 AM	22	4/4/01 8:24:00 AM	18
4/4/01 6:46:00 AM	70	4/4/01 7:19:00 AM	31	4/4/01 7:52:00 AM	22	4/4/01 8:25:00 AM	19
4/4/01 6:47:00 AM	66	4/4/01 7:20:00 AM	36	4/4/01 7:53:00 AM	23	4/4/01 8:26:00 AM	19
4/4/01 6:48:00 AM	49	4/4/01 7:21:00 AM	31	4/4/01 7:54:00 AM	22	4/4/01 8:27:00 AM	23
4/4/01 6:49:00 AM	44	4/4/01 7:22:00 AM	31	4/4/01 7:55:00 AM	22	4/4/01 8:28:00 AM	22

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/4/01 8:29:00 AM	17	4/4/01 9:04:00 AM	21	4/4/01 9:39:00 AM	12	4/4/01 10:14:00 AM	8
4/4/01 8:30:00 AM	13	4/4/01 9:05:00 AM	19	4/4/01 9:40:00 AM	12	4/4/01 10:15:00 AM	8
4/4/01 8:31:00 AM	17	4/4/01 9:06:00 AM	18	4/4/01 9:41:00 AM	13	4/4/01 10:16:00 AM	8
4/4/01 8:32:00 AM	14	4/4/01 9:07:00 AM	20	4/4/01 9:42:00 AM	11	4/4/01 10:17:00 AM	7
4/4/01 8:33:00 AM	16	4/4/01 9:08:00 AM	18	4/4/01 9:43:00 AM	10	4/4/01 10:18:00 AM	8
4/4/01 8:34:00 AM	15	4/4/01 9:09:00 AM	16	4/4/01 9:44:00 AM	15	4/4/01 10:19:00 AM	8
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4/4/01 8:36:00 AM	25	4/4/01 9:11:00 AM	19	4/4/01 9:46:00 AM	10	4/4/01 10:21:00 AM	8
4/4/01 8:37:00 AM	25	4/4/01 9:12:00 AM	69	4/4/01 9:47:00 AM	12	4/4/01 10:22:00 AM	7
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4/4/01 8:42:00 AM	15	4/4/01 9:17:00 AM	15	4/4/01 9:52:00 AM	17	4/4/01 10:27:00 AM	7
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4/4/01 8:46:00 AM	13	4/4/01 9:21:00 AM	15	4/4/01 9:56:00 AM	10	4/4/01 10:31:00 AM	10
4/4/01 8:47:00 AM	12	4/4/01 9:22:00 AM	13	4/4/01 9:57:00 AM	11	4/4/01 10:32:00 AM	7
4/4/01 8:48:00 AM	10	4/4/01 9:23:00 AM	15	4/4/01 9:58:00 AM	10	4/4/01 10:33:00 AM	8
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4/4/01 8:52:00 AM	16	4/4/01 9:27:00 AM	13	4/4/01 10:02:00 AM	10	4/4/01 10:37:00 AM	11
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4/4/01 8:58:00 AM	21	4/4/01 9:33:00 AM	30	4/4/01 10:08:00 AM	10	4/4/01 10:43:00 AM	7
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4/4/01 9:00:00 AM	22	4/4/01 9:35:00 AM	11	4/4/01 10:10:00 AM	9	4/4/01 10:45:00 AM	7
4/4/01 9:01:00 AM	20	4/4/01 9:36:00 AM	11	4/4/01 10:11:00 AM	8	4/4/01 10:46:00 AM	7
4/4/01 9:02:00 AM	20	4/4/01 9:37:00 AM	12	4/4/01 10:12:00 AM	8	4/4/01 10:47:00 AM	7
4/4/01 9:03:00 AM	19	4/4/01 9:38:00 AM	11	4/4/01 10:13:00 AM	9	4/4/01 10:48:00 AM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/4/01 10:49:00 AM	5	4/4/01 11:24:00 AM	4	4/4/01 11:59:00 AM	6	4/4/01 12:34:00 PM	4
4/4/01 10:50:00 AM	5	4/4/01 11:25:00 AM	3	4/4/01 12:00:00 PM	4	4/4/01 12:35:00 PM	5
4/4/01 10:51:00 AM	6	4/4/01 11:26:00 AM	5	4/4/01 12:01:00 PM	5	4/4/01 12:36:00 PM	4
4/4/01 10:52:00 AM	7	4/4/01 11:27:00 AM	4	4/4/01 12:02:00 PM	4	4/4/01 12:37:00 PM	4
4/4/01 10:53:00 AM	8	4/4/01 11:28:00 AM	5	4/4/01 12:03:00 PM	4	4/4/01 12:38:00 PM	5
4/4/01 10:54:00 AM	6	4/4/01 11:29:00 AM	6	4/4/01 12:04:00 PM	22	4/4/01 12:39:00 PM	4
4/4/01 10:55:00 AM	7	4/4/01 11:30:00 AM	6	4/4/01 12:05:00 PM	5	4/4/01 12:40:00 PM	4
4/4/01 10:56:00 AM	7	4/4/01 11:31:00 AM	4	4/4/01 12:06:00 PM	3	4/4/01 12:41:00 PM	29
4/4/01 10:57:00 AM	6	4/4/01 11:32:00 AM	4	4/4/01 12:07:00 PM	6	4/4/01 12:42:00 PM	18
4/4/01 10:58:00 AM	6	4/4/01 11:33:00 AM	4	4/4/01 12:08:00 PM	4	4/4/01 12:43:00 PM	4
4/4/01 10:59:00 AM	5	4/4/01 11:34:00 AM	4	4/4/01 12:09:00 PM	4	4/4/01 12:44:00 PM	4
4/4/01 11:00:00 AM	6	4/4/01 11:35:00 AM	4	4/4/01 12:10:00 PM	6	4/4/01 12:45:00 PM	11
4/4/01 11:01:00 AM	5	4/4/01 11:36:00 AM	5	4/4/01 12:11:00 PM	6	4/4/01 12:46:00 PM	4
4/4/01 11:02:00 AM	4	4/4/01 11:37:00 AM	6	4/4/01 12:12:00 PM	5	4/4/01 12:47:00 PM	4
4/4/01 11:03:00 AM	5	4/4/01 11:38:00 AM	7	4/4/01 12:13:00 PM	6	4/4/01 12:48:00 PM	8
4/4/01 11:04:00 AM	5	4/4/01 11:39:00 AM	6	4/4/01 12:14:00 PM	3	4/4/01 12:49:00 PM	4
4/4/01 11:05:00 AM	4	4/4/01 11:40:00 AM	6	4/4/01 12:15:00 PM	4	4/4/01 12:50:00 PM	5
4/4/01 11:06:00 AM	6	4/4/01 11:41:00 AM	5	4/4/01 12:16:00 PM	4	4/4/01 12:51:00 PM	5
4/4/01 11:07:00 AM	4	4/4/01 11:42:00 AM	5	4/4/01 12:17:00 PM	6	4/4/01 12:52:00 PM	4
4/4/01 11:08:00 AM	5	4/4/01 11:43:00 AM	5	4/4/01 12:18:00 PM	4	4/4/01 12:53:00 PM	15
4/4/01 11:09:00 AM	6	4/4/01 11:44:00 AM	4	4/4/01 12:19:00 PM	3	4/4/01 12:54:00 PM	4
4/4/01 11:10:00 AM	5	4/4/01 11:45:00 AM	4	4/4/01 12:20:00 PM	4	4/4/01 12:55:00 PM	4
4/4/01 11:11:00 AM	5	4/4/01 11:46:00 AM	4	4/4/01 12:21:00 PM	4	4/4/01 12:56:00 PM	3
4/4/01 11:12:00 AM	5	4/4/01 11:47:00 AM	4	4/4/01 12:22:00 PM	5	4/4/01 12:57:00 PM	4
4/4/01 11:13:00 AM	6	4/4/01 11:48:00 AM	5	4/4/01 12:23:00 PM	4	4/4/01 12:58:00 PM	4
4/4/01 11:14:00 AM	4	4/4/01 11:49:00 AM	7	4/4/01 12:24:00 PM	4	4/4/01 12:59:00 PM	4
4/4/01 11:15:00 AM	5	4/4/01 11:50:00 AM	4	4/4/01 12:25:00 PM	6	4/4/01 1:00:00 PM	4
4/4/01 11:16:00 AM	5	4/4/01 11:51:00 AM	4	4/4/01 12:26:00 PM	4	4/4/01 1:01:00 PM	4
4/4/01 11:17:00 AM	7	4/4/01 11:52:00 AM	5	4/4/01 12:27:00 PM	4	4/4/01 1:02:00 PM	5
4/4/01 11:18:00 AM	5	4/4/01 11:53:00 AM	6	4/4/01 12:28:00 PM	4	4/4/01 1:03:00 PM	5
4/4/01 11:19:00 AM	10	4/4/01 11:54:00 AM	6	4/4/01 12:29:00 PM	4	4/4/01 1:04:00 PM	5
4/4/01 11:20:00 AM	6	4/4/01 11:55:00 AM	4	4/4/01 12:30:00 PM	5	4/4/01 1:05:00 PM	4
4/4/01 11:21:00 AM	4	4/4/01 11:56:00 AM	5	4/4/01 12:31:00 PM	6	4/4/01 1:06:00 PM	4
4/4/01 11:22:00 AM	6	4/4/01 11:57:00 AM	4	4/4/01 12:32:00 PM	9	4/4/01 1:07:00 PM	4
4/4/01 11:23:00 AM	4	4/4/01 11:58:00 AM	5	4/4/01 12:33:00 PM	4	4/4/01 1:08:00 PM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/4/01 1:09:00 PM	4	4/4/01 1:44:00 PM	5	4/5/01 7:33:00 AM	29	4/5/01 8:08:00 AM	28
4/4/01 1:10:00 PM	4	4/4/01 1:45:00 PM	10	4/5/01 7:34:00 AM	34	4/5/01 8:09:00 AM	30
4/4/01 1:11:00 PM	4	4/5/01 7:00:00 AM	71	4/5/01 7:35:00 AM	30	4/5/01 8:10:00 AM	29
4/4/01 1:12:00 PM	4	4/5/01 7:01:00 AM	59	4/5/01 7:36:00 AM	30	4/5/01 8:11:00 AM	28
4/4/01 1:13:00 PM	5	4/5/01 7:02:00 AM	57	4/5/01 7:37:00 AM	35	4/5/01 8:12:00 AM	25
4/4/01 1:14:00 PM	5	4/5/01 7:03:00 AM	46	4/5/01 7:38:00 AM	28	4/5/01 8:13:00 AM	28
4/4/01 1:15:00 PM	6	4/5/01 7:04:00 AM	50	4/5/01 7:39:00 AM	34	4/5/01 8:14:00 AM	28
4/4/01 1:16:00 PM	9	4/5/01 7:05:00 AM	44	4/5/01 7:40:00 AM	28	4/5/01 8:15:00 AM	24
4/4/01 1:17:00 PM	4	4/5/01 7:06:00 AM	37	4/5/01 7:41:00 AM	31	4/5/01 8:16:00 AM	26
4/4/01 1:18:00 PM	4	4/5/01 7:07:00 AM	28	4/5/01 7:42:00 AM	33	4/5/01 8:17:00 AM	28
4/4/01 1:19:00 PM	5	4/5/01 7:08:00 AM	26	4/5/01 7:43:00 AM	35	4/5/01 8:18:00 AM	28
4/4/01 1:20:00 PM	4	4/5/01 7:09:00 AM	25	4/5/01 7:44:00 AM	30	4/5/01 8:19:00 AM	24
4/4/01 1:21:00 PM	5	4/5/01 7:10:00 AM	29	4/5/01 7:45:00 AM	31	4/5/01 8:20:00 AM	24
4/4/01 1:22:00 PM	4	4/5/01 7:11:00 AM	28	4/5/01 7:46:00 AM	33	4/5/01 8:21:00 AM	25
4/4/01 1:23:00 PM	4	4/5/01 7:12:00 AM	29	4/5/01 7:47:00 AM	30	4/5/01 8:22:00 AM	19
4/4/01 1:24:00 PM	4	4/5/01 7:13:00 AM	27	4/5/01 7:48:00 AM	31	4/5/01 8:23:00 AM	21
4/4/01 1:25:00 PM	5	4/5/01 7:14:00 AM	26	4/5/01 7:49:00 AM	30	4/5/01 8:24:00 AM	23
4/4/01 1:26:00 PM	5	4/5/01 7:15:00 AM	27	4/5/01 7:50:00 AM	33	4/5/01 8:25:00 AM	24
4/4/01 1:27:00 PM	4	4/5/01 7:16:00 AM	25	4/5/01 7:51:00 AM	27	4/5/01 8:26:00 AM	24
4/4/01 1:28:00 PM	4	4/5/01 7:17:00 AM	28	4/5/01 7:52:00 AM	31	4/5/01 8:27:00 AM	26
4/4/01 1:29:00 PM	5	4/5/01 7:18:00 AM	34	4/5/01 7:53:00 AM	32	4/5/01 8:28:00 AM	26
4/4/01 1:30:00 PM	4	4/5/01 7:19:00 AM	28	4/5/01 7:54:00 AM	28	4/5/01 8:29:00 AM	23
4/4/01 1:31:00 PM	4	4/5/01 7:20:00 AM	32	4/5/01 7:55:00 AM	29	4/5/01 8:30:00 AM	22
4/4/01 1:32:00 PM	4	4/5/01 7:21:00 AM	26	4/5/01 7:56:00 AM	35	4/5/01 8:31:00 AM	19
4/4/01 1:33:00 PM	4	4/5/01 7:22:00 AM	24	4/5/01 7:57:00 AM	28	4/5/01 8:32:00 AM	15
4/4/01 1:34:00 PM	5	4/5/01 7:23:00 AM	28	4/5/01 7:58:00 AM	29	4/5/01 8:33:00 AM	15
4/4/01 1:35:00 PM	6	4/5/01 7:24:00 AM	29	4/5/01 7:59:00 AM	29	4/5/01 8:34:00 AM	12
4/4/01 1:36:00 PM	5	4/5/01 7:25:00 AM	26	4/5/01 8:00:00 AM	27	4/5/01 8:35:00 AM	15
4/4/01 1:37:00 PM	4	4/5/01 7:26:00 AM	26	4/5/01 8:01:00 AM	25	4/5/01 8:36:00 AM	14
4/4/01 1:38:00 PM	5	4/5/01 7:27:00 AM	84	4/5/01 8:02:00 AM	25	4/5/01 8:37:00 AM	15
4/4/01 1:39:00 PM	4	4/5/01 7:28:00 AM	93	4/5/01 8:03:00 AM	23	4/5/01 8:38:00 AM	12
4/4/01 1:40:00 PM	4	4/5/01 7:29:00 AM	62	4/5/01 8:04:00 AM	26	4/5/01 8:39:00 AM	10
4/4/01 1:41:00 PM	4	4/5/01 7:30:00 AM	31	4/5/01 8:05:00 AM	27	4/5/01 8:40:00 AM	11
4/4/01 1:42:00 PM	4	4/5/01 7:31:00 AM	32	4/5/01 8:06:00 AM	25	4/5/01 8:41:00 AM	12
4/4/01 1:43:00 PM	5	4/5/01 7:32:00 AM	27	4/5/01 8:07:00 AM	24	4/5/01 8:42:00 AM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/5/01 8:43:00 AM	10	4/5/01 9:18:00 AM	16	4/5/01 9:53:00 AM	10	4/5/01 10:28:00 AM	7
4/5/01 8:44:00 AM	10	4/5/01 9:19:00 AM	8	4/5/01 9:54:00 AM	9	4/5/01 10:29:00 AM	8
4/5/01 8:45:00 AM	12	4/5/01 9:20:00 AM	10	4/5/01 9:55:00 AM	10	4/5/01 10:30:00 AM	6
4/5/01 8:46:00 AM	10	4/5/01 9:21:00 AM	8	4/5/01 9:56:00 AM	13	4/5/01 10:31:00 AM	6
4/5/01 8:47:00 AM	11	4/5/01 9:22:00 AM	9	4/5/01 9:57:00 AM	34	4/5/01 10:32:00 AM	5
4/5/01 8:48:00 AM	12	4/5/01 9:23:00 AM	10	4/5/01 9:58:00 AM	13	4/5/01 10:33:00 AM	7
4/5/01 8:49:00 AM	13	4/5/01 9:24:00 AM	13	4/5/01 9:59:00 AM	9	4/5/01 10:34:00 AM	8
4/5/01 8:50:00 AM	15	4/5/01 9:25:00 AM	9	4/5/01 10:00:00 AM	15	4/5/01 10:35:00 AM	38
4/5/01 8:51:00 AM	12	4/5/01 9:26:00 AM	9	4/5/01 10:01:00 AM	9	4/5/01 10:36:00 AM	11
4/5/01 8:52:00 AM	12	4/5/01 9:27:00 AM	9	4/5/01 10:02:00 AM	10	4/5/01 10:37:00 AM	16
4/5/01 8:53:00 AM	12	4/5/01 9:28:00 AM	23	4/5/01 10:03:00 AM	8	4/5/01 10:38:00 AM	14
4/5/01 8:54:00 AM	11	4/5/01 9:29:00 AM	24	4/5/01 10:04:00 AM	8	4/5/01 10:39:00 AM	8
4/5/01 8:55:00 AM	10	4/5/01 9:30:00 AM	23	4/5/01 10:05:00 AM	9	4/5/01 10:40:00 AM	7
4/5/01 8:56:00 AM	14	4/5/01 9:31:00 AM	39	4/5/01 10:06:00 AM	12	4/5/01 10:41:00 AM	6
4/5/01 8:57:00 AM	12	4/5/01 9:32:00 AM	22	4/5/01 10:07:00 AM	9	4/5/01 10:42:00 AM	5
4/5/01 8:58:00 AM	12	4/5/01 9:33:00 AM	60	4/5/01 10:08:00 AM	12	4/5/01 10:43:00 AM	7
4/5/01 8:59:00 AM	15	4/5/01 9:34:00 AM	30	4/5/01 10:09:00 AM	18	4/5/01 10:44:00 AM	8
4/5/01 9:00:00 AM	11	4/5/01 9:35:00 AM	11	4/5/01 10:10:00 AM	10	4/5/01 10:45:00 AM	11
4/5/01 9:01:00 AM	12	4/5/01 9:36:00 AM	12	4/5/01 10:11:00 AM	9	4/5/01 10:46:00 AM	6
4/5/01 9:02:00 AM	12	4/5/01 9:37:00 AM	34	4/5/01 10:12:00 AM	16	4/5/01 10:47:00 AM	6
4/5/01 9:03:00 AM	12	4/5/01 9:38:00 AM	18	4/5/01 10:13:00 AM	10	4/5/01 10:48:00 AM	6
4/5/01 9:04:00 AM	9	4/5/01 9:39:00 AM	25	4/5/01 10:14:00 AM	13	4/5/01 10:49:00 AM	7
4/5/01 9:05:00 AM	12	4/5/01 9:40:00 AM	10	4/5/01 10:15:00 AM	13	4/5/01 10:50:00 AM	8
4/5/01 9:06:00 AM	11	4/5/01 9:41:00 AM	12	4/5/01 10:16:00 AM	8	4/5/01 10:51:00 AM	12
4/5/01 9:07:00 AM	9	4/5/01 9:42:00 AM	14	4/5/01 10:17:00 AM	10	4/5/01 10:52:00 AM	8
4/5/01 9:08:00 AM	10	4/5/01 9:43:00 AM	12	4/5/01 10:18:00 AM	7	4/5/01 10:53:00 AM	14
4/5/01 9:09:00 AM	11	4/5/01 9:44:00 AM	9	4/5/01 10:19:00 AM	9	4/5/01 10:54:00 AM	11
4/5/01 9:10:00 AM	11	4/5/01 9:45:00 AM	10	4/5/01 10:20:00 AM	9	4/5/01 10:55:00 AM	12
4/5/01 9:11:00 AM	10	4/5/01 9:46:00 AM	18	4/5/01 10:21:00 AM	10	4/5/01 10:56:00 AM	8
4/5/01 9:12:00 AM	9	4/5/01 9:47:00 AM	13	4/5/01 10:22:00 AM	9	4/5/01 10:57:00 AM	19
4/5/01 9:13:00 AM	10	4/5/01 9:48:00 AM	10	4/5/01 10:23:00 AM	27	4/5/01 10:58:00 AM	17
4/5/01 9:14:00 AM	9	4/5/01 9:49:00 AM	9	4/5/01 10:24:00 AM	10	4/5/01 10:59:00 AM	13
4/5/01 9:15:00 AM	9	4/5/01 9:50:00 AM	8	4/5/01 10:25:00 AM	13	4/5/01 11:00:00 AM	10
4/5/01 9:16:00 AM	9	4/5/01 9:51:00 AM	16	4/5/01 10:26:00 AM	9	4/5/01 11:01:00 AM	7
4/5/01 9:17:00 AM	8	4/5/01 9:52:00 AM	10	4/5/01 10:27:00 AM	6	4/5/01 11:02:00 AM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/5/01 11:03:00 AM	11	4/5/01 11:38:00 AM	8	4/5/01 12:13:00 PM	8	4/5/01 12:48:00 PM	7
4/5/01 11:04:00 AM	7	4/5/01 11:39:00 AM	7	4/5/01 12:14:00 PM	12	4/5/01 12:49:00 PM	6
4/5/01 11:05:00 AM	8	4/5/01 11:40:00 AM	6	4/5/01 12:15:00 PM	18	4/5/01 12:50:00 PM	7
4/5/01 11:06:00 AM	15	4/5/01 11:41:00 AM	7	4/5/01 12:16:00 PM	17	4/5/01 12:51:00 PM	8
4/5/01 11:07:00 AM	9	4/5/01 11:42:00 AM	10	4/5/01 12:17:00 PM	8	4/5/01 12:52:00 PM	9
4/5/01 11:08:00 AM	21	4/5/01 11:43:00 AM	9	4/5/01 12:18:00 PM	7	4/5/01 12:53:00 PM	7
4/5/01 11:09:00 AM	15	4/5/01 11:44:00 AM	8	4/5/01 12:19:00 PM	9	4/5/01 12:54:00 PM	6
4/5/01 11:10:00 AM	7	4/5/01 11:45:00 AM	12	4/5/01 12:20:00 PM	8	4/5/01 12:55:00 PM	10
4/5/01 11:11:00 AM	11	4/5/01 11:46:00 AM	6	4/5/01 12:21:00 PM	8	4/5/01 12:56:00 PM	7
4/5/01 11:12:00 AM	18	4/5/01 11:47:00 AM	8	4/5/01 12:22:00 PM	8	4/5/01 12:57:00 PM	6
4/5/01 11:13:00 AM	10	4/5/01 11:48:00 AM	9	4/5/01 12:23:00 PM	13	4/5/01 12:58:00 PM	7
4/5/01 11:14:00 AM	30	4/5/01 11:49:00 AM	14	4/5/01 12:24:00 PM	7	4/5/01 12:59:00 PM	6
4/5/01 11:15:00 AM	26	4/5/01 11:50:00 AM	20	4/5/01 12:25:00 PM	9	4/5/01 1:00:00 PM	6
4/5/01 11:16:00 AM	12	4/5/01 11:51:00 AM	14	4/5/01 12:26:00 PM	7	4/5/01 1:01:00 PM	7
4/5/01 11:17:00 AM	49	4/5/01 11:52:00 AM	10	4/5/01 12:27:00 PM	8	4/5/01 1:02:00 PM	7
4/5/01 11:18:00 AM	8	4/5/01 11:53:00 AM	16	4/5/01 12:28:00 PM	8	4/5/01 1:03:00 PM	6
4/5/01 11:19:00 AM	12	4/5/01 11:54:00 AM	12	4/5/01 12:29:00 PM	12	4/5/01 1:04:00 PM	6
4/5/01 11:20:00 AM	9	4/5/01 11:55:00 AM	13	4/5/01 12:30:00 PM	8	4/5/01 1:05:00 PM	15
4/5/01 11:21:00 AM	15	4/5/01 11:56:00 AM	38	4/5/01 12:31:00 PM	7	4/5/01 1:06:00 PM	16
4/5/01 11:22:00 AM	7	4/5/01 11:57:00 AM	14	4/5/01 12:32:00 PM	8	4/5/01 1:07:00 PM	11
4/5/01 11:23:00 AM	8	4/5/01 11:58:00 AM	10	4/5/01 12:33:00 PM	7	4/5/01 1:08:00 PM	4
4/5/01 11:24:00 AM	10	4/5/01 11:59:00 AM	8	4/5/01 12:34:00 PM	7	4/5/01 1:09:00 PM	6
4/5/01 11:25:00 AM	8	4/5/01 12:00:00 PM	9	4/5/01 12:35:00 PM	23	4/5/01 1:10:00 PM	7
4/5/01 11:26:00 AM	9	4/5/01 12:01:00 PM	9	4/5/01 12:36:00 PM	6	4/5/01 1:11:00 PM	7
4/5/01 11:27:00 AM	7	4/5/01 12:02:00 PM	11	4/5/01 12:37:00 PM	10	4/5/01 1:12:00 PM	6
4/5/01 11:28:00 AM	21	4/5/01 12:03:00 PM	8	4/5/01 12:38:00 PM	6	4/5/01 1:13:00 PM	7
4/5/01 11:29:00 AM	40	4/5/01 12:04:00 PM	10	4/5/01 12:39:00 PM	6	4/5/01 1:14:00 PM	13
4/5/01 11:30:00 AM	13	4/5/01 12:05:00 PM	11	4/5/01 12:40:00 PM	6	4/5/01 1:15:00 PM	11
4/5/01 11:31:00 AM	66	4/5/01 12:06:00 PM	15	4/5/01 12:41:00 PM	39	4/5/01 1:16:00 PM	6
4/5/01 11:32:00 AM	20	4/5/01 12:07:00 PM	17	4/5/01 12:42:00 PM	7	4/5/01 1:17:00 PM	7
4/5/01 11:33:00 AM	12	4/5/01 12:08:00 PM	13	4/5/01 12:43:00 PM	6	4/5/01 1:18:00 PM	6
4/5/01 11:34:00 AM	14	4/5/01 12:09:00 PM	57	4/5/01 12:44:00 PM	6	4/5/01 1:19:00 PM	6
4/5/01 11:35:00 AM	11	4/5/01 12:10:00 PM	19	4/5/01 12:45:00 PM	11	4/5/01 1:20:00 PM	6
4/5/01 11:36:00 AM	9	4/5/01 12:11:00 PM	9	4/5/01 12:46:00 PM	10	4/5/01 1:21:00 PM	7
4/5/01 11:37:00 AM	10	4/5/01 12:12:00 PM	9	4/5/01 12:47:00 PM	6	4/5/01 1:22:00 PM	18

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/5/01 1:23:00 PM	24	4/5/01 1:58:00 PM	10	4/5/01 2:33:00 PM	10	4/6/01 9:05:00 AM	39
4/5/01 1:24:00 PM	27	4/5/01 1:59:00 PM	13	4/5/01 2:34:00 PM	9	4/6/01 9:06:00 AM	31
4/5/01 1:25:00 PM	8	4/5/01 2:00:00 PM	7	4/5/01 2:35:00 PM	17	4/6/01 9:07:00 AM	28
4/5/01 1:26:00 PM	7	4/5/01 2:01:00 PM	8	4/5/01 2:36:00 PM	17	4/6/01 9:08:00 AM	29
4/5/01 1:27:00 PM	6	4/5/01 2:02:00 PM	22	4/5/01 2:37:00 PM	8	4/6/01 9:09:00 AM	31
4/5/01 1:28:00 PM	6	4/5/01 2:03:00 PM	13	4/5/01 2:38:00 PM	8	4/6/01 9:10:00 AM	30
4/5/01 1:29:00 PM	6	4/5/01 2:04:00 PM	8	4/5/01 2:39:00 PM	16	4/6/01 9:11:00 AM	32
4/5/01 1:30:00 PM	6	4/5/01 2:05:00 PM	13	4/5/01 2:40:00 PM	10	4/6/01 9:12:00 AM	25
4/5/01 1:31:00 PM	10	4/5/01 2:06:00 PM	9	4/5/01 2:41:00 PM	29	4/6/01 9:13:00 AM	28
4/5/01 1:32:00 PM	7	4/5/01 2:07:00 PM	11	4/5/01 2:42:00 PM	9	4/6/01 9:14:00 AM	27
4/5/01 1:33:00 PM	6	4/5/01 2:08:00 PM	10	4/5/01 2:43:00 PM	39	4/6/01 9:15:00 AM	33
4/5/01 1:34:00 PM	7	4/5/01 2:09:00 PM	23	4/5/01 2:44:00 PM	21	4/6/01 9:16:00 AM	38
4/5/01 1:35:00 PM	6	4/5/01 2:10:00 PM	11	4/5/01 2:45:00 PM	8	4/6/01 9:17:00 AM	26
4/5/01 1:36:00 PM	15	4/5/01 2:11:00 PM	11	4/5/01 2:46:00 PM	9	4/6/01 9:18:00 AM	28
4/5/01 1:37:00 PM	7	4/5/01 2:12:00 PM	13	4/5/01 2:47:00 PM	9	4/6/01 9:19:00 AM	23
4/5/01 1:38:00 PM	5	4/5/01 2:13:00 PM	12	4/5/01 2:48:00 PM	7	4/6/01 9:20:00 AM	30
4/5/01 1:39:00 PM	5	4/5/01 2:14:00 PM	9	4/5/01 2:49:00 PM	10	4/6/01 9:21:00 AM	28
4/5/01 1:40:00 PM	10	4/5/01 2:15:00 PM	43	4/5/01 2:50:00 PM	13	4/6/01 9:22:00 AM	26
4/5/01 1:41:00 PM	8	4/5/01 2:16:00 PM	8	4/5/01 2:51:00 PM	12	4/6/01 9:23:00 AM	25
4/5/01 1:42:00 PM	5	4/5/01 2:17:00 PM	8	4/5/01 2:52:00 PM	8	4/6/01 9:24:00 AM	25
4/5/01 1:43:00 PM	7	4/5/01 2:18:00 PM	18	4/5/01 2:53:00 PM	7	4/6/01 9:25:00 AM	39
4/5/01 1:44:00 PM	6	4/5/01 2:19:00 PM	17	4/6/01 8:51:00 AM	31	4/6/01 9:26:00 AM	28
4/5/01 1:45:00 PM	10	4/5/01 2:20:00 PM	9	4/6/01 8:52:00 AM	26	4/6/01 9:27:00 AM	26
4/5/01 1:46:00 PM	6	4/5/01 2:21:00 PM	12	4/6/01 8:53:00 AM	28	4/6/01 9:28:00 AM	23
4/5/01 1:47:00 PM	6	4/5/01 2:22:00 PM	33	4/6/01 8:54:00 AM	44	4/6/01 9:29:00 AM	27
4/5/01 1:48:00 PM	7	4/5/01 2:23:00 PM	35	4/6/01 8:55:00 AM	30	4/6/01 9:30:00 AM	28
4/5/01 1:49:00 PM	7	4/5/01 2:24:00 PM	29	4/6/01 8:56:00 AM	35	4/6/01 9:31:00 AM	31
4/5/01 1:50:00 PM	20	4/5/01 2:25:00 PM	10	4/6/01 8:57:00 AM	29	4/6/01 9:32:00 AM	24
4/5/01 1:51:00 PM	8	4/5/01 2:26:00 PM	9	4/6/01 8:58:00 AM	47	4/6/01 9:33:00 AM	24
4/5/01 1:52:00 PM	15	4/5/01 2:27:00 PM	8	4/6/01 8:59:00 AM	199	4/6/01 9:34:00 AM	28
4/5/01 1:53:00 PM	18	4/5/01 2:28:00 PM	12	4/6/01 9:00:00 AM	32	4/6/01 9:35:00 AM	33
4/5/01 1:54:00 PM	15	4/5/01 2:29:00 PM	13	4/6/01 9:01:00 AM	25	4/6/01 9:36:00 AM	26
4/5/01 1:55:00 PM	16	4/5/01 2:30:00 PM	11	4/6/01 9:02:00 AM	30	4/6/01 9:37:00 AM	30
4/5/01 1:56:00 PM	8	4/5/01 2:31:00 PM	16	4/6/01 9:03:00 AM	28	4/9/01 7:23:00 AM	56
4/5/01 1:57:00 PM	21	4/5/01 2:32:00 PM	59	4/6/01 9:04:00 AM	34	4/9/01 7:24:00 AM	56

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/9/01 7:25:00 AM	60	4/9/01 8:00:00 AM	27	4/9/01 8:47:00 AM	4	4/9/01 9:22:00 AM	3
4/9/01 7:26:00 AM	77	4/9/01 8:01:00 AM	27	4/9/01 8:48:00 AM	3	4/9/01 9:23:00 AM	5
4/9/01 7:27:00 AM	62	4/9/01 8:02:00 AM	23	4/9/01 8:49:00 AM	3	4/9/01 9:24:00 AM	4
4/9/01 7:28:00 AM	54	4/9/01 8:03:00 AM	24	4/9/01 8:50:00 AM	6	4/9/01 9:25:00 AM	5
4/9/01 7:29:00 AM	54	4/9/01 8:04:00 AM	21	4/9/01 8:51:00 AM	4	4/9/01 9:26:00 AM	4
4/9/01 7:30:00 AM	54	4/9/01 8:05:00 AM	27	4/9/01 8:52:00 AM	4	4/9/01 9:27:00 AM	3
4/9/01 7:31:00 AM	49	4/9/01 8:06:00 AM	22	4/9/01 8:53:00 AM	4	4/9/01 9:28:00 AM	6
4/9/01 7:32:00 AM	60	4/9/01 8:07:00 AM	23	4/9/01 8:54:00 AM	5	4/9/01 9:29:00 AM	5
4/9/01 7:33:00 AM	48	4/9/01 8:08:00 AM	25	4/9/01 8:55:00 AM	4	4/9/01 9:30:00 AM	4
4/9/01 7:34:00 AM	53	4/9/01 8:09:00 AM	21	4/9/01 8:56:00 AM	4	4/9/01 9:31:00 AM	4
4/9/01 7:35:00 AM	57	4/9/01 8:10:00 AM	59	4/9/01 8:57:00 AM	3	4/9/01 9:32:00 AM	5
4/9/01 7:36:00 AM	62	4/9/01 8:11:00 AM	10	4/9/01 8:58:00 AM	4	4/9/01 9:33:00 AM	4
4/9/01 7:37:00 AM	68	4/9/01 8:12:00 AM	20	4/9/01 8:59:00 AM	5	4/9/01 9:34:00 AM	5
4/9/01 7:38:00 AM	54	4/9/01 8:13:00 AM	18	4/9/01 9:00:00 AM	3	4/9/01 9:35:00 AM	5
4/9/01 7:39:00 AM	42	4/9/01 8:14:00 AM	10	4/9/01 9:01:00 AM	4	4/9/01 9:36:00 AM	5
4/9/01 7:40:00 AM	41	4/9/01 8:15:00 AM	12	4/9/01 9:02:00 AM	5	4/9/01 9:37:00 AM	5
4/9/01 7:41:00 AM	42	4/9/01 8:16:00 AM	11	4/9/01 9:03:00 AM	6	4/9/01 9:38:00 AM	5
4/9/01 7:42:00 AM	41	4/9/01 8:17:00 AM	7	4/9/01 9:04:00 AM	5	4/9/01 9:39:00 AM	5
4/9/01 7:43:00 AM	38	4/9/01 8:18:00 AM	10	4/9/01 9:05:00 AM	5	4/9/01 9:40:00 AM	5
4/9/01 7:44:00 AM	38	4/9/01 8:19:00 AM	28	4/9/01 9:06:00 AM	6	4/9/01 9:41:00 AM	4
4/9/01 7:45:00 AM	45	4/9/01 8:20:00 AM	8	4/9/01 9:07:00 AM	6	4/9/01 9:42:00 AM	4
4/9/01 7:46:00 AM	35	4/9/01 8:21:00 AM	12	4/9/01 9:08:00 AM	5	4/9/01 9:43:00 AM	4
4/9/01 7:47:00 AM	36	4/9/01 8:22:00 AM	8	4/9/01 9:09:00 AM	4	4/9/01 9:44:00 AM	4
4/9/01 7:48:00 AM	36	4/9/01 8:35:00 AM	6	4/9/01 9:10:00 AM	6	4/9/01 9:45:00 AM	5
4/9/01 7:49:00 AM	31	4/9/01 8:36:00 AM	7	4/9/01 9:11:00 AM	4	4/9/01 9:46:00 AM	4
4/9/01 7:50:00 AM	35	4/9/01 8:37:00 AM	5	4/9/01 9:12:00 AM	5	4/9/01 9:47:00 AM	4
4/9/01 7:51:00 AM	28	4/9/01 8:38:00 AM	7	4/9/01 9:13:00 AM	6	4/9/01 9:48:00 AM	4
4/9/01 7:52:00 AM	31	4/9/01 8:39:00 AM	7	4/9/01 9:14:00 AM	6	4/9/01 9:49:00 AM	5
4/9/01 7:53:00 AM	28	4/9/01 8:40:00 AM	10	4/9/01 9:15:00 AM	5	4/9/01 9:50:00 AM	6
4/9/01 7:54:00 AM	30	4/9/01 8:41:00 AM	6	4/9/01 9:16:00 AM	5	4/9/01 9:51:00 AM	6
4/9/01 7:55:00 AM	31	4/9/01 8:42:00 AM	16	4/9/01 9:17:00 AM	5	4/9/01 9:52:00 AM	4
4/9/01 7:56:00 AM	29	4/9/01 8:43:00 AM	5	4/9/01 9:18:00 AM	4	4/9/01 9:53:00 AM	5
4/9/01 7:57:00 AM	26	4/9/01 8:44:00 AM	4	4/9/01 9:19:00 AM	6	4/9/01 9:54:00 AM	5
4/9/01 7:58:00 AM	27	4/9/01 8:45:00 AM	10	4/9/01 9:20:00 AM	6	4/9/01 9:55:00 AM	4
4/9/01 7:59:00 AM	27	4/9/01 8:46:00 AM	6	4/9/01 9:21:00 AM	7	4/9/01 9:56:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/9/01 9:57:00 AM	4	4/9/01 10:32:00 AM	5	4/9/01 11:07:00 AM	2	4/9/01 1:25:00 PM	1
4/9/01 9:58:00 AM	4	4/9/01 10:33:00 AM	4	4/9/01 11:08:00 AM	4	4/9/01 1:26:00 PM	2
4/9/01 9:59:00 AM	5	4/9/01 10:34:00 AM	5	4/9/01 11:09:00 AM	5	4/9/01 1:27:00 PM	2
4/9/01 10:00:00 AM	5	4/9/01 10:35:00 AM	4	4/9/01 11:10:00 AM	7	4/9/01 1:28:00 PM	3
4/9/01 10:01:00 AM	4	4/9/01 10:36:00 AM	4	4/9/01 11:11:00 AM	4	4/9/01 1:29:00 PM	2
4/9/01 10:02:00 AM	6	4/9/01 10:37:00 AM	3	4/9/01 11:12:00 AM	4	4/9/01 1:30:00 PM	3
4/9/01 10:03:00 AM	4	4/9/01 10:38:00 AM	3	4/9/01 11:13:00 AM	7	4/9/01 1:31:00 PM	2
4/9/01 10:04:00 AM	3	4/9/01 10:39:00 AM	3	4/9/01 11:14:00 AM	4	4/9/01 1:32:00 PM	4
4/9/01 10:05:00 AM	4	4/9/01 10:40:00 AM	6	4/9/01 11:15:00 AM	3	4/9/01 1:33:00 PM	1
4/9/01 10:06:00 AM	6	4/9/01 10:41:00 AM	4	4/9/01 11:16:00 AM	3	4/9/01 1:34:00 PM	9
4/9/01 10:07:00 AM	5	4/9/01 10:42:00 AM	4	4/9/01 11:17:00 AM	5	4/9/01 1:35:00 PM	4
4/9/01 10:08:00 AM	5	4/9/01 10:43:00 AM	4	4/9/01 11:18:00 AM	3	4/9/01 1:36:00 PM	3
4/9/01 10:09:00 AM	6	4/9/01 10:44:00 AM	4	4/9/01 11:19:00 AM	4	4/9/01 1:37:00 PM	2
4/9/01 10:10:00 AM	4	4/9/01 10:45:00 AM	5	4/9/01 11:20:00 AM	2	4/9/01 1:38:00 PM	3
4/9/01 10:11:00 AM	4	4/9/01 10:46:00 AM	4	4/9/01 11:21:00 AM	3	4/9/01 1:39:00 PM	4
4/9/01 10:12:00 AM	4	4/9/01 10:47:00 AM	5	4/9/01 11:22:00 AM	4	4/9/01 1:40:00 PM	3
4/9/01 10:13:00 AM	4	4/9/01 10:48:00 AM	4	4/9/01 11:23:00 AM	3	4/9/01 1:41:00 PM	3
4/9/01 10:14:00 AM	3	4/9/01 10:49:00 AM	3	4/9/01 11:24:00 AM	4	4/9/01 1:42:00 PM	2
4/9/01 10:15:00 AM	4	4/9/01 10:50:00 AM	7	4/9/01 11:25:00 AM	3	4/9/01 1:43:00 PM	2
4/9/01 10:16:00 AM	3	4/9/01 10:51:00 AM	4	4/9/01 11:26:00 AM	2	4/9/01 1:44:00 PM	3
4/9/01 10:17:00 AM	4	4/9/01 10:52:00 AM	5	4/9/01 11:27:00 AM	4	4/9/01 1:45:00 PM	3
4/9/01 10:18:00 AM	7	4/9/01 10:53:00 AM	5	4/9/01 11:28:00 AM	3	4/9/01 1:46:00 PM	4
4/9/01 10:19:00 AM	4	4/9/01 10:54:00 AM	5	4/9/01 11:29:00 AM	3	4/9/01 1:47:00 PM	2
4/9/01 10:20:00 AM	4	4/9/01 10:55:00 AM	6	4/9/01 11:30:00 AM	5	4/9/01 1:48:00 PM	2
4/9/01 10:21:00 AM	3	4/9/01 10:56:00 AM	6	4/9/01 11:31:00 AM	5	4/9/01 1:49:00 PM	4
4/9/01 10:22:00 AM	5	4/9/01 10:57:00 AM	7	4/9/01 11:32:00 AM	3	4/9/01 1:50:00 PM	4
4/9/01 10:23:00 AM	9	4/9/01 10:58:00 AM	6	4/9/01 11:33:00 AM	4	4/9/01 1:51:00 PM	4
4/9/01 10:24:00 AM	5	4/9/01 10:59:00 AM	5	4/9/01 11:34:00 AM	2	4/9/01 1:52:00 PM	4
4/9/01 10:25:00 AM	4	4/9/01 11:00:00 AM	4	4/9/01 11:35:00 AM	3	4/9/01 1:53:00 PM	5
4/9/01 10:26:00 AM	4	4/9/01 11:01:00 AM	6	4/9/01 11:36:00 AM	3	4/9/01 1:54:00 PM	5
4/9/01 10:27:00 AM	5	4/9/01 11:02:00 AM	4	4/9/01 11:37:00 AM	3	4/9/01 1:55:00 PM	5
4/9/01 10:28:00 AM	5	4/9/01 11:03:00 AM	4	4/9/01 11:38:00 AM	12	4/9/01 1:56:00 PM	4
4/9/01 10:29:00 AM	5	4/9/01 11:04:00 AM	8	4/9/01 11:39:00 AM	4	4/9/01 1:57:00 PM	3
4/9/01 10:30:00 AM	3	4/9/01 11:05:00 AM	5	4/9/01 11:40:00 AM	2	4/9/01 1:58:00 PM	3
4/9/01 10:31:00 AM	4	4/9/01 11:06:00 AM	4	4/9/01 1:24:00 PM	2	4/9/01 1:59:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/9/01 2:00:00 PM	2	4/9/01 2:35:00 PM	3	4/9/01 3:10:00 PM	3	4/10/01 10:43:00 AM	4
4/9/01 2:01:00 PM	3	4/9/01 2:36:00 PM	2	4/9/01 3:11:00 PM	3	4/10/01 10:44:00 AM	5
4/9/01 2:02:00 PM	3	4/9/01 2:37:00 PM	3	4/9/01 3:12:00 PM	4	4/10/01 10:45:00 AM	7
4/9/01 2:03:00 PM	4	4/9/01 2:38:00 PM	3	4/9/01 3:13:00 PM	3	4/10/01 10:46:00 AM	5
4/9/01 2:04:00 PM	3	4/9/01 2:39:00 PM	2	4/9/01 3:14:00 PM	3	4/10/01 10:47:00 AM	6
4/9/01 2:05:00 PM	5	4/9/01 2:40:00 PM	2	4/9/01 3:15:00 PM	2	4/10/01 10:48:00 AM	6
4/9/01 2:06:00 PM	3	4/9/01 2:41:00 PM	3	4/9/01 3:16:00 PM	2	4/10/01 10:49:00 AM	5
4/9/01 2:07:00 PM	5	4/9/01 2:42:00 PM	2	4/9/01 3:17:00 PM	5	4/10/01 10:50:00 AM	5
4/9/01 2:08:00 PM	4	4/9/01 2:43:00 PM	4	4/9/01 3:18:00 PM	4	4/10/01 10:51:00 AM	5
4/9/01 2:09:00 PM	4	4/9/01 2:44:00 PM	3	4/10/01 10:17:00 AM	12	4/10/01 10:52:00 AM	6
4/9/01 2:10:00 PM	4	4/9/01 2:45:00 PM	4	4/10/01 10:18:00 AM	11	4/10/01 10:53:00 AM	6
4/9/01 2:11:00 PM	4	4/9/01 2:46:00 PM	6	4/10/01 10:19:00 AM	10	4/10/01 10:54:00 AM	6
4/9/01 2:12:00 PM	3	4/9/01 2:47:00 PM	6	4/10/01 10:20:00 AM	12	4/10/01 10:55:00 AM	5
4/9/01 2:13:00 PM	3	4/9/01 2:48:00 PM	8	4/10/01 10:21:00 AM	13	4/10/01 10:56:00 AM	9
4/9/01 2:14:00 PM	3	4/9/01 2:49:00 PM	3	4/10/01 10:22:00 AM	5	4/10/01 10:57:00 AM	7
4/9/01 2:15:00 PM	3	4/9/01 2:50:00 PM	3	4/10/01 10:23:00 AM	6	4/10/01 10:58:00 AM	4
4/9/01 2:16:00 PM	2	4/9/01 2:51:00 PM	4	4/10/01 10:24:00 AM	6	4/10/01 10:59:00 AM	4
4/9/01 2:17:00 PM	7	4/9/01 2:52:00 PM	3	4/10/01 10:25:00 AM	6	4/10/01 11:00:00 AM	5
4/9/01 2:18:00 PM	5	4/9/01 2:53:00 PM	4	4/10/01 10:26:00 AM	7	4/10/01 11:01:00 AM	8
4/9/01 2:19:00 PM	4	4/9/01 2:54:00 PM	3	4/10/01 10:27:00 AM	4	4/10/01 11:02:00 AM	6
4/9/01 2:20:00 PM	4	4/9/01 2:55:00 PM	5	4/10/01 10:28:00 AM	5	4/10/01 11:03:00 AM	8
4/9/01 2:21:00 PM	2	4/9/01 2:56:00 PM	3	4/10/01 10:29:00 AM	5	4/10/01 11:04:00 AM	6
4/9/01 2:22:00 PM	4	4/9/01 2:57:00 PM	3	4/10/01 10:30:00 AM	7	4/10/01 11:05:00 AM	7
4/9/01 2:23:00 PM	5	4/9/01 2:58:00 PM	4	4/10/01 10:31:00 AM	6	4/10/01 11:06:00 AM	6
4/9/01 2:24:00 PM	8	4/9/01 2:59:00 PM	3	4/10/01 10:32:00 AM	5	4/10/01 11:07:00 AM	7
4/9/01 2:25:00 PM	4	4/9/01 3:00:00 PM	3	4/10/01 10:33:00 AM	6	4/10/01 11:08:00 AM	6
4/9/01 2:26:00 PM	3	4/9/01 3:01:00 PM	2	4/10/01 10:34:00 AM	5	4/10/01 11:09:00 AM	4
4/9/01 2:27:00 PM	4	4/9/01 3:02:00 PM	5	4/10/01 10:35:00 AM	5	4/10/01 11:10:00 AM	5
4/9/01 2:28:00 PM	7	4/9/01 3:03:00 PM	2	4/10/01 10:36:00 AM	9	4/10/01 11:11:00 AM	5
4/9/01 2:29:00 PM	4	4/9/01 3:04:00 PM	3	4/10/01 10:37:00 AM	5	4/10/01 11:12:00 AM	7
4/9/01 2:30:00 PM	3	4/9/01 3:05:00 PM	4	4/10/01 10:38:00 AM	9	4/10/01 11:13:00 AM	10
4/9/01 2:31:00 PM	5	4/9/01 3:06:00 PM	3	4/10/01 10:39:00 AM	6	4/10/01 11:14:00 AM	4
4/9/01 2:32:00 PM	4	4/9/01 3:07:00 PM	2	4/10/01 10:40:00 AM	5	4/10/01 11:15:00 AM	6
4/9/01 2:33:00 PM	3	4/9/01 3:08:00 PM	3	4/10/01 10:41:00 AM	5	4/10/01 11:16:00 AM	6
4/9/01 2:34:00 PM	2	4/9/01 3:09:00 PM	3	4/10/01 10:42:00 AM	3	4/10/01 11:17:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/10/01 11:18:00 AM	7	4/10/01 11:53:00 AM	8	4/10/01 12:28:00 PM	7	4/11/01 12:35:00 PM	7
4/10/01 11:19:00 AM	6	4/10/01 11:54:00 AM	7	4/10/01 12:29:00 PM	9	4/11/01 12:36:00 PM	10
4/10/01 11:20:00 AM	6	4/10/01 11:55:00 AM	5	4/10/01 12:30:00 PM	7	4/11/01 12:37:00 PM	11
4/10/01 11:21:00 AM	8	4/10/01 11:56:00 AM	6	4/10/01 12:31:00 PM	6	4/11/01 12:38:00 PM	10
4/10/01 11:22:00 AM	6	4/10/01 11:57:00 AM	6	4/10/01 12:32:00 PM	9	4/11/01 12:39:00 PM	7
4/10/01 11:23:00 AM	8	4/10/01 11:58:00 AM	7	4/10/01 12:33:00 PM	9	4/11/01 12:40:00 PM	10
4/10/01 11:24:00 AM	4	4/10/01 11:59:00 AM	6	4/10/01 12:34:00 PM	6	4/11/01 12:41:00 PM	12
4/10/01 11:25:00 AM	8	4/10/01 12:00:00 PM	5	4/10/01 12:35:00 PM	7	4/11/01 12:42:00 PM	12
4/10/01 11:26:00 AM	7	4/10/01 12:01:00 PM	8	4/10/01 12:36:00 PM	8	4/11/01 12:43:00 PM	9
4/10/01 11:27:00 AM	10	4/10/01 12:02:00 PM	5	4/10/01 12:37:00 PM	6	4/11/01 12:44:00 PM	12
4/10/01 11:28:00 AM	10	4/10/01 12:03:00 PM	6	4/10/01 12:38:00 PM	6	4/11/01 12:45:00 PM	7
4/10/01 11:29:00 AM	9	4/10/01 12:04:00 PM	7	4/10/01 12:39:00 PM	6	4/11/01 12:46:00 PM	106
4/10/01 11:30:00 AM	9	4/10/01 12:05:00 PM	10	4/10/01 12:40:00 PM	7	4/11/01 12:47:00 PM	11
4/10/01 11:31:00 AM	9	4/10/01 12:06:00 PM	5	4/10/01 12:41:00 PM	6	4/11/01 12:48:00 PM	8
4/10/01 11:32:00 AM	4	4/10/01 12:07:00 PM	6	4/10/01 12:42:00 PM	6	4/11/01 12:49:00 PM	12
4/10/01 11:33:00 AM	5	4/10/01 12:08:00 PM	8	4/10/01 12:43:00 PM	8	4/11/01 12:50:00 PM	8
4/10/01 11:34:00 AM	4	4/10/01 12:09:00 PM	3	4/10/01 12:44:00 PM	8	4/11/01 12:51:00 PM	9
4/10/01 11:35:00 AM	7	4/10/01 12:10:00 PM	5	4/10/01 12:45:00 PM	9	4/11/01 12:52:00 PM	17
4/10/01 11:36:00 AM	6	4/10/01 12:11:00 PM	10	4/10/01 12:46:00 PM	7	4/11/01 12:53:00 PM	27
4/10/01 11:37:00 AM	7	4/10/01 12:12:00 PM	6	4/10/01 12:47:00 PM	5	4/11/01 12:54:00 PM	23
4/10/01 11:38:00 AM	16	4/10/01 12:13:00 PM	8	4/10/01 12:48:00 PM	9	4/11/01 12:55:00 PM	13
4/10/01 11:39:00 AM	10	4/10/01 12:14:00 PM	9	4/10/01 12:49:00 PM	10	4/11/01 12:56:00 PM	10
4/10/01 11:40:00 AM	8	4/10/01 12:15:00 PM	5	4/10/01 12:50:00 PM	7	4/11/01 12:57:00 PM	10
4/10/01 11:41:00 AM	7	4/10/01 12:16:00 PM	7	4/10/01 12:51:00 PM	10	4/11/01 12:58:00 PM	15
4/10/01 11:42:00 AM	8	4/10/01 12:17:00 PM	9	4/10/01 12:52:00 PM	8	4/11/01 12:59:00 PM	36
4/10/01 11:43:00 AM	8	4/10/01 12:18:00 PM	9	4/10/01 12:53:00 PM	6	4/11/01 1:00:00 PM	21
4/10/01 11:44:00 AM	10	4/10/01 12:19:00 PM	8	4/10/01 12:54:00 PM	7	4/11/01 1:01:00 PM	10
4/10/01 11:45:00 AM	8	4/10/01 12:20:00 PM	6	4/10/01 12:55:00 PM	11	4/11/01 1:02:00 PM	11
4/10/01 11:46:00 AM	9	4/10/01 12:21:00 PM	7	4/10/01 12:56:00 PM	8	4/11/01 1:03:00 PM	8
4/10/01 11:47:00 AM	7	4/10/01 12:22:00 PM	6	4/10/01 12:57:00 PM	6	4/11/01 1:04:00 PM	11
4/10/01 11:48:00 AM	8	4/10/01 12:23:00 PM	7	4/11/01 12:30:00 PM	10	4/11/01 1:05:00 PM	18
4/10/01 11:49:00 AM	6	4/10/01 12:24:00 PM	9	4/11/01 12:31:00 PM	12	4/11/01 1:06:00 PM	17
4/10/01 11:50:00 AM	6	4/10/01 12:25:00 PM	7	4/11/01 12:32:00 PM	6	4/11/01 1:07:00 PM	10
4/10/01 11:51:00 AM	6	4/10/01 12:26:00 PM	5	4/11/01 12:33:00 PM	10	4/11/01 1:08:00 PM	12
4/10/01 11:52:00 AM	7	4/10/01 12:27:00 PM	6	4/11/01 12:34:00 PM	11	4/11/01 1:09:00 PM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/11/01 1:10:00 PM	9	4/11/01 1:45:00 PM	14	4/13/01 11:43:00 AM	6	4/13/01 12:18:00 PM	11
4/11/01 1:11:00 PM	8	4/11/01 1:46:00 PM	27	4/13/01 11:44:00 AM	7	4/13/01 12:19:00 PM	12
4/11/01 1:12:00 PM	11	4/11/01 1:47:00 PM	14	4/13/01 11:45:00 AM	5	4/13/01 12:20:00 PM	8
4/11/01 1:13:00 PM	9	4/11/01 1:48:00 PM	14	4/13/01 11:46:00 AM	6	4/13/01 12:21:00 PM	4
4/11/01 1:14:00 PM	20	4/11/01 1:49:00 PM	12	4/13/01 11:47:00 AM	6	4/13/01 12:22:00 PM	5
4/11/01 1:15:00 PM	17	4/11/01 1:50:00 PM	9	4/13/01 11:48:00 AM	6	4/13/01 12:23:00 PM	5
4/11/01 1:16:00 PM	13	4/11/01 1:51:00 PM	22	4/13/01 11:49:00 AM	5	4/13/01 12:24:00 PM	4
4/11/01 1:17:00 PM	13	4/11/01 1:52:00 PM	16	4/13/01 11:50:00 AM	7	4/13/01 12:25:00 PM	4
4/11/01 1:18:00 PM	15	4/11/01 1:53:00 PM	16	4/13/01 11:51:00 AM	4	4/13/01 12:26:00 PM	16
4/11/01 1:19:00 PM	10	4/11/01 1:54:00 PM	10	4/13/01 11:52:00 AM	6	4/13/01 12:27:00 PM	6
4/11/01 1:20:00 PM	19	4/11/01 1:55:00 PM	10	4/13/01 11:53:00 AM	6	4/13/01 12:28:00 PM	3
4/11/01 1:21:00 PM	17	4/11/01 1:56:00 PM	43	4/13/01 11:54:00 AM	6	4/13/01 12:29:00 PM	4
4/11/01 1:22:00 PM	11	4/11/01 1:57:00 PM	14	4/13/01 11:55:00 AM	6	4/13/01 12:30:00 PM	7
4/11/01 1:23:00 PM	15	4/11/01 1:58:00 PM	24	4/13/01 11:56:00 AM	3	4/13/01 12:31:00 PM	5
4/11/01 1:24:00 PM	9	4/11/01 1:59:00 PM	9	4/13/01 11:57:00 AM	4	4/13/01 12:32:00 PM	4
4/11/01 1:25:00 PM	10	4/11/01 2:00:00 PM	14	4/13/01 11:58:00 AM	4	4/13/01 12:33:00 PM	4
4/11/01 1:26:00 PM	15	4/11/01 2:01:00 PM	13	4/13/01 11:59:00 AM	4	4/13/01 12:34:00 PM	3
4/11/01 1:27:00 PM	9	4/11/01 2:02:00 PM	11	4/13/01 12:00:00 PM	4	4/13/01 12:35:00 PM	4
4/11/01 1:28:00 PM	11	4/11/01 2:03:00 PM	18	4/13/01 12:01:00 PM	7	4/13/01 12:36:00 PM	12
4/11/01 1:29:00 PM	13	4/11/01 2:04:00 PM	32	4/13/01 12:02:00 PM	4	4/13/01 12:37:00 PM	7
4/11/01 1:30:00 PM	12	4/11/01 2:05:00 PM	16	4/13/01 12:03:00 PM	3	4/13/01 12:38:00 PM	6
4/11/01 1:31:00 PM	10	4/11/01 2:06:00 PM	21	4/13/01 12:04:00 PM	5	4/13/01 12:39:00 PM	5
4/11/01 1:32:00 PM	10	4/11/01 2:07:00 PM	20	4/13/01 12:05:00 PM	5	4/13/01 12:40:00 PM	4
4/11/01 1:33:00 PM	13	4/11/01 2:08:00 PM	11	4/13/01 12:06:00 PM	4	4/13/01 12:41:00 PM	8
4/11/01 1:34:00 PM	13	4/11/01 2:09:00 PM	16	4/13/01 12:07:00 PM	5	4/13/01 12:42:00 PM	5
4/11/01 1:35:00 PM	9	4/11/01 2:10:00 PM	24	4/13/01 12:08:00 PM	4	4/13/01 12:43:00 PM	4
4/11/01 1:36:00 PM	19	4/13/01 11:34:00 AM	9	4/13/01 12:09:00 PM	5	4/13/01 12:44:00 PM	6
4/11/01 1:37:00 PM	14	4/13/01 11:35:00 AM	7	4/13/01 12:10:00 PM	4	4/13/01 12:45:00 PM	3
4/11/01 1:38:00 PM	11	4/13/01 11:36:00 AM	4	4/13/01 12:11:00 PM	4	4/13/01 12:46:00 PM	4
4/11/01 1:39:00 PM	14	4/13/01 11:37:00 AM	5	4/13/01 12:12:00 PM	6	4/13/01 12:47:00 PM	7
4/11/01 1:40:00 PM	13	4/13/01 11:38:00 AM	10	4/13/01 12:13:00 PM	8	4/13/01 12:48:00 PM	6
4/11/01 1:41:00 PM	13	4/13/01 11:39:00 AM	6	4/13/01 12:14:00 PM	5	4/13/01 12:49:00 PM	5
4/11/01 1:42:00 PM	14	4/13/01 11:40:00 AM	6	4/13/01 12:15:00 PM	8	4/13/01 12:50:00 PM	7
4/11/01 1:43:00 PM	11	4/13/01 11:41:00 AM	6	4/13/01 12:16:00 PM	6	4/13/01 12:51:00 PM	6
4/11/01 1:44:00 PM	12	4/13/01 11:42:00 AM	5	4/13/01 12:17:00 PM	6	4/13/01 12:52:00 PM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/13/01 12:53:00 PM	10	4/13/01 1:28:00 PM	9	4/13/01 2:03:00 PM	14	4/16/01 9:10:00 AM	6
4/13/01 12:54:00 PM	27	4/13/01 1:29:00 PM	14	4/13/01 2:04:00 PM	10	4/16/01 9:11:00 AM	10
4/13/01 12:55:00 PM	36	4/13/01 1:30:00 PM	12	4/13/01 2:05:00 PM	11	4/16/01 9:12:00 AM	6
4/13/01 12:56:00 PM	365	4/13/01 1:31:00 PM	19	4/13/01 2:06:00 PM	11	4/16/01 9:13:00 AM	6
4/13/01 12:57:00 PM	10	4/13/01 1:32:00 PM	14	4/13/01 2:07:00 PM	17	4/16/01 9:14:00 AM	4
4/13/01 12:58:00 PM	12	4/13/01 1:33:00 PM	49	4/13/01 2:08:00 PM	18	4/16/01 9:15:00 AM	4
4/13/01 12:59:00 PM	16	4/13/01 1:34:00 PM	18	4/13/01 2:09:00 PM	18	4/16/01 9:16:00 AM	5
4/13/01 1:00:00 PM	18	4/13/01 1:35:00 PM	20	4/13/01 2:10:00 PM	9	4/16/01 9:17:00 AM	6
4/13/01 1:01:00 PM	25	4/13/01 1:36:00 PM	19	4/13/01 2:11:00 PM	16	4/16/01 9:18:00 AM	5
4/13/01 1:02:00 PM	25	4/13/01 1:37:00 PM	8	4/13/01 2:12:00 PM	7	4/16/01 9:19:00 AM	5
4/13/01 1:03:00 PM	30	4/13/01 1:38:00 PM	20	4/13/01 2:13:00 PM	11	4/16/01 9:20:00 AM	4
4/13/01 1:04:00 PM	16	4/13/01 1:39:00 PM	14	4/13/01 2:14:00 PM	11	4/16/01 9:21:00 AM	5
4/13/01 1:05:00 PM	24	4/13/01 1:40:00 PM	13	4/13/01 2:15:00 PM	13	4/16/01 9:22:00 AM	15
4/13/01 1:06:00 PM	18	4/13/01 1:41:00 PM	10	4/13/01 2:16:00 PM	10	4/16/01 9:23:00 AM	6
4/13/01 1:07:00 PM	16	4/13/01 1:42:00 PM	12	4/13/01 2:17:00 PM	13	4/16/01 9:24:00 AM	5
4/13/01 1:08:00 PM	26	4/13/01 1:43:00 PM	20	4/13/01 2:18:00 PM	10	4/16/01 9:25:00 AM	4
4/13/01 1:09:00 PM	24	4/13/01 1:44:00 PM	11	4/13/01 2:19:00 PM	21	4/16/01 9:26:00 AM	5
4/13/01 1:10:00 PM	48	4/13/01 1:45:00 PM	11	4/13/01 2:20:00 PM	12	4/16/01 9:27:00 AM	5
4/13/01 1:11:00 PM	20	4/13/01 1:46:00 PM	10	4/13/01 2:21:00 PM	8	4/16/01 9:28:00 AM	8
4/13/01 1:12:00 PM	33	4/13/01 1:47:00 PM	14	4/13/01 2:22:00 PM	8	4/16/01 9:29:00 AM	6
4/13/01 1:13:00 PM	15	4/13/01 1:48:00 PM	12	4/13/01 2:23:00 PM	9	4/16/01 9:30:00 AM	8
4/13/01 1:14:00 PM	20	4/13/01 1:49:00 PM	12	4/13/01 2:24:00 PM	10	4/16/01 9:31:00 AM	7
4/13/01 1:15:00 PM	17	4/13/01 1:50:00 PM	7	4/13/01 2:25:00 PM	11	4/16/01 9:32:00 AM	5
4/13/01 1:16:00 PM	37	4/13/01 1:51:00 PM	30	4/13/01 2:26:00 PM	10	4/16/01 9:33:00 AM	5
4/13/01 1:17:00 PM	15	4/13/01 1:52:00 PM	39	4/13/01 2:27:00 PM	8	4/16/01 9:34:00 AM	4
4/13/01 1:18:00 PM	21	4/13/01 1:53:00 PM	14	4/13/01 2:28:00 PM	6	4/16/01 9:35:00 AM	5
4/13/01 1:19:00 PM	27	4/13/01 1:54:00 PM	12	4/13/01 2:29:00 PM	3	4/16/01 9:36:00 AM	7
4/13/01 1:20:00 PM	13	4/13/01 1:55:00 PM	15	4/13/01 2:30:00 PM	7	4/16/01 9:37:00 AM	5
4/13/01 1:21:00 PM	18	4/13/01 1:56:00 PM	7	4/13/01 2:31:00 PM	4	4/16/01 9:38:00 AM	4
4/13/01 1:22:00 PM	31	4/13/01 1:57:00 PM	14	4/13/01 2:32:00 PM	7	4/16/01 9:39:00 AM	4
4/13/01 1:23:00 PM	16	4/13/01 1:58:00 PM	18	4/13/01 2:33:00 PM	5	4/16/01 9:40:00 AM	4
4/13/01 1:24:00 PM	12	4/13/01 1:59:00 PM	9	4/13/01 2:34:00 PM	4	4/16/01 9:41:00 AM	5
4/13/01 1:25:00 PM	12	4/13/01 2:00:00 PM	17	4/13/01 2:35:00 PM	8	4/16/01 9:42:00 AM	6
4/13/01 1:26:00 PM	11	4/13/01 2:01:00 PM	11	4/16/01 9:08:00 AM	44	4/16/01 9:43:00 AM	6
4/13/01 1:27:00 PM	11	4/13/01 2:02:00 PM	4	4/16/01 9:09:00 AM	3	4/17/01 7:35:00 AM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/17/01 7:36:00 AM	15	4/18/01 7:50:00 AM	8	4/18/01 8:25:00 AM	7	4/18/01 9:00:00 AM	6
4/17/01 7:37:00 AM	12	4/18/01 7:51:00 AM	6	4/18/01 8:26:00 AM	6	4/18/01 9:01:00 AM	5
4/17/01 7:38:00 AM	14	4/18/01 7:52:00 AM	7	4/18/01 8:27:00 AM	4	4/18/01 9:02:00 AM	9
4/17/01 7:39:00 AM	10	4/18/01 7:53:00 AM	8	4/18/01 8:28:00 AM	7	4/18/01 9:03:00 AM	42
4/17/01 7:40:00 AM	16	4/18/01 7:54:00 AM	7	4/18/01 8:29:00 AM	10	4/18/01 9:04:00 AM	14
4/17/01 7:41:00 AM	12	4/18/01 7:55:00 AM	5	4/18/01 8:30:00 AM	6	4/18/01 9:05:00 AM	6
4/17/01 7:42:00 AM	11	4/18/01 7:56:00 AM	6	4/18/01 8:31:00 AM	6	4/18/01 9:06:00 AM	37
4/17/01 7:43:00 AM	14	4/18/01 7:57:00 AM	6	4/18/01 8:32:00 AM	6	4/18/01 9:07:00 AM	9
4/17/01 7:44:00 AM	16	4/18/01 7:58:00 AM	9	4/18/01 8:33:00 AM	6	4/18/01 9:08:00 AM	191
4/17/01 7:45:00 AM	15	4/18/01 7:59:00 AM	5	4/18/01 8:34:00 AM	5	4/18/01 9:09:00 AM	333
4/17/01 7:46:00 AM	12	4/18/01 8:00:00 AM	6	4/18/01 8:35:00 AM	7	4/18/01 9:10:00 AM	11
4/17/01 7:47:00 AM	14	4/18/01 8:01:00 AM	7	4/18/01 8:36:00 AM	5	4/18/01 9:11:00 AM	50
4/17/01 7:48:00 AM	15	4/18/01 8:02:00 AM	7	4/18/01 8:37:00 AM	7	4/18/01 9:12:00 AM	41
4/17/01 7:49:00 AM	13	4/18/01 8:03:00 AM	8	4/18/01 8:38:00 AM	5	4/18/01 9:13:00 AM	9
4/17/01 7:50:00 AM	14	4/18/01 8:04:00 AM	4	4/18/01 8:39:00 AM	14	4/18/01 9:14:00 AM	6
4/17/01 7:51:00 AM	14	4/18/01 8:05:00 AM	6	4/18/01 8:40:00 AM	6	4/18/01 9:15:00 AM	5
4/17/01 7:52:00 AM	16	4/18/01 8:06:00 AM	7	4/18/01 8:41:00 AM	6	4/18/01 9:16:00 AM	10
4/17/01 7:53:00 AM	13	4/18/01 8:07:00 AM	7	4/18/01 8:42:00 AM	6	4/18/01 9:17:00 AM	5
4/17/01 7:54:00 AM	10	4/18/01 8:08:00 AM	6	4/18/01 8:43:00 AM	5	4/18/01 9:18:00 AM	8
4/17/01 7:55:00 AM	11	4/18/01 8:09:00 AM	8	4/18/01 8:44:00 AM	6	4/18/01 9:19:00 AM	7
4/17/01 7:56:00 AM	13	4/18/01 8:10:00 AM	11	4/18/01 8:45:00 AM	7	4/18/01 9:20:00 AM	8
4/17/01 7:57:00 AM	11	4/18/01 8:11:00 AM	6	4/18/01 8:46:00 AM	6	4/18/01 9:21:00 AM	6
4/17/01 7:58:00 AM	10	4/18/01 8:12:00 AM	3	4/18/01 8:47:00 AM	10	4/18/01 9:22:00 AM	8
4/17/01 7:59:00 AM	14	4/18/01 8:13:00 AM	6	4/18/01 8:48:00 AM	8	4/18/01 9:23:00 AM	14
4/17/01 8:00:00 AM	15	4/18/01 8:14:00 AM	6	4/18/01 8:49:00 AM	8	4/18/01 9:24:00 AM	9
4/18/01 7:40:00 AM	10	4/18/01 8:15:00 AM	8	4/18/01 8:50:00 AM	6	4/18/01 9:25:00 AM	10
4/18/01 7:41:00 AM	5	4/18/01 8:16:00 AM	6	4/18/01 8:51:00 AM	7	4/18/01 9:26:00 AM	8
4/18/01 7:42:00 AM	5	4/18/01 8:17:00 AM	6	4/18/01 8:52:00 AM	6	4/18/01 9:27:00 AM	6
4/18/01 7:43:00 AM	6	4/18/01 8:18:00 AM	6	4/18/01 8:53:00 AM	7	4/18/01 9:28:00 AM	7
4/18/01 7:44:00 AM	5	4/18/01 8:19:00 AM	6	4/18/01 8:54:00 AM	7	4/18/01 9:29:00 AM	6
4/18/01 7:45:00 AM	6	4/18/01 8:20:00 AM	8	4/18/01 8:55:00 AM	14	4/18/01 9:30:00 AM	6
4/18/01 7:46:00 AM	7	4/18/01 8:21:00 AM	6	4/18/01 8:56:00 AM	25	4/18/01 9:31:00 AM	11
4/18/01 7:47:00 AM	7	4/18/01 8:22:00 AM	8	4/18/01 8:57:00 AM	44	4/18/01 9:32:00 AM	8
4/18/01 7:48:00 AM	6	4/18/01 8:23:00 AM	7	4/18/01 8:58:00 AM	6	4/18/01 9:33:00 AM	8
4/18/01 7:49:00 AM	6	4/18/01 8:24:00 AM	9	4/18/01 8:59:00 AM	7	4/18/01 9:34:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/18/01 9:35:00 AM	6	4/18/01 10:10:00 AM	7	4/18/01 10:45:00 AM	7	4/18/01 11:20:00 AM	6
4/18/01 9:36:00 AM	6	4/18/01 10:11:00 AM	6	4/18/01 10:46:00 AM	8	4/18/01 11:21:00 AM	5
4/18/01 9:37:00 AM	4	4/18/01 10:12:00 AM	6	4/18/01 10:47:00 AM	8	4/18/01 11:22:00 AM	6
4/18/01 9:38:00 AM	12	4/18/01 10:13:00 AM	5	4/18/01 10:48:00 AM	7	4/18/01 11:23:00 AM	5
4/18/01 9:39:00 AM	6	4/18/01 10:14:00 AM	7	4/18/01 10:49:00 AM	5	4/18/01 11:24:00 AM	5
4/18/01 9:40:00 AM	5	4/18/01 10:15:00 AM	6	4/18/01 10:50:00 AM	9	4/18/01 11:25:00 AM	10
4/18/01 9:41:00 AM	24	4/18/01 10:16:00 AM	16	4/18/01 10:51:00 AM	6	4/18/01 11:26:00 AM	6
4/18/01 9:42:00 AM	32	4/18/01 10:17:00 AM	6	4/18/01 10:52:00 AM	6	4/18/01 11:27:00 AM	8
4/18/01 9:43:00 AM	13	4/18/01 10:18:00 AM	5	4/18/01 10:53:00 AM	9	4/18/01 11:28:00 AM	17
4/18/01 9:44:00 AM	6	4/18/01 10:19:00 AM	5	4/18/01 10:54:00 AM	7	4/18/01 11:29:00 AM	11
4/18/01 9:45:00 AM	7	4/18/01 10:20:00 AM	6	4/18/01 10:55:00 AM	5	4/18/01 11:30:00 AM	7
4/18/01 9:46:00 AM	12	4/18/01 10:21:00 AM	7	4/18/01 10:56:00 AM	9	4/18/01 11:31:00 AM	6
4/18/01 9:47:00 AM	7	4/18/01 10:22:00 AM	10	4/18/01 10:57:00 AM	8	4/18/01 11:32:00 AM	6
4/18/01 9:48:00 AM	6	4/18/01 10:23:00 AM	6	4/18/01 10:58:00 AM	6	4/18/01 11:33:00 AM	5
4/18/01 9:49:00 AM	4	4/18/01 10:24:00 AM	7	4/18/01 10:59:00 AM	6	4/18/01 11:34:00 AM	5
4/18/01 9:50:00 AM	14	4/18/01 10:25:00 AM	8	4/18/01 11:00:00 AM	4	4/18/01 11:35:00 AM	4
4/18/01 9:51:00 AM	24	4/18/01 10:26:00 AM	6	4/18/01 11:01:00 AM	6	4/18/01 11:36:00 AM	6
4/18/01 9:52:00 AM	8	4/18/01 10:27:00 AM	6	4/18/01 11:02:00 AM	8	4/18/01 11:37:00 AM	4
4/18/01 9:53:00 AM	3	4/18/01 10:28:00 AM	8	4/18/01 11:03:00 AM	7	4/18/01 11:38:00 AM	4
4/18/01 9:54:00 AM	12	4/18/01 10:29:00 AM	9	4/18/01 11:04:00 AM	9	4/18/01 11:39:00 AM	6
4/18/01 9:55:00 AM	6	4/18/01 10:30:00 AM	6	4/18/01 11:05:00 AM	6	4/18/01 11:40:00 AM	5
4/18/01 9:56:00 AM	9	4/18/01 10:31:00 AM	10	4/18/01 11:06:00 AM	72	4/18/01 11:41:00 AM	7
4/18/01 9:57:00 AM	14	4/18/01 10:32:00 AM	12	4/18/01 11:07:00 AM	76	4/18/01 11:42:00 AM	9
4/18/01 9:58:00 AM	16	4/18/01 10:33:00 AM	7	4/18/01 11:08:00 AM	8	4/18/01 11:43:00 AM	13
4/18/01 9:59:00 AM	6	4/18/01 10:34:00 AM	6	4/18/01 11:09:00 AM	8	4/18/01 11:44:00 AM	12
4/18/01 10:00:00 AM	11	4/18/01 10:35:00 AM	7	4/18/01 11:10:00 AM	13	4/18/01 11:45:00 AM	5
4/18/01 10:01:00 AM	8	4/18/01 10:36:00 AM	7	4/18/01 11:11:00 AM	6	4/18/01 11:46:00 AM	8
4/18/01 10:02:00 AM	11	4/18/01 10:37:00 AM	5	4/18/01 11:12:00 AM	9	4/18/01 11:47:00 AM	4
4/18/01 10:03:00 AM	8	4/18/01 10:38:00 AM	5	4/18/01 11:13:00 AM	6	4/18/01 11:48:00 AM	6
4/18/01 10:04:00 AM	6	4/18/01 10:39:00 AM	5	4/18/01 11:14:00 AM	8	4/18/01 11:49:00 AM	6
4/18/01 10:05:00 AM	9	4/18/01 10:40:00 AM	6	4/18/01 11:15:00 AM	6	4/18/01 11:50:00 AM	4
4/18/01 10:06:00 AM	8	4/18/01 10:41:00 AM	7	4/18/01 11:16:00 AM	9	4/18/01 11:51:00 AM	5
4/18/01 10:07:00 AM	13	4/18/01 10:42:00 AM	5	4/18/01 11:17:00 AM	6	4/18/01 11:52:00 AM	7
4/18/01 10:08:00 AM	6	4/18/01 10:43:00 AM	6	4/18/01 11:18:00 AM	5	4/18/01 11:53:00 AM	5
4/18/01 10:09:00 AM	9	4/18/01 10:44:00 AM	8	4/18/01 11:19:00 AM	4	4/18/01 11:54:00 AM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/18/01 11:55:00 AM	7	4/18/01 12:30:00 PM	4	4/18/01 1:05:00 PM	6	4/18/01 1:40:00 PM	5
4/18/01 11:56:00 AM	5	4/18/01 12:31:00 PM	5	4/18/01 1:06:00 PM	6	4/18/01 1:41:00 PM	4
4/18/01 11:57:00 AM	4	4/18/01 12:32:00 PM	12	4/18/01 1:07:00 PM	6	4/18/01 1:42:00 PM	6
4/18/01 11:58:00 AM	5	4/18/01 12:33:00 PM	15	4/18/01 1:08:00 PM	7	4/18/01 1:43:00 PM	6
4/18/01 11:59:00 AM	6	4/18/01 12:34:00 PM	30	4/18/01 1:09:00 PM	6	4/18/01 1:44:00 PM	15
4/18/01 12:00:00 PM	5	4/18/01 12:35:00 PM	7	4/18/01 1:10:00 PM	6	4/18/01 1:45:00 PM	6
4/18/01 12:01:00 PM	7	4/18/01 12:36:00 PM	5	4/18/01 1:11:00 PM	6	4/18/01 1:46:00 PM	7
4/18/01 12:02:00 PM	5	4/18/01 12:37:00 PM	7	4/18/01 1:12:00 PM	8	4/18/01 1:47:00 PM	5
4/18/01 12:03:00 PM	6	4/18/01 12:38:00 PM	6	4/18/01 1:13:00 PM	5	4/18/01 1:48:00 PM	5
4/18/01 12:04:00 PM	6	4/18/01 12:39:00 PM	264	4/18/01 1:14:00 PM	5	4/18/01 1:49:00 PM	6
4/18/01 12:05:00 PM	7	4/18/01 12:40:00 PM	9	4/18/01 1:15:00 PM	6	4/18/01 1:50:00 PM	6
4/18/01 12:06:00 PM	10	4/18/01 12:41:00 PM	7	4/18/01 1:16:00 PM	6	4/18/01 1:51:00 PM	5
4/18/01 12:07:00 PM	7	4/18/01 12:42:00 PM	7	4/18/01 1:17:00 PM	6	4/18/01 1:52:00 PM	6
4/18/01 12:08:00 PM	6	4/18/01 12:43:00 PM	6	4/18/01 1:18:00 PM	6	4/18/01 1:53:00 PM	5
4/18/01 12:09:00 PM	5	4/18/01 12:44:00 PM	7	4/18/01 1:19:00 PM	7	4/18/01 1:54:00 PM	5
4/18/01 12:10:00 PM	6	4/18/01 12:45:00 PM	6	4/18/01 1:20:00 PM	4	4/18/01 1:55:00 PM	8
4/18/01 12:11:00 PM	6	4/18/01 12:46:00 PM	6	4/18/01 1:21:00 PM	4	4/18/01 1:56:00 PM	6
4/18/01 12:12:00 PM	5	4/18/01 12:47:00 PM	24	4/18/01 1:22:00 PM	6	4/18/01 1:57:00 PM	5
4/18/01 12:13:00 PM	5	4/18/01 12:48:00 PM	15	4/18/01 1:23:00 PM	6	4/18/01 1:58:00 PM	6
4/18/01 12:14:00 PM	6	4/18/01 12:49:00 PM	19	4/18/01 1:24:00 PM	4	4/18/01 1:59:00 PM	6
4/18/01 12:15:00 PM	4	4/18/01 12:50:00 PM	7	4/18/01 1:25:00 PM	6	4/18/01 2:00:00 PM	4
4/18/01 12:16:00 PM	5	4/18/01 12:51:00 PM	19	4/18/01 1:26:00 PM	7	4/18/01 2:01:00 PM	5
4/18/01 12:17:00 PM	6	4/18/01 12:52:00 PM	13	4/18/01 1:27:00 PM	7	4/18/01 2:02:00 PM	5
4/18/01 12:18:00 PM	6	4/18/01 12:53:00 PM	9	4/18/01 1:28:00 PM	7	4/18/01 2:03:00 PM	6
4/18/01 12:19:00 PM	6	4/18/01 12:54:00 PM	11	4/18/01 1:29:00 PM	6	4/18/01 2:04:00 PM	5
4/18/01 12:20:00 PM	8	4/18/01 12:55:00 PM	14	4/18/01 1:30:00 PM	6	4/18/01 2:05:00 PM	6
4/18/01 12:21:00 PM	6	4/18/01 12:56:00 PM	8	4/18/01 1:31:00 PM	6	4/18/01 2:06:00 PM	9
4/18/01 12:22:00 PM	6	4/18/01 12:57:00 PM	8	4/18/01 1:32:00 PM	6	4/18/01 2:07:00 PM	6
4/18/01 12:23:00 PM	5	4/18/01 12:58:00 PM	11	4/18/01 1:33:00 PM	7	4/18/01 2:08:00 PM	18
4/18/01 12:24:00 PM	5	4/18/01 12:59:00 PM	7	4/18/01 1:34:00 PM	6	4/18/01 2:09:00 PM	6
4/18/01 12:25:00 PM	7	4/18/01 1:00:00 PM	4	4/18/01 1:35:00 PM	5	4/18/01 2:10:00 PM	6
4/18/01 12:26:00 PM	6	4/18/01 1:01:00 PM	8	4/18/01 1:36:00 PM	7	4/18/01 2:11:00 PM	9
4/18/01 12:27:00 PM	4	4/18/01 1:02:00 PM	11	4/18/01 1:37:00 PM	6	4/18/01 2:12:00 PM	17
4/18/01 12:28:00 PM	5	4/18/01 1:03:00 PM	6	4/18/01 1:38:00 PM	6	4/18/01 2:13:00 PM	6
4/18/01 12:29:00 PM	7	4/18/01 1:04:00 PM	6	4/18/01 1:39:00 PM	7	4/18/01 2:14:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/18/01 2:15:00 PM	5	4/18/01 2:50:00 PM	8	4/19/01 7:21:00 AM	15	4/19/01 7:56:00 AM	12
4/18/01 2:16:00 PM	6	4/18/01 2:51:00 PM	9	4/19/01 7:22:00 AM	26	4/19/01 7:57:00 AM	13
4/18/01 2:17:00 PM	44	4/18/01 2:52:00 PM	52	4/19/01 7:23:00 AM	18	4/19/01 7:58:00 AM	12
4/18/01 2:18:00 PM	10	4/18/01 2:53:00 PM	16	4/19/01 7:24:00 AM	16	4/19/01 7:59:00 AM	16
4/18/01 2:19:00 PM	8	4/18/01 2:54:00 PM	8	4/19/01 7:25:00 AM	14	4/19/01 8:00:00 AM	17
4/18/01 2:20:00 PM	5	4/18/01 2:55:00 PM	11	4/19/01 7:26:00 AM	25	4/19/01 8:01:00 AM	14
4/18/01 2:21:00 PM	6	4/18/01 2:56:00 PM	8	4/19/01 7:27:00 AM	24	4/19/01 8:02:00 AM	19
4/18/01 2:22:00 PM	6	4/18/01 2:57:00 PM	6	4/19/01 7:28:00 AM	15	4/19/01 8:03:00 AM	26
4/18/01 2:23:00 PM	24	4/18/01 2:58:00 PM	10	4/19/01 7:29:00 AM	20	4/19/01 8:04:00 AM	17
4/18/01 2:24:00 PM	12	4/18/01 2:59:00 PM	16	4/19/01 7:30:00 AM	18	4/19/01 8:05:00 AM	16
4/18/01 2:25:00 PM	11	4/18/01 3:00:00 PM	21	4/19/01 7:31:00 AM	15	4/19/01 8:06:00 AM	14
4/18/01 2:26:00 PM	13	4/18/01 3:01:00 PM	15	4/19/01 7:32:00 AM	14	4/19/01 8:07:00 AM	12
4/18/01 2:27:00 PM	12	4/18/01 3:02:00 PM	15	4/19/01 7:33:00 AM	15	4/19/01 8:08:00 AM	16
4/18/01 2:28:00 PM	16	4/18/01 3:03:00 PM	23	4/19/01 7:34:00 AM	14	4/19/01 8:09:00 AM	15
4/18/01 2:29:00 PM	12	4/18/01 3:04:00 PM	6	4/19/01 7:35:00 AM	20	4/19/01 8:10:00 AM	20
4/18/01 2:30:00 PM	8	4/18/01 3:05:00 PM	23	4/19/01 7:36:00 AM	16	4/19/01 8:11:00 AM	16
4/18/01 2:31:00 PM	8	4/18/01 3:06:00 PM	10	4/19/01 7:37:00 AM	16	4/19/01 8:12:00 AM	46
4/18/01 2:32:00 PM	18	4/18/01 3:07:00 PM	16	4/19/01 7:38:00 AM	18	4/19/01 8:13:00 AM	17
4/18/01 2:33:00 PM	8	4/18/01 3:08:00 PM	9	4/19/01 7:39:00 AM	18	4/19/01 8:14:00 AM	14
4/18/01 2:34:00 PM	9	4/18/01 3:09:00 PM	6	4/19/01 7:40:00 AM	18	4/19/01 8:15:00 AM	17
4/18/01 2:35:00 PM	8	4/18/01 3:10:00 PM	6	4/19/01 7:41:00 AM	22	4/19/01 8:16:00 AM	11
4/18/01 2:36:00 PM	16	4/18/01 3:11:00 PM	10	4/19/01 7:42:00 AM	16	4/19/01 8:17:00 AM	13
4/18/01 2:37:00 PM	6	4/18/01 3:12:00 PM	7	4/19/01 7:43:00 AM	14	4/19/01 8:18:00 AM	12
4/18/01 2:38:00 PM	70	4/18/01 3:13:00 PM	5	4/19/01 7:44:00 AM	17	4/19/01 8:19:00 AM	10
4/18/01 2:39:00 PM	6	4/18/01 3:14:00 PM	8	4/19/01 7:45:00 AM	14	4/19/01 8:20:00 AM	10
4/18/01 2:40:00 PM	7	4/18/01 3:15:00 PM	7	4/19/01 7:46:00 AM	12	4/19/01 8:21:00 AM	12
4/18/01 2:41:00 PM	8	4/18/01 3:16:00 PM	13	4/19/01 7:47:00 AM	19	4/19/01 8:22:00 AM	18
4/18/01 2:42:00 PM	6	4/18/01 3:17:00 PM	35	4/19/01 7:48:00 AM	15	4/19/01 8:23:00 AM	12
4/18/01 2:43:00 PM	7	4/19/01 7:14:00 AM	18	4/19/01 7:49:00 AM	22	4/19/01 8:24:00 AM	14
4/18/01 2:44:00 PM	7	4/19/01 7:15:00 AM	18	4/19/01 7:50:00 AM	18	4/19/01 8:25:00 AM	12
4/18/01 2:45:00 PM	5	4/19/01 7:16:00 AM	27	4/19/01 7:51:00 AM	24	4/19/01 8:26:00 AM	10
4/18/01 2:46:00 PM	5	4/19/01 7:17:00 AM	47	4/19/01 7:52:00 AM	21	4/19/01 8:27:00 AM	9
4/18/01 2:47:00 PM	7	4/19/01 7:18:00 AM	26	4/19/01 7:53:00 AM	15	4/19/01 8:28:00 AM	7
4/18/01 2:48:00 PM	9	4/19/01 7:19:00 AM	13	4/19/01 7:54:00 AM	23	4/19/01 8:29:00 AM	8
4/18/01 2:49:00 PM	11	4/19/01 7:20:00 AM	13	4/19/01 7:55:00 AM	36	4/19/01 8:30:00 AM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/19/01 8:31:00 AM	9	4/19/01 9:06:00 AM	82	4/20/01 7:21:00 AM	14	4/20/01 7:56:00 AM	19
4/19/01 8:32:00 AM	10	4/19/01 9:07:00 AM	71	4/20/01 7:22:00 AM	14	4/20/01 7:57:00 AM	16
4/19/01 8:33:00 AM	9	4/19/01 9:08:00 AM	22	4/20/01 7:23:00 AM	14	4/20/01 7:58:00 AM	14
4/19/01 8:34:00 AM	13	4/19/01 9:09:00 AM	8	4/20/01 7:24:00 AM	18	4/20/01 7:59:00 AM	13
4/19/01 8:35:00 AM	14	4/19/01 9:10:00 AM	10	4/20/01 7:25:00 AM	50	4/20/01 8:00:00 AM	12
4/19/01 8:36:00 AM	35	4/19/01 9:11:00 AM	12	4/20/01 7:26:00 AM	17	4/20/01 8:01:00 AM	14
4/19/01 8:37:00 AM	57	4/19/01 9:12:00 AM	18	4/20/01 7:27:00 AM	18	4/20/01 8:02:00 AM	14
4/19/01 8:38:00 AM	17	4/19/01 9:13:00 AM	10	4/20/01 7:28:00 AM	14	4/20/01 8:03:00 AM	14
4/19/01 8:39:00 AM	10	4/19/01 9:14:00 AM	9	4/20/01 7:29:00 AM	14	4/20/01 8:04:00 AM	13
4/19/01 8:40:00 AM	7	4/19/01 9:15:00 AM	11	4/20/01 7:30:00 AM	30	4/20/01 8:05:00 AM	15
4/19/01 8:41:00 AM	7	4/19/01 9:16:00 AM	10	4/20/01 7:31:00 AM	18	4/20/01 8:06:00 AM	16
4/19/01 8:42:00 AM	12	4/19/01 9:17:00 AM	8	4/20/01 7:32:00 AM	18	4/20/01 8:07:00 AM	42
4/19/01 8:43:00 AM	14	4/19/01 9:18:00 AM	8	4/20/01 7:33:00 AM	15	4/20/01 8:08:00 AM	32
4/19/01 8:44:00 AM	23	4/19/01 9:19:00 AM	28	4/20/01 7:34:00 AM	13	4/20/01 8:09:00 AM	21
4/19/01 8:45:00 AM	33	4/19/01 9:20:00 AM	37	4/20/01 7:35:00 AM	13	4/20/01 8:10:00 AM	15
4/19/01 8:46:00 AM	26	4/19/01 9:21:00 AM	15	4/20/01 7:36:00 AM	12	4/20/01 8:11:00 AM	17
4/19/01 8:47:00 AM	14	4/20/01 7:02:00 AM	33	4/20/01 7:37:00 AM	20	4/20/01 8:12:00 AM	13
4/19/01 8:48:00 AM	9	4/20/01 7:03:00 AM	16	4/20/01 7:38:00 AM	17	4/20/01 8:13:00 AM	15
4/19/01 8:49:00 AM	11	4/20/01 7:04:00 AM	18	4/20/01 7:39:00 AM	13	4/20/01 8:14:00 AM	16
4/19/01 8:50:00 AM	14	4/20/01 7:05:00 AM	17	4/20/01 7:40:00 AM	13	4/20/01 8:15:00 AM	14
4/19/01 8:51:00 AM	63	4/20/01 7:06:00 AM	13	4/20/01 7:41:00 AM	14	4/20/01 8:16:00 AM	18
4/19/01 8:52:00 AM	128	4/20/01 7:07:00 AM	13	4/20/01 7:42:00 AM	13	4/20/01 8:17:00 AM	14
4/19/01 8:53:00 AM	28	4/20/01 7:08:00 AM	14	4/20/01 7:43:00 AM	15	4/20/01 8:18:00 AM	14
4/19/01 8:54:00 AM	15	4/20/01 7:09:00 AM	14	4/20/01 7:44:00 AM	14	4/20/01 8:19:00 AM	18
4/19/01 8:55:00 AM	16	4/20/01 7:10:00 AM	15	4/20/01 7:45:00 AM	14	4/20/01 8:20:00 AM	26
4/19/01 8:56:00 AM	40	4/20/01 7:11:00 AM	15	4/20/01 7:46:00 AM	17	4/20/01 8:21:00 AM	16
4/19/01 8:57:00 AM	206	4/20/01 7:12:00 AM	15	4/20/01 7:47:00 AM	14	4/20/01 8:22:00 AM	15
4/19/01 8:58:00 AM	133	4/20/01 7:13:00 AM	14	4/20/01 7:48:00 AM	15	4/20/01 8:23:00 AM	17
4/19/01 8:59:00 AM	81	4/20/01 7:14:00 AM	15	4/20/01 7:49:00 AM	14	4/20/01 8:24:00 AM	15
4/19/01 9:00:00 AM	53	4/20/01 7:15:00 AM	15	4/20/01 7:50:00 AM	12	4/20/01 8:25:00 AM	12
4/19/01 9:01:00 AM	284	4/20/01 7:16:00 AM	14	4/20/01 7:51:00 AM	13	4/20/01 8:26:00 AM	12
4/19/01 9:02:00 AM	575	4/20/01 7:17:00 AM	14	4/20/01 7:52:00 AM	13	4/20/01 8:27:00 AM	14
4/19/01 9:03:00 AM	104	4/20/01 7:18:00 AM	13	4/20/01 7:53:00 AM	13	4/20/01 8:28:00 AM	14
4/19/01 9:04:00 AM	129	4/20/01 7:19:00 AM	16	4/20/01 7:54:00 AM	13	4/20/01 8:29:00 AM	13
4/19/01 9:05:00 AM	488	4/20/01 7:20:00 AM	28	4/20/01 7:55:00 AM	13	4/20/01 8:30:00 AM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/20/01 8:31:00 AM	12	4/20/01 9:06:00 AM	8	4/20/01 9:41:00 AM	10	4/20/01 10:16:00 AM	12
4/20/01 8:32:00 AM	13	4/20/01 9:07:00 AM	8	4/20/01 9:42:00 AM	11	4/20/01 10:17:00 AM	15
4/20/01 8:33:00 AM	12	4/20/01 9:08:00 AM	9	4/20/01 9:43:00 AM	10	4/20/01 10:18:00 AM	12
4/20/01 8:34:00 AM	12	4/20/01 9:09:00 AM	8	4/20/01 9:44:00 AM	29	4/20/01 10:19:00 AM	20
4/20/01 8:35:00 AM	11	4/20/01 9:10:00 AM	8	4/20/01 9:45:00 AM	12	4/20/01 10:20:00 AM	17
4/20/01 8:36:00 AM	10	4/20/01 9:11:00 AM	10	4/20/01 9:46:00 AM	12	4/20/01 10:21:00 AM	16
4/20/01 8:37:00 AM	12	4/20/01 9:12:00 AM	10	4/20/01 9:47:00 AM	11	4/20/01 10:22:00 AM	17
4/20/01 8:38:00 AM	10	4/20/01 9:13:00 AM	10	4/20/01 9:48:00 AM	10	4/20/01 10:23:00 AM	11
4/20/01 8:39:00 AM	9	4/20/01 9:14:00 AM	8	4/20/01 9:49:00 AM	10	4/20/01 10:24:00 AM	17
4/20/01 8:40:00 AM	9	4/20/01 9:15:00 AM	8	4/20/01 9:50:00 AM	10	4/20/01 10:25:00 AM	14
4/20/01 8:41:00 AM	6	4/20/01 9:16:00 AM	9	4/20/01 9:51:00 AM	16	4/20/01 10:26:00 AM	12
4/20/01 8:42:00 AM	8	4/20/01 9:17:00 AM	37	4/20/01 9:52:00 AM	11	4/20/01 10:27:00 AM	11
4/20/01 8:43:00 AM	8	4/20/01 9:18:00 AM	9	4/20/01 9:53:00 AM	12	4/20/01 10:28:00 AM	11
4/20/01 8:44:00 AM	10	4/20/01 9:19:00 AM	12	4/20/01 9:54:00 AM	10	4/20/01 10:29:00 AM	13
4/20/01 8:45:00 AM	11	4/20/01 9:20:00 AM	14	4/20/01 9:55:00 AM	11	4/20/01 10:30:00 AM	18
4/20/01 8:46:00 AM	40	4/20/01 9:21:00 AM	10	4/20/01 9:56:00 AM	11	4/20/01 10:31:00 AM	12
4/20/01 8:47:00 AM	8	4/20/01 9:22:00 AM	13	4/20/01 9:57:00 AM	13	4/20/01 10:32:00 AM	10
4/20/01 8:48:00 AM	9	4/20/01 9:23:00 AM	28	4/20/01 9:58:00 AM	15	4/20/01 10:33:00 AM	12
4/20/01 8:49:00 AM	10	4/20/01 9:24:00 AM	29	4/20/01 9:59:00 AM	16	4/20/01 10:34:00 AM	11
4/20/01 8:50:00 AM	9	4/20/01 9:25:00 AM	14	4/20/01 10:00:00 AM	12	4/20/01 10:35:00 AM	14
4/20/01 8:51:00 AM	14	4/20/01 9:26:00 AM	11	4/20/01 10:01:00 AM	13	4/20/01 10:36:00 AM	12
4/20/01 8:52:00 AM	9	4/20/01 9:27:00 AM	33	4/20/01 10:02:00 AM	13	4/20/01 10:37:00 AM	16
4/20/01 8:53:00 AM	21	4/20/01 9:28:00 AM	16	4/20/01 10:03:00 AM	12	4/20/01 10:38:00 AM	12
4/20/01 8:54:00 AM	9	4/20/01 9:29:00 AM	12	4/20/01 10:04:00 AM	23	4/20/01 10:39:00 AM	13
4/20/01 8:55:00 AM	11	4/20/01 9:30:00 AM	12	4/20/01 10:05:00 AM	10	4/20/01 10:40:00 AM	12
4/20/01 8:56:00 AM	11	4/20/01 9:31:00 AM	14	4/20/01 10:06:00 AM	10	4/20/01 10:41:00 AM	12
4/20/01 8:57:00 AM	38	4/20/01 9:32:00 AM	10	4/20/01 10:07:00 AM	11	4/20/01 10:42:00 AM	11
4/20/01 8:58:00 AM	13	4/20/01 9:33:00 AM	9	4/20/01 10:08:00 AM	11	4/20/01 10:43:00 AM	11
4/20/01 8:59:00 AM	17	4/20/01 9:34:00 AM	10	4/20/01 10:09:00 AM	12	4/20/01 10:44:00 AM	12
4/20/01 9:00:00 AM	9	4/20/01 9:35:00 AM	14	4/20/01 10:10:00 AM	86	4/20/01 10:45:00 AM	11
4/20/01 9:01:00 AM	12	4/20/01 9:36:00 AM	10	4/20/01 10:11:00 AM	39	4/20/01 10:46:00 AM	12
4/20/01 9:02:00 AM	8	4/20/01 9:37:00 AM	10	4/20/01 10:12:00 AM	12	4/20/01 10:47:00 AM	12
4/20/01 9:03:00 AM	8	4/20/01 9:38:00 AM	10	4/20/01 10:13:00 AM	10	4/20/01 10:48:00 AM	15
4/20/01 9:04:00 AM	8	4/20/01 9:39:00 AM	10	4/20/01 10:14:00 AM	10	4/20/01 10:49:00 AM	17
4/20/01 9:05:00 AM	9	4/20/01 9:40:00 AM	25	4/20/01 10:15:00 AM	13	4/20/01 10:50:00 AM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/20/01 10:51:00 AM	16	4/20/01 11:26:00 AM	13	4/20/01 12:01:00 PM	17	4/20/01 12:36:00 PM	146
4/20/01 10:52:00 AM	14	4/20/01 11:27:00 AM	14	4/20/01 12:02:00 PM	15	4/20/01 12:37:00 PM	162
4/20/01 10:53:00 AM	12	4/20/01 11:28:00 AM	14	4/20/01 12:03:00 PM	15	4/20/01 12:38:00 PM	43
4/20/01 10:54:00 AM	15	4/20/01 11:29:00 AM	14	4/20/01 12:04:00 PM	16	4/20/01 12:39:00 PM	228
4/20/01 10:55:00 AM	13	4/20/01 11:30:00 AM	15	4/20/01 12:05:00 PM	26	4/20/01 12:40:00 PM	111
4/20/01 10:56:00 AM	13	4/20/01 11:31:00 AM	16	4/20/01 12:06:00 PM	34	4/20/01 12:41:00 PM	229
4/20/01 10:57:00 AM	15	4/20/01 11:32:00 AM	13	4/20/01 12:07:00 PM	57	4/20/01 12:42:00 PM	80
4/20/01 10:58:00 AM	13	4/20/01 11:33:00 AM	18	4/20/01 12:08:00 PM	19	4/20/01 12:43:00 PM	74
4/20/01 10:59:00 AM	14	4/20/01 11:34:00 AM	28	4/20/01 12:09:00 PM	23	4/20/01 12:44:00 PM	24
4/20/01 11:00:00 AM	18	4/20/01 11:35:00 AM	21	4/20/01 12:10:00 PM	21	4/20/01 12:45:00 PM	17
4/20/01 11:01:00 AM	38	4/20/01 11:36:00 AM	14	4/20/01 12:11:00 PM	15	4/20/01 12:46:00 PM	18
4/20/01 11:02:00 AM	14	4/20/01 11:37:00 AM	17	4/20/01 12:12:00 PM	16	4/20/01 12:47:00 PM	19
4/20/01 11:03:00 AM	13	4/20/01 11:38:00 AM	15	4/20/01 12:13:00 PM	14	4/20/01 12:48:00 PM	15
4/20/01 11:04:00 AM	13	4/20/01 11:39:00 AM	14	4/20/01 12:14:00 PM	20	4/20/01 12:49:00 PM	18
4/20/01 11:05:00 AM	14	4/20/01 11:40:00 AM	20	4/20/01 12:15:00 PM	17	4/20/01 12:50:00 PM	75
4/20/01 11:06:00 AM	17	4/20/01 11:41:00 AM	25	4/20/01 12:16:00 PM	17	4/20/01 12:51:00 PM	26
4/20/01 11:07:00 AM	13	4/20/01 11:42:00 AM	23	4/20/01 12:17:00 PM	19	4/20/01 12:52:00 PM	18
4/20/01 11:08:00 AM	14	4/20/01 11:43:00 AM	54	4/20/01 12:18:00 PM	16	4/20/01 12:53:00 PM	19
4/20/01 11:09:00 AM	14	4/20/01 11:44:00 AM	17	4/20/01 12:19:00 PM	17	4/20/01 12:54:00 PM	27
4/20/01 11:10:00 AM	20	4/20/01 11:45:00 AM	23	4/20/01 12:20:00 PM	16	4/20/01 12:55:00 PM	19
4/20/01 11:11:00 AM	16	4/20/01 11:46:00 AM	16	4/20/01 12:21:00 PM	14	4/20/01 12:56:00 PM	19
4/20/01 11:12:00 AM	13	4/20/01 11:47:00 AM	14	4/20/01 12:22:00 PM	16	4/20/01 12:57:00 PM	40
4/20/01 11:13:00 AM	17	4/20/01 11:48:00 AM	16	4/20/01 12:23:00 PM	15	4/20/01 12:58:00 PM	68
4/20/01 11:14:00 AM	17	4/20/01 11:49:00 AM	16	4/20/01 12:24:00 PM	20	4/20/01 12:59:00 PM	24
4/20/01 11:15:00 AM	16	4/20/01 11:50:00 AM	29	4/20/01 12:25:00 PM	15	4/20/01 1:00:00 PM	21
4/20/01 11:16:00 AM	25	4/20/01 11:51:00 AM	16	4/20/01 12:26:00 PM	18	4/20/01 1:01:00 PM	19
4/20/01 11:17:00 AM	23	4/20/01 11:52:00 AM	14	4/20/01 12:27:00 PM	66	4/20/01 1:02:00 PM	21
4/20/01 11:18:00 AM	22	4/20/01 11:53:00 AM	22	4/20/01 12:28:00 PM	27	4/20/01 1:03:00 PM	20
4/20/01 11:19:00 AM	16	4/20/01 11:54:00 AM	46	4/20/01 12:29:00 PM	21	4/20/01 1:04:00 PM	20
4/20/01 11:20:00 AM	14	4/20/01 11:55:00 AM	42	4/20/01 12:30:00 PM	24	4/23/01 7:44:00 AM	6
4/20/01 11:21:00 AM	14	4/20/01 11:56:00 AM	73	4/20/01 12:31:00 PM	17	4/23/01 7:45:00 AM	4
4/20/01 11:22:00 AM	17	4/20/01 11:57:00 AM	17	4/20/01 12:32:00 PM	16	4/23/01 7:46:00 AM	4
4/20/01 11:23:00 AM	16	4/20/01 11:58:00 AM	24	4/20/01 12:33:00 PM	16	4/23/01 7:47:00 AM	4
4/20/01 11:24:00 AM	14	4/20/01 11:59:00 AM	47	4/20/01 12:34:00 PM	15	4/23/01 7:48:00 AM	5
4/20/01 11:25:00 AM	14	4/20/01 12:00:00 PM	193	4/20/01 12:35:00 PM	15	4/23/01 7:49:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/23/01 7:50:00 AM	6	4/23/01 8:25:00 AM	6	4/23/01 9:00:00 AM	10	4/23/01 9:35:00 AM	7
4/23/01 7:51:00 AM	8	4/23/01 8:26:00 AM	5	4/23/01 9:01:00 AM	8	4/23/01 9:36:00 AM	9
4/23/01 7:52:00 AM	7	4/23/01 8:27:00 AM	5	4/23/01 9:02:00 AM	9	4/23/01 9:37:00 AM	7
4/23/01 7:53:00 AM	7	4/23/01 8:28:00 AM	5	4/23/01 9:03:00 AM	10	4/23/01 9:38:00 AM	7
4/23/01 7:54:00 AM	5	4/23/01 8:29:00 AM	10	4/23/01 9:04:00 AM	10	4/23/01 9:39:00 AM	7
4/23/01 7:55:00 AM	20	4/23/01 8:30:00 AM	6	4/23/01 9:05:00 AM	11	4/23/01 9:40:00 AM	7
4/23/01 7:56:00 AM	8	4/23/01 8:31:00 AM	4	4/23/01 9:06:00 AM	12	4/23/01 9:41:00 AM	10
4/23/01 7:57:00 AM	5	4/23/01 8:32:00 AM	5	4/23/01 9:07:00 AM	9	4/23/01 9:42:00 AM	9
4/23/01 7:58:00 AM	6	4/23/01 8:33:00 AM	5	4/23/01 9:08:00 AM	9	4/23/01 9:43:00 AM	15
4/23/01 7:59:00 AM	4	4/23/01 8:34:00 AM	5	4/23/01 9:09:00 AM	9	4/23/01 9:44:00 AM	8
4/23/01 8:00:00 AM	5	4/23/01 8:35:00 AM	5	4/23/01 9:10:00 AM	8	4/23/01 9:45:00 AM	8
4/23/01 8:01:00 AM	4	4/23/01 8:36:00 AM	5	4/23/01 9:11:00 AM	10	4/23/01 9:46:00 AM	8
4/23/01 8:02:00 AM	4	4/23/01 8:37:00 AM	5	4/23/01 9:12:00 AM	9	4/23/01 9:47:00 AM	7
4/23/01 8:03:00 AM	7	4/23/01 8:38:00 AM	7	4/23/01 9:13:00 AM	9	4/23/01 9:48:00 AM	7
4/23/01 8:04:00 AM	5	4/23/01 8:39:00 AM	7	4/23/01 9:14:00 AM	9	4/23/01 9:49:00 AM	8
4/23/01 8:05:00 AM	4	4/23/01 8:40:00 AM	4	4/23/01 9:15:00 AM	9	4/23/01 9:50:00 AM	8
4/23/01 8:06:00 AM	5	4/23/01 8:41:00 AM	5	4/23/01 9:16:00 AM	9	4/23/01 9:51:00 AM	7
4/23/01 8:07:00 AM	5	4/23/01 8:42:00 AM	5	4/23/01 9:17:00 AM	8	4/23/01 9:52:00 AM	7
4/23/01 8:08:00 AM	5	4/23/01 8:43:00 AM	4	4/23/01 9:18:00 AM	9	4/23/01 9:53:00 AM	9
4/23/01 8:09:00 AM	4	4/23/01 8:44:00 AM	8	4/23/01 9:19:00 AM	8	4/23/01 9:54:00 AM	7
4/23/01 8:10:00 AM	5	4/23/01 8:45:00 AM	5	4/23/01 9:20:00 AM	7	4/23/01 9:55:00 AM	6
4/23/01 8:11:00 AM	4	4/23/01 8:46:00 AM	4	4/23/01 9:21:00 AM	7	4/23/01 9:56:00 AM	6
4/23/01 8:12:00 AM	4	4/23/01 8:47:00 AM	4	4/23/01 9:22:00 AM	8	4/23/01 9:57:00 AM	8
4/23/01 8:13:00 AM	5	4/23/01 8:48:00 AM	5	4/23/01 9:23:00 AM	8	4/23/01 9:58:00 AM	7
4/23/01 8:14:00 AM	6	4/23/01 8:49:00 AM	6	4/23/01 9:24:00 AM	10	4/23/01 9:59:00 AM	7
4/23/01 8:15:00 AM	6	4/23/01 8:50:00 AM	7	4/23/01 9:25:00 AM	8	4/23/01 10:00:00 AM	7
4/23/01 8:16:00 AM	5	4/23/01 8:51:00 AM	6	4/23/01 9:26:00 AM	9	4/23/01 10:01:00 AM	7
4/23/01 8:17:00 AM	5	4/23/01 8:52:00 AM	6	4/23/01 9:27:00 AM	8	4/23/01 10:02:00 AM	6
4/23/01 8:18:00 AM	5	4/23/01 8:53:00 AM	7	4/23/01 9:28:00 AM	12	4/23/01 10:03:00 AM	7
4/23/01 8:19:00 AM	4	4/23/01 8:54:00 AM	7	4/23/01 9:29:00 AM	8	4/23/01 10:04:00 AM	7
4/23/01 8:20:00 AM	6	4/23/01 8:55:00 AM	10	4/23/01 9:30:00 AM	8	4/23/01 10:05:00 AM	6
4/23/01 8:21:00 AM	6	4/23/01 8:56:00 AM	12	4/23/01 9:31:00 AM	7	4/23/01 10:06:00 AM	7
4/23/01 8:22:00 AM	5	4/23/01 8:57:00 AM	24	4/23/01 9:32:00 AM	7	4/23/01 10:07:00 AM	6
4/23/01 8:23:00 AM	5	4/23/01 8:58:00 AM	12	4/23/01 9:33:00 AM	7	4/23/01 10:08:00 AM	6
4/23/01 8:24:00 AM	5	4/23/01 8:59:00 AM	26	4/23/01 9:34:00 AM	7	4/23/01 10:09:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/23/01 10:10:00 AM	6	4/23/01 10:45:00 AM	7	4/23/01 11:20:00 AM	7	4/23/01 11:55:00 AM	7
4/23/01 10:11:00 AM	6	4/23/01 10:46:00 AM	6	4/23/01 11:21:00 AM	8	4/23/01 11:56:00 AM	7
4/23/01 10:12:00 AM	6	4/23/01 10:47:00 AM	5	4/23/01 11:22:00 AM	8	4/23/01 11:57:00 AM	7
4/23/01 10:13:00 AM	6	4/23/01 10:48:00 AM	6	4/23/01 11:23:00 AM	9	4/23/01 11:58:00 AM	8
4/23/01 10:14:00 AM	6	4/23/01 10:49:00 AM	8	4/23/01 11:24:00 AM	7	4/23/01 11:59:00 AM	6
4/23/01 10:15:00 AM	6	4/23/01 10:50:00 AM	10	4/23/01 11:25:00 AM	9	4/23/01 12:00:00 PM	6
4/23/01 10:16:00 AM	9	4/23/01 10:51:00 AM	7	4/23/01 11:26:00 AM	8	4/23/01 12:01:00 PM	9
4/23/01 10:17:00 AM	6	4/23/01 10:52:00 AM	6	4/23/01 11:27:00 AM	8	4/23/01 12:02:00 PM	10
4/23/01 10:18:00 AM	7	4/23/01 10:53:00 AM	6	4/23/01 11:28:00 AM	11	4/23/01 12:03:00 PM	7
4/23/01 10:19:00 AM	6	4/23/01 10:54:00 AM	7	4/23/01 11:29:00 AM	10	4/23/01 12:04:00 PM	9
4/23/01 10:20:00 AM	6	4/23/01 10:55:00 AM	8	4/23/01 11:30:00 AM	8	4/23/01 12:05:00 PM	8
4/23/01 10:21:00 AM	6	4/23/01 10:56:00 AM	7	4/23/01 11:31:00 AM	9	4/23/01 12:06:00 PM	8
4/23/01 10:22:00 AM	6	4/23/01 10:57:00 AM	8	4/23/01 11:32:00 AM	9	4/23/01 12:07:00 PM	8
4/23/01 10:23:00 AM	6	4/23/01 10:58:00 AM	6	4/23/01 11:33:00 AM	9	4/23/01 12:08:00 PM	10
4/23/01 10:24:00 AM	6	4/23/01 10:59:00 AM	6	4/23/01 11:34:00 AM	10	4/23/01 12:09:00 PM	11
4/23/01 10:25:00 AM	6	4/23/01 11:00:00 AM	8	4/23/01 11:35:00 AM	9	4/23/01 12:10:00 PM	7
4/23/01 10:26:00 AM	7	4/23/01 11:01:00 AM	7	4/23/01 11:36:00 AM	7	4/23/01 12:11:00 PM	8
4/23/01 10:27:00 AM	12	4/23/01 11:02:00 AM	8	4/23/01 11:37:00 AM	8	4/23/01 12:12:00 PM	7
4/23/01 10:28:00 AM	8	4/23/01 11:03:00 AM	6	4/23/01 11:38:00 AM	10	4/23/01 12:13:00 PM	8
4/23/01 10:29:00 AM	9	4/23/01 11:04:00 AM	8	4/23/01 11:39:00 AM	8	4/23/01 12:14:00 PM	7
4/23/01 10:30:00 AM	32	4/23/01 11:05:00 AM	6	4/23/01 11:40:00 AM	7	4/23/01 12:15:00 PM	8
4/23/01 10:31:00 AM	7	4/23/01 11:06:00 AM	6	4/23/01 11:41:00 AM	7	4/23/01 12:16:00 PM	8
4/23/01 10:32:00 AM	7	4/23/01 11:07:00 AM	6	4/23/01 11:42:00 AM	8	4/23/01 12:17:00 PM	8
4/23/01 10:33:00 AM	6	4/23/01 11:08:00 AM	7	4/23/01 11:43:00 AM	8	4/23/01 12:18:00 PM	8
4/23/01 10:34:00 AM	6	4/23/01 11:09:00 AM	8	4/23/01 11:44:00 AM	8	4/23/01 12:19:00 PM	8
4/23/01 10:35:00 AM	6	4/23/01 11:10:00 AM	7	4/23/01 11:45:00 AM	7	4/23/01 12:20:00 PM	8
4/23/01 10:36:00 AM	5	4/23/01 11:11:00 AM	12	4/23/01 11:46:00 AM	8	4/23/01 12:21:00 PM	7
4/23/01 10:37:00 AM	8	4/23/01 11:12:00 AM	11	4/23/01 11:47:00 AM	7	4/23/01 12:22:00 PM	8
4/23/01 10:38:00 AM	6	4/23/01 11:13:00 AM	11	4/23/01 11:48:00 AM	6	4/23/01 12:23:00 PM	7
4/23/01 10:39:00 AM	6	4/23/01 11:14:00 AM	6	4/23/01 11:49:00 AM	10	4/23/01 12:24:00 PM	10
4/23/01 10:40:00 AM	8	4/23/01 11:15:00 AM	6	4/23/01 11:50:00 AM	8	4/23/01 12:25:00 PM	8
4/23/01 10:41:00 AM	29	4/23/01 11:16:00 AM	7	4/23/01 11:51:00 AM	14	4/23/01 12:26:00 PM	7
4/23/01 10:42:00 AM	10	4/23/01 11:17:00 AM	7	4/23/01 11:52:00 AM	31	4/23/01 12:27:00 PM	8
4/23/01 10:43:00 AM	7	4/23/01 11:18:00 AM	8	4/23/01 11:53:00 AM	8	4/23/01 12:28:00 PM	7
4/23/01 10:44:00 AM	6	4/23/01 11:19:00 AM	8	4/23/01 11:54:00 AM	7	4/23/01 12:29:00 PM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/23/01 12:30:00 PM	7	4/23/01 1:05:00 PM	7	4/23/01 1:40:00 PM	9	4/24/01 7:40:00 AM	49
4/23/01 12:31:00 PM	7	4/23/01 1:06:00 PM	8	4/23/01 1:41:00 PM	8	4/24/01 7:41:00 AM	45
4/23/01 12:32:00 PM	7	4/23/01 1:07:00 PM	6	4/23/01 1:42:00 PM	9	4/24/01 7:42:00 AM	47
4/23/01 12:33:00 PM	8	4/23/01 1:08:00 PM	6	4/23/01 1:43:00 PM	9	4/24/01 7:43:00 AM	47
4/23/01 12:34:00 PM	8	4/23/01 1:09:00 PM	7	4/23/01 1:44:00 PM	9	4/24/01 7:44:00 AM	142
4/23/01 12:35:00 PM	7	4/23/01 1:10:00 PM	7	4/23/01 1:45:00 PM	9	4/24/01 7:45:00 AM	54
4/23/01 12:36:00 PM	7	4/23/01 1:11:00 PM	6	4/23/01 1:46:00 PM	13	4/24/01 7:46:00 AM	45
4/23/01 12:37:00 PM	8	4/23/01 1:12:00 PM	7	4/23/01 1:47:00 PM	9	4/24/01 7:47:00 AM	46
4/23/01 12:38:00 PM	8	4/23/01 1:13:00 PM	6	4/23/01 1:48:00 PM	10	4/24/01 7:48:00 AM	46
4/23/01 12:39:00 PM	7	4/23/01 1:14:00 PM	7	4/23/01 1:49:00 PM	10	4/24/01 7:49:00 AM	45
4/23/01 12:40:00 PM	8	4/23/01 1:15:00 PM	8	4/23/01 1:50:00 PM	8	4/24/01 7:50:00 AM	46
4/23/01 12:41:00 PM	8	4/23/01 1:16:00 PM	7	4/24/01 7:16:00 AM	54	4/24/01 7:51:00 AM	44
4/23/01 12:42:00 PM	8	4/23/01 1:17:00 PM	7	4/24/01 7:17:00 AM	53	4/24/01 7:52:00 AM	46
4/23/01 12:43:00 PM	10	4/23/01 1:18:00 PM	8	4/24/01 7:18:00 AM	51	4/24/01 7:53:00 AM	46
4/23/01 12:44:00 PM	8	4/23/01 1:19:00 PM	7	4/24/01 7:19:00 AM	48	4/24/01 7:54:00 AM	46
4/23/01 12:45:00 PM	8	4/23/01 1:20:00 PM	7	4/24/01 7:20:00 AM	51	4/24/01 7:55:00 AM	44
4/23/01 12:46:00 PM	9	4/23/01 1:21:00 PM	8	4/24/01 7:21:00 AM	50	4/24/01 7:56:00 AM	44
4/23/01 12:47:00 PM	8	4/23/01 1:22:00 PM	13	4/24/01 7:22:00 AM	49	4/24/01 7:57:00 AM	44
4/23/01 12:48:00 PM	9	4/23/01 1:23:00 PM	8	4/24/01 7:23:00 AM	49	4/24/01 7:58:00 AM	43
4/23/01 12:49:00 PM	8	4/23/01 1:24:00 PM	7	4/24/01 7:24:00 AM	50	4/24/01 7:59:00 AM	45
4/23/01 12:50:00 PM	9	4/23/01 1:25:00 PM	8	4/24/01 7:25:00 AM	48	4/24/01 8:00:00 AM	44
4/23/01 12:51:00 PM	8	4/23/01 1:26:00 PM	8	4/24/01 7:26:00 AM	49	4/24/01 8:01:00 AM	45
4/23/01 12:52:00 PM	9	4/23/01 1:27:00 PM	8	4/24/01 7:27:00 AM	48	4/24/01 8:02:00 AM	43
4/23/01 12:53:00 PM	8	4/23/01 1:28:00 PM	10	4/24/01 7:28:00 AM	49	4/24/01 8:03:00 AM	42
4/23/01 12:54:00 PM	8	4/23/01 1:29:00 PM	11	4/24/01 7:29:00 AM	47	4/24/01 8:04:00 AM	42
4/23/01 12:55:00 PM	7	4/23/01 1:30:00 PM	10	4/24/01 7:30:00 AM	48	4/24/01 8:05:00 AM	43
4/23/01 12:56:00 PM	9	4/23/01 1:31:00 PM	7	4/24/01 7:31:00 AM	48	4/24/01 8:06:00 AM	43
4/23/01 12:57:00 PM	9	4/23/01 1:32:00 PM	9	4/24/01 7:32:00 AM	48	4/24/01 8:07:00 AM	43
4/23/01 12:58:00 PM	8	4/23/01 1:33:00 PM	9	4/24/01 7:33:00 AM	49	4/24/01 8:08:00 AM	43
4/23/01 12:59:00 PM	8	4/23/01 1:34:00 PM	8	4/24/01 7:34:00 AM	129	4/24/01 8:09:00 AM	42
4/23/01 1:00:00 PM	8	4/23/01 1:35:00 PM	9	4/24/01 7:35:00 AM	56	4/24/01 8:10:00 AM	46
4/23/01 1:01:00 PM	7	4/23/01 1:36:00 PM	15	4/24/01 7:36:00 AM	51	4/24/01 8:11:00 AM	45
4/23/01 1:02:00 PM	8	4/23/01 1:37:00 PM	8	4/24/01 7:37:00 AM	56	4/24/01 8:12:00 AM	42
4/23/01 1:03:00 PM	7	4/23/01 1:38:00 PM	8	4/24/01 7:38:00 AM	50	4/24/01 8:13:00 AM	41
4/23/01 1:04:00 PM	8	4/23/01 1:39:00 PM	8	4/24/01 7:39:00 AM	51	4/24/01 8:14:00 AM	41

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/24/01 8:15:00 AM	41	4/24/01 8:50:00 AM	42	4/24/01 9:25:00 AM	36	4/24/01 10:00:00 AM	33
4/24/01 8:16:00 AM	41	4/24/01 8:51:00 AM	43	4/24/01 9:26:00 AM	36	4/24/01 10:01:00 AM	34
4/24/01 8:17:00 AM	42	4/24/01 8:52:00 AM	42	4/24/01 9:27:00 AM	37	4/24/01 10:02:00 AM	34
4/24/01 8:18:00 AM	41	4/24/01 8:53:00 AM	43	4/24/01 9:28:00 AM	36	4/24/01 10:03:00 AM	39
4/24/01 8:19:00 AM	41	4/24/01 8:54:00 AM	46	4/24/01 9:29:00 AM	38	4/24/01 10:04:00 AM	39
4/24/01 8:20:00 AM	42	4/24/01 8:55:00 AM	42	4/24/01 9:30:00 AM	38	4/24/01 10:05:00 AM	34
4/24/01 8:21:00 AM	42	4/24/01 8:56:00 AM	42	4/24/01 9:31:00 AM	37	4/24/01 10:06:00 AM	35
4/24/01 8:22:00 AM	42	4/24/01 8:57:00 AM	40	4/24/01 9:32:00 AM	37	4/24/01 10:07:00 AM	33
4/24/01 8:23:00 AM	42	4/24/01 8:58:00 AM	44	4/24/01 9:33:00 AM	36	4/24/01 10:08:00 AM	32
4/24/01 8:24:00 AM	44	4/24/01 8:59:00 AM	43	4/24/01 9:34:00 AM	35	4/24/01 10:09:00 AM	35
4/24/01 8:25:00 AM	104	4/24/01 9:00:00 AM	42	4/24/01 9:35:00 AM	37	4/24/01 10:10:00 AM	32
4/24/01 8:26:00 AM	48	4/24/01 9:01:00 AM	43	4/24/01 9:36:00 AM	35	4/24/01 10:11:00 AM	32
4/24/01 8:27:00 AM	48	4/24/01 9:02:00 AM	41	4/24/01 9:37:00 AM	37	4/24/01 10:12:00 AM	31
4/24/01 8:28:00 AM	41	4/24/01 9:03:00 AM	43	4/24/01 9:38:00 AM	35	4/24/01 10:13:00 AM	34
4/24/01 8:29:00 AM	42	4/24/01 9:04:00 AM	41	4/24/01 9:39:00 AM	37	4/24/01 10:14:00 AM	33
4/24/01 8:30:00 AM	40	4/24/01 9:05:00 AM	41	4/24/01 9:40:00 AM	37	4/24/01 10:15:00 AM	31
4/24/01 8:31:00 AM	42	4/24/01 9:06:00 AM	44	4/24/01 9:41:00 AM	38	4/24/01 10:16:00 AM	31
4/24/01 8:32:00 AM	41	4/24/01 9:07:00 AM	40	4/24/01 9:42:00 AM	35	4/24/01 10:17:00 AM	29
4/24/01 8:33:00 AM	41	4/24/01 9:08:00 AM	40	4/24/01 9:43:00 AM	33	4/24/01 10:18:00 AM	30
4/24/01 8:34:00 AM	40	4/24/01 9:09:00 AM	41	4/24/01 9:44:00 AM	34	4/24/01 10:19:00 AM	32
4/24/01 8:35:00 AM	42	4/24/01 9:10:00 AM	41	4/24/01 9:45:00 AM	35	4/24/01 10:20:00 AM	32
4/24/01 8:36:00 AM	41	4/24/01 9:11:00 AM	40	4/24/01 9:46:00 AM	34	4/24/01 10:21:00 AM	30
4/24/01 8:37:00 AM	43	4/24/01 9:12:00 AM	40	4/24/01 9:47:00 AM	34	4/24/01 10:22:00 AM	30
4/24/01 8:38:00 AM	43	4/24/01 9:13:00 AM	40	4/24/01 9:48:00 AM	32	4/24/01 10:23:00 AM	31
4/24/01 8:39:00 AM	43	4/24/01 9:14:00 AM	38	4/24/01 9:49:00 AM	32	4/24/01 10:24:00 AM	31
4/24/01 8:40:00 AM	46	4/24/01 9:15:00 AM	39	4/24/01 9:50:00 AM	33	4/24/01 10:25:00 AM	33
4/24/01 8:41:00 AM	43	4/24/01 9:16:00 AM	40	4/24/01 9:51:00 AM	31	4/24/01 10:26:00 AM	31
4/24/01 8:42:00 AM	41	4/24/01 9:17:00 AM	39	4/24/01 9:52:00 AM	31	4/24/01 10:27:00 AM	31
4/24/01 8:43:00 AM	48	4/24/01 9:18:00 AM	36	4/24/01 9:53:00 AM	31	4/24/01 10:28:00 AM	32
4/24/01 8:44:00 AM	41	4/24/01 9:19:00 AM	37	4/24/01 9:54:00 AM	32	4/24/01 10:29:00 AM	30
4/24/01 8:45:00 AM	42	4/24/01 9:20:00 AM	40	4/24/01 9:55:00 AM	32	4/24/01 10:30:00 AM	31
4/24/01 8:46:00 AM	40	4/24/01 9:21:00 AM	37	4/24/01 9:56:00 AM	31	4/24/01 10:31:00 AM	30
4/24/01 8:47:00 AM	42	4/24/01 9:22:00 AM	37	4/24/01 9:57:00 AM	30	4/24/01 10:32:00 AM	30
4/24/01 8:48:00 AM	41	4/24/01 9:23:00 AM	36	4/24/01 9:58:00 AM	32	4/24/01 10:33:00 AM	30
4/24/01 8:49:00 AM	47	4/24/01 9:24:00 AM	36	4/24/01 9:59:00 AM	33	4/24/01 10:34:00 AM	30

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/24/01 10:35:00 AM	30	4/24/01 11:10:00 AM	29	4/25/01 6:40:00 AM	20	4/25/01 7:15:00 AM	15
4/24/01 10:36:00 AM	30	4/24/01 11:11:00 AM	30	4/25/01 6:41:00 AM	20	4/25/01 7:16:00 AM	11
4/24/01 10:37:00 AM	31	4/24/01 11:12:00 AM	29	4/25/01 6:42:00 AM	14	4/25/01 7:17:00 AM	9
4/24/01 10:38:00 AM	29	4/24/01 11:13:00 AM	28	4/25/01 6:43:00 AM	19	4/25/01 7:18:00 AM	12
4/24/01 10:39:00 AM	29	4/24/01 11:14:00 AM	35	4/25/01 6:44:00 AM	10	4/25/01 7:19:00 AM	9
4/24/01 10:40:00 AM	33	4/24/01 11:15:00 AM	28	4/25/01 6:45:00 AM	16	4/25/01 7:20:00 AM	12
4/24/01 10:41:00 AM	29	4/24/01 11:16:00 AM	28	4/25/01 6:46:00 AM	10	4/25/01 7:21:00 AM	12
4/24/01 10:42:00 AM	30	4/24/01 11:17:00 AM	25	4/25/01 6:47:00 AM	12	4/25/01 7:22:00 AM	10
4/24/01 10:43:00 AM	30	4/24/01 11:18:00 AM	25	4/25/01 6:48:00 AM	9	4/25/01 7:23:00 AM	11
4/24/01 10:44:00 AM	30	4/24/01 11:19:00 AM	25	4/25/01 6:49:00 AM	12	4/25/01 7:24:00 AM	8
4/24/01 10:45:00 AM	30	4/24/01 11:20:00 AM	24	4/25/01 6:50:00 AM	10	4/25/01 7:25:00 AM	9
4/24/01 10:46:00 AM	30	4/24/01 11:21:00 AM	30	4/25/01 6:51:00 AM	6	4/25/01 7:26:00 AM	18
4/24/01 10:47:00 AM	31	4/24/01 11:22:00 AM	31	4/25/01 6:52:00 AM	7	4/25/01 7:27:00 AM	13
4/24/01 10:48:00 AM	30	4/24/01 11:23:00 AM	33	4/25/01 6:53:00 AM	10	4/25/01 7:28:00 AM	12
4/24/01 10:49:00 AM	30	4/24/01 11:24:00 AM	30	4/25/01 6:54:00 AM	6	4/25/01 7:29:00 AM	8
4/24/01 10:50:00 AM	30	4/24/01 11:25:00 AM	36	4/25/01 6:55:00 AM	6	4/25/01 7:30:00 AM	8
4/24/01 10:51:00 AM	30	4/24/01 11:26:00 AM	32	4/25/01 6:56:00 AM	7	4/25/01 7:31:00 AM	9
4/24/01 10:52:00 AM	29	4/24/01 11:27:00 AM	26	4/25/01 6:57:00 AM	7	4/25/01 7:32:00 AM	33
4/24/01 10:53:00 AM	29	4/24/01 11:28:00 AM	23	4/25/01 6:58:00 AM	7	4/25/01 7:33:00 AM	11
4/24/01 10:54:00 AM	29	4/24/01 11:29:00 AM	26	4/25/01 6:59:00 AM	8	4/25/01 7:34:00 AM	8
4/24/01 10:55:00 AM	29	4/24/01 11:30:00 AM	27	4/25/01 7:00:00 AM	11	4/25/01 7:35:00 AM	10
4/24/01 10:56:00 AM	29	4/25/01 6:26:00 AM	17	4/25/01 7:01:00 AM	9	4/25/01 7:36:00 AM	8
4/24/01 10:57:00 AM	29	4/25/01 6:27:00 AM	7	4/25/01 7:02:00 AM	8	4/25/01 7:37:00 AM	9
4/24/01 10:58:00 AM	29	4/25/01 6:28:00 AM	6	4/25/01 7:03:00 AM	12	4/25/01 7:38:00 AM	16
4/24/01 10:59:00 AM	30	4/25/01 6:29:00 AM	6	4/25/01 7:04:00 AM	8	4/25/01 7:39:00 AM	8
4/24/01 11:00:00 AM	30	4/25/01 6:30:00 AM	6	4/25/01 7:05:00 AM	10	4/25/01 7:40:00 AM	8
4/24/01 11:01:00 AM	30	4/25/01 6:31:00 AM	7	4/25/01 7:06:00 AM	11	4/25/01 7:41:00 AM	7
4/24/01 11:02:00 AM	31	4/25/01 6:32:00 AM	7	4/25/01 7:07:00 AM	16	4/25/01 7:42:00 AM	7
4/24/01 11:03:00 AM	31	4/25/01 6:33:00 AM	13	4/25/01 7:08:00 AM	10	4/25/01 7:43:00 AM	8
4/24/01 11:04:00 AM	30	4/25/01 6:34:00 AM	14	4/25/01 7:09:00 AM	7	4/25/01 7:44:00 AM	8
4/24/01 11:05:00 AM	30	4/25/01 6:35:00 AM	16	4/25/01 7:10:00 AM	9	4/25/01 7:45:00 AM	7
4/24/01 11:06:00 AM	31	4/25/01 6:36:00 AM	10	4/25/01 7:11:00 AM	20	4/25/01 7:46:00 AM	7
4/24/01 11:07:00 AM	30	4/25/01 6:37:00 AM	16	4/25/01 7:12:00 AM	6	4/25/01 7:47:00 AM	19
4/24/01 11:08:00 AM	29	4/25/01 6:38:00 AM	11	4/25/01 7:13:00 AM	7	4/25/01 7:48:00 AM	13
4/24/01 11:09:00 AM	29	4/25/01 6:39:00 AM	12	4/25/01 7:14:00 AM	8	4/25/01 7:49:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/25/01 7:50:00 AM	7	4/25/01 8:25:00 AM	8	4/25/01 9:00:00 AM	9	4/25/01 9:35:00 AM	11
4/25/01 7:51:00 AM	8	4/25/01 8:26:00 AM	6	4/25/01 9:01:00 AM	8	4/25/01 9:36:00 AM	42
4/25/01 7:52:00 AM	19	4/25/01 8:27:00 AM	6	4/25/01 9:02:00 AM	9	4/25/01 9:37:00 AM	54
4/25/01 7:53:00 AM	12	4/25/01 8:28:00 AM	6	4/25/01 9:03:00 AM	13	4/25/01 9:38:00 AM	20
4/25/01 7:54:00 AM	7	4/25/01 8:29:00 AM	7	4/25/01 9:04:00 AM	9	4/25/01 9:39:00 AM	12
4/25/01 7:55:00 AM	11	4/25/01 8:30:00 AM	6	4/25/01 9:05:00 AM	14	4/25/01 9:40:00 AM	40
4/25/01 7:56:00 AM	23	4/25/01 8:31:00 AM	6	4/25/01 9:06:00 AM	8	4/25/01 9:41:00 AM	8
4/25/01 7:57:00 AM	17	4/25/01 8:32:00 AM	7	4/25/01 9:07:00 AM	26	4/25/01 9:42:00 AM	9
4/25/01 7:58:00 AM	14	4/25/01 8:33:00 AM	38	4/25/01 9:08:00 AM	19	4/25/01 9:43:00 AM	10
4/25/01 7:59:00 AM	8	4/25/01 8:34:00 AM	10	4/25/01 9:09:00 AM	11	4/25/01 9:44:00 AM	8
4/25/01 8:00:00 AM	11	4/25/01 8:35:00 AM	8	4/25/01 9:10:00 AM	7	4/25/01 9:45:00 AM	8
4/25/01 8:01:00 AM	8	4/25/01 8:36:00 AM	14	4/25/01 9:11:00 AM	7	4/25/01 9:46:00 AM	18
4/25/01 8:02:00 AM	8	4/25/01 8:37:00 AM	8	4/25/01 9:12:00 AM	21	4/25/01 9:47:00 AM	10
4/25/01 8:03:00 AM	14	4/25/01 8:38:00 AM	8	4/25/01 9:13:00 AM	9	4/25/01 9:48:00 AM	10
4/25/01 8:04:00 AM	10	4/25/01 8:39:00 AM	8	4/25/01 9:14:00 AM	8	4/25/01 9:49:00 AM	13
4/25/01 8:05:00 AM	20	4/25/01 8:40:00 AM	154	4/25/01 9:15:00 AM	9	4/25/01 9:50:00 AM	13
4/25/01 8:06:00 AM	10	4/25/01 8:41:00 AM	16	4/25/01 9:16:00 AM	14	4/25/01 9:51:00 AM	9
4/25/01 8:07:00 AM	7	4/25/01 8:42:00 AM	11	4/25/01 9:17:00 AM	8	4/26/01 9:27:00 AM	21
4/25/01 8:08:00 AM	7	4/25/01 8:43:00 AM	28	4/25/01 9:18:00 AM	7	4/26/01 9:28:00 AM	18
4/25/01 8:09:00 AM	7	4/25/01 8:44:00 AM	12	4/25/01 9:19:00 AM	8	4/26/01 9:29:00 AM	8
4/25/01 8:10:00 AM	7	4/25/01 8:45:00 AM	34	4/25/01 9:20:00 AM	42	4/26/01 9:30:00 AM	9
4/25/01 8:11:00 AM	6	4/25/01 8:46:00 AM	12	4/25/01 9:21:00 AM	9	4/26/01 9:31:00 AM	10
4/25/01 8:12:00 AM	8	4/25/01 8:47:00 AM	42	4/25/01 9:22:00 AM	17	4/26/01 9:32:00 AM	10
4/25/01 8:13:00 AM	6	4/25/01 8:48:00 AM	10	4/25/01 9:23:00 AM	8	4/26/01 9:33:00 AM	11
4/25/01 8:14:00 AM	7	4/25/01 8:49:00 AM	17	4/25/01 9:24:00 AM	12	4/26/01 9:34:00 AM	12
4/25/01 8:15:00 AM	8	4/25/01 8:50:00 AM	11	4/25/01 9:25:00 AM	9	4/26/01 9:35:00 AM	8
4/25/01 8:16:00 AM	7	4/25/01 8:51:00 AM	14	4/25/01 9:26:00 AM	8	4/26/01 9:36:00 AM	7
4/25/01 8:17:00 AM	8	4/25/01 8:52:00 AM	30	4/25/01 9:27:00 AM	14	4/26/01 9:37:00 AM	12
4/25/01 8:18:00 AM	6	4/25/01 8:53:00 AM	8	4/25/01 9:28:00 AM	10	4/26/01 9:38:00 AM	8
4/25/01 8:19:00 AM	17	4/25/01 8:54:00 AM	10	4/25/01 9:29:00 AM	8	4/26/01 9:39:00 AM	8
4/25/01 8:20:00 AM	7	4/25/01 8:55:00 AM	9	4/25/01 9:30:00 AM	8	4/26/01 9:40:00 AM	13
4/25/01 8:21:00 AM	7	4/25/01 8:56:00 AM	7	4/25/01 9:31:00 AM	9	4/26/01 9:41:00 AM	28
4/25/01 8:22:00 AM	8	4/25/01 8:57:00 AM	7	4/25/01 9:32:00 AM	11	4/26/01 9:42:00 AM	72
4/25/01 8:23:00 AM	7	4/25/01 8:58:00 AM	12	4/25/01 9:33:00 AM	36	4/26/01 9:43:00 AM	237
4/25/01 8:24:00 AM	8	4/25/01 8:59:00 AM	9	4/25/01 9:34:00 AM	26	4/26/01 9:44:00 AM	275

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/26/01 9:45:00 AM	754	4/26/01 10:20:00 AM	34	4/26/01 10:55:00 AM	16	4/26/01 11:30:00 AM	18
4/26/01 9:46:00 AM	709	4/26/01 10:21:00 AM	16	4/26/01 10:56:00 AM	16	4/26/01 11:31:00 AM	13
4/26/01 9:47:00 AM	81	4/26/01 10:22:00 AM	11	4/26/01 10:57:00 AM	14	4/26/01 11:32:00 AM	40
4/26/01 9:48:00 AM	8	4/26/01 10:23:00 AM	18	4/26/01 10:58:00 AM	34	4/26/01 11:33:00 AM	12
4/26/01 9:49:00 AM	17	4/26/01 10:24:00 AM	25	4/26/01 10:59:00 AM	20	4/26/01 11:34:00 AM	13
4/26/01 9:50:00 AM	10	4/26/01 10:25:00 AM	35	4/26/01 11:00:00 AM	10	4/26/01 11:35:00 AM	14
4/26/01 9:51:00 AM	96	4/26/01 10:26:00 AM	23	4/26/01 11:01:00 AM	13	4/26/01 11:36:00 AM	11
4/26/01 9:52:00 AM	13	4/26/01 10:27:00 AM	19	4/26/01 11:02:00 AM	13	4/26/01 11:37:00 AM	10
4/26/01 9:53:00 AM	18	4/26/01 10:28:00 AM	17	4/26/01 11:03:00 AM	17	4/26/01 11:38:00 AM	30
4/26/01 9:54:00 AM	23	4/26/01 10:29:00 AM	20	4/26/01 11:04:00 AM	12	4/26/01 11:39:00 AM	80
4/26/01 9:55:00 AM	9	4/26/01 10:30:00 AM	25	4/26/01 11:05:00 AM	13	4/26/01 11:40:00 AM	10
4/26/01 9:56:00 AM	15	4/26/01 10:31:00 AM	73	4/26/01 11:06:00 AM	10	4/26/01 11:41:00 AM	13
4/26/01 9:57:00 AM	12	4/26/01 10:32:00 AM	9	4/26/01 11:07:00 AM	11	4/26/01 11:42:00 AM	12
4/26/01 9:58:00 AM	8	4/26/01 10:33:00 AM	9	4/26/01 11:08:00 AM	28	4/26/01 11:43:00 AM	22
4/26/01 9:59:00 AM	6	4/26/01 10:34:00 AM	10	4/26/01 11:09:00 AM	11	4/26/01 11:44:00 AM	11
4/26/01 10:00:00 AM	9	4/26/01 10:35:00 AM	19	4/26/01 11:10:00 AM	13	4/26/01 11:45:00 AM	10
4/26/01 10:01:00 AM	138	4/26/01 10:36:00 AM	21	4/26/01 11:11:00 AM	13	4/26/01 11:46:00 AM	10
4/26/01 10:02:00 AM	524	4/26/01 10:37:00 AM	15	4/26/01 11:12:00 AM	10	4/26/01 11:47:00 AM	10
4/26/01 10:03:00 AM	358	4/26/01 10:38:00 AM	10	4/26/01 11:13:00 AM	10	4/26/01 11:48:00 AM	10
4/26/01 10:04:00 AM	153	4/26/01 10:39:00 AM	12	4/26/01 11:14:00 AM	10	4/26/01 11:49:00 AM	9
4/26/01 10:05:00 AM	223	4/26/01 10:40:00 AM	12	4/26/01 11:15:00 AM	9	4/26/01 11:50:00 AM	10
4/26/01 10:06:00 AM	157	4/26/01 10:41:00 AM	13	4/26/01 11:16:00 AM	12	4/26/01 11:51:00 AM	10
4/26/01 10:07:00 AM	63	4/26/01 10:42:00 AM	16	4/26/01 11:17:00 AM	16	4/26/01 11:52:00 AM	10
4/26/01 10:08:00 AM	25	4/26/01 10:43:00 AM	8	4/26/01 11:18:00 AM	11	4/26/01 11:53:00 AM	10
4/26/01 10:09:00 AM	15	4/26/01 10:44:00 AM	9	4/26/01 11:19:00 AM	9	4/26/01 11:54:00 AM	11
4/26/01 10:10:00 AM	35	4/26/01 10:45:00 AM	14	4/26/01 11:20:00 AM	9	4/26/01 11:55:00 AM	10
4/26/01 10:11:00 AM	75	4/26/01 10:46:00 AM	10	4/26/01 11:21:00 AM	10	4/26/01 11:56:00 AM	10
4/26/01 10:12:00 AM	48	4/26/01 10:47:00 AM	8	4/26/01 11:22:00 AM	10	4/26/01 11:57:00 AM	9
4/26/01 10:13:00 AM	18	4/26/01 10:48:00 AM	9	4/26/01 11:23:00 AM	14	4/26/01 11:58:00 AM	10
4/26/01 10:14:00 AM	20	4/26/01 10:49:00 AM	10	4/26/01 11:24:00 AM	21	4/26/01 11:59:00 AM	11
4/26/01 10:15:00 AM	10	4/26/01 10:50:00 AM	11	4/26/01 11:25:00 AM	9	4/26/01 12:00:00 PM	10
4/26/01 10:16:00 AM	14	4/26/01 10:51:00 AM	18	4/26/01 11:26:00 AM	12	4/26/01 12:01:00 PM	13
4/26/01 10:17:00 AM	8	4/26/01 10:52:00 AM	10	4/26/01 11:27:00 AM	10	4/26/01 12:02:00 PM	25
4/26/01 10:18:00 AM	52	4/26/01 10:53:00 AM	18	4/26/01 11:28:00 AM	14	4/26/01 12:03:00 PM	10
4/26/01 10:19:00 AM	14	4/26/01 10:54:00 AM	12	4/26/01 11:29:00 AM	15	4/26/01 12:04:00 PM	20

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/26/01 12:05:00 PM	10	4/26/01 12:40:00 PM	10	4/26/01 1:15:00 PM	10	4/27/01 6:59:00 AM	23
4/26/01 12:06:00 PM	14	4/26/01 12:41:00 PM	10	4/26/01 1:16:00 PM	23	4/27/01 7:00:00 AM	22
4/26/01 12:07:00 PM	12	4/26/01 12:42:00 PM	11	4/26/01 1:17:00 PM	13	4/27/01 7:01:00 AM	23
4/26/01 12:08:00 PM	10	4/26/01 12:43:00 PM	11	4/26/01 1:18:00 PM	10	4/27/01 7:02:00 AM	22
4/26/01 12:09:00 PM	11	4/26/01 12:44:00 PM	10	4/26/01 1:19:00 PM	10	4/27/01 7:03:00 AM	21
4/26/01 12:10:00 PM	12	4/26/01 12:45:00 PM	9	4/26/01 1:20:00 PM	10	4/27/01 7:04:00 AM	18
4/26/01 12:11:00 PM	11	4/26/01 12:46:00 PM	13	4/26/01 1:21:00 PM	9	4/27/01 7:05:00 AM	18
4/26/01 12:12:00 PM	12	4/26/01 12:47:00 PM	24	4/26/01 1:22:00 PM	10	4/27/01 7:06:00 AM	16
4/26/01 12:13:00 PM	10	4/26/01 12:48:00 PM	13	4/26/01 1:23:00 PM	12	4/27/01 7:07:00 AM	19
4/26/01 12:14:00 PM	15	4/26/01 12:49:00 PM	10	4/26/01 1:24:00 PM	10	4/27/01 7:08:00 AM	16
4/26/01 12:15:00 PM	13	4/26/01 12:50:00 PM	12	4/26/01 1:25:00 PM	11	4/27/01 7:09:00 AM	18
4/26/01 12:16:00 PM	10	4/26/01 12:51:00 PM	10	4/26/01 1:26:00 PM	12	4/27/01 7:10:00 AM	18
4/26/01 12:17:00 PM	10	4/26/01 12:52:00 PM	10	4/26/01 1:27:00 PM	16	4/27/01 7:11:00 AM	17
4/26/01 12:18:00 PM	10	4/26/01 12:53:00 PM	10	4/26/01 1:28:00 PM	11	4/27/01 7:12:00 AM	17
4/26/01 12:19:00 PM	12	4/26/01 12:54:00 PM	10	4/26/01 1:29:00 PM	10	4/27/01 7:13:00 AM	22
4/26/01 12:20:00 PM	9	4/26/01 12:55:00 PM	10	4/26/01 1:30:00 PM	11	4/27/01 7:14:00 AM	21
4/26/01 12:21:00 PM	10	4/26/01 12:56:00 PM	10	4/27/01 6:40:00 AM	26	4/27/01 7:15:00 AM	24
4/26/01 12:22:00 PM	12	4/26/01 12:57:00 PM	14	4/27/01 6:41:00 AM	32	4/27/01 7:16:00 AM	25
4/26/01 12:23:00 PM	11	4/26/01 12:58:00 PM	22	4/27/01 6:42:00 AM	27	4/27/01 7:17:00 AM	22
4/26/01 12:24:00 PM	9	4/26/01 12:59:00 PM	22	4/27/01 6:43:00 AM	15	4/27/01 7:18:00 AM	25
4/26/01 12:25:00 PM	9	4/26/01 1:00:00 PM	12	4/27/01 6:44:00 AM	14	4/27/01 7:19:00 AM	22
4/26/01 12:26:00 PM	34	4/26/01 1:01:00 PM	10	4/27/01 6:45:00 AM	18	4/27/01 7:20:00 AM	24
4/26/01 12:27:00 PM	13	4/26/01 1:02:00 PM	10	4/27/01 6:46:00 AM	19	4/27/01 7:21:00 AM	21
4/26/01 12:28:00 PM	10	4/26/01 1:03:00 PM	11	4/27/01 6:47:00 AM	23	4/27/01 7:22:00 AM	23
4/26/01 12:29:00 PM	12	4/26/01 1:04:00 PM	13	4/27/01 6:48:00 AM	20	4/27/01 7:23:00 AM	24
4/26/01 12:30:00 PM	79	4/26/01 1:05:00 PM	13	4/27/01 6:49:00 AM	22	4/27/01 7:24:00 AM	20
4/26/01 12:31:00 PM	21	4/26/01 1:06:00 PM	9	4/27/01 6:50:00 AM	24	4/27/01 7:25:00 AM	20
4/26/01 12:32:00 PM	39	4/26/01 1:07:00 PM	10	4/27/01 6:51:00 AM	25	4/27/01 7:26:00 AM	23
4/26/01 12:33:00 PM	17	4/26/01 1:08:00 PM	24	4/27/01 6:52:00 AM	23	4/27/01 7:27:00 AM	22
4/26/01 12:34:00 PM	28	4/26/01 1:09:00 PM	14	4/27/01 6:53:00 AM	24	4/27/01 7:28:00 AM	48
4/26/01 12:35:00 PM	16	4/26/01 1:10:00 PM	10	4/27/01 6:54:00 AM	23	4/27/01 7:29:00 AM	26
4/26/01 12:36:00 PM	42	4/26/01 1:11:00 PM	10	4/27/01 6:55:00 AM	21	4/27/01 7:30:00 AM	24
4/26/01 12:37:00 PM	11	4/26/01 1:12:00 PM	10	4/27/01 6:56:00 AM	19	4/27/01 7:31:00 AM	15
4/26/01 12:38:00 PM	13	4/26/01 1:13:00 PM	11	4/27/01 6:57:00 AM	23	4/27/01 7:32:00 AM	14
4/26/01 12:39:00 PM	32	4/26/01 1:14:00 PM	10	4/27/01 6:58:00 AM	24	4/27/01 7:33:00 AM	18

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/27/01 7:34:00 AM	14	4/27/01 8:09:00 AM	18	4/27/01 8:44:00 AM	17	4/27/01 9:19:00 AM	27
4/27/01 7:35:00 AM	15	4/27/01 8:10:00 AM	18	4/27/01 8:45:00 AM	21	4/27/01 9:20:00 AM	29
4/27/01 7:36:00 AM	18	4/27/01 8:11:00 AM	19	4/27/01 8:46:00 AM	17	4/27/01 9:21:00 AM	20
4/27/01 7:37:00 AM	17	4/27/01 8:12:00 AM	18	4/27/01 8:47:00 AM	21	4/27/01 9:22:00 AM	21
4/27/01 7:38:00 AM	30	4/27/01 8:13:00 AM	17	4/27/01 8:48:00 AM	20	4/27/01 9:23:00 AM	18
4/27/01 7:39:00 AM	18	4/27/01 8:14:00 AM	19	4/27/01 8:49:00 AM	16	4/27/01 9:24:00 AM	15
4/27/01 7:40:00 AM	18	4/27/01 8:15:00 AM	18	4/27/01 8:50:00 AM	27	4/27/01 9:25:00 AM	19
4/27/01 7:41:00 AM	57	4/27/01 8:16:00 AM	17	4/27/01 8:51:00 AM	23	4/27/01 9:26:00 AM	22
4/27/01 7:42:00 AM	27	4/27/01 8:17:00 AM	14	4/27/01 8:52:00 AM	43	4/27/01 9:27:00 AM	28
4/27/01 7:43:00 AM	23	4/27/01 8:18:00 AM	16	4/27/01 8:53:00 AM	35	4/27/01 9:28:00 AM	18
4/27/01 7:44:00 AM	101	4/27/01 8:19:00 AM	26	4/27/01 8:54:00 AM	18	4/27/01 9:29:00 AM	30
4/27/01 7:45:00 AM	66	4/27/01 8:20:00 AM	16	4/27/01 8:55:00 AM	40	4/27/01 9:30:00 AM	15
4/27/01 7:46:00 AM	24	4/27/01 8:21:00 AM	20	4/27/01 8:56:00 AM	20	4/27/01 9:31:00 AM	16
4/27/01 7:47:00 AM	23	4/27/01 8:22:00 AM	18	4/27/01 8:57:00 AM	23	4/27/01 9:32:00 AM	19
4/27/01 7:48:00 AM	21	4/27/01 8:23:00 AM	17	4/27/01 8:58:00 AM	19	4/27/01 9:33:00 AM	17
4/27/01 7:49:00 AM	24	4/27/01 8:24:00 AM	15	4/27/01 8:59:00 AM	74	4/27/01 9:34:00 AM	19
4/27/01 7:50:00 AM	24	4/27/01 8:25:00 AM	18	4/27/01 9:00:00 AM	36	4/27/01 9:35:00 AM	17
4/27/01 7:51:00 AM	22	4/27/01 8:26:00 AM	15	4/27/01 9:01:00 AM	18	4/27/01 9:36:00 AM	18
4/27/01 7:52:00 AM	23	4/27/01 8:27:00 AM	15	4/27/01 9:02:00 AM	26	4/27/01 9:37:00 AM	25
4/27/01 7:53:00 AM	20	4/27/01 8:28:00 AM	15	4/27/01 9:03:00 AM	21	4/27/01 9:38:00 AM	23
4/27/01 7:54:00 AM	23	4/27/01 8:29:00 AM	17	4/27/01 9:04:00 AM	44	4/27/01 9:39:00 AM	22
4/27/01 7:55:00 AM	23	4/27/01 8:30:00 AM	18	4/27/01 9:05:00 AM	17	4/27/01 9:40:00 AM	35
4/27/01 7:56:00 AM	20	4/27/01 8:31:00 AM	18	4/27/01 9:06:00 AM	19	4/27/01 9:41:00 AM	60
4/27/01 7:57:00 AM	20	4/27/01 8:32:00 AM	19	4/27/01 9:07:00 AM	20	4/27/01 9:42:00 AM	16
4/27/01 7:58:00 AM	20	4/27/01 8:33:00 AM	19	4/27/01 9:08:00 AM	23	4/27/01 9:43:00 AM	14
4/27/01 7:59:00 AM	21	4/27/01 8:34:00 AM	21	4/27/01 9:09:00 AM	21	4/27/01 9:44:00 AM	32
4/27/01 8:00:00 AM	17	4/27/01 8:35:00 AM	20	4/27/01 9:10:00 AM	22	4/27/01 9:45:00 AM	27
4/27/01 8:01:00 AM	18	4/27/01 8:36:00 AM	19	4/27/01 9:11:00 AM	28	4/27/01 9:46:00 AM	14
4/27/01 8:02:00 AM	23	4/27/01 8:37:00 AM	16	4/27/01 9:12:00 AM	17	4/27/01 9:47:00 AM	19
4/27/01 8:03:00 AM	30	4/27/01 8:38:00 AM	17	4/27/01 9:13:00 AM	20	4/27/01 9:48:00 AM	16
4/27/01 8:04:00 AM	20	4/27/01 8:39:00 AM	27	4/27/01 9:14:00 AM	19	4/27/01 9:49:00 AM	16
4/27/01 8:05:00 AM	16	4/27/01 8:40:00 AM	17	4/27/01 9:15:00 AM	28	4/27/01 9:50:00 AM	17
4/27/01 8:06:00 AM	15	4/27/01 8:41:00 AM	24	4/27/01 9:16:00 AM	24	4/27/01 9:51:00 AM	30
4/27/01 8:07:00 AM	19	4/27/01 8:42:00 AM	19	4/27/01 9:17:00 AM	133	4/27/01 9:52:00 AM	20
4/27/01 8:08:00 AM	17	4/27/01 8:43:00 AM	22	4/27/01 9:18:00 AM	51	4/27/01 9:53:00 AM	27

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/27/01 9:54:00 AM	17	4/27/01 10:29:00 AM	18	4/27/01 11:04:00 AM	15	4/27/01 11:39:00 AM	22
4/27/01 9:55:00 AM	24	4/27/01 10:30:00 AM	23	4/27/01 11:05:00 AM	16	4/27/01 11:40:00 AM	24
4/27/01 9:56:00 AM	16	4/27/01 10:31:00 AM	16	4/27/01 11:06:00 AM	15	4/27/01 11:41:00 AM	20
4/27/01 9:57:00 AM	15	4/27/01 10:32:00 AM	21	4/27/01 11:07:00 AM	17	4/27/01 11:42:00 AM	14
4/27/01 9:58:00 AM	16	4/27/01 10:33:00 AM	28	4/27/01 11:08:00 AM	20	4/27/01 11:43:00 AM	22
4/27/01 9:59:00 AM	14	4/27/01 10:34:00 AM	500	4/27/01 11:09:00 AM	16	4/27/01 11:44:00 AM	18
4/27/01 10:00:00 AM	18	4/27/01 10:35:00 AM	19	4/27/01 11:10:00 AM	14	4/27/01 11:45:00 AM	36
4/27/01 10:01:00 AM	15	4/27/01 10:36:00 AM	18	4/27/01 11:11:00 AM	14	4/27/01 11:46:00 AM	16
4/27/01 10:02:00 AM	15	4/27/01 10:37:00 AM	42	4/27/01 11:12:00 AM	16	4/27/01 11:47:00 AM	18
4/27/01 10:03:00 AM	19	4/27/01 10:38:00 AM	16	4/27/01 11:13:00 AM	22	4/27/01 11:48:00 AM	16
4/27/01 10:04:00 AM	18	4/27/01 10:39:00 AM	15	4/27/01 11:14:00 AM	27	4/27/01 11:49:00 AM	15
4/27/01 10:05:00 AM	14	4/27/01 10:40:00 AM	15	4/27/01 11:15:00 AM	21	4/27/01 11:50:00 AM	18
4/27/01 10:06:00 AM	20	4/27/01 10:41:00 AM	16	4/27/01 11:16:00 AM	19	4/27/01 11:51:00 AM	15
4/27/01 10:07:00 AM	21	4/27/01 10:42:00 AM	18	4/27/01 11:17:00 AM	15	4/27/01 11:52:00 AM	15
4/27/01 10:08:00 AM	19	4/27/01 10:43:00 AM	14	4/27/01 11:18:00 AM	13	4/27/01 11:53:00 AM	13
4/27/01 10:09:00 AM	16	4/27/01 10:44:00 AM	15	4/27/01 11:19:00 AM	19	4/27/01 11:54:00 AM	20
4/27/01 10:10:00 AM	21	4/27/01 10:45:00 AM	14	4/27/01 11:20:00 AM	20	4/27/01 11:55:00 AM	16
4/27/01 10:11:00 AM	23	4/27/01 10:46:00 AM	16	4/27/01 11:21:00 AM	15	4/27/01 11:56:00 AM	15
4/27/01 10:12:00 AM	17	4/27/01 10:47:00 AM	243	4/27/01 11:22:00 AM	18	4/27/01 11:57:00 AM	22
4/27/01 10:13:00 AM	17	4/27/01 10:48:00 AM	43	4/27/01 11:23:00 AM	16	4/27/01 11:58:00 AM	22
4/27/01 10:14:00 AM	19	4/27/01 10:49:00 AM	43	4/27/01 11:24:00 AM	17	4/27/01 11:59:00 AM	13
4/27/01 10:15:00 AM	26	4/27/01 10:50:00 AM	51	4/27/01 11:25:00 AM	22	4/27/01 12:00:00 PM	18
4/27/01 10:16:00 AM	17	4/27/01 10:51:00 AM	32	4/27/01 11:26:00 AM	15	4/27/01 12:01:00 PM	17
4/27/01 10:17:00 AM	18	4/27/01 10:52:00 AM	19	4/27/01 11:27:00 AM	15	4/27/01 12:02:00 PM	17
4/27/01 10:18:00 AM	17	4/27/01 10:53:00 AM	17	4/27/01 11:28:00 AM	18	4/27/01 12:03:00 PM	18
4/27/01 10:19:00 AM	15	4/27/01 10:54:00 AM	17	4/27/01 11:29:00 AM	29	4/27/01 12:04:00 PM	17
4/27/01 10:20:00 AM	14	4/27/01 10:55:00 AM	22	4/27/01 11:30:00 AM	15	4/27/01 12:05:00 PM	15
4/27/01 10:21:00 AM	27	4/27/01 10:56:00 AM	16	4/27/01 11:31:00 AM	22	4/27/01 12:06:00 PM	25
4/27/01 10:22:00 AM	18	4/27/01 10:57:00 AM	16	4/27/01 11:32:00 AM	16	4/27/01 12:07:00 PM	19
4/27/01 10:23:00 AM	15	4/27/01 10:58:00 AM	17	4/27/01 11:33:00 AM	14	4/27/01 12:08:00 PM	18
4/27/01 10:24:00 AM	17	4/27/01 10:59:00 AM	14	4/27/01 11:34:00 AM	14	4/27/01 12:09:00 PM	232
4/27/01 10:25:00 AM	14	4/27/01 11:00:00 AM	21	4/27/01 11:35:00 AM	16	4/27/01 12:10:00 PM	134
4/27/01 10:26:00 AM	16	4/27/01 11:01:00 AM	19	4/27/01 11:36:00 AM	17	4/27/01 12:11:00 PM	108
4/27/01 10:27:00 AM	18	4/27/01 11:02:00 AM	24	4/27/01 11:37:00 AM	14	4/27/01 12:12:00 PM	15
4/27/01 10:28:00 AM	16	4/27/01 11:03:00 AM	18	4/27/01 11:38:00 AM	24	4/27/01 12:13:00 PM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/27/01 12:14:00 PM	17	4/27/01 12:49:00 PM	16	4/30/01 7:35:00 AM	24	4/30/01 8:10:00 AM	27
4/27/01 12:15:00 PM	16	4/27/01 12:50:00 PM	13	4/30/01 7:36:00 AM	35	4/30/01 8:11:00 AM	20
4/27/01 12:16:00 PM	17	4/27/01 12:51:00 PM	13	4/30/01 7:37:00 AM	27	4/30/01 8:12:00 AM	22
4/27/01 12:17:00 PM	24	4/27/01 12:52:00 PM	14	4/30/01 7:38:00 AM	34	4/30/01 8:13:00 AM	34
4/27/01 12:18:00 PM	22	4/27/01 12:53:00 PM	16	4/30/01 7:39:00 AM	24	4/30/01 8:14:00 AM	25
4/27/01 12:19:00 PM	28	4/30/01 7:05:00 AM	59	4/30/01 7:40:00 AM	35	4/30/01 8:15:00 AM	19
4/27/01 12:20:00 PM	50	4/30/01 7:06:00 AM	31	4/30/01 7:41:00 AM	45	4/30/01 8:16:00 AM	18
4/27/01 12:21:00 PM	23	4/30/01 7:07:00 AM	24	4/30/01 7:42:00 AM	20	4/30/01 8:17:00 AM	20
4/27/01 12:22:00 PM	113	4/30/01 7:08:00 AM	24	4/30/01 7:43:00 AM	28	4/30/01 8:18:00 AM	67
4/27/01 12:23:00 PM	431	4/30/01 7:09:00 AM	30	4/30/01 7:44:00 AM	22	4/30/01 8:19:00 AM	88
4/27/01 12:24:00 PM	73	4/30/01 7:10:00 AM	24	4/30/01 7:45:00 AM	20	4/30/01 8:20:00 AM	27
4/27/01 12:25:00 PM	22	4/30/01 7:11:00 AM	22	4/30/01 7:46:00 AM	27	4/30/01 8:21:00 AM	24
4/27/01 12:26:00 PM	142	4/30/01 7:12:00 AM	28	4/30/01 7:47:00 AM	24	4/30/01 8:22:00 AM	60
4/27/01 12:27:00 PM	28	4/30/01 7:13:00 AM	19	4/30/01 7:48:00 AM	35	4/30/01 8:23:00 AM	21
4/27/01 12:28:00 PM	46	4/30/01 7:14:00 AM	27	4/30/01 7:49:00 AM	30	4/30/01 8:24:00 AM	16
4/27/01 12:29:00 PM	15	4/30/01 7:15:00 AM	51	4/30/01 7:50:00 AM	38	4/30/01 8:25:00 AM	14
4/27/01 12:30:00 PM	13	4/30/01 7:16:00 AM	67	4/30/01 7:51:00 AM	39	4/30/01 8:26:00 AM	18
4/27/01 12:31:00 PM	13	4/30/01 7:17:00 AM	18	4/30/01 7:52:00 AM	26	4/30/01 8:27:00 AM	24
4/27/01 12:32:00 PM	15	4/30/01 7:18:00 AM	23	4/30/01 7:53:00 AM	22	4/30/01 8:28:00 AM	11
4/27/01 12:33:00 PM	15	4/30/01 7:19:00 AM	15	4/30/01 7:54:00 AM	22	4/30/01 8:29:00 AM	17
4/27/01 12:34:00 PM	182	4/30/01 7:20:00 AM	20	4/30/01 7:55:00 AM	20	4/30/01 8:30:00 AM	18
4/27/01 12:35:00 PM	15	4/30/01 7:21:00 AM	47	4/30/01 7:56:00 AM	15	4/30/01 8:31:00 AM	14
4/27/01 12:36:00 PM	20	4/30/01 7:22:00 AM	26	4/30/01 7:57:00 AM	17	4/30/01 8:32:00 AM	18
4/27/01 12:37:00 PM	21	4/30/01 7:23:00 AM	21	4/30/01 7:58:00 AM	20	4/30/01 8:33:00 AM	20
4/27/01 12:38:00 PM	19	4/30/01 7:24:00 AM	20	4/30/01 7:59:00 AM	21	4/30/01 8:34:00 AM	15
4/27/01 12:39:00 PM	12	4/30/01 7:25:00 AM	21	4/30/01 8:00:00 AM	21	4/30/01 8:35:00 AM	17
4/27/01 12:40:00 PM	11	4/30/01 7:26:00 AM	25	4/30/01 8:01:00 AM	24	4/30/01 8:36:00 AM	13
4/27/01 12:41:00 PM	14	4/30/01 7:27:00 AM	26	4/30/01 8:02:00 AM	22	4/30/01 8:37:00 AM	19
4/27/01 12:42:00 PM	40	4/30/01 7:28:00 AM	23	4/30/01 8:03:00 AM	25	4/30/01 8:38:00 AM	16
4/27/01 12:43:00 PM	13	4/30/01 7:29:00 AM	25	4/30/01 8:04:00 AM	20	4/30/01 8:39:00 AM	20
4/27/01 12:44:00 PM	14	4/30/01 7:30:00 AM	19	4/30/01 8:05:00 AM	38	4/30/01 8:40:00 AM	16
4/27/01 12:45:00 PM	11	4/30/01 7:31:00 AM	24	4/30/01 8:06:00 AM	30	4/30/01 8:41:00 AM	30
4/27/01 12:46:00 PM	16	4/30/01 7:32:00 AM	22	4/30/01 8:07:00 AM	18	4/30/01 8:42:00 AM	14
4/27/01 12:47:00 PM	13	4/30/01 7:33:00 AM	24	4/30/01 8:08:00 AM	21	4/30/01 8:43:00 AM	14
4/27/01 12:48:00 PM	13	4/30/01 7:34:00 AM	34	4/30/01 8:09:00 AM	36	4/30/01 8:44:00 AM	18

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/30/01 8:45:00 AM	27	4/30/01 9:20:00 AM	49	4/30/01 9:55:00 AM	10	4/30/01 10:30:00 AM	186
4/30/01 8:46:00 AM	14	4/30/01 9:21:00 AM	20	4/30/01 9:56:00 AM	9	4/30/01 10:31:00 AM	190
4/30/01 8:47:00 AM	15	4/30/01 9:22:00 AM	13	4/30/01 9:57:00 AM	10	4/30/01 10:32:00 AM	187
4/30/01 8:48:00 AM	23	4/30/01 9:23:00 AM	10	4/30/01 9:58:00 AM	25	4/30/01 10:33:00 AM	194
4/30/01 8:49:00 AM	26	4/30/01 9:24:00 AM	11	4/30/01 9:59:00 AM	15	4/30/01 10:34:00 AM	180
4/30/01 8:50:00 AM	17	4/30/01 9:25:00 AM	25	4/30/01 10:00:00 AM	14	4/30/01 10:35:00 AM	186
4/30/01 8:51:00 AM	15	4/30/01 9:26:00 AM	40	4/30/01 10:01:00 AM	12	4/30/01 10:36:00 AM	194
4/30/01 8:52:00 AM	13	4/30/01 9:27:00 AM	20	4/30/01 10:02:00 AM	10	4/30/01 10:37:00 AM	190
4/30/01 8:53:00 AM	10	4/30/01 9:28:00 AM	15	4/30/01 10:03:00 AM	12	4/30/01 10:38:00 AM	190
4/30/01 8:54:00 AM	16	4/30/01 9:29:00 AM	16	4/30/01 10:04:00 AM	10	4/30/01 10:39:00 AM	198
4/30/01 8:55:00 AM	23	4/30/01 9:30:00 AM	9	4/30/01 10:05:00 AM	11	4/30/01 10:40:00 AM	185
4/30/01 8:56:00 AM	13	4/30/01 9:31:00 AM	10	4/30/01 10:06:00 AM	24	4/30/01 10:41:00 AM	186
4/30/01 8:57:00 AM	11	4/30/01 9:32:00 AM	15	4/30/01 10:07:00 AM	11	4/30/01 10:42:00 AM	182
4/30/01 8:58:00 AM	11	4/30/01 9:33:00 AM	23	4/30/01 10:08:00 AM	11	4/30/01 10:43:00 AM	183
4/30/01 8:59:00 AM	39	4/30/01 9:34:00 AM	22	4/30/01 10:09:00 AM	48	4/30/01 10:44:00 AM	181
4/30/01 9:00:00 AM	13	4/30/01 9:35:00 AM	16	4/30/01 10:10:00 AM	42	4/30/01 10:45:00 AM	181
4/30/01 9:01:00 AM	25	4/30/01 9:36:00 AM	16	4/30/01 10:11:00 AM	946	4/30/01 10:46:00 AM	185
4/30/01 9:02:00 AM	20	4/30/01 9:37:00 AM	172	4/30/01 10:12:00 AM	393	4/30/01 10:47:00 AM	183
4/30/01 9:03:00 AM	13	4/30/01 9:38:00 AM	14	4/30/01 10:13:00 AM	281	4/30/01 1:18:00 PM	30
4/30/01 9:04:00 AM	12	4/30/01 9:39:00 AM	91	4/30/01 10:14:00 AM	257	4/30/01 1:19:00 PM	8
4/30/01 9:05:00 AM	11	4/30/01 9:40:00 AM	47	4/30/01 10:15:00 AM	207	4/30/01 1:20:00 PM	14
4/30/01 9:06:00 AM	11	4/30/01 9:41:00 AM	16	4/30/01 10:16:00 AM	194	4/30/01 1:21:00 PM	33
4/30/01 9:07:00 AM	10	4/30/01 9:42:00 AM	12	4/30/01 10:17:00 AM	186	4/30/01 1:22:00 PM	9
4/30/01 9:08:00 AM	9	4/30/01 9:43:00 AM	12	4/30/01 10:18:00 AM	211	4/30/01 1:23:00 PM	6
4/30/01 9:09:00 AM	11	4/30/01 9:44:00 AM	13	4/30/01 10:19:00 AM	265	4/30/01 1:24:00 PM	76
4/30/01 9:10:00 AM	14	4/30/01 9:45:00 AM	41	4/30/01 10:20:00 AM	184	4/30/01 1:25:00 PM	14
4/30/01 9:11:00 AM	10	4/30/01 9:46:00 AM	8	4/30/01 10:21:00 AM	190	4/30/01 1:26:00 PM	52
4/30/01 9:12:00 AM	11	4/30/01 9:47:00 AM	9	4/30/01 10:22:00 AM	182	4/30/01 1:27:00 PM	37
4/30/01 9:13:00 AM	33	4/30/01 9:48:00 AM	10	4/30/01 10:23:00 AM	199	4/30/01 1:28:00 PM	22
4/30/01 9:14:00 AM	10	4/30/01 9:49:00 AM	10	4/30/01 10:24:00 AM	191	4/30/01 1:29:00 PM	34
4/30/01 9:15:00 AM	11	4/30/01 9:50:00 AM	12	4/30/01 10:25:00 AM	191	4/30/01 1:30:00 PM	39
4/30/01 9:16:00 AM	11	4/30/01 9:51:00 AM	19	4/30/01 10:26:00 AM	180	4/30/01 1:31:00 PM	17
4/30/01 9:17:00 AM	13	4/30/01 9:52:00 AM	98	4/30/01 10:27:00 AM	184	4/30/01 1:32:00 PM	12
4/30/01 9:18:00 AM	50	4/30/01 9:53:00 AM	10	4/30/01 10:28:00 AM	184	4/30/01 1:33:00 PM	17
4/30/01 9:19:00 AM	22	4/30/01 9:54:00 AM	9	4/30/01 10:29:00 AM	186	4/30/01 1:34:00 PM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/30/01 1:35:00 PM	31	5/2/01 8:54:00 AM	18	5/2/01 9:29:00 AM	108	5/2/01 10:04:00 AM	41
4/30/01 1:36:00 PM	10	5/2/01 8:55:00 AM	180	5/2/01 9:30:00 AM	73	5/2/01 10:05:00 AM	37
4/30/01 1:37:00 PM	9	5/2/01 8:56:00 AM	43	5/2/01 9:31:00 AM	27	5/2/01 10:06:00 AM	28
4/30/01 1:38:00 PM	13	5/2/01 8:57:00 AM	46	5/2/01 9:32:00 AM	25	5/2/01 10:07:00 AM	23
4/30/01 1:39:00 PM	12	5/2/01 8:58:00 AM	31	5/2/01 9:33:00 AM	21	5/2/01 10:08:00 AM	24
4/30/01 1:40:00 PM	20	5/2/01 8:59:00 AM	50	5/2/01 9:34:00 AM	23	5/2/01 10:09:00 AM	28
4/30/01 1:41:00 PM	11	5/2/01 9:00:00 AM	134	5/2/01 9:35:00 AM	27	5/2/01 10:10:00 AM	30
4/30/01 1:42:00 PM	10	5/2/01 9:01:00 AM	86	5/2/01 9:36:00 AM	20	5/2/01 10:11:00 AM	91
4/30/01 1:43:00 PM	22	5/2/01 9:02:00 AM	33	5/2/01 9:37:00 AM	60	5/2/01 10:12:00 AM	34
4/30/01 1:44:00 PM	13	5/2/01 9:03:00 AM	27	5/2/01 9:38:00 AM	33	5/2/01 10:13:00 AM	109
4/30/01 1:45:00 PM	23	5/2/01 9:04:00 AM	28	5/2/01 9:39:00 AM	29	5/2/01 10:14:00 AM	43
4/30/01 1:46:00 PM	10	5/2/01 9:05:00 AM	95	5/2/01 9:40:00 AM	40	5/2/01 10:15:00 AM	58
4/30/01 1:47:00 PM	55	5/2/01 9:06:00 AM	102	5/2/01 9:41:00 AM	62	5/2/01 10:16:00 AM	30
4/30/01 1:48:00 PM	8	5/2/01 9:07:00 AM	32	5/2/01 9:42:00 AM	26	5/2/01 10:17:00 AM	38
4/30/01 1:49:00 PM	52	5/2/01 9:08:00 AM	32	5/2/01 9:43:00 AM	20	5/2/01 10:18:00 AM	38
5/2/01 8:34:00 AM	24	5/2/01 9:09:00 AM	171	5/2/01 9:44:00 AM	22	5/2/01 10:19:00 AM	43
5/2/01 8:35:00 AM	36	5/2/01 9:10:00 AM	30	5/2/01 9:45:00 AM	25	5/2/01 10:20:00 AM	62
5/2/01 8:36:00 AM	46	5/2/01 9:11:00 AM	47	5/2/01 9:46:00 AM	34	5/2/01 10:21:00 AM	81
5/2/01 8:37:00 AM	35	5/2/01 9:12:00 AM	177	5/2/01 9:47:00 AM	25	5/2/01 10:22:00 AM	30
5/2/01 8:38:00 AM	96	5/2/01 9:13:00 AM	31	5/2/01 9:48:00 AM	44	5/2/01 10:23:00 AM	82
5/2/01 8:39:00 AM	68	5/2/01 9:14:00 AM	54	5/2/01 9:49:00 AM	64	5/2/01 10:24:00 AM	63
5/2/01 8:40:00 AM	31	5/2/01 9:15:00 AM	45	5/2/01 9:50:00 AM	29	5/2/01 10:25:00 AM	29
5/2/01 8:41:00 AM	38	5/2/01 9:16:00 AM	32	5/2/01 9:51:00 AM	42	5/2/01 10:26:00 AM	20
5/2/01 8:42:00 AM	54	5/2/01 9:17:00 AM	36	5/2/01 9:52:00 AM	31	5/2/01 10:27:00 AM	64
5/2/01 8:43:00 AM	53	5/2/01 9:18:00 AM	26	5/2/01 9:53:00 AM	47	5/2/01 10:28:00 AM	32
5/2/01 8:44:00 AM	42	5/2/01 9:19:00 AM	49	5/2/01 9:54:00 AM	24	5/2/01 10:29:00 AM	51
5/2/01 8:45:00 AM	45	5/2/01 9:20:00 AM	133	5/2/01 9:55:00 AM	22	5/2/01 10:30:00 AM	47
5/2/01 8:46:00 AM	24	5/2/01 9:21:00 AM	32	5/2/01 9:56:00 AM	26	5/2/01 10:31:00 AM	44
5/2/01 8:47:00 AM	22	5/2/01 9:22:00 AM	36	5/2/01 9:57:00 AM	26	5/2/01 10:32:00 AM	45
5/2/01 8:48:00 AM	33	5/2/01 9:23:00 AM	49	5/2/01 9:58:00 AM	36	5/2/01 10:33:00 AM	20
5/2/01 8:49:00 AM	26	5/2/01 9:24:00 AM	88	5/2/01 9:59:00 AM	36	5/2/01 10:34:00 AM	39
5/2/01 8:50:00 AM	24	5/2/01 9:25:00 AM	27	5/2/01 10:00:00 AM	35	5/2/01 10:35:00 AM	27
5/2/01 8:51:00 AM	54	5/2/01 9:26:00 AM	22	5/2/01 10:01:00 AM	24	5/2/01 10:36:00 AM	44
5/2/01 8:52:00 AM	49	5/2/01 9:27:00 AM	22	5/2/01 10:02:00 AM	21	5/2/01 10:37:00 AM	45
5/2/01 8:53:00 AM	54	5/2/01 9:28:00 AM	69	5/2/01 10:03:00 AM	69	5/2/01 10:38:00 AM	68

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/2/01 10:39:00 AM	34	5/2/01 11:14:00 AM	157	5/2/01 11:49:00 AM	21	5/2/01 12:24:00 PM	24
5/2/01 10:40:00 AM	29	5/2/01 11:15:00 AM	84	5/2/01 11:50:00 AM	24	5/2/01 12:25:00 PM	26
5/2/01 10:41:00 AM	21	5/2/01 11:16:00 AM	238	5/2/01 11:51:00 AM	26	5/2/01 12:26:00 PM	24
5/2/01 10:42:00 AM	21	5/2/01 11:17:00 AM	172	5/2/01 11:52:00 AM	41	5/2/01 12:27:00 PM	28
5/2/01 10:43:00 AM	32	5/2/01 11:18:00 AM	150	5/2/01 11:53:00 AM	22	5/2/01 12:28:00 PM	34
5/2/01 10:44:00 AM	19	5/2/01 11:19:00 AM	51	5/2/01 11:54:00 AM	22	5/2/01 12:29:00 PM	28
5/2/01 10:45:00 AM	55	5/2/01 11:20:00 AM	518	5/2/01 11:55:00 AM	21	5/2/01 12:30:00 PM	34
5/2/01 10:46:00 AM	49	5/2/01 11:21:00 AM	143	5/2/01 11:56:00 AM	22	5/2/01 12:31:00 PM	30
5/2/01 10:47:00 AM	24	5/2/01 11:22:00 AM	122	5/2/01 11:57:00 AM	28	5/2/01 12:32:00 PM	25
5/2/01 10:48:00 AM	23	5/2/01 11:23:00 AM	91	5/2/01 11:58:00 AM	26	5/2/01 12:33:00 PM	25
5/2/01 10:49:00 AM	33	5/2/01 11:24:00 AM	63	5/2/01 11:59:00 AM	22	5/2/01 12:34:00 PM	25
5/2/01 10:50:00 AM	20	5/2/01 11:25:00 AM	42	5/2/01 12:00:00 PM	29	5/2/01 12:35:00 PM	24
5/2/01 10:51:00 AM	19	5/2/01 11:26:00 AM	34	5/2/01 12:01:00 PM	24	5/2/01 12:36:00 PM	34
5/2/01 10:52:00 AM	20	5/2/01 11:27:00 AM	26	5/2/01 12:02:00 PM	27	5/2/01 12:37:00 PM	27
5/2/01 10:53:00 AM	20	5/2/01 11:28:00 AM	20	5/2/01 12:03:00 PM	34	5/2/01 12:38:00 PM	25
5/2/01 10:54:00 AM	24	5/2/01 11:29:00 AM	24	5/2/01 12:04:00 PM	53	5/2/01 12:39:00 PM	35
5/2/01 10:55:00 AM	24	5/2/01 11:30:00 AM	28	5/2/01 12:05:00 PM	27	5/2/01 12:40:00 PM	38
5/2/01 10:56:00 AM	23	5/2/01 11:31:00 AM	27	5/2/01 12:06:00 PM	72	5/2/01 12:41:00 PM	34
5/2/01 10:57:00 AM	27	5/2/01 11:32:00 AM	79	5/2/01 12:07:00 PM	43	5/2/01 12:42:00 PM	31
5/2/01 10:58:00 AM	29	5/2/01 11:33:00 AM	48	5/2/01 12:08:00 PM	30	5/2/01 12:43:00 PM	29
5/2/01 10:59:00 AM	23	5/2/01 11:34:00 AM	21	5/2/01 12:09:00 PM	29	5/2/01 12:44:00 PM	35
5/2/01 11:00:00 AM	26	5/2/01 11:35:00 AM	58	5/2/01 12:10:00 PM	27	5/2/01 12:45:00 PM	35
5/2/01 11:01:00 AM	27	5/2/01 11:36:00 AM	26	5/2/01 12:11:00 PM	21	5/2/01 12:46:00 PM	53
5/2/01 11:02:00 AM	136	5/2/01 11:37:00 AM	52	5/2/01 12:12:00 PM	26	5/2/01 12:47:00 PM	37
5/2/01 11:03:00 AM	57	5/2/01 11:38:00 AM	19	5/2/01 12:13:00 PM	21	5/2/01 12:48:00 PM	27
5/2/01 11:04:00 AM	34	5/2/01 11:39:00 AM	22	5/2/01 12:14:00 PM	24	5/2/01 12:49:00 PM	34
5/2/01 11:05:00 AM	49	5/2/01 11:40:00 AM	30	5/2/01 12:15:00 PM	38	5/2/01 12:50:00 PM	70
5/2/01 11:06:00 AM	208	5/2/01 11:41:00 AM	23	5/2/01 12:16:00 PM	25	5/2/01 12:51:00 PM	33
5/2/01 11:07:00 AM	192	5/2/01 11:42:00 AM	27	5/2/01 12:17:00 PM	28	5/2/01 12:52:00 PM	28
5/2/01 11:08:00 AM	238	5/2/01 11:43:00 AM	21	5/2/01 12:18:00 PM	23	5/2/01 12:53:00 PM	43
5/2/01 11:09:00 AM	254	5/2/01 11:44:00 AM	71	5/2/01 12:19:00 PM	30	5/2/01 12:54:00 PM	32
5/2/01 11:10:00 AM	358	5/2/01 11:45:00 AM	26	5/2/01 12:20:00 PM	29	5/2/01 12:55:00 PM	38
5/2/01 11:11:00 AM	290	5/2/01 11:46:00 AM	23	5/2/01 12:21:00 PM	33	5/2/01 12:56:00 PM	82
5/2/01 11:12:00 AM	264	5/2/01 11:47:00 AM	22	5/2/01 12:22:00 PM	35	5/2/01 12:57:00 PM	34
5/2/01 11:13:00 AM	250	5/2/01 11:48:00 AM	20	5/2/01 12:23:00 PM	48	5/2/01 12:58:00 PM	27

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/2/01 12:59:00 PM	29	5/2/01 1:34:00 PM	54	5/2/01 2:09:00 PM	36	5/3/01 7:29:00 AM	48
5/2/01 1:00:00 PM	27	5/2/01 1:35:00 PM	38	5/2/01 2:10:00 PM	50	5/3/01 7:30:00 AM	46
5/2/01 1:01:00 PM	24	5/2/01 1:36:00 PM	33	5/2/01 2:11:00 PM	43	5/3/01 7:31:00 AM	49
5/2/01 1:02:00 PM	25	5/2/01 1:37:00 PM	37	5/2/01 2:12:00 PM	27	5/3/01 7:32:00 AM	46
5/2/01 1:03:00 PM	25	5/2/01 1:38:00 PM	43	5/2/01 2:13:00 PM	65	5/3/01 7:33:00 AM	48
5/2/01 1:04:00 PM	32	5/2/01 1:39:00 PM	67	5/2/01 2:14:00 PM	117	5/3/01 7:34:00 AM	46
5/2/01 1:05:00 PM	26	5/2/01 1:40:00 PM	48	5/2/01 2:15:00 PM	71	5/3/01 7:35:00 AM	45
5/2/01 1:06:00 PM	21	5/2/01 1:41:00 PM	31	5/2/01 2:16:00 PM	23	5/3/01 7:36:00 AM	46
5/2/01 1:07:00 PM	24	5/2/01 1:42:00 PM	36	5/2/01 2:17:00 PM	33	5/3/01 7:37:00 AM	47
5/2/01 1:08:00 PM	23	5/2/01 1:43:00 PM	42	5/2/01 2:18:00 PM	68	5/3/01 7:38:00 AM	46
5/2/01 1:09:00 PM	24	5/2/01 1:44:00 PM	40	5/2/01 2:19:00 PM	27	5/3/01 7:39:00 AM	45
5/2/01 1:10:00 PM	22	5/2/01 1:45:00 PM	86	5/2/01 2:20:00 PM	28	5/3/01 7:40:00 AM	46
5/2/01 1:11:00 PM	36	5/2/01 1:46:00 PM	50	5/3/01 7:06:00 AM	55	5/3/01 7:41:00 AM	50
5/2/01 1:12:00 PM	32	5/2/01 1:47:00 PM	766	5/3/01 7:07:00 AM	62	5/3/01 7:42:00 AM	46
5/2/01 1:13:00 PM	22	5/2/01 1:48:00 PM	200	5/3/01 7:08:00 AM	56	5/3/01 7:43:00 AM	45
5/2/01 1:14:00 PM	26	5/2/01 1:49:00 PM	137	5/3/01 7:09:00 AM	61	5/3/01 7:44:00 AM	62
5/2/01 1:15:00 PM	25	5/2/01 1:50:00 PM	98	5/3/01 7:10:00 AM	53	5/3/01 7:45:00 AM	109
5/2/01 1:16:00 PM	28	5/2/01 1:51:00 PM	39	5/3/01 7:11:00 AM	48	5/3/01 7:46:00 AM	61
5/2/01 1:17:00 PM	40	5/2/01 1:52:00 PM	48	5/3/01 7:12:00 AM	51	5/3/01 7:47:00 AM	72
5/2/01 1:18:00 PM	51	5/2/01 1:53:00 PM	78	5/3/01 7:13:00 AM	50	5/3/01 7:48:00 AM	50
5/2/01 1:19:00 PM	32	5/2/01 1:54:00 PM	63	5/3/01 7:14:00 AM	49	5/3/01 7:49:00 AM	48
5/2/01 1:20:00 PM	27	5/2/01 1:55:00 PM	43	5/3/01 7:15:00 AM	49	5/3/01 7:50:00 AM	52
5/2/01 1:21:00 PM	36	5/2/01 1:56:00 PM	39	5/3/01 7:16:00 AM	50	5/3/01 7:51:00 AM	44
5/2/01 1:22:00 PM	32	5/2/01 1:57:00 PM	67	5/3/01 7:17:00 AM	49	5/3/01 7:52:00 AM	44
5/2/01 1:23:00 PM	28	5/2/01 1:58:00 PM	36	5/3/01 7:18:00 AM	48	5/3/01 7:53:00 AM	44
5/2/01 1:24:00 PM	81	5/2/01 1:59:00 PM	42	5/3/01 7:19:00 AM	45	5/3/01 7:54:00 AM	44
5/2/01 1:25:00 PM	35	5/2/01 2:00:00 PM	36	5/3/01 7:20:00 AM	50	5/3/01 7:55:00 AM	46
5/2/01 1:26:00 PM	52	5/2/01 2:01:00 PM	42	5/3/01 7:21:00 AM	50	5/3/01 7:56:00 AM	70
5/2/01 1:27:00 PM	149	5/2/01 2:02:00 PM	38	5/3/01 7:22:00 AM	49	5/3/01 7:57:00 AM	49
5/2/01 1:28:00 PM	27	5/2/01 2:03:00 PM	27	5/3/01 7:23:00 AM	48	5/3/01 7:58:00 AM	53
5/2/01 1:29:00 PM	308	5/2/01 2:04:00 PM	138	5/3/01 7:24:00 AM	50	5/3/01 7:59:00 AM	47
5/2/01 1:30:00 PM	239	5/2/01 2:05:00 PM	58	5/3/01 7:25:00 AM	45	5/3/01 8:00:00 AM	55
5/2/01 1:31:00 PM	87	5/2/01 2:06:00 PM	28	5/3/01 7:26:00 AM	47	5/3/01 8:01:00 AM	44
5/2/01 1:32:00 PM	36	5/2/01 2:07:00 PM	34	5/3/01 7:27:00 AM	46	5/3/01 8:02:00 AM	57
5/2/01 1:33:00 PM	53	5/2/01 2:08:00 PM	43	5/3/01 7:28:00 AM	48	5/3/01 8:03:00 AM	42

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/3/01 8:04:00 AM	51	5/3/01 8:39:00 AM	108	5/3/01 9:14:00 AM	37	5/3/01 9:49:00 AM	42
5/3/01 8:05:00 AM	49	5/3/01 8:40:00 AM	57	5/3/01 9:15:00 AM	44	5/3/01 9:50:00 AM	36
5/3/01 8:06:00 AM	44	5/3/01 8:41:00 AM	49	5/3/01 9:16:00 AM	48	5/3/01 9:51:00 AM	46
5/3/01 8:07:00 AM	45	5/3/01 8:42:00 AM	58	5/3/01 9:17:00 AM	154	5/3/01 9:52:00 AM	47
5/3/01 8:08:00 AM	78	5/3/01 8:43:00 AM	56	5/3/01 9:18:00 AM	69	5/3/01 9:53:00 AM	40
5/3/01 8:09:00 AM	67	5/3/01 8:44:00 AM	39	5/3/01 9:19:00 AM	30	5/3/01 9:54:00 AM	43
5/3/01 8:10:00 AM	48	5/3/01 8:45:00 AM	36	5/3/01 9:20:00 AM	42	5/3/01 9:55:00 AM	32
5/3/01 8:11:00 AM	55	5/3/01 8:46:00 AM	38	5/3/01 9:21:00 AM	41	5/3/01 9:56:00 AM	38
5/3/01 8:12:00 AM	57	5/3/01 8:47:00 AM	41	5/3/01 9:22:00 AM	40	5/3/01 9:57:00 AM	79
5/3/01 8:13:00 AM	45	5/3/01 8:48:00 AM	35	5/3/01 9:23:00 AM	44	5/3/01 9:58:00 AM	38
5/3/01 8:14:00 AM	51	5/3/01 8:49:00 AM	35	5/3/01 9:24:00 AM	35	5/3/01 9:59:00 AM	47
5/3/01 8:15:00 AM	50	5/3/01 8:50:00 AM	37	5/3/01 9:25:00 AM	33	5/3/01 10:00:00 AM	34
5/3/01 8:16:00 AM	48	5/3/01 8:51:00 AM	52	5/3/01 9:26:00 AM	212	5/3/01 10:01:00 AM	32
5/3/01 8:17:00 AM	73	5/3/01 8:52:00 AM	40	5/3/01 9:27:00 AM	63	5/3/01 10:02:00 AM	37
5/3/01 8:18:00 AM	134	5/3/01 8:53:00 AM	70	5/3/01 9:28:00 AM	39	5/3/01 10:03:00 AM	30
5/3/01 8:19:00 AM	54	5/3/01 8:54:00 AM	42	5/3/01 9:29:00 AM	35	5/3/01 10:04:00 AM	30
5/3/01 8:20:00 AM	43	5/3/01 8:55:00 AM	42	5/3/01 9:30:00 AM	37	5/3/01 10:05:00 AM	37
5/3/01 8:21:00 AM	46	5/3/01 8:56:00 AM	42	5/3/01 9:31:00 AM	30	5/3/01 10:06:00 AM	32
5/3/01 8:22:00 AM	41	5/3/01 8:57:00 AM	41	5/3/01 9:32:00 AM	38	5/3/01 10:07:00 AM	33
5/3/01 8:23:00 AM	43	5/3/01 8:58:00 AM	42	5/3/01 9:33:00 AM	40	5/3/01 10:08:00 AM	37
5/3/01 8:24:00 AM	44	5/3/01 8:59:00 AM	53	5/3/01 9:34:00 AM	38	5/3/01 10:09:00 AM	31
5/3/01 8:25:00 AM	55	5/3/01 9:00:00 AM	66	5/3/01 9:35:00 AM	40	5/3/01 10:10:00 AM	35
5/3/01 8:26:00 AM	45	5/3/01 9:01:00 AM	32	5/3/01 9:36:00 AM	34	5/3/01 10:11:00 AM	31
5/3/01 8:27:00 AM	46	5/3/01 9:02:00 AM	56	5/3/01 9:37:00 AM	70	5/3/01 10:12:00 AM	30
5/3/01 8:28:00 AM	44	5/3/01 9:03:00 AM	48	5/3/01 9:38:00 AM	52	5/3/01 10:13:00 AM	29
5/3/01 8:29:00 AM	47	5/3/01 9:04:00 AM	43	5/3/01 9:39:00 AM	88	5/3/01 10:14:00 AM	48
5/3/01 8:30:00 AM	45	5/3/01 9:05:00 AM	42	5/3/01 9:40:00 AM	139	5/3/01 10:15:00 AM	36
5/3/01 8:31:00 AM	44	5/3/01 9:06:00 AM	38	5/3/01 9:41:00 AM	95	5/3/01 10:16:00 AM	80
5/3/01 8:32:00 AM	45	5/3/01 9:07:00 AM	51	5/3/01 9:42:00 AM	53	5/3/01 10:17:00 AM	61
5/3/01 8:33:00 AM	79	5/3/01 9:08:00 AM	37	5/3/01 9:43:00 AM	34	5/3/01 10:18:00 AM	47
5/3/01 8:34:00 AM	38	5/3/01 9:09:00 AM	53	5/3/01 9:44:00 AM	31	5/3/01 10:19:00 AM	31
5/3/01 8:35:00 AM	42	5/3/01 9:10:00 AM	58	5/3/01 9:45:00 AM	89	5/3/01 10:20:00 AM	45
5/3/01 8:36:00 AM	39	5/3/01 9:11:00 AM	46	5/3/01 9:46:00 AM	80	5/3/01 10:21:00 AM	46
5/3/01 8:37:00 AM	40	5/3/01 9:12:00 AM	46	5/3/01 9:47:00 AM	30	5/3/01 10:22:00 AM	47
5/3/01 8:38:00 AM	43	5/3/01 9:13:00 AM	74	5/3/01 9:48:00 AM	57	5/3/01 10:23:00 AM	55

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/3/01 10:24:00 AM	54	5/3/01 10:59:00 AM	36	5/3/01 11:34:00 AM	30	5/3/01 12:09:00 PM	44
5/3/01 10:25:00 AM	59	5/3/01 11:00:00 AM	29	5/3/01 11:35:00 AM	29	5/3/01 12:10:00 PM	40
5/3/01 10:26:00 AM	84	5/3/01 11:01:00 AM	33	5/3/01 11:36:00 AM	36	5/3/01 12:11:00 PM	41
5/3/01 10:27:00 AM	58	5/3/01 11:02:00 AM	33	5/3/01 11:37:00 AM	34	5/3/01 12:12:00 PM	41
5/3/01 10:28:00 AM	55	5/3/01 11:03:00 AM	32	5/3/01 11:38:00 AM	34	5/3/01 12:13:00 PM	53
5/3/01 10:29:00 AM	38	5/3/01 11:04:00 AM	36	5/3/01 11:39:00 AM	46	5/3/01 12:14:00 PM	55
5/3/01 10:30:00 AM	31	5/3/01 11:05:00 AM	29	5/3/01 11:40:00 AM	50	5/3/01 12:15:00 PM	49
5/3/01 10:31:00 AM	31	5/3/01 11:06:00 AM	30	5/3/01 11:41:00 AM	59	5/3/01 12:16:00 PM	46
5/3/01 10:32:00 AM	50	5/3/01 11:07:00 AM	29	5/3/01 11:42:00 AM	62	5/3/01 12:17:00 PM	46
5/3/01 10:33:00 AM	38	5/3/01 11:08:00 AM	29	5/3/01 11:43:00 AM	53	5/3/01 12:18:00 PM	46
5/3/01 10:34:00 AM	30	5/3/01 11:09:00 AM	42	5/3/01 11:44:00 AM	64	5/3/01 12:19:00 PM	55
5/3/01 10:35:00 AM	36	5/3/01 11:10:00 AM	34	5/3/01 11:45:00 AM	60	5/3/01 12:20:00 PM	50
5/3/01 10:36:00 AM	75	5/3/01 11:11:00 AM	41	5/3/01 11:46:00 AM	55	5/3/01 12:21:00 PM	45
5/3/01 10:37:00 AM	32	5/3/01 11:12:00 AM	48	5/3/01 11:47:00 AM	49	5/3/01 12:22:00 PM	47
5/3/01 10:38:00 AM	31	5/3/01 11:13:00 AM	76	5/3/01 11:48:00 AM	49	5/3/01 12:23:00 PM	46
5/3/01 10:39:00 AM	39	5/3/01 11:14:00 AM	37	5/3/01 11:49:00 AM	53	5/3/01 12:24:00 PM	86
5/3/01 10:40:00 AM	57	5/3/01 11:15:00 AM	34	5/3/01 11:50:00 AM	43	5/3/01 12:25:00 PM	54
5/3/01 10:41:00 AM	36	5/3/01 11:16:00 AM	29	5/3/01 11:51:00 AM	46	5/3/01 12:26:00 PM	98
5/3/01 10:42:00 AM	34	5/3/01 11:17:00 AM	31	5/3/01 11:52:00 AM	44	5/3/01 12:27:00 PM	591
5/3/01 10:43:00 AM	36	5/3/01 11:18:00 AM	30	5/3/01 11:53:00 AM	36	5/3/01 12:28:00 PM	140
5/3/01 10:44:00 AM	34	5/3/01 11:19:00 AM	39	5/3/01 11:54:00 AM	43	5/3/01 12:29:00 PM	162
5/3/01 10:45:00 AM	32	5/3/01 11:20:00 AM	26	5/3/01 11:55:00 AM	42	5/3/01 12:30:00 PM	83
5/3/01 10:46:00 AM	40	5/3/01 11:21:00 AM	27	5/3/01 11:56:00 AM	40	5/3/01 12:31:00 PM	49
5/3/01 10:47:00 AM	31	5/3/01 11:22:00 AM	36	5/3/01 11:57:00 AM	43	5/3/01 12:32:00 PM	29
5/3/01 10:48:00 AM	36	5/3/01 11:23:00 AM	41	5/3/01 11:58:00 AM	37	5/3/01 12:33:00 PM	43
5/3/01 10:49:00 AM	30	5/3/01 11:24:00 AM	32	5/3/01 11:59:00 AM	42	5/3/01 12:34:00 PM	71
5/3/01 10:50:00 AM	35	5/3/01 11:25:00 AM	27	5/3/01 12:00:00 PM	39	5/3/01 12:35:00 PM	141
5/3/01 10:51:00 AM	34	5/3/01 11:26:00 AM	28	5/3/01 12:01:00 PM	40	5/3/01 12:36:00 PM	202
5/3/01 10:52:00 AM	32	5/3/01 11:27:00 AM	30	5/3/01 12:02:00 PM	47	5/3/01 12:37:00 PM	146
5/3/01 10:53:00 AM	35	5/3/01 11:28:00 AM	41	5/3/01 12:03:00 PM	45	5/3/01 12:38:00 PM	66
5/3/01 10:54:00 AM	34	5/3/01 11:29:00 AM	33	5/3/01 12:04:00 PM	44	5/3/01 12:39:00 PM	72
5/3/01 10:55:00 AM	28	5/3/01 11:30:00 AM	33	5/3/01 12:05:00 PM	44	5/3/01 12:40:00 PM	151
5/3/01 10:56:00 AM	31	5/3/01 11:31:00 AM	31	5/3/01 12:06:00 PM	41	5/3/01 12:41:00 PM	88
5/3/01 10:57:00 AM	34	5/3/01 11:32:00 AM	30	5/3/01 12:07:00 PM	41	5/3/01 12:42:00 PM	58
5/3/01 10:58:00 AM	37	5/3/01 11:33:00 AM	34	5/3/01 12:08:00 PM	46	5/3/01 12:43:00 PM	124

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/3/01 12:44:00 PM	37	5/3/01 1:19:00 PM	60	5/3/01 1:54:00 PM	74	5/3/01 2:29:00 PM	55
5/3/01 12:45:00 PM	54	5/3/01 1:20:00 PM	142	5/3/01 1:55:00 PM	60	5/3/01 2:30:00 PM	56
5/3/01 12:46:00 PM	106	5/3/01 1:21:00 PM	91	5/3/01 1:56:00 PM	161	5/3/01 2:31:00 PM	51
5/3/01 12:47:00 PM	87	5/3/01 1:22:00 PM	58	5/3/01 1:57:00 PM	116	5/3/01 2:32:00 PM	33
5/3/01 12:48:00 PM	35	5/3/01 1:23:00 PM	34	5/3/01 1:58:00 PM	98	5/4/01 6:29:00 AM	128
5/3/01 12:49:00 PM	50	5/3/01 1:24:00 PM	38	5/3/01 1:59:00 PM	112	5/4/01 6:30:00 AM	108
5/3/01 12:50:00 PM	48	5/3/01 1:25:00 PM	58	5/3/01 2:00:00 PM	42	5/4/01 6:31:00 AM	108
5/3/01 12:51:00 PM	84	5/3/01 1:26:00 PM	56	5/3/01 2:01:00 PM	138	5/4/01 6:32:00 AM	106
5/3/01 12:52:00 PM	72	5/3/01 1:27:00 PM	61	5/3/01 2:02:00 PM	34	5/4/01 6:33:00 AM	104
5/3/01 12:53:00 PM	106	5/3/01 1:28:00 PM	102	5/3/01 2:03:00 PM	92	5/4/01 6:34:00 AM	121
5/3/01 12:54:00 PM	79	5/3/01 1:29:00 PM	70	5/3/01 2:04:00 PM	43	5/4/01 6:35:00 AM	105
5/3/01 12:55:00 PM	86	5/3/01 1:30:00 PM	92	5/3/01 2:05:00 PM	67	5/4/01 6:36:00 AM	109
5/3/01 12:56:00 PM	93	5/3/01 1:31:00 PM	120	5/3/01 2:06:00 PM	51	5/4/01 6:37:00 AM	106
5/3/01 12:57:00 PM	129	5/3/01 1:32:00 PM	220	5/3/01 2:07:00 PM	407	5/4/01 6:38:00 AM	103
5/3/01 12:58:00 PM	82	5/3/01 1:33:00 PM	96	5/3/01 2:08:00 PM	214	5/4/01 6:39:00 AM	108
5/3/01 12:59:00 PM	40	5/3/01 1:34:00 PM	124	5/3/01 2:09:00 PM	90	5/4/01 6:40:00 AM	106
5/3/01 1:00:00 PM	37	5/3/01 1:35:00 PM	160	5/3/01 2:10:00 PM	76	5/4/01 6:41:00 AM	105
5/3/01 1:01:00 PM	43	5/3/01 1:36:00 PM	101	5/3/01 2:11:00 PM	170	5/4/01 6:42:00 AM	109
5/3/01 1:02:00 PM	28	5/3/01 1:37:00 PM	222	5/3/01 2:12:00 PM	37	5/4/01 6:43:00 AM	107
5/3/01 1:03:00 PM	62	5/3/01 1:38:00 PM	92	5/3/01 2:13:00 PM	49	5/4/01 6:44:00 AM	106
5/3/01 1:04:00 PM	29	5/3/01 1:39:00 PM	226	5/3/01 2:14:00 PM	64	5/4/01 6:45:00 AM	104
5/3/01 1:05:00 PM	28	5/3/01 1:40:00 PM	286	5/3/01 2:15:00 PM	176	5/4/01 6:46:00 AM	103
5/3/01 1:06:00 PM	44	5/3/01 1:41:00 PM	152	5/3/01 2:16:00 PM	70	5/4/01 6:47:00 AM	103
5/3/01 1:07:00 PM	91	5/3/01 1:42:00 PM	46	5/3/01 2:17:00 PM	119	5/4/01 6:48:00 AM	113
5/3/01 1:08:00 PM	34	5/3/01 1:43:00 PM	135	5/3/01 2:18:00 PM	76	5/4/01 6:49:00 AM	105
5/3/01 1:09:00 PM	36	5/3/01 1:44:00 PM	217	5/3/01 2:19:00 PM	77	5/4/01 6:50:00 AM	98
5/3/01 1:10:00 PM	58	5/3/01 1:45:00 PM	97	5/3/01 2:20:00 PM	129	5/4/01 6:51:00 AM	106
5/3/01 1:11:00 PM	36	5/3/01 1:46:00 PM	53	5/3/01 2:21:00 PM	210	5/4/01 6:52:00 AM	103
5/3/01 1:12:00 PM	102	5/3/01 1:47:00 PM	114	5/3/01 2:22:00 PM	173	5/4/01 6:53:00 AM	108
5/3/01 1:13:00 PM	178	5/3/01 1:48:00 PM	42	5/3/01 2:23:00 PM	64	5/4/01 6:54:00 AM	107
5/3/01 1:14:00 PM	746	5/3/01 1:49:00 PM	33	5/3/01 2:24:00 PM	41	5/4/01 6:55:00 AM	129
5/3/01 1:15:00 PM	85	5/3/01 1:50:00 PM	78	5/3/01 2:25:00 PM	74	5/4/01 6:56:00 AM	112
5/3/01 1:16:00 PM	66	5/3/01 1:51:00 PM	127	5/3/01 2:26:00 PM	298	5/4/01 6:57:00 AM	105
5/3/01 1:17:00 PM	132	5/3/01 1:52:00 PM	135	5/3/01 2:27:00 PM	201	5/4/01 6:58:00 AM	109
5/3/01 1:18:00 PM	78	5/3/01 1:53:00 PM	91	5/3/01 2:28:00 PM	142	5/4/01 6:59:00 AM	116

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/4/01 7:00:00 AM	103	5/4/01 7:35:00 AM	76	5/4/01 8:10:00 AM	55	5/4/01 8:45:00 AM	58
5/4/01 7:01:00 AM	114	5/4/01 7:36:00 AM	74	5/4/01 8:11:00 AM	56	5/4/01 8:46:00 AM	52
5/4/01 7:02:00 AM	104	5/4/01 7:37:00 AM	72	5/4/01 8:12:00 AM	62	5/4/01 8:47:00 AM	52
5/4/01 7:03:00 AM	102	5/4/01 7:38:00 AM	79	5/4/01 8:13:00 AM	61	5/4/01 8:48:00 AM	55
5/4/01 7:04:00 AM	94	5/4/01 7:39:00 AM	82	5/4/01 8:14:00 AM	65	5/4/01 8:49:00 AM	54
5/4/01 7:05:00 AM	98	5/4/01 7:40:00 AM	88	5/4/01 8:15:00 AM	58	5/4/01 8:50:00 AM	54
5/4/01 7:06:00 AM	124	5/4/01 7:41:00 AM	81	5/4/01 8:16:00 AM	56	5/4/01 8:51:00 AM	54
5/4/01 7:07:00 AM	109	5/4/01 7:42:00 AM	78	5/4/01 8:17:00 AM	54	5/4/01 8:52:00 AM	59
5/4/01 7:08:00 AM	99	5/4/01 7:43:00 AM	81	5/4/01 8:18:00 AM	58	5/4/01 8:53:00 AM	52
5/4/01 7:09:00 AM	106	5/4/01 7:44:00 AM	92	5/4/01 8:19:00 AM	63	5/4/01 8:54:00 AM	55
5/4/01 7:10:00 AM	105	5/4/01 7:45:00 AM	82	5/4/01 8:20:00 AM	54	5/4/01 8:55:00 AM	52
5/4/01 7:11:00 AM	107	5/4/01 7:46:00 AM	68	5/4/01 8:21:00 AM	65	5/4/01 8:56:00 AM	52
5/4/01 7:12:00 AM	135	5/4/01 7:47:00 AM	74	5/4/01 8:22:00 AM	54	5/4/01 8:57:00 AM	53
5/4/01 7:13:00 AM	131	5/4/01 7:48:00 AM	72	5/4/01 8:23:00 AM	58	5/4/01 8:58:00 AM	72
5/4/01 7:14:00 AM	103	5/4/01 7:49:00 AM	72	5/4/01 8:24:00 AM	54	5/4/01 8:59:00 AM	72
5/4/01 7:15:00 AM	127	5/4/01 7:50:00 AM	74	5/4/01 8:25:00 AM	70	5/4/01 9:00:00 AM	71
5/4/01 7:16:00 AM	122	5/4/01 7:51:00 AM	69	5/4/01 8:26:00 AM	72	5/4/01 9:01:00 AM	54
5/4/01 7:17:00 AM	94	5/4/01 7:52:00 AM	67	5/4/01 8:27:00 AM	54	5/4/01 9:02:00 AM	54
5/4/01 7:18:00 AM	122	5/4/01 7:53:00 AM	79	5/4/01 8:28:00 AM	56	5/4/01 9:03:00 AM	53
5/4/01 7:19:00 AM	130	5/4/01 7:54:00 AM	84	5/4/01 8:29:00 AM	70	5/4/01 9:04:00 AM	56
5/4/01 7:20:00 AM	100	5/4/01 7:55:00 AM	65	5/4/01 8:30:00 AM	111	5/4/01 9:05:00 AM	51
5/4/01 7:21:00 AM	109	5/4/01 7:56:00 AM	73	5/4/01 8:31:00 AM	138	5/4/01 9:06:00 AM	52
5/4/01 7:22:00 AM	109	5/4/01 7:57:00 AM	77	5/4/01 8:32:00 AM	66	5/4/01 9:07:00 AM	56
5/4/01 7:23:00 AM	83	5/4/01 7:58:00 AM	73	5/4/01 8:33:00 AM	54	5/4/01 9:08:00 AM	52
5/4/01 7:24:00 AM	78	5/4/01 7:59:00 AM	72	5/4/01 8:34:00 AM	57	5/4/01 9:09:00 AM	54
5/4/01 7:25:00 AM	78	5/4/01 8:00:00 AM	64	5/4/01 8:35:00 AM	75	5/4/01 9:10:00 AM	54
5/4/01 7:26:00 AM	93	5/4/01 8:01:00 AM	69	5/4/01 8:36:00 AM	57	5/4/01 9:11:00 AM	52
5/4/01 7:27:00 AM	88	5/4/01 8:02:00 AM	81	5/4/01 8:37:00 AM	57	5/4/01 9:12:00 AM	53
5/4/01 7:28:00 AM	97	5/4/01 8:03:00 AM	67	5/4/01 8:38:00 AM	62	5/4/01 9:13:00 AM	52
5/4/01 7:29:00 AM	84	5/4/01 8:04:00 AM	57	5/4/01 8:39:00 AM	54	5/4/01 9:14:00 AM	62
5/4/01 7:30:00 AM	97	5/4/01 8:05:00 AM	100	5/4/01 8:40:00 AM	56	5/4/01 9:15:00 AM	66
5/4/01 7:31:00 AM	86	5/4/01 8:06:00 AM	64	5/4/01 8:41:00 AM	64	5/4/01 9:16:00 AM	66
5/4/01 7:32:00 AM	84	5/4/01 8:07:00 AM	73	5/4/01 8:42:00 AM	96	5/4/01 9:17:00 AM	53
5/4/01 7:33:00 AM	78	5/4/01 8:08:00 AM	67	5/4/01 8:43:00 AM	51	5/4/01 9:18:00 AM	53
5/4/01 7:34:00 AM	75	5/4/01 8:09:00 AM	55	5/4/01 8:44:00 AM	56	5/4/01 9:19:00 AM	51

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/4/01 9:20:00 AM	51	5/4/01 9:55:00 AM	53	5/4/01 10:30:00 AM	49	5/4/01 11:05:00 AM	51
5/4/01 9:21:00 AM	50	5/4/01 9:56:00 AM	53	5/4/01 10:31:00 AM	45	5/4/01 11:06:00 AM	50
5/4/01 9:22:00 AM	113	5/4/01 9:57:00 AM	49	5/4/01 10:32:00 AM	49	5/4/01 11:07:00 AM	47
5/4/01 9:23:00 AM	122	5/4/01 9:58:00 AM	50	5/4/01 10:33:00 AM	48	5/4/01 11:08:00 AM	59
5/4/01 9:24:00 AM	54	5/4/01 9:59:00 AM	52	5/4/01 10:34:00 AM	54	5/4/01 11:09:00 AM	52
5/4/01 9:25:00 AM	52	5/4/01 10:00:00 AM	53	5/4/01 10:35:00 AM	58	5/4/01 11:10:00 AM	47
5/4/01 9:26:00 AM	51	5/4/01 10:01:00 AM	57	5/4/01 10:36:00 AM	52	5/4/01 11:11:00 AM	50
5/4/01 9:27:00 AM	52	5/4/01 10:02:00 AM	48	5/4/01 10:37:00 AM	47	5/4/01 11:12:00 AM	44
5/4/01 9:28:00 AM	60	5/4/01 10:03:00 AM	49	5/4/01 10:38:00 AM	52	5/4/01 11:13:00 AM	51
5/4/01 9:29:00 AM	57	5/4/01 10:04:00 AM	56	5/4/01 10:39:00 AM	54	5/4/01 11:14:00 AM	55
5/4/01 9:30:00 AM	51	5/4/01 10:05:00 AM	57	5/4/01 10:40:00 AM	52	5/4/01 11:15:00 AM	53
5/4/01 9:31:00 AM	59	5/4/01 10:06:00 AM	54	5/4/01 10:41:00 AM	53	5/4/01 11:16:00 AM	49
5/4/01 9:32:00 AM	56	5/4/01 10:07:00 AM	49	5/4/01 10:42:00 AM	52	5/4/01 11:17:00 AM	47
5/4/01 9:33:00 AM	53	5/4/01 10:08:00 AM	47	5/4/01 10:43:00 AM	49	5/4/01 11:18:00 AM	57
5/4/01 9:34:00 AM	53	5/4/01 10:09:00 AM	51	5/4/01 10:44:00 AM	49	5/4/01 11:19:00 AM	68
5/4/01 9:35:00 AM	55	5/4/01 10:10:00 AM	50	5/4/01 10:45:00 AM	51	5/4/01 11:20:00 AM	130
5/4/01 9:36:00 AM	55	5/4/01 10:11:00 AM	46	5/4/01 10:46:00 AM	58	5/4/01 11:21:00 AM	53
5/4/01 9:37:00 AM	54	5/4/01 10:12:00 AM	50	5/4/01 10:47:00 AM	50	5/4/01 11:22:00 AM	62
5/4/01 9:38:00 AM	48	5/4/01 10:13:00 AM	53	5/4/01 10:48:00 AM	49	5/4/01 11:23:00 AM	62
5/4/01 9:39:00 AM	52	5/4/01 10:14:00 AM	48	5/4/01 10:49:00 AM	48	5/4/01 11:24:00 AM	52
5/4/01 9:40:00 AM	55	5/4/01 10:15:00 AM	49	5/4/01 10:50:00 AM	49	5/4/01 11:25:00 AM	56
5/4/01 9:41:00 AM	64	5/4/01 10:16:00 AM	48	5/4/01 10:51:00 AM	47	5/4/01 11:26:00 AM	60
5/4/01 9:42:00 AM	89	5/4/01 10:17:00 AM	52	5/4/01 10:52:00 AM	53	5/4/01 11:27:00 AM	57
5/4/01 9:43:00 AM	72	5/4/01 10:18:00 AM	132	5/4/01 10:53:00 AM	52	5/4/01 11:28:00 AM	59
5/4/01 9:44:00 AM	123	5/4/01 10:19:00 AM	74	5/4/01 10:54:00 AM	53	5/4/01 11:29:00 AM	46
5/4/01 9:45:00 AM	54	5/4/01 10:20:00 AM	59	5/4/01 10:55:00 AM	51	5/4/01 11:30:00 AM	47
5/4/01 9:46:00 AM	50	5/4/01 10:21:00 AM	54	5/4/01 10:56:00 AM	50	5/4/01 11:31:00 AM	49
5/4/01 9:47:00 AM	67	5/4/01 10:22:00 AM	49	5/4/01 10:57:00 AM	58	5/4/01 11:32:00 AM	47
5/4/01 9:48:00 AM	55	5/4/01 10:23:00 AM	48	5/4/01 10:58:00 AM	49	5/4/01 11:33:00 AM	67
5/4/01 9:49:00 AM	50	5/4/01 10:24:00 AM	50	5/4/01 10:59:00 AM	50	5/4/01 11:34:00 AM	71
5/4/01 9:50:00 AM	50	5/4/01 10:25:00 AM	48	5/4/01 11:00:00 AM	51	5/4/01 11:35:00 AM	93
5/4/01 9:51:00 AM	56	5/4/01 10:26:00 AM	49	5/4/01 11:01:00 AM	56	5/4/01 11:36:00 AM	213
5/4/01 9:52:00 AM	51	5/4/01 10:27:00 AM	52	5/4/01 11:02:00 AM	51	5/4/01 11:37:00 AM	126
5/4/01 9:53:00 AM	53	5/4/01 10:28:00 AM	49	5/4/01 11:03:00 AM	49	5/4/01 11:38:00 AM	111
5/4/01 9:54:00 AM	80	5/4/01 10:29:00 AM	48	5/4/01 11:04:00 AM	54	5/4/01 11:39:00 AM	54

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/4/01 11:40:00 AM	61	5/4/01 12:15:00 PM	62	5/4/01 12:50:00 PM	89	5/4/01 1:25:00 PM	102
5/4/01 11:41:00 AM	61	5/4/01 12:16:00 PM	45	5/4/01 12:51:00 PM	70	5/4/01 1:26:00 PM	178
5/4/01 11:42:00 AM	48	5/4/01 12:17:00 PM	46	5/4/01 12:52:00 PM	53	5/4/01 1:27:00 PM	67
5/4/01 11:43:00 AM	51	5/4/01 12:18:00 PM	47	5/4/01 12:53:00 PM	45	5/4/01 1:28:00 PM	51
5/4/01 11:44:00 AM	46	5/4/01 12:19:00 PM	59	5/4/01 12:54:00 PM	47	5/7/01 7:41:00 AM	47
5/4/01 11:45:00 AM	48	5/4/01 12:20:00 PM	42	5/4/01 12:55:00 PM	48	5/7/01 7:42:00 AM	73
5/4/01 11:46:00 AM	58	5/4/01 12:21:00 PM	55	5/4/01 12:56:00 PM	55	5/7/01 7:43:00 AM	25
5/4/01 11:47:00 AM	48	5/4/01 12:22:00 PM	54	5/4/01 12:57:00 PM	47	5/7/01 7:44:00 AM	15
5/4/01 11:48:00 AM	68	5/4/01 12:23:00 PM	77	5/4/01 12:58:00 PM	44	5/7/01 7:45:00 AM	14
5/4/01 11:49:00 AM	81	5/4/01 12:24:00 PM	61	5/4/01 12:59:00 PM	45	5/7/01 7:46:00 AM	19
5/4/01 11:50:00 AM	63	5/4/01 12:25:00 PM	87	5/4/01 1:00:00 PM	66	5/7/01 7:47:00 AM	56
5/4/01 11:51:00 AM	52	5/4/01 12:26:00 PM	46	5/4/01 1:01:00 PM	83	5/7/01 7:48:00 AM	61
5/4/01 11:52:00 AM	66	5/4/01 12:27:00 PM	101	5/4/01 1:02:00 PM	59	5/7/01 7:49:00 AM	45
5/4/01 11:53:00 AM	53	5/4/01 12:28:00 PM	142	5/4/01 1:03:00 PM	94	5/7/01 7:50:00 AM	77
5/4/01 11:54:00 AM	49	5/4/01 12:29:00 PM	138	5/4/01 1:04:00 PM	49	5/7/01 7:51:00 AM	29
5/4/01 11:55:00 AM	49	5/4/01 12:30:00 PM	58	5/4/01 1:05:00 PM	58	5/7/01 7:52:00 AM	18
5/4/01 11:56:00 AM	52	5/4/01 12:31:00 PM	51	5/4/01 1:06:00 PM	83	5/7/01 7:53:00 AM	12
5/4/01 11:57:00 AM	50	5/4/01 12:32:00 PM	48	5/4/01 1:07:00 PM	42	5/7/01 7:54:00 AM	31
5/4/01 11:58:00 AM	53	5/4/01 12:33:00 PM	53	5/4/01 1:08:00 PM	42	5/7/01 7:55:00 AM	18
5/4/01 11:59:00 AM	47	5/4/01 12:34:00 PM	121	5/4/01 1:09:00 PM	77	5/7/01 7:56:00 AM	47
5/4/01 12:00:00 PM	51	5/4/01 12:35:00 PM	168	5/4/01 1:10:00 PM	118	5/7/01 7:57:00 AM	74
5/4/01 12:01:00 PM	46	5/4/01 12:36:00 PM	86	5/4/01 1:11:00 PM	264	5/7/01 7:58:00 AM	73
5/4/01 12:02:00 PM	48	5/4/01 12:37:00 PM	56	5/4/01 1:12:00 PM	63	5/7/01 7:59:00 AM	64
5/4/01 12:03:00 PM	62	5/4/01 12:38:00 PM	63	5/4/01 1:13:00 PM	108	5/7/01 8:00:00 AM	23
5/4/01 12:04:00 PM	78	5/4/01 12:39:00 PM	82	5/4/01 1:14:00 PM	122	5/7/01 8:01:00 AM	30
5/4/01 12:05:00 PM	54	5/4/01 12:40:00 PM	166	5/4/01 1:15:00 PM	90	5/7/01 8:02:00 AM	57
5/4/01 12:06:00 PM	50	5/4/01 12:41:00 PM	107	5/4/01 1:16:00 PM	88	5/7/01 8:03:00 AM	53
5/4/01 12:07:00 PM	49	5/4/01 12:42:00 PM	50	5/4/01 1:17:00 PM	73	5/7/01 8:04:00 AM	31
5/4/01 12:08:00 PM	60	5/4/01 12:43:00 PM	43	5/4/01 1:18:00 PM	59	5/7/01 8:05:00 AM	18
5/4/01 12:09:00 PM	53	5/4/01 12:44:00 PM	47	5/4/01 1:19:00 PM	89	5/7/01 8:06:00 AM	33
5/4/01 12:10:00 PM	58	5/4/01 12:45:00 PM	46	5/4/01 1:20:00 PM	61	5/7/01 8:07:00 AM	18
5/4/01 12:11:00 PM	58	5/4/01 12:46:00 PM	46	5/4/01 1:21:00 PM	48	5/7/01 8:08:00 AM	26
5/4/01 12:12:00 PM	56	5/4/01 12:47:00 PM	45	5/4/01 1:22:00 PM	59	5/7/01 8:09:00 AM	8
5/4/01 12:13:00 PM	56	5/4/01 12:48:00 PM	73	5/4/01 1:23:00 PM	54	5/7/01 8:10:00 AM	19
5/4/01 12:14:00 PM	54	5/4/01 12:49:00 PM	61	5/4/01 1:24:00 PM	47	5/7/01 8:11:00 AM	37

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/01 8:12:00 AM	58	5/7/01 8:47:00 AM	31	5/7/01 9:22:00 AM	24	5/7/01 9:57:00 AM	8
5/7/01 8:13:00 AM	68	5/7/01 8:48:00 AM	14	5/7/01 9:23:00 AM	11	5/7/01 9:58:00 AM	10
5/7/01 8:14:00 AM	50	5/7/01 8:49:00 AM	8	5/7/01 9:24:00 AM	27	5/7/01 9:59:00 AM	8
5/7/01 8:15:00 AM	57	5/7/01 8:50:00 AM	9	5/7/01 9:25:00 AM	15	5/7/01 10:00:00 AM	8
5/7/01 8:16:00 AM	26	5/7/01 8:51:00 AM	16	5/7/01 9:26:00 AM	8	5/7/01 10:01:00 AM	7
5/7/01 8:17:00 AM	12	5/7/01 8:52:00 AM	25	5/7/01 9:27:00 AM	8	5/7/01 10:02:00 AM	6
5/7/01 8:18:00 AM	37	5/7/01 8:53:00 AM	10	5/7/01 9:28:00 AM	10	5/7/01 10:03:00 AM	7
5/7/01 8:19:00 AM	10	5/7/01 8:54:00 AM	60	5/7/01 9:29:00 AM	9	5/7/01 10:04:00 AM	8
5/7/01 8:20:00 AM	41	5/7/01 8:55:00 AM	78	5/7/01 9:30:00 AM	13	5/7/01 10:05:00 AM	6
5/7/01 8:21:00 AM	31	5/7/01 8:56:00 AM	28	5/7/01 9:31:00 AM	16	5/7/01 10:06:00 AM	13
5/7/01 8:22:00 AM	18	5/7/01 8:57:00 AM	15	5/7/01 9:32:00 AM	27	5/7/01 10:07:00 AM	12
5/7/01 8:23:00 AM	79	5/7/01 8:58:00 AM	20	5/7/01 9:33:00 AM	18	5/7/01 10:08:00 AM	8
5/7/01 8:24:00 AM	35	5/7/01 8:59:00 AM	16	5/7/01 9:34:00 AM	15	5/7/01 10:09:00 AM	9
5/7/01 8:25:00 AM	15	5/7/01 9:00:00 AM	28	5/7/01 9:35:00 AM	22	5/7/01 10:10:00 AM	16
5/7/01 8:26:00 AM	7	5/7/01 9:01:00 AM	26	5/7/01 9:36:00 AM	98	5/7/01 10:11:00 AM	10
5/7/01 8:27:00 AM	20	5/7/01 9:02:00 AM	38	5/7/01 9:37:00 AM	14	5/7/01 10:12:00 AM	7
5/7/01 8:28:00 AM	8	5/7/01 9:03:00 AM	48	5/7/01 9:38:00 AM	14	5/7/01 10:13:00 AM	6
5/7/01 8:29:00 AM	8	5/7/01 9:04:00 AM	22	5/7/01 9:39:00 AM	6	5/7/01 10:14:00 AM	6
5/7/01 8:30:00 AM	15	5/7/01 9:05:00 AM	18	5/7/01 9:40:00 AM	26	5/7/01 10:15:00 AM	7
5/7/01 8:31:00 AM	26	5/7/01 9:06:00 AM	21	5/7/01 9:41:00 AM	10	5/7/01 10:16:00 AM	6
5/7/01 8:32:00 AM	29	5/7/01 9:07:00 AM	25	5/7/01 9:42:00 AM	7	5/7/01 10:17:00 AM	13
5/7/01 8:33:00 AM	24	5/7/01 9:08:00 AM	27	5/7/01 9:43:00 AM	6	5/7/01 10:18:00 AM	8
5/7/01 8:34:00 AM	15	5/7/01 9:09:00 AM	13	5/7/01 9:44:00 AM	9	5/7/01 10:19:00 AM	9
5/7/01 8:35:00 AM	10	5/7/01 9:10:00 AM	14	5/7/01 9:45:00 AM	6	5/7/01 10:20:00 AM	21
5/7/01 8:36:00 AM	12	5/7/01 9:11:00 AM	19	5/7/01 9:46:00 AM	6	5/7/01 10:21:00 AM	35
5/7/01 8:37:00 AM	16	5/7/01 9:12:00 AM	25	5/7/01 9:47:00 AM	9	5/7/01 10:22:00 AM	6
5/7/01 8:38:00 AM	49	5/7/01 9:13:00 AM	30	5/7/01 9:48:00 AM	8	5/7/01 10:23:00 AM	9
5/7/01 8:39:00 AM	54	5/7/01 9:14:00 AM	15	5/7/01 9:49:00 AM	11	5/7/01 10:24:00 AM	7
5/7/01 8:40:00 AM	18	5/7/01 9:15:00 AM	11	5/7/01 9:50:00 AM	10	5/7/01 10:25:00 AM	6
5/7/01 8:41:00 AM	22	5/7/01 9:16:00 AM	22	5/7/01 9:51:00 AM	12	5/7/01 10:26:00 AM	8
5/7/01 8:42:00 AM	11	5/7/01 9:17:00 AM	15	5/7/01 9:52:00 AM	14	5/7/01 10:27:00 AM	11
5/7/01 8:43:00 AM	25	5/7/01 9:18:00 AM	23	5/7/01 9:53:00 AM	9	5/7/01 10:28:00 AM	13
5/7/01 8:44:00 AM	21	5/7/01 9:19:00 AM	15	5/7/01 9:54:00 AM	5	5/7/01 10:29:00 AM	10
5/7/01 8:45:00 AM	17	5/7/01 9:20:00 AM	10	5/7/01 9:55:00 AM	5	5/7/01 10:30:00 AM	10
5/7/01 8:46:00 AM	62	5/7/01 9:21:00 AM	17	5/7/01 9:56:00 AM	8	5/7/01 10:31:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/01 10:32:00 AM	10	5/7/01 11:07:00 AM	7	5/7/01 11:42:00 AM	8	5/7/01 12:17:00 PM	19
5/7/01 10:33:00 AM	42	5/7/01 11:08:00 AM	9	5/7/01 11:43:00 AM	8	5/7/01 12:18:00 PM	36
5/7/01 10:34:00 AM	12	5/7/01 11:09:00 AM	9	5/7/01 11:44:00 AM	7	5/7/01 12:19:00 PM	12
5/7/01 10:35:00 AM	6	5/7/01 11:10:00 AM	8	5/7/01 11:45:00 AM	25	5/7/01 12:20:00 PM	22
5/7/01 10:36:00 AM	16	5/7/01 11:11:00 AM	10	5/7/01 11:46:00 AM	8	5/7/01 12:21:00 PM	15
5/7/01 10:37:00 AM	10	5/7/01 11:12:00 AM	7	5/7/01 11:47:00 AM	13	5/7/01 12:22:00 PM	9
5/7/01 10:38:00 AM	8	5/7/01 11:13:00 AM	8	5/7/01 11:48:00 AM	86	5/7/01 12:23:00 PM	18
5/7/01 10:39:00 AM	7	5/7/01 11:14:00 AM	10	5/7/01 11:49:00 AM	96	5/7/01 12:24:00 PM	10
5/7/01 10:40:00 AM	7	5/7/01 11:15:00 AM	18	5/7/01 11:50:00 AM	69	5/7/01 12:25:00 PM	10
5/7/01 10:41:00 AM	6	5/7/01 11:16:00 AM	9	5/7/01 11:51:00 AM	13	5/7/01 12:26:00 PM	20
5/7/01 10:42:00 AM	9	5/7/01 11:17:00 AM	7	5/7/01 11:52:00 AM	7	5/7/01 12:27:00 PM	9
5/7/01 10:43:00 AM	9	5/7/01 11:18:00 AM	8	5/7/01 11:53:00 AM	16	5/7/01 12:28:00 PM	6
5/7/01 10:44:00 AM	7	5/7/01 11:19:00 AM	6	5/7/01 11:54:00 AM	8	5/7/01 12:29:00 PM	12
5/7/01 10:45:00 AM	11	5/7/01 11:20:00 AM	8	5/7/01 11:55:00 AM	65	5/7/01 12:30:00 PM	18
5/7/01 10:46:00 AM	10	5/7/01 11:21:00 AM	7	5/7/01 11:56:00 AM	38	5/7/01 12:31:00 PM	20
5/7/01 10:47:00 AM	6	5/7/01 11:22:00 AM	8	5/7/01 11:57:00 AM	6	5/7/01 12:32:00 PM	14
5/7/01 10:48:00 AM	7	5/7/01 11:23:00 AM	9	5/7/01 11:58:00 AM	8	5/7/01 12:33:00 PM	8
5/7/01 10:49:00 AM	9	5/7/01 11:24:00 AM	9	5/7/01 11:59:00 AM	44	5/7/01 12:34:00 PM	15
5/7/01 10:50:00 AM	7	5/7/01 11:25:00 AM	8	5/7/01 12:00:00 PM	12	5/7/01 12:35:00 PM	20
5/7/01 10:51:00 AM	7	5/7/01 11:26:00 AM	10	5/7/01 12:01:00 PM	7	5/7/01 12:36:00 PM	10
5/7/01 10:52:00 AM	7	5/7/01 11:27:00 AM	9	5/7/01 12:02:00 PM	38	5/7/01 12:37:00 PM	9
5/7/01 10:53:00 AM	24	5/7/01 11:28:00 AM	8	5/7/01 12:03:00 PM	11	5/7/01 12:38:00 PM	15
5/7/01 10:54:00 AM	8	5/7/01 11:29:00 AM	18	5/7/01 12:04:00 PM	7	5/7/01 12:39:00 PM	8
5/7/01 10:55:00 AM	10	5/7/01 11:30:00 AM	8	5/7/01 12:05:00 PM	19	5/7/01 12:40:00 PM	6
5/7/01 10:56:00 AM	28	5/7/01 11:31:00 AM	13	5/7/01 12:06:00 PM	19	5/7/01 12:41:00 PM	9
5/7/01 10:57:00 AM	8	5/7/01 11:32:00 AM	9	5/7/01 12:07:00 PM	34	5/7/01 12:42:00 PM	37
5/7/01 10:58:00 AM	11	5/7/01 11:33:00 AM	10	5/7/01 12:08:00 PM	33	5/7/01 12:43:00 PM	16
5/7/01 10:59:00 AM	9	5/7/01 11:34:00 AM	9	5/7/01 12:09:00 PM	170	5/7/01 12:44:00 PM	45
5/7/01 11:00:00 AM	20	5/7/01 11:35:00 AM	10	5/7/01 12:10:00 PM	9	5/7/01 12:45:00 PM	28
5/7/01 11:01:00 AM	10	5/7/01 11:36:00 AM	7	5/7/01 12:11:00 PM	28	5/7/01 12:46:00 PM	32
5/7/01 11:02:00 AM	7	5/7/01 11:37:00 AM	7	5/7/01 12:12:00 PM	39	5/7/01 12:47:00 PM	33
5/7/01 11:03:00 AM	8	5/7/01 11:38:00 AM	10	5/7/01 12:13:00 PM	11	5/7/01 12:48:00 PM	7
5/7/01 11:04:00 AM	9	5/7/01 11:39:00 AM	6	5/7/01 12:14:00 PM	31	5/7/01 12:49:00 PM	14
5/7/01 11:05:00 AM	8	5/7/01 11:40:00 AM	14	5/7/01 12:15:00 PM	349	5/7/01 12:50:00 PM	21
5/7/01 11:06:00 AM	8	5/7/01 11:41:00 AM	9	5/7/01 12:16:00 PM	74	5/7/01 12:51:00 PM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/01 12:52:00 PM	10	5/7/01 1:27:00 PM	108	5/7/01 2:02:00 PM	40	5/7/01 2:37:00 PM	18
5/7/01 12:53:00 PM	6	5/7/01 1:28:00 PM	11	5/7/01 2:03:00 PM	42	5/7/01 2:38:00 PM	23
5/7/01 12:54:00 PM	7	5/7/01 1:29:00 PM	16	5/7/01 2:04:00 PM	43	5/7/01 2:39:00 PM	14
5/7/01 12:55:00 PM	6	5/7/01 1:30:00 PM	16	5/7/01 2:05:00 PM	28	5/7/01 2:40:00 PM	23
5/7/01 12:56:00 PM	14	5/7/01 1:31:00 PM	17	5/7/01 2:06:00 PM	20	5/7/01 2:41:00 PM	10
5/7/01 12:57:00 PM	18	5/7/01 1:32:00 PM	10	5/7/01 2:07:00 PM	21	5/7/01 2:42:00 PM	19
5/7/01 12:58:00 PM	30	5/7/01 1:33:00 PM	12	5/7/01 2:08:00 PM	8	5/7/01 2:43:00 PM	28
5/7/01 12:59:00 PM	7	5/7/01 1:34:00 PM	16	5/7/01 2:09:00 PM	11	5/7/01 2:44:00 PM	26
5/7/01 1:00:00 PM	10	5/7/01 1:35:00 PM	25	5/7/01 2:10:00 PM	11	5/7/01 2:45:00 PM	28
5/7/01 1:01:00 PM	17	5/7/01 1:36:00 PM	31	5/7/01 2:11:00 PM	9	5/7/01 2:46:00 PM	11
5/7/01 1:02:00 PM	16	5/7/01 1:37:00 PM	49	5/7/01 2:12:00 PM	13	5/7/01 2:47:00 PM	9
5/7/01 1:03:00 PM	22	5/7/01 1:38:00 PM	23	5/7/01 2:13:00 PM	33	5/7/01 2:48:00 PM	8
5/7/01 1:04:00 PM	16	5/7/01 1:39:00 PM	18	5/7/01 2:14:00 PM	21	5/7/01 2:49:00 PM	12
5/7/01 1:05:00 PM	17	5/7/01 1:40:00 PM	9	5/7/01 2:15:00 PM	16	5/8/01 8:51:00 AM	20
5/7/01 1:06:00 PM	12	5/7/01 1:41:00 PM	19	5/7/01 2:16:00 PM	39	5/8/01 8:52:00 AM	25
5/7/01 1:07:00 PM	20	5/7/01 1:42:00 PM	40	5/7/01 2:17:00 PM	12	5/8/01 8:53:00 AM	34
5/7/01 1:08:00 PM	10	5/7/01 1:43:00 PM	25	5/7/01 2:18:00 PM	8	5/8/01 8:54:00 AM	20
5/7/01 1:09:00 PM	8	5/7/01 1:44:00 PM	12	5/7/01 2:19:00 PM	12	5/8/01 8:55:00 AM	18
5/7/01 1:10:00 PM	8	5/7/01 1:45:00 PM	24	5/7/01 2:20:00 PM	9	5/8/01 8:56:00 AM	24
5/7/01 1:11:00 PM	9	5/7/01 1:46:00 PM	16	5/7/01 2:21:00 PM	15	5/8/01 8:57:00 AM	18
5/7/01 1:12:00 PM	10	5/7/01 1:47:00 PM	11	5/7/01 2:22:00 PM	10	5/8/01 8:58:00 AM	19
5/7/01 1:13:00 PM	16	5/7/01 1:48:00 PM	8	5/7/01 2:23:00 PM	11	5/8/01 8:59:00 AM	21
5/7/01 1:14:00 PM	8	5/7/01 1:49:00 PM	11	5/7/01 2:24:00 PM	8	5/8/01 9:00:00 AM	26
5/7/01 1:15:00 PM	9	5/7/01 1:50:00 PM	38	5/7/01 2:25:00 PM	11	5/8/01 9:01:00 AM	24
5/7/01 1:16:00 PM	10	5/7/01 1:51:00 PM	20	5/7/01 2:26:00 PM	11	5/8/01 9:02:00 AM	23
5/7/01 1:17:00 PM	8	5/7/01 1:52:00 PM	11	5/7/01 2:27:00 PM	8	5/8/01 9:03:00 AM	19
5/7/01 1:18:00 PM	7	5/7/01 1:53:00 PM	13	5/7/01 2:28:00 PM	12	5/8/01 9:04:00 AM	30
5/7/01 1:19:00 PM	7	5/7/01 1:54:00 PM	11	5/7/01 2:29:00 PM	8	5/8/01 9:05:00 AM	30
5/7/01 1:20:00 PM	19	5/7/01 1:55:00 PM	32	5/7/01 2:30:00 PM	23	5/8/01 9:06:00 AM	22
5/7/01 1:21:00 PM	9	5/7/01 1:56:00 PM	22	5/7/01 2:31:00 PM	14	5/8/01 9:07:00 AM	31
5/7/01 1:22:00 PM	24	5/7/01 1:57:00 PM	11	5/7/01 2:32:00 PM	14	5/8/01 9:08:00 AM	16
5/7/01 1:23:00 PM	9	5/7/01 1:58:00 PM	11	5/7/01 2:33:00 PM	13	5/8/01 9:09:00 AM	19
5/7/01 1:24:00 PM	17	5/7/01 1:59:00 PM	7	5/7/01 2:34:00 PM	18	5/8/01 9:10:00 AM	37
5/7/01 1:25:00 PM	11	5/7/01 2:00:00 PM	36	5/7/01 2:35:00 PM	11	5/8/01 9:11:00 AM	19
5/7/01 1:26:00 PM	10	5/7/01 2:01:00 PM	34	5/7/01 2:36:00 PM	9	5/8/01 9:12:00 AM	19

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/8/01 9:13:00 AM	20	5/8/01 9:48:00 AM	14	5/8/01 10:23:00 AM	15	5/8/01 10:58:00 AM	13
5/8/01 9:14:00 AM	18	5/8/01 9:49:00 AM	15	5/8/01 10:24:00 AM	17	5/8/01 10:59:00 AM	15
5/8/01 9:15:00 AM	24	5/8/01 9:50:00 AM	13	5/8/01 10:25:00 AM	14	5/8/01 11:00:00 AM	18
5/8/01 9:16:00 AM	17	5/8/01 9:51:00 AM	17	5/8/01 10:26:00 AM	47	5/8/01 11:01:00 AM	13
5/8/01 9:17:00 AM	21	5/8/01 9:52:00 AM	20	5/8/01 10:27:00 AM	18	5/8/01 11:02:00 AM	17
5/8/01 9:18:00 AM	18	5/8/01 9:53:00 AM	21	5/8/01 10:28:00 AM	22	5/8/01 11:03:00 AM	16
5/8/01 9:19:00 AM	27	5/8/01 9:54:00 AM	15	5/8/01 10:29:00 AM	32	5/8/01 11:04:00 AM	14
5/8/01 9:20:00 AM	14	5/8/01 9:55:00 AM	17	5/8/01 10:30:00 AM	26	5/8/01 11:05:00 AM	12
5/8/01 9:21:00 AM	17	5/8/01 9:56:00 AM	19	5/8/01 10:31:00 AM	18	5/8/01 11:06:00 AM	15
5/8/01 9:22:00 AM	18	5/8/01 9:57:00 AM	18	5/8/01 10:32:00 AM	28	5/8/01 11:07:00 AM	10
5/8/01 9:23:00 AM	21	5/8/01 9:58:00 AM	17	5/8/01 10:33:00 AM	21	5/8/01 11:08:00 AM	25
5/8/01 9:24:00 AM	22	5/8/01 9:59:00 AM	15	5/8/01 10:34:00 AM	19	5/8/01 11:09:00 AM	13
5/8/01 9:25:00 AM	17	5/8/01 10:00:00 AM	25	5/8/01 10:35:00 AM	22	5/8/01 11:10:00 AM	24
5/8/01 9:26:00 AM	17	5/8/01 10:01:00 AM	16	5/8/01 10:36:00 AM	18	5/8/01 11:11:00 AM	20
5/8/01 9:27:00 AM	17	5/8/01 10:02:00 AM	17	5/8/01 10:37:00 AM	23	5/8/01 11:12:00 AM	20
5/8/01 9:28:00 AM	20	5/8/01 10:03:00 AM	14	5/8/01 10:38:00 AM	25	5/8/01 11:13:00 AM	17
5/8/01 9:29:00 AM	21	5/8/01 10:04:00 AM	16	5/8/01 10:39:00 AM	23	5/8/01 11:14:00 AM	21
5/8/01 9:30:00 AM	22	5/8/01 10:05:00 AM	28	5/8/01 10:40:00 AM	24	5/8/01 11:15:00 AM	22
5/8/01 9:31:00 AM	16	5/8/01 10:06:00 AM	22	5/8/01 10:41:00 AM	26	5/8/01 11:16:00 AM	11
5/8/01 9:32:00 AM	16	5/8/01 10:07:00 AM	18	5/8/01 10:42:00 AM	27	5/8/01 11:17:00 AM	19
5/8/01 9:33:00 AM	14	5/8/01 10:08:00 AM	13	5/8/01 10:43:00 AM	25	5/8/01 11:18:00 AM	15
5/8/01 9:34:00 AM	16	5/8/01 10:09:00 AM	17	5/8/01 10:44:00 AM	24	5/8/01 11:19:00 AM	17
5/8/01 9:35:00 AM	14	5/8/01 10:10:00 AM	21	5/8/01 10:45:00 AM	22	5/8/01 11:20:00 AM	14
5/8/01 9:36:00 AM	15	5/8/01 10:11:00 AM	28	5/8/01 10:46:00 AM	20	5/8/01 11:21:00 AM	28
5/8/01 9:37:00 AM	15	5/8/01 10:12:00 AM	35	5/8/01 10:47:00 AM	18	5/8/01 11:22:00 AM	16
5/8/01 9:38:00 AM	14	5/8/01 10:13:00 AM	19	5/8/01 10:48:00 AM	13	5/8/01 11:23:00 AM	13
5/8/01 9:39:00 AM	18	5/8/01 10:14:00 AM	21	5/8/01 10:49:00 AM	13	5/8/01 11:24:00 AM	16
5/8/01 9:40:00 AM	16	5/8/01 10:15:00 AM	17	5/8/01 10:50:00 AM	15	5/8/01 11:25:00 AM	13
5/8/01 9:41:00 AM	15	5/8/01 10:16:00 AM	25	5/8/01 10:51:00 AM	15	5/8/01 11:26:00 AM	14
5/8/01 9:42:00 AM	14	5/8/01 10:17:00 AM	30	5/8/01 10:52:00 AM	13	5/8/01 11:27:00 AM	13
5/8/01 9:43:00 AM	13	5/8/01 10:18:00 AM	18	5/8/01 10:53:00 AM	13	5/8/01 11:28:00 AM	16
5/8/01 9:44:00 AM	14	5/8/01 10:19:00 AM	17	5/8/01 10:54:00 AM	16	5/8/01 11:29:00 AM	13
5/8/01 9:45:00 AM	19	5/8/01 10:20:00 AM	18	5/8/01 10:55:00 AM	14	5/8/01 11:30:00 AM	12
5/8/01 9:46:00 AM	15	5/8/01 10:21:00 AM	16	5/8/01 10:56:00 AM	19	5/8/01 11:31:00 AM	13
5/8/01 9:47:00 AM	16	5/8/01 10:22:00 AM	16	5/8/01 10:57:00 AM	14	5/8/01 11:32:00 AM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/8/01 11:33:00 AM	13	5/8/01 12:08:00 PM	13	5/8/01 12:43:00 PM	13	5/8/01 1:18:00 PM	15
5/8/01 11:34:00 AM	13	5/8/01 12:09:00 PM	15	5/8/01 12:44:00 PM	9	5/8/01 1:19:00 PM	18
5/8/01 11:35:00 AM	13	5/8/01 12:10:00 PM	18	5/8/01 12:45:00 PM	15	5/8/01 1:20:00 PM	13
5/8/01 11:36:00 AM	13	5/8/01 12:11:00 PM	17	5/8/01 12:46:00 PM	13	5/8/01 1:21:00 PM	15
5/8/01 11:37:00 AM	14	5/8/01 12:12:00 PM	24	5/8/01 12:47:00 PM	10	5/8/01 1:22:00 PM	13
5/8/01 11:38:00 AM	15	5/8/01 12:13:00 PM	15	5/8/01 12:48:00 PM	15	5/8/01 1:23:00 PM	13
5/8/01 11:39:00 AM	14	5/8/01 12:14:00 PM	17	5/8/01 12:49:00 PM	20	5/8/01 1:24:00 PM	9
5/8/01 11:40:00 AM	12	5/8/01 12:15:00 PM	21	5/8/01 12:50:00 PM	13	5/8/01 1:25:00 PM	10
5/8/01 11:41:00 AM	14	5/8/01 12:16:00 PM	18	5/8/01 12:51:00 PM	14	5/8/01 1:26:00 PM	12
5/8/01 11:42:00 AM	13	5/8/01 12:17:00 PM	18	5/8/01 12:52:00 PM	11	5/8/01 1:27:00 PM	12
5/8/01 11:43:00 AM	11	5/8/01 12:18:00 PM	20	5/8/01 12:53:00 PM	28	5/8/01 1:28:00 PM	11
5/8/01 11:44:00 AM	15	5/8/01 12:19:00 PM	17	5/8/01 12:54:00 PM	18	5/8/01 1:29:00 PM	11
5/8/01 11:45:00 AM	14	5/8/01 12:20:00 PM	22	5/8/01 12:55:00 PM	16	5/8/01 1:30:00 PM	10
5/8/01 11:46:00 AM	14	5/8/01 12:21:00 PM	17	5/8/01 12:56:00 PM	18	5/8/01 1:31:00 PM	11
5/8/01 11:47:00 AM	14	5/8/01 12:22:00 PM	13	5/8/01 12:57:00 PM	19	5/8/01 1:32:00 PM	12
5/8/01 11:48:00 AM	13	5/8/01 12:23:00 PM	17	5/8/01 12:58:00 PM	21	5/8/01 1:33:00 PM	13
5/8/01 11:49:00 AM	14	5/8/01 12:24:00 PM	15	5/8/01 12:59:00 PM	20	5/8/01 1:34:00 PM	21
5/8/01 11:50:00 AM	13	5/8/01 12:25:00 PM	24	5/8/01 1:00:00 PM	22	5/8/01 1:35:00 PM	16
5/8/01 11:51:00 AM	14	5/8/01 12:26:00 PM	27	5/8/01 1:01:00 PM	14	5/8/01 1:36:00 PM	27
5/8/01 11:52:00 AM	12	5/8/01 12:27:00 PM	38	5/8/01 1:02:00 PM	16	5/8/01 1:37:00 PM	14
5/8/01 11:53:00 AM	13	5/8/01 12:28:00 PM	20	5/8/01 1:03:00 PM	15	5/8/01 1:38:00 PM	23
5/8/01 11:54:00 AM	12	5/8/01 12:29:00 PM	15	5/8/01 1:04:00 PM	19	5/8/01 1:39:00 PM	14
5/8/01 11:55:00 AM	14	5/8/01 12:30:00 PM	13	5/8/01 1:05:00 PM	18	5/8/01 1:40:00 PM	14
5/8/01 11:56:00 AM	17	5/8/01 12:31:00 PM	18	5/8/01 1:06:00 PM	23	5/8/01 1:41:00 PM	21
5/8/01 11:57:00 AM	13	5/8/01 12:32:00 PM	15	5/8/01 1:07:00 PM	12	5/8/01 1:42:00 PM	20
5/8/01 11:58:00 AM	13	5/8/01 12:33:00 PM	12	5/8/01 1:08:00 PM	20	5/8/01 1:43:00 PM	16
5/8/01 11:59:00 AM	15	5/8/01 12:34:00 PM	13	5/8/01 1:09:00 PM	35	5/8/01 1:44:00 PM	18
5/8/01 12:00:00 PM	13	5/8/01 12:35:00 PM	17	5/8/01 1:10:00 PM	18	5/8/01 1:45:00 PM	12
5/8/01 12:01:00 PM	11	5/8/01 12:36:00 PM	19	5/8/01 1:11:00 PM	40	5/8/01 1:46:00 PM	21
5/8/01 12:02:00 PM	18	5/8/01 12:37:00 PM	18	5/8/01 1:12:00 PM	24	5/8/01 1:47:00 PM	15
5/8/01 12:03:00 PM	24	5/8/01 12:38:00 PM	19	5/8/01 1:13:00 PM	13	5/8/01 1:48:00 PM	21
5/8/01 12:04:00 PM	21	5/8/01 12:39:00 PM	25	5/8/01 1:14:00 PM	16	5/8/01 1:49:00 PM	18
5/8/01 12:05:00 PM	21	5/8/01 12:40:00 PM	13	5/8/01 1:15:00 PM	11	5/8/01 1:50:00 PM	12
5/8/01 12:06:00 PM	20	5/8/01 12:41:00 PM	10	5/8/01 1:16:00 PM	10	5/8/01 1:51:00 PM	17
5/8/01 12:07:00 PM	22	5/8/01 12:42:00 PM	12	5/8/01 1:17:00 PM	12	5/8/01 1:52:00 PM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/8/01 1:53:00 PM	16	5/8/01 2:28:00 PM	10	5/8/01 3:03:00 PM	12	5/8/01 3:38:00 PM	14
5/8/01 1:54:00 PM	14	5/8/01 2:29:00 PM	10	5/8/01 3:04:00 PM	16	5/8/01 3:39:00 PM	20
5/8/01 1:55:00 PM	11	5/8/01 2:30:00 PM	10	5/8/01 3:05:00 PM	19	5/8/01 3:40:00 PM	17
5/8/01 1:56:00 PM	18	5/8/01 2:31:00 PM	14	5/8/01 3:06:00 PM	22	5/8/01 3:41:00 PM	15
5/8/01 1:57:00 PM	44	5/8/01 2:32:00 PM	15	5/8/01 3:07:00 PM	21	5/8/01 3:42:00 PM	19
5/8/01 1:58:00 PM	17	5/8/01 2:33:00 PM	10	5/8/01 3:08:00 PM	17	5/8/01 3:43:00 PM	24
5/8/01 1:59:00 PM	10	5/8/01 2:34:00 PM	10	5/8/01 3:09:00 PM	18	5/8/01 3:44:00 PM	31
5/8/01 2:00:00 PM	14	5/8/01 2:35:00 PM	17	5/8/01 3:10:00 PM	25	5/8/01 3:45:00 PM	22
5/8/01 2:01:00 PM	59	5/8/01 2:36:00 PM	17	5/8/01 3:11:00 PM	17	5/8/01 3:46:00 PM	10
5/8/01 2:02:00 PM	33	5/8/01 2:37:00 PM	16	5/8/01 3:12:00 PM	23	5/9/01 8:57:00 AM	34
5/8/01 2:03:00 PM	19	5/8/01 2:38:00 PM	10	5/8/01 3:13:00 PM	16	5/9/01 8:58:00 AM	29
5/8/01 2:04:00 PM	8	5/8/01 2:39:00 PM	11	5/8/01 3:14:00 PM	21	5/9/01 8:59:00 AM	27
5/8/01 2:05:00 PM	15	5/8/01 2:40:00 PM	10	5/8/01 3:15:00 PM	12	5/9/01 9:00:00 AM	24
5/8/01 2:06:00 PM	13	5/8/01 2:41:00 PM	11	5/8/01 3:16:00 PM	18	5/9/01 9:01:00 AM	28
5/8/01 2:07:00 PM	25	5/8/01 2:42:00 PM	11	5/8/01 3:17:00 PM	13	5/9/01 9:02:00 AM	29
5/8/01 2:08:00 PM	33	5/8/01 2:43:00 PM	19	5/8/01 3:18:00 PM	22	5/9/01 9:03:00 AM	28
5/8/01 2:09:00 PM	16	5/8/01 2:44:00 PM	15	5/8/01 3:19:00 PM	17	5/9/01 9:04:00 AM	24
5/8/01 2:10:00 PM	17	5/8/01 2:45:00 PM	15	5/8/01 3:20:00 PM	12	5/9/01 9:05:00 AM	24
5/8/01 2:11:00 PM	18	5/8/01 2:46:00 PM	9	5/8/01 3:21:00 PM	20	5/9/01 9:06:00 AM	33
5/8/01 2:12:00 PM	15	5/8/01 2:47:00 PM	13	5/8/01 3:22:00 PM	16	5/9/01 9:07:00 AM	27
5/8/01 2:13:00 PM	21	5/8/01 2:48:00 PM	8	5/8/01 3:23:00 PM	16	5/9/01 9:08:00 AM	28
5/8/01 2:14:00 PM	23	5/8/01 2:49:00 PM	17	5/8/01 3:24:00 PM	17	5/9/01 9:09:00 AM	36
5/8/01 2:15:00 PM	22	5/8/01 2:50:00 PM	58	5/8/01 3:25:00 PM	14	5/9/01 9:10:00 AM	37
5/8/01 2:16:00 PM	14	5/8/01 2:51:00 PM	18	5/8/01 3:26:00 PM	18	5/9/01 9:11:00 AM	32
5/8/01 2:17:00 PM	16	5/8/01 2:52:00 PM	20	5/8/01 3:27:00 PM	16	5/9/01 9:12:00 AM	37
5/8/01 2:18:00 PM	11	5/8/01 2:53:00 PM	18	5/8/01 3:28:00 PM	13	5/9/01 9:13:00 AM	38
5/8/01 2:19:00 PM	16	5/8/01 2:54:00 PM	19	5/8/01 3:29:00 PM	18	5/9/01 9:14:00 AM	43
5/8/01 2:20:00 PM	20	5/8/01 2:55:00 PM	26	5/8/01 3:30:00 PM	13	5/9/01 9:15:00 AM	44
5/8/01 2:21:00 PM	12	5/8/01 2:56:00 PM	24	5/8/01 3:31:00 PM	17	5/9/01 9:16:00 AM	50
5/8/01 2:22:00 PM	13	5/8/01 2:57:00 PM	16	5/8/01 3:32:00 PM	17	5/9/01 9:17:00 AM	42
5/8/01 2:23:00 PM	12	5/8/01 2:58:00 PM	12	5/8/01 3:33:00 PM	15	5/9/01 9:18:00 AM	30
5/8/01 2:24:00 PM	14	5/8/01 2:59:00 PM	36	5/8/01 3:34:00 PM	13	5/9/01 9:19:00 AM	39
5/8/01 2:25:00 PM	16	5/8/01 3:00:00 PM	20	5/8/01 3:35:00 PM	16	5/9/01 9:20:00 AM	28
5/8/01 2:26:00 PM	10	5/8/01 3:01:00 PM	18	5/8/01 3:36:00 PM	22	5/9/01 9:21:00 AM	37
5/8/01 2:27:00 PM	13	5/8/01 3:02:00 PM	10	5/8/01 3:37:00 PM	13	5/9/01 9:22:00 AM	40

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/9/01 9:23:00 AM	49	5/9/01 9:58:00 AM	34	5/9/01 10:33:00 AM	54	5/9/01 11:08:00 AM	29
5/9/01 9:24:00 AM	23	5/9/01 9:59:00 AM	25	5/9/01 10:34:00 AM	25	5/9/01 11:09:00 AM	43
5/9/01 9:25:00 AM	25	5/9/01 10:00:00 AM	24	5/9/01 10:35:00 AM	31	5/9/01 11:10:00 AM	21
5/9/01 9:26:00 AM	39	5/9/01 10:01:00 AM	24	5/9/01 10:36:00 AM	23	5/9/01 11:11:00 AM	21
5/9/01 9:27:00 AM	30	5/9/01 10:02:00 AM	26	5/9/01 10:37:00 AM	34	5/9/01 11:12:00 AM	22
5/9/01 9:28:00 AM	65	5/9/01 10:03:00 AM	30	5/9/01 10:38:00 AM	27	5/9/01 11:13:00 AM	22
5/9/01 9:29:00 AM	37	5/9/01 10:04:00 AM	39	5/9/01 10:39:00 AM	37	5/9/01 11:14:00 AM	22
5/9/01 9:30:00 AM	34	5/9/01 10:05:00 AM	40	5/9/01 10:40:00 AM	26	5/9/01 11:15:00 AM	19
5/9/01 9:31:00 AM	29	5/9/01 10:06:00 AM	29	5/9/01 10:41:00 AM	27	5/9/01 11:16:00 AM	19
5/9/01 9:32:00 AM	32	5/9/01 10:07:00 AM	33	5/9/01 10:42:00 AM	24	5/9/01 11:17:00 AM	20
5/9/01 9:33:00 AM	44	5/9/01 10:08:00 AM	56	5/9/01 10:43:00 AM	32	5/9/01 11:18:00 AM	21
5/9/01 9:34:00 AM	31	5/9/01 10:09:00 AM	26	5/9/01 10:44:00 AM	27	5/9/01 11:19:00 AM	25
5/9/01 9:35:00 AM	34	5/9/01 10:10:00 AM	22	5/9/01 10:45:00 AM	35	5/9/01 11:20:00 AM	25
5/9/01 9:36:00 AM	25	5/9/01 10:11:00 AM	63	5/9/01 10:46:00 AM	41	5/9/01 11:21:00 AM	27
5/9/01 9:37:00 AM	29	5/9/01 10:12:00 AM	88	5/9/01 10:47:00 AM	28	5/9/01 11:22:00 AM	21
5/9/01 9:38:00 AM	33	5/9/01 10:13:00 AM	57	5/9/01 10:48:00 AM	22	5/9/01 11:23:00 AM	19
5/9/01 9:39:00 AM	43	5/9/01 10:14:00 AM	34	5/9/01 10:49:00 AM	27	5/9/01 11:24:00 AM	21
5/9/01 9:40:00 AM	27	5/9/01 10:15:00 AM	25	5/9/01 10:50:00 AM	26	5/9/01 11:25:00 AM	20
5/9/01 9:41:00 AM	29	5/9/01 10:16:00 AM	23	5/9/01 10:51:00 AM	21	5/9/01 11:26:00 AM	20
5/9/01 9:42:00 AM	31	5/9/01 10:17:00 AM	34	5/9/01 10:52:00 AM	20	5/9/01 11:27:00 AM	20
5/9/01 9:43:00 AM	34	5/9/01 10:18:00 AM	29	5/9/01 10:53:00 AM	19	5/9/01 11:28:00 AM	20
5/9/01 9:44:00 AM	45	5/9/01 10:19:00 AM	38	5/9/01 10:54:00 AM	26	5/9/01 11:29:00 AM	23
5/9/01 9:45:00 AM	35	5/9/01 10:20:00 AM	23	5/9/01 10:55:00 AM	22	5/9/01 11:30:00 AM	22
5/9/01 9:46:00 AM	28	5/9/01 10:21:00 AM	21	5/9/01 10:56:00 AM	24	5/9/01 11:31:00 AM	21
5/9/01 9:47:00 AM	36	5/9/01 10:22:00 AM	28	5/9/01 10:57:00 AM	22	5/9/01 11:32:00 AM	22
5/9/01 9:48:00 AM	69	5/9/01 10:23:00 AM	22	5/9/01 10:58:00 AM	28	5/9/01 11:33:00 AM	22
5/9/01 9:49:00 AM	108	5/9/01 10:24:00 AM	33	5/9/01 10:59:00 AM	34	5/9/01 11:34:00 AM	21
5/9/01 9:50:00 AM	38	5/9/01 10:25:00 AM	30	5/9/01 11:00:00 AM	27	5/9/01 11:35:00 AM	27
5/9/01 9:51:00 AM	47	5/9/01 10:26:00 AM	19	5/9/01 11:01:00 AM	26	5/9/01 11:36:00 AM	20
5/9/01 9:52:00 AM	24	5/9/01 10:27:00 AM	23	5/9/01 11:02:00 AM	22	5/9/01 11:37:00 AM	21
5/9/01 9:53:00 AM	24	5/9/01 10:28:00 AM	22	5/9/01 11:03:00 AM	24	5/9/01 11:38:00 AM	21
5/9/01 9:54:00 AM	32	5/9/01 10:29:00 AM	20	5/9/01 11:04:00 AM	55	5/9/01 11:39:00 AM	22
5/9/01 9:55:00 AM	28	5/9/01 10:30:00 AM	23	5/9/01 11:05:00 AM	35	5/9/01 11:40:00 AM	22
5/9/01 9:56:00 AM	21	5/9/01 10:31:00 AM	30	5/9/01 11:06:00 AM	35	5/9/01 11:41:00 AM	21
5/9/01 9:57:00 AM	25	5/9/01 10:32:00 AM	22	5/9/01 11:07:00 AM	24	5/9/01 11:42:00 AM	21

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/9/01 11:43:00 AM	20	5/9/01 12:18:00 PM	19	5/9/01 12:53:00 PM	20	5/11/01 9:32:00 AM	26
5/9/01 11:44:00 AM	20	5/9/01 12:19:00 PM	20	5/9/01 12:54:00 PM	17	5/11/01 9:33:00 AM	49
5/9/01 11:45:00 AM	20	5/9/01 12:20:00 PM	18	5/9/01 12:55:00 PM	20	5/11/01 9:34:00 AM	23
5/9/01 11:46:00 AM	22	5/9/01 12:21:00 PM	27	5/9/01 12:56:00 PM	16	5/11/01 9:35:00 AM	32
5/9/01 11:47:00 AM	19	5/9/01 12:22:00 PM	35	5/11/01 9:01:00 AM	36	5/11/01 9:36:00 AM	29
5/9/01 11:48:00 AM	20	5/9/01 12:23:00 PM	28	5/11/01 9:02:00 AM	32	5/11/01 9:37:00 AM	47
5/9/01 11:49:00 AM	20	5/9/01 12:24:00 PM	34	5/11/01 9:03:00 AM	39	5/11/01 9:38:00 AM	37
5/9/01 11:50:00 AM	22	5/9/01 12:25:00 PM	24	5/11/01 9:04:00 AM	56	5/11/01 9:39:00 AM	21
5/9/01 11:51:00 AM	42	5/9/01 12:26:00 PM	23	5/11/01 9:05:00 AM	37	5/11/01 9:40:00 AM	22
5/9/01 11:52:00 AM	21	5/9/01 12:27:00 PM	19	5/11/01 9:06:00 AM	32	5/11/01 9:41:00 AM	22
5/9/01 11:53:00 AM	20	5/9/01 12:28:00 PM	37	5/11/01 9:07:00 AM	36	5/11/01 9:42:00 AM	29
5/9/01 11:54:00 AM	19	5/9/01 12:29:00 PM	20	5/11/01 9:08:00 AM	30	5/11/01 9:43:00 AM	72
5/9/01 11:55:00 AM	23	5/9/01 12:30:00 PM	18	5/11/01 9:09:00 AM	27	5/11/01 9:44:00 AM	46
5/9/01 11:56:00 AM	21	5/9/01 12:31:00 PM	20	5/11/01 9:10:00 AM	36	5/11/01 9:45:00 AM	26
5/9/01 11:57:00 AM	27	5/9/01 12:32:00 PM	18	5/11/01 9:11:00 AM	74	5/11/01 9:46:00 AM	25
5/9/01 11:58:00 AM	19	5/9/01 12:33:00 PM	18	5/11/01 9:12:00 AM	54	5/11/01 9:47:00 AM	33
5/9/01 11:59:00 AM	25	5/9/01 12:34:00 PM	27	5/11/01 9:13:00 AM	37	5/11/01 9:48:00 AM	22
5/9/01 12:00:00 PM	20	5/9/01 12:35:00 PM	32	5/11/01 9:14:00 AM	39	5/11/01 9:49:00 AM	22
5/9/01 12:01:00 PM	21	5/9/01 12:36:00 PM	21	5/11/01 9:15:00 AM	42	5/11/01 9:50:00 AM	80
5/9/01 12:02:00 PM	23	5/9/01 12:37:00 PM	22	5/11/01 9:16:00 AM	68	5/11/01 9:51:00 AM	30
5/9/01 12:03:00 PM	21	5/9/01 12:38:00 PM	25	5/11/01 9:17:00 AM	30	5/11/01 9:52:00 AM	58
5/9/01 12:04:00 PM	18	5/9/01 12:39:00 PM	18	5/11/01 9:18:00 AM	28	5/11/01 9:53:00 AM	43
5/9/01 12:05:00 PM	20	5/9/01 12:40:00 PM	15	5/11/01 9:19:00 AM	47	5/11/01 9:54:00 AM	23
5/9/01 12:06:00 PM	19	5/9/01 12:41:00 PM	15	5/11/01 9:20:00 AM	31	5/11/01 9:55:00 AM	34
5/9/01 12:07:00 PM	20	5/9/01 12:42:00 PM	17	5/11/01 9:21:00 AM	72	5/11/01 9:56:00 AM	30
5/9/01 12:08:00 PM	43	5/9/01 12:43:00 PM	16	5/11/01 9:22:00 AM	45	5/11/01 9:57:00 AM	25
5/9/01 12:09:00 PM	24	5/9/01 12:44:00 PM	18	5/11/01 9:23:00 AM	24	5/11/01 9:58:00 AM	29
5/9/01 12:10:00 PM	24	5/9/01 12:45:00 PM	16	5/11/01 9:24:00 AM	44	5/11/01 9:59:00 AM	29
5/9/01 12:11:00 PM	21	5/9/01 12:46:00 PM	17	5/11/01 9:25:00 AM	51	5/11/01 10:00:00 AM	32
5/9/01 12:12:00 PM	19	5/9/01 12:47:00 PM	15	5/11/01 9:26:00 AM	25	5/11/01 10:01:00 AM	26
5/9/01 12:13:00 PM	18	5/9/01 12:48:00 PM	18	5/11/01 9:27:00 AM	55	5/11/01 10:02:00 AM	29
5/9/01 12:14:00 PM	20	5/9/01 12:49:00 PM	15	5/11/01 9:28:00 AM	30	5/11/01 10:03:00 AM	22
5/9/01 12:15:00 PM	18	5/9/01 12:50:00 PM	16	5/11/01 9:29:00 AM	34	5/11/01 10:04:00 AM	26
5/9/01 12:16:00 PM	17	5/9/01 12:51:00 PM	16	5/11/01 9:30:00 AM	40	5/11/01 10:05:00 AM	20
5/9/01 12:17:00 PM	18	5/9/01 12:52:00 PM	16	5/11/01 9:31:00 AM	27	5/11/01 10:06:00 AM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/11/01 10:07:00 AM	24	5/11/01 10:42:00 AM	21	5/11/01 11:17:00 AM	15	5/11/01 11:52:00 AM	17
5/11/01 10:08:00 AM	22	5/11/01 10:43:00 AM	21	5/11/01 11:18:00 AM	107	5/11/01 11:53:00 AM	19
5/11/01 10:09:00 AM	25	5/11/01 10:44:00 AM	21	5/11/01 11:19:00 AM	95	5/11/01 11:54:00 AM	19
5/11/01 10:10:00 AM	28	5/11/01 10:45:00 AM	47	5/11/01 11:20:00 AM	22	5/11/01 11:55:00 AM	19
5/11/01 10:11:00 AM	26	5/11/01 10:46:00 AM	30	5/11/01 11:21:00 AM	25	5/11/01 11:56:00 AM	23
5/11/01 10:12:00 AM	24	5/11/01 10:47:00 AM	36	5/11/01 11:22:00 AM	17	5/11/01 11:57:00 AM	18
5/11/01 10:13:00 AM	25	5/11/01 10:48:00 AM	42	5/11/01 11:23:00 AM	21	5/11/01 11:58:00 AM	19
5/11/01 10:14:00 AM	36	5/11/01 10:49:00 AM	46	5/11/01 11:24:00 AM	19	5/11/01 11:59:00 AM	18
5/11/01 10:15:00 AM	22	5/11/01 10:50:00 AM	38	5/11/01 11:25:00 AM	23	5/11/01 12:00:00 PM	20
5/11/01 10:16:00 AM	38	5/11/01 10:51:00 AM	56	5/11/01 11:26:00 AM	21	5/11/01 12:01:00 PM	24
5/11/01 10:17:00 AM	29	5/11/01 10:52:00 AM	29	5/11/01 11:27:00 AM	24	5/11/01 12:02:00 PM	21
5/11/01 10:18:00 AM	26	5/11/01 10:53:00 AM	19	5/11/01 11:28:00 AM	20	5/11/01 12:03:00 PM	22
5/11/01 10:19:00 AM	22	5/11/01 10:54:00 AM	22	5/11/01 11:29:00 AM	42	5/11/01 12:04:00 PM	19
5/11/01 10:20:00 AM	25	5/11/01 10:55:00 AM	19	5/11/01 11:30:00 AM	23	5/11/01 12:05:00 PM	17
5/11/01 10:21:00 AM	18	5/11/01 10:56:00 AM	27	5/11/01 11:31:00 AM	28	5/11/01 12:06:00 PM	18
5/11/01 10:22:00 AM	25	5/11/01 10:57:00 AM	20	5/11/01 11:32:00 AM	15	5/11/01 12:07:00 PM	24
5/11/01 10:23:00 AM	27	5/11/01 10:58:00 AM	18	5/11/01 11:33:00 AM	24	5/11/01 12:08:00 PM	46
5/11/01 10:24:00 AM	29	5/11/01 10:59:00 AM	27	5/11/01 11:34:00 AM	32	5/11/01 12:09:00 PM	22
5/11/01 10:25:00 AM	27	5/11/01 11:00:00 AM	31	5/11/01 11:35:00 AM	34	5/11/01 12:10:00 PM	22
5/11/01 10:26:00 AM	46	5/11/01 11:01:00 AM	24	5/11/01 11:36:00 AM	19	5/11/01 12:11:00 PM	20
5/11/01 10:27:00 AM	38	5/11/01 11:02:00 AM	17	5/11/01 11:37:00 AM	45	5/11/01 12:12:00 PM	21
5/11/01 10:28:00 AM	23	5/11/01 11:03:00 AM	28	5/11/01 11:38:00 AM	68	5/11/01 12:13:00 PM	20
5/11/01 10:29:00 AM	29	5/11/01 11:04:00 AM	37	5/11/01 11:39:00 AM	27	5/11/01 12:14:00 PM	21
5/11/01 10:30:00 AM	30	5/11/01 11:05:00 AM	32	5/11/01 11:40:00 AM	27	5/11/01 12:15:00 PM	18
5/11/01 10:31:00 AM	37	5/11/01 11:06:00 AM	44	5/11/01 11:41:00 AM	29	5/11/01 12:16:00 PM	21
5/11/01 10:32:00 AM	18	5/11/01 11:07:00 AM	46	5/11/01 11:42:00 AM	22	5/11/01 12:17:00 PM	37
5/11/01 10:33:00 AM	36	5/11/01 11:08:00 AM	42	5/11/01 11:43:00 AM	32	5/11/01 12:18:00 PM	23
5/11/01 10:34:00 AM	40	5/11/01 11:09:00 AM	32	5/11/01 11:44:00 AM	19	5/11/01 12:19:00 PM	72
5/11/01 10:35:00 AM	23	5/11/01 11:10:00 AM	27	5/11/01 11:45:00 AM	22	5/11/01 12:20:00 PM	194
5/11/01 10:36:00 AM	41	5/11/01 11:11:00 AM	34	5/11/01 11:46:00 AM	17	5/11/01 12:21:00 PM	28
5/11/01 10:37:00 AM	51	5/11/01 11:12:00 AM	55	5/11/01 11:47:00 AM	16	5/11/01 12:22:00 PM	23
5/11/01 10:38:00 AM	22	5/11/01 11:13:00 AM	76	5/11/01 11:48:00 AM	24	5/11/01 12:23:00 PM	20
5/11/01 10:39:00 AM	29	5/11/01 11:14:00 AM	19	5/11/01 11:49:00 AM	18	5/11/01 12:24:00 PM	18
5/11/01 10:40:00 AM	48	5/11/01 11:15:00 AM	20	5/11/01 11:50:00 AM	19	5/11/01 12:25:00 PM	20
5/11/01 10:41:00 AM	30	5/11/01 11:16:00 AM	18	5/11/01 11:51:00 AM	20	5/11/01 12:26:00 PM	21

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/11/01 12:27:00 PM	22	5/15/01 7:18:00 AM	22	5/15/01 7:53:00 AM	10	5/15/01 8:28:00 AM	6
5/11/01 12:28:00 PM	25	5/15/01 7:19:00 AM	21	5/15/01 7:54:00 AM	11	5/15/01 8:29:00 AM	7
5/11/01 12:29:00 PM	18	5/15/01 7:20:00 AM	18	5/15/01 7:55:00 AM	15	5/15/01 8:30:00 AM	8
5/11/01 12:30:00 PM	22	5/15/01 7:21:00 AM	17	5/15/01 7:56:00 AM	10	5/15/01 8:31:00 AM	6
5/11/01 12:31:00 PM	18	5/15/01 7:22:00 AM	23	5/15/01 7:57:00 AM	10	5/15/01 8:32:00 AM	8
5/11/01 12:32:00 PM	20	5/15/01 7:23:00 AM	17	5/15/01 7:58:00 AM	14	5/15/01 8:33:00 AM	7
5/11/01 12:33:00 PM	22	5/15/01 7:24:00 AM	15	5/15/01 7:59:00 AM	13	5/15/01 8:34:00 AM	6
5/11/01 12:34:00 PM	27	5/15/01 7:25:00 AM	12	5/15/01 8:00:00 AM	11	5/15/01 8:35:00 AM	7
5/11/01 12:35:00 PM	48	5/15/01 7:26:00 AM	15	5/15/01 8:01:00 AM	10	5/15/01 8:36:00 AM	6
5/11/01 12:36:00 PM	24	5/15/01 7:27:00 AM	13	5/15/01 8:02:00 AM	8	5/15/01 8:37:00 AM	6
5/11/01 12:37:00 PM	18	5/15/01 7:28:00 AM	15	5/15/01 8:03:00 AM	9	5/15/01 8:38:00 AM	9
5/11/01 12:38:00 PM	21	5/15/01 7:29:00 AM	14	5/15/01 8:04:00 AM	9	5/15/01 8:39:00 AM	7
5/11/01 12:39:00 PM	21	5/15/01 7:30:00 AM	13	5/15/01 8:05:00 AM	9	5/15/01 8:40:00 AM	7
5/11/01 12:40:00 PM	20	5/15/01 7:31:00 AM	16	5/15/01 8:06:00 AM	10	5/15/01 8:41:00 AM	7
5/11/01 12:41:00 PM	19	5/15/01 7:32:00 AM	16	5/15/01 8:07:00 AM	12	5/15/01 8:42:00 AM	6
5/11/01 12:42:00 PM	24	5/15/01 7:33:00 AM	11	5/15/01 8:08:00 AM	10	5/15/01 8:43:00 AM	7
5/11/01 12:43:00 PM	19	5/15/01 7:34:00 AM	11	5/15/01 8:09:00 AM	9	5/15/01 8:44:00 AM	8
5/11/01 12:44:00 PM	20	5/15/01 7:35:00 AM	13	5/15/01 8:10:00 AM	10	5/15/01 8:45:00 AM	7
5/11/01 12:45:00 PM	22	5/15/01 7:36:00 AM	11	5/15/01 8:11:00 AM	10	5/15/01 8:46:00 AM	8
5/11/01 12:46:00 PM	28	5/15/01 7:37:00 AM	11	5/15/01 8:12:00 AM	7	5/15/01 8:47:00 AM	6
5/11/01 12:47:00 PM	18	5/15/01 7:38:00 AM	10	5/15/01 8:13:00 AM	9	5/15/01 8:48:00 AM	7
5/11/01 12:48:00 PM	24	5/15/01 7:39:00 AM	14	5/15/01 8:14:00 AM	10	5/15/01 8:49:00 AM	6
5/11/01 12:49:00 PM	20	5/15/01 7:40:00 AM	11	5/15/01 8:15:00 AM	8	5/15/01 8:50:00 AM	6
5/11/01 12:50:00 PM	25	5/15/01 7:41:00 AM	10	5/15/01 8:16:00 AM	8	5/15/01 8:51:00 AM	5
5/15/01 7:07:00 AM	24	5/15/01 7:42:00 AM	14	5/15/01 8:17:00 AM	9	5/15/01 8:52:00 AM	8
5/15/01 7:08:00 AM	14	5/15/01 7:43:00 AM	15	5/15/01 8:18:00 AM	7	5/15/01 8:53:00 AM	7
5/15/01 7:09:00 AM	18	5/15/01 7:44:00 AM	18	5/15/01 8:19:00 AM	7	5/15/01 8:54:00 AM	7
5/15/01 7:10:00 AM	23	5/15/01 7:45:00 AM	12	5/15/01 8:20:00 AM	6	5/15/01 8:55:00 AM	6
5/15/01 7:11:00 AM	19	5/15/01 7:46:00 AM	45	5/15/01 8:21:00 AM	6	5/15/01 8:56:00 AM	6
5/15/01 7:12:00 AM	24	5/15/01 7:47:00 AM	11	5/15/01 8:22:00 AM	6	5/15/01 8:57:00 AM	6
5/15/01 7:13:00 AM	19	5/15/01 7:48:00 AM	14	5/15/01 8:23:00 AM	10	5/15/01 8:58:00 AM	7
5/15/01 7:14:00 AM	19	5/15/01 7:49:00 AM	10	5/15/01 8:24:00 AM	7	5/15/01 8:59:00 AM	8
5/15/01 7:15:00 AM	14	5/15/01 7:50:00 AM	10	5/15/01 8:25:00 AM	7	5/15/01 9:00:00 AM	7
5/15/01 7:16:00 AM	14	5/15/01 7:51:00 AM	11	5/15/01 8:26:00 AM	7	5/15/01 9:01:00 AM	4
5/15/01 7:17:00 AM	17	5/15/01 7:52:00 AM	10	5/15/01 8:27:00 AM	6	5/15/01 9:02:00 AM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/15/01 9:03:00 AM	8	5/15/01 9:38:00 AM	7	5/15/01 10:13:00 AM	8	5/15/01 10:48:00 AM	6
5/15/01 9:04:00 AM	6	5/15/01 9:39:00 AM	4	5/15/01 10:14:00 AM	9	5/15/01 10:49:00 AM	8
5/15/01 9:05:00 AM	7	5/15/01 9:40:00 AM	7	5/15/01 10:15:00 AM	7	5/15/01 10:50:00 AM	16
5/15/01 9:06:00 AM	6	5/15/01 9:41:00 AM	7	5/15/01 10:16:00 AM	8	5/15/01 10:51:00 AM	10
5/15/01 9:07:00 AM	7	5/15/01 9:42:00 AM	6	5/15/01 10:17:00 AM	6	5/15/01 10:52:00 AM	8
5/15/01 9:08:00 AM	6	5/15/01 9:43:00 AM	6	5/15/01 10:18:00 AM	7	5/15/01 10:53:00 AM	12
5/15/01 9:09:00 AM	5	5/15/01 9:44:00 AM	5	5/15/01 10:19:00 AM	6	5/15/01 10:54:00 AM	6
5/15/01 9:10:00 AM	6	5/15/01 9:45:00 AM	8	5/15/01 10:20:00 AM	6	5/15/01 10:55:00 AM	8
5/15/01 9:11:00 AM	5	5/15/01 9:46:00 AM	12	5/15/01 10:21:00 AM	8	5/15/01 10:56:00 AM	9
5/15/01 9:12:00 AM	19	5/15/01 9:47:00 AM	10	5/15/01 10:22:00 AM	9	5/15/01 10:57:00 AM	6
5/15/01 9:13:00 AM	8	5/15/01 9:48:00 AM	13	5/15/01 10:23:00 AM	7	5/15/01 10:58:00 AM	10
5/15/01 9:14:00 AM	9	5/15/01 9:49:00 AM	10	5/15/01 10:24:00 AM	6	5/15/01 10:59:00 AM	8
5/15/01 9:15:00 AM	9	5/15/01 9:50:00 AM	12	5/15/01 10:25:00 AM	8	5/15/01 11:00:00 AM	9
5/15/01 9:16:00 AM	6	5/15/01 9:51:00 AM	9	5/15/01 10:26:00 AM	48	5/15/01 11:01:00 AM	4
5/15/01 9:17:00 AM	8	5/15/01 9:52:00 AM	7	5/15/01 10:27:00 AM	8	5/15/01 11:02:00 AM	6
5/15/01 9:18:00 AM	6	5/15/01 9:53:00 AM	6	5/15/01 10:28:00 AM	8	5/15/01 11:03:00 AM	8
5/15/01 9:19:00 AM	10	5/15/01 9:54:00 AM	9	5/15/01 10:29:00 AM	22	5/15/01 11:04:00 AM	6
5/15/01 9:20:00 AM	10	5/15/01 9:55:00 AM	9	5/15/01 10:30:00 AM	9	5/15/01 11:05:00 AM	5
5/15/01 9:21:00 AM	7	5/15/01 9:56:00 AM	7	5/15/01 10:31:00 AM	9	5/15/01 11:06:00 AM	8
5/15/01 9:22:00 AM	7	5/15/01 9:57:00 AM	10	5/15/01 10:32:00 AM	7	5/15/01 11:07:00 AM	14
5/15/01 9:23:00 AM	8	5/15/01 9:58:00 AM	10	5/15/01 10:33:00 AM	6	5/15/01 11:08:00 AM	9
5/15/01 9:24:00 AM	7	5/15/01 9:59:00 AM	8	5/15/01 10:34:00 AM	5	5/15/01 11:09:00 AM	10
5/15/01 9:25:00 AM	7	5/15/01 10:00:00 AM	7	5/15/01 10:35:00 AM	10	5/15/01 11:10:00 AM	7
5/15/01 9:26:00 AM	21	5/15/01 10:01:00 AM	8	5/15/01 10:36:00 AM	8	5/15/01 11:11:00 AM	9
5/15/01 9:27:00 AM	12	5/15/01 10:02:00 AM	7	5/15/01 10:37:00 AM	6	5/15/01 11:12:00 AM	8
5/15/01 9:28:00 AM	6	5/15/01 10:03:00 AM	6	5/15/01 10:38:00 AM	8	5/15/01 11:13:00 AM	8
5/15/01 9:29:00 AM	17	5/15/01 10:04:00 AM	6	5/15/01 10:39:00 AM	15	5/15/01 11:14:00 AM	7
5/15/01 9:30:00 AM	6	5/15/01 10:05:00 AM	7	5/15/01 10:40:00 AM	22	5/15/01 11:15:00 AM	6
5/15/01 9:31:00 AM	6	5/15/01 10:06:00 AM	10	5/15/01 10:41:00 AM	9	5/15/01 11:16:00 AM	6
5/15/01 9:32:00 AM	8	5/15/01 10:07:00 AM	7	5/15/01 10:42:00 AM	12	5/15/01 11:17:00 AM	7
5/15/01 9:33:00 AM	7	5/15/01 10:08:00 AM	8	5/15/01 10:43:00 AM	7	5/15/01 11:18:00 AM	5
5/15/01 9:34:00 AM	8	5/15/01 10:09:00 AM	7	5/15/01 10:44:00 AM	6	5/15/01 11:19:00 AM	7
5/15/01 9:35:00 AM	8	5/15/01 10:10:00 AM	8	5/15/01 10:45:00 AM	8	5/15/01 11:20:00 AM	6
5/15/01 9:36:00 AM	6	5/15/01 10:11:00 AM	7	5/15/01 10:46:00 AM	10	5/15/01 11:21:00 AM	6
5/15/01 9:37:00 AM	6	5/15/01 10:12:00 AM	8	5/15/01 10:47:00 AM	9	5/15/01 11:22:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/15/01 11:23:00 AM	9	5/15/01 11:58:00 AM	7	5/15/01 12:33:00 PM	9	5/15/01 1:08:00 PM	10
5/15/01 11:24:00 AM	7	5/15/01 11:59:00 AM	10	5/15/01 12:34:00 PM	5	5/15/01 1:09:00 PM	22
5/15/01 11:25:00 AM	9	5/15/01 12:00:00 PM	10	5/15/01 12:35:00 PM	8	5/15/01 1:10:00 PM	15
5/15/01 11:26:00 AM	8	5/15/01 12:01:00 PM	6	5/15/01 12:36:00 PM	10	5/15/01 1:11:00 PM	16
5/15/01 11:27:00 AM	7	5/15/01 12:02:00 PM	9	5/15/01 12:37:00 PM	25	5/15/01 1:12:00 PM	17
5/15/01 11:28:00 AM	8	5/15/01 12:03:00 PM	5	5/15/01 12:38:00 PM	10	5/15/01 1:13:00 PM	14
5/15/01 11:29:00 AM	8	5/15/01 12:04:00 PM	6	5/15/01 12:39:00 PM	7	5/15/01 1:14:00 PM	8
5/15/01 11:30:00 AM	14	5/15/01 12:05:00 PM	6	5/15/01 12:40:00 PM	9	5/15/01 1:15:00 PM	11
5/15/01 11:31:00 AM	6	5/15/01 12:06:00 PM	8	5/15/01 12:41:00 PM	8	5/15/01 1:16:00 PM	12
5/15/01 11:32:00 AM	9	5/15/01 12:07:00 PM	7	5/15/01 12:42:00 PM	7	5/15/01 1:17:00 PM	11
5/15/01 11:33:00 AM	7	5/15/01 12:08:00 PM	6	5/15/01 12:43:00 PM	5	5/15/01 1:18:00 PM	9
5/15/01 11:34:00 AM	6	5/15/01 12:09:00 PM	5	5/15/01 12:44:00 PM	14	5/15/01 1:19:00 PM	9
5/15/01 11:35:00 AM	8	5/15/01 12:10:00 PM	6	5/15/01 12:45:00 PM	10	5/15/01 1:20:00 PM	7
5/15/01 11:36:00 AM	8	5/15/01 12:11:00 PM	7	5/15/01 12:46:00 PM	7	5/15/01 1:21:00 PM	14
5/15/01 11:37:00 AM	13	5/15/01 12:12:00 PM	6	5/15/01 12:47:00 PM	8	5/15/01 1:22:00 PM	14
5/15/01 11:38:00 AM	7	5/15/01 12:13:00 PM	7	5/15/01 12:48:00 PM	6	5/15/01 1:23:00 PM	8
5/15/01 11:39:00 AM	7	5/15/01 12:14:00 PM	7	5/15/01 12:49:00 PM	8	5/15/01 1:24:00 PM	7
5/15/01 11:40:00 AM	7	5/15/01 12:15:00 PM	8	5/15/01 12:50:00 PM	9	5/15/01 1:25:00 PM	7
5/15/01 11:41:00 AM	9	5/15/01 12:16:00 PM	7	5/15/01 12:51:00 PM	14	5/15/01 1:26:00 PM	6
5/15/01 11:42:00 AM	8	5/15/01 12:17:00 PM	7	5/15/01 12:52:00 PM	6	5/15/01 1:27:00 PM	9
5/15/01 11:43:00 AM	9	5/15/01 12:18:00 PM	7	5/15/01 12:53:00 PM	7	5/15/01 1:28:00 PM	10
5/15/01 11:44:00 AM	9	5/15/01 12:19:00 PM	6	5/15/01 12:54:00 PM	10	5/15/01 1:29:00 PM	8
5/15/01 11:45:00 AM	7	5/15/01 12:20:00 PM	6	5/15/01 12:55:00 PM	6	5/15/01 1:30:00 PM	6
5/15/01 11:46:00 AM	6	5/15/01 12:21:00 PM	6	5/15/01 12:56:00 PM	7	5/15/01 1:31:00 PM	8
5/15/01 11:47:00 AM	6	5/15/01 12:22:00 PM	7	5/15/01 12:57:00 PM	21	5/15/01 1:32:00 PM	6
5/15/01 11:48:00 AM	7	5/15/01 12:23:00 PM	7	5/15/01 12:58:00 PM	14	5/15/01 1:33:00 PM	9
5/15/01 11:49:00 AM	6	5/15/01 12:24:00 PM	7	5/15/01 12:59:00 PM	9	5/15/01 1:34:00 PM	7
5/15/01 11:50:00 AM	6	5/15/01 12:25:00 PM	6	5/15/01 1:00:00 PM	8	5/15/01 1:35:00 PM	9
5/15/01 11:51:00 AM	6	5/15/01 12:26:00 PM	6	5/15/01 1:01:00 PM	13	5/15/01 1:36:00 PM	6
5/15/01 11:52:00 AM	7	5/15/01 12:27:00 PM	6	5/15/01 1:02:00 PM	7	5/15/01 1:37:00 PM	8
5/15/01 11:53:00 AM	8	5/15/01 12:28:00 PM	8	5/15/01 1:03:00 PM	8	5/15/01 1:38:00 PM	7
5/15/01 11:54:00 AM	8	5/15/01 12:29:00 PM	24	5/15/01 1:04:00 PM	10	5/15/01 1:39:00 PM	9
5/15/01 11:55:00 AM	6	5/15/01 12:30:00 PM	7	5/15/01 1:05:00 PM	10	5/15/01 1:40:00 PM	11
5/15/01 11:56:00 AM	8	5/15/01 12:31:00 PM	10	5/15/01 1:06:00 PM	10	5/15/01 1:41:00 PM	9
5/15/01 11:57:00 AM	6	5/15/01 12:32:00 PM	8	5/15/01 1:07:00 PM	15	5/15/01 1:42:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/15/01 1:43:00 PM	8	5/15/01 2:18:00 PM	9	5/17/01 6:36:00 AM	42	5/17/01 7:11:00 AM	31
5/15/01 1:44:00 PM	9	5/15/01 2:19:00 PM	10	5/17/01 6:37:00 AM	62	5/17/01 7:12:00 AM	51
5/15/01 1:45:00 PM	14	5/15/01 2:20:00 PM	8	5/17/01 6:38:00 AM	45	5/17/01 7:13:00 AM	29
5/15/01 1:46:00 PM	8	5/15/01 2:21:00 PM	12	5/17/01 6:39:00 AM	47	5/17/01 7:14:00 AM	30
5/15/01 1:47:00 PM	6	5/15/01 2:22:00 PM	11	5/17/01 6:40:00 AM	48	5/17/01 7:15:00 AM	40
5/15/01 1:48:00 PM	8	5/15/01 2:23:00 PM	11	5/17/01 6:41:00 AM	35	5/17/01 7:16:00 AM	28
5/15/01 1:49:00 PM	11	5/15/01 2:24:00 PM	13	5/17/01 6:42:00 AM	39	5/17/01 7:17:00 AM	41
5/15/01 1:50:00 PM	9	5/15/01 2:25:00 PM	14	5/17/01 6:43:00 AM	44	5/17/01 7:18:00 AM	31
5/15/01 1:51:00 PM	8	5/15/01 2:26:00 PM	14	5/17/01 6:44:00 AM	43	5/17/01 7:19:00 AM	32
5/15/01 1:52:00 PM	12	5/15/01 2:27:00 PM	7	5/17/01 6:45:00 AM	36	5/17/01 7:20:00 AM	32
5/15/01 1:53:00 PM	6	5/15/01 2:28:00 PM	13	5/17/01 6:46:00 AM	46	5/17/01 7:21:00 AM	33
5/15/01 1:54:00 PM	20	5/15/01 2:29:00 PM	8	5/17/01 6:47:00 AM	40	5/17/01 7:22:00 AM	42
5/15/01 1:55:00 PM	9	5/15/01 2:30:00 PM	11	5/17/01 6:48:00 AM	39	5/17/01 7:23:00 AM	34
5/15/01 1:56:00 PM	10	5/15/01 2:31:00 PM	11	5/17/01 6:49:00 AM	40	5/17/01 7:24:00 AM	31
5/15/01 1:57:00 PM	9	5/15/01 2:32:00 PM	9	5/17/01 6:50:00 AM	37	5/17/01 7:25:00 AM	42
5/15/01 1:58:00 PM	8	5/15/01 2:33:00 PM	12	5/17/01 6:51:00 AM	39	5/17/01 7:26:00 AM	34
5/15/01 1:59:00 PM	9	5/15/01 2:34:00 PM	7	5/17/01 6:52:00 AM	39	5/17/01 7:27:00 AM	43
5/15/01 2:00:00 PM	13	5/15/01 2:35:00 PM	8	5/17/01 6:53:00 AM	42	5/17/01 7:28:00 AM	31
5/15/01 2:01:00 PM	8	5/15/01 2:36:00 PM	10	5/17/01 6:54:00 AM	32	5/17/01 7:29:00 AM	49
5/15/01 2:02:00 PM	10	5/15/01 2:37:00 PM	7	5/17/01 6:55:00 AM	33	5/17/01 7:30:00 AM	31
5/15/01 2:03:00 PM	9	5/15/01 2:38:00 PM	10	5/17/01 6:56:00 AM	33	5/17/01 7:31:00 AM	36
5/15/01 2:04:00 PM	12	5/15/01 2:39:00 PM	8	5/17/01 6:57:00 AM	31	5/17/01 7:32:00 AM	37
5/15/01 2:05:00 PM	14	5/15/01 2:40:00 PM	9	5/17/01 6:58:00 AM	34	5/17/01 7:33:00 AM	35
5/15/01 2:06:00 PM	7	5/15/01 2:41:00 PM	10	5/17/01 6:59:00 AM	33	5/17/01 7:34:00 AM	27
5/15/01 2:07:00 PM	8	5/15/01 2:42:00 PM	12	5/17/01 7:00:00 AM	35	5/17/01 7:35:00 AM	55
5/15/01 2:08:00 PM	11	5/15/01 2:43:00 PM	8	5/17/01 7:01:00 AM	51	5/17/01 7:36:00 AM	31
5/15/01 2:09:00 PM	8	5/15/01 2:44:00 PM	7	5/17/01 7:02:00 AM	32	5/17/01 7:37:00 AM	33
5/15/01 2:10:00 PM	8	5/15/01 2:45:00 PM	9	5/17/01 7:03:00 AM	32	5/17/01 7:38:00 AM	32
5/15/01 2:11:00 PM	6	5/15/01 2:46:00 PM	6	5/17/01 7:04:00 AM	88	5/17/01 7:39:00 AM	26
5/15/01 2:12:00 PM	9	5/15/01 2:47:00 PM	284	5/17/01 7:05:00 AM	33	5/17/01 7:40:00 AM	46
5/15/01 2:13:00 PM	9	5/15/01 2:48:00 PM	81	5/17/01 7:06:00 AM	47	5/17/01 7:41:00 AM	30
5/15/01 2:14:00 PM	9	5/15/01 2:49:00 PM	12	5/17/01 7:07:00 AM	44	5/17/01 7:42:00 AM	40
5/15/01 2:15:00 PM	8	5/15/01 2:50:00 PM	10	5/17/01 7:08:00 AM	29	5/17/01 7:43:00 AM	47
5/15/01 2:16:00 PM	16	5/17/01 6:34:00 AM	42	5/17/01 7:09:00 AM	38	5/17/01 7:44:00 AM	36
5/15/01 2:17:00 PM	14	5/17/01 6:35:00 AM	80	5/17/01 7:10:00 AM	34	5/17/01 7:45:00 AM	26

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/17/01 7:46:00 AM	26	5/17/01 8:21:00 AM	31	5/17/01 8:56:00 AM	26	5/17/01 9:31:00 AM	29
5/17/01 7:47:00 AM	33	5/17/01 8:22:00 AM	27	5/17/01 8:57:00 AM	29	5/17/01 9:32:00 AM	27
5/17/01 7:48:00 AM	34	5/17/01 8:23:00 AM	27	5/17/01 8:58:00 AM	29	5/17/01 9:33:00 AM	23
5/17/01 7:49:00 AM	38	5/17/01 8:24:00 AM	26	5/17/01 8:59:00 AM	34	5/17/01 9:34:00 AM	39
5/17/01 7:50:00 AM	31	5/17/01 8:25:00 AM	26	5/17/01 9:00:00 AM	25	5/17/01 9:35:00 AM	25
5/17/01 7:51:00 AM	48	5/17/01 8:26:00 AM	28	5/17/01 9:01:00 AM	39	5/17/01 9:36:00 AM	40
5/17/01 7:52:00 AM	48	5/17/01 8:27:00 AM	27	5/17/01 9:02:00 AM	38	5/17/01 9:37:00 AM	33
5/17/01 7:53:00 AM	33	5/17/01 8:28:00 AM	27	5/17/01 9:03:00 AM	27	5/17/01 9:38:00 AM	38
5/17/01 7:54:00 AM	46	5/17/01 8:29:00 AM	25	5/17/01 9:04:00 AM	32	5/17/01 9:39:00 AM	33
5/17/01 7:55:00 AM	32	5/17/01 8:30:00 AM	25	5/17/01 9:05:00 AM	24	5/17/01 9:40:00 AM	52
5/17/01 7:56:00 AM	32	5/17/01 8:31:00 AM	27	5/17/01 9:06:00 AM	22	5/17/01 9:41:00 AM	26
5/17/01 7:57:00 AM	29	5/17/01 8:32:00 AM	25	5/17/01 9:07:00 AM	26	5/17/01 9:42:00 AM	87
5/17/01 7:58:00 AM	50	5/17/01 8:33:00 AM	26	5/17/01 9:08:00 AM	29	5/17/01 9:43:00 AM	27
5/17/01 7:59:00 AM	33	5/17/01 8:34:00 AM	27	5/17/01 9:09:00 AM	28	5/17/01 9:44:00 AM	28
5/17/01 8:00:00 AM	43	5/17/01 8:35:00 AM	26	5/17/01 9:10:00 AM	24	5/17/01 9:45:00 AM	25
5/17/01 8:01:00 AM	47	5/17/01 8:36:00 AM	27	5/17/01 9:11:00 AM	29	5/17/01 9:46:00 AM	25
5/17/01 8:02:00 AM	29	5/17/01 8:37:00 AM	28	5/17/01 9:12:00 AM	25	5/17/01 9:47:00 AM	31
5/17/01 8:03:00 AM	32	5/17/01 8:38:00 AM	32	5/17/01 9:13:00 AM	29	5/17/01 9:48:00 AM	27
5/17/01 8:04:00 AM	27	5/17/01 8:39:00 AM	27	5/17/01 9:14:00 AM	26	5/17/01 9:49:00 AM	33
5/17/01 8:05:00 AM	27	5/17/01 8:40:00 AM	27	5/17/01 9:15:00 AM	26	5/17/01 9:50:00 AM	51
5/17/01 8:06:00 AM	27	5/17/01 8:41:00 AM	26	5/17/01 9:16:00 AM	25	5/17/01 9:51:00 AM	34
5/17/01 8:07:00 AM	25	5/17/01 8:42:00 AM	26	5/17/01 9:17:00 AM	26	5/17/01 9:52:00 AM	79
5/17/01 8:08:00 AM	26	5/17/01 8:43:00 AM	30	5/17/01 9:18:00 AM	23	5/17/01 9:53:00 AM	33
5/17/01 8:09:00 AM	36	5/17/01 8:44:00 AM	26	5/17/01 9:19:00 AM	24	5/17/01 9:54:00 AM	30
5/17/01 8:10:00 AM	30	5/17/01 8:45:00 AM	26	5/17/01 9:20:00 AM	24	5/17/01 9:55:00 AM	39
5/17/01 8:11:00 AM	28	5/17/01 8:46:00 AM	27	5/17/01 9:21:00 AM	26	5/17/01 9:56:00 AM	30
5/17/01 8:12:00 AM	29	5/17/01 8:47:00 AM	28	5/17/01 9:22:00 AM	24	5/17/01 9:57:00 AM	70
5/17/01 8:13:00 AM	28	5/17/01 8:48:00 AM	27	5/17/01 9:23:00 AM	32	5/17/01 9:58:00 AM	49
5/17/01 8:14:00 AM	24	5/17/01 8:49:00 AM	24	5/17/01 9:24:00 AM	40	5/17/01 9:59:00 AM	25
5/17/01 8:15:00 AM	40	5/17/01 8:50:00 AM	24	5/17/01 9:25:00 AM	24	5/17/01 10:00:00 AM	25
5/17/01 8:16:00 AM	29	5/17/01 8:51:00 AM	27	5/17/01 9:26:00 AM	38	5/17/01 10:01:00 AM	58
5/17/01 8:17:00 AM	30	5/17/01 8:52:00 AM	26	5/17/01 9:27:00 AM	29	5/17/01 10:02:00 AM	28
5/17/01 8:18:00 AM	30	5/17/01 8:53:00 AM	27	5/17/01 9:28:00 AM	30	5/17/01 10:03:00 AM	31
5/17/01 8:19:00 AM	37	5/17/01 8:54:00 AM	26	5/17/01 9:29:00 AM	24	5/17/01 10:04:00 AM	34
5/17/01 8:20:00 AM	42	5/17/01 8:55:00 AM	32	5/17/01 9:30:00 AM	34	5/17/01 10:05:00 AM	33

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/17/01 10:06:00 AM	32	5/17/01 10:41:00 AM	27	5/17/01 11:16:00 AM	25	5/17/01 11:51:00 AM	27
5/17/01 10:07:00 AM	40	5/17/01 10:42:00 AM	23	5/17/01 11:17:00 AM	25	5/17/01 11:52:00 AM	28
5/17/01 10:08:00 AM	74	5/17/01 10:43:00 AM	31	5/17/01 11:18:00 AM	22	5/17/01 11:53:00 AM	37
5/17/01 10:09:00 AM	39	5/17/01 10:44:00 AM	28	5/17/01 11:19:00 AM	23	5/17/01 11:54:00 AM	30
5/17/01 10:10:00 AM	27	5/17/01 10:45:00 AM	30	5/17/01 11:20:00 AM	24	5/17/01 11:55:00 AM	32
5/17/01 10:11:00 AM	24	5/17/01 10:46:00 AM	35	5/17/01 11:21:00 AM	23	5/17/01 11:56:00 AM	28
5/17/01 10:12:00 AM	101	5/17/01 10:47:00 AM	25	5/17/01 11:22:00 AM	22	5/17/01 11:57:00 AM	34
5/17/01 10:13:00 AM	46	5/17/01 10:48:00 AM	34	5/17/01 11:23:00 AM	25	5/17/01 11:58:00 AM	24
5/17/01 10:14:00 AM	49	5/17/01 10:49:00 AM	30	5/17/01 11:24:00 AM	25	5/17/01 11:59:00 AM	28
5/17/01 10:15:00 AM	44	5/17/01 10:50:00 AM	26	5/17/01 11:25:00 AM	24	5/17/01 12:00:00 PM	31
5/17/01 10:16:00 AM	50	5/17/01 10:51:00 AM	27	5/17/01 11:26:00 AM	24	5/17/01 12:01:00 PM	29
5/17/01 10:17:00 AM	27	5/17/01 10:52:00 AM	33	5/17/01 11:27:00 AM	24	5/17/01 12:02:00 PM	26
5/17/01 10:18:00 AM	28	5/17/01 10:53:00 AM	26	5/17/01 11:28:00 AM	24	5/17/01 12:03:00 PM	22
5/17/01 10:19:00 AM	33	5/17/01 10:54:00 AM	29	5/17/01 11:29:00 AM	26	5/17/01 12:04:00 PM	24
5/17/01 10:20:00 AM	27	5/17/01 10:55:00 AM	30	5/17/01 11:30:00 AM	24	5/17/01 12:05:00 PM	26
5/17/01 10:21:00 AM	31	5/17/01 10:56:00 AM	28	5/17/01 11:31:00 AM	24	5/17/01 12:06:00 PM	26
5/17/01 10:22:00 AM	32	5/17/01 10:57:00 AM	24	5/17/01 11:32:00 AM	24	5/17/01 12:07:00 PM	30
5/17/01 10:23:00 AM	60	5/17/01 10:58:00 AM	26	5/17/01 11:33:00 AM	29	5/17/01 12:08:00 PM	26
5/17/01 10:24:00 AM	38	5/17/01 10:59:00 AM	34	5/17/01 11:34:00 AM	54	5/17/01 12:09:00 PM	28
5/17/01 10:25:00 AM	42	5/17/01 11:00:00 AM	23	5/17/01 11:35:00 AM	44	5/17/01 12:10:00 PM	27
5/17/01 10:26:00 AM	52	5/17/01 11:01:00 AM	24	5/17/01 11:36:00 AM	40	5/17/01 12:11:00 PM	26
5/17/01 10:27:00 AM	39	5/17/01 11:02:00 AM	32	5/17/01 11:37:00 AM	25	5/17/01 12:12:00 PM	25
5/17/01 10:28:00 AM	36	5/17/01 11:03:00 AM	27	5/17/01 11:38:00 AM	30	5/17/01 12:13:00 PM	27
5/17/01 10:29:00 AM	24	5/17/01 11:04:00 AM	22	5/17/01 11:39:00 AM	28	5/17/01 12:14:00 PM	27
5/17/01 10:30:00 AM	24	5/17/01 11:05:00 AM	22	5/17/01 11:40:00 AM	25	5/17/01 12:15:00 PM	29
5/17/01 10:31:00 AM	63	5/17/01 11:06:00 AM	31	5/17/01 11:41:00 AM	26	5/17/01 12:16:00 PM	32
5/17/01 10:32:00 AM	43	5/17/01 11:07:00 AM	35	5/17/01 11:42:00 AM	32	5/17/01 12:17:00 PM	28
5/17/01 10:33:00 AM	27	5/17/01 11:08:00 AM	33	5/17/01 11:43:00 AM	24	5/17/01 12:18:00 PM	27
5/17/01 10:34:00 AM	25	5/17/01 11:09:00 AM	23	5/17/01 11:44:00 AM	24	5/17/01 12:19:00 PM	30
5/17/01 10:35:00 AM	24	5/17/01 11:10:00 AM	25	5/17/01 11:45:00 AM	28	5/17/01 12:20:00 PM	29
5/17/01 10:36:00 AM	28	5/17/01 11:11:00 AM	28	5/17/01 11:46:00 AM	27	5/17/01 12:21:00 PM	34
5/17/01 10:37:00 AM	24	5/17/01 11:12:00 AM	23	5/17/01 11:47:00 AM	24	5/17/01 12:22:00 PM	25
5/17/01 10:38:00 AM	37	5/17/01 11:13:00 AM	24	5/17/01 11:48:00 AM	27	5/17/01 12:23:00 PM	26
5/17/01 10:39:00 AM	26	5/17/01 11:14:00 AM	24	5/17/01 11:49:00 AM	24	5/17/01 12:24:00 PM	24
5/17/01 10:40:00 AM	27	5/17/01 11:15:00 AM	22	5/17/01 11:50:00 AM	26	5/17/01 12:25:00 PM	26

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/17/01 12:26:00 PM	28	5/17/01 1:01:00 PM	26	5/17/01 1:36:00 PM	28	5/17/01 2:11:00 PM	34
5/17/01 12:27:00 PM	26	5/17/01 1:02:00 PM	23	5/17/01 1:37:00 PM	38	5/17/01 2:12:00 PM	32
5/17/01 12:28:00 PM	29	5/17/01 1:03:00 PM	26	5/17/01 1:38:00 PM	43	5/17/01 2:13:00 PM	24
5/17/01 12:29:00 PM	23	5/17/01 1:04:00 PM	43	5/17/01 1:39:00 PM	38	5/17/01 2:14:00 PM	27
5/17/01 12:30:00 PM	24	5/17/01 1:05:00 PM	68	5/17/01 1:40:00 PM	51	5/17/01 2:15:00 PM	26
5/17/01 12:31:00 PM	31	5/17/01 1:06:00 PM	23	5/17/01 1:41:00 PM	28	5/17/01 2:16:00 PM	26
5/17/01 12:32:00 PM	28	5/17/01 1:07:00 PM	28	5/17/01 1:42:00 PM	23	5/17/01 2:17:00 PM	21
5/17/01 12:33:00 PM	33	5/17/01 1:08:00 PM	35	5/17/01 1:43:00 PM	27	5/17/01 2:18:00 PM	24
5/17/01 12:34:00 PM	23	5/17/01 1:09:00 PM	29	5/17/01 1:44:00 PM	54	5/17/01 2:19:00 PM	27
5/17/01 12:35:00 PM	48	5/17/01 1:10:00 PM	26	5/17/01 1:45:00 PM	23	5/17/01 2:20:00 PM	27
5/17/01 12:36:00 PM	32	5/17/01 1:11:00 PM	31	5/17/01 1:46:00 PM	23	5/17/01 2:21:00 PM	26
5/17/01 12:37:00 PM	29	5/17/01 1:12:00 PM	25	5/17/01 1:47:00 PM	30	5/17/01 2:22:00 PM	28
5/17/01 12:38:00 PM	25	5/17/01 1:13:00 PM	24	5/17/01 1:48:00 PM	29	5/17/01 2:23:00 PM	61
5/17/01 12:39:00 PM	22	5/17/01 1:14:00 PM	25	5/17/01 1:49:00 PM	32	5/17/01 2:24:00 PM	29
5/17/01 12:40:00 PM	27	5/17/01 1:15:00 PM	26	5/17/01 1:50:00 PM	26	5/17/01 2:25:00 PM	66
5/17/01 12:41:00 PM	29	5/17/01 1:16:00 PM	26	5/17/01 1:51:00 PM	34	5/17/01 2:26:00 PM	40
5/17/01 12:42:00 PM	31	5/17/01 1:17:00 PM	24	5/17/01 1:52:00 PM	26	5/17/01 2:27:00 PM	122
5/17/01 12:43:00 PM	59	5/17/01 1:18:00 PM	25	5/17/01 1:53:00 PM	28	5/17/01 2:28:00 PM	34
5/17/01 12:44:00 PM	34	5/17/01 1:19:00 PM	126	5/17/01 1:54:00 PM	23	5/17/01 2:29:00 PM	83
5/17/01 12:45:00 PM	60	5/17/01 1:20:00 PM	57	5/17/01 1:55:00 PM	30	5/17/01 2:30:00 PM	45
5/17/01 12:46:00 PM	45	5/17/01 1:21:00 PM	23	5/17/01 1:56:00 PM	24	5/17/01 2:31:00 PM	25
5/17/01 12:47:00 PM	30	5/17/01 1:22:00 PM	25	5/17/01 1:57:00 PM	29	5/17/01 2:32:00 PM	22
5/17/01 12:48:00 PM	30	5/17/01 1:23:00 PM	29	5/17/01 1:58:00 PM	27	5/17/01 2:33:00 PM	33
5/17/01 12:49:00 PM	41	5/17/01 1:24:00 PM	37	5/17/01 1:59:00 PM	22	5/17/01 2:34:00 PM	88
5/17/01 12:50:00 PM	32	5/17/01 1:25:00 PM	24	5/17/01 2:00:00 PM	52	5/17/01 2:35:00 PM	28
5/17/01 12:51:00 PM	38	5/17/01 1:26:00 PM	24	5/17/01 2:01:00 PM	27	5/17/01 2:36:00 PM	27
5/17/01 12:52:00 PM	29	5/17/01 1:27:00 PM	22	5/17/01 2:02:00 PM	29	5/17/01 2:37:00 PM	27
5/17/01 12:53:00 PM	30	5/17/01 1:28:00 PM	22	5/17/01 2:03:00 PM	23	5/17/01 2:38:00 PM	25
5/17/01 12:54:00 PM	25	5/17/01 1:29:00 PM	30	5/17/01 2:04:00 PM	36	5/17/01 2:39:00 PM	27
5/17/01 12:55:00 PM	28	5/17/01 1:30:00 PM	23	5/17/01 2:05:00 PM	62	5/17/01 2:40:00 PM	27
5/17/01 12:56:00 PM	32	5/17/01 1:31:00 PM	23	5/17/01 2:06:00 PM	86	5/17/01 2:41:00 PM	30
5/17/01 12:57:00 PM	26	5/17/01 1:32:00 PM	25	5/17/01 2:07:00 PM	33	5/17/01 2:42:00 PM	29
5/17/01 12:58:00 PM	25	5/17/01 1:33:00 PM	49	5/17/01 2:08:00 PM	26	5/18/01 11:39:00 AM	392
5/17/01 12:59:00 PM	22	5/17/01 1:34:00 PM	27	5/17/01 2:09:00 PM	33	5/18/01 11:40:00 AM	38
5/17/01 1:00:00 PM	33	5/17/01 1:35:00 PM	26	5/17/01 2:10:00 PM	32	5/18/01 11:41:00 AM	42

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/18/01 11:42:00 AM	50	5/18/01 12:17:00 PM	20	5/18/01 12:52:00 PM	17	5/18/01 1:27:00 PM	16
5/18/01 11:43:00 AM	47	5/18/01 12:18:00 PM	60	5/18/01 12:53:00 PM	14	5/18/01 1:28:00 PM	16
5/18/01 11:44:00 AM	55	5/18/01 12:19:00 PM	152	5/18/01 12:54:00 PM	20	5/18/01 1:29:00 PM	17
5/18/01 11:45:00 AM	43	5/18/01 12:20:00 PM	54	5/18/01 12:55:00 PM	21	5/18/01 1:30:00 PM	22
5/18/01 11:46:00 AM	42	5/18/01 12:21:00 PM	17	5/18/01 12:56:00 PM	17	5/18/01 1:31:00 PM	44
5/18/01 11:47:00 AM	46	5/18/01 12:22:00 PM	16	5/18/01 12:57:00 PM	20	5/18/01 1:32:00 PM	35
5/18/01 11:48:00 AM	46	5/18/01 12:23:00 PM	19	5/18/01 12:58:00 PM	15	5/18/01 1:33:00 PM	27
5/18/01 11:49:00 AM	35	5/18/01 12:24:00 PM	14	5/18/01 12:59:00 PM	13	5/18/01 1:34:00 PM	47
5/18/01 11:50:00 AM	30	5/18/01 12:25:00 PM	19	5/18/01 1:00:00 PM	17	5/18/01 1:35:00 PM	29
5/18/01 11:51:00 AM	17	5/18/01 12:26:00 PM	27	5/18/01 1:01:00 PM	15	5/18/01 1:36:00 PM	58
5/18/01 11:52:00 AM	18	5/18/01 12:27:00 PM	19	5/18/01 1:02:00 PM	16	5/18/01 1:37:00 PM	194
5/18/01 11:53:00 AM	20	5/18/01 12:28:00 PM	32	5/18/01 1:03:00 PM	16	5/18/01 1:38:00 PM	20
5/18/01 11:54:00 AM	18	5/18/01 12:29:00 PM	21	5/18/01 1:04:00 PM	14	5/18/01 1:39:00 PM	17
5/18/01 11:55:00 AM	16	5/18/01 12:30:00 PM	34	5/18/01 1:05:00 PM	18	5/18/01 1:40:00 PM	50
5/18/01 11:56:00 AM	22	5/18/01 12:31:00 PM	21	5/18/01 1:06:00 PM	16	5/18/01 1:41:00 PM	70
5/18/01 11:57:00 AM	16	5/18/01 12:32:00 PM	17	5/18/01 1:07:00 PM	15	5/18/01 1:42:00 PM	74
5/18/01 11:58:00 AM	118	5/18/01 12:33:00 PM	15	5/18/01 1:08:00 PM	13	5/18/01 1:43:00 PM	74
5/18/01 11:59:00 AM	22	5/18/01 12:34:00 PM	13	5/18/01 1:09:00 PM	15	5/18/01 1:44:00 PM	81
5/18/01 12:00:00 PM	21	5/18/01 12:35:00 PM	14	5/18/01 1:10:00 PM	15	5/18/01 1:45:00 PM	58
5/18/01 12:01:00 PM	18	5/18/01 12:36:00 PM	16	5/18/01 1:11:00 PM	19	5/18/01 1:46:00 PM	48
5/18/01 12:02:00 PM	22	5/18/01 12:37:00 PM	16	5/18/01 1:12:00 PM	15	5/18/01 1:47:00 PM	47
5/18/01 12:03:00 PM	15	5/18/01 12:38:00 PM	19	5/18/01 1:13:00 PM	14	5/18/01 1:48:00 PM	50
5/18/01 12:04:00 PM	12	5/18/01 12:39:00 PM	21	5/18/01 1:14:00 PM	62	5/18/01 1:49:00 PM	49
5/18/01 12:05:00 PM	26	5/18/01 12:40:00 PM	25	5/18/01 1:15:00 PM	38	5/18/01 1:50:00 PM	51
5/18/01 12:06:00 PM	14	5/18/01 12:41:00 PM	20	5/18/01 1:16:00 PM	26	5/18/01 1:51:00 PM	40
5/18/01 12:07:00 PM	47	5/18/01 12:42:00 PM	16	5/18/01 1:17:00 PM	24	5/18/01 1:52:00 PM	46
5/18/01 12:08:00 PM	64	5/18/01 12:43:00 PM	18	5/18/01 1:18:00 PM	20	5/18/01 1:53:00 PM	40
5/18/01 12:09:00 PM	18	5/18/01 12:44:00 PM	15	5/18/01 1:19:00 PM	19	5/18/01 1:54:00 PM	56
5/18/01 12:10:00 PM	36	5/18/01 12:45:00 PM	18	5/18/01 1:20:00 PM	20	5/18/01 1:55:00 PM	50
5/18/01 12:11:00 PM	19	5/18/01 12:46:00 PM	18	5/18/01 1:21:00 PM	16	5/18/01 1:56:00 PM	46
5/18/01 12:12:00 PM	15	5/18/01 12:47:00 PM	15	5/18/01 1:22:00 PM	25	5/18/01 1:57:00 PM	51
5/18/01 12:13:00 PM	25	5/18/01 12:48:00 PM	16	5/18/01 1:23:00 PM	17	5/18/01 1:58:00 PM	46
5/18/01 12:14:00 PM	47	5/18/01 12:49:00 PM	17	5/18/01 1:24:00 PM	18	5/18/01 1:59:00 PM	49
5/18/01 12:15:00 PM	34	5/18/01 12:50:00 PM	17	5/18/01 1:25:00 PM	19	5/18/01 2:00:00 PM	65
5/18/01 12:16:00 PM	24	5/18/01 12:51:00 PM	18	5/18/01 1:26:00 PM	16	5/18/01 2:01:00 PM	64

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/18/01 2:02:00 PM	66	5/21/01 9:59:00 AM	12	5/21/01 10:34:00 AM	21	5/21/01 11:09:00 AM	21
5/18/01 2:03:00 PM	49	5/21/01 10:00:00 AM	10	5/21/01 10:35:00 AM	11	5/21/01 11:10:00 AM	12
5/21/01 9:26:00 AM	20	5/21/01 10:01:00 AM	6	5/21/01 10:36:00 AM	22	5/21/01 11:11:00 AM	11
5/21/01 9:27:00 AM	15	5/21/01 10:02:00 AM	8	5/21/01 10:37:00 AM	10	5/21/01 11:12:00 AM	41
5/21/01 9:28:00 AM	7	5/21/01 10:03:00 AM	10	5/21/01 10:38:00 AM	8	5/21/01 11:13:00 AM	24
5/21/01 9:29:00 AM	14	5/21/01 10:04:00 AM	9	5/21/01 10:39:00 AM	8	5/21/01 11:14:00 AM	115
5/21/01 9:30:00 AM	13	5/21/01 10:05:00 AM	14	5/21/01 10:40:00 AM	9	5/21/01 11:15:00 AM	74
5/21/01 9:31:00 AM	6	5/21/01 10:06:00 AM	82	5/21/01 10:41:00 AM	11	5/21/01 11:16:00 AM	85
5/21/01 9:32:00 AM	8	5/21/01 10:07:00 AM	22	5/21/01 10:42:00 AM	10	5/21/01 11:17:00 AM	11
5/21/01 9:33:00 AM	10	5/21/01 10:08:00 AM	13	5/21/01 10:43:00 AM	11	5/21/01 11:18:00 AM	117
5/21/01 9:34:00 AM	101	5/21/01 10:09:00 AM	8	5/21/01 10:44:00 AM	38	5/21/01 11:19:00 AM	9
5/21/01 9:35:00 AM	101	5/21/01 10:10:00 AM	7	5/21/01 10:45:00 AM	11	5/21/01 11:20:00 AM	13
5/21/01 9:36:00 AM	29	5/21/01 10:11:00 AM	10	5/21/01 10:46:00 AM	10	5/21/01 11:21:00 AM	14
5/21/01 9:37:00 AM	11	5/21/01 10:12:00 AM	9	5/21/01 10:47:00 AM	14	5/21/01 11:22:00 AM	48
5/21/01 9:38:00 AM	7	5/21/01 10:13:00 AM	9	5/21/01 10:48:00 AM	16	5/21/01 11:23:00 AM	12
5/21/01 9:39:00 AM	8	5/21/01 10:14:00 AM	8	5/21/01 10:49:00 AM	13	5/21/01 11:24:00 AM	13
5/21/01 9:40:00 AM	8	5/21/01 10:15:00 AM	9	5/21/01 10:50:00 AM	102	5/21/01 11:25:00 AM	47
5/21/01 9:41:00 AM	7	5/21/01 10:16:00 AM	7	5/21/01 10:51:00 AM	9	5/21/01 11:26:00 AM	10
5/21/01 9:42:00 AM	11	5/21/01 10:17:00 AM	7	5/21/01 10:52:00 AM	12	5/21/01 11:27:00 AM	13
5/21/01 9:43:00 AM	11	5/21/01 10:18:00 AM	9	5/21/01 10:53:00 AM	13	5/21/01 11:28:00 AM	10
5/21/01 9:44:00 AM	15	5/21/01 10:19:00 AM	15	5/21/01 10:54:00 AM	15	5/21/01 11:29:00 AM	12
5/21/01 9:45:00 AM	11	5/21/01 10:20:00 AM	16	5/21/01 10:55:00 AM	11	5/21/01 11:30:00 AM	10
5/21/01 9:46:00 AM	15	5/21/01 10:21:00 AM	13	5/21/01 10:56:00 AM	22	5/21/01 11:31:00 AM	9
5/21/01 9:47:00 AM	6	5/21/01 10:22:00 AM	14	5/21/01 10:57:00 AM	24	5/21/01 11:32:00 AM	7
5/21/01 9:48:00 AM	7	5/21/01 10:23:00 AM	12	5/21/01 10:58:00 AM	42	5/21/01 11:33:00 AM	10
5/21/01 9:49:00 AM	8	5/21/01 10:24:00 AM	7	5/21/01 10:59:00 AM	131	5/21/01 11:34:00 AM	11
5/21/01 9:50:00 AM	6	5/21/01 10:25:00 AM	10	5/21/01 11:00:00 AM	12	5/21/01 11:35:00 AM	8
5/21/01 9:51:00 AM	7	5/21/01 10:26:00 AM	9	5/21/01 11:01:00 AM	12	5/21/01 11:36:00 AM	8
5/21/01 9:52:00 AM	9	5/21/01 10:27:00 AM	11	5/21/01 11:02:00 AM	10	5/21/01 11:37:00 AM	10
5/21/01 9:53:00 AM	12	5/21/01 10:28:00 AM	6	5/21/01 11:03:00 AM	138	5/21/01 11:38:00 AM	10
5/21/01 9:54:00 AM	10	5/21/01 10:29:00 AM	10	5/21/01 11:04:00 AM	28	5/21/01 11:39:00 AM	6
5/21/01 9:55:00 AM	13	5/21/01 10:30:00 AM	8	5/21/01 11:05:00 AM	11	5/21/01 11:40:00 AM	7
5/21/01 9:56:00 AM	8	5/21/01 10:31:00 AM	17	5/21/01 11:06:00 AM	9	5/21/01 11:41:00 AM	8
5/21/01 9:57:00 AM	9	5/21/01 10:32:00 AM	40	5/21/01 11:07:00 AM	8	5/21/01 11:42:00 AM	9
5/21/01 9:58:00 AM	14	5/21/01 10:33:00 AM	11	5/21/01 11:08:00 AM	9	5/21/01 11:43:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/21/01 11:44:00 AM	7	5/21/01 12:19:00 PM	21	5/21/01 12:54:00 PM	50	5/21/01 1:29:00 PM	9
5/21/01 11:45:00 AM	7	5/21/01 12:20:00 PM	14	5/21/01 12:55:00 PM	12	5/21/01 1:30:00 PM	11
5/21/01 11:46:00 AM	14	5/21/01 12:21:00 PM	22	5/21/01 12:56:00 PM	26	5/21/01 1:31:00 PM	12
5/21/01 11:47:00 AM	11	5/21/01 12:22:00 PM	16	5/21/01 12:57:00 PM	34	5/21/01 1:32:00 PM	35
5/21/01 11:48:00 AM	8	5/21/01 12:23:00 PM	21	5/21/01 12:58:00 PM	16	5/21/01 1:33:00 PM	71
5/21/01 11:49:00 AM	8	5/21/01 12:24:00 PM	17	5/21/01 12:59:00 PM	22	5/21/01 1:34:00 PM	16
5/21/01 11:50:00 AM	10	5/21/01 12:25:00 PM	12	5/21/01 1:00:00 PM	15	5/21/01 1:35:00 PM	14
5/21/01 11:51:00 AM	9	5/21/01 12:26:00 PM	27	5/21/01 1:01:00 PM	28	5/21/01 1:36:00 PM	24
5/21/01 11:52:00 AM	193	5/21/01 12:27:00 PM	19	5/21/01 1:02:00 PM	42	5/21/01 1:37:00 PM	20
5/21/01 11:53:00 AM	14	5/21/01 12:28:00 PM	143	5/21/01 1:03:00 PM	16	5/21/01 1:38:00 PM	34
5/21/01 11:54:00 AM	9	5/21/01 12:29:00 PM	49	5/21/01 1:04:00 PM	17	5/21/01 1:39:00 PM	14
5/21/01 11:55:00 AM	23	5/21/01 12:30:00 PM	54	5/21/01 1:05:00 PM	31	5/21/01 1:40:00 PM	10
5/21/01 11:56:00 AM	10	5/21/01 12:31:00 PM	13	5/21/01 1:06:00 PM	20	5/21/01 1:41:00 PM	28
5/21/01 11:57:00 AM	9	5/21/01 12:32:00 PM	30	5/21/01 1:07:00 PM	21	5/21/01 1:42:00 PM	11
5/21/01 11:58:00 AM	15	5/21/01 12:33:00 PM	23	5/21/01 1:08:00 PM	17	5/21/01 1:43:00 PM	11
5/21/01 11:59:00 AM	15	5/21/01 12:34:00 PM	17	5/21/01 1:09:00 PM	27	5/21/01 1:44:00 PM	11
5/21/01 12:00:00 PM	9	5/21/01 12:35:00 PM	13	5/21/01 1:10:00 PM	25	5/21/01 1:45:00 PM	10
5/21/01 12:01:00 PM	15	5/21/01 12:36:00 PM	25	5/21/01 1:11:00 PM	21	5/21/01 1:46:00 PM	9
5/21/01 12:02:00 PM	55	5/21/01 12:37:00 PM	11	5/21/01 1:12:00 PM	40	5/21/01 1:47:00 PM	14
5/21/01 12:03:00 PM	15	5/21/01 12:38:00 PM	26	5/21/01 1:13:00 PM	25	5/21/01 1:48:00 PM	20
5/21/01 12:04:00 PM	14	5/21/01 12:39:00 PM	52	5/21/01 1:14:00 PM	13	5/21/01 1:49:00 PM	12
5/21/01 12:05:00 PM	12	5/21/01 12:40:00 PM	16	5/21/01 1:15:00 PM	28	5/21/01 1:50:00 PM	12
5/21/01 12:06:00 PM	13	5/21/01 12:41:00 PM	12	5/21/01 1:16:00 PM	28	5/21/01 1:51:00 PM	14
5/21/01 12:07:00 PM	35	5/21/01 12:42:00 PM	15	5/21/01 1:17:00 PM	82	5/21/01 1:52:00 PM	13
5/21/01 12:08:00 PM	37	5/21/01 12:43:00 PM	19	5/21/01 1:18:00 PM	90	5/21/01 1:53:00 PM	24
5/21/01 12:09:00 PM	70	5/21/01 12:44:00 PM	14	5/21/01 1:19:00 PM	227	5/21/01 1:54:00 PM	23
5/21/01 12:10:00 PM	30	5/21/01 12:45:00 PM	25	5/21/01 1:20:00 PM	352	5/21/01 1:55:00 PM	10
5/21/01 12:11:00 PM	14	5/21/01 12:46:00 PM	11	5/21/01 1:21:00 PM	89	5/21/01 1:56:00 PM	19
5/21/01 12:12:00 PM	29	5/21/01 12:47:00 PM	19	5/21/01 1:22:00 PM	36	5/21/01 1:57:00 PM	13
5/21/01 12:13:00 PM	14	5/21/01 12:48:00 PM	21	5/21/01 1:23:00 PM	16	5/21/01 1:58:00 PM	16
5/21/01 12:14:00 PM	17	5/21/01 12:49:00 PM	12	5/21/01 1:24:00 PM	12	5/21/01 1:59:00 PM	11
5/21/01 12:15:00 PM	55	5/21/01 12:50:00 PM	82	5/21/01 1:25:00 PM	13	5/21/01 2:00:00 PM	16
5/21/01 12:16:00 PM	16	5/21/01 12:51:00 PM	114	5/21/01 1:26:00 PM	10	5/21/01 2:01:00 PM	100
5/21/01 12:17:00 PM	10	5/21/01 12:52:00 PM	24	5/21/01 1:27:00 PM	11	5/21/01 2:02:00 PM	12
5/21/01 12:18:00 PM	12	5/21/01 12:53:00 PM	39	5/21/01 1:28:00 PM	29	5/21/01 2:03:00 PM	22

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/21/01 2:04:00 PM	28	5/21/01 2:39:00 PM	10	5/21/01 3:14:00 PM	13	5/21/01 3:49:00 PM	12
5/21/01 2:05:00 PM	12	5/21/01 2:40:00 PM	18	5/21/01 3:15:00 PM	14	5/21/01 3:50:00 PM	15
5/21/01 2:06:00 PM	12	5/21/01 2:41:00 PM	25	5/21/01 3:16:00 PM	20	5/21/01 3:51:00 PM	14
5/21/01 2:07:00 PM	12	5/21/01 2:42:00 PM	23	5/21/01 3:17:00 PM	25	5/21/01 3:52:00 PM	15
5/21/01 2:08:00 PM	14	5/21/01 2:43:00 PM	15	5/21/01 3:18:00 PM	15	5/21/01 3:53:00 PM	65
5/21/01 2:09:00 PM	11	5/21/01 2:44:00 PM	15	5/21/01 3:19:00 PM	12	5/21/01 3:54:00 PM	25
5/21/01 2:10:00 PM	12	5/21/01 2:45:00 PM	15	5/21/01 3:20:00 PM	12	5/21/01 3:55:00 PM	19
5/21/01 2:11:00 PM	14	5/21/01 2:46:00 PM	16	5/21/01 3:21:00 PM	22	5/21/01 3:56:00 PM	13
5/21/01 2:12:00 PM	9	5/21/01 2:47:00 PM	13	5/21/01 3:22:00 PM	13	5/21/01 3:57:00 PM	36
5/21/01 2:13:00 PM	12	5/21/01 2:48:00 PM	19	5/21/01 3:23:00 PM	14	6/8/01 6:32:00 AM	19
5/21/01 2:14:00 PM	12	5/21/01 2:49:00 PM	10	5/21/01 3:24:00 PM	12	6/8/01 6:33:00 AM	19
5/21/01 2:15:00 PM	12	5/21/01 2:50:00 PM	19	5/21/01 3:25:00 PM	60	6/8/01 6:34:00 AM	21
5/21/01 2:16:00 PM	15	5/21/01 2:51:00 PM	12	5/21/01 3:26:00 PM	12	6/8/01 6:35:00 AM	21
5/21/01 2:17:00 PM	15	5/21/01 2:52:00 PM	16	5/21/01 3:27:00 PM	17	6/8/01 6:36:00 AM	21
5/21/01 2:18:00 PM	22	5/21/01 2:53:00 PM	16	5/21/01 3:28:00 PM	16	6/8/01 6:37:00 AM	21
5/21/01 2:19:00 PM	11	5/21/01 2:54:00 PM	13	5/21/01 3:29:00 PM	17	6/8/01 6:38:00 AM	19
5/21/01 2:20:00 PM	16	5/21/01 2:55:00 PM	15	5/21/01 3:30:00 PM	42	6/8/01 6:39:00 AM	19
5/21/01 2:21:00 PM	13	5/21/01 2:56:00 PM	17	5/21/01 3:31:00 PM	18	6/8/01 6:40:00 AM	19
5/21/01 2:22:00 PM	13	5/21/01 2:57:00 PM	12	5/21/01 3:32:00 PM	35	6/8/01 6:41:00 AM	21
5/21/01 2:23:00 PM	13	5/21/01 2:58:00 PM	13	5/21/01 3:33:00 PM	19	6/8/01 6:42:00 AM	18
5/21/01 2:24:00 PM	12	5/21/01 2:59:00 PM	12	5/21/01 3:34:00 PM	29	6/8/01 6:43:00 AM	21
5/21/01 2:25:00 PM	14	5/21/01 3:00:00 PM	13	5/21/01 3:35:00 PM	19	6/8/01 6:44:00 AM	22
5/21/01 2:26:00 PM	14	5/21/01 3:01:00 PM	15	5/21/01 3:36:00 PM	11	6/8/01 6:45:00 AM	21
5/21/01 2:27:00 PM	11	5/21/01 3:02:00 PM	13	5/21/01 3:37:00 PM	16	6/8/01 6:46:00 AM	20
5/21/01 2:28:00 PM	15	5/21/01 3:03:00 PM	19	5/21/01 3:38:00 PM	17	6/8/01 6:47:00 AM	21
5/21/01 2:29:00 PM	13	5/21/01 3:04:00 PM	11	5/21/01 3:39:00 PM	13	6/8/01 6:48:00 AM	21
5/21/01 2:30:00 PM	20	5/21/01 3:05:00 PM	13	5/21/01 3:40:00 PM	13	6/8/01 6:49:00 AM	20
5/21/01 2:31:00 PM	15	5/21/01 3:06:00 PM	13	5/21/01 3:41:00 PM	14	6/8/01 6:50:00 AM	19
5/21/01 2:32:00 PM	12	5/21/01 3:07:00 PM	19	5/21/01 3:42:00 PM	12	6/8/01 6:51:00 AM	18
5/21/01 2:33:00 PM	16	5/21/01 3:08:00 PM	14	5/21/01 3:43:00 PM	14	6/8/01 6:52:00 AM	19
5/21/01 2:34:00 PM	13	5/21/01 3:09:00 PM	15	5/21/01 3:44:00 PM	13	6/8/01 6:53:00 AM	19
5/21/01 2:35:00 PM	13	5/21/01 3:10:00 PM	14	5/21/01 3:45:00 PM	12	6/8/01 6:54:00 AM	19
5/21/01 2:36:00 PM	12	5/21/01 3:11:00 PM	13	5/21/01 3:46:00 PM	17	6/8/01 6:55:00 AM	21
5/21/01 2:37:00 PM	14	5/21/01 3:12:00 PM	11	5/21/01 3:47:00 PM	14	6/8/01 6:56:00 AM	17
5/21/01 2:38:00 PM	16	5/21/01 3:13:00 PM	34	5/21/01 3:48:00 PM	13	6/8/01 6:57:00 AM	18

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/8/01 6:58:00 AM	17	6/8/01 7:33:00 AM	14	6/8/01 8:08:00 AM	13	6/8/01 8:43:00 AM	13
6/8/01 6:59:00 AM	19	6/8/01 7:34:00 AM	15	6/8/01 8:09:00 AM	14	6/8/01 8:44:00 AM	9
6/8/01 7:00:00 AM	19	6/8/01 7:35:00 AM	14	6/8/01 8:10:00 AM	14	6/8/01 8:45:00 AM	9
6/8/01 7:01:00 AM	18	6/8/01 7:36:00 AM	13	6/8/01 8:11:00 AM	15	6/8/01 8:46:00 AM	10
6/8/01 7:02:00 AM	17	6/8/01 7:37:00 AM	15	6/8/01 8:12:00 AM	17	6/8/01 8:47:00 AM	8
6/8/01 7:03:00 AM	17	6/8/01 7:38:00 AM	14	6/8/01 8:13:00 AM	15	6/8/01 8:48:00 AM	12
6/8/01 7:04:00 AM	17	6/8/01 7:39:00 AM	16	6/8/01 8:14:00 AM	19	6/8/01 8:49:00 AM	10
6/8/01 7:05:00 AM	20	6/8/01 7:40:00 AM	15	6/8/01 8:15:00 AM	12	6/8/01 8:50:00 AM	8
6/8/01 7:06:00 AM	20	6/8/01 7:41:00 AM	13	6/8/01 8:16:00 AM	13	6/8/01 8:51:00 AM	9
6/8/01 7:07:00 AM	16	6/8/01 7:42:00 AM	14	6/8/01 8:17:00 AM	11	6/8/01 8:52:00 AM	9
6/8/01 7:08:00 AM	16	6/8/01 7:43:00 AM	16	6/8/01 8:18:00 AM	9	6/8/01 8:53:00 AM	11
6/8/01 7:09:00 AM	18	6/8/01 7:44:00 AM	27	6/8/01 8:19:00 AM	11	6/8/01 8:54:00 AM	27
6/8/01 7:10:00 AM	17	6/8/01 7:45:00 AM	13	6/8/01 8:20:00 AM	10	6/8/01 8:55:00 AM	12
6/8/01 7:11:00 AM	18	6/8/01 7:46:00 AM	15	6/8/01 8:21:00 AM	12	6/8/01 8:56:00 AM	9
6/8/01 7:12:00 AM	18	6/8/01 7:47:00 AM	14	6/8/01 8:22:00 AM	10	6/8/01 8:57:00 AM	10
6/8/01 7:13:00 AM	18	6/8/01 7:48:00 AM	14	6/8/01 8:23:00 AM	12	6/8/01 8:58:00 AM	10
6/8/01 7:14:00 AM	18	6/8/01 7:49:00 AM	14	6/8/01 8:24:00 AM	12	6/8/01 8:59:00 AM	11
6/8/01 7:15:00 AM	18	6/8/01 7:50:00 AM	13	6/8/01 8:25:00 AM	14	6/8/01 9:00:00 AM	13
6/8/01 7:16:00 AM	17	6/8/01 7:51:00 AM	12	6/8/01 8:26:00 AM	8	6/8/01 9:01:00 AM	12
6/8/01 7:17:00 AM	19	6/8/01 7:52:00 AM	16	6/8/01 8:27:00 AM	10	6/8/01 9:02:00 AM	10
6/8/01 7:18:00 AM	22	6/8/01 7:53:00 AM	12	6/8/01 8:28:00 AM	9	6/8/01 9:03:00 AM	9
6/8/01 7:19:00 AM	15	6/8/01 7:54:00 AM	14	6/8/01 8:29:00 AM	10	6/8/01 9:04:00 AM	10
6/8/01 7:20:00 AM	16	6/8/01 7:55:00 AM	14	6/8/01 8:30:00 AM	10	6/8/01 9:05:00 AM	12
6/8/01 7:21:00 AM	20	6/8/01 7:56:00 AM	16	6/8/01 8:31:00 AM	8	6/8/01 9:06:00 AM	11
6/8/01 7:22:00 AM	15	6/8/01 7:57:00 AM	15	6/8/01 8:32:00 AM	10	6/8/01 9:07:00 AM	10
6/8/01 7:23:00 AM	17	6/8/01 7:58:00 AM	14	6/8/01 8:33:00 AM	10	6/8/01 9:08:00 AM	10
6/8/01 7:24:00 AM	14	6/8/01 7:59:00 AM	14	6/8/01 8:34:00 AM	12	6/8/01 9:09:00 AM	12
6/8/01 7:25:00 AM	17	6/8/01 8:00:00 AM	18	6/8/01 8:35:00 AM	8	6/8/01 9:10:00 AM	10
6/8/01 7:26:00 AM	16	6/8/01 8:01:00 AM	17	6/8/01 8:36:00 AM	10	6/8/01 9:11:00 AM	10
6/8/01 7:27:00 AM	16	6/8/01 8:02:00 AM	12	6/8/01 8:37:00 AM	8	6/8/01 9:12:00 AM	10
6/8/01 7:28:00 AM	17	6/8/01 8:03:00 AM	12	6/8/01 8:38:00 AM	7	6/8/01 9:13:00 AM	10
6/8/01 7:29:00 AM	16	6/8/01 8:04:00 AM	13	6/8/01 8:39:00 AM	11	6/8/01 9:14:00 AM	8
6/8/01 7:30:00 AM	17	6/8/01 8:05:00 AM	13	6/8/01 8:40:00 AM	8	6/8/01 9:15:00 AM	11
6/8/01 7:31:00 AM	15	6/8/01 8:06:00 AM	14	6/8/01 8:41:00 AM	8	6/8/01 9:16:00 AM	8
6/8/01 7:32:00 AM	16	6/8/01 8:07:00 AM	17	6/8/01 8:42:00 AM	8	6/8/01 9:17:00 AM	10

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/8/01 9:18:00 AM	13	6/8/01 9:53:00 AM	8	6/8/01 10:28:00 AM	10	6/8/01 11:03:00 AM	11
6/8/01 9:19:00 AM	21	6/8/01 9:54:00 AM	10	6/8/01 10:29:00 AM	12	6/8/01 11:04:00 AM	19
6/8/01 9:20:00 AM	9	6/8/01 9:55:00 AM	12	6/8/01 10:30:00 AM	10	6/8/01 11:05:00 AM	10
6/8/01 9:21:00 AM	8	6/8/01 9:56:00 AM	10	6/8/01 10:31:00 AM	12	6/8/01 11:06:00 AM	10
6/8/01 9:22:00 AM	11	6/8/01 9:57:00 AM	10	6/8/01 10:32:00 AM	20	6/8/01 11:07:00 AM	10
6/8/01 9:23:00 AM	10	6/8/01 9:58:00 AM	13	6/8/01 10:33:00 AM	11	6/8/01 11:08:00 AM	8
6/8/01 9:24:00 AM	14	6/8/01 9:59:00 AM	11	6/8/01 10:34:00 AM	10	6/8/01 11:09:00 AM	11
6/8/01 9:25:00 AM	16	6/8/01 10:00:00 AM	13	6/8/01 10:35:00 AM	10	6/8/01 11:10:00 AM	11
6/8/01 9:26:00 AM	35	6/8/01 10:01:00 AM	8	6/8/01 10:36:00 AM	13	6/8/01 11:11:00 AM	13
6/8/01 9:27:00 AM	16	6/8/01 10:02:00 AM	9	6/8/01 10:37:00 AM	12	6/8/01 11:12:00 AM	14
6/8/01 9:28:00 AM	11	6/8/01 10:03:00 AM	12	6/8/01 10:38:00 AM	24	6/8/01 11:13:00 AM	16
6/8/01 9:29:00 AM	17	6/8/01 10:04:00 AM	13	6/8/01 10:39:00 AM	13	6/8/01 11:14:00 AM	10
6/8/01 9:30:00 AM	8	6/8/01 10:05:00 AM	9	6/8/01 10:40:00 AM	12	6/8/01 11:15:00 AM	9
6/8/01 9:31:00 AM	78	6/8/01 10:06:00 AM	10	6/8/01 10:41:00 AM	10	6/8/01 11:16:00 AM	9
6/8/01 9:32:00 AM	12	6/8/01 10:07:00 AM	8	6/8/01 10:42:00 AM	12	6/8/01 11:17:00 AM	9
6/8/01 9:33:00 AM	10	6/8/01 10:08:00 AM	9	6/8/01 10:43:00 AM	11	6/8/01 11:18:00 AM	10
6/8/01 9:34:00 AM	11	6/8/01 10:09:00 AM	8	6/8/01 10:44:00 AM	17	6/8/01 11:19:00 AM	9
6/8/01 9:35:00 AM	10	6/8/01 10:10:00 AM	10	6/8/01 10:45:00 AM	20	6/8/01 11:20:00 AM	9
6/8/01 9:36:00 AM	9	6/8/01 10:11:00 AM	10	6/8/01 10:46:00 AM	9	6/8/01 11:21:00 AM	10
6/8/01 9:37:00 AM	9	6/8/01 10:12:00 AM	10	6/8/01 10:47:00 AM	32	6/8/01 11:22:00 AM	7
6/8/01 9:38:00 AM	10	6/8/01 10:13:00 AM	12	6/8/01 10:48:00 AM	10	6/8/01 11:23:00 AM	23
6/8/01 9:39:00 AM	9	6/8/01 10:14:00 AM	13	6/8/01 10:49:00 AM	10	6/8/01 11:24:00 AM	10
6/8/01 9:40:00 AM	10	6/8/01 10:15:00 AM	20	6/8/01 10:50:00 AM	14	6/8/01 11:25:00 AM	10
6/8/01 9:41:00 AM	10	6/8/01 10:16:00 AM	13	6/8/01 10:51:00 AM	9	6/8/01 11:26:00 AM	11
6/8/01 9:42:00 AM	9	6/8/01 10:17:00 AM	11	6/8/01 10:52:00 AM	12	6/8/01 11:27:00 AM	10
6/8/01 9:43:00 AM	12	6/8/01 10:18:00 AM	8	6/8/01 10:53:00 AM	16	6/8/01 11:28:00 AM	9
6/8/01 9:44:00 AM	12	6/8/01 10:19:00 AM	9	6/8/01 10:54:00 AM	9	6/8/01 11:29:00 AM	12
6/8/01 9:45:00 AM	10	6/8/01 10:20:00 AM	8	6/8/01 10:55:00 AM	38	6/8/01 11:30:00 AM	9
6/8/01 9:46:00 AM	44	6/8/01 10:21:00 AM	10	6/8/01 10:56:00 AM	35	6/8/01 11:31:00 AM	12
6/8/01 9:47:00 AM	11	6/8/01 10:22:00 AM	11	6/8/01 10:57:00 AM	12	6/8/01 11:32:00 AM	9
6/8/01 9:48:00 AM	9	6/8/01 10:23:00 AM	10	6/8/01 10:58:00 AM	10	6/8/01 11:33:00 AM	9
6/8/01 9:49:00 AM	10	6/8/01 10:24:00 AM	11	6/8/01 10:59:00 AM	9	6/8/01 11:34:00 AM	9
6/8/01 9:50:00 AM	10	6/8/01 10:25:00 AM	11	6/8/01 11:00:00 AM	17	6/8/01 11:35:00 AM	11
6/8/01 9:51:00 AM	10	6/8/01 10:26:00 AM	11	6/8/01 11:01:00 AM	20	6/8/01 11:36:00 AM	8
6/8/01 9:52:00 AM	10	6/8/01 10:27:00 AM	13	6/8/01 11:02:00 AM	10	6/8/01 11:37:00 AM	10

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/8/01 11:38:00 AM	11	6/8/01 12:13:00 PM	8	6/8/01 12:48:00 PM	14	6/8/01 1:23:00 PM	13
6/8/01 11:39:00 AM	12	6/8/01 12:14:00 PM	10	6/8/01 12:49:00 PM	12	6/8/01 1:24:00 PM	11
6/8/01 11:40:00 AM	12	6/8/01 12:15:00 PM	10	6/8/01 12:50:00 PM	12	6/8/01 1:25:00 PM	14
6/8/01 11:41:00 AM	9	6/8/01 12:16:00 PM	10	6/8/01 12:51:00 PM	12	6/8/01 1:26:00 PM	23
6/8/01 11:42:00 AM	9	6/8/01 12:17:00 PM	9	6/8/01 12:52:00 PM	10	6/8/01 1:27:00 PM	21
6/8/01 11:43:00 AM	9	6/8/01 12:18:00 PM	9	6/8/01 12:53:00 PM	11	6/8/01 1:28:00 PM	38
6/8/01 11:44:00 AM	10	6/8/01 12:19:00 PM	8	6/8/01 12:54:00 PM	8	6/8/01 1:29:00 PM	17
6/8/01 11:45:00 AM	14	6/8/01 12:20:00 PM	10	6/8/01 12:55:00 PM	10	6/8/01 1:30:00 PM	10
6/8/01 11:46:00 AM	29	6/8/01 12:21:00 PM	11	6/8/01 12:56:00 PM	8	6/8/01 1:31:00 PM	10
6/8/01 11:47:00 AM	25	6/8/01 12:22:00 PM	8	6/8/01 12:57:00 PM	12	6/8/01 1:32:00 PM	10
6/8/01 11:48:00 AM	8	6/8/01 12:23:00 PM	10	6/8/01 12:58:00 PM	20	6/8/01 1:33:00 PM	14
6/8/01 11:49:00 AM	9	6/8/01 12:24:00 PM	10	6/8/01 12:59:00 PM	9	6/8/01 1:34:00 PM	10
6/8/01 11:50:00 AM	8	6/8/01 12:25:00 PM	8	6/8/01 1:00:00 PM	10	6/8/01 1:35:00 PM	10
6/8/01 11:51:00 AM	11	6/8/01 12:26:00 PM	10	6/8/01 1:01:00 PM	9	6/8/01 1:36:00 PM	10
6/8/01 11:52:00 AM	10	6/8/01 12:27:00 PM	10	6/8/01 1:02:00 PM	11	6/8/01 1:37:00 PM	9
6/8/01 11:53:00 AM	40	6/8/01 12:28:00 PM	9	6/8/01 1:03:00 PM	9	6/8/01 1:38:00 PM	10
6/8/01 11:54:00 AM	18	6/8/01 12:29:00 PM	11	6/8/01 1:04:00 PM	11	6/8/01 1:39:00 PM	11
6/8/01 11:55:00 AM	11	6/8/01 12:30:00 PM	7	6/8/01 1:05:00 PM	11	6/8/01 1:40:00 PM	10
6/8/01 11:56:00 AM	19	6/8/01 12:31:00 PM	8	6/8/01 1:06:00 PM	10	6/8/01 1:41:00 PM	18
6/8/01 11:57:00 AM	19	6/8/01 12:32:00 PM	8	6/8/01 1:07:00 PM	13	6/8/01 1:42:00 PM	13
6/8/01 11:58:00 AM	19	6/8/01 12:33:00 PM	10	6/8/01 1:08:00 PM	13	6/8/01 1:43:00 PM	16
6/8/01 11:59:00 AM	18	6/8/01 12:34:00 PM	7	6/8/01 1:09:00 PM	16	6/8/01 1:44:00 PM	16
6/8/01 12:00:00 PM	8	6/8/01 12:35:00 PM	12	6/8/01 1:10:00 PM	11	6/8/01 1:45:00 PM	13
6/8/01 12:01:00 PM	11	6/8/01 12:36:00 PM	12	6/8/01 1:11:00 PM	10	6/8/01 1:46:00 PM	8
6/8/01 12:02:00 PM	8	6/8/01 12:37:00 PM	13	6/8/01 1:12:00 PM	8	6/8/01 1:47:00 PM	10
6/8/01 12:03:00 PM	10	6/8/01 12:38:00 PM	14	6/8/01 1:13:00 PM	8	6/8/01 1:48:00 PM	11
6/8/01 12:04:00 PM	9	6/8/01 12:39:00 PM	8	6/8/01 1:14:00 PM	8	6/8/01 1:49:00 PM	13
6/8/01 12:05:00 PM	9	6/8/01 12:40:00 PM	8	6/8/01 1:15:00 PM	8	6/8/01 1:50:00 PM	12
6/8/01 12:06:00 PM	9	6/8/01 12:41:00 PM	7	6/8/01 1:16:00 PM	10	6/8/01 1:51:00 PM	10
6/8/01 12:07:00 PM	9	6/8/01 12:42:00 PM	9	6/8/01 1:17:00 PM	13	6/8/01 1:52:00 PM	11
6/8/01 12:08:00 PM	8	6/8/01 12:43:00 PM	10	6/8/01 1:18:00 PM	10	6/8/01 1:53:00 PM	8
6/8/01 12:09:00 PM	9	6/8/01 12:44:00 PM	10	6/8/01 1:19:00 PM	10	6/8/01 1:54:00 PM	8
6/8/01 12:10:00 PM	10	6/8/01 12:45:00 PM	8	6/8/01 1:20:00 PM	10	6/8/01 1:55:00 PM	15
6/8/01 12:11:00 PM	8	6/8/01 12:46:00 PM	9	6/8/01 1:21:00 PM	24	6/8/01 1:56:00 PM	12
6/8/01 12:12:00 PM	10	6/8/01 12:47:00 PM	10	6/8/01 1:22:00 PM	50	6/8/01 1:57:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/8/01 1:58:00 PM	13	6/8/01 2:33:00 PM	12	6/8/01 3:08:00 PM	13	6/19/01 7:30:00 AM	58
6/8/01 1:59:00 PM	10	6/8/01 2:34:00 PM	16	6/8/01 3:09:00 PM	11	6/19/01 7:31:00 AM	21
6/8/01 2:00:00 PM	14	6/8/01 2:35:00 PM	10	6/8/01 3:10:00 PM	11	6/19/01 7:32:00 AM	18
6/8/01 2:01:00 PM	10	6/8/01 2:36:00 PM	13	6/8/01 3:11:00 PM	10	6/19/01 7:33:00 AM	20
6/8/01 2:02:00 PM	13	6/8/01 2:37:00 PM	12	6/8/01 3:12:00 PM	14	6/19/01 7:34:00 AM	19
6/8/01 2:03:00 PM	12	6/8/01 2:38:00 PM	12	6/8/01 3:13:00 PM	16	6/19/01 7:35:00 AM	18
6/8/01 2:04:00 PM	11	6/8/01 2:39:00 PM	12	6/8/01 3:14:00 PM	12	6/19/01 7:36:00 AM	21
6/8/01 2:05:00 PM	11	6/8/01 2:40:00 PM	10	6/8/01 3:15:00 PM	9	6/19/01 7:37:00 AM	16
6/8/01 2:06:00 PM	10	6/8/01 2:41:00 PM	14	6/8/01 3:16:00 PM	10	6/19/01 7:38:00 AM	20
6/8/01 2:07:00 PM	11	6/8/01 2:42:00 PM	24	6/8/01 3:17:00 PM	10	6/19/01 7:39:00 AM	33
6/8/01 2:08:00 PM	13	6/8/01 2:43:00 PM	18	6/8/01 3:18:00 PM	10	6/19/01 7:40:00 AM	18
6/8/01 2:09:00 PM	12	6/8/01 2:44:00 PM	12	6/8/01 3:19:00 PM	14	6/19/01 7:41:00 AM	23
6/8/01 2:10:00 PM	12	6/8/01 2:45:00 PM	10	6/8/01 3:20:00 PM	29	6/19/01 7:42:00 AM	20
6/8/01 2:11:00 PM	11	6/8/01 2:46:00 PM	10	6/8/01 3:21:00 PM	12	6/19/01 7:43:00 AM	17
6/8/01 2:12:00 PM	15	6/8/01 2:47:00 PM	11	6/8/01 3:22:00 PM	19	6/19/01 7:44:00 AM	26
6/8/01 2:13:00 PM	11	6/8/01 2:48:00 PM	10	6/19/01 7:10:00 AM	100	6/19/01 7:45:00 AM	20
6/8/01 2:14:00 PM	11	6/8/01 2:49:00 PM	12	6/19/01 7:11:00 AM	43	6/19/01 7:46:00 AM	20
6/8/01 2:15:00 PM	15	6/8/01 2:50:00 PM	8	6/19/01 7:12:00 AM	61	6/19/01 7:47:00 AM	27
6/8/01 2:16:00 PM	19	6/8/01 2:51:00 PM	10	6/19/01 7:13:00 AM	22	6/19/01 7:48:00 AM	23
6/8/01 2:17:00 PM	18	6/8/01 2:52:00 PM	12	6/19/01 7:14:00 AM	17	6/19/01 7:49:00 AM	20
6/8/01 2:18:00 PM	32	6/8/01 2:53:00 PM	12	6/19/01 7:15:00 AM	25	6/19/01 7:50:00 AM	19
6/8/01 2:19:00 PM	14	6/8/01 2:54:00 PM	10	6/19/01 7:16:00 AM	20	6/19/01 7:51:00 AM	24
6/8/01 2:20:00 PM	10	6/8/01 2:55:00 PM	12	6/19/01 7:17:00 AM	33	6/19/01 7:52:00 AM	79
6/8/01 2:21:00 PM	10	6/8/01 2:56:00 PM	13	6/19/01 7:18:00 AM	27	6/19/01 7:53:00 AM	38
6/8/01 2:22:00 PM	10	6/8/01 2:57:00 PM	17	6/19/01 7:19:00 AM	57	6/19/01 9:43:00 AM	30
6/8/01 2:23:00 PM	12	6/8/01 2:58:00 PM	12	6/19/01 7:20:00 AM	68	6/19/01 9:44:00 AM	16
6/8/01 2:24:00 PM	20	6/8/01 2:59:00 PM	10	6/19/01 7:21:00 AM	34	6/19/01 9:45:00 AM	17
6/8/01 2:25:00 PM	14	6/8/01 3:00:00 PM	9	6/19/01 7:22:00 AM	30	6/19/01 9:46:00 AM	14
6/8/01 2:26:00 PM	17	6/8/01 3:01:00 PM	13	6/19/01 7:23:00 AM	19	6/19/01 9:47:00 AM	18
6/8/01 2:27:00 PM	34	6/8/01 3:02:00 PM	9	6/19/01 7:24:00 AM	21	6/19/01 9:48:00 AM	14
6/8/01 2:28:00 PM	13	6/8/01 3:03:00 PM	9	6/19/01 7:25:00 AM	72	6/19/01 9:49:00 AM	18
6/8/01 2:29:00 PM	19	6/8/01 3:04:00 PM	9	6/19/01 7:26:00 AM	34	6/19/01 9:50:00 AM	13
6/8/01 2:30:00 PM	25	6/8/01 3:05:00 PM	8	6/19/01 7:27:00 AM	28	6/19/01 9:51:00 AM	18
6/8/01 2:31:00 PM	11	6/8/01 3:06:00 PM	15	6/19/01 7:28:00 AM	17	6/19/01 9:52:00 AM	15
6/8/01 2:32:00 PM	22	6/8/01 3:07:00 PM	10	6/19/01 7:29:00 AM	18	6/19/01 9:53:00 AM	20

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/19/01 9:54:00 AM	15	6/19/01 10:29:00 AM	18	6/19/01 11:04:00 AM	20	6/19/01 11:39:00 AM	22
6/19/01 9:55:00 AM	13	6/19/01 10:30:00 AM	21	6/19/01 11:05:00 AM	18	6/19/01 11:40:00 AM	19
6/19/01 9:56:00 AM	17	6/19/01 10:31:00 AM	20	6/19/01 11:06:00 AM	53	6/19/01 11:41:00 AM	22
6/19/01 9:57:00 AM	20	6/19/01 10:32:00 AM	18	6/19/01 11:07:00 AM	22	6/19/01 11:42:00 AM	20
6/19/01 9:58:00 AM	15	6/19/01 10:33:00 AM	16	6/19/01 11:08:00 AM	20	6/19/01 11:43:00 AM	17
6/19/01 9:59:00 AM	15	6/19/01 10:34:00 AM	38	6/19/01 11:09:00 AM	23	6/19/01 11:44:00 AM	17
6/19/01 10:00:00 AM	20	6/19/01 10:35:00 AM	18	6/19/01 11:10:00 AM	22	6/19/01 11:45:00 AM	21
6/19/01 10:01:00 AM	15	6/19/01 10:36:00 AM	18	6/19/01 11:11:00 AM	299	6/19/01 11:46:00 AM	22
6/19/01 10:02:00 AM	17	6/19/01 10:37:00 AM	17	6/19/01 11:12:00 AM	41	6/19/01 11:47:00 AM	21
6/19/01 10:03:00 AM	18	6/19/01 10:38:00 AM	20	6/19/01 11:13:00 AM	18	6/19/01 11:48:00 AM	23
6/19/01 10:04:00 AM	18	6/19/01 10:39:00 AM	16	6/19/01 11:14:00 AM	23	6/19/01 11:49:00 AM	19
6/19/01 10:05:00 AM	14	6/19/01 10:40:00 AM	14	6/19/01 11:15:00 AM	20	6/19/01 11:50:00 AM	20
6/19/01 10:06:00 AM	23	6/19/01 10:41:00 AM	15	6/19/01 11:16:00 AM	17	6/19/01 11:51:00 AM	22
6/19/01 10:07:00 AM	22	6/19/01 10:42:00 AM	17	6/19/01 11:17:00 AM	18	6/19/01 11:52:00 AM	22
6/19/01 10:08:00 AM	18	6/19/01 10:43:00 AM	22	6/19/01 11:18:00 AM	18	6/19/01 11:53:00 AM	19
6/19/01 10:09:00 AM	30	6/19/01 10:44:00 AM	20	6/19/01 11:19:00 AM	42	6/19/01 11:54:00 AM	24
6/19/01 10:10:00 AM	31	6/19/01 10:45:00 AM	20	6/19/01 11:20:00 AM	20	6/19/01 11:55:00 AM	19
6/19/01 10:11:00 AM	22	6/19/01 10:46:00 AM	22	6/19/01 11:21:00 AM	18	6/19/01 11:56:00 AM	28
6/19/01 10:12:00 AM	31	6/19/01 10:47:00 AM	19	6/19/01 11:22:00 AM	20	6/19/01 11:57:00 AM	25
6/19/01 10:13:00 AM	17	6/19/01 10:48:00 AM	30	6/19/01 11:23:00 AM	21	6/19/01 11:58:00 AM	26
6/19/01 10:14:00 AM	16	6/19/01 10:49:00 AM	23	6/19/01 11:24:00 AM	24	6/19/01 11:59:00 AM	24
6/19/01 10:15:00 AM	16	6/19/01 10:50:00 AM	26	6/19/01 11:25:00 AM	19	6/19/01 12:00:00 PM	24
6/19/01 10:16:00 AM	23	6/19/01 10:51:00 AM	36	6/19/01 11:26:00 AM	18	6/19/01 12:01:00 PM	36
6/19/01 10:17:00 AM	27	6/19/01 10:52:00 AM	50	6/19/01 11:27:00 AM	20	6/19/01 12:02:00 PM	40
6/19/01 10:18:00 AM	21	6/19/01 10:53:00 AM	37	6/19/01 11:28:00 AM	20	6/29/01 8:28:00 AM	10
6/19/01 10:19:00 AM	19	6/19/01 10:54:00 AM	23	6/19/01 11:29:00 AM	19	6/29/01 8:28:00 AM	10
6/19/01 10:20:00 AM	16	6/19/01 10:55:00 AM	18	6/19/01 11:30:00 AM	18	6/29/01 8:29:00 AM	16
6/19/01 10:21:00 AM	18	6/19/01 10:56:00 AM	20	6/19/01 11:31:00 AM	17	6/29/01 8:29:00 AM	6
6/19/01 10:22:00 AM	17	6/19/01 10:57:00 AM	19	6/19/01 11:32:00 AM	23	6/29/01 8:29:00 AM	136
6/19/01 10:23:00 AM	16	6/19/01 10:58:00 AM	15	6/19/01 11:33:00 AM	19	6/29/01 8:29:00 AM	206
6/19/01 10:24:00 AM	16	6/19/01 10:59:00 AM	20	6/19/01 11:34:00 AM	19	6/29/01 8:29:00 AM	15
6/19/01 10:25:00 AM	16	6/19/01 11:00:00 AM	18	6/19/01 11:35:00 AM	21	6/29/01 8:29:00 AM	11
6/19/01 10:26:00 AM	18	6/19/01 11:01:00 AM	19	6/19/01 11:36:00 AM	18	6/29/01 8:29:00 AM	16
6/19/01 10:27:00 AM	19	6/19/01 11:02:00 AM	22	6/19/01 11:37:00 AM	20	6/29/01 8:29:00 AM	6
6/19/01 10:28:00 AM	16	6/19/01 11:03:00 AM	22	6/19/01 11:38:00 AM	18	6/29/01 8:29:00 AM	136

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 8:29:00 AM	206	6/29/01 8:32:00 AM	12	6/29/01 8:35:00 AM	31	6/29/01 8:38:00 AM	69
6/29/01 8:29:00 AM	15	6/29/01 8:32:00 AM	10	6/29/01 8:35:00 AM	16	6/29/01 8:38:00 AM	30
6/29/01 8:29:00 AM	11	6/29/01 8:32:00 AM	15	6/29/01 8:35:00 AM	24	6/29/01 8:38:00 AM	16
6/29/01 8:30:00 AM	13	6/29/01 8:32:00 AM	18	6/29/01 8:35:00 AM	26	6/29/01 8:38:00 AM	14
6/29/01 8:30:00 AM	18	6/29/01 8:33:00 AM	11	6/29/01 8:35:00 AM	16	6/29/01 8:38:00 AM	8
6/29/01 8:30:00 AM	20	6/29/01 8:33:00 AM	11	6/29/01 8:36:00 AM	20	6/29/01 8:38:00 AM	10
6/29/01 8:30:00 AM	17	6/29/01 8:33:00 AM	22	6/29/01 8:36:00 AM	25	6/29/01 8:39:00 AM	10
6/29/01 8:30:00 AM	19	6/29/01 8:33:00 AM	48	6/29/01 8:36:00 AM	41	6/29/01 8:39:00 AM	11
6/29/01 8:30:00 AM	24	6/29/01 8:33:00 AM	49	6/29/01 8:36:00 AM	58	6/29/01 8:39:00 AM	10
6/29/01 8:30:00 AM	13	6/29/01 8:33:00 AM	14	6/29/01 8:36:00 AM	34	6/29/01 8:39:00 AM	10
6/29/01 8:30:00 AM	18	6/29/01 8:33:00 AM	11	6/29/01 8:36:00 AM	20	6/29/01 8:39:00 AM	9
6/29/01 8:30:00 AM	20	6/29/01 8:33:00 AM	11	6/29/01 8:36:00 AM	20	6/29/01 8:39:00 AM	22
6/29/01 8:30:00 AM	17	6/29/01 8:33:00 AM	22	6/29/01 8:36:00 AM	25	6/29/01 8:39:00 AM	10
6/29/01 8:30:00 AM	19	6/29/01 8:33:00 AM	48	6/29/01 8:36:00 AM	41	6/29/01 8:39:00 AM	11
6/29/01 8:30:00 AM	24	6/29/01 8:33:00 AM	49	6/29/01 8:36:00 AM	58	6/29/01 8:39:00 AM	10
6/29/01 8:31:00 AM	12	6/29/01 8:33:00 AM	14	6/29/01 8:36:00 AM	34	6/29/01 8:39:00 AM	10
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	13	6/29/01 8:36:00 AM	20	6/29/01 8:39:00 AM	9
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	12	6/29/01 8:37:00 AM	14	6/29/01 8:39:00 AM	22
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	12	6/29/01 8:37:00 AM	13	6/29/01 8:40:00 AM	31
6/29/01 8:31:00 AM	13	6/29/01 8:34:00 AM	9	6/29/01 8:37:00 AM	17	6/29/01 8:40:00 AM	16
6/29/01 8:31:00 AM	9	6/29/01 8:34:00 AM	10	6/29/01 8:37:00 AM	36	6/29/01 8:40:00 AM	8
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	9	6/29/01 8:37:00 AM	119	6/29/01 8:40:00 AM	13
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	13	6/29/01 8:37:00 AM	161	6/29/01 8:40:00 AM	19
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	12	6/29/01 8:37:00 AM	14	6/29/01 8:40:00 AM	19
6/29/01 8:31:00 AM	12	6/29/01 8:34:00 AM	12	6/29/01 8:37:00 AM	13	6/29/01 8:40:00 AM	31
6/29/01 8:31:00 AM	13	6/29/01 8:34:00 AM	9	6/29/01 8:37:00 AM	17	6/29/01 8:40:00 AM	16
6/29/01 8:31:00 AM	9	6/29/01 8:34:00 AM	10	6/29/01 8:37:00 AM	36	6/29/01 8:40:00 AM	8
6/29/01 8:32:00 AM	10	6/29/01 8:34:00 AM	9	6/29/01 8:37:00 AM	119	6/29/01 8:40:00 AM	13
6/29/01 8:32:00 AM	14	6/29/01 8:35:00 AM	21	6/29/01 8:37:00 AM	161	6/29/01 8:40:00 AM	19
6/29/01 8:32:00 AM	12	6/29/01 8:35:00 AM	31	6/29/01 8:38:00 AM	69	6/29/01 8:40:00 AM	19
6/29/01 8:32:00 AM	10	6/29/01 8:35:00 AM	16	6/29/01 8:38:00 AM	30	6/29/01 8:41:00 AM	18
6/29/01 8:32:00 AM	15	6/29/01 8:35:00 AM	24	6/29/01 8:38:00 AM	16	6/29/01 8:41:00 AM	12
6/29/01 8:32:00 AM	18	6/29/01 8:35:00 AM	26	6/29/01 8:38:00 AM	14	6/29/01 8:41:00 AM	13
6/29/01 8:32:00 AM	10	6/29/01 8:35:00 AM	16	6/29/01 8:38:00 AM	8	6/29/01 8:41:00 AM	17
6/29/01 8:32:00 AM	14	6/29/01 8:35:00 AM	21	6/29/01 8:38:00 AM	10	6/29/01 8:41:00 AM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 8:41:00 AM	11	6/29/01 8:44:00 AM	16	6/29/01 8:47:00 AM	10	6/29/01 8:50:00 AM	17
6/29/01 8:41:00 AM	18	6/29/01 8:44:00 AM	9	6/29/01 8:47:00 AM	13	6/29/01 8:50:00 AM	12
6/29/01 8:41:00 AM	12	6/29/01 8:44:00 AM	12	6/29/01 8:47:00 AM	16	6/29/01 8:50:00 AM	8
6/29/01 8:41:00 AM	13	6/29/01 8:44:00 AM	12	6/29/01 8:47:00 AM	11	6/29/01 8:50:00 AM	10
6/29/01 8:41:00 AM	17	6/29/01 8:44:00 AM	12	6/29/01 8:47:00 AM	9	6/29/01 8:50:00 AM	12
6/29/01 8:41:00 AM	16	6/29/01 8:44:00 AM	17	6/29/01 8:47:00 AM	9	6/29/01 8:50:00 AM	16
6/29/01 8:41:00 AM	11	6/29/01 8:44:00 AM	16	6/29/01 8:47:00 AM	10	6/29/01 8:50:00 AM	17
6/29/01 8:42:00 AM	13	6/29/01 8:44:00 AM	9	6/29/01 8:47:00 AM	13	6/29/01 8:50:00 AM	12
6/29/01 8:42:00 AM	18	6/29/01 8:45:00 AM	7	6/29/01 8:47:00 AM	16	6/29/01 8:50:00 AM	8
6/29/01 8:42:00 AM	12	6/29/01 8:45:00 AM	7	6/29/01 8:48:00 AM	18	6/29/01 8:50:00 AM	10
6/29/01 8:42:00 AM	12	6/29/01 8:45:00 AM	8	6/29/01 8:48:00 AM	19	6/29/01 8:51:00 AM	12
6/29/01 8:42:00 AM	11	6/29/01 8:45:00 AM	11	6/29/01 8:48:00 AM	15	6/29/01 8:51:00 AM	23
6/29/01 8:42:00 AM	15	6/29/01 8:45:00 AM	15	6/29/01 8:48:00 AM	11	6/29/01 8:51:00 AM	41
6/29/01 8:42:00 AM	13	6/29/01 8:45:00 AM	20	6/29/01 8:48:00 AM	9	6/29/01 8:51:00 AM	31
6/29/01 8:42:00 AM	18	6/29/01 8:45:00 AM	7	6/29/01 8:48:00 AM	13	6/29/01 8:51:00 AM	12
6/29/01 8:42:00 AM	12	6/29/01 8:45:00 AM	7	6/29/01 8:48:00 AM	18	6/29/01 8:51:00 AM	13
6/29/01 8:42:00 AM	12	6/29/01 8:45:00 AM	8	6/29/01 8:48:00 AM	19	6/29/01 8:51:00 AM	12
6/29/01 8:42:00 AM	11	6/29/01 8:45:00 AM	11	6/29/01 8:48:00 AM	15	6/29/01 8:51:00 AM	23
6/29/01 8:42:00 AM	15	6/29/01 8:45:00 AM	15	6/29/01 8:48:00 AM	11	6/29/01 8:51:00 AM	41
6/29/01 8:43:00 AM	18	6/29/01 8:45:00 AM	20	6/29/01 8:48:00 AM	9	6/29/01 8:51:00 AM	31
6/29/01 8:43:00 AM	11	6/29/01 8:46:00 AM	17	6/29/01 8:48:00 AM	13	6/29/01 8:51:00 AM	12
6/29/01 8:43:00 AM	13	6/29/01 8:46:00 AM	11	6/29/01 8:49:00 AM	16	6/29/01 8:51:00 AM	13
6/29/01 8:43:00 AM	20	6/29/01 8:46:00 AM	14	6/29/01 8:49:00 AM	22	6/29/01 8:52:00 AM	13
6/29/01 8:43:00 AM	16	6/29/01 8:46:00 AM	18	6/29/01 8:49:00 AM	34	6/29/01 8:52:00 AM	9
6/29/01 8:43:00 AM	12	6/29/01 8:46:00 AM	17	6/29/01 8:49:00 AM	23	6/29/01 8:52:00 AM	11
6/29/01 8:43:00 AM	18	6/29/01 8:46:00 AM	13	6/29/01 8:49:00 AM	13	6/29/01 8:52:00 AM	11
6/29/01 8:43:00 AM	11	6/29/01 8:46:00 AM	17	6/29/01 8:49:00 AM	12	6/29/01 8:52:00 AM	10
6/29/01 8:43:00 AM	13	6/29/01 8:46:00 AM	11	6/29/01 8:49:00 AM	16	6/29/01 8:52:00 AM	9
6/29/01 8:43:00 AM	20	6/29/01 8:46:00 AM	14	6/29/01 8:49:00 AM	22	6/29/01 8:52:00 AM	13
6/29/01 8:43:00 AM	16	6/29/01 8:46:00 AM	18	6/29/01 8:49:00 AM	34	6/29/01 8:52:00 AM	9
6/29/01 8:43:00 AM	12	6/29/01 8:46:00 AM	17	6/29/01 8:49:00 AM	23	6/29/01 8:52:00 AM	11
6/29/01 8:44:00 AM	12	6/29/01 8:46:00 AM	13	6/29/01 8:49:00 AM	13	6/29/01 8:52:00 AM	11
6/29/01 8:44:00 AM	12	6/29/01 8:47:00 AM	11	6/29/01 8:49:00 AM	12	6/29/01 8:52:00 AM	10
6/29/01 8:44:00 AM	12	6/29/01 8:47:00 AM	9	6/29/01 8:50:00 AM	12	6/29/01 8:52:00 AM	9
6/29/01 8:44:00 AM	17	6/29/01 8:47:00 AM	9	6/29/01 8:50:00 AM	16	6/29/01 8:53:00 AM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 8:53:00 AM	10	6/29/01 8:56:00 AM	22	6/29/01 8:58:00 AM	18	6/29/01 9:01:00 AM	27
6/29/01 8:53:00 AM	10	6/29/01 8:56:00 AM	21	6/29/01 8:59:00 AM	22	6/29/01 9:01:00 AM	14
6/29/01 8:53:00 AM	11	6/29/01 8:56:00 AM	15	6/29/01 8:59:00 AM	22	6/29/01 9:02:00 AM	15
6/29/01 8:53:00 AM	13	6/29/01 8:56:00 AM	11	6/29/01 8:59:00 AM	53	6/29/01 9:02:00 AM	10
6/29/01 8:53:00 AM	10	6/29/01 8:56:00 AM	11	6/29/01 8:59:00 AM	73	6/29/01 9:02:00 AM	12
6/29/01 8:53:00 AM	11	6/29/01 8:56:00 AM	17	6/29/01 8:59:00 AM	60	6/29/01 9:02:00 AM	10
6/29/01 8:53:00 AM	10	6/29/01 8:56:00 AM	22	6/29/01 8:59:00 AM	71	6/29/01 9:02:00 AM	8
6/29/01 8:53:00 AM	10	6/29/01 8:56:00 AM	21	6/29/01 8:59:00 AM	22	6/29/01 9:02:00 AM	10
6/29/01 8:53:00 AM	11	6/29/01 8:56:00 AM	15	6/29/01 8:59:00 AM	22	6/29/01 9:02:00 AM	15
6/29/01 8:53:00 AM	13	6/29/01 8:56:00 AM	11	6/29/01 8:59:00 AM	53	6/29/01 9:02:00 AM	10
6/29/01 8:53:00 AM	10	6/29/01 8:56:00 AM	11	6/29/01 8:59:00 AM	73	6/29/01 9:02:00 AM	12
6/29/01 8:54:00 AM	9	6/29/01 8:56:00 AM	17	6/29/01 8:59:00 AM	60	6/29/01 9:02:00 AM	10
6/29/01 8:54:00 AM	8	6/29/01 8:57:00 AM	23	6/29/01 8:59:00 AM	71	6/29/01 9:02:00 AM	8
6/29/01 8:54:00 AM	11	6/29/01 8:57:00 AM	17	6/29/01 9:00:00 AM	63	6/29/01 9:02:00 AM	10
6/29/01 8:54:00 AM	14	6/29/01 8:57:00 AM	49	6/29/01 9:00:00 AM	129	6/29/01 9:03:00 AM	15
6/29/01 8:54:00 AM	34	6/29/01 8:57:00 AM	78	6/29/01 9:00:00 AM	88	6/29/01 9:03:00 AM	13
6/29/01 8:54:00 AM	64	6/29/01 8:57:00 AM	40	6/29/01 9:00:00 AM	12	6/29/01 9:03:00 AM	12
6/29/01 8:54:00 AM	9	6/29/01 8:57:00 AM	36	6/29/01 9:00:00 AM	13	6/29/01 9:03:00 AM	16
6/29/01 8:54:00 AM	8	6/29/01 8:57:00 AM	23	6/29/01 9:00:00 AM	20	6/29/01 9:03:00 AM	12
6/29/01 8:54:00 AM	11	6/29/01 8:57:00 AM	17	6/29/01 9:00:00 AM	63	6/29/01 9:03:00 AM	15
6/29/01 8:54:00 AM	14	6/29/01 8:57:00 AM	49	6/29/01 9:00:00 AM	129	6/29/01 9:03:00 AM	15
6/29/01 8:54:00 AM	34	6/29/01 8:57:00 AM	78	6/29/01 9:00:00 AM	88	6/29/01 9:03:00 AM	13
6/29/01 8:54:00 AM	64	6/29/01 8:57:00 AM	40	6/29/01 9:00:00 AM	12	6/29/01 9:03:00 AM	12
6/29/01 8:55:00 AM	44	6/29/01 8:57:00 AM	36	6/29/01 9:00:00 AM	13	6/29/01 9:03:00 AM	16
6/29/01 8:55:00 AM	15	6/29/01 8:58:00 AM	22	6/29/01 9:00:00 AM	20	6/29/01 9:03:00 AM	12
6/29/01 8:55:00 AM	20	6/29/01 8:58:00 AM	24	6/29/01 9:01:00 AM	23	6/29/01 9:03:00 AM	15
6/29/01 8:55:00 AM	22	6/29/01 8:58:00 AM	26	6/29/01 9:01:00 AM	10	6/29/01 9:04:00 AM	16
6/29/01 8:55:00 AM	10	6/29/01 8:58:00 AM	14	6/29/01 9:01:00 AM	10	6/29/01 9:04:00 AM	31
6/29/01 8:55:00 AM	14	6/29/01 8:58:00 AM	14	6/29/01 9:01:00 AM	22	6/29/01 9:04:00 AM	44
6/29/01 8:55:00 AM	44	6/29/01 8:58:00 AM	18	6/29/01 9:01:00 AM	27	6/29/01 9:04:00 AM	17
6/29/01 8:55:00 AM	15	6/29/01 8:58:00 AM	22	6/29/01 9:01:00 AM	14	6/29/01 9:04:00 AM	16
6/29/01 8:55:00 AM	20	6/29/01 8:58:00 AM	24	6/29/01 9:01:00 AM	23	6/29/01 9:04:00 AM	15
6/29/01 8:55:00 AM	22	6/29/01 8:58:00 AM	26	6/29/01 9:01:00 AM	10	6/29/01 9:04:00 AM	16
6/29/01 8:55:00 AM	10	6/29/01 8:58:00 AM	14	6/29/01 9:01:00 AM	10	6/29/01 9:04:00 AM	31
6/29/01 8:55:00 AM	14	6/29/01 8:58:00 AM	14	6/29/01 9:01:00 AM	22	6/29/01 9:04:00 AM	44

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 9:04:00 AM	17	6/29/01 9:07:00 AM	19	6/29/01 9:10:00 AM	38	6/29/01 9:13:00 AM	10
6/29/01 9:04:00 AM	16	6/29/01 9:07:00 AM	19	6/29/01 9:10:00 AM	30	6/29/01 9:13:00 AM	11
6/29/01 9:04:00 AM	15	6/29/01 9:07:00 AM	15	6/29/01 9:10:00 AM	11	6/29/01 9:13:00 AM	13
6/29/01 9:05:00 AM	13	6/29/01 9:07:00 AM	15	6/29/01 9:10:00 AM	20	6/29/01 9:13:00 AM	14
6/29/01 9:05:00 AM	10	6/29/01 9:08:00 AM	13	6/29/01 9:10:00 AM	27	6/29/01 9:13:00 AM	12
6/29/01 9:05:00 AM	13	6/29/01 9:08:00 AM	24	6/29/01 9:11:00 AM	18	6/29/01 9:13:00 AM	10
6/29/01 9:05:00 AM	18	6/29/01 9:08:00 AM	43	6/29/01 9:11:00 AM	17	6/29/01 9:14:00 AM	7
6/29/01 9:05:00 AM	106	6/29/01 9:08:00 AM	41	6/29/01 9:11:00 AM	16	6/29/01 9:14:00 AM	12
6/29/01 9:05:00 AM	158	6/29/01 9:08:00 AM	43	6/29/01 9:11:00 AM	15	6/29/01 9:14:00 AM	16
6/29/01 9:05:00 AM	13	6/29/01 9:08:00 AM	22	6/29/01 9:11:00 AM	15	6/29/01 9:14:00 AM	12
6/29/01 9:05:00 AM	10	6/29/01 9:08:00 AM	13	6/29/01 9:11:00 AM	18	6/29/01 9:14:00 AM	12
6/29/01 9:05:00 AM	13	6/29/01 9:08:00 AM	24	6/29/01 9:11:00 AM	18	6/29/01 9:14:00 AM	27
6/29/01 9:05:00 AM	18	6/29/01 9:08:00 AM	43	6/29/01 9:11:00 AM	17	6/29/01 9:14:00 AM	7
6/29/01 9:05:00 AM	106	6/29/01 9:08:00 AM	41	6/29/01 9:11:00 AM	16	6/29/01 9:14:00 AM	12
6/29/01 9:05:00 AM	158	6/29/01 9:08:00 AM	43	6/29/01 9:11:00 AM	15	6/29/01 9:14:00 AM	16
6/29/01 9:06:00 AM	30	6/29/01 9:08:00 AM	22	6/29/01 9:11:00 AM	15	6/29/01 9:14:00 AM	12
6/29/01 9:06:00 AM	12	6/29/01 9:09:00 AM	19	6/29/01 9:11:00 AM	18	6/29/01 9:14:00 AM	12
6/29/01 9:06:00 AM	18	6/29/01 9:09:00 AM	24	6/29/01 9:12:00 AM	14	6/29/01 9:14:00 AM	27
6/29/01 9:06:00 AM	25	6/29/01 9:09:00 AM	18	6/29/01 9:12:00 AM	17	6/29/01 9:15:00 AM	38
6/29/01 9:06:00 AM	16	6/29/01 9:09:00 AM	17	6/29/01 9:12:00 AM	12	6/29/01 9:15:00 AM	16
6/29/01 9:06:00 AM	15	6/29/01 9:09:00 AM	11	6/29/01 9:12:00 AM	16	6/29/01 9:15:00 AM	15
6/29/01 9:06:00 AM	30	6/29/01 9:09:00 AM	15	6/29/01 9:12:00 AM	24	6/29/01 9:15:00 AM	16
6/29/01 9:06:00 AM	12	6/29/01 9:09:00 AM	19	6/29/01 9:12:00 AM	24	6/29/01 9:15:00 AM	11
6/29/01 9:06:00 AM	18	6/29/01 9:09:00 AM	24	6/29/01 9:12:00 AM	14	6/29/01 9:15:00 AM	12
6/29/01 9:06:00 AM	25	6/29/01 9:09:00 AM	18	6/29/01 9:12:00 AM	17	6/29/01 9:15:00 AM	38
6/29/01 9:06:00 AM	16	6/29/01 9:09:00 AM	17	6/29/01 9:12:00 AM	12	6/29/01 9:15:00 AM	16
6/29/01 9:06:00 AM	15	6/29/01 9:09:00 AM	11	6/29/01 9:12:00 AM	16	6/29/01 9:15:00 AM	15
6/29/01 9:07:00 AM	18	6/29/01 9:09:00 AM	15	6/29/01 9:12:00 AM	24	6/29/01 9:15:00 AM	16
6/29/01 9:07:00 AM	20	6/29/01 9:10:00 AM	24	6/29/01 9:12:00 AM	24	6/29/01 9:15:00 AM	11
6/29/01 9:07:00 AM	19	6/29/01 9:10:00 AM	38	6/29/01 9:13:00 AM	10	6/29/01 9:15:00 AM	12
6/29/01 9:07:00 AM	19	6/29/01 9:10:00 AM	30	6/29/01 9:13:00 AM	11	6/29/01 9:16:00 AM	13
6/29/01 9:07:00 AM	15	6/29/01 9:10:00 AM	11	6/29/01 9:13:00 AM	13	6/29/01 9:16:00 AM	11
6/29/01 9:07:00 AM	15	6/29/01 9:10:00 AM	20	6/29/01 9:13:00 AM	14	6/29/01 9:16:00 AM	60
6/29/01 9:07:00 AM	18	6/29/01 9:10:00 AM	27	6/29/01 9:13:00 AM	12	6/29/01 9:16:00 AM	96
6/29/01 9:07:00 AM	20	6/29/01 9:10:00 AM	24	6/29/01 9:13:00 AM	10	6/29/01 9:16:00 AM	28

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 9:16:00 AM	19	6/29/01 9:19:00 AM	10	6/29/01 9:22:00 AM	10	6/29/01 9:25:00 AM	8
6/29/01 9:16:00 AM	13	6/29/01 9:19:00 AM	11	6/29/01 9:22:00 AM	13	6/29/01 9:25:00 AM	10
6/29/01 9:16:00 AM	11	6/29/01 9:19:00 AM	13	6/29/01 9:22:00 AM	14	6/29/01 9:25:00 AM	14
6/29/01 9:16:00 AM	60	6/29/01 9:19:00 AM	12	6/29/01 9:22:00 AM	17	6/29/01 9:25:00 AM	14
6/29/01 9:16:00 AM	96	6/29/01 9:19:00 AM	10	6/29/01 9:22:00 AM	14	6/29/01 9:25:00 AM	12
6/29/01 9:16:00 AM	28	6/29/01 9:19:00 AM	11	6/29/01 9:22:00 AM	12	6/29/01 9:25:00 AM	8
6/29/01 9:16:00 AM	19	6/29/01 9:19:00 AM	10	6/29/01 9:22:00 AM	10	6/29/01 9:25:00 AM	8
6/29/01 9:17:00 AM	16	6/29/01 9:19:00 AM	11	6/29/01 9:22:00 AM	13	6/29/01 9:25:00 AM	10
6/29/01 9:17:00 AM	10	6/29/01 9:20:00 AM	11	6/29/01 9:22:00 AM	14	6/29/01 9:25:00 AM	14
6/29/01 9:17:00 AM	12	6/29/01 9:20:00 AM	10	6/29/01 9:23:00 AM	16	6/29/01 9:25:00 AM	14
6/29/01 9:17:00 AM	16	6/29/01 9:20:00 AM	13	6/29/01 9:23:00 AM	15	6/29/01 9:26:00 AM	10
6/29/01 9:17:00 AM	21	6/29/01 9:20:00 AM	20	6/29/01 9:23:00 AM	9	6/29/01 9:26:00 AM	10
6/29/01 9:17:00 AM	14	6/29/01 9:20:00 AM	20	6/29/01 9:23:00 AM	10	6/29/01 9:26:00 AM	18
6/29/01 9:17:00 AM	16	6/29/01 9:20:00 AM	11	6/29/01 9:23:00 AM	10	6/29/01 9:26:00 AM	26
6/29/01 9:17:00 AM	10	6/29/01 9:20:00 AM	11	6/29/01 9:23:00 AM	8	6/29/01 9:26:00 AM	35
6/29/01 9:17:00 AM	12	6/29/01 9:20:00 AM	10	6/29/01 9:23:00 AM	16	6/29/01 9:26:00 AM	37
6/29/01 9:17:00 AM	16	6/29/01 9:20:00 AM	13	6/29/01 9:23:00 AM	15	6/29/01 9:26:00 AM	10
6/29/01 9:17:00 AM	21	6/29/01 9:20:00 AM	20	6/29/01 9:23:00 AM	9	6/29/01 9:26:00 AM	10
6/29/01 9:17:00 AM	14	6/29/01 9:20:00 AM	20	6/29/01 9:23:00 AM	10	6/29/01 9:26:00 AM	18
6/29/01 9:18:00 AM	10	6/29/01 9:20:00 AM	11	6/29/01 9:23:00 AM	10	6/29/01 9:26:00 AM	26
6/29/01 9:18:00 AM	11	6/29/01 9:21:00 AM	12	6/29/01 9:23:00 AM	8	6/29/01 9:26:00 AM	35
6/29/01 9:18:00 AM	11	6/29/01 9:21:00 AM	12	6/29/01 9:24:00 AM	11	6/29/01 9:26:00 AM	37
6/29/01 9:18:00 AM	12	6/29/01 9:21:00 AM	11	6/29/01 9:24:00 AM	14	6/29/01 9:27:00 AM	21
6/29/01 9:18:00 AM	13	6/29/01 9:21:00 AM	13	6/29/01 9:24:00 AM	10	6/29/01 9:27:00 AM	16
6/29/01 9:18:00 AM	11	6/29/01 9:21:00 AM	11	6/29/01 9:24:00 AM	6	6/29/01 9:27:00 AM	15
6/29/01 9:18:00 AM	10	6/29/01 9:21:00 AM	15	6/29/01 9:24:00 AM	6	6/29/01 9:27:00 AM	12
6/29/01 9:18:00 AM	11	6/29/01 9:21:00 AM	12	6/29/01 9:24:00 AM	10	6/29/01 9:27:00 AM	11
6/29/01 9:18:00 AM	11	6/29/01 9:21:00 AM	12	6/29/01 9:24:00 AM	11	6/29/01 9:27:00 AM	14
6/29/01 9:18:00 AM	12	6/29/01 9:21:00 AM	11	6/29/01 9:24:00 AM	14	6/29/01 9:27:00 AM	21
6/29/01 9:18:00 AM	13	6/29/01 9:21:00 AM	13	6/29/01 9:24:00 AM	10	6/29/01 9:27:00 AM	16
6/29/01 9:18:00 AM	11	6/29/01 9:21:00 AM	11	6/29/01 9:24:00 AM	6	6/29/01 9:27:00 AM	15
6/29/01 9:19:00 AM	13	6/29/01 9:21:00 AM	15	6/29/01 9:24:00 AM	6	6/29/01 9:27:00 AM	12
6/29/01 9:19:00 AM	12	6/29/01 9:22:00 AM	17	6/29/01 9:24:00 AM	10	6/29/01 9:27:00 AM	11
6/29/01 9:19:00 AM	10	6/29/01 9:22:00 AM	14	6/29/01 9:25:00 AM	12	6/29/01 9:27:00 AM	14
6/29/01 9:19:00 AM	11	6/29/01 9:22:00 AM	12	6/29/01 9:25:00 AM	8	6/29/01 9:28:00 AM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 9:28:00 AM	16	6/29/01 9:31:00 AM	15	6/29/01 9:33:00 AM	11	6/29/01 9:36:00 AM	10
6/29/01 9:28:00 AM	23	6/29/01 9:31:00 AM	31	6/29/01 9:34:00 AM	8	6/29/01 9:36:00 AM	13
6/29/01 9:28:00 AM	20	6/29/01 9:31:00 AM	43	6/29/01 9:34:00 AM	30	6/29/01 9:37:00 AM	14
6/29/01 9:28:00 AM	15	6/29/01 9:31:00 AM	17	6/29/01 9:34:00 AM	60	6/29/01 9:37:00 AM	6
6/29/01 9:28:00 AM	18	6/29/01 9:31:00 AM	19	6/29/01 9:34:00 AM	80	6/29/01 9:37:00 AM	12
6/29/01 9:28:00 AM	14	6/29/01 9:31:00 AM	12	6/29/01 9:34:00 AM	66	6/29/01 9:37:00 AM	14
6/29/01 9:28:00 AM	16	6/29/01 9:31:00 AM	15	6/29/01 9:34:00 AM	34	6/29/01 9:37:00 AM	12
6/29/01 9:28:00 AM	23	6/29/01 9:31:00 AM	31	6/29/01 9:34:00 AM	8	6/29/01 9:37:00 AM	13
6/29/01 9:28:00 AM	20	6/29/01 9:31:00 AM	43	6/29/01 9:34:00 AM	30	6/29/01 9:37:00 AM	14
6/29/01 9:28:00 AM	15	6/29/01 9:31:00 AM	17	6/29/01 9:34:00 AM	60	6/29/01 9:37:00 AM	6
6/29/01 9:28:00 AM	18	6/29/01 9:31:00 AM	19	6/29/01 9:34:00 AM	80	6/29/01 9:37:00 AM	12
6/29/01 9:29:00 AM	19	6/29/01 9:31:00 AM	12	6/29/01 9:34:00 AM	66	6/29/01 9:37:00 AM	14
6/29/01 9:29:00 AM	16	6/29/01 9:32:00 AM	10	6/29/01 9:34:00 AM	34	6/29/01 9:37:00 AM	12
6/29/01 9:29:00 AM	11	6/29/01 9:32:00 AM	44	6/29/01 9:35:00 AM	33	6/29/01 9:37:00 AM	13
6/29/01 9:29:00 AM	20	6/29/01 9:32:00 AM	85	6/29/01 9:35:00 AM	20	6/29/01 9:38:00 AM	9
6/29/01 9:29:00 AM	126	6/29/01 9:32:00 AM	48	6/29/01 9:35:00 AM	14	6/29/01 9:38:00 AM	12
6/29/01 9:29:00 AM	176	6/29/01 9:32:00 AM	10	6/29/01 9:35:00 AM	19	6/29/01 9:38:00 AM	14
6/29/01 9:29:00 AM	19	6/29/01 9:32:00 AM	8	6/29/01 9:35:00 AM	15	6/29/01 9:38:00 AM	14
6/29/01 9:29:00 AM	16	6/29/01 9:32:00 AM	10	6/29/01 9:35:00 AM	12	6/29/01 9:38:00 AM	11
6/29/01 9:29:00 AM	11	6/29/01 9:32:00 AM	44	6/29/01 9:35:00 AM	33	6/29/01 9:38:00 AM	11
6/29/01 9:29:00 AM	20	6/29/01 9:32:00 AM	85	6/29/01 9:35:00 AM	20	6/29/01 9:38:00 AM	9
6/29/01 9:29:00 AM	126	6/29/01 9:32:00 AM	48	6/29/01 9:35:00 AM	14	6/29/01 9:38:00 AM	12
6/29/01 9:29:00 AM	176	6/29/01 9:32:00 AM	10	6/29/01 9:35:00 AM	19	6/29/01 9:38:00 AM	14
6/29/01 9:30:00 AM	38	6/29/01 9:32:00 AM	8	6/29/01 9:35:00 AM	15	6/29/01 9:38:00 AM	14
6/29/01 9:30:00 AM	36	6/29/01 9:33:00 AM	9	6/29/01 9:35:00 AM	12	6/29/01 9:38:00 AM	11
6/29/01 9:30:00 AM	158	6/29/01 9:33:00 AM	18	6/29/01 9:36:00 AM	14	6/29/01 9:38:00 AM	11
6/29/01 9:30:00 AM	205	6/29/01 9:33:00 AM	26	6/29/01 9:36:00 AM	16	6/29/01 9:39:00 AM	11
6/29/01 9:30:00 AM	18	6/29/01 9:33:00 AM	24	6/29/01 9:36:00 AM	16	6/29/01 9:39:00 AM	11
6/29/01 9:30:00 AM	13	6/29/01 9:33:00 AM	19	6/29/01 9:36:00 AM	14	6/29/01 9:39:00 AM	9
6/29/01 9:30:00 AM	38	6/29/01 9:33:00 AM	11	6/29/01 9:36:00 AM	10	6/29/01 9:39:00 AM	6
6/29/01 9:30:00 AM	36	6/29/01 9:33:00 AM	9	6/29/01 9:36:00 AM	13	6/29/01 9:39:00 AM	11
6/29/01 9:30:00 AM	158	6/29/01 9:33:00 AM	18	6/29/01 9:36:00 AM	14	6/29/01 9:39:00 AM	13
6/29/01 9:30:00 AM	205	6/29/01 9:33:00 AM	26	6/29/01 9:36:00 AM	16	6/29/01 9:39:00 AM	11
6/29/01 9:30:00 AM	18	6/29/01 9:33:00 AM	24	6/29/01 9:36:00 AM	16	6/29/01 9:39:00 AM	11
6/29/01 9:30:00 AM	13	6/29/01 9:33:00 AM	19	6/29/01 9:36:00 AM	14	6/29/01 9:39:00 AM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 9:39:00 AM	6	6/29/01 9:42:00 AM	16	6/29/01 9:45:00 AM	11	6/29/01 9:48:00 AM	17
6/29/01 9:39:00 AM	11	6/29/01 9:42:00 AM	14	6/29/01 9:45:00 AM	10	6/29/01 9:48:00 AM	14
6/29/01 9:39:00 AM	13	6/29/01 9:42:00 AM	14	6/29/01 9:45:00 AM	10	6/29/01 9:48:00 AM	10
6/29/01 9:40:00 AM	8	6/29/01 9:42:00 AM	11	6/29/01 9:45:00 AM	11	6/29/01 9:48:00 AM	7
6/29/01 9:40:00 AM	12	6/29/01 9:43:00 AM	12	6/29/01 9:45:00 AM	10	6/29/01 9:48:00 AM	10
6/29/01 9:40:00 AM	11	6/29/01 9:43:00 AM	15	6/29/01 9:46:00 AM	10	6/29/01 9:48:00 AM	13
6/29/01 9:40:00 AM	21	6/29/01 9:43:00 AM	34	6/29/01 9:46:00 AM	10	6/29/01 9:49:00 AM	13
6/29/01 9:40:00 AM	34	6/29/01 9:43:00 AM	47	6/29/01 9:46:00 AM	11	6/29/01 9:49:00 AM	30
6/29/01 9:40:00 AM	20	6/29/01 9:43:00 AM	17	6/29/01 9:46:00 AM	19	6/29/01 9:49:00 AM	37
6/29/01 9:40:00 AM	8	6/29/01 9:43:00 AM	14	6/29/01 9:46:00 AM	19	6/29/01 9:49:00 AM	13
6/29/01 9:40:00 AM	12	6/29/01 9:43:00 AM	12	6/29/01 9:46:00 AM	13	6/29/01 9:49:00 AM	10
6/29/01 9:40:00 AM	11	6/29/01 9:43:00 AM	15	6/29/01 9:46:00 AM	10	6/29/01 9:49:00 AM	11
6/29/01 9:40:00 AM	21	6/29/01 9:43:00 AM	34	6/29/01 9:46:00 AM	10	6/29/01 9:49:00 AM	13
6/29/01 9:40:00 AM	34	6/29/01 9:43:00 AM	47	6/29/01 9:46:00 AM	11	6/29/01 9:49:00 AM	30
6/29/01 9:40:00 AM	20	6/29/01 9:43:00 AM	17	6/29/01 9:46:00 AM	19	6/29/01 9:49:00 AM	37
6/29/01 9:41:00 AM	12	6/29/01 9:43:00 AM	14	6/29/01 9:46:00 AM	19	6/29/01 9:49:00 AM	13
6/29/01 9:41:00 AM	18	6/29/01 9:44:00 AM	17	6/29/01 9:46:00 AM	13	6/29/01 9:49:00 AM	10
6/29/01 9:41:00 AM	24	6/29/01 9:44:00 AM	17	6/29/01 9:47:00 AM	15	6/29/01 9:49:00 AM	11
6/29/01 9:41:00 AM	13	6/29/01 9:44:00 AM	22	6/29/01 9:47:00 AM	19	6/29/01 9:50:00 AM	10
6/29/01 9:41:00 AM	12	6/29/01 9:44:00 AM	28	6/29/01 9:47:00 AM	32	6/29/01 9:50:00 AM	9
6/29/01 9:41:00 AM	13	6/29/01 9:44:00 AM	16	6/29/01 9:47:00 AM	34	6/29/01 9:50:00 AM	12
6/29/01 9:41:00 AM	12	6/29/01 9:44:00 AM	18	6/29/01 9:47:00 AM	15	6/29/01 9:50:00 AM	27
6/29/01 9:41:00 AM	18	6/29/01 9:44:00 AM	17	6/29/01 9:47:00 AM	14	6/29/01 9:50:00 AM	34
6/29/01 9:41:00 AM	24	6/29/01 9:44:00 AM	17	6/29/01 9:47:00 AM	15	6/29/01 9:50:00 AM	15
6/29/01 9:41:00 AM	13	6/29/01 9:44:00 AM	22	6/29/01 9:47:00 AM	19	6/29/01 9:50:00 AM	10
6/29/01 9:41:00 AM	12	6/29/01 9:44:00 AM	28	6/29/01 9:47:00 AM	32	6/29/01 9:50:00 AM	9
6/29/01 9:41:00 AM	13	6/29/01 9:44:00 AM	16	6/29/01 9:47:00 AM	34	6/29/01 9:50:00 AM	12
6/29/01 9:42:00 AM	11	6/29/01 9:44:00 AM	18	6/29/01 9:47:00 AM	15	6/29/01 9:50:00 AM	27
6/29/01 9:42:00 AM	13	6/29/01 9:45:00 AM	20	6/29/01 9:47:00 AM	14	6/29/01 9:50:00 AM	34
6/29/01 9:42:00 AM	16	6/29/01 9:45:00 AM	11	6/29/01 9:48:00 AM	17	6/29/01 9:50:00 AM	15
6/29/01 9:42:00 AM	14	6/29/01 9:45:00 AM	10	6/29/01 9:48:00 AM	14	6/29/01 9:51:00 AM	11
6/29/01 9:42:00 AM	14	6/29/01 9:45:00 AM	10	6/29/01 9:48:00 AM	10	6/29/01 9:51:00 AM	15
6/29/01 9:42:00 AM	11	6/29/01 9:45:00 AM	11	6/29/01 9:48:00 AM	7	6/29/01 9:51:00 AM	12
6/29/01 9:42:00 AM	11	6/29/01 9:45:00 AM	10	6/29/01 9:48:00 AM	10	6/29/01 9:51:00 AM	10
6/29/01 9:42:00 AM	13	6/29/01 9:45:00 AM	20	6/29/01 9:48:00 AM	13	6/29/01 9:51:00 AM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 9:51:00 AM	12	6/29/01 9:54:00 AM	19	6/29/01 9:57:00 AM	11	6/29/01 10:00:00 AM	14
6/29/01 9:51:00 AM	11	6/29/01 9:54:00 AM	20	6/29/01 9:57:00 AM	14	6/29/01 10:00:00 AM	14
6/29/01 9:51:00 AM	15	6/29/01 9:54:00 AM	18	6/29/01 9:57:00 AM	19	6/29/01 10:00:00 AM	16
6/29/01 9:51:00 AM	12	6/29/01 9:54:00 AM	18	6/29/01 9:57:00 AM	14	6/29/01 10:00:00 AM	12
6/29/01 9:51:00 AM	10	6/29/01 9:54:00 AM	22	6/29/01 9:57:00 AM	42	6/29/01 10:00:00 AM	11
6/29/01 9:51:00 AM	12	6/29/01 9:54:00 AM	20	6/29/01 9:57:00 AM	54	6/29/01 10:00:00 AM	14
6/29/01 9:51:00 AM	12	6/29/01 9:54:00 AM	19	6/29/01 9:57:00 AM	11	6/29/01 10:00:00 AM	14
6/29/01 9:52:00 AM	13	6/29/01 9:54:00 AM	20	6/29/01 9:57:00 AM	14	6/29/01 10:00:00 AM	14
6/29/01 9:52:00 AM	14	6/29/01 9:55:00 AM	28	6/29/01 9:57:00 AM	19	6/29/01 10:00:00 AM	16
6/29/01 9:52:00 AM	12	6/29/01 9:55:00 AM	27	6/29/01 9:58:00 AM	14	6/29/01 10:00:00 AM	12
6/29/01 9:52:00 AM	22	6/29/01 9:55:00 AM	19	6/29/01 9:58:00 AM	15	6/29/01 10:01:00 AM	8
6/29/01 9:52:00 AM	33	6/29/01 9:55:00 AM	43	6/29/01 9:58:00 AM	18	6/29/01 10:01:00 AM	10
6/29/01 9:52:00 AM	26	6/29/01 9:55:00 AM	73	6/29/01 9:58:00 AM	12	6/29/01 10:01:00 AM	15
6/29/01 9:52:00 AM	13	6/29/01 9:55:00 AM	41	6/29/01 9:58:00 AM	17	6/29/01 10:01:00 AM	21
6/29/01 9:52:00 AM	14	6/29/01 9:55:00 AM	28	6/29/01 9:58:00 AM	22	6/29/01 10:01:00 AM	31
6/29/01 9:52:00 AM	12	6/29/01 9:55:00 AM	27	6/29/01 9:58:00 AM	14	6/29/01 10:01:00 AM	30
6/29/01 9:52:00 AM	22	6/29/01 9:55:00 AM	19	6/29/01 9:58:00 AM	15	6/29/01 10:01:00 AM	8
6/29/01 9:52:00 AM	33	6/29/01 9:55:00 AM	43	6/29/01 9:58:00 AM	18	6/29/01 10:01:00 AM	10
6/29/01 9:52:00 AM	26	6/29/01 9:55:00 AM	73	6/29/01 9:58:00 AM	12	6/29/01 10:01:00 AM	15
6/29/01 9:53:00 AM	31	6/29/01 9:55:00 AM	41	6/29/01 9:58:00 AM	17	6/29/01 10:01:00 AM	21
6/29/01 9:53:00 AM	45	6/29/01 9:56:00 AM	17	6/29/01 9:58:00 AM	22	6/29/01 10:01:00 AM	31
6/29/01 9:53:00 AM	42	6/29/01 9:56:00 AM	28	6/29/01 9:59:00 AM	22	6/29/01 10:01:00 AM	30
6/29/01 9:53:00 AM	53	6/29/01 9:56:00 AM	30	6/29/01 9:59:00 AM	22	6/29/01 10:02:00 AM	13
6/29/01 9:53:00 AM	45	6/29/01 9:56:00 AM	19	6/29/01 9:59:00 AM	23	6/29/01 10:02:00 AM	15
6/29/01 9:53:00 AM	23	6/29/01 9:56:00 AM	19	6/29/01 9:59:00 AM	27	6/29/01 10:02:00 AM	29
6/29/01 9:53:00 AM	31	6/29/01 9:56:00 AM	16	6/29/01 9:59:00 AM	19	6/29/01 10:02:00 AM	34
6/29/01 9:53:00 AM	45	6/29/01 9:56:00 AM	17	6/29/01 9:59:00 AM	13	6/29/01 10:02:00 AM	15
6/29/01 9:53:00 AM	42	6/29/01 9:56:00 AM	28	6/29/01 9:59:00 AM	22	6/29/01 10:02:00 AM	15
6/29/01 9:53:00 AM	53	6/29/01 9:56:00 AM	30	6/29/01 9:59:00 AM	22	6/29/01 10:02:00 AM	13
6/29/01 9:53:00 AM	45	6/29/01 9:56:00 AM	19	6/29/01 9:59:00 AM	23	6/29/01 10:02:00 AM	15
6/29/01 9:53:00 AM	23	6/29/01 9:56:00 AM	19	6/29/01 9:59:00 AM	27	6/29/01 10:02:00 AM	29
6/29/01 9:54:00 AM	18	6/29/01 9:56:00 AM	16	6/29/01 9:59:00 AM	19	6/29/01 10:02:00 AM	34
6/29/01 9:54:00 AM	18	6/29/01 9:57:00 AM	14	6/29/01 9:59:00 AM	13	6/29/01 10:02:00 AM	15
6/29/01 9:54:00 AM	22	6/29/01 9:57:00 AM	42	6/29/01 10:00:00 AM	11	6/29/01 10:02:00 AM	15
6/29/01 9:54:00 AM	20	6/29/01 9:57:00 AM	54	6/29/01 10:00:00 AM	14	6/29/01 10:03:00 AM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 10:03:00 AM	25	6/29/01 10:06:00 AM	14	6/29/01 10:08:00 AM	15	6/29/01 10:11:00 AM	15
6/29/01 10:03:00 AM	17	6/29/01 10:06:00 AM	15	6/29/01 10:09:00 AM	19	6/29/01 10:11:00 AM	13
6/29/01 10:03:00 AM	22	6/29/01 10:06:00 AM	13	6/29/01 10:09:00 AM	20	6/29/01 10:12:00 AM	23
6/29/01 10:03:00 AM	19	6/29/01 10:06:00 AM	12	6/29/01 10:09:00 AM	19	6/29/01 10:12:00 AM	28
6/29/01 10:03:00 AM	18	6/29/01 10:06:00 AM	20	6/29/01 10:09:00 AM	15	6/29/01 10:12:00 AM	14
6/29/01 10:03:00 AM	24	6/29/01 10:06:00 AM	24	6/29/01 10:09:00 AM	15	6/29/01 10:12:00 AM	14
6/29/01 10:03:00 AM	25	6/29/01 10:06:00 AM	14	6/29/01 10:09:00 AM	14	6/29/01 10:12:00 AM	22
6/29/01 10:03:00 AM	17	6/29/01 10:06:00 AM	15	6/29/01 10:09:00 AM	19	6/29/01 10:12:00 AM	28
6/29/01 10:03:00 AM	22	6/29/01 10:06:00 AM	13	6/29/01 10:09:00 AM	20	6/29/01 10:12:00 AM	23
6/29/01 10:03:00 AM	19	6/29/01 10:06:00 AM	12	6/29/01 10:09:00 AM	19	6/29/01 10:12:00 AM	28
6/29/01 10:03:00 AM	18	6/29/01 10:06:00 AM	20	6/29/01 10:09:00 AM	15	6/29/01 10:12:00 AM	14
6/29/01 10:04:00 AM	11	6/29/01 10:06:00 AM	24	6/29/01 10:09:00 AM	15	6/29/01 10:12:00 AM	14
6/29/01 10:04:00 AM	17	6/29/01 10:07:00 AM	15	6/29/01 10:09:00 AM	14	6/29/01 10:12:00 AM	22
6/29/01 10:04:00 AM	20	6/29/01 10:07:00 AM	14	6/29/01 10:10:00 AM	13	6/29/01 10:12:00 AM	28
6/29/01 10:04:00 AM	13	6/29/01 10:07:00 AM	13	6/29/01 10:10:00 AM	11	6/29/01 10:13:00 AM	20
6/29/01 10:04:00 AM	12	6/29/01 10:07:00 AM	14	6/29/01 10:10:00 AM	17	6/29/01 10:13:00 AM	16
6/29/01 10:04:00 AM	12	6/29/01 10:07:00 AM	19	6/29/01 10:10:00 AM	19	6/29/01 10:13:00 AM	15
6/29/01 10:04:00 AM	11	6/29/01 10:07:00 AM	16	6/29/01 10:10:00 AM	36	6/29/01 10:13:00 AM	17
6/29/01 10:04:00 AM	17	6/29/01 10:07:00 AM	15	6/29/01 10:10:00 AM	43	6/29/01 10:13:00 AM	19
6/29/01 10:04:00 AM	20	6/29/01 10:07:00 AM	14	6/29/01 10:10:00 AM	13	6/29/01 10:13:00 AM	16
6/29/01 10:04:00 AM	13	6/29/01 10:07:00 AM	13	6/29/01 10:10:00 AM	11	6/29/01 10:13:00 AM	20
6/29/01 10:04:00 AM	12	6/29/01 10:07:00 AM	14	6/29/01 10:10:00 AM	17	6/29/01 10:13:00 AM	16
6/29/01 10:04:00 AM	12	6/29/01 10:07:00 AM	19	6/29/01 10:10:00 AM	19	6/29/01 10:13:00 AM	15
6/29/01 10:05:00 AM	14	6/29/01 10:07:00 AM	16	6/29/01 10:10:00 AM	36	6/29/01 10:13:00 AM	17
6/29/01 10:05:00 AM	18	6/29/01 10:08:00 AM	12	6/29/01 10:10:00 AM	43	6/29/01 10:13:00 AM	19
6/29/01 10:05:00 AM	20	6/29/01 10:08:00 AM	16	6/29/01 10:11:00 AM	13	6/29/01 10:13:00 AM	16
6/29/01 10:05:00 AM	17	6/29/01 10:08:00 AM	20	6/29/01 10:11:00 AM	12	6/29/01 10:14:00 AM	16
6/29/01 10:05:00 AM	14	6/29/01 10:08:00 AM	22	6/29/01 10:11:00 AM	29	6/29/01 10:14:00 AM	21
6/29/01 10:05:00 AM	11	6/29/01 10:08:00 AM	12	6/29/01 10:11:00 AM	40	6/29/01 10:14:00 AM	17
6/29/01 10:05:00 AM	14	6/29/01 10:08:00 AM	15	6/29/01 10:11:00 AM	15	6/29/01 10:14:00 AM	16
6/29/01 10:05:00 AM	18	6/29/01 10:08:00 AM	12	6/29/01 10:11:00 AM	13	6/29/01 10:14:00 AM	28
6/29/01 10:05:00 AM	20	6/29/01 10:08:00 AM	16	6/29/01 10:11:00 AM	13	6/29/01 10:14:00 AM	34
6/29/01 10:05:00 AM	17	6/29/01 10:08:00 AM	20	6/29/01 10:11:00 AM	12	6/29/01 10:14:00 AM	16
6/29/01 10:05:00 AM	14	6/29/01 10:08:00 AM	22	6/29/01 10:11:00 AM	29	6/29/01 10:14:00 AM	21
6/29/01 10:05:00 AM	11	6/29/01 10:08:00 AM	12	6/29/01 10:11:00 AM	40	6/29/01 10:14:00 AM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 10:14:00 AM	16	6/29/01 10:17:00 AM	14	6/29/01 10:20:00 AM	15	6/29/01 10:23:00 AM	35
6/29/01 10:14:00 AM	28	6/29/01 10:17:00 AM	12	6/29/01 10:20:00 AM	13	6/29/01 10:23:00 AM	37
6/29/01 10:14:00 AM	34	6/29/01 10:17:00 AM	14	6/29/01 10:20:00 AM	10	6/29/01 10:23:00 AM	17
6/29/01 10:15:00 AM	24	6/29/01 10:17:00 AM	17	6/29/01 10:20:00 AM	22	6/29/01 10:23:00 AM	16
6/29/01 10:15:00 AM	15	6/29/01 10:18:00 AM	17	6/29/01 10:20:00 AM	40	6/29/01 10:23:00 AM	16
6/29/01 10:15:00 AM	13	6/29/01 10:18:00 AM	16	6/29/01 10:21:00 AM	48	6/29/01 10:23:00 AM	19
6/29/01 10:15:00 AM	12	6/29/01 10:18:00 AM	16	6/29/01 10:21:00 AM	38	6/29/01 10:24:00 AM	14
6/29/01 10:15:00 AM	10	6/29/01 10:18:00 AM	14	6/29/01 10:21:00 AM	16	6/29/01 10:24:00 AM	12
6/29/01 10:15:00 AM	14	6/29/01 10:18:00 AM	14	6/29/01 10:21:00 AM	13	6/29/01 10:24:00 AM	13
6/29/01 10:15:00 AM	24	6/29/01 10:18:00 AM	16	6/29/01 10:21:00 AM	27	6/29/01 10:24:00 AM	15
6/29/01 10:15:00 AM	15	6/29/01 10:18:00 AM	17	6/29/01 10:21:00 AM	33	6/29/01 10:24:00 AM	18
6/29/01 10:15:00 AM	13	6/29/01 10:18:00 AM	16	6/29/01 10:21:00 AM	48	6/29/01 10:24:00 AM	18
6/29/01 10:15:00 AM	12	6/29/01 10:18:00 AM	16	6/29/01 10:21:00 AM	38	6/29/01 10:24:00 AM	14
6/29/01 10:15:00 AM	10	6/29/01 10:18:00 AM	14	6/29/01 10:21:00 AM	16	6/29/01 10:24:00 AM	12
6/29/01 10:15:00 AM	14	6/29/01 10:18:00 AM	14	6/29/01 10:21:00 AM	13	6/29/01 10:24:00 AM	13
6/29/01 10:16:00 AM	12	6/29/01 10:18:00 AM	16	6/29/01 10:21:00 AM	27	6/29/01 10:24:00 AM	15
6/29/01 10:16:00 AM	18	6/29/01 10:19:00 AM	17	6/29/01 10:21:00 AM	33	6/29/01 10:24:00 AM	18
6/29/01 10:16:00 AM	21	6/29/01 10:19:00 AM	14	6/29/01 10:22:00 AM	11	6/29/01 10:24:00 AM	18
6/29/01 10:16:00 AM	16	6/29/01 10:19:00 AM	15	6/29/01 10:22:00 AM	21	6/29/01 10:25:00 AM	18
6/29/01 10:16:00 AM	15	6/29/01 10:19:00 AM	17	6/29/01 10:22:00 AM	26	6/29/01 10:25:00 AM	17
6/29/01 10:16:00 AM	12	6/29/01 10:19:00 AM	20	6/29/01 10:22:00 AM	27	6/29/01 10:25:00 AM	26
6/29/01 10:16:00 AM	12	6/29/01 10:19:00 AM	16	6/29/01 10:22:00 AM	34	6/29/01 10:25:00 AM	55
6/29/01 10:16:00 AM	18	6/29/01 10:19:00 AM	17	6/29/01 10:22:00 AM	20	6/29/01 10:25:00 AM	53
6/29/01 10:16:00 AM	21	6/29/01 10:19:00 AM	14	6/29/01 10:22:00 AM	11	6/29/01 10:25:00 AM	30
6/29/01 10:16:00 AM	16	6/29/01 10:19:00 AM	15	6/29/01 10:22:00 AM	21	6/29/01 10:25:00 AM	18
6/29/01 10:16:00 AM	15	6/29/01 10:19:00 AM	17	6/29/01 10:22:00 AM	26	6/29/01 10:25:00 AM	17
6/29/01 10:16:00 AM	12	6/29/01 10:19:00 AM	20	6/29/01 10:22:00 AM	27	6/29/01 10:25:00 AM	26
6/29/01 10:17:00 AM	16	6/29/01 10:19:00 AM	16	6/29/01 10:22:00 AM	34	6/29/01 10:25:00 AM	55
6/29/01 10:17:00 AM	19	6/29/01 10:20:00 AM	15	6/29/01 10:22:00 AM	20	6/29/01 10:25:00 AM	53
6/29/01 10:17:00 AM	14	6/29/01 10:20:00 AM	15	6/29/01 10:23:00 AM	35	6/29/01 10:25:00 AM	30
6/29/01 10:17:00 AM	12	6/29/01 10:20:00 AM	13	6/29/01 10:23:00 AM	37	6/29/01 10:26:00 AM	39
6/29/01 10:17:00 AM	14	6/29/01 10:20:00 AM	10	6/29/01 10:23:00 AM	17	6/29/01 10:26:00 AM	36
6/29/01 10:17:00 AM	17	6/29/01 10:20:00 AM	22	6/29/01 10:23:00 AM	16	6/29/01 10:26:00 AM	14
6/29/01 10:17:00 AM	16	6/29/01 10:20:00 AM	40	6/29/01 10:23:00 AM	16	6/29/01 10:26:00 AM	16
6/29/01 10:17:00 AM	19	6/29/01 10:20:00 AM	15	6/29/01 10:23:00 AM	19	6/29/01 10:26:00 AM	27

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 10:26:00 AM	57	6/29/01 10:29:00 AM	14	6/29/01 10:32:00 AM	23	6/29/01 10:35:00 AM	26
6/29/01 10:26:00 AM	39	6/29/01 10:29:00 AM	31	6/29/01 10:32:00 AM	14	6/29/01 10:35:00 AM	20
6/29/01 10:26:00 AM	36	6/29/01 10:29:00 AM	33	6/29/01 10:32:00 AM	14	6/29/01 10:35:00 AM	20
6/29/01 10:26:00 AM	14	6/29/01 10:29:00 AM	26	6/29/01 10:32:00 AM	15	6/29/01 10:35:00 AM	29
6/29/01 10:26:00 AM	16	6/29/01 10:29:00 AM	20	6/29/01 10:32:00 AM	15	6/29/01 10:35:00 AM	52
6/29/01 10:26:00 AM	27	6/29/01 10:29:00 AM	15	6/29/01 10:32:00 AM	21	6/29/01 10:35:00 AM	21
6/29/01 10:26:00 AM	57	6/29/01 10:29:00 AM	14	6/29/01 10:32:00 AM	23	6/29/01 10:35:00 AM	26
6/29/01 10:27:00 AM	53	6/29/01 10:29:00 AM	31	6/29/01 10:32:00 AM	14	6/29/01 10:35:00 AM	20
6/29/01 10:27:00 AM	15	6/29/01 10:30:00 AM	62	6/29/01 10:32:00 AM	14	6/29/01 10:35:00 AM	20
6/29/01 10:27:00 AM	14	6/29/01 10:30:00 AM	48	6/29/01 10:33:00 AM	11	6/29/01 10:35:00 AM	29
6/29/01 10:27:00 AM	16	6/29/01 10:30:00 AM	23	6/29/01 10:33:00 AM	10	6/29/01 10:36:00 AM	25
6/29/01 10:27:00 AM	17	6/29/01 10:30:00 AM	27	6/29/01 10:33:00 AM	12	6/29/01 10:36:00 AM	18
6/29/01 10:27:00 AM	16	6/29/01 10:30:00 AM	25	6/29/01 10:33:00 AM	32	6/29/01 10:36:00 AM	17
6/29/01 10:27:00 AM	53	6/29/01 10:30:00 AM	15	6/29/01 10:33:00 AM	45	6/29/01 10:36:00 AM	17
6/29/01 10:27:00 AM	15	6/29/01 10:30:00 AM	62	6/29/01 10:33:00 AM	26	6/29/01 10:36:00 AM	17
6/29/01 10:27:00 AM	14	6/29/01 10:30:00 AM	48	6/29/01 10:33:00 AM	11	6/29/01 10:36:00 AM	20
6/29/01 10:27:00 AM	16	6/29/01 10:30:00 AM	23	6/29/01 10:33:00 AM	10	6/29/01 10:36:00 AM	25
6/29/01 10:27:00 AM	17	6/29/01 10:30:00 AM	27	6/29/01 10:33:00 AM	12	6/29/01 10:36:00 AM	18
6/29/01 10:27:00 AM	16	6/29/01 10:30:00 AM	25	6/29/01 10:33:00 AM	32	6/29/01 10:36:00 AM	17
6/29/01 10:28:00 AM	16	6/29/01 10:30:00 AM	15	6/29/01 10:33:00 AM	45	6/29/01 10:36:00 AM	17
6/29/01 10:28:00 AM	24	6/29/01 10:31:00 AM	17	6/29/01 10:33:00 AM	26	6/29/01 10:36:00 AM	17
6/29/01 10:28:00 AM	29	6/29/01 10:31:00 AM	24	6/29/01 10:34:00 AM	28	6/29/01 10:36:00 AM	20
6/29/01 10:28:00 AM	111	6/29/01 10:31:00 AM	30	6/29/01 10:34:00 AM	20	6/29/01 10:37:00 AM	19
6/29/01 10:28:00 AM	178	6/29/01 10:31:00 AM	18	6/29/01 10:34:00 AM	16	6/29/01 10:37:00 AM	28
6/29/01 10:28:00 AM	55	6/29/01 10:31:00 AM	12	6/29/01 10:34:00 AM	22	6/29/01 10:37:00 AM	73
6/29/01 10:28:00 AM	16	6/29/01 10:31:00 AM	13	6/29/01 10:34:00 AM	21	6/29/01 10:37:00 AM	96
6/29/01 10:28:00 AM	24	6/29/01 10:31:00 AM	17	6/29/01 10:34:00 AM	40	6/29/01 10:37:00 AM	48
6/29/01 10:28:00 AM	29	6/29/01 10:31:00 AM	24	6/29/01 10:34:00 AM	28	6/29/01 10:37:00 AM	31
6/29/01 10:28:00 AM	111	6/29/01 10:31:00 AM	30	6/29/01 10:34:00 AM	20	6/29/01 10:37:00 AM	19
6/29/01 10:28:00 AM	178	6/29/01 10:31:00 AM	18	6/29/01 10:34:00 AM	16	6/29/01 10:37:00 AM	28
6/29/01 10:28:00 AM	55	6/29/01 10:31:00 AM	12	6/29/01 10:34:00 AM	22	6/29/01 10:37:00 AM	73
6/29/01 10:29:00 AM	33	6/29/01 10:31:00 AM	13	6/29/01 10:34:00 AM	21	6/29/01 10:37:00 AM	96
6/29/01 10:29:00 AM	26	6/29/01 10:32:00 AM	15	6/29/01 10:34:00 AM	40	6/29/01 10:37:00 AM	48
6/29/01 10:29:00 AM	20	6/29/01 10:32:00 AM	15	6/29/01 10:35:00 AM	52	6/29/01 10:37:00 AM	31
6/29/01 10:29:00 AM	15	6/29/01 10:32:00 AM	21	6/29/01 10:35:00 AM	21	6/29/01 10:38:00 AM	35

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 10:38:00 AM	29	6/29/01 10:41:00 AM	44	6/29/01 10:43:00 AM	20	6/29/01 10:46:00 AM	17
6/29/01 10:38:00 AM	36	6/29/01 10:41:00 AM	64	6/29/01 10:44:00 AM	95	6/29/01 10:46:00 AM	16
6/29/01 10:38:00 AM	28	6/29/01 10:41:00 AM	26	6/29/01 10:44:00 AM	153	6/29/01 10:47:00 AM	15
6/29/01 10:38:00 AM	263	6/29/01 10:41:00 AM	19	6/29/01 10:44:00 AM	68	6/29/01 10:47:00 AM	15
6/29/01 10:38:00 AM	411	6/29/01 10:41:00 AM	19	6/29/01 10:44:00 AM	47	6/29/01 10:47:00 AM	18
6/29/01 10:38:00 AM	35	6/29/01 10:41:00 AM	20	6/29/01 10:44:00 AM	26	6/29/01 10:47:00 AM	18
6/29/01 10:38:00 AM	29	6/29/01 10:41:00 AM	44	6/29/01 10:44:00 AM	22	6/29/01 10:47:00 AM	16
6/29/01 10:38:00 AM	36	6/29/01 10:41:00 AM	64	6/29/01 10:44:00 AM	95	6/29/01 10:47:00 AM	15
6/29/01 10:38:00 AM	28	6/29/01 10:41:00 AM	26	6/29/01 10:44:00 AM	153	6/29/01 10:47:00 AM	15
6/29/01 10:38:00 AM	263	6/29/01 10:41:00 AM	19	6/29/01 10:44:00 AM	68	6/29/01 10:47:00 AM	15
6/29/01 10:38:00 AM	411	6/29/01 10:41:00 AM	19	6/29/01 10:44:00 AM	47	6/29/01 10:47:00 AM	18
6/29/01 10:39:00 AM	62	6/29/01 10:41:00 AM	20	6/29/01 10:44:00 AM	26	6/29/01 10:47:00 AM	18
6/29/01 10:39:00 AM	24	6/29/01 10:42:00 AM	25	6/29/01 10:44:00 AM	22	6/29/01 10:47:00 AM	16
6/29/01 10:39:00 AM	15	6/29/01 10:42:00 AM	33	6/29/01 10:45:00 AM	20	6/29/01 10:47:00 AM	15
6/29/01 10:39:00 AM	16	6/29/01 10:42:00 AM	24	6/29/01 10:45:00 AM	16	6/29/01 10:48:00 AM	16
6/29/01 10:39:00 AM	18	6/29/01 10:42:00 AM	19	6/29/01 10:45:00 AM	23	6/29/01 10:48:00 AM	14
6/29/01 10:39:00 AM	21	6/29/01 10:42:00 AM	22	6/29/01 10:45:00 AM	26	6/29/01 10:48:00 AM	12
6/29/01 10:39:00 AM	62	6/29/01 10:42:00 AM	20	6/29/01 10:45:00 AM	32	6/29/01 10:48:00 AM	14
6/29/01 10:39:00 AM	24	6/29/01 10:42:00 AM	25	6/29/01 10:45:00 AM	30	6/29/01 10:48:00 AM	17
6/29/01 10:39:00 AM	15	6/29/01 10:42:00 AM	33	6/29/01 10:45:00 AM	20	6/29/01 10:48:00 AM	73
6/29/01 10:39:00 AM	16	6/29/01 10:42:00 AM	24	6/29/01 10:45:00 AM	16	6/29/01 10:48:00 AM	16
6/29/01 10:39:00 AM	18	6/29/01 10:42:00 AM	19	6/29/01 10:45:00 AM	23	6/29/01 10:48:00 AM	14
6/29/01 10:39:00 AM	21	6/29/01 10:42:00 AM	22	6/29/01 10:45:00 AM	26	6/29/01 10:48:00 AM	12
6/29/01 10:40:00 AM	36	6/29/01 10:42:00 AM	20	6/29/01 10:45:00 AM	32	6/29/01 10:48:00 AM	14
6/29/01 10:40:00 AM	46	6/29/01 10:43:00 AM	18	6/29/01 10:45:00 AM	30	6/29/01 10:48:00 AM	17
6/29/01 10:40:00 AM	26	6/29/01 10:43:00 AM	19	6/29/01 10:46:00 AM	16	6/29/01 10:48:00 AM	73
6/29/01 10:40:00 AM	18	6/29/01 10:43:00 AM	17	6/29/01 10:46:00 AM	16	6/29/01 10:49:00 AM	112
6/29/01 10:40:00 AM	16	6/29/01 10:43:00 AM	18	6/29/01 10:46:00 AM	20	6/29/01 10:49:00 AM	38
6/29/01 10:40:00 AM	17	6/29/01 10:43:00 AM	18	6/29/01 10:46:00 AM	25	6/29/01 10:49:00 AM	30
6/29/01 10:40:00 AM	36	6/29/01 10:43:00 AM	20	6/29/01 10:46:00 AM	17	6/29/01 10:49:00 AM	28
6/29/01 10:40:00 AM	46	6/29/01 10:43:00 AM	18	6/29/01 10:46:00 AM	16	6/29/01 10:49:00 AM	25
6/29/01 10:40:00 AM	26	6/29/01 10:43:00 AM	19	6/29/01 10:46:00 AM	16	6/29/01 10:49:00 AM	62
6/29/01 10:40:00 AM	18	6/29/01 10:43:00 AM	17	6/29/01 10:46:00 AM	16	6/29/01 10:49:00 AM	112
6/29/01 10:40:00 AM	16	6/29/01 10:43:00 AM	18	6/29/01 10:46:00 AM	20	6/29/01 10:49:00 AM	38
6/29/01 10:40:00 AM	17	6/29/01 10:43:00 AM	18	6/29/01 10:46:00 AM	25	6/29/01 10:49:00 AM	30

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 10:49:00 AM	28	6/29/01 10:52:00 AM	18	6/29/01 10:55:00 AM	31	6/29/01 10:58:00 AM	16
6/29/01 10:49:00 AM	25	6/29/01 10:52:00 AM	44	6/29/01 10:55:00 AM	75	6/29/01 10:58:00 AM	18
6/29/01 10:49:00 AM	62	6/29/01 10:52:00 AM	66	6/29/01 10:55:00 AM	76	6/29/01 10:58:00 AM	18
6/29/01 10:50:00 AM	83	6/29/01 10:52:00 AM	33	6/29/01 10:55:00 AM	22	6/29/01 10:58:00 AM	23
6/29/01 10:50:00 AM	24	6/29/01 10:53:00 AM	24	6/29/01 10:55:00 AM	25	6/29/01 10:58:00 AM	39
6/29/01 10:50:00 AM	21	6/29/01 10:53:00 AM	23	6/29/01 10:56:00 AM	27	6/29/01 10:58:00 AM	44
6/29/01 10:50:00 AM	36	6/29/01 10:53:00 AM	30	6/29/01 10:56:00 AM	39	6/29/01 10:59:00 AM	32
6/29/01 10:50:00 AM	50	6/29/01 10:53:00 AM	34	6/29/01 10:56:00 AM	56	6/29/01 10:59:00 AM	33
6/29/01 10:50:00 AM	36	6/29/01 10:53:00 AM	36	6/29/01 10:56:00 AM	39	6/29/01 10:59:00 AM	19
6/29/01 10:50:00 AM	83	6/29/01 10:53:00 AM	53	6/29/01 10:56:00 AM	36	6/29/01 10:59:00 AM	16
6/29/01 10:50:00 AM	24	6/29/01 10:53:00 AM	24	6/29/01 10:56:00 AM	25	6/29/01 10:59:00 AM	18
6/29/01 10:50:00 AM	21	6/29/01 10:53:00 AM	23	6/29/01 10:56:00 AM	27	6/29/01 10:59:00 AM	28
6/29/01 10:50:00 AM	36	6/29/01 10:53:00 AM	30	6/29/01 10:56:00 AM	39	6/29/01 10:59:00 AM	32
6/29/01 10:50:00 AM	50	6/29/01 10:53:00 AM	34	6/29/01 10:56:00 AM	56	6/29/01 10:59:00 AM	33
6/29/01 10:50:00 AM	36	6/29/01 10:53:00 AM	36	6/29/01 10:56:00 AM	39	6/29/01 10:59:00 AM	19
6/29/01 10:51:00 AM	16	6/29/01 10:53:00 AM	53	6/29/01 10:56:00 AM	36	6/29/01 10:59:00 AM	16
6/29/01 10:51:00 AM	18	6/29/01 10:54:00 AM	38	6/29/01 10:56:00 AM	25	6/29/01 10:59:00 AM	18
6/29/01 10:51:00 AM	15	6/29/01 10:54:00 AM	22	6/29/01 10:57:00 AM	18	6/29/01 10:59:00 AM	28
6/29/01 10:51:00 AM	15	6/29/01 10:54:00 AM	31	6/29/01 10:57:00 AM	19	6/29/01 11:00:00 AM	30
6/29/01 10:51:00 AM	17	6/29/01 10:54:00 AM	33	6/29/01 10:57:00 AM	13	6/29/01 11:00:00 AM	15
6/29/01 10:51:00 AM	30	6/29/01 10:54:00 AM	23	6/29/01 10:57:00 AM	23	6/29/01 11:00:00 AM	17
6/29/01 10:51:00 AM	16	6/29/01 10:54:00 AM	18	6/29/01 10:57:00 AM	31	6/29/01 11:00:00 AM	16
6/29/01 10:51:00 AM	18	6/29/01 10:54:00 AM	38	6/29/01 10:57:00 AM	16	6/29/01 11:00:00 AM	18
6/29/01 10:51:00 AM	15	6/29/01 10:54:00 AM	22	6/29/01 10:57:00 AM	18	6/29/01 11:00:00 AM	20
6/29/01 10:51:00 AM	15	6/29/01 10:54:00 AM	31	6/29/01 10:57:00 AM	19	6/29/01 11:00:00 AM	30
6/29/01 10:51:00 AM	17	6/29/01 10:54:00 AM	33	6/29/01 10:57:00 AM	13	6/29/01 11:00:00 AM	15
6/29/01 10:51:00 AM	30	6/29/01 10:54:00 AM	23	6/29/01 10:57:00 AM	23	6/29/01 11:00:00 AM	17
6/29/01 10:52:00 AM	40	6/29/01 10:54:00 AM	18	6/29/01 10:57:00 AM	31	6/29/01 11:00:00 AM	16
6/29/01 10:52:00 AM	25	6/29/01 10:55:00 AM	17	6/29/01 10:57:00 AM	16	6/29/01 11:00:00 AM	18
6/29/01 10:52:00 AM	18	6/29/01 10:55:00 AM	31	6/29/01 10:58:00 AM	16	6/29/01 11:00:00 AM	20
6/29/01 10:52:00 AM	44	6/29/01 10:55:00 AM	75	6/29/01 10:58:00 AM	18	6/29/01 11:01:00 AM	21
6/29/01 10:52:00 AM	66	6/29/01 10:55:00 AM	76	6/29/01 10:58:00 AM	18	6/29/01 11:01:00 AM	20
6/29/01 10:52:00 AM	33	6/29/01 10:55:00 AM	22	6/29/01 10:58:00 AM	23	6/29/01 11:01:00 AM	27
6/29/01 10:52:00 AM	40	6/29/01 10:55:00 AM	25	6/29/01 10:58:00 AM	39	6/29/01 11:01:00 AM	47
6/29/01 10:52:00 AM	25	6/29/01 10:55:00 AM	17	6/29/01 10:58:00 AM	44	6/29/01 11:01:00 AM	43

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 11:01:00 AM	17	6/29/01 11:04:00 AM	21	6/29/01 11:07:00 AM	116	6/29/01 11:10:00 AM	40
6/29/01 11:01:00 AM	21	6/29/01 11:04:00 AM	19	6/29/01 11:07:00 AM	191	6/29/01 11:10:00 AM	28
6/29/01 11:01:00 AM	20	6/29/01 11:04:00 AM	14	6/29/01 11:07:00 AM	83	6/29/01 11:10:00 AM	20
6/29/01 11:01:00 AM	27	6/29/01 11:04:00 AM	15	6/29/01 11:07:00 AM	44	6/29/01 11:10:00 AM	16
6/29/01 11:01:00 AM	47	6/29/01 11:04:00 AM	19	6/29/01 11:07:00 AM	34	6/29/01 11:10:00 AM	34
6/29/01 11:01:00 AM	43	6/29/01 11:04:00 AM	24	6/29/01 11:07:00 AM	38	6/29/01 11:10:00 AM	44
6/29/01 11:01:00 AM	17	6/29/01 11:04:00 AM	21	6/29/01 11:07:00 AM	116	6/29/01 11:10:00 AM	40
6/29/01 11:02:00 AM	19	6/29/01 11:04:00 AM	19	6/29/01 11:07:00 AM	191	6/29/01 11:10:00 AM	28
6/29/01 11:02:00 AM	19	6/29/01 11:05:00 AM	17	6/29/01 11:07:00 AM	83	6/29/01 11:10:00 AM	20
6/29/01 11:02:00 AM	27	6/29/01 11:05:00 AM	17	6/29/01 11:08:00 AM	41	6/29/01 11:10:00 AM	16
6/29/01 11:02:00 AM	45	6/29/01 11:05:00 AM	30	6/29/01 11:08:00 AM	32	6/29/01 11:11:00 AM	19
6/29/01 11:02:00 AM	31	6/29/01 11:05:00 AM	36	6/29/01 11:08:00 AM	32	6/29/01 11:11:00 AM	18
6/29/01 11:02:00 AM	17	6/29/01 11:05:00 AM	17	6/29/01 11:08:00 AM	24	6/29/01 11:11:00 AM	16
6/29/01 11:02:00 AM	19	6/29/01 11:05:00 AM	18	6/29/01 11:08:00 AM	20	6/29/01 11:11:00 AM	18
6/29/01 11:02:00 AM	19	6/29/01 11:05:00 AM	17	6/29/01 11:08:00 AM	34	6/29/01 11:11:00 AM	15
6/29/01 11:02:00 AM	27	6/29/01 11:05:00 AM	17	6/29/01 11:08:00 AM	41	6/29/01 11:11:00 AM	15
6/29/01 11:02:00 AM	45	6/29/01 11:05:00 AM	30	6/29/01 11:08:00 AM	32	6/29/01 11:11:00 AM	19
6/29/01 11:02:00 AM	31	6/29/01 11:05:00 AM	36	6/29/01 11:08:00 AM	32	6/29/01 11:11:00 AM	18
6/29/01 11:02:00 AM	17	6/29/01 11:05:00 AM	17	6/29/01 11:08:00 AM	24	6/29/01 11:11:00 AM	16
6/29/01 11:03:00 AM	25	6/29/01 11:05:00 AM	18	6/29/01 11:08:00 AM	20	6/29/01 11:11:00 AM	18
6/29/01 11:03:00 AM	47	6/29/01 11:06:00 AM	23	6/29/01 11:08:00 AM	34	6/29/01 11:11:00 AM	15
6/29/01 11:03:00 AM	68	6/29/01 11:06:00 AM	21	6/29/01 11:09:00 AM	38	6/29/01 11:11:00 AM	15
6/29/01 11:03:00 AM	45	6/29/01 11:06:00 AM	17	6/29/01 11:09:00 AM	26	6/29/01 11:12:00 AM	14
6/29/01 11:03:00 AM	26	6/29/01 11:06:00 AM	34	6/29/01 11:09:00 AM	17	6/29/01 11:12:00 AM	9
6/29/01 11:03:00 AM	19	6/29/01 11:06:00 AM	41	6/29/01 11:09:00 AM	30	6/29/01 11:12:00 AM	35
6/29/01 11:03:00 AM	25	6/29/01 11:06:00 AM	31	6/29/01 11:09:00 AM	49	6/29/01 11:12:00 AM	96
6/29/01 11:03:00 AM	47	6/29/01 11:06:00 AM	23	6/29/01 11:09:00 AM	44	6/29/01 11:12:00 AM	105
6/29/01 11:03:00 AM	68	6/29/01 11:06:00 AM	21	6/29/01 11:09:00 AM	38	6/29/01 11:12:00 AM	55
6/29/01 11:03:00 AM	45	6/29/01 11:06:00 AM	17	6/29/01 11:09:00 AM	26	6/29/01 11:12:00 AM	14
6/29/01 11:03:00 AM	26	6/29/01 11:06:00 AM	34	6/29/01 11:09:00 AM	17	6/29/01 11:12:00 AM	9
6/29/01 11:03:00 AM	19	6/29/01 11:06:00 AM	41	6/29/01 11:09:00 AM	30	6/29/01 11:12:00 AM	35
6/29/01 11:04:00 AM	14	6/29/01 11:06:00 AM	31	6/29/01 11:09:00 AM	49	6/29/01 11:12:00 AM	96
6/29/01 11:04:00 AM	15	6/29/01 11:07:00 AM	44	6/29/01 11:09:00 AM	44	6/29/01 11:12:00 AM	105
6/29/01 11:04:00 AM	19	6/29/01 11:07:00 AM	34	6/29/01 11:10:00 AM	34	6/29/01 11:12:00 AM	55
6/29/01 11:04:00 AM	24	6/29/01 11:07:00 AM	38	6/29/01 11:10:00 AM	44	6/29/01 11:13:00 AM	35

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 11:13:00 AM	46	6/29/01 11:16:00 AM	19	6/29/01 11:18:00 AM	112	6/29/01 11:21:00 AM	17
6/29/01 11:13:00 AM	40	6/29/01 11:16:00 AM	20	6/29/01 11:19:00 AM	25	6/29/01 11:21:00 AM	19
6/29/01 11:13:00 AM	46	6/29/01 11:16:00 AM	26	6/29/01 11:19:00 AM	18	6/29/01 11:22:00 AM	24
6/29/01 11:13:00 AM	53	6/29/01 11:16:00 AM	20	6/29/01 11:19:00 AM	21	6/29/01 11:22:00 AM	23
6/29/01 11:13:00 AM	46	6/29/01 11:16:00 AM	18	6/29/01 11:19:00 AM	39	6/29/01 11:22:00 AM	24
6/29/01 11:13:00 AM	35	6/29/01 11:16:00 AM	19	6/29/01 11:19:00 AM	40	6/29/01 11:22:00 AM	38
6/29/01 11:13:00 AM	46	6/29/01 11:16:00 AM	19	6/29/01 11:19:00 AM	16	6/29/01 11:22:00 AM	49
6/29/01 11:13:00 AM	40	6/29/01 11:16:00 AM	20	6/29/01 11:19:00 AM	25	6/29/01 11:22:00 AM	56
6/29/01 11:13:00 AM	46	6/29/01 11:16:00 AM	26	6/29/01 11:19:00 AM	18	6/29/01 11:22:00 AM	24
6/29/01 11:13:00 AM	53	6/29/01 11:16:00 AM	20	6/29/01 11:19:00 AM	21	6/29/01 11:22:00 AM	23
6/29/01 11:13:00 AM	46	6/29/01 11:16:00 AM	18	6/29/01 11:19:00 AM	39	6/29/01 11:22:00 AM	24
6/29/01 11:14:00 AM	25	6/29/01 11:16:00 AM	19	6/29/01 11:19:00 AM	40	6/29/01 11:22:00 AM	38
6/29/01 11:14:00 AM	20	6/29/01 11:17:00 AM	19	6/29/01 11:19:00 AM	16	6/29/01 11:22:00 AM	49
6/29/01 11:14:00 AM	22	6/29/01 11:17:00 AM	17	6/29/01 11:20:00 AM	19	6/29/01 11:22:00 AM	56
6/29/01 11:14:00 AM	26	6/29/01 11:17:00 AM	19	6/29/01 11:20:00 AM	27	6/29/01 11:23:00 AM	44
6/29/01 11:14:00 AM	26	6/29/01 11:17:00 AM	17	6/29/01 11:20:00 AM	29	6/29/01 11:23:00 AM	14
6/29/01 11:14:00 AM	25	6/29/01 11:17:00 AM	19	6/29/01 11:20:00 AM	19	6/29/01 11:23:00 AM	15
6/29/01 11:14:00 AM	25	6/29/01 11:17:00 AM	22	6/29/01 11:20:00 AM	16	6/29/01 11:23:00 AM	21
6/29/01 11:14:00 AM	20	6/29/01 11:17:00 AM	19	6/29/01 11:20:00 AM	20	6/29/01 11:23:00 AM	37
6/29/01 11:14:00 AM	22	6/29/01 11:17:00 AM	17	6/29/01 11:20:00 AM	19	6/29/01 11:23:00 AM	47
6/29/01 11:14:00 AM	26	6/29/01 11:17:00 AM	19	6/29/01 11:20:00 AM	27	6/29/01 11:23:00 AM	44
6/29/01 11:14:00 AM	26	6/29/01 11:17:00 AM	17	6/29/01 11:20:00 AM	29	6/29/01 11:23:00 AM	14
6/29/01 11:14:00 AM	25	6/29/01 11:17:00 AM	19	6/29/01 11:20:00 AM	19	6/29/01 11:23:00 AM	15
6/29/01 11:15:00 AM	42	6/29/01 11:17:00 AM	22	6/29/01 11:20:00 AM	16	6/29/01 11:23:00 AM	21
6/29/01 11:15:00 AM	70	6/29/01 11:18:00 AM	22	6/29/01 11:20:00 AM	20	6/29/01 11:23:00 AM	37
6/29/01 11:15:00 AM	46	6/29/01 11:18:00 AM	22	6/29/01 11:21:00 AM	22	6/29/01 11:23:00 AM	47
6/29/01 11:15:00 AM	26	6/29/01 11:18:00 AM	21	6/29/01 11:21:00 AM	21	6/29/01 11:24:00 AM	38
6/29/01 11:15:00 AM	27	6/29/01 11:18:00 AM	20	6/29/01 11:21:00 AM	15	6/29/01 11:24:00 AM	27
6/29/01 11:15:00 AM	27	6/29/01 11:18:00 AM	83	6/29/01 11:21:00 AM	16	6/29/01 11:24:00 AM	24
6/29/01 11:15:00 AM	42	6/29/01 11:18:00 AM	112	6/29/01 11:21:00 AM	17	6/29/01 11:24:00 AM	24
6/29/01 11:15:00 AM	70	6/29/01 11:18:00 AM	22	6/29/01 11:21:00 AM	19	6/29/01 11:24:00 AM	27
6/29/01 11:15:00 AM	46	6/29/01 11:18:00 AM	22	6/29/01 11:21:00 AM	22	6/29/01 11:24:00 AM	26
6/29/01 11:15:00 AM	26	6/29/01 11:18:00 AM	21	6/29/01 11:21:00 AM	21	6/29/01 11:24:00 AM	38
6/29/01 11:15:00 AM	27	6/29/01 11:18:00 AM	20	6/29/01 11:21:00 AM	15	6/29/01 11:24:00 AM	27
6/29/01 11:15:00 AM	27	6/29/01 11:18:00 AM	83	6/29/01 11:21:00 AM	16	6/29/01 11:24:00 AM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 11:24:00 AM	24	6/29/01 11:27:00 AM	24	6/29/01 11:30:00 AM	18	6/29/01 11:33:00 AM	28
6/29/01 11:24:00 AM	27	6/29/01 11:27:00 AM	17	6/29/01 11:30:00 AM	17	6/29/01 11:33:00 AM	31
6/29/01 11:24:00 AM	26	6/29/01 11:27:00 AM	19	6/29/01 11:30:00 AM	32	6/29/01 11:33:00 AM	37
6/29/01 11:25:00 AM	28	6/29/01 11:27:00 AM	22	6/29/01 11:30:00 AM	38	6/29/01 11:33:00 AM	19
6/29/01 11:25:00 AM	21	6/29/01 11:28:00 AM	22	6/29/01 11:30:00 AM	18	6/29/01 11:33:00 AM	95
6/29/01 11:25:00 AM	21	6/29/01 11:28:00 AM	45	6/29/01 11:31:00 AM	36	6/29/01 11:33:00 AM	148
6/29/01 11:25:00 AM	20	6/29/01 11:28:00 AM	54	6/29/01 11:31:00 AM	51	6/29/01 11:34:00 AM	41
6/29/01 11:25:00 AM	20	6/29/01 11:28:00 AM	26	6/29/01 11:31:00 AM	27	6/29/01 11:34:00 AM	23
6/29/01 11:25:00 AM	23	6/29/01 11:28:00 AM	16	6/29/01 11:31:00 AM	23	6/29/01 11:34:00 AM	37
6/29/01 11:25:00 AM	28	6/29/01 11:28:00 AM	20	6/29/01 11:31:00 AM	25	6/29/01 11:34:00 AM	33
6/29/01 11:25:00 AM	21	6/29/01 11:28:00 AM	22	6/29/01 11:31:00 AM	18	6/29/01 11:34:00 AM	16
6/29/01 11:25:00 AM	21	6/29/01 11:28:00 AM	45	6/29/01 11:31:00 AM	36	6/29/01 11:34:00 AM	15
6/29/01 11:25:00 AM	20	6/29/01 11:28:00 AM	54	6/29/01 11:31:00 AM	51	6/29/01 11:34:00 AM	41
6/29/01 11:25:00 AM	20	6/29/01 11:28:00 AM	26	6/29/01 11:31:00 AM	27	6/29/01 11:34:00 AM	23
6/29/01 11:25:00 AM	23	6/29/01 11:28:00 AM	16	6/29/01 11:31:00 AM	23	6/29/01 11:34:00 AM	37
6/29/01 11:26:00 AM	25	6/29/01 11:28:00 AM	20	6/29/01 11:31:00 AM	25	6/29/01 11:34:00 AM	33
6/29/01 11:26:00 AM	24	6/29/01 11:29:00 AM	19	6/29/01 11:31:00 AM	18	6/29/01 11:34:00 AM	16
6/29/01 11:26:00 AM	22	6/29/01 11:29:00 AM	15	6/29/01 11:32:00 AM	16	6/29/01 11:34:00 AM	15
6/29/01 11:26:00 AM	19	6/29/01 11:29:00 AM	16	6/29/01 11:32:00 AM	20	6/29/01 11:35:00 AM	19
6/29/01 11:26:00 AM	24	6/29/01 11:29:00 AM	20	6/29/01 11:32:00 AM	24	6/29/01 11:35:00 AM	13
6/29/01 11:26:00 AM	28	6/29/01 11:29:00 AM	22	6/29/01 11:32:00 AM	25	6/29/01 11:35:00 AM	15
6/29/01 11:26:00 AM	25	6/29/01 11:29:00 AM	21	6/29/01 11:32:00 AM	28	6/29/01 11:35:00 AM	37
6/29/01 11:26:00 AM	24	6/29/01 11:29:00 AM	19	6/29/01 11:32:00 AM	30	6/29/01 11:35:00 AM	46
6/29/01 11:26:00 AM	22	6/29/01 11:29:00 AM	15	6/29/01 11:32:00 AM	16	6/29/01 11:35:00 AM	21
6/29/01 11:26:00 AM	19	6/29/01 11:29:00 AM	16	6/29/01 11:32:00 AM	20	6/29/01 11:35:00 AM	19
6/29/01 11:26:00 AM	24	6/29/01 11:29:00 AM	20	6/29/01 11:32:00 AM	24	6/29/01 11:35:00 AM	13
6/29/01 11:26:00 AM	28	6/29/01 11:29:00 AM	22	6/29/01 11:32:00 AM	25	6/29/01 11:35:00 AM	15
6/29/01 11:27:00 AM	24	6/29/01 11:29:00 AM	21	6/29/01 11:32:00 AM	28	6/29/01 11:35:00 AM	37
6/29/01 11:27:00 AM	27	6/29/01 11:30:00 AM	21	6/29/01 11:32:00 AM	30	6/29/01 11:35:00 AM	46
6/29/01 11:27:00 AM	24	6/29/01 11:30:00 AM	18	6/29/01 11:33:00 AM	28	6/29/01 11:35:00 AM	21
6/29/01 11:27:00 AM	17	6/29/01 11:30:00 AM	17	6/29/01 11:33:00 AM	31	6/29/01 11:36:00 AM	19
6/29/01 11:27:00 AM	19	6/29/01 11:30:00 AM	32	6/29/01 11:33:00 AM	37	6/29/01 11:36:00 AM	17
6/29/01 11:27:00 AM	22	6/29/01 11:30:00 AM	38	6/29/01 11:33:00 AM	19	6/29/01 11:36:00 AM	17
6/29/01 11:27:00 AM	24	6/29/01 11:30:00 AM	18	6/29/01 11:33:00 AM	95	6/29/01 11:36:00 AM	21
6/29/01 11:27:00 AM	27	6/29/01 11:30:00 AM	21	6/29/01 11:33:00 AM	148	6/29/01 11:36:00 AM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 11:36:00 AM	18	6/29/01 11:39:00 AM	48	6/29/01 11:42:00 AM	17	6/29/01 11:45:00 AM	17
6/29/01 11:36:00 AM	19	6/29/01 11:39:00 AM	55	6/29/01 11:42:00 AM	12	6/29/01 11:45:00 AM	21
6/29/01 11:36:00 AM	17	6/29/01 11:39:00 AM	36	6/29/01 11:42:00 AM	14	6/29/01 11:45:00 AM	22
6/29/01 11:36:00 AM	17	6/29/01 11:39:00 AM	27	6/29/01 11:42:00 AM	16	6/29/01 11:45:00 AM	18
6/29/01 11:36:00 AM	21	6/29/01 11:39:00 AM	40	6/29/01 11:42:00 AM	15	6/29/01 11:45:00 AM	32
6/29/01 11:36:00 AM	16	6/29/01 11:39:00 AM	46	6/29/01 11:42:00 AM	16	6/29/01 11:45:00 AM	15
6/29/01 11:36:00 AM	18	6/29/01 11:39:00 AM	48	6/29/01 11:42:00 AM	17	6/29/01 11:45:00 AM	17
6/29/01 11:37:00 AM	18	6/29/01 11:39:00 AM	55	6/29/01 11:42:00 AM	12	6/29/01 11:45:00 AM	21
6/29/01 11:37:00 AM	15	6/29/01 11:40:00 AM	16	6/29/01 11:42:00 AM	14	6/29/01 11:45:00 AM	22
6/29/01 11:37:00 AM	18	6/29/01 11:40:00 AM	27	6/29/01 11:43:00 AM	17	6/29/01 11:45:00 AM	18
6/29/01 11:37:00 AM	18	6/29/01 11:40:00 AM	44	6/29/01 11:43:00 AM	70	6/29/01 11:46:00 AM	22
6/29/01 11:37:00 AM	24	6/29/01 11:40:00 AM	30	6/29/01 11:43:00 AM	96	6/29/01 11:46:00 AM	16
6/29/01 11:37:00 AM	26	6/29/01 11:40:00 AM	13	6/29/01 11:43:00 AM	19	6/29/01 11:46:00 AM	14
6/29/01 11:37:00 AM	18	6/29/01 11:40:00 AM	13	6/29/01 11:43:00 AM	26	6/29/01 11:46:00 AM	17
6/29/01 11:37:00 AM	15	6/29/01 11:40:00 AM	16	6/29/01 11:43:00 AM	30	6/29/01 11:46:00 AM	17
6/29/01 11:37:00 AM	18	6/29/01 11:40:00 AM	27	6/29/01 11:43:00 AM	17	6/29/01 11:46:00 AM	11
6/29/01 11:37:00 AM	18	6/29/01 11:40:00 AM	44	6/29/01 11:43:00 AM	70	6/29/01 11:46:00 AM	22
6/29/01 11:37:00 AM	24	6/29/01 11:40:00 AM	30	6/29/01 11:43:00 AM	96	6/29/01 11:46:00 AM	16
6/29/01 11:37:00 AM	26	6/29/01 11:40:00 AM	13	6/29/01 11:43:00 AM	19	6/29/01 11:46:00 AM	14
6/29/01 11:38:00 AM	18	6/29/01 11:40:00 AM	13	6/29/01 11:43:00 AM	26	6/29/01 11:46:00 AM	17
6/29/01 11:38:00 AM	19	6/29/01 11:41:00 AM	16	6/29/01 11:43:00 AM	30	6/29/01 11:46:00 AM	17
6/29/01 11:38:00 AM	16	6/29/01 11:41:00 AM	17	6/29/01 11:44:00 AM	31	6/29/01 11:46:00 AM	11
6/29/01 11:38:00 AM	19	6/29/01 11:41:00 AM	16	6/29/01 11:44:00 AM	24	6/29/01 11:47:00 AM	13
6/29/01 11:38:00 AM	38	6/29/01 11:41:00 AM	17	6/29/01 11:44:00 AM	17	6/29/01 11:47:00 AM	16
6/29/01 11:38:00 AM	49	6/29/01 11:41:00 AM	18	6/29/01 11:44:00 AM	28	6/29/01 11:47:00 AM	17
6/29/01 11:38:00 AM	18	6/29/01 11:41:00 AM	17	6/29/01 11:44:00 AM	35	6/29/01 11:47:00 AM	18
6/29/01 11:38:00 AM	19	6/29/01 11:41:00 AM	16	6/29/01 11:44:00 AM	37	6/29/01 11:47:00 AM	16
6/29/01 11:38:00 AM	16	6/29/01 11:41:00 AM	17	6/29/01 11:44:00 AM	31	6/29/01 11:47:00 AM	16
6/29/01 11:38:00 AM	19	6/29/01 11:41:00 AM	16	6/29/01 11:44:00 AM	24	6/29/01 11:47:00 AM	13
6/29/01 11:38:00 AM	38	6/29/01 11:41:00 AM	17	6/29/01 11:44:00 AM	17	6/29/01 11:47:00 AM	16
6/29/01 11:38:00 AM	49	6/29/01 11:41:00 AM	18	6/29/01 11:44:00 AM	28	6/29/01 11:47:00 AM	17
6/29/01 11:39:00 AM	36	6/29/01 11:41:00 AM	17	6/29/01 11:44:00 AM	35	6/29/01 11:47:00 AM	18
6/29/01 11:39:00 AM	27	6/29/01 11:42:00 AM	16	6/29/01 11:44:00 AM	37	6/29/01 11:47:00 AM	16
6/29/01 11:39:00 AM	40	6/29/01 11:42:00 AM	15	6/29/01 11:45:00 AM	32	6/29/01 11:47:00 AM	16
6/29/01 11:39:00 AM	46	6/29/01 11:42:00 AM	16	6/29/01 11:45:00 AM	15	6/29/01 11:48:00 AM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 11:48:00 AM	17	6/29/01 11:51:00 AM	25	6/29/01 11:53:00 AM	21	6/29/01 11:56:00 AM	17
6/29/01 11:48:00 AM	16	6/29/01 11:51:00 AM	25	6/29/01 11:54:00 AM	24	6/29/01 11:56:00 AM	16
6/29/01 11:48:00 AM	18	6/29/01 11:51:00 AM	21	6/29/01 11:54:00 AM	30	6/29/01 11:57:00 AM	23
6/29/01 11:48:00 AM	21	6/29/01 11:51:00 AM	28	6/29/01 11:54:00 AM	24	6/29/01 11:57:00 AM	30
6/29/01 11:48:00 AM	16	6/29/01 11:51:00 AM	30	6/29/01 11:54:00 AM	16	6/29/01 11:57:00 AM	30
6/29/01 11:48:00 AM	17	6/29/01 11:51:00 AM	14	6/29/01 11:54:00 AM	16	6/29/01 11:57:00 AM	28
6/29/01 11:48:00 AM	17	6/29/01 11:51:00 AM	25	6/29/01 11:54:00 AM	14	6/29/01 11:57:00 AM	30
6/29/01 11:48:00 AM	16	6/29/01 11:51:00 AM	25	6/29/01 11:54:00 AM	24	6/29/01 11:57:00 AM	29
6/29/01 11:48:00 AM	18	6/29/01 11:51:00 AM	21	6/29/01 11:54:00 AM	30	6/29/01 11:57:00 AM	23
6/29/01 11:48:00 AM	21	6/29/01 11:51:00 AM	28	6/29/01 11:54:00 AM	24	6/29/01 11:57:00 AM	30
6/29/01 11:48:00 AM	16	6/29/01 11:51:00 AM	30	6/29/01 11:54:00 AM	16	6/29/01 11:57:00 AM	30
6/29/01 11:49:00 AM	16	6/29/01 11:51:00 AM	14	6/29/01 11:54:00 AM	16	6/29/01 11:57:00 AM	28
6/29/01 11:49:00 AM	15	6/29/01 11:52:00 AM	16	6/29/01 11:54:00 AM	14	6/29/01 11:57:00 AM	30
6/29/01 11:49:00 AM	15	6/29/01 11:52:00 AM	18	6/29/01 11:55:00 AM	21	6/29/01 11:57:00 AM	29
6/29/01 11:49:00 AM	24	6/29/01 11:52:00 AM	16	6/29/01 11:55:00 AM	22	6/29/01 11:58:00 AM	23
6/29/01 11:49:00 AM	29	6/29/01 11:52:00 AM	32	6/29/01 11:55:00 AM	15	6/29/01 11:58:00 AM	21
6/29/01 11:49:00 AM	20	6/29/01 11:52:00 AM	53	6/29/01 11:55:00 AM	20	6/29/01 11:58:00 AM	35
6/29/01 11:49:00 AM	16	6/29/01 11:52:00 AM	37	6/29/01 11:55:00 AM	20	6/29/01 11:58:00 AM	41
6/29/01 11:49:00 AM	15	6/29/01 11:52:00 AM	16	6/29/01 11:55:00 AM	17	6/29/01 11:58:00 AM	34
6/29/01 11:49:00 AM	15	6/29/01 11:52:00 AM	18	6/29/01 11:55:00 AM	21	6/29/01 11:58:00 AM	28
6/29/01 11:49:00 AM	24	6/29/01 11:52:00 AM	16	6/29/01 11:55:00 AM	22	6/29/01 11:58:00 AM	23
6/29/01 11:49:00 AM	29	6/29/01 11:52:00 AM	32	6/29/01 11:55:00 AM	15	6/29/01 11:58:00 AM	21
6/29/01 11:49:00 AM	20	6/29/01 11:52:00 AM	53	6/29/01 11:55:00 AM	20	6/29/01 11:58:00 AM	35
6/29/01 11:50:00 AM	16	6/29/01 11:52:00 AM	37	6/29/01 11:55:00 AM	20	6/29/01 11:58:00 AM	41
6/29/01 11:50:00 AM	15	6/29/01 11:53:00 AM	23	6/29/01 11:55:00 AM	17	6/29/01 11:58:00 AM	34
6/29/01 11:50:00 AM	21	6/29/01 11:53:00 AM	18	6/29/01 11:56:00 AM	32	6/29/01 11:58:00 AM	28
6/29/01 11:50:00 AM	24	6/29/01 11:53:00 AM	17	6/29/01 11:56:00 AM	36	6/29/01 11:59:00 AM	15
6/29/01 11:50:00 AM	19	6/29/01 11:53:00 AM	19	6/29/01 11:56:00 AM	19	6/29/01 11:59:00 AM	19
6/29/01 11:50:00 AM	21	6/29/01 11:53:00 AM	22	6/29/01 11:56:00 AM	19	6/29/01 11:59:00 AM	26
6/29/01 11:50:00 AM	16	6/29/01 11:53:00 AM	21	6/29/01 11:56:00 AM	17	6/29/01 11:59:00 AM	22
6/29/01 11:50:00 AM	15	6/29/01 11:53:00 AM	23	6/29/01 11:56:00 AM	16	6/29/01 11:59:00 AM	25
6/29/01 11:50:00 AM	21	6/29/01 11:53:00 AM	18	6/29/01 11:56:00 AM	32	6/29/01 11:59:00 AM	32
6/29/01 11:50:00 AM	24	6/29/01 11:53:00 AM	17	6/29/01 11:56:00 AM	36	6/29/01 11:59:00 AM	15
6/29/01 11:50:00 AM	19	6/29/01 11:53:00 AM	19	6/29/01 11:56:00 AM	19	6/29/01 11:59:00 AM	19
6/29/01 11:50:00 AM	21	6/29/01 11:53:00 AM	22	6/29/01 11:56:00 AM	19	6/29/01 11:59:00 AM	26

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 11:59:00 AM	22	6/29/01 12:02:00 PM	58	6/29/01 12:05:00 PM	21	6/29/01 12:08:00 PM	14
6/29/01 11:59:00 AM	25	6/29/01 12:02:00 PM	17	6/29/01 12:05:00 PM	23	6/29/01 12:08:00 PM	19
6/29/01 11:59:00 AM	32	6/29/01 12:02:00 PM	19	6/29/01 12:05:00 PM	18	6/29/01 12:08:00 PM	18
6/29/01 12:00:00 PM	34	6/29/01 12:02:00 PM	20	6/29/01 12:05:00 PM	17	6/29/01 12:08:00 PM	17
6/29/01 12:00:00 PM	28	6/29/01 12:03:00 PM	16	6/29/01 12:05:00 PM	19	6/29/01 12:08:00 PM	19
6/29/01 12:00:00 PM	24	6/29/01 12:03:00 PM	19	6/29/01 12:06:00 PM	23	6/29/01 12:08:00 PM	22
6/29/01 12:00:00 PM	32	6/29/01 12:03:00 PM	22	6/29/01 12:06:00 PM	20	6/29/01 12:09:00 PM	28
6/29/01 12:00:00 PM	42	6/29/01 12:03:00 PM	17	6/29/01 12:06:00 PM	14	6/29/01 12:09:00 PM	31
6/29/01 12:00:00 PM	39	6/29/01 12:03:00 PM	18	6/29/01 12:06:00 PM	95	6/29/01 12:09:00 PM	21
6/29/01 12:00:00 PM	34	6/29/01 12:03:00 PM	22	6/29/01 12:06:00 PM	132	6/29/01 12:09:00 PM	18
6/29/01 12:00:00 PM	28	6/29/01 12:03:00 PM	16	6/29/01 12:06:00 PM	16	6/29/01 12:09:00 PM	26
6/29/01 12:00:00 PM	24	6/29/01 12:03:00 PM	19	6/29/01 12:06:00 PM	23	6/29/01 12:09:00 PM	30
6/29/01 12:00:00 PM	32	6/29/01 12:03:00 PM	22	6/29/01 12:06:00 PM	20	6/29/01 12:09:00 PM	28
6/29/01 12:00:00 PM	42	6/29/01 12:03:00 PM	17	6/29/01 12:06:00 PM	14	6/29/01 12:09:00 PM	31
6/29/01 12:00:00 PM	39	6/29/01 12:03:00 PM	18	6/29/01 12:06:00 PM	95	6/29/01 12:09:00 PM	21
6/29/01 12:01:00 PM	31	6/29/01 12:03:00 PM	22	6/29/01 12:06:00 PM	132	6/29/01 12:09:00 PM	18
6/29/01 12:01:00 PM	29	6/29/01 12:04:00 PM	18	6/29/01 12:06:00 PM	16	6/29/01 12:09:00 PM	26
6/29/01 12:01:00 PM	33	6/29/01 12:04:00 PM	25	6/29/01 12:07:00 PM	18	6/29/01 12:09:00 PM	30
6/29/01 12:01:00 PM	26	6/29/01 12:04:00 PM	28	6/29/01 12:07:00 PM	21	6/29/01 12:10:00 PM	23
6/29/01 12:01:00 PM	14	6/29/01 12:04:00 PM	14	6/29/01 12:07:00 PM	22	6/29/01 12:10:00 PM	15
6/29/01 12:01:00 PM	14	6/29/01 12:04:00 PM	16	6/29/01 12:07:00 PM	16	6/29/01 12:10:00 PM	16
6/29/01 12:01:00 PM	31	6/29/01 12:04:00 PM	15	6/29/01 12:07:00 PM	18	6/29/01 12:10:00 PM	20
6/29/01 12:01:00 PM	29	6/29/01 12:04:00 PM	18	6/29/01 12:07:00 PM	17	6/29/01 12:10:00 PM	34
6/29/01 12:01:00 PM	33	6/29/01 12:04:00 PM	25	6/29/01 12:07:00 PM	18	6/29/01 12:10:00 PM	39
6/29/01 12:01:00 PM	26	6/29/01 12:04:00 PM	28	6/29/01 12:07:00 PM	21	6/29/01 12:10:00 PM	23
6/29/01 12:01:00 PM	14	6/29/01 12:04:00 PM	14	6/29/01 12:07:00 PM	22	6/29/01 12:10:00 PM	15
6/29/01 12:01:00 PM	14	6/29/01 12:04:00 PM	16	6/29/01 12:07:00 PM	16	6/29/01 12:10:00 PM	16
6/29/01 12:02:00 PM	49	6/29/01 12:04:00 PM	15	6/29/01 12:07:00 PM	18	6/29/01 12:10:00 PM	20
6/29/01 12:02:00 PM	96	6/29/01 12:05:00 PM	18	6/29/01 12:07:00 PM	17	6/29/01 12:10:00 PM	34
6/29/01 12:02:00 PM	58	6/29/01 12:05:00 PM	21	6/29/01 12:08:00 PM	14	6/29/01 12:10:00 PM	39
6/29/01 12:02:00 PM	17	6/29/01 12:05:00 PM	23	6/29/01 12:08:00 PM	19	6/29/01 12:11:00 PM	15
6/29/01 12:02:00 PM	19	6/29/01 12:05:00 PM	18	6/29/01 12:08:00 PM	18	6/29/01 12:11:00 PM	13
6/29/01 12:02:00 PM	20	6/29/01 12:05:00 PM	17	6/29/01 12:08:00 PM	17	6/29/01 12:11:00 PM	20
6/29/01 12:02:00 PM	49	6/29/01 12:05:00 PM	19	6/29/01 12:08:00 PM	19	6/29/01 12:11:00 PM	25
6/29/01 12:02:00 PM	96	6/29/01 12:05:00 PM	18	6/29/01 12:08:00 PM	22	6/29/01 12:11:00 PM	32

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 12:11:00 PM	39	6/29/01 12:14:00 PM	55	6/29/01 12:17:00 PM	15	6/29/01 12:20:00 PM	19
6/29/01 12:11:00 PM	15	6/29/01 12:14:00 PM	60	6/29/01 12:17:00 PM	28	6/29/01 12:20:00 PM	20
6/29/01 12:11:00 PM	13	6/29/01 12:14:00 PM	26	6/29/01 12:17:00 PM	35	6/29/01 12:20:00 PM	16
6/29/01 12:11:00 PM	20	6/29/01 12:14:00 PM	23	6/29/01 12:17:00 PM	20	6/29/01 12:20:00 PM	18
6/29/01 12:11:00 PM	25	6/29/01 12:14:00 PM	64	6/29/01 12:17:00 PM	18	6/29/01 12:20:00 PM	22
6/29/01 12:11:00 PM	32	6/29/01 12:14:00 PM	93	6/29/01 12:17:00 PM	21	6/29/01 12:20:00 PM	13
6/29/01 12:11:00 PM	39	6/29/01 12:14:00 PM	55	6/29/01 12:17:00 PM	15	6/29/01 12:20:00 PM	19
6/29/01 12:12:00 PM	39	6/29/01 12:14:00 PM	60	6/29/01 12:17:00 PM	28	6/29/01 12:20:00 PM	20
6/29/01 12:12:00 PM	34	6/29/01 12:15:00 PM	46	6/29/01 12:17:00 PM	35	6/29/01 12:20:00 PM	16
6/29/01 12:12:00 PM	20	6/29/01 12:15:00 PM	72	6/29/01 12:18:00 PM	22	6/29/01 12:20:00 PM	18
6/29/01 12:12:00 PM	20	6/29/01 12:15:00 PM	151	6/29/01 12:18:00 PM	26	6/29/01 12:21:00 PM	16
6/29/01 12:12:00 PM	22	6/29/01 12:15:00 PM	152	6/29/01 12:18:00 PM	19	6/29/01 12:21:00 PM	16
6/29/01 12:12:00 PM	25	6/29/01 12:15:00 PM	55	6/29/01 12:18:00 PM	18	6/29/01 12:21:00 PM	18
6/29/01 12:12:00 PM	39	6/29/01 12:15:00 PM	48	6/29/01 12:18:00 PM	30	6/29/01 12:21:00 PM	18
6/29/01 12:12:00 PM	34	6/29/01 12:15:00 PM	46	6/29/01 12:18:00 PM	106	6/29/01 12:21:00 PM	18
6/29/01 12:12:00 PM	20	6/29/01 12:15:00 PM	72	6/29/01 12:18:00 PM	22	6/29/01 12:21:00 PM	21
6/29/01 12:12:00 PM	20	6/29/01 12:15:00 PM	151	6/29/01 12:18:00 PM	26	6/29/01 12:21:00 PM	16
6/29/01 12:12:00 PM	22	6/29/01 12:15:00 PM	152	6/29/01 12:18:00 PM	19	6/29/01 12:21:00 PM	16
6/29/01 12:12:00 PM	25	6/29/01 12:15:00 PM	55	6/29/01 12:18:00 PM	18	6/29/01 12:21:00 PM	18
6/29/01 12:13:00 PM	17	6/29/01 12:15:00 PM	48	6/29/01 12:18:00 PM	30	6/29/01 12:21:00 PM	18
6/29/01 12:13:00 PM	17	6/29/01 12:16:00 PM	32	6/29/01 12:18:00 PM	106	6/29/01 12:21:00 PM	18
6/29/01 12:13:00 PM	23	6/29/01 12:16:00 PM	22	6/29/01 12:19:00 PM	123	6/29/01 12:21:00 PM	21
6/29/01 12:13:00 PM	26	6/29/01 12:16:00 PM	26	6/29/01 12:19:00 PM	23	6/29/01 12:22:00 PM	20
6/29/01 12:13:00 PM	26	6/29/01 12:16:00 PM	23	6/29/01 12:19:00 PM	25	6/29/01 12:22:00 PM	17
6/29/01 12:13:00 PM	30	6/29/01 12:16:00 PM	42	6/29/01 12:19:00 PM	17	6/29/01 12:22:00 PM	16
6/29/01 12:13:00 PM	17	6/29/01 12:16:00 PM	57	6/29/01 12:19:00 PM	15	6/29/01 12:22:00 PM	16
6/29/01 12:13:00 PM	17	6/29/01 12:16:00 PM	32	6/29/01 12:19:00 PM	19	6/29/01 12:22:00 PM	48
6/29/01 12:13:00 PM	23	6/29/01 12:16:00 PM	22	6/29/01 12:19:00 PM	123	6/29/01 12:22:00 PM	71
6/29/01 12:13:00 PM	26	6/29/01 12:16:00 PM	26	6/29/01 12:19:00 PM	23	6/29/01 12:22:00 PM	20
6/29/01 12:13:00 PM	26	6/29/01 12:16:00 PM	23	6/29/01 12:19:00 PM	25	6/29/01 12:22:00 PM	17
6/29/01 12:13:00 PM	30	6/29/01 12:16:00 PM	42	6/29/01 12:19:00 PM	17	6/29/01 12:22:00 PM	16
6/29/01 12:14:00 PM	26	6/29/01 12:16:00 PM	57	6/29/01 12:19:00 PM	15	6/29/01 12:22:00 PM	16
6/29/01 12:14:00 PM	23	6/29/01 12:17:00 PM	20	6/29/01 12:19:00 PM	19	6/29/01 12:22:00 PM	48
6/29/01 12:14:00 PM	64	6/29/01 12:17:00 PM	18	6/29/01 12:20:00 PM	22	6/29/01 12:22:00 PM	71
6/29/01 12:14:00 PM	93	6/29/01 12:17:00 PM	21	6/29/01 12:20:00 PM	13	6/29/01 12:23:00 PM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 12:23:00 PM	19	6/29/01 12:26:00 PM	427	6/29/01 12:28:00 PM	20	6/29/01 12:31:00 PM	233
6/29/01 12:23:00 PM	17	6/29/01 12:26:00 PM	49	6/29/01 12:29:00 PM	21	6/29/01 12:31:00 PM	345
6/29/01 12:23:00 PM	22	6/29/01 12:26:00 PM	22	6/29/01 12:29:00 PM	22	6/29/01 12:32:00 PM	39
6/29/01 12:23:00 PM	24	6/29/01 12:26:00 PM	21	6/29/01 12:29:00 PM	29	6/29/01 12:32:00 PM	26
6/29/01 12:23:00 PM	23	6/29/01 12:26:00 PM	15	6/29/01 12:29:00 PM	44	6/29/01 12:32:00 PM	29
6/29/01 12:23:00 PM	24	6/29/01 12:26:00 PM	14	6/29/01 12:29:00 PM	50	6/29/01 12:32:00 PM	19
6/29/01 12:23:00 PM	19	6/29/01 12:26:00 PM	427	6/29/01 12:29:00 PM	38	6/29/01 12:32:00 PM	14
6/29/01 12:23:00 PM	17	6/29/01 12:26:00 PM	49	6/29/01 12:29:00 PM	21	6/29/01 12:32:00 PM	26
6/29/01 12:23:00 PM	22	6/29/01 12:26:00 PM	22	6/29/01 12:29:00 PM	22	6/29/01 12:32:00 PM	39
6/29/01 12:23:00 PM	24	6/29/01 12:26:00 PM	21	6/29/01 12:29:00 PM	29	6/29/01 12:32:00 PM	26
6/29/01 12:23:00 PM	23	6/29/01 12:26:00 PM	15	6/29/01 12:29:00 PM	44	6/29/01 12:32:00 PM	29
6/29/01 12:24:00 PM	24	6/29/01 12:26:00 PM	14	6/29/01 12:29:00 PM	50	6/29/01 12:32:00 PM	19
6/29/01 12:24:00 PM	18	6/29/01 12:27:00 PM	17	6/29/01 12:29:00 PM	38	6/29/01 12:32:00 PM	14
6/29/01 12:24:00 PM	17	6/29/01 12:27:00 PM	18	6/29/01 12:30:00 PM	28	6/29/01 12:32:00 PM	26
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6/29/01 12:24:00 PM	17	6/29/01 12:27:00 PM	20	6/29/01 12:30:00 PM	39	6/29/01 12:33:00 PM	19
6/29/01 12:24:00 PM	16	6/29/01 12:27:00 PM	26	6/29/01 12:30:00 PM	37	6/29/01 12:33:00 PM	23
6/29/01 12:24:00 PM	24	6/29/01 12:27:00 PM	20	6/29/01 12:30:00 PM	28	6/29/01 12:33:00 PM	26
6/29/01 12:24:00 PM	18	6/29/01 12:27:00 PM	17	6/29/01 12:30:00 PM	23	6/29/01 12:33:00 PM	16
6/29/01 12:24:00 PM	17	6/29/01 12:27:00 PM	18	6/29/01 12:30:00 PM	28	6/29/01 12:33:00 PM	16
6/29/01 12:24:00 PM	18	6/29/01 12:27:00 PM	16	6/29/01 12:30:00 PM	33	6/29/01 12:33:00 PM	34
6/29/01 12:24:00 PM	17	6/29/01 12:27:00 PM	20	6/29/01 12:30:00 PM	39	6/29/01 12:33:00 PM	19
6/29/01 12:24:00 PM	16	6/29/01 12:27:00 PM	26	6/29/01 12:30:00 PM	37	6/29/01 12:33:00 PM	23
6/29/01 12:25:00 PM	18	6/29/01 12:27:00 PM	20	6/29/01 12:30:00 PM	28	6/29/01 12:33:00 PM	26
6/29/01 12:25:00 PM	19	6/29/01 12:28:00 PM	22	6/29/01 12:30:00 PM	23	6/29/01 12:33:00 PM	16
6/29/01 12:25:00 PM	17	6/29/01 12:28:00 PM	29	6/29/01 12:31:00 PM	23	6/29/01 12:33:00 PM	16
6/29/01 12:25:00 PM	18	6/29/01 12:28:00 PM	26	6/29/01 12:31:00 PM	25	6/29/01 12:34:00 PM	21
6/29/01 12:25:00 PM	19	6/29/01 12:28:00 PM	22	6/29/01 12:31:00 PM	27	6/29/01 12:34:00 PM	24
6/29/01 12:25:00 PM	277	6/29/01 12:28:00 PM	22	6/29/01 12:31:00 PM	25	6/29/01 12:34:00 PM	18
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6/29/01 12:25:00 PM	19	6/29/01 12:28:00 PM	22	6/29/01 12:31:00 PM	345	6/29/01 12:34:00 PM	23
6/29/01 12:25:00 PM	17	6/29/01 12:28:00 PM	29	6/29/01 12:31:00 PM	23	6/29/01 12:34:00 PM	15
6/29/01 12:25:00 PM	18	6/29/01 12:28:00 PM	26	6/29/01 12:31:00 PM	25	6/29/01 12:34:00 PM	21
6/29/01 12:25:00 PM	19	6/29/01 12:28:00 PM	22	6/29/01 12:31:00 PM	27	6/29/01 12:34:00 PM	24
6/29/01 12:25:00 PM	277	6/29/01 12:28:00 PM	22	6/29/01 12:31:00 PM	25	6/29/01 12:34:00 PM	18

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 12:34:00 PM	22	6/29/01 12:37:00 PM	53	6/29/01 12:40:00 PM	16	6/29/01 12:43:00 PM	17
6/29/01 12:34:00 PM	23	6/29/01 12:37:00 PM	69	6/29/01 12:40:00 PM	19	6/29/01 12:43:00 PM	17
6/29/01 12:34:00 PM	15	6/29/01 12:37:00 PM	20	6/29/01 12:40:00 PM	22	6/29/01 12:43:00 PM	21
6/29/01 12:35:00 PM	24	6/29/01 12:37:00 PM	22	6/29/01 12:40:00 PM	19	6/29/01 12:43:00 PM	27
6/29/01 12:35:00 PM	32	6/29/01 12:38:00 PM	22	6/29/01 12:40:00 PM	18	6/29/01 12:43:00 PM	24
6/29/01 12:35:00 PM	20	6/29/01 12:38:00 PM	37	6/29/01 12:41:00 PM	21	6/29/01 12:43:00 PM	19
6/29/01 12:35:00 PM	15	6/29/01 12:38:00 PM	52	6/29/01 12:41:00 PM	16	6/29/01 12:44:00 PM	18
6/29/01 12:35:00 PM	18	6/29/01 12:38:00 PM	56	6/29/01 12:41:00 PM	77	6/29/01 12:44:00 PM	19
6/29/01 12:35:00 PM	24	6/29/01 12:38:00 PM	55	6/29/01 12:41:00 PM	108	6/29/01 12:44:00 PM	18
6/29/01 12:35:00 PM	24	6/29/01 12:38:00 PM	55	6/29/01 12:41:00 PM	14	6/29/01 12:44:00 PM	18
6/29/01 12:35:00 PM	32	6/29/01 12:38:00 PM	22	6/29/01 12:41:00 PM	15	6/29/01 12:44:00 PM	17
6/29/01 12:35:00 PM	20	6/29/01 12:38:00 PM	37	6/29/01 12:41:00 PM	21	6/29/01 12:44:00 PM	20
6/29/01 12:35:00 PM	15	6/29/01 12:38:00 PM	52	6/29/01 12:41:00 PM	16	6/29/01 12:44:00 PM	18
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6/29/01 12:36:00 PM	27	6/29/01 12:38:00 PM	55	6/29/01 12:41:00 PM	14	6/29/01 12:44:00 PM	18
6/29/01 12:36:00 PM	21	6/29/01 12:39:00 PM	22	6/29/01 12:41:00 PM	15	6/29/01 12:44:00 PM	17
6/29/01 12:36:00 PM	23	6/29/01 12:39:00 PM	17	6/29/01 12:42:00 PM	20	6/29/01 12:44:00 PM	20
6/29/01 12:36:00 PM	36	6/29/01 12:39:00 PM	19	6/29/01 12:42:00 PM	19	6/29/01 12:45:00 PM	24
6/29/01 12:36:00 PM	34	6/29/01 12:39:00 PM	22	6/29/01 12:42:00 PM	16	6/29/01 12:45:00 PM	21
6/29/01 12:36:00 PM	23	6/29/01 12:39:00 PM	21	6/29/01 12:42:00 PM	24	6/29/01 12:45:00 PM	81
6/29/01 12:36:00 PM	27	6/29/01 12:39:00 PM	25	6/29/01 12:42:00 PM	25	6/29/01 12:45:00 PM	135
6/29/01 12:36:00 PM	21	6/29/01 12:39:00 PM	22	6/29/01 12:42:00 PM	18	6/29/01 12:45:00 PM	135
6/29/01 12:36:00 PM	23	6/29/01 12:39:00 PM	17	6/29/01 12:42:00 PM	20	6/29/01 12:45:00 PM	193
6/29/01 12:36:00 PM	36	6/29/01 12:39:00 PM	19	6/29/01 12:42:00 PM	19	6/29/01 12:45:00 PM	24
6/29/01 12:36:00 PM	34	6/29/01 12:39:00 PM	22	6/29/01 12:42:00 PM	16	6/29/01 12:45:00 PM	21
6/29/01 12:36:00 PM	23	6/29/01 12:39:00 PM	21	6/29/01 12:42:00 PM	24	6/29/01 12:45:00 PM	81
6/29/01 12:37:00 PM	20	6/29/01 12:39:00 PM	25	6/29/01 12:42:00 PM	25	6/29/01 12:45:00 PM	135
6/29/01 12:37:00 PM	19	6/29/01 12:40:00 PM	31	6/29/01 12:42:00 PM	18	6/29/01 12:45:00 PM	135
6/29/01 12:37:00 PM	53	6/29/01 12:40:00 PM	16	6/29/01 12:43:00 PM	17	6/29/01 12:45:00 PM	193
6/29/01 12:37:00 PM	69	6/29/01 12:40:00 PM	19	6/29/01 12:43:00 PM	17	6/29/01 12:46:00 PM	99
6/29/01 12:37:00 PM	20	6/29/01 12:40:00 PM	22	6/29/01 12:43:00 PM	21	6/29/01 12:46:00 PM	33
6/29/01 12:37:00 PM	22	6/29/01 12:40:00 PM	19	6/29/01 12:43:00 PM	27	6/29/01 12:46:00 PM	32
6/29/01 12:37:00 PM	20	6/29/01 12:40:00 PM	18	6/29/01 12:43:00 PM	24	6/29/01 12:46:00 PM	18
6/29/01 12:37:00 PM	19	6/29/01 12:40:00 PM	31	6/29/01 12:43:00 PM	19	6/29/01 12:46:00 PM	29

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
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6/29/01 12:46:00 PM	99	6/29/01 12:49:00 PM	23	6/29/01 12:52:00 PM	15	6/29/01 12:55:00 PM	39
6/29/01 12:46:00 PM	33	6/29/01 12:49:00 PM	19	6/29/01 12:52:00 PM	15	6/29/01 12:55:00 PM	29
6/29/01 12:46:00 PM	32	6/29/01 12:49:00 PM	24	6/29/01 12:52:00 PM	14	6/29/01 12:55:00 PM	34
6/29/01 12:46:00 PM	18	6/29/01 12:49:00 PM	63	6/29/01 12:52:00 PM	14	6/29/01 12:55:00 PM	25
6/29/01 12:46:00 PM	29	6/29/01 12:49:00 PM	91	6/29/01 12:52:00 PM	15	6/29/01 12:55:00 PM	35
6/29/01 12:46:00 PM	31	6/29/01 12:49:00 PM	37	6/29/01 12:52:00 PM	14	6/29/01 12:55:00 PM	33
6/29/01 12:47:00 PM	17	6/29/01 12:49:00 PM	23	6/29/01 12:52:00 PM	15	6/29/01 12:55:00 PM	39
6/29/01 12:47:00 PM	157	6/29/01 12:50:00 PM	22	6/29/01 12:52:00 PM	15	6/29/01 12:55:00 PM	29
6/29/01 12:47:00 PM	272	6/29/01 12:50:00 PM	21	6/29/01 12:53:00 PM	17	6/29/01 12:55:00 PM	34
6/29/01 12:47:00 PM	472	6/29/01 12:50:00 PM	18	6/29/01 12:53:00 PM	16	6/29/01 12:56:00 PM	24
6/29/01 12:47:00 PM	605	6/29/01 12:50:00 PM	379	6/29/01 12:53:00 PM	15	6/29/01 12:56:00 PM	15
6/29/01 12:47:00 PM	28	6/29/01 12:50:00 PM	585	6/29/01 12:53:00 PM	25	6/29/01 12:56:00 PM	16
6/29/01 12:47:00 PM	17	6/29/01 12:50:00 PM	213	6/29/01 12:53:00 PM	30	6/29/01 12:56:00 PM	46
6/29/01 12:47:00 PM	157	6/29/01 12:50:00 PM	22	6/29/01 12:53:00 PM	20	6/29/01 12:56:00 PM	84
6/29/01 12:47:00 PM	272	6/29/01 12:50:00 PM	21	6/29/01 12:53:00 PM	17	6/29/01 12:56:00 PM	47
6/29/01 12:47:00 PM	472	6/29/01 12:50:00 PM	18	6/29/01 12:53:00 PM	16	6/29/01 12:56:00 PM	24
6/29/01 12:47:00 PM	605	6/29/01 12:50:00 PM	379	6/29/01 12:53:00 PM	15	6/29/01 12:56:00 PM	15
6/29/01 12:47:00 PM	28	6/29/01 12:50:00 PM	585	6/29/01 12:53:00 PM	25	6/29/01 12:56:00 PM	16
6/29/01 12:48:00 PM	19	6/29/01 12:50:00 PM	213	6/29/01 12:53:00 PM	30	6/29/01 12:56:00 PM	46
6/29/01 12:48:00 PM	21	6/29/01 12:51:00 PM	272	6/29/01 12:53:00 PM	20	6/29/01 12:56:00 PM	84
6/29/01 12:48:00 PM	17	6/29/01 12:51:00 PM	36	6/29/01 12:54:00 PM	20	6/29/01 12:56:00 PM	47
6/29/01 12:48:00 PM	15	6/29/01 12:51:00 PM	26	6/29/01 12:54:00 PM	19	6/29/01 12:57:00 PM	42
6/29/01 12:48:00 PM	21	6/29/01 12:51:00 PM	24	6/29/01 12:54:00 PM	21	6/29/01 12:57:00 PM	54
6/29/01 12:48:00 PM	23	6/29/01 12:51:00 PM	28	6/29/01 12:54:00 PM	18	6/29/01 12:57:00 PM	12
6/29/01 12:48:00 PM	19	6/29/01 12:51:00 PM	20	6/29/01 12:54:00 PM	18	6/29/01 12:57:00 PM	13
6/29/01 12:48:00 PM	21	6/29/01 12:51:00 PM	272	6/29/01 12:54:00 PM	17	6/29/01 12:57:00 PM	16
6/29/01 12:48:00 PM	17	6/29/01 12:51:00 PM	36	6/29/01 12:54:00 PM	20	6/29/01 12:57:00 PM	20
6/29/01 12:48:00 PM	15	6/29/01 12:51:00 PM	26	6/29/01 12:54:00 PM	19	6/29/01 12:57:00 PM	42
6/29/01 12:48:00 PM	21	6/29/01 12:51:00 PM	24	6/29/01 12:54:00 PM	21	6/29/01 12:57:00 PM	54
6/29/01 12:48:00 PM	23	6/29/01 12:51:00 PM	28	6/29/01 12:54:00 PM	18	6/29/01 12:57:00 PM	12
6/29/01 12:49:00 PM	19	6/29/01 12:51:00 PM	20	6/29/01 12:54:00 PM	18	6/29/01 12:57:00 PM	13
6/29/01 12:49:00 PM	24	6/29/01 12:52:00 PM	14	6/29/01 12:54:00 PM	17	6/29/01 12:57:00 PM	16
6/29/01 12:49:00 PM	63	6/29/01 12:52:00 PM	14	6/29/01 12:55:00 PM	25	6/29/01 12:57:00 PM	20
6/29/01 12:49:00 PM	91	6/29/01 12:52:00 PM	15	6/29/01 12:55:00 PM	35	6/29/01 12:58:00 PM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 12:58:00 PM	114	6/29/01 1:01:00 PM	90	6/29/01 1:03:00 PM	33	6/29/01 1:06:00 PM	28
6/29/01 12:58:00 PM	167	6/29/01 1:01:00 PM	26	6/29/01 1:04:00 PM	24	6/29/01 1:06:00 PM	20
6/29/01 12:58:00 PM	46	6/29/01 1:01:00 PM	20	6/29/01 1:04:00 PM	22	6/29/01 1:07:00 PM	17
6/29/01 12:58:00 PM	45	6/29/01 1:01:00 PM	26	6/29/01 1:04:00 PM	13	6/29/01 1:07:00 PM	19
6/29/01 12:58:00 PM	17	6/29/01 1:01:00 PM	29	6/29/01 1:04:00 PM	12	6/29/01 1:07:00 PM	21
6/29/01 12:58:00 PM	17	6/29/01 1:01:00 PM	17	6/29/01 1:04:00 PM	24	6/29/01 1:07:00 PM	20
6/29/01 12:58:00 PM	114	6/29/01 1:01:00 PM	90	6/29/01 1:04:00 PM	37	6/29/01 1:07:00 PM	19
6/29/01 12:58:00 PM	167	6/29/01 1:01:00 PM	26	6/29/01 1:04:00 PM	24	6/29/01 1:07:00 PM	27
6/29/01 12:58:00 PM	46	6/29/01 1:01:00 PM	20	6/29/01 1:04:00 PM	22	6/29/01 1:07:00 PM	17
6/29/01 12:58:00 PM	45	6/29/01 1:01:00 PM	26	6/29/01 1:04:00 PM	13	6/29/01 1:07:00 PM	19
6/29/01 12:58:00 PM	17	6/29/01 1:01:00 PM	29	6/29/01 1:04:00 PM	12	6/29/01 1:07:00 PM	21
6/29/01 12:59:00 PM	25	6/29/01 1:01:00 PM	17	6/29/01 1:04:00 PM	24	6/29/01 1:07:00 PM	20
6/29/01 12:59:00 PM	29	6/29/01 1:02:00 PM	20	6/29/01 1:04:00 PM	37	6/29/01 1:07:00 PM	19
6/29/01 12:59:00 PM	20	6/29/01 1:02:00 PM	16	6/29/01 1:05:00 PM	26	6/29/01 1:07:00 PM	27
6/29/01 12:59:00 PM	16	6/29/01 1:02:00 PM	18	6/29/01 1:05:00 PM	33	6/29/01 1:08:00 PM	29
6/29/01 12:59:00 PM	22	6/29/01 1:02:00 PM	18	6/29/01 1:05:00 PM	35	6/29/01 1:08:00 PM	20
6/29/01 12:59:00 PM	22	6/29/01 1:02:00 PM	22	6/29/01 1:05:00 PM	22	6/29/01 1:08:00 PM	19
6/29/01 12:59:00 PM	25	6/29/01 1:02:00 PM	60	6/29/01 1:05:00 PM	29	6/29/01 1:08:00 PM	21
6/29/01 12:59:00 PM	29	6/29/01 1:02:00 PM	20	6/29/01 1:05:00 PM	48	6/29/01 1:08:00 PM	22
6/29/01 12:59:00 PM	20	6/29/01 1:02:00 PM	16	6/29/01 1:05:00 PM	26	6/29/01 1:08:00 PM	24
6/29/01 12:59:00 PM	16	6/29/01 1:02:00 PM	18	6/29/01 1:05:00 PM	33	6/29/01 1:08:00 PM	29
6/29/01 12:59:00 PM	22	6/29/01 1:02:00 PM	18	6/29/01 1:05:00 PM	35	6/29/01 1:08:00 PM	20
6/29/01 12:59:00 PM	22	6/29/01 1:02:00 PM	22	6/29/01 1:05:00 PM	22	6/29/01 1:08:00 PM	19
6/29/01 1:00:00 PM	17	6/29/01 1:02:00 PM	60	6/29/01 1:05:00 PM	29	6/29/01 1:08:00 PM	21
6/29/01 1:00:00 PM	44	6/29/01 1:03:00 PM	74	6/29/01 1:05:00 PM	48	6/29/01 1:08:00 PM	22
6/29/01 1:00:00 PM	75	6/29/01 1:03:00 PM	50	6/29/01 1:06:00 PM	48	6/29/01 1:08:00 PM	24
6/29/01 1:00:00 PM	91	6/29/01 1:03:00 PM	57	6/29/01 1:06:00 PM	23	6/29/01 1:09:00 PM	17
6/29/01 1:00:00 PM	127	6/29/01 1:03:00 PM	44	6/29/01 1:06:00 PM	26	6/29/01 1:09:00 PM	18
6/29/01 1:00:00 PM	102	6/29/01 1:03:00 PM	68	6/29/01 1:06:00 PM	23	6/29/01 1:09:00 PM	19
6/29/01 1:00:00 PM	17	6/29/01 1:03:00 PM	33	6/29/01 1:06:00 PM	28	6/29/01 1:09:00 PM	20
6/29/01 1:00:00 PM	44	6/29/01 1:03:00 PM	74	6/29/01 1:06:00 PM	20	6/29/01 1:09:00 PM	25
6/29/01 1:00:00 PM	75	6/29/01 1:03:00 PM	50	6/29/01 1:06:00 PM	48	6/29/01 1:09:00 PM	23
6/29/01 1:00:00 PM	91	6/29/01 1:03:00 PM	57	6/29/01 1:06:00 PM	23	6/29/01 1:09:00 PM	17
6/29/01 1:00:00 PM	127	6/29/01 1:03:00 PM	44	6/29/01 1:06:00 PM	26	6/29/01 1:09:00 PM	18
6/29/01 1:00:00 PM	102	6/29/01 1:03:00 PM	68	6/29/01 1:06:00 PM	23	6/29/01 1:09:00 PM	19

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 1:09:00 PM	20	6/29/01 1:12:00 PM	19	6/29/01 1:15:00 PM	29	6/29/01 1:18:00 PM	23
6/29/01 1:09:00 PM	25	6/29/01 1:12:00 PM	38	6/29/01 1:15:00 PM	24	6/29/01 1:18:00 PM	22
6/29/01 1:09:00 PM	23	6/29/01 1:12:00 PM	46	6/29/01 1:15:00 PM	28	6/29/01 1:18:00 PM	20
6/29/01 1:10:00 PM	18	6/29/01 1:12:00 PM	22	6/29/01 1:15:00 PM	35	6/29/01 1:18:00 PM	17
6/29/01 1:10:00 PM	19	6/29/01 1:13:00 PM	18	6/29/01 1:15:00 PM	42	6/29/01 1:18:00 PM	22
6/29/01 1:10:00 PM	20	6/29/01 1:13:00 PM	20	6/29/01 1:16:00 PM	34	6/29/01 1:18:00 PM	30
6/29/01 1:10:00 PM	18	6/29/01 1:13:00 PM	22	6/29/01 1:16:00 PM	33	6/29/01 1:19:00 PM	27
6/29/01 1:10:00 PM	24	6/29/01 1:13:00 PM	19	6/29/01 1:16:00 PM	83	6/29/01 1:19:00 PM	30
6/29/01 1:10:00 PM	24	6/29/01 1:13:00 PM	19	6/29/01 1:16:00 PM	104	6/29/01 1:19:00 PM	44
6/29/01 1:10:00 PM	18	6/29/01 1:13:00 PM	18	6/29/01 1:16:00 PM	18	6/29/01 1:19:00 PM	40
6/29/01 1:10:00 PM	19	6/29/01 1:13:00 PM	18	6/29/01 1:16:00 PM	20	6/29/01 1:19:00 PM	29
6/29/01 1:10:00 PM	20	6/29/01 1:13:00 PM	20	6/29/01 1:16:00 PM	34	6/29/01 1:19:00 PM	21
6/29/01 1:10:00 PM	18	6/29/01 1:13:00 PM	22	6/29/01 1:16:00 PM	33	6/29/01 1:19:00 PM	27
6/29/01 1:10:00 PM	24	6/29/01 1:13:00 PM	19	6/29/01 1:16:00 PM	83	6/29/01 1:19:00 PM	30
6/29/01 1:10:00 PM	24	6/29/01 1:13:00 PM	19	6/29/01 1:16:00 PM	104	6/29/01 1:19:00 PM	44
6/29/01 1:11:00 PM	17	6/29/01 1:13:00 PM	18	6/29/01 1:16:00 PM	18	6/29/01 1:19:00 PM	40
6/29/01 1:11:00 PM	19	6/29/01 1:14:00 PM	21	6/29/01 1:16:00 PM	20	6/29/01 1:19:00 PM	29
6/29/01 1:11:00 PM	20	6/29/01 1:14:00 PM	21	6/29/01 1:17:00 PM	15	6/29/01 1:19:00 PM	21
6/29/01 1:11:00 PM	23	6/29/01 1:14:00 PM	17	6/29/01 1:17:00 PM	17	6/29/01 1:20:00 PM	23
6/29/01 1:11:00 PM	26	6/29/01 1:14:00 PM	16	6/29/01 1:17:00 PM	20	6/29/01 1:20:00 PM	25
6/29/01 1:11:00 PM	21	6/29/01 1:14:00 PM	20	6/29/01 1:17:00 PM	20	6/29/01 1:20:00 PM	22
6/29/01 1:11:00 PM	17	6/29/01 1:14:00 PM	24	6/29/01 1:17:00 PM	22	6/29/01 1:20:00 PM	83
6/29/01 1:11:00 PM	19	6/29/01 1:14:00 PM	21	6/29/01 1:17:00 PM	24	6/29/01 1:20:00 PM	108
6/29/01 1:11:00 PM	20	6/29/01 1:14:00 PM	21	6/29/01 1:17:00 PM	15	6/29/01 1:20:00 PM	28
6/29/01 1:11:00 PM	23	6/29/01 1:14:00 PM	17	6/29/01 1:17:00 PM	17	6/29/01 1:20:00 PM	23
6/29/01 1:11:00 PM	26	6/29/01 1:14:00 PM	16	6/29/01 1:17:00 PM	20	6/29/01 1:20:00 PM	25
6/29/01 1:11:00 PM	21	6/29/01 1:14:00 PM	20	6/29/01 1:17:00 PM	20	6/29/01 1:20:00 PM	22
6/29/01 1:12:00 PM	18	6/29/01 1:14:00 PM	24	6/29/01 1:17:00 PM	22	6/29/01 1:20:00 PM	83
6/29/01 1:12:00 PM	18	6/29/01 1:15:00 PM	32	6/29/01 1:17:00 PM	24	6/29/01 1:20:00 PM	108
6/29/01 1:12:00 PM	19	6/29/01 1:15:00 PM	29	6/29/01 1:18:00 PM	23	6/29/01 1:20:00 PM	28
6/29/01 1:12:00 PM	38	6/29/01 1:15:00 PM	24	6/29/01 1:18:00 PM	22	6/29/01 1:21:00 PM	21
6/29/01 1:12:00 PM	46	6/29/01 1:15:00 PM	28	6/29/01 1:18:00 PM	20	6/29/01 1:21:00 PM	19
6/29/01 1:12:00 PM	22	6/29/01 1:15:00 PM	35	6/29/01 1:18:00 PM	17	6/29/01 1:21:00 PM	18
6/29/01 1:12:00 PM	18	6/29/01 1:15:00 PM	42	6/29/01 1:18:00 PM	22	6/29/01 1:21:00 PM	18
6/29/01 1:12:00 PM	18	6/29/01 1:15:00 PM	32	6/29/01 1:18:00 PM	30	6/29/01 1:21:00 PM	30

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 1:21:00 PM	28	6/29/01 1:24:00 PM	17	6/29/01 1:27:00 PM	18	6/29/01 1:30:00 PM	19
6/29/01 1:21:00 PM	21	6/29/01 1:24:00 PM	18	6/29/01 1:27:00 PM	18	6/29/01 1:30:00 PM	28
6/29/01 1:21:00 PM	19	6/29/01 1:24:00 PM	20	6/29/01 1:27:00 PM	47	6/29/01 1:30:00 PM	42
6/29/01 1:21:00 PM	18	6/29/01 1:24:00 PM	22	6/29/01 1:27:00 PM	34	6/29/01 1:30:00 PM	34
6/29/01 1:21:00 PM	18	6/29/01 1:24:00 PM	21	6/29/01 1:27:00 PM	24	6/29/01 1:30:00 PM	20
6/29/01 1:21:00 PM	30	6/29/01 1:24:00 PM	21	6/29/01 1:27:00 PM	21	6/29/01 1:30:00 PM	17
6/29/01 1:21:00 PM	28	6/29/01 1:24:00 PM	17	6/29/01 1:27:00 PM	18	6/29/01 1:30:00 PM	19
6/29/01 1:22:00 PM	17	6/29/01 1:24:00 PM	18	6/29/01 1:27:00 PM	18	6/29/01 1:30:00 PM	28
6/29/01 1:22:00 PM	22	6/29/01 1:25:00 PM	23	6/29/01 1:27:00 PM	47	6/29/01 1:30:00 PM	42
6/29/01 1:22:00 PM	25	6/29/01 1:25:00 PM	21	6/29/01 1:28:00 PM	64	6/29/01 1:30:00 PM	34
6/29/01 1:22:00 PM	27	6/29/01 1:25:00 PM	24	6/29/01 1:28:00 PM	23	6/29/01 1:31:00 PM	20
6/29/01 1:22:00 PM	30	6/29/01 1:25:00 PM	25	6/29/01 1:28:00 PM	22	6/29/01 1:31:00 PM	21
6/29/01 1:22:00 PM	26	6/29/01 1:25:00 PM	24	6/29/01 1:28:00 PM	26	6/29/01 1:31:00 PM	20
6/29/01 1:22:00 PM	17	6/29/01 1:25:00 PM	22	6/29/01 1:28:00 PM	20	6/29/01 1:31:00 PM	21
6/29/01 1:22:00 PM	22	6/29/01 1:25:00 PM	23	6/29/01 1:28:00 PM	16	6/29/01 1:31:00 PM	20
6/29/01 1:22:00 PM	25	6/29/01 1:25:00 PM	21	6/29/01 1:28:00 PM	64	6/29/01 1:31:00 PM	19
6/29/01 1:22:00 PM	27	6/29/01 1:25:00 PM	24	6/29/01 1:28:00 PM	23	6/29/01 1:31:00 PM	20
6/29/01 1:22:00 PM	30	6/29/01 1:25:00 PM	25	6/29/01 1:28:00 PM	22	6/29/01 1:31:00 PM	21
6/29/01 1:22:00 PM	26	6/29/01 1:25:00 PM	24	6/29/01 1:28:00 PM	26	6/29/01 1:31:00 PM	20
6/29/01 1:23:00 PM	19	6/29/01 1:25:00 PM	22	6/29/01 1:28:00 PM	20	6/29/01 1:31:00 PM	21
6/29/01 1:23:00 PM	21	6/29/01 1:26:00 PM	17	6/29/01 1:28:00 PM	16	6/29/01 1:31:00 PM	20
6/29/01 1:23:00 PM	21	6/29/01 1:26:00 PM	22	6/29/01 1:29:00 PM	23	6/29/01 1:31:00 PM	19
6/29/01 1:23:00 PM	17	6/29/01 1:26:00 PM	21	6/29/01 1:29:00 PM	27	6/29/01 1:32:00 PM	25
6/29/01 1:23:00 PM	16	6/29/01 1:26:00 PM	20	6/29/01 1:29:00 PM	20	6/29/01 1:32:00 PM	31
6/29/01 1:23:00 PM	17	6/29/01 1:26:00 PM	24	6/29/01 1:29:00 PM	19	6/29/01 1:32:00 PM	32
6/29/01 1:23:00 PM	19	6/29/01 1:26:00 PM	35	6/29/01 1:29:00 PM	19	6/29/01 1:32:00 PM	32
6/29/01 1:23:00 PM	21	6/29/01 1:26:00 PM	17	6/29/01 1:29:00 PM	21	6/29/01 1:32:00 PM	31
6/29/01 1:23:00 PM	21	6/29/01 1:26:00 PM	22	6/29/01 1:29:00 PM	23	6/29/01 1:32:00 PM	26
6/29/01 1:23:00 PM	17	6/29/01 1:26:00 PM	21	6/29/01 1:29:00 PM	27	6/29/01 1:32:00 PM	25
6/29/01 1:23:00 PM	16	6/29/01 1:26:00 PM	20	6/29/01 1:29:00 PM	20	6/29/01 1:32:00 PM	31
6/29/01 1:23:00 PM	17	6/29/01 1:26:00 PM	24	6/29/01 1:29:00 PM	19	6/29/01 1:32:00 PM	32
6/29/01 1:24:00 PM	20	6/29/01 1:26:00 PM	35	6/29/01 1:29:00 PM	19	6/29/01 1:32:00 PM	32
6/29/01 1:24:00 PM	22	6/29/01 1:27:00 PM	34	6/29/01 1:29:00 PM	21	6/29/01 1:32:00 PM	31
6/29/01 1:24:00 PM	21	6/29/01 1:27:00 PM	24	6/29/01 1:30:00 PM	20	6/29/01 1:32:00 PM	26
6/29/01 1:24:00 PM	21	6/29/01 1:27:00 PM	21	6/29/01 1:30:00 PM	17	6/29/01 1:33:00 PM	23

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/29/01 1:33:00 PM	20	6/29/01 1:36:00 PM	18	7/2/01 12:26:00 PM	86	7/2/01 12:32:00 PM	20
6/29/01 1:33:00 PM	22	6/29/01 1:36:00 PM	18	7/2/01 12:27:00 PM	7	7/2/01 12:32:00 PM	14
6/29/01 1:33:00 PM	27	6/29/01 1:36:00 PM	16	7/2/01 12:27:00 PM	12	7/2/01 12:33:00 PM	13
6/29/01 1:33:00 PM	31	6/29/01 1:36:00 PM	18	7/2/01 12:27:00 PM	19	7/2/01 12:33:00 PM	21
6/29/01 1:33:00 PM	26	6/29/01 1:36:00 PM	18	7/2/01 12:27:00 PM	9	7/2/01 12:33:00 PM	26
6/29/01 1:33:00 PM	23	6/29/01 1:36:00 PM	20	7/2/01 12:27:00 PM	7	7/2/01 12:33:00 PM	22
6/29/01 1:33:00 PM	20	6/29/01 1:36:00 PM	18	7/2/01 12:27:00 PM	8	7/2/01 12:33:00 PM	21
6/29/01 1:33:00 PM	22	6/29/01 1:36:00 PM	18	7/2/01 12:28:00 PM	12	7/2/01 12:33:00 PM	9
6/29/01 1:33:00 PM	27	6/29/01 1:36:00 PM	16	7/2/01 12:28:00 PM	18	7/2/01 12:34:00 PM	6
6/29/01 1:33:00 PM	31	6/29/01 1:36:00 PM	18	7/2/01 12:28:00 PM	17	7/2/01 12:34:00 PM	4
6/29/01 1:33:00 PM	26	6/29/01 1:36:00 PM	18	7/2/01 12:28:00 PM	22	7/2/01 12:34:00 PM	1
6/29/01 1:34:00 PM	24	6/29/01 1:36:00 PM	20	7/2/01 12:28:00 PM	15	7/2/01 12:34:00 PM	7
6/29/01 1:34:00 PM	21	6/29/01 1:37:00 PM	22	7/2/01 12:28:00 PM	23	7/2/01 12:34:00 PM	8
6/29/01 1:34:00 PM	18	6/29/01 1:37:00 PM	19	7/2/01 12:29:00 PM	8	7/2/01 12:34:00 PM	7
6/29/01 1:34:00 PM	24	6/29/01 1:37:00 PM	24	7/2/01 12:29:00 PM	8	7/2/01 12:35:00 PM	15
6/29/01 1:34:00 PM	31	6/29/01 1:37:00 PM	29	7/2/01 12:29:00 PM	10	7/2/01 12:35:00 PM	5
6/29/01 1:34:00 PM	18	6/29/01 1:37:00 PM	36	7/2/01 12:29:00 PM	14	7/2/01 12:35:00 PM	17
6/29/01 1:34:00 PM	24	6/29/01 1:37:00 PM	62	7/2/01 12:29:00 PM	21	7/2/01 12:35:00 PM	30
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6/29/01 1:35:00 PM	18	6/29/01 1:38:00 PM	22	7/2/01 12:31:00 PM	16	7/2/01 12:36:00 PM	11
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6/29/01 1:35:00 PM	18	6/29/01 1:38:00 PM	54	7/2/01 12:31:00 PM	3	7/2/01 12:37:00 PM	5
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6/29/01 1:35:00 PM	18	6/29/01 1:38:00 PM	25	7/2/01 12:32:00 PM	1	7/2/01 12:37:00 PM	19
6/29/01 1:35:00 PM	18	7/2/01 12:26:00 PM	1	7/2/01 12:32:00 PM	2	7/2/01 12:38:00 PM	6
6/29/01 1:35:00 PM	21	7/2/01 12:26:00 PM	2	7/2/01 12:32:00 PM	8	7/2/01 12:38:00 PM	7
6/29/01 1:35:00 PM	18	7/2/01 12:26:00 PM	27	7/2/01 12:32:00 PM	12	7/2/01 12:38:00 PM	10

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 12:38:00 PM	16	7/2/01 12:44:00 PM	19	7/2/01 12:50:00 PM	17	7/2/01 12:56:00 PM	24
7/2/01 12:38:00 PM	7	7/2/01 12:44:00 PM	7	7/2/01 12:50:00 PM	23	7/2/01 12:56:00 PM	27
7/2/01 12:38:00 PM	12	7/2/01 12:44:00 PM	13	7/2/01 12:50:00 PM	10	7/2/01 12:56:00 PM	24
7/2/01 12:39:00 PM	21	7/2/01 12:44:00 PM	13	7/2/01 12:50:00 PM	7	7/2/01 12:56:00 PM	28
7/2/01 12:39:00 PM	16	7/2/01 12:45:00 PM	8	7/2/01 12:50:00 PM	7	7/2/01 12:56:00 PM	8
7/2/01 12:39:00 PM	8	7/2/01 12:45:00 PM	11	7/2/01 12:51:00 PM	6	7/2/01 12:56:00 PM	6
7/2/01 12:39:00 PM	8	7/2/01 12:45:00 PM	10	7/2/01 12:51:00 PM	18	7/2/01 12:57:00 PM	6
7/2/01 12:39:00 PM	8	7/2/01 12:45:00 PM	20	7/2/01 12:51:00 PM	16	7/2/01 12:57:00 PM	4
7/2/01 12:39:00 PM	5	7/2/01 12:45:00 PM	20	7/2/01 12:51:00 PM	15	7/2/01 12:57:00 PM	10
7/2/01 12:40:00 PM	12	7/2/01 12:45:00 PM	24	7/2/01 12:51:00 PM	5	7/2/01 12:57:00 PM	11
7/2/01 12:40:00 PM	29	7/2/01 12:46:00 PM	8	7/2/01 12:51:00 PM	5	7/2/01 12:57:00 PM	5
7/2/01 12:40:00 PM	10	7/2/01 12:46:00 PM	10	7/2/01 12:52:00 PM	9	7/2/01 12:57:00 PM	4
7/2/01 12:40:00 PM	20	7/2/01 12:46:00 PM	8	7/2/01 12:52:00 PM	22	7/2/01 12:58:00 PM	19
7/2/01 12:40:00 PM	12	7/2/01 12:46:00 PM	9	7/2/01 12:52:00 PM	19	7/2/01 12:58:00 PM	15
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7/2/01 12:41:00 PM	12	7/2/01 12:47:00 PM	15	7/2/01 12:53:00 PM	2	7/2/01 12:58:00 PM	10
7/2/01 12:41:00 PM	8	7/2/01 12:47:00 PM	21	7/2/01 12:53:00 PM	11	7/2/01 12:59:00 PM	20
7/2/01 12:41:00 PM	6	7/2/01 12:47:00 PM	14	7/2/01 12:53:00 PM	7	7/2/01 12:59:00 PM	16
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7/2/01 12:42:00 PM	9	7/2/01 12:47:00 PM	7	7/2/01 12:53:00 PM	9	7/2/01 12:59:00 PM	14
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7/2/01 12:42:00 PM	7	7/2/01 12:48:00 PM	11	7/2/01 12:54:00 PM	5	7/2/01 12:59:00 PM	30
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7/2/01 12:42:00 PM	13	7/2/01 12:48:00 PM	16	7/2/01 12:54:00 PM	12	7/2/01 1:00:00 PM	34
7/2/01 12:43:00 PM	13	7/2/01 12:48:00 PM	18	7/2/01 12:54:00 PM	31	7/2/01 1:00:00 PM	17
7/2/01 12:43:00 PM	5	7/2/01 12:49:00 PM	21	7/2/01 12:54:00 PM	17	7/2/01 1:00:00 PM	5
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7/2/01 12:44:00 PM	17	7/2/01 12:50:00 PM	15	7/2/01 12:55:00 PM	9	7/2/01 1:01:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 1:01:00 PM	4	7/2/01 1:07:00 PM	9	7/2/01 1:13:00 PM	9	7/2/01 1:19:00 PM	4
7/2/01 1:02:00 PM	2	7/2/01 1:07:00 PM	1	7/2/01 1:13:00 PM	14	7/2/01 1:19:00 PM	3
7/2/01 1:02:00 PM	0	7/2/01 1:08:00 PM	4	7/2/01 1:13:00 PM	14	7/2/01 1:19:00 PM	12
7/2/01 1:02:00 PM	3	7/2/01 1:08:00 PM	4	7/2/01 1:14:00 PM	21	7/2/01 1:19:00 PM	11
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7/2/01 1:02:00 PM	3	7/2/01 1:08:00 PM	7	7/2/01 1:14:00 PM	9	7/2/01 1:20:00 PM	24
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Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
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7/2/01 1:25:00 PM	16	7/2/01 1:31:00 PM	13	7/2/01 1:37:00 PM	5	7/2/01 1:42:00 PM	14
7/2/01 1:25:00 PM	13	7/2/01 1:31:00 PM	18	7/2/01 1:37:00 PM	3	7/2/01 1:43:00 PM	11
7/2/01 1:25:00 PM	1	7/2/01 1:31:00 PM	8	7/2/01 1:37:00 PM	2	7/2/01 1:43:00 PM	8
7/2/01 1:25:00 PM	4	7/2/01 1:31:00 PM	6	7/2/01 1:37:00 PM	2	7/2/01 1:43:00 PM	9
7/2/01 1:26:00 PM	5	7/2/01 1:31:00 PM	17	7/2/01 1:37:00 PM	0	7/2/01 1:43:00 PM	20
7/2/01 1:26:00 PM	8	7/2/01 1:32:00 PM	17	7/2/01 1:37:00 PM	0	7/2/01 1:43:00 PM	19
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7/2/01 1:29:00 PM	5	7/2/01 1:35:00 PM	35	7/2/01 1:40:00 PM	19	7/2/01 1:46:00 PM	2
7/2/01 1:29:00 PM	4	7/2/01 1:35:00 PM	35	7/2/01 1:41:00 PM	15	7/2/01 1:46:00 PM	5
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Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 1:48:00 PM	16	7/2/01 1:54:00 PM	3	7/2/01 2:00:00 PM	12	7/2/01 2:06:00 PM	17
7/2/01 1:48:00 PM	44	7/2/01 1:54:00 PM	3	7/2/01 2:00:00 PM	22	7/2/01 2:06:00 PM	26
7/2/01 1:48:00 PM	16	7/2/01 1:54:00 PM	0	7/2/01 2:00:00 PM	29	7/2/01 2:06:00 PM	40
7/2/01 1:49:00 PM	25	7/2/01 1:54:00 PM	1	7/2/01 2:00:00 PM	38	7/2/01 2:06:00 PM	26
7/2/01 1:49:00 PM	18	7/2/01 1:55:00 PM	4	7/2/01 2:00:00 PM	52	7/2/01 2:06:00 PM	14
7/2/01 1:49:00 PM	11	7/2/01 1:55:00 PM	5	7/2/01 2:01:00 PM	25	7/2/01 2:06:00 PM	14
7/2/01 1:49:00 PM	5	7/2/01 1:55:00 PM	2	7/2/01 2:01:00 PM	13	7/2/01 2:07:00 PM	32
7/2/01 1:49:00 PM	3	7/2/01 1:55:00 PM	10	7/2/01 2:01:00 PM	44	7/2/01 2:07:00 PM	18
7/2/01 1:49:00 PM	6	7/2/01 1:55:00 PM	3	7/2/01 2:01:00 PM	9	7/2/01 2:07:00 PM	9
7/2/01 1:50:00 PM	8	7/2/01 1:55:00 PM	3	7/2/01 2:01:00 PM	11	7/2/01 2:07:00 PM	14
7/2/01 1:50:00 PM	5	7/2/01 1:56:00 PM	15	7/2/01 2:01:00 PM	16	7/2/01 2:07:00 PM	12
7/2/01 1:50:00 PM	2	7/2/01 1:56:00 PM	17	7/2/01 2:02:00 PM	24	7/2/01 2:07:00 PM	22
7/2/01 1:50:00 PM	3	7/2/01 1:56:00 PM	20	7/2/01 2:02:00 PM	16	7/2/01 2:08:00 PM	5
7/2/01 1:50:00 PM	7	7/2/01 1:56:00 PM	3	7/2/01 2:02:00 PM	10	7/2/01 2:08:00 PM	2
7/2/01 1:50:00 PM	12	7/2/01 1:56:00 PM	14	7/2/01 2:02:00 PM	16	7/2/01 2:08:00 PM	0
7/2/01 1:51:00 PM	3	7/2/01 1:56:00 PM	32	7/2/01 2:02:00 PM	10	7/2/01 2:08:00 PM	2
7/2/01 1:51:00 PM	5	7/2/01 1:57:00 PM	9	7/2/01 2:02:00 PM	10	7/2/01 2:08:00 PM	7
7/2/01 1:51:00 PM	6	7/2/01 1:57:00 PM	9	7/2/01 2:03:00 PM	26	7/2/01 2:08:00 PM	6
7/2/01 1:51:00 PM	21	7/2/01 1:57:00 PM	4	7/2/01 2:03:00 PM	2	7/2/01 2:09:00 PM	5
7/2/01 1:51:00 PM	15	7/2/01 1:57:00 PM	6	7/2/01 2:03:00 PM	4	7/2/01 2:09:00 PM	11
7/2/01 1:51:00 PM	13	7/2/01 1:57:00 PM	2	7/2/01 2:03:00 PM	6	7/2/01 2:09:00 PM	17
7/2/01 1:52:00 PM	4	7/2/01 1:57:00 PM	4	7/2/01 2:03:00 PM	9	7/2/01 2:09:00 PM	17
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7/2/01 1:54:00 PM	8	7/2/01 2:00:00 PM	20	7/2/01 2:05:00 PM	6	7/2/01 2:11:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 2:11:00 PM	24	7/2/01 2:17:00 PM	10	7/2/01 2:23:00 PM	15	7/2/01 2:29:00 PM	8
7/2/01 2:12:00 PM	17	7/2/01 2:17:00 PM	8	7/2/01 2:23:00 PM	8	7/2/01 2:29:00 PM	7
7/2/01 2:12:00 PM	9	7/2/01 2:18:00 PM	10	7/2/01 2:23:00 PM	4	7/2/01 2:29:00 PM	7
7/2/01 2:12:00 PM	6	7/2/01 2:18:00 PM	8	7/2/01 2:24:00 PM	16	7/2/01 2:29:00 PM	35
7/2/01 2:12:00 PM	4	7/2/01 2:18:00 PM	7	7/2/01 2:24:00 PM	11	7/2/01 2:30:00 PM	28
7/2/01 2:12:00 PM	8	7/2/01 2:18:00 PM	17	7/2/01 2:24:00 PM	9	7/2/01 2:30:00 PM	23
7/2/01 2:12:00 PM	9	7/2/01 2:18:00 PM	29	7/2/01 2:24:00 PM	10	7/2/01 2:30:00 PM	16
7/2/01 2:13:00 PM	13	7/2/01 2:18:00 PM	7	7/2/01 2:24:00 PM	2	7/2/01 2:30:00 PM	25
7/2/01 2:13:00 PM	14	7/2/01 2:19:00 PM	3	7/2/01 2:24:00 PM	2	7/2/01 2:30:00 PM	10
7/2/01 2:13:00 PM	4	7/2/01 2:19:00 PM	2	7/2/01 2:25:00 PM	8	7/2/01 2:30:00 PM	9
7/2/01 2:13:00 PM	13	7/2/01 2:19:00 PM	9	7/2/01 2:25:00 PM	10	7/2/01 2:31:00 PM	16
7/2/01 2:13:00 PM	17	7/2/01 2:19:00 PM	11	7/2/01 2:25:00 PM	10	7/2/01 2:31:00 PM	11
7/2/01 2:13:00 PM	16	7/2/01 2:19:00 PM	18	7/2/01 2:25:00 PM	7	7/2/01 2:31:00 PM	24
7/2/01 2:14:00 PM	31	7/2/01 2:19:00 PM	14	7/2/01 2:25:00 PM	7	7/2/01 2:31:00 PM	10
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7/2/01 2:15:00 PM	17	7/2/01 2:21:00 PM	19	7/2/01 2:27:00 PM	26	7/2/01 2:33:00 PM	24
7/2/01 2:15:00 PM	11	7/2/01 2:21:00 PM	16	7/2/01 2:27:00 PM	7	7/2/01 2:33:00 PM	8
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7/2/01 2:16:00 PM	25	7/2/01 2:22:00 PM	5	7/2/01 2:27:00 PM	54	7/2/01 2:33:00 PM	18
7/2/01 2:16:00 PM	1	7/2/01 2:22:00 PM	4	7/2/01 2:28:00 PM	30	7/2/01 2:33:00 PM	13
7/2/01 2:16:00 PM	8	7/2/01 2:22:00 PM	7	7/2/01 2:28:00 PM	10	7/2/01 2:34:00 PM	11
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7/2/01 2:17:00 PM	7	7/2/01 2:23:00 PM	21	7/2/01 2:28:00 PM	9	7/2/01 2:34:00 PM	7
7/2/01 2:17:00 PM	11	7/2/01 2:23:00 PM	12	7/2/01 2:29:00 PM	8	7/2/01 2:34:00 PM	6
7/2/01 2:17:00 PM	15	7/2/01 2:23:00 PM	26	7/2/01 2:29:00 PM	16	7/2/01 2:35:00 PM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 2:35:00 PM	4	7/2/01 2:41:00 PM	4	7/2/01 2:46:00 PM	12	7/2/01 2:52:00 PM	2
7/2/01 2:35:00 PM	18	7/2/01 2:41:00 PM	8	7/2/01 2:47:00 PM	14	7/2/01 2:52:00 PM	13
7/2/01 2:35:00 PM	12	7/2/01 2:41:00 PM	37	7/2/01 2:47:00 PM	15	7/2/01 2:53:00 PM	31
7/2/01 2:35:00 PM	6	7/2/01 2:41:00 PM	22	7/2/01 2:47:00 PM	15	7/2/01 2:53:00 PM	13
7/2/01 2:35:00 PM	1	7/2/01 2:41:00 PM	10	7/2/01 2:47:00 PM	35	7/2/01 2:53:00 PM	15
7/2/01 2:36:00 PM	3	7/2/01 2:41:00 PM	8	7/2/01 2:47:00 PM	13	7/2/01 2:53:00 PM	26
7/2/01 2:36:00 PM	3	7/2/01 2:42:00 PM	20	7/2/01 2:47:00 PM	12	7/2/01 2:53:00 PM	14
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7/2/01 2:36:00 PM	17	7/2/01 2:42:00 PM	19	7/2/01 2:48:00 PM	14	7/2/01 2:54:00 PM	26
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7/2/01 2:38:00 PM	16	7/2/01 2:44:00 PM	11	7/2/01 2:49:00 PM	13	7/2/01 2:55:00 PM	6
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7/2/01 2:40:00 PM	3	7/2/01 2:46:00 PM	16	7/2/01 2:52:00 PM	4	7/2/01 2:58:00 PM	1

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 2:58:00 PM	4	7/2/01 3:04:00 PM	20	7/2/01 3:10:00 PM	19	7/2/01 3:16:00 PM	3
7/2/01 2:58:00 PM	0	7/2/01 3:04:00 PM	18	7/2/01 3:10:00 PM	7	7/2/01 3:16:00 PM	7
7/2/01 2:58:00 PM	2	7/2/01 3:04:00 PM	21	7/2/01 3:10:00 PM	17	7/2/01 3:16:00 PM	5
7/2/01 2:59:00 PM	7	7/2/01 3:04:00 PM	17	7/2/01 3:10:00 PM	12	7/2/01 3:16:00 PM	8
7/2/01 2:59:00 PM	18	7/2/01 3:05:00 PM	19	7/2/01 3:10:00 PM	10	7/2/01 3:16:00 PM	9
7/2/01 2:59:00 PM	20	7/2/01 3:05:00 PM	7	7/2/01 3:11:00 PM	15	7/2/01 3:16:00 PM	101
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7/2/01 3:02:00 PM	12	7/2/01 3:08:00 PM	22	7/2/01 3:13:00 PM	9	7/2/01 3:19:00 PM	16
7/2/01 3:02:00 PM	14	7/2/01 3:08:00 PM	16	7/2/01 3:14:00 PM	6	7/2/01 3:19:00 PM	2
7/2/01 3:02:00 PM	9	7/2/01 3:08:00 PM	18	7/2/01 3:14:00 PM	3	7/2/01 3:20:00 PM	6
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7/2/01 3:03:00 PM	14	7/2/01 3:09:00 PM	14	7/2/01 3:15:00 PM	2	7/2/01 3:21:00 PM	3
7/2/01 3:04:00 PM	8	7/2/01 3:09:00 PM	21	7/2/01 3:15:00 PM	1	7/2/01 3:21:00 PM	4
7/2/01 3:04:00 PM	6	7/2/01 3:10:00 PM	30	7/2/01 3:15:00 PM	2	7/2/01 3:21:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 3:21:00 PM	4	7/2/01 3:27:00 PM	7	7/2/01 3:33:00 PM	8	7/2/01 3:39:00 PM	9
7/2/01 3:22:00 PM	10	7/2/01 3:27:00 PM	9	7/2/01 3:33:00 PM	18	7/2/01 3:39:00 PM	6
7/2/01 3:22:00 PM	13	7/2/01 3:28:00 PM	5	7/2/01 3:33:00 PM	14	7/2/01 3:39:00 PM	9
7/2/01 3:22:00 PM	23	7/2/01 3:28:00 PM	16	7/2/01 3:34:00 PM	18	7/2/01 3:39:00 PM	4
7/2/01 3:22:00 PM	6	7/2/01 3:28:00 PM	8	7/2/01 3:34:00 PM	9	7/2/01 3:40:00 PM	6
7/2/01 3:22:00 PM	12	7/2/01 3:28:00 PM	6	7/2/01 3:34:00 PM	8	7/2/01 3:40:00 PM	4
7/2/01 3:22:00 PM	8	7/2/01 3:28:00 PM	7	7/2/01 3:34:00 PM	15	7/2/01 3:40:00 PM	4
7/2/01 3:23:00 PM	9	7/2/01 3:28:00 PM	9	7/2/01 3:34:00 PM	30	7/2/01 3:40:00 PM	3
7/2/01 3:23:00 PM	4	7/2/01 3:29:00 PM	11	7/2/01 3:34:00 PM	19	7/2/01 3:40:00 PM	4
7/2/01 3:23:00 PM	14	7/2/01 3:29:00 PM	13	7/2/01 3:35:00 PM	16	7/2/01 3:40:00 PM	12
7/2/01 3:23:00 PM	12	7/2/01 3:29:00 PM	17	7/2/01 3:35:00 PM	19	7/2/01 3:41:00 PM	10
7/2/01 3:23:00 PM	23	7/2/01 3:29:00 PM	8	7/2/01 3:35:00 PM	19	7/2/01 3:41:00 PM	2
7/2/01 3:23:00 PM	1	7/2/01 3:29:00 PM	16	7/2/01 3:35:00 PM	6	7/2/01 3:41:00 PM	1
7/2/01 3:24:00 PM	4	7/2/01 3:29:00 PM	28	7/2/01 3:35:00 PM	3	7/2/01 3:41:00 PM	1
7/2/01 3:24:00 PM	11	7/2/01 3:30:00 PM	24	7/2/01 3:35:00 PM	3	7/2/01 3:41:00 PM	8
7/2/01 3:24:00 PM	10	7/2/01 3:30:00 PM	16	7/2/01 3:36:00 PM	8	7/2/01 3:41:00 PM	16
7/2/01 3:24:00 PM	20	7/2/01 3:30:00 PM	16	7/2/01 3:36:00 PM	6	7/2/01 3:42:00 PM	12
7/2/01 3:24:00 PM	33	7/2/01 3:30:00 PM	17	7/2/01 3:36:00 PM	5	7/2/01 3:42:00 PM	15
7/2/01 3:24:00 PM	8	7/2/01 3:30:00 PM	5	7/2/01 3:36:00 PM	7	7/2/01 3:42:00 PM	16
7/2/01 3:25:00 PM	7	7/2/01 3:30:00 PM	3	7/2/01 3:36:00 PM	11	7/2/01 3:42:00 PM	24
7/2/01 3:25:00 PM	8	7/2/01 3:31:00 PM	6	7/2/01 3:36:00 PM	10	7/2/01 3:42:00 PM	10
7/2/01 3:25:00 PM	6	7/2/01 3:31:00 PM	4	7/2/01 3:37:00 PM	2	7/2/01 3:42:00 PM	17
7/2/01 3:25:00 PM	16	7/2/01 3:31:00 PM	8	7/2/01 3:37:00 PM	1	7/2/01 3:43:00 PM	3
7/2/01 3:25:00 PM	10	7/2/01 3:31:00 PM	20	7/2/01 3:37:00 PM	1	7/2/01 3:43:00 PM	3
7/2/01 3:25:00 PM	3	7/2/01 3:31:00 PM	14	7/2/01 3:37:00 PM	5	7/2/01 3:43:00 PM	8
7/2/01 3:26:00 PM	6	7/2/01 3:31:00 PM	8	7/2/01 3:37:00 PM	13	7/2/01 3:43:00 PM	12
7/2/01 3:26:00 PM	6	7/2/01 3:32:00 PM	17	7/2/01 3:37:00 PM	9	7/2/01 3:43:00 PM	10
7/2/01 3:26:00 PM	9	7/2/01 3:32:00 PM	19	7/2/01 3:38:00 PM	12	7/2/01 3:43:00 PM	7
7/2/01 3:26:00 PM	11	7/2/01 3:32:00 PM	4	7/2/01 3:38:00 PM	11	7/2/01 3:44:00 PM	14
7/2/01 3:26:00 PM	8	7/2/01 3:32:00 PM	11	7/2/01 3:38:00 PM	15	7/2/01 3:44:00 PM	28
7/2/01 3:26:00 PM	6	7/2/01 3:32:00 PM	12	7/2/01 3:38:00 PM	22	7/2/01 3:44:00 PM	7
7/2/01 3:27:00 PM	5	7/2/01 3:32:00 PM	29	7/2/01 3:38:00 PM	7	7/2/01 3:44:00 PM	4
7/2/01 3:27:00 PM	10	7/2/01 3:33:00 PM	15	7/2/01 3:38:00 PM	6	7/2/01 3:44:00 PM	7
7/2/01 3:27:00 PM	22	7/2/01 3:33:00 PM	17	7/2/01 3:39:00 PM	6	7/2/01 3:44:00 PM	2
7/2/01 3:27:00 PM	3	7/2/01 3:33:00 PM	9	7/2/01 3:39:00 PM	25	7/2/01 3:45:00 PM	1

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/2/01 3:45:00 PM	7	7/10/01 7:58:00 AM	28	7/10/01 8:33:00 AM	25	7/10/01 9:08:00 AM	21
7/2/01 3:45:00 PM	12	7/10/01 7:59:00 AM	19	7/10/01 8:34:00 AM	25	7/10/01 9:09:00 AM	23
7/2/01 3:45:00 PM	2	7/10/01 8:00:00 AM	25	7/10/01 8:35:00 AM	26	7/10/01 9:10:00 AM	27
7/2/01 3:45:00 PM	1	7/10/01 8:01:00 AM	29	7/10/01 8:36:00 AM	61	7/10/01 9:11:00 AM	30
7/2/01 3:45:00 PM	4	7/10/01 8:02:00 AM	22	7/10/01 8:37:00 AM	43	7/10/01 9:12:00 AM	34
7/2/01 3:46:00 PM	0	7/10/01 8:03:00 AM	26	7/10/01 8:38:00 AM	32	7/10/01 9:13:00 AM	53
7/2/01 3:46:00 PM	3	7/10/01 8:04:00 AM	25	7/10/01 8:39:00 AM	41	7/10/01 9:14:00 AM	25
7/2/01 3:46:00 PM	9	7/10/01 8:05:00 AM	21	7/10/01 8:40:00 AM	60	7/10/01 9:15:00 AM	20
7/2/01 3:46:00 PM	4	7/10/01 8:06:00 AM	18	7/10/01 8:41:00 AM	28	7/10/01 9:16:00 AM	21
7/2/01 3:46:00 PM	8	7/10/01 8:07:00 AM	20	7/10/01 8:42:00 AM	39	7/10/01 9:17:00 AM	19
7/2/01 3:46:00 PM	2	7/10/01 8:08:00 AM	20	7/10/01 8:43:00 AM	21	7/10/01 9:18:00 AM	29
7/2/01 3:47:00 PM	2	7/10/01 8:09:00 AM	21	7/10/01 8:44:00 AM	28	7/10/01 9:19:00 AM	26
7/2/01 3:47:00 PM	7	7/10/01 8:10:00 AM	22	7/10/01 8:45:00 AM	37	7/10/01 9:20:00 AM	22
7/2/01 3:47:00 PM	4	7/10/01 8:11:00 AM	22	7/10/01 8:46:00 AM	34	7/10/01 9:21:00 AM	24
7/2/01 3:47:00 PM	0	7/10/01 8:12:00 AM	21	7/10/01 8:47:00 AM	36	7/10/01 9:22:00 AM	26
7/2/01 3:47:00 PM	0	7/10/01 8:13:00 AM	24	7/10/01 8:48:00 AM	31	7/10/01 9:23:00 AM	29
7/2/01 3:47:00 PM	2	7/10/01 8:14:00 AM	20	7/10/01 8:49:00 AM	45	7/10/01 9:24:00 AM	17
7/2/01 3:48:00 PM	4	7/10/01 8:15:00 AM	19	7/10/01 8:50:00 AM	274	7/10/01 9:25:00 AM	29
7/2/01 3:48:00 PM	3	7/10/01 8:16:00 AM	20	7/10/01 8:51:00 AM	261	7/10/01 9:26:00 AM	21
7/2/01 3:48:00 PM	2	7/10/01 8:17:00 AM	20	7/10/01 8:52:00 AM	69	7/10/01 9:27:00 AM	19
7/2/01 3:48:00 PM	5	7/10/01 8:18:00 AM	21	7/10/01 8:53:00 AM	32	7/10/01 9:28:00 AM	24
7/2/01 3:48:00 PM	15	7/10/01 8:19:00 AM	21	7/10/01 8:54:00 AM	30	7/10/01 9:29:00 AM	22
7/2/01 3:48:00 PM	32	7/10/01 8:20:00 AM	26	7/10/01 8:55:00 AM	24	7/10/01 9:30:00 AM	20
7/2/01 3:49:00 PM	51	7/10/01 8:21:00 AM	25	7/10/01 8:56:00 AM	26	7/10/01 9:31:00 AM	21
7/2/01 3:49:00 PM	38	7/10/01 8:22:00 AM	30	7/10/01 8:57:00 AM	26	7/10/01 9:32:00 AM	20
7/2/01 3:49:00 PM	10	7/10/01 8:23:00 AM	29	7/10/01 8:58:00 AM	27	7/10/01 9:33:00 AM	20
7/2/01 3:49:00 PM	8	7/10/01 8:24:00 AM	22	7/10/01 8:59:00 AM	31	7/10/01 9:34:00 AM	21
7/2/01 3:49:00 PM	17	7/10/01 8:25:00 AM	26	7/10/01 9:00:00 AM	40	7/10/01 9:35:00 AM	26
7/2/01 3:49:00 PM	5	7/10/01 8:26:00 AM	26	7/10/01 9:01:00 AM	27	7/10/01 9:36:00 AM	19
7/2/01 3:50:00 PM	10	7/10/01 8:27:00 AM	24	7/10/01 9:02:00 AM	22	7/10/01 9:37:00 AM	20
7/2/01 3:50:00 PM	9	7/10/01 8:28:00 AM	20	7/10/01 9:03:00 AM	32	7/10/01 9:38:00 AM	19
7/2/01 3:50:00 PM	16	7/10/01 8:29:00 AM	24	7/10/01 9:04:00 AM	26	7/10/01 9:39:00 AM	20
7/10/01 7:55:00 AM	20	7/10/01 8:30:00 AM	21	7/10/01 9:05:00 AM	22	7/10/01 9:40:00 AM	20
7/10/01 7:56:00 AM	26	7/10/01 8:31:00 AM	20	7/10/01 9:06:00 AM	20	7/10/01 9:41:00 AM	18
7/10/01 7:57:00 AM	26	7/10/01 8:32:00 AM	23	7/10/01 9:07:00 AM	26	7/10/01 9:42:00 AM	19

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/10/01 9:43:00 AM	20	7/10/01 10:18:00 AM	21	7/10/01 10:53:00 AM	23	7/10/01 11:28:00 AM	28
7/10/01 9:44:00 AM	22	7/10/01 10:19:00 AM	23	7/10/01 10:54:00 AM	24	7/10/01 11:29:00 AM	21
7/10/01 9:45:00 AM	21	7/10/01 10:20:00 AM	21	7/10/01 10:55:00 AM	18	7/10/01 11:30:00 AM	23
7/10/01 9:46:00 AM	19	7/10/01 10:21:00 AM	29	7/10/01 10:56:00 AM	23	7/10/01 11:31:00 AM	22
7/10/01 9:47:00 AM	20	7/10/01 10:22:00 AM	25	7/10/01 10:57:00 AM	20	7/10/01 11:32:00 AM	20
7/10/01 9:48:00 AM	24	7/10/01 10:23:00 AM	22	7/10/01 10:58:00 AM	20	7/10/01 11:33:00 AM	22
7/10/01 9:49:00 AM	24	7/10/01 10:24:00 AM	20	7/10/01 10:59:00 AM	19	7/10/01 11:34:00 AM	24
7/10/01 9:50:00 AM	24	7/10/01 10:25:00 AM	18	7/10/01 11:00:00 AM	19	7/10/01 11:35:00 AM	20
7/10/01 9:51:00 AM	24	7/10/01 10:26:00 AM	22	7/10/01 11:01:00 AM	21	7/10/01 11:36:00 AM	20
7/10/01 9:52:00 AM	20	7/10/01 10:27:00 AM	24	7/10/01 11:02:00 AM	19	7/10/01 11:37:00 AM	19
7/10/01 9:53:00 AM	24	7/10/01 10:28:00 AM	24	7/10/01 11:03:00 AM	26	7/10/01 11:38:00 AM	21
7/10/01 9:54:00 AM	22	7/10/01 10:29:00 AM	19	7/10/01 11:04:00 AM	21	7/10/01 11:39:00 AM	20
7/10/01 9:55:00 AM	43	7/10/01 10:30:00 AM	19	7/10/01 11:05:00 AM	21	7/10/01 11:40:00 AM	19
7/10/01 9:56:00 AM	30	7/10/01 10:31:00 AM	21	7/10/01 11:06:00 AM	24	7/10/01 11:41:00 AM	31
7/10/01 9:57:00 AM	23	7/10/01 10:32:00 AM	20	7/10/01 11:07:00 AM	19	7/10/01 11:42:00 AM	20
7/10/01 9:58:00 AM	22	7/10/01 10:33:00 AM	21	7/10/01 11:08:00 AM	20	7/10/01 11:43:00 AM	20
7/10/01 9:59:00 AM	22	7/10/01 10:34:00 AM	21	7/10/01 11:09:00 AM	23	7/10/01 11:44:00 AM	19
7/10/01 10:00:00 AM	28	7/10/01 10:35:00 AM	22	7/10/01 11:10:00 AM	20	7/10/01 11:45:00 AM	22
7/10/01 10:01:00 AM	21	7/10/01 10:36:00 AM	25	7/10/01 11:11:00 AM	22	7/10/01 11:46:00 AM	19
7/10/01 10:02:00 AM	20	7/10/01 10:37:00 AM	19	7/10/01 11:12:00 AM	21	7/10/01 11:47:00 AM	24
7/10/01 10:03:00 AM	21	7/10/01 10:38:00 AM	26	7/10/01 11:13:00 AM	23	7/10/01 11:48:00 AM	23
7/10/01 10:04:00 AM	28	7/10/01 10:39:00 AM	27	7/10/01 11:14:00 AM	36	7/10/01 11:49:00 AM	22
7/10/01 10:05:00 AM	23	7/10/01 10:40:00 AM	20	7/10/01 11:15:00 AM	20	7/10/01 11:50:00 AM	22
7/10/01 10:06:00 AM	18	7/10/01 10:41:00 AM	23	7/10/01 11:16:00 AM	26	7/10/01 11:51:00 AM	24
7/10/01 10:07:00 AM	22	7/10/01 10:42:00 AM	22	7/10/01 11:17:00 AM	24	7/10/01 11:52:00 AM	22
7/10/01 10:08:00 AM	20	7/10/01 10:43:00 AM	20	7/10/01 11:18:00 AM	21	7/10/01 11:53:00 AM	21
7/10/01 10:09:00 AM	21	7/10/01 10:44:00 AM	25	7/10/01 11:19:00 AM	18	7/10/01 11:54:00 AM	23
7/10/01 10:10:00 AM	22	7/10/01 10:45:00 AM	20	7/10/01 11:20:00 AM	22	7/10/01 11:55:00 AM	21
7/10/01 10:11:00 AM	21	7/10/01 10:46:00 AM	20	7/10/01 11:21:00 AM	18	7/10/01 11:56:00 AM	35
7/10/01 10:12:00 AM	22	7/10/01 10:47:00 AM	19	7/10/01 11:22:00 AM	20	7/10/01 11:57:00 AM	25
7/10/01 10:13:00 AM	20	7/10/01 10:48:00 AM	19	7/10/01 11:23:00 AM	30	7/10/01 11:58:00 AM	21
7/10/01 10:14:00 AM	21	7/10/01 10:49:00 AM	18	7/10/01 11:24:00 AM	21	7/10/01 11:59:00 AM	21
7/10/01 10:15:00 AM	25	7/10/01 10:50:00 AM	20	7/10/01 11:25:00 AM	21	7/10/01 12:00:00 PM	19
7/10/01 10:16:00 AM	21	7/10/01 10:51:00 AM	27	7/10/01 11:26:00 AM	19	7/10/01 12:01:00 PM	20
7/10/01 10:17:00 AM	19	7/10/01 10:52:00 AM	20	7/10/01 11:27:00 AM	60	7/10/01 12:02:00 PM	19

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/10/01 12:03:00 PM	19	7/10/01 12:38:00 PM	32	7/10/01 1:13:00 PM	18	7/11/01 12:20:00 PM	13
7/10/01 12:04:00 PM	20	7/10/01 12:39:00 PM	70	7/10/01 1:14:00 PM	24	7/11/01 12:21:00 PM	15
7/10/01 12:05:00 PM	21	7/10/01 12:40:00 PM	23	7/10/01 1:15:00 PM	16	7/11/01 12:22:00 PM	12
7/10/01 12:06:00 PM	20	7/10/01 12:41:00 PM	26	7/10/01 1:16:00 PM	17	7/11/01 12:23:00 PM	13
7/10/01 12:07:00 PM	22	7/10/01 12:42:00 PM	22	7/10/01 1:17:00 PM	15	7/11/01 12:24:00 PM	12
7/10/01 12:08:00 PM	21	7/10/01 12:43:00 PM	34	7/10/01 1:18:00 PM	16	7/11/01 12:25:00 PM	12
7/10/01 12:09:00 PM	20	7/10/01 12:44:00 PM	103	7/10/01 1:19:00 PM	18	7/11/01 12:26:00 PM	12
7/10/01 12:10:00 PM	26	7/10/01 12:45:00 PM	43	7/10/01 1:20:00 PM	15	7/11/01 12:27:00 PM	18
7/10/01 12:11:00 PM	38	7/10/01 12:46:00 PM	61	7/10/01 1:21:00 PM	15	7/11/01 12:28:00 PM	14
7/10/01 12:12:00 PM	19	7/10/01 12:47:00 PM	51	7/10/01 1:22:00 PM	14	7/11/01 12:29:00 PM	12
7/10/01 12:13:00 PM	27	7/10/01 12:48:00 PM	76	7/10/01 1:23:00 PM	30	7/11/01 12:30:00 PM	14
7/10/01 12:14:00 PM	26	7/10/01 12:49:00 PM	34	7/10/01 1:24:00 PM	62	7/11/01 12:31:00 PM	15
7/10/01 12:15:00 PM	34	7/10/01 12:50:00 PM	24	7/11/01 11:57:00 AM	21	7/11/01 12:32:00 PM	14
7/10/01 12:16:00 PM	43	7/10/01 12:51:00 PM	21	7/11/01 11:58:00 AM	21	7/11/01 12:33:00 PM	12
7/10/01 12:17:00 PM	30	7/10/01 12:52:00 PM	26	7/11/01 11:59:00 AM	21	7/11/01 12:34:00 PM	12
7/10/01 12:18:00 PM	149	7/10/01 12:53:00 PM	20	7/11/01 12:00:00 PM	14	7/11/01 12:35:00 PM	17
7/10/01 12:19:00 PM	24	7/10/01 12:54:00 PM	32	7/11/01 12:01:00 PM	14	7/11/01 12:36:00 PM	14
7/10/01 12:20:00 PM	24	7/10/01 12:55:00 PM	20	7/11/01 12:02:00 PM	15	7/11/01 12:37:00 PM	20
7/10/01 12:21:00 PM	29	7/10/01 12:56:00 PM	26	7/11/01 12:03:00 PM	14	7/11/01 12:38:00 PM	12
7/10/01 12:22:00 PM	25	7/10/01 12:57:00 PM	25	7/11/01 12:04:00 PM	18	7/11/01 12:39:00 PM	15
7/10/01 12:23:00 PM	22	7/10/01 12:58:00 PM	24	7/11/01 12:05:00 PM	16	7/11/01 12:40:00 PM	18
7/10/01 12:24:00 PM	20	7/10/01 12:59:00 PM	22	7/11/01 12:06:00 PM	12	7/11/01 12:41:00 PM	14
7/10/01 12:25:00 PM	22	7/10/01 1:00:00 PM	20	7/11/01 12:07:00 PM	16	7/11/01 12:42:00 PM	15
7/10/01 12:26:00 PM	28	7/10/01 1:01:00 PM	33	7/11/01 12:08:00 PM	12	7/11/01 12:43:00 PM	15
7/10/01 12:27:00 PM	24	7/10/01 1:02:00 PM	36	7/11/01 12:09:00 PM	14	7/11/01 12:44:00 PM	13
7/10/01 12:28:00 PM	33	7/10/01 1:03:00 PM	44	7/11/01 12:10:00 PM	12	7/11/01 12:45:00 PM	14
7/10/01 12:29:00 PM	31	7/10/01 1:04:00 PM	50	7/11/01 12:11:00 PM	14	7/11/01 12:46:00 PM	17
7/10/01 12:30:00 PM	24	7/10/01 1:05:00 PM	25	7/11/01 12:12:00 PM	14	7/11/01 12:47:00 PM	14
7/10/01 12:31:00 PM	28	7/10/01 1:06:00 PM	53	7/11/01 12:13:00 PM	14	7/11/01 12:48:00 PM	13
7/10/01 12:32:00 PM	32	7/10/01 1:07:00 PM	21	7/11/01 12:14:00 PM	13	7/11/01 12:49:00 PM	13
7/10/01 12:33:00 PM	30	7/10/01 1:08:00 PM	23	7/11/01 12:15:00 PM	13	7/11/01 12:50:00 PM	13
7/10/01 12:34:00 PM	28	7/10/01 1:09:00 PM	26	7/11/01 12:16:00 PM	18	7/11/01 12:51:00 PM	13
7/10/01 12:35:00 PM	36	7/10/01 1:10:00 PM	18	7/11/01 12:17:00 PM	16	7/11/01 12:52:00 PM	14
7/10/01 12:36:00 PM	28	7/10/01 1:11:00 PM	21	7/11/01 12:18:00 PM	22	7/11/01 12:53:00 PM	10
7/10/01 12:37:00 PM	19	7/10/01 1:12:00 PM	19	7/11/01 12:19:00 PM	14	7/11/01 12:54:00 PM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/11/01 12:55:00 PM	13	7/11/01 1:30:00 PM	11	7/11/01 2:05:00 PM	11	7/12/01 10:11:00 AM	3
7/11/01 12:56:00 PM	16	7/11/01 1:31:00 PM	13	7/11/01 2:06:00 PM	11	7/12/01 10:12:00 AM	4
7/11/01 12:57:00 PM	13	7/11/01 1:32:00 PM	14	7/11/01 2:07:00 PM	10	7/12/01 10:13:00 AM	3
7/11/01 12:58:00 PM	17	7/11/01 1:33:00 PM	10	7/11/01 2:08:00 PM	12	7/12/01 10:14:00 AM	6
7/11/01 12:59:00 PM	13	7/11/01 1:34:00 PM	10	7/11/01 2:09:00 PM	11	7/12/01 10:15:00 AM	3
7/11/01 1:00:00 PM	12	7/11/01 1:35:00 PM	14	7/11/01 2:10:00 PM	9	7/12/01 10:16:00 AM	2
7/11/01 1:01:00 PM	16	7/11/01 1:36:00 PM	10	7/11/01 2:11:00 PM	13	7/12/01 10:17:00 AM	2
7/11/01 1:02:00 PM	11	7/11/01 1:37:00 PM	10	7/11/01 2:12:00 PM	9	7/12/01 10:18:00 AM	5
7/11/01 1:03:00 PM	14	7/11/01 1:38:00 PM	10	7/11/01 2:13:00 PM	9	7/12/01 10:19:00 AM	4
7/11/01 1:04:00 PM	12	7/11/01 1:39:00 PM	11	7/11/01 2:14:00 PM	9	7/12/01 10:20:00 AM	4
7/11/01 1:05:00 PM	14	7/11/01 1:40:00 PM	11	7/11/01 2:15:00 PM	10	7/12/01 10:21:00 AM	3
7/11/01 1:06:00 PM	13	7/11/01 1:41:00 PM	12	7/11/01 2:16:00 PM	11	7/12/01 10:22:00 AM	5
7/11/01 1:07:00 PM	12	7/11/01 1:42:00 PM	10	7/11/01 2:17:00 PM	11	7/12/01 10:23:00 AM	5
7/11/01 1:08:00 PM	12	7/11/01 1:43:00 PM	12	7/11/01 2:18:00 PM	11	7/12/01 10:24:00 AM	4
7/11/01 1:09:00 PM	13	7/11/01 1:44:00 PM	11	7/11/01 2:19:00 PM	13	7/12/01 10:25:00 AM	3
7/11/01 1:10:00 PM	13	7/11/01 1:45:00 PM	10	7/11/01 2:20:00 PM	11	7/12/01 10:26:00 AM	6
7/11/01 1:11:00 PM	13	7/11/01 1:46:00 PM	11	7/11/01 2:21:00 PM	11	7/12/01 10:27:00 AM	4
7/11/01 1:12:00 PM	12	7/11/01 1:47:00 PM	12	7/12/01 9:53:00 AM	16	7/12/01 10:28:00 AM	4
7/11/01 1:13:00 PM	14	7/11/01 1:48:00 PM	12	7/12/01 9:54:00 AM	6	7/12/01 10:29:00 AM	4
7/11/01 1:14:00 PM	12	7/11/01 1:49:00 PM	11	7/12/01 9:55:00 AM	8	7/12/01 10:30:00 AM	5
7/11/01 1:15:00 PM	12	7/11/01 1:50:00 PM	13	7/12/01 9:56:00 AM	7	7/12/01 10:31:00 AM	4
7/11/01 1:16:00 PM	14	7/11/01 1:51:00 PM	9	7/12/01 9:57:00 AM	4	7/12/01 10:32:00 AM	3
7/11/01 1:17:00 PM	12	7/11/01 1:52:00 PM	10	7/12/01 9:58:00 AM	4	7/12/01 10:33:00 AM	4
7/11/01 1:18:00 PM	13	7/11/01 1:53:00 PM	11	7/12/01 9:59:00 AM	3	7/12/01 10:34:00 AM	5
7/11/01 1:19:00 PM	16	7/11/01 1:54:00 PM	10	7/12/01 10:00:00 AM	4	7/12/01 10:35:00 AM	3
7/11/01 1:20:00 PM	11	7/11/01 1:55:00 PM	14	7/12/01 10:01:00 AM	7	7/12/01 10:36:00 AM	6
7/11/01 1:21:00 PM	13	7/11/01 1:56:00 PM	12	7/12/01 10:02:00 AM	6	7/12/01 10:37:00 AM	4
7/11/01 1:22:00 PM	13	7/11/01 1:57:00 PM	12	7/12/01 10:03:00 AM	6	7/12/01 10:38:00 AM	8
7/11/01 1:23:00 PM	11	7/11/01 1:58:00 PM	9	7/12/01 10:04:00 AM	6	7/12/01 10:39:00 AM	7
7/11/01 1:24:00 PM	12	7/11/01 1:59:00 PM	11	7/12/01 10:05:00 AM	5	7/12/01 10:40:00 AM	2
7/11/01 1:25:00 PM	21	7/11/01 2:00:00 PM	9	7/12/01 10:06:00 AM	4	7/12/01 10:41:00 AM	4
7/11/01 1:26:00 PM	13	7/11/01 2:01:00 PM	13	7/12/01 10:07:00 AM	4	7/12/01 10:42:00 AM	5
7/11/01 1:27:00 PM	13	7/11/01 2:02:00 PM	9	7/12/01 10:08:00 AM	4	7/12/01 10:43:00 AM	3
7/11/01 1:28:00 PM	13	7/11/01 2:03:00 PM	9	7/12/01 10:09:00 AM	4	7/12/01 10:44:00 AM	6
7/11/01 1:29:00 PM	12	7/11/01 2:04:00 PM	9	7/12/01 10:10:00 AM	4	7/12/01 10:45:00 AM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/12/01 10:46:00 AM	7	7/12/01 11:21:00 AM	27	7/12/01 11:56:00 AM	5	7/12/01 12:31:00 PM	4
7/12/01 10:47:00 AM	3	7/12/01 11:22:00 AM	35	7/12/01 11:57:00 AM	5	7/12/01 12:32:00 PM	4
7/12/01 10:48:00 AM	4	7/12/01 11:23:00 AM	33	7/12/01 11:58:00 AM	5	7/12/01 12:33:00 PM	5
7/12/01 10:49:00 AM	2	7/12/01 11:24:00 AM	33	7/12/01 11:59:00 AM	5	7/12/01 12:34:00 PM	5
7/12/01 10:50:00 AM	4	7/12/01 11:25:00 AM	32	7/12/01 12:00:00 PM	24	7/12/01 12:35:00 PM	4
7/12/01 10:51:00 AM	5	7/12/01 11:26:00 AM	30	7/12/01 12:01:00 PM	8	7/12/01 12:36:00 PM	4
7/12/01 10:52:00 AM	3	7/12/01 11:27:00 AM	26	7/12/01 12:02:00 PM	5	7/12/01 12:37:00 PM	6
7/12/01 10:53:00 AM	8	7/12/01 11:28:00 AM	20	7/12/01 12:03:00 PM	8	7/12/01 12:38:00 PM	4
7/12/01 10:54:00 AM	9	7/12/01 11:29:00 AM	16	7/12/01 12:04:00 PM	6	7/12/01 12:39:00 PM	5
7/12/01 10:55:00 AM	3	7/12/01 11:30:00 AM	16	7/12/01 12:05:00 PM	5	7/12/01 12:40:00 PM	3
7/12/01 10:56:00 AM	3	7/12/01 11:31:00 AM	16	7/12/01 12:06:00 PM	5	7/12/01 12:41:00 PM	4
7/12/01 10:57:00 AM	6	7/12/01 11:32:00 AM	19	7/12/01 12:07:00 PM	5	7/12/01 12:42:00 PM	2
7/12/01 10:58:00 AM	5	7/12/01 11:33:00 AM	13	7/12/01 12:08:00 PM	3	7/12/01 12:43:00 PM	4
7/12/01 10:59:00 AM	4	7/12/01 11:34:00 AM	11	7/12/01 12:09:00 PM	5	7/12/01 12:44:00 PM	4
7/12/01 11:00:00 AM	3	7/12/01 11:35:00 AM	10	7/12/01 12:10:00 PM	5	7/12/01 12:45:00 PM	4
7/12/01 11:01:00 AM	4	7/12/01 11:36:00 AM	11	7/12/01 12:11:00 PM	3	7/12/01 12:46:00 PM	3
7/12/01 11:02:00 AM	5	7/12/01 11:37:00 AM	7	7/12/01 12:12:00 PM	4	7/12/01 12:47:00 PM	3
7/12/01 11:03:00 AM	9	7/12/01 11:38:00 AM	6	7/12/01 12:13:00 PM	4	7/12/01 12:48:00 PM	3
7/12/01 11:04:00 AM	6	7/12/01 11:39:00 AM	9	7/12/01 12:14:00 PM	4	7/12/01 12:49:00 PM	3
7/12/01 11:05:00 AM	21	7/12/01 11:40:00 AM	7	7/12/01 12:15:00 PM	4	7/12/01 12:50:00 PM	4
7/12/01 11:06:00 AM	7	7/12/01 11:41:00 AM	7	7/12/01 12:16:00 PM	3	7/12/01 12:51:00 PM	3
7/12/01 11:07:00 AM	2	7/12/01 11:42:00 AM	6	7/12/01 12:17:00 PM	3	7/12/01 12:52:00 PM	5
7/12/01 11:08:00 AM	4	7/12/01 11:43:00 AM	9	7/12/01 12:18:00 PM	4	7/12/01 12:53:00 PM	4
7/12/01 11:09:00 AM	4	7/12/01 11:44:00 AM	7	7/12/01 12:19:00 PM	8	7/12/01 12:54:00 PM	5
7/12/01 11:10:00 AM	2	7/12/01 11:45:00 AM	7	7/12/01 12:20:00 PM	7	7/12/01 12:55:00 PM	4
7/12/01 11:11:00 AM	6	7/12/01 11:46:00 AM	6	7/12/01 12:21:00 PM	4	7/12/01 12:56:00 PM	4
7/12/01 11:12:00 AM	4	7/12/01 11:47:00 AM	4	7/12/01 12:22:00 PM	4	7/12/01 12:57:00 PM	4
7/12/01 11:13:00 AM	8	7/12/01 11:48:00 AM	6	7/12/01 12:23:00 PM	4	7/12/01 12:58:00 PM	6
7/12/01 11:14:00 AM	4	7/12/01 11:49:00 AM	6	7/12/01 12:24:00 PM	4	7/12/01 12:59:00 PM	5
7/12/01 11:15:00 AM	6	7/12/01 11:50:00 AM	6	7/12/01 12:25:00 PM	3	7/12/01 1:00:00 PM	4
7/12/01 11:16:00 AM	7	7/12/01 11:51:00 AM	6	7/12/01 12:26:00 PM	3	7/12/01 1:01:00 PM	3
7/12/01 11:17:00 AM	3	7/12/01 11:52:00 AM	4	7/12/01 12:27:00 PM	3	7/12/01 1:02:00 PM	6
7/12/01 11:18:00 AM	4	7/12/01 11:53:00 AM	5	7/12/01 12:28:00 PM	6	7/12/01 1:03:00 PM	3
7/12/01 11:19:00 AM	42	7/12/01 11:54:00 AM	6	7/12/01 12:29:00 PM	3	7/12/01 1:04:00 PM	3
7/12/01 11:20:00 AM	48	7/12/01 11:55:00 AM	6	7/12/01 12:30:00 PM	4	7/12/01 1:05:00 PM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/12/01 1:06:00 PM	4	7/12/01 1:41:00 PM	4	7/13/01 8:13:00 AM	3	7/13/01 8:48:00 AM	2
7/12/01 1:07:00 PM	5	7/12/01 1:42:00 PM	5	7/13/01 8:14:00 AM	4	7/13/01 8:49:00 AM	4
7/12/01 1:08:00 PM	4	7/12/01 1:43:00 PM	6	7/13/01 8:15:00 AM	3	7/13/01 8:50:00 AM	3
7/12/01 1:09:00 PM	5	7/12/01 1:44:00 PM	6	7/13/01 8:16:00 AM	3	7/13/01 8:51:00 AM	3
7/12/01 1:10:00 PM	5	7/12/01 1:45:00 PM	4	7/13/01 8:17:00 AM	4	7/13/01 8:52:00 AM	3
7/12/01 1:11:00 PM	5	7/12/01 1:46:00 PM	5	7/13/01 8:18:00 AM	5	7/13/01 8:53:00 AM	4
7/12/01 1:12:00 PM	3	7/12/01 1:47:00 PM	20	7/13/01 8:19:00 AM	3	7/13/01 8:54:00 AM	2
7/12/01 1:13:00 PM	4	7/12/01 1:48:00 PM	12	7/13/01 8:20:00 AM	4	7/13/01 8:55:00 AM	4
7/12/01 1:14:00 PM	4	7/12/01 1:49:00 PM	6	7/13/01 8:21:00 AM	4	7/13/01 8:56:00 AM	5
7/12/01 1:15:00 PM	4	7/12/01 1:50:00 PM	8	7/13/01 8:22:00 AM	3	7/13/01 8:57:00 AM	2
7/12/01 1:16:00 PM	5	7/12/01 1:51:00 PM	15	7/13/01 8:23:00 AM	2	7/13/01 8:58:00 AM	2
7/12/01 1:17:00 PM	6	7/12/01 1:52:00 PM	28	7/13/01 8:24:00 AM	4	7/13/01 8:59:00 AM	2
7/12/01 1:18:00 PM	3	7/12/01 1:53:00 PM	12	7/13/01 8:25:00 AM	5	7/13/01 9:00:00 AM	2
7/12/01 1:19:00 PM	4	7/12/01 1:54:00 PM	12	7/13/01 8:26:00 AM	5	7/13/01 9:01:00 AM	3
7/12/01 1:20:00 PM	4	7/12/01 1:55:00 PM	12	7/13/01 8:27:00 AM	4	7/13/01 9:02:00 AM	2
7/12/01 1:21:00 PM	6	7/13/01 7:53:00 AM	16	7/13/01 8:28:00 AM	3	7/13/01 9:03:00 AM	1
7/12/01 1:22:00 PM	5	7/13/01 7:54:00 AM	6	7/13/01 8:29:00 AM	3	7/13/01 9:04:00 AM	0
7/12/01 1:23:00 PM	5	7/13/01 7:55:00 AM	6	7/13/01 8:30:00 AM	3	7/13/01 9:05:00 AM	2
7/12/01 1:24:00 PM	5	7/13/01 7:56:00 AM	5	7/13/01 8:31:00 AM	3	7/13/01 9:06:00 AM	2
7/12/01 1:25:00 PM	5	7/13/01 7:57:00 AM	5	7/13/01 8:32:00 AM	2	7/13/01 9:07:00 AM	2
7/12/01 1:26:00 PM	4	7/13/01 7:58:00 AM	4	7/13/01 8:33:00 AM	2	7/13/01 9:08:00 AM	2
7/12/01 1:27:00 PM	6	7/13/01 7:59:00 AM	2	7/13/01 8:34:00 AM	2	7/13/01 9:09:00 AM	1
7/12/01 1:28:00 PM	4	7/13/01 8:00:00 AM	3	7/13/01 8:35:00 AM	3	7/13/01 9:10:00 AM	5
7/12/01 1:29:00 PM	3	7/13/01 8:01:00 AM	3	7/13/01 8:36:00 AM	2	7/13/01 9:11:00 AM	1
7/12/01 1:30:00 PM	3	7/13/01 8:02:00 AM	3	7/13/01 8:37:00 AM	3	7/13/01 9:12:00 AM	3
7/12/01 1:31:00 PM	5	7/13/01 8:03:00 AM	3	7/13/01 8:38:00 AM	3	7/13/01 9:13:00 AM	3
7/12/01 1:32:00 PM	5	7/13/01 8:04:00 AM	4	7/13/01 8:39:00 AM	3	7/13/01 9:14:00 AM	4
7/12/01 1:33:00 PM	4	7/13/01 8:05:00 AM	3	7/13/01 8:40:00 AM	3	7/13/01 9:15:00 AM	2
7/12/01 1:34:00 PM	6	7/13/01 8:06:00 AM	3	7/13/01 8:41:00 AM	3	7/13/01 9:16:00 AM	3
7/12/01 1:35:00 PM	5	7/13/01 8:07:00 AM	3	7/13/01 8:42:00 AM	2	7/13/01 9:17:00 AM	4
7/12/01 1:36:00 PM	4	7/13/01 8:08:00 AM	3	7/13/01 8:43:00 AM	2	7/13/01 9:18:00 AM	2
7/12/01 1:37:00 PM	5	7/13/01 8:09:00 AM	3	7/13/01 8:44:00 AM	2	7/13/01 9:19:00 AM	2
7/12/01 1:38:00 PM	5	7/13/01 8:10:00 AM	5	7/13/01 8:45:00 AM	2	7/13/01 9:20:00 AM	2
7/12/01 1:39:00 PM	4	7/13/01 8:11:00 AM	3	7/13/01 8:46:00 AM	2	7/13/01 9:21:00 AM	4
7/12/01 1:40:00 PM	3	7/13/01 8:12:00 AM	4	7/13/01 8:47:00 AM	4	7/13/01 9:22:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/13/01 9:23:00 AM	2	7/13/01 9:58:00 AM	2	7/13/01 10:33:00 AM	4	7/13/01 11:08:00 AM	4
7/13/01 9:24:00 AM	3	7/13/01 9:59:00 AM	2	7/13/01 10:34:00 AM	3	7/13/01 11:09:00 AM	5
7/13/01 9:25:00 AM	3	7/13/01 10:00:00 AM	3	7/13/01 10:35:00 AM	4	7/13/01 11:10:00 AM	2
7/13/01 9:26:00 AM	2	7/13/01 10:01:00 AM	3	7/13/01 10:36:00 AM	3	7/13/01 11:11:00 AM	3
7/13/01 9:27:00 AM	2	7/13/01 10:02:00 AM	5	7/13/01 10:37:00 AM	2	7/13/01 11:12:00 AM	3
7/13/01 9:28:00 AM	4	7/13/01 10:03:00 AM	4	7/13/01 10:38:00 AM	4	7/13/01 11:13:00 AM	3
7/13/01 9:29:00 AM	8	7/13/01 10:04:00 AM	3	7/13/01 10:39:00 AM	3	7/13/01 11:14:00 AM	3
7/13/01 9:30:00 AM	1	7/13/01 10:05:00 AM	4	7/13/01 10:40:00 AM	3	7/13/01 11:15:00 AM	4
7/13/01 9:31:00 AM	2	7/13/01 10:06:00 AM	3	7/13/01 10:41:00 AM	3	7/13/01 11:16:00 AM	3
7/13/01 9:32:00 AM	5	7/13/01 10:07:00 AM	6	7/13/01 10:42:00 AM	2	7/13/01 11:17:00 AM	3
7/13/01 9:33:00 AM	2	7/13/01 10:08:00 AM	4	7/13/01 10:43:00 AM	3	7/13/01 11:18:00 AM	2
7/13/01 9:34:00 AM	4	7/13/01 10:09:00 AM	3	7/13/01 10:44:00 AM	2	7/13/01 11:19:00 AM	3
7/13/01 9:35:00 AM	2	7/13/01 10:10:00 AM	5	7/13/01 10:45:00 AM	5	7/13/01 11:20:00 AM	2
7/13/01 9:36:00 AM	4	7/13/01 10:11:00 AM	3	7/13/01 10:46:00 AM	2	7/13/01 11:21:00 AM	3
7/13/01 9:37:00 AM	2	7/13/01 10:12:00 AM	4	7/13/01 10:47:00 AM	3	7/13/01 11:22:00 AM	5
7/13/01 9:38:00 AM	2	7/13/01 10:13:00 AM	4	7/13/01 10:48:00 AM	1	7/13/01 11:23:00 AM	3
7/13/01 9:39:00 AM	3	7/13/01 10:14:00 AM	3	7/13/01 10:49:00 AM	2	7/13/01 11:24:00 AM	4
7/13/01 9:40:00 AM	2	7/13/01 10:15:00 AM	4	7/13/01 10:50:00 AM	4	7/13/01 11:25:00 AM	5
7/13/01 9:41:00 AM	2	7/13/01 10:16:00 AM	4	7/13/01 10:51:00 AM	5	7/13/01 11:26:00 AM	2
7/13/01 9:42:00 AM	2	7/13/01 10:17:00 AM	4	7/13/01 10:52:00 AM	1	7/13/01 11:27:00 AM	3
7/13/01 9:43:00 AM	3	7/13/01 10:18:00 AM	5	7/13/01 10:53:00 AM	3	7/13/01 11:28:00 AM	3
7/13/01 9:44:00 AM	6	7/13/01 10:19:00 AM	4	7/13/01 10:54:00 AM	3	7/13/01 11:29:00 AM	3
7/13/01 9:45:00 AM	2	7/13/01 10:20:00 AM	3	7/13/01 10:55:00 AM	4	7/13/01 11:30:00 AM	4
7/13/01 9:46:00 AM	2	7/13/01 10:21:00 AM	4	7/13/01 10:56:00 AM	3	7/13/01 11:31:00 AM	2
7/13/01 9:47:00 AM	5	7/13/01 10:22:00 AM	4	7/13/01 10:57:00 AM	2	7/13/01 11:32:00 AM	4
7/13/01 9:48:00 AM	6	7/13/01 10:23:00 AM	4	7/13/01 10:58:00 AM	2	7/13/01 11:33:00 AM	3
7/13/01 9:49:00 AM	4	7/13/01 10:24:00 AM	3	7/13/01 10:59:00 AM	3	7/13/01 11:34:00 AM	3
7/13/01 9:50:00 AM	2	7/13/01 10:25:00 AM	4	7/13/01 11:00:00 AM	3	7/13/01 11:35:00 AM	5
7/13/01 9:51:00 AM	5	7/13/01 10:26:00 AM	2	7/13/01 11:01:00 AM	2	7/13/01 11:36:00 AM	3
7/13/01 9:52:00 AM	2	7/13/01 10:27:00 AM	3	7/13/01 11:02:00 AM	3	7/13/01 11:37:00 AM	4
7/13/01 9:53:00 AM	2	7/13/01 10:28:00 AM	4	7/13/01 11:03:00 AM	4	7/13/01 11:38:00 AM	3
7/13/01 9:54:00 AM	3	7/13/01 10:29:00 AM	1	7/13/01 11:04:00 AM	2	7/13/01 11:39:00 AM	3
7/13/01 9:55:00 AM	6	7/13/01 10:30:00 AM	2	7/13/01 11:05:00 AM	3	7/13/01 11:40:00 AM	4
7/13/01 9:56:00 AM	6	7/13/01 10:31:00 AM	4	7/13/01 11:06:00 AM	3	7/13/01 11:41:00 AM	4
7/13/01 9:57:00 AM	4	7/13/01 10:32:00 AM	3	7/13/01 11:07:00 AM	3	7/13/01 11:42:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/13/01 11:43:00 AM	3	7/13/01 12:18:00 PM	4	7/13/01 12:53:00 PM	4	7/16/01 8:15:00 AM	12
7/13/01 11:44:00 AM	5	7/13/01 12:19:00 PM	4	7/13/01 12:54:00 PM	5	7/16/01 8:16:00 AM	12
7/13/01 11:45:00 AM	4	7/13/01 12:20:00 PM	3	7/13/01 12:55:00 PM	4	7/16/01 8:17:00 AM	12
7/13/01 11:46:00 AM	4	7/13/01 12:21:00 PM	4	7/13/01 12:56:00 PM	8	7/16/01 8:18:00 AM	11
7/13/01 11:47:00 AM	4	7/13/01 12:22:00 PM	4	7/13/01 12:57:00 PM	6	7/16/01 8:19:00 AM	12
7/13/01 11:48:00 AM	6	7/13/01 12:23:00 PM	5	7/13/01 12:58:00 PM	6	7/16/01 8:20:00 AM	12
7/13/01 11:49:00 AM	4	7/13/01 12:24:00 PM	6	7/13/01 12:59:00 PM	6	7/16/01 8:21:00 AM	14
7/13/01 11:50:00 AM	4	7/13/01 12:25:00 PM	3	7/13/01 1:00:00 PM	4	7/16/01 8:22:00 AM	13
7/13/01 11:51:00 AM	8	7/13/01 12:26:00 PM	5	7/16/01 7:48:00 AM	22	7/16/01 8:23:00 AM	12
7/13/01 11:52:00 AM	5	7/13/01 12:27:00 PM	4	7/16/01 7:49:00 AM	14	7/16/01 8:24:00 AM	10
7/13/01 11:53:00 AM	3	7/13/01 12:28:00 PM	9	7/16/01 7:50:00 AM	15	7/16/01 8:25:00 AM	11
7/13/01 11:54:00 AM	3	7/13/01 12:29:00 PM	4	7/16/01 7:51:00 AM	20	7/16/01 8:26:00 AM	12
7/13/01 11:55:00 AM	4	7/13/01 12:30:00 PM	5	7/16/01 7:52:00 AM	16	7/16/01 8:27:00 AM	10
7/13/01 11:56:00 AM	5	7/13/01 12:31:00 PM	6	7/16/01 7:53:00 AM	17	7/16/01 8:28:00 AM	11
7/13/01 11:57:00 AM	6	7/13/01 12:32:00 PM	4	7/16/01 7:54:00 AM	15	7/16/01 8:29:00 AM	10
7/13/01 11:58:00 AM	5	7/13/01 12:33:00 PM	5	7/16/01 7:55:00 AM	14	7/16/01 8:30:00 AM	9
7/13/01 11:59:00 AM	4	7/13/01 12:34:00 PM	5	7/16/01 7:56:00 AM	14	7/16/01 8:31:00 AM	12
7/13/01 12:00:00 PM	5	7/13/01 12:35:00 PM	4	7/16/01 7:57:00 AM	15	7/16/01 8:32:00 AM	13
7/13/01 12:01:00 PM	6	7/13/01 12:36:00 PM	4	7/16/01 7:58:00 AM	11	7/16/01 8:33:00 AM	10
7/13/01 12:02:00 PM	6	7/13/01 12:37:00 PM	6	7/16/01 7:59:00 AM	29	7/16/01 8:34:00 AM	12
7/13/01 12:03:00 PM	4	7/13/01 12:38:00 PM	5	7/16/01 8:00:00 AM	39	7/16/01 8:35:00 AM	15
7/13/01 12:04:00 PM	7	7/13/01 12:39:00 PM	5	7/16/01 8:01:00 AM	13	7/16/01 8:36:00 AM	18
7/13/01 12:05:00 PM	3	7/13/01 12:40:00 PM	4	7/16/01 8:02:00 AM	21	7/16/01 8:37:00 AM	11
7/13/01 12:06:00 PM	4	7/13/01 12:41:00 PM	4	7/16/01 8:03:00 AM	14	7/16/01 8:38:00 AM	14
7/13/01 12:07:00 PM	3	7/13/01 12:42:00 PM	4	7/16/01 8:04:00 AM	14	7/16/01 8:39:00 AM	13
7/13/01 12:08:00 PM	5	7/13/01 12:43:00 PM	5	7/16/01 8:05:00 AM	15	7/16/01 8:40:00 AM	14
7/13/01 12:09:00 PM	4	7/13/01 12:44:00 PM	4	7/16/01 8:06:00 AM	43	7/16/01 8:41:00 AM	24
7/13/01 12:10:00 PM	3	7/13/01 12:45:00 PM	4	7/16/01 8:07:00 AM	22	7/16/01 8:42:00 AM	11
7/13/01 12:11:00 PM	4	7/13/01 12:46:00 PM	7	7/16/01 8:08:00 AM	16	7/16/01 8:43:00 AM	17
7/13/01 12:12:00 PM	5	7/13/01 12:47:00 PM	5	7/16/01 8:09:00 AM	14	7/16/01 8:44:00 AM	15
7/13/01 12:13:00 PM	4	7/13/01 12:48:00 PM	4	7/16/01 8:10:00 AM	15	7/16/01 8:45:00 AM	25
7/13/01 12:14:00 PM	4	7/13/01 12:49:00 PM	5	7/16/01 8:11:00 AM	15	7/16/01 8:46:00 AM	16
7/13/01 12:15:00 PM	4	7/13/01 12:50:00 PM	5	7/16/01 8:12:00 AM	14	7/16/01 8:47:00 AM	14
7/13/01 12:16:00 PM	4	7/13/01 12:51:00 PM	3	7/16/01 8:13:00 AM	39	7/16/01 8:48:00 AM	14
7/13/01 12:17:00 PM	4	7/13/01 12:52:00 PM	6	7/16/01 8:14:00 AM	13	7/16/01 8:49:00 AM	56

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/16/01 8:50:00 AM	52	7/16/01 9:25:00 AM	21	7/16/01 10:00:00 AM	9	7/16/01 10:35:00 AM	8
7/16/01 8:51:00 AM	43	7/16/01 9:26:00 AM	25	7/16/01 10:01:00 AM	10	7/16/01 10:36:00 AM	6
7/16/01 8:52:00 AM	13	7/16/01 9:27:00 AM	10	7/16/01 10:02:00 AM	10	7/16/01 10:37:00 AM	7
7/16/01 8:53:00 AM	17	7/16/01 9:28:00 AM	14	7/16/01 10:03:00 AM	8	7/16/01 10:38:00 AM	14
7/16/01 8:54:00 AM	11	7/16/01 9:29:00 AM	15	7/16/01 10:04:00 AM	16	7/16/01 10:39:00 AM	8
7/16/01 8:55:00 AM	17	7/16/01 9:30:00 AM	8	7/16/01 10:05:00 AM	11	7/16/01 10:40:00 AM	14
7/16/01 8:56:00 AM	22	7/16/01 9:31:00 AM	11	7/16/01 10:06:00 AM	12	7/16/01 10:41:00 AM	18
7/16/01 8:57:00 AM	15	7/16/01 9:32:00 AM	12	7/16/01 10:07:00 AM	16	7/16/01 10:42:00 AM	10
7/16/01 8:58:00 AM	12	7/16/01 9:33:00 AM	18	7/16/01 10:08:00 AM	8	7/16/01 10:43:00 AM	9
7/16/01 8:59:00 AM	21	7/16/01 9:34:00 AM	10	7/16/01 10:09:00 AM	10	7/16/01 10:44:00 AM	10
7/16/01 9:00:00 AM	12	7/16/01 9:35:00 AM	10	7/16/01 10:10:00 AM	11	7/16/01 10:45:00 AM	19
7/16/01 9:01:00 AM	27	7/16/01 9:36:00 AM	9	7/16/01 10:11:00 AM	10	7/16/01 10:46:00 AM	7
7/16/01 9:02:00 AM	18	7/16/01 9:37:00 AM	18	7/16/01 10:12:00 AM	10	7/16/01 10:47:00 AM	8
7/16/01 9:03:00 AM	10	7/16/01 9:38:00 AM	11	7/16/01 10:13:00 AM	12	7/16/01 10:48:00 AM	7
7/16/01 9:04:00 AM	16	7/16/01 9:39:00 AM	10	7/16/01 10:14:00 AM	9	7/16/01 10:49:00 AM	8
7/16/01 9:05:00 AM	20	7/16/01 9:40:00 AM	14	7/16/01 10:15:00 AM	10	7/16/01 10:50:00 AM	27
7/16/01 9:06:00 AM	20	7/16/01 9:41:00 AM	24	7/16/01 10:16:00 AM	10	7/16/01 10:51:00 AM	32
7/16/01 9:07:00 AM	22	7/16/01 9:42:00 AM	27	7/16/01 10:17:00 AM	8	7/16/01 10:52:00 AM	16
7/16/01 9:08:00 AM	11	7/16/01 9:43:00 AM	10	7/16/01 10:18:00 AM	9	7/16/01 10:53:00 AM	23
7/16/01 9:09:00 AM	9	7/16/01 9:44:00 AM	11	7/16/01 10:19:00 AM	9	7/16/01 10:54:00 AM	32
7/16/01 9:10:00 AM	15	7/16/01 9:45:00 AM	24	7/16/01 10:20:00 AM	8	7/16/01 10:55:00 AM	10
7/16/01 9:11:00 AM	11	7/16/01 9:46:00 AM	16	7/16/01 10:21:00 AM	14	7/16/01 10:56:00 AM	8
7/16/01 9:12:00 AM	228	7/16/01 9:47:00 AM	13	7/16/01 10:22:00 AM	13	7/16/01 10:57:00 AM	10
7/16/01 9:13:00 AM	22	7/16/01 9:48:00 AM	19	7/16/01 10:23:00 AM	21	7/16/01 10:58:00 AM	9
7/16/01 9:14:00 AM	19	7/16/01 9:49:00 AM	13	7/16/01 10:24:00 AM	48	7/16/01 10:59:00 AM	8
7/16/01 9:15:00 AM	16	7/16/01 9:50:00 AM	12	7/16/01 10:25:00 AM	8	7/16/01 11:00:00 AM	9
7/16/01 9:16:00 AM	37	7/16/01 9:51:00 AM	13	7/16/01 10:26:00 AM	8	7/16/01 11:01:00 AM	9
7/16/01 9:17:00 AM	10	7/16/01 9:52:00 AM	13	7/16/01 10:27:00 AM	10	7/16/01 11:02:00 AM	8
7/16/01 9:18:00 AM	14	7/16/01 9:53:00 AM	16	7/16/01 10:28:00 AM	9	7/16/01 11:03:00 AM	8
7/16/01 9:19:00 AM	14	7/16/01 9:54:00 AM	37	7/16/01 10:29:00 AM	7	7/16/01 11:04:00 AM	9
7/16/01 9:20:00 AM	25	7/16/01 9:55:00 AM	36	7/16/01 10:30:00 AM	7	7/16/01 11:05:00 AM	7
7/16/01 9:21:00 AM	12	7/16/01 9:56:00 AM	16	7/16/01 10:31:00 AM	14	7/16/01 11:06:00 AM	8
7/16/01 9:22:00 AM	80	7/16/01 9:57:00 AM	10	7/16/01 10:32:00 AM	9	7/16/01 11:07:00 AM	8
7/16/01 9:23:00 AM	13	7/16/01 9:58:00 AM	9	7/16/01 10:33:00 AM	8	7/16/01 11:08:00 AM	10
7/16/01 9:24:00 AM	17	7/16/01 9:59:00 AM	9	7/16/01 10:34:00 AM	16	7/16/01 11:09:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/16/01 11:10:00 AM	7	7/16/01 11:45:00 AM	38	7/16/01 12:20:00 PM	10	7/16/01 12:55:00 PM	11
7/16/01 11:11:00 AM	10	7/16/01 11:46:00 AM	23	7/16/01 12:21:00 PM	10	7/16/01 12:56:00 PM	15
7/16/01 11:12:00 AM	9	7/16/01 11:47:00 AM	29	7/16/01 12:22:00 PM	6	7/16/01 12:57:00 PM	9
7/16/01 11:13:00 AM	8	7/16/01 11:48:00 AM	32	7/16/01 12:23:00 PM	9	7/16/01 12:58:00 PM	10
7/16/01 11:14:00 AM	7	7/16/01 11:49:00 AM	11	7/16/01 12:24:00 PM	8	7/16/01 12:59:00 PM	17
7/16/01 11:15:00 AM	7	7/16/01 11:50:00 AM	11	7/16/01 12:25:00 PM	9	7/16/01 1:00:00 PM	10
7/16/01 11:16:00 AM	8	7/16/01 11:51:00 AM	8	7/16/01 12:26:00 PM	9	7/16/01 1:01:00 PM	9
7/16/01 11:17:00 AM	8	7/16/01 11:52:00 AM	8	7/16/01 12:27:00 PM	11	7/16/01 1:02:00 PM	10
7/16/01 11:18:00 AM	8	7/16/01 11:53:00 AM	25	7/16/01 12:28:00 PM	8	7/16/01 1:03:00 PM	7
7/16/01 11:19:00 AM	7	7/16/01 11:54:00 AM	19	7/16/01 12:29:00 PM	8	7/16/01 1:04:00 PM	9
7/16/01 11:20:00 AM	9	7/16/01 11:55:00 AM	18	7/16/01 12:30:00 PM	7	7/16/01 1:05:00 PM	11
7/16/01 11:21:00 AM	7	7/16/01 11:56:00 AM	9	7/16/01 12:31:00 PM	7	7/16/01 1:06:00 PM	10
7/16/01 11:22:00 AM	7	7/16/01 11:57:00 AM	9	7/16/01 12:32:00 PM	8	7/16/01 1:07:00 PM	9
7/16/01 11:23:00 AM	10	7/16/01 11:58:00 AM	22	7/16/01 12:33:00 PM	8	7/16/01 1:08:00 PM	7
7/16/01 11:24:00 AM	7	7/16/01 11:59:00 AM	16	7/16/01 12:34:00 PM	9	7/16/01 1:09:00 PM	8
7/16/01 11:25:00 AM	7	7/16/01 12:00:00 PM	14	7/16/01 12:35:00 PM	10	7/16/01 1:10:00 PM	7
7/16/01 11:26:00 AM	8	7/16/01 12:01:00 PM	21	7/16/01 12:36:00 PM	6	7/16/01 1:11:00 PM	8
7/16/01 11:27:00 AM	9	7/16/01 12:02:00 PM	26	7/16/01 12:37:00 PM	10	7/16/01 1:12:00 PM	9
7/16/01 11:28:00 AM	8	7/16/01 12:03:00 PM	20	7/16/01 12:38:00 PM	10	7/16/01 1:13:00 PM	10
7/16/01 11:29:00 AM	7	7/16/01 12:04:00 PM	13	7/16/01 12:39:00 PM	8	7/16/01 1:14:00 PM	8
7/16/01 11:30:00 AM	7	7/16/01 12:05:00 PM	28	7/16/01 12:40:00 PM	14	7/16/01 1:15:00 PM	7
7/16/01 11:31:00 AM	8	7/16/01 12:06:00 PM	22	7/16/01 12:41:00 PM	8	7/16/01 1:16:00 PM	8
7/16/01 11:32:00 AM	7	7/16/01 12:07:00 PM	13	7/16/01 12:42:00 PM	7	7/16/01 1:17:00 PM	9
7/16/01 11:33:00 AM	7	7/16/01 12:08:00 PM	20	7/16/01 12:43:00 PM	9	7/16/01 1:18:00 PM	9
7/16/01 11:34:00 AM	8	7/16/01 12:09:00 PM	11	7/16/01 12:44:00 PM	8	7/16/01 1:19:00 PM	11
7/16/01 11:35:00 AM	8	7/16/01 12:10:00 PM	10	7/16/01 12:45:00 PM	9	7/16/01 1:20:00 PM	10
7/16/01 11:36:00 AM	7	7/16/01 12:11:00 PM	9	7/16/01 12:46:00 PM	8	7/16/01 1:21:00 PM	20
7/16/01 11:37:00 AM	7	7/16/01 12:12:00 PM	12	7/16/01 12:47:00 PM	8	7/16/01 1:22:00 PM	8
7/16/01 11:38:00 AM	8	7/16/01 12:13:00 PM	10	7/16/01 12:48:00 PM	8	7/16/01 1:23:00 PM	12
7/16/01 11:39:00 AM	5	7/16/01 12:14:00 PM	12	7/16/01 12:49:00 PM	8	7/16/01 1:24:00 PM	20
7/16/01 11:40:00 AM	8	7/16/01 12:15:00 PM	9	7/16/01 12:50:00 PM	9	7/16/01 1:25:00 PM	11
7/16/01 11:41:00 AM	8	7/16/01 12:16:00 PM	12	7/16/01 12:51:00 PM	8	7/16/01 1:26:00 PM	9
7/16/01 11:42:00 AM	8	7/16/01 12:17:00 PM	8	7/16/01 12:52:00 PM	9	7/16/01 1:27:00 PM	10
7/16/01 11:43:00 AM	9	7/16/01 12:18:00 PM	9	7/16/01 12:53:00 PM	11	7/16/01 1:28:00 PM	12
7/16/01 11:44:00 AM	19	7/16/01 12:19:00 PM	8	7/16/01 12:54:00 PM	12	7/16/01 1:29:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/16/01 1:30:00 PM	20	7/16/01 2:05:00 PM	13	7/16/01 2:40:00 PM	8	7/17/01 2:01:00 PM	9
7/16/01 1:31:00 PM	13	7/16/01 2:06:00 PM	9	7/16/01 2:41:00 PM	7	7/17/01 2:02:00 PM	9
7/16/01 1:32:00 PM	10	7/16/01 2:07:00 PM	11	7/16/01 2:42:00 PM	12	7/17/01 2:03:00 PM	8
7/16/01 1:33:00 PM	11	7/16/01 2:08:00 PM	24	7/16/01 2:43:00 PM	22	7/17/01 2:04:00 PM	10
7/16/01 1:34:00 PM	9	7/16/01 2:09:00 PM	17	7/16/01 2:44:00 PM	13	7/17/01 2:05:00 PM	10
7/16/01 1:35:00 PM	9	7/16/01 2:10:00 PM	9	7/16/01 2:45:00 PM	10	7/17/01 2:06:00 PM	15
7/16/01 1:36:00 PM	10	7/16/01 2:11:00 PM	10	7/16/01 2:46:00 PM	9	7/17/01 2:07:00 PM	10
7/16/01 1:37:00 PM	12	7/16/01 2:12:00 PM	9	7/16/01 2:47:00 PM	9	7/17/01 2:08:00 PM	9
7/16/01 1:38:00 PM	9	7/16/01 2:13:00 PM	9	7/16/01 2:48:00 PM	9	7/17/01 2:09:00 PM	8
7/16/01 1:39:00 PM	10	7/16/01 2:14:00 PM	11	7/16/01 2:49:00 PM	7	7/17/01 2:10:00 PM	9
7/16/01 1:40:00 PM	9	7/16/01 2:15:00 PM	34	7/16/01 2:50:00 PM	12	7/17/01 2:11:00 PM	11
7/16/01 1:41:00 PM	11	7/16/01 2:16:00 PM	15	7/16/01 2:51:00 PM	9	7/17/01 2:12:00 PM	14
7/16/01 1:42:00 PM	10	7/16/01 2:17:00 PM	9	7/16/01 2:52:00 PM	11	7/17/01 2:13:00 PM	11
7/16/01 1:43:00 PM	10	7/16/01 2:18:00 PM	12	7/16/01 2:53:00 PM	10	7/17/01 2:14:00 PM	10
7/16/01 1:44:00 PM	8	7/16/01 2:19:00 PM	17	7/16/01 2:54:00 PM	12	7/17/01 2:15:00 PM	8
7/16/01 1:45:00 PM	9	7/16/01 2:20:00 PM	12	7/16/01 2:55:00 PM	24	7/17/01 2:16:00 PM	9
7/16/01 1:46:00 PM	10	7/16/01 2:21:00 PM	10	7/16/01 2:56:00 PM	11	7/17/01 2:17:00 PM	8
7/16/01 1:47:00 PM	10	7/16/01 2:22:00 PM	9	7/16/01 2:57:00 PM	8	7/17/01 2:18:00 PM	9
7/16/01 1:48:00 PM	12	7/16/01 2:23:00 PM	9	7/16/01 2:58:00 PM	9	7/17/01 2:19:00 PM	10
7/16/01 1:49:00 PM	28	7/16/01 2:24:00 PM	10	7/16/01 2:59:00 PM	7	7/17/01 2:20:00 PM	10
7/16/01 1:50:00 PM	32	7/16/01 2:25:00 PM	29	7/16/01 3:00:00 PM	9	7/17/01 2:21:00 PM	10
7/16/01 1:51:00 PM	21	7/16/01 2:26:00 PM	12	7/16/01 3:01:00 PM	10	7/17/01 2:22:00 PM	10
7/16/01 1:52:00 PM	26	7/16/01 2:27:00 PM	25	7/16/01 3:02:00 PM	10	7/17/01 2:23:00 PM	11
7/16/01 1:53:00 PM	25	7/16/01 2:28:00 PM	9	7/16/01 3:03:00 PM	10	7/17/01 2:24:00 PM	10
7/16/01 1:54:00 PM	10	7/16/01 2:29:00 PM	10	7/16/01 3:04:00 PM	7	7/17/01 2:25:00 PM	12
7/16/01 1:55:00 PM	16	7/16/01 2:30:00 PM	14	7/16/01 3:05:00 PM	8	7/17/01 2:26:00 PM	8
7/16/01 1:56:00 PM	12	7/16/01 2:31:00 PM	10	7/16/01 3:06:00 PM	12	7/17/01 2:27:00 PM	8
7/16/01 1:57:00 PM	10	7/16/01 2:32:00 PM	8	7/16/01 3:07:00 PM	12	7/17/01 2:28:00 PM	9
7/16/01 1:58:00 PM	12	7/16/01 2:33:00 PM	13	7/16/01 3:08:00 PM	10	7/17/01 2:29:00 PM	9
7/16/01 1:59:00 PM	13	7/16/01 2:34:00 PM	13	7/17/01 1:55:00 PM	18	7/17/01 2:30:00 PM	9
7/16/01 2:00:00 PM	7	7/16/01 2:35:00 PM	15	7/17/01 1:56:00 PM	10	7/17/01 2:31:00 PM	10
7/16/01 2:01:00 PM	11	7/16/01 2:36:00 PM	11	7/17/01 1:57:00 PM	10	7/17/01 2:32:00 PM	11
7/16/01 2:02:00 PM	10	7/16/01 2:37:00 PM	10	7/17/01 1:58:00 PM	8	7/17/01 2:33:00 PM	11
7/16/01 2:03:00 PM	17	7/16/01 2:38:00 PM	8	7/17/01 1:59:00 PM	10	7/17/01 2:34:00 PM	9
7/16/01 2:04:00 PM	9	7/16/01 2:39:00 PM	7	7/17/01 2:00:00 PM	14	7/17/01 2:35:00 PM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/17/01 2:36:00 PM	14	7/17/01 3:11:00 PM	13	7/17/01 3:46:00 PM	14	7/18/01 8:07:00 AM	19
7/17/01 2:37:00 PM	8	7/17/01 3:12:00 PM	11	7/17/01 3:47:00 PM	9	7/18/01 8:07:00 AM	19
7/17/01 2:38:00 PM	8	7/17/01 3:13:00 PM	10	7/17/01 3:48:00 PM	9	7/18/01 8:07:00 AM	18
7/17/01 2:39:00 PM	8	7/17/01 3:14:00 PM	12	7/17/01 3:49:00 PM	12	7/18/01 8:07:00 AM	19
7/17/01 2:40:00 PM	10	7/17/01 3:15:00 PM	10	7/17/01 3:50:00 PM	11	7/18/01 8:07:00 AM	21
7/17/01 2:41:00 PM	9	7/17/01 3:16:00 PM	10	7/17/01 3:51:00 PM	9	7/18/01 8:07:00 AM	16
7/17/01 2:42:00 PM	9	7/17/01 3:17:00 PM	10	7/17/01 3:52:00 PM	10	7/18/01 8:08:00 AM	15
7/17/01 2:43:00 PM	8	7/17/01 3:18:00 PM	10	7/17/01 3:53:00 PM	11	7/18/01 8:08:00 AM	15
7/17/01 2:44:00 PM	8	7/17/01 3:19:00 PM	10	7/17/01 3:54:00 PM	10	7/18/01 8:08:00 AM	19
7/17/01 2:45:00 PM	9	7/17/01 3:20:00 PM	9	7/17/01 3:55:00 PM	11	7/18/01 8:08:00 AM	18
7/17/01 2:46:00 PM	10	7/17/01 3:21:00 PM	8	7/17/01 3:56:00 PM	13	7/18/01 8:08:00 AM	17
7/17/01 2:47:00 PM	10	7/17/01 3:22:00 PM	10	7/17/01 3:57:00 PM	10	7/18/01 8:08:00 AM	17
7/17/01 2:48:00 PM	9	7/17/01 3:23:00 PM	9	7/17/01 3:58:00 PM	9	7/18/01 8:09:00 AM	17
7/17/01 2:49:00 PM	10	7/17/01 3:24:00 PM	9	7/17/01 3:59:00 PM	10	7/18/01 8:09:00 AM	18
7/17/01 2:50:00 PM	10	7/17/01 3:25:00 PM	10	7/17/01 4:00:00 PM	10	7/18/01 8:09:00 AM	19
7/17/01 2:51:00 PM	8	7/17/01 3:26:00 PM	10	7/18/01 8:03:00 AM	39	7/18/01 8:09:00 AM	15
7/17/01 2:52:00 PM	9	7/17/01 3:27:00 PM	9	7/18/01 8:03:00 AM	44	7/18/01 8:09:00 AM	17
7/17/01 2:53:00 PM	13	7/17/01 3:28:00 PM	10	7/18/01 8:04:00 AM	37	7/18/01 8:09:00 AM	14
7/17/01 2:54:00 PM	9	7/17/01 3:29:00 PM	11	7/18/01 8:04:00 AM	36	7/18/01 8:10:00 AM	16
7/17/01 2:55:00 PM	9	7/17/01 3:30:00 PM	10	7/18/01 8:04:00 AM	33	7/18/01 8:10:00 AM	16
7/17/01 2:56:00 PM	10	7/17/01 3:31:00 PM	9	7/18/01 8:04:00 AM	33	7/18/01 8:10:00 AM	17
7/17/01 2:57:00 PM	10	7/17/01 3:32:00 PM	11	7/18/01 8:04:00 AM	33	7/18/01 8:10:00 AM	19
7/17/01 2:58:00 PM	10	7/17/01 3:33:00 PM	10	7/18/01 8:04:00 AM	32	7/18/01 8:10:00 AM	20
7/17/01 2:59:00 PM	9	7/17/01 3:34:00 PM	10	7/18/01 8:05:00 AM	28	7/18/01 8:10:00 AM	21
7/17/01 3:00:00 PM	10	7/17/01 3:35:00 PM	11	7/18/01 8:05:00 AM	39	7/18/01 8:11:00 AM	17
7/17/01 3:01:00 PM	10	7/17/01 3:36:00 PM	17	7/18/01 8:05:00 AM	47	7/18/01 8:11:00 AM	15
7/17/01 3:02:00 PM	9	7/17/01 3:37:00 PM	10	7/18/01 8:05:00 AM	32	7/18/01 8:11:00 AM	16
7/17/01 3:03:00 PM	10	7/17/01 3:38:00 PM	12	7/18/01 8:05:00 AM	24	7/18/01 8:11:00 AM	17
7/17/01 3:04:00 PM	10	7/17/01 3:39:00 PM	9	7/18/01 8:05:00 AM	20	7/18/01 8:11:00 AM	18
7/17/01 3:05:00 PM	11	7/17/01 3:40:00 PM	9	7/18/01 8:06:00 AM	25	7/18/01 8:11:00 AM	20
7/17/01 3:06:00 PM	9	7/17/01 3:41:00 PM	10	7/18/01 8:06:00 AM	32	7/18/01 8:12:00 AM	16
7/17/01 3:07:00 PM	10	7/17/01 3:42:00 PM	10	7/18/01 8:06:00 AM	61	7/18/01 8:12:00 AM	15
7/17/01 3:08:00 PM	13	7/17/01 3:43:00 PM	13	7/18/01 8:06:00 AM	77	7/18/01 8:12:00 AM	15
7/17/01 3:09:00 PM	17	7/17/01 3:44:00 PM	9	7/18/01 8:06:00 AM	30	7/18/01 8:12:00 AM	17
7/17/01 3:10:00 PM	9	7/17/01 3:45:00 PM	8	7/18/01 8:06:00 AM	47	7/18/01 8:12:00 AM	19

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 8:12:00 AM	20	7/18/01 8:18:00 AM	18	7/18/01 8:24:00 AM	18	7/18/01 8:30:00 AM	19
7/18/01 8:13:00 AM	20	7/18/01 8:18:00 AM	14	7/18/01 8:24:00 AM	17	7/18/01 8:30:00 AM	19
7/18/01 8:13:00 AM	19	7/18/01 8:19:00 AM	18	7/18/01 8:24:00 AM	15	7/18/01 8:30:00 AM	20
7/18/01 8:13:00 AM	20	7/18/01 8:19:00 AM	22	7/18/01 8:25:00 AM	16	7/18/01 8:30:00 AM	17
7/18/01 8:13:00 AM	14	7/18/01 8:19:00 AM	26	7/18/01 8:25:00 AM	18	7/18/01 8:31:00 AM	15
7/18/01 8:13:00 AM	14	7/18/01 8:19:00 AM	16	7/18/01 8:25:00 AM	20	7/18/01 8:31:00 AM	16
7/18/01 8:13:00 AM	15	7/18/01 8:19:00 AM	16	7/18/01 8:25:00 AM	20	7/18/01 8:31:00 AM	15
7/18/01 8:14:00 AM	16	7/18/01 8:19:00 AM	21	7/18/01 8:25:00 AM	16	7/18/01 8:31:00 AM	16
7/18/01 8:14:00 AM	14	7/18/01 8:20:00 AM	21	7/18/01 8:25:00 AM	18	7/18/01 8:31:00 AM	14
7/18/01 8:14:00 AM	14	7/18/01 8:20:00 AM	20	7/18/01 8:26:00 AM	18	7/18/01 8:31:00 AM	14
7/18/01 8:14:00 AM	14	7/18/01 8:20:00 AM	14	7/18/01 8:26:00 AM	17	7/18/01 8:32:00 AM	13
7/18/01 8:14:00 AM	14	7/18/01 8:20:00 AM	14	7/18/01 8:26:00 AM	19	7/18/01 8:32:00 AM	17
7/18/01 8:14:00 AM	16	7/18/01 8:20:00 AM	18	7/18/01 8:26:00 AM	18	7/18/01 8:32:00 AM	17
7/18/01 8:15:00 AM	16	7/18/01 8:20:00 AM	19	7/18/01 8:26:00 AM	16	7/18/01 8:32:00 AM	12
7/18/01 8:15:00 AM	14	7/18/01 8:21:00 AM	16	7/18/01 8:26:00 AM	12	7/18/01 8:32:00 AM	12
7/18/01 8:15:00 AM	16	7/18/01 8:21:00 AM	16	7/18/01 8:27:00 AM	16	7/18/01 8:32:00 AM	15
7/18/01 8:15:00 AM	18	7/18/01 8:21:00 AM	14	7/18/01 8:27:00 AM	16	7/18/01 8:33:00 AM	18
7/18/01 8:15:00 AM	17	7/18/01 8:21:00 AM	16	7/18/01 8:27:00 AM	15	7/18/01 8:33:00 AM	16
7/18/01 8:15:00 AM	17	7/18/01 8:21:00 AM	16	7/18/01 8:27:00 AM	15	7/18/01 8:33:00 AM	17
7/18/01 8:16:00 AM	21	7/18/01 8:21:00 AM	17	7/18/01 8:27:00 AM	17	7/18/01 8:33:00 AM	18
7/18/01 8:16:00 AM	17	7/18/01 8:22:00 AM	18	7/18/01 8:27:00 AM	21	7/18/01 8:33:00 AM	18
7/18/01 8:16:00 AM	16	7/18/01 8:22:00 AM	16	7/18/01 8:28:00 AM	17	7/18/01 8:33:00 AM	14
7/18/01 8:16:00 AM	16	7/18/01 8:22:00 AM	13	7/18/01 8:28:00 AM	16	7/18/01 8:34:00 AM	14
7/18/01 8:16:00 AM	13	7/18/01 8:22:00 AM	15	7/18/01 8:28:00 AM	18	7/18/01 8:34:00 AM	11
7/18/01 8:16:00 AM	14	7/18/01 8:22:00 AM	18	7/18/01 8:28:00 AM	16	7/18/01 8:34:00 AM	14
7/18/01 8:17:00 AM	13	7/18/01 8:22:00 AM	18	7/18/01 8:28:00 AM	16	7/18/01 8:34:00 AM	18
7/18/01 8:17:00 AM	16	7/18/01 8:23:00 AM	16	7/18/01 8:28:00 AM	16	7/18/01 8:34:00 AM	21
7/18/01 8:17:00 AM	18	7/18/01 8:23:00 AM	15	7/18/01 8:29:00 AM	15	7/18/01 8:34:00 AM	17
7/18/01 8:17:00 AM	17	7/18/01 8:23:00 AM	15	7/18/01 8:29:00 AM	16	7/18/01 8:35:00 AM	15
7/18/01 8:17:00 AM	18	7/18/01 8:23:00 AM	16	7/18/01 8:29:00 AM	16	7/18/01 8:35:00 AM	18
7/18/01 8:17:00 AM	19	7/18/01 8:23:00 AM	17	7/18/01 8:29:00 AM	18	7/18/01 8:35:00 AM	28
7/18/01 8:18:00 AM	16	7/18/01 8:23:00 AM	17	7/18/01 8:29:00 AM	19	7/18/01 8:35:00 AM	28
7/18/01 8:18:00 AM	16	7/18/01 8:24:00 AM	16	7/18/01 8:29:00 AM	20	7/18/01 8:35:00 AM	16
7/18/01 8:18:00 AM	16	7/18/01 8:24:00 AM	13	7/18/01 8:30:00 AM	15	7/18/01 8:35:00 AM	15
7/18/01 8:18:00 AM	16	7/18/01 8:24:00 AM	16	7/18/01 8:30:00 AM	16	7/18/01 8:36:00 AM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 8:36:00 AM	17	7/18/01 8:42:00 AM	19	7/18/01 8:47:00 AM	19	7/18/01 8:53:00 AM	16
7/18/01 8:36:00 AM	15	7/18/01 8:42:00 AM	19	7/18/01 8:48:00 AM	16	7/18/01 8:53:00 AM	16
7/18/01 8:36:00 AM	14	7/18/01 8:42:00 AM	18	7/18/01 8:48:00 AM	20	7/18/01 8:54:00 AM	15
7/18/01 8:36:00 AM	18	7/18/01 8:42:00 AM	18	7/18/01 8:48:00 AM	24	7/18/01 8:54:00 AM	19
7/18/01 8:36:00 AM	18	7/18/01 8:42:00 AM	14	7/18/01 8:48:00 AM	21	7/18/01 8:54:00 AM	16
7/18/01 8:37:00 AM	15	7/18/01 8:42:00 AM	16	7/18/01 8:48:00 AM	17	7/18/01 8:54:00 AM	15
7/18/01 8:37:00 AM	16	7/18/01 8:43:00 AM	18	7/18/01 8:48:00 AM	16	7/18/01 8:54:00 AM	17
7/18/01 8:37:00 AM	17	7/18/01 8:43:00 AM	18	7/18/01 8:49:00 AM	16	7/18/01 8:54:00 AM	15
7/18/01 8:37:00 AM	16	7/18/01 8:43:00 AM	16	7/18/01 8:49:00 AM	18	7/18/01 8:55:00 AM	13
7/18/01 8:37:00 AM	15	7/18/01 8:43:00 AM	17	7/18/01 8:49:00 AM	17	7/18/01 8:55:00 AM	17
7/18/01 8:37:00 AM	21	7/18/01 8:43:00 AM	15	7/18/01 8:49:00 AM	17	7/18/01 8:55:00 AM	18
7/18/01 8:38:00 AM	16	7/18/01 8:43:00 AM	16	7/18/01 8:49:00 AM	17	7/18/01 8:55:00 AM	18
7/18/01 8:38:00 AM	13	7/18/01 8:44:00 AM	17	7/18/01 8:49:00 AM	18	7/18/01 8:55:00 AM	17
7/18/01 8:38:00 AM	17	7/18/01 8:44:00 AM	15	7/18/01 8:50:00 AM	20	7/18/01 8:55:00 AM	19
7/18/01 8:38:00 AM	16	7/18/01 8:44:00 AM	16	7/18/01 8:50:00 AM	16	7/18/01 8:56:00 AM	18
7/18/01 8:38:00 AM	17	7/18/01 8:44:00 AM	19	7/18/01 8:50:00 AM	14	7/18/01 8:56:00 AM	15
7/18/01 8:38:00 AM	14	7/18/01 8:44:00 AM	16	7/18/01 8:50:00 AM	18	7/18/01 8:56:00 AM	19
7/18/01 8:39:00 AM	18	7/18/01 8:44:00 AM	14	7/18/01 8:50:00 AM	17	7/18/01 8:56:00 AM	19
7/18/01 8:39:00 AM	21	7/18/01 8:45:00 AM	16	7/18/01 8:50:00 AM	19	7/18/01 8:56:00 AM	25
7/18/01 8:39:00 AM	17	7/18/01 8:45:00 AM	16	7/18/01 8:51:00 AM	20	7/18/01 8:56:00 AM	28
7/18/01 8:39:00 AM	15	7/18/01 8:45:00 AM	20	7/18/01 8:51:00 AM	18	7/18/01 8:57:00 AM	21
7/18/01 8:39:00 AM	16	7/18/01 8:45:00 AM	16	7/18/01 8:51:00 AM	14	7/18/01 8:57:00 AM	39
7/18/01 8:39:00 AM	17	7/18/01 8:45:00 AM	14	7/18/01 8:51:00 AM	13	7/18/01 8:57:00 AM	51
7/18/01 8:40:00 AM	16	7/18/01 8:45:00 AM	14	7/18/01 8:51:00 AM	14	7/18/01 8:57:00 AM	35
7/18/01 8:40:00 AM	19	7/18/01 8:46:00 AM	13	7/18/01 8:51:00 AM	23	7/18/01 8:57:00 AM	45
7/18/01 8:40:00 AM	24	7/18/01 8:46:00 AM	16	7/18/01 8:52:00 AM	34	7/18/01 8:57:00 AM	19
7/18/01 8:40:00 AM	25	7/18/01 8:46:00 AM	18	7/18/01 8:52:00 AM	15	7/18/01 8:58:00 AM	18
7/18/01 8:40:00 AM	22	7/18/01 8:46:00 AM	14	7/18/01 8:52:00 AM	15	7/18/01 8:58:00 AM	20
7/18/01 8:40:00 AM	21	7/18/01 8:46:00 AM	15	7/18/01 8:52:00 AM	16	7/18/01 8:58:00 AM	19
7/18/01 8:41:00 AM	16	7/18/01 8:46:00 AM	14	7/18/01 8:52:00 AM	16	7/18/01 8:58:00 AM	22
7/18/01 8:41:00 AM	15	7/18/01 8:47:00 AM	13	7/18/01 8:52:00 AM	16	7/18/01 8:58:00 AM	17
7/18/01 8:41:00 AM	16	7/18/01 8:47:00 AM	16	7/18/01 8:53:00 AM	16	7/18/01 8:58:00 AM	18
7/18/01 8:41:00 AM	16	7/18/01 8:47:00 AM	18	7/18/01 8:53:00 AM	14	7/18/01 8:59:00 AM	18
7/18/01 8:41:00 AM	17	7/18/01 8:47:00 AM	17	7/18/01 8:53:00 AM	16	7/18/01 8:59:00 AM	18
7/18/01 8:41:00 AM	19	7/18/01 8:47:00 AM	17	7/18/01 8:53:00 AM	18	7/18/01 8:59:00 AM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 8:59:00 AM	19	7/18/01 9:05:00 AM	16	7/18/01 9:11:00 AM	18	7/18/01 9:17:00 AM	15
7/18/01 8:59:00 AM	19	7/18/01 9:05:00 AM	14	7/18/01 9:11:00 AM	18	7/18/01 9:17:00 AM	19
7/18/01 8:59:00 AM	23	7/18/01 9:05:00 AM	13	7/18/01 9:11:00 AM	16	7/18/01 9:17:00 AM	18
7/18/01 9:00:00 AM	22	7/18/01 9:05:00 AM	13	7/18/01 9:11:00 AM	15	7/18/01 9:17:00 AM	16
7/18/01 9:00:00 AM	20	7/18/01 9:06:00 AM	14	7/18/01 9:11:00 AM	18	7/18/01 9:17:00 AM	20
7/18/01 9:00:00 AM	21	7/18/01 9:06:00 AM	15	7/18/01 9:12:00 AM	17	7/18/01 9:17:00 AM	27
7/18/01 9:00:00 AM	21	7/18/01 9:06:00 AM	15	7/18/01 9:12:00 AM	18	7/18/01 9:18:00 AM	19
7/18/01 9:00:00 AM	20	7/18/01 9:06:00 AM	16	7/18/01 9:12:00 AM	18	7/18/01 9:18:00 AM	16
7/18/01 9:00:00 AM	19	7/18/01 9:06:00 AM	16	7/18/01 9:12:00 AM	15	7/18/01 9:18:00 AM	17
7/18/01 9:01:00 AM	14	7/18/01 9:06:00 AM	16	7/18/01 9:12:00 AM	13	7/18/01 9:18:00 AM	16
7/18/01 9:01:00 AM	18	7/18/01 9:07:00 AM	13	7/18/01 9:12:00 AM	14	7/18/01 9:18:00 AM	16
7/18/01 9:01:00 AM	16	7/18/01 9:07:00 AM	13	7/18/01 9:13:00 AM	16	7/18/01 9:18:00 AM	15
7/18/01 9:01:00 AM	18	7/18/01 9:07:00 AM	16	7/18/01 9:13:00 AM	16	7/18/01 9:19:00 AM	16
7/18/01 9:01:00 AM	16	7/18/01 9:07:00 AM	14	7/18/01 9:13:00 AM	15	7/18/01 9:19:00 AM	15
7/18/01 9:01:00 AM	15	7/18/01 9:07:00 AM	14	7/18/01 9:13:00 AM	17	7/18/01 9:19:00 AM	17
7/18/01 9:02:00 AM	16	7/18/01 9:07:00 AM	17	7/18/01 9:13:00 AM	18	7/18/01 9:19:00 AM	16
7/18/01 9:02:00 AM	15	7/18/01 9:08:00 AM	14	7/18/01 9:13:00 AM	17	7/18/01 9:19:00 AM	15
7/18/01 9:02:00 AM	18	7/18/01 9:08:00 AM	13	7/18/01 9:14:00 AM	18	7/18/01 9:19:00 AM	16
7/18/01 9:02:00 AM	15	7/18/01 9:08:00 AM	14	7/18/01 9:14:00 AM	19	7/18/01 9:20:00 AM	21
7/18/01 9:02:00 AM	17	7/18/01 9:08:00 AM	15	7/18/01 9:14:00 AM	17	7/18/01 9:20:00 AM	16
7/18/01 9:02:00 AM	19	7/18/01 9:08:00 AM	14	7/18/01 9:14:00 AM	15	7/18/01 9:20:00 AM	15
7/18/01 9:03:00 AM	19	7/18/01 9:08:00 AM	15	7/18/01 9:14:00 AM	18	7/18/01 9:20:00 AM	18
7/18/01 9:03:00 AM	18	7/18/01 9:09:00 AM	14	7/18/01 9:14:00 AM	18	7/18/01 9:20:00 AM	19
7/18/01 9:03:00 AM	17	7/18/01 9:09:00 AM	16	7/18/01 9:15:00 AM	19	7/18/01 9:20:00 AM	16
7/18/01 9:03:00 AM	14	7/18/01 9:09:00 AM	17	7/18/01 9:15:00 AM	18	7/18/01 9:21:00 AM	15
7/18/01 9:03:00 AM	16	7/18/01 9:09:00 AM	15	7/18/01 9:15:00 AM	16	7/18/01 9:21:00 AM	15
7/18/01 9:03:00 AM	18	7/18/01 9:09:00 AM	16	7/18/01 9:15:00 AM	14	7/18/01 9:21:00 AM	18
7/18/01 9:04:00 AM	17	7/18/01 9:09:00 AM	16	7/18/01 9:15:00 AM	15	7/18/01 9:21:00 AM	15
7/18/01 9:04:00 AM	15	7/18/01 9:10:00 AM	15	7/18/01 9:15:00 AM	16	7/18/01 9:21:00 AM	14
7/18/01 9:04:00 AM	17	7/18/01 9:10:00 AM	16	7/18/01 9:16:00 AM	16	7/18/01 9:21:00 AM	15
7/18/01 9:04:00 AM	17	7/18/01 9:10:00 AM	13	7/18/01 9:16:00 AM	22	7/18/01 9:22:00 AM	18
7/18/01 9:04:00 AM	15	7/18/01 9:10:00 AM	15	7/18/01 9:16:00 AM	34	7/18/01 9:22:00 AM	18
7/18/01 9:04:00 AM	17	7/18/01 9:10:00 AM	14	7/18/01 9:16:00 AM	34	7/18/01 9:22:00 AM	18
7/18/01 9:05:00 AM	16	7/18/01 9:10:00 AM	15	7/18/01 9:16:00 AM	25	7/18/01 9:22:00 AM	18
7/18/01 9:05:00 AM	16	7/18/01 9:11:00 AM	17	7/18/01 9:16:00 AM	16	7/18/01 9:22:00 AM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 9:22:00 AM	16	7/18/01 9:28:00 AM	16	7/18/01 9:34:00 AM	13	7/18/01 9:40:00 AM	15
7/18/01 9:23:00 AM	18	7/18/01 9:28:00 AM	16	7/18/01 9:34:00 AM	16	7/18/01 9:40:00 AM	16
7/18/01 9:23:00 AM	20	7/18/01 9:29:00 AM	23	7/18/01 9:34:00 AM	16	7/18/01 9:40:00 AM	22
7/18/01 9:23:00 AM	20	7/18/01 9:29:00 AM	33	7/18/01 9:35:00 AM	16	7/18/01 9:40:00 AM	16
7/18/01 9:23:00 AM	19	7/18/01 9:29:00 AM	20	7/18/01 9:35:00 AM	18	7/18/01 9:41:00 AM	17
7/18/01 9:23:00 AM	19	7/18/01 9:29:00 AM	20	7/18/01 9:35:00 AM	16	7/18/01 9:41:00 AM	15
7/18/01 9:23:00 AM	18	7/18/01 9:29:00 AM	20	7/18/01 9:35:00 AM	18	7/18/01 9:41:00 AM	15
7/18/01 9:24:00 AM	20	7/18/01 9:29:00 AM	19	7/18/01 9:35:00 AM	38	7/18/01 9:41:00 AM	17
7/18/01 9:24:00 AM	22	7/18/01 9:30:00 AM	18	7/18/01 9:35:00 AM	73	7/18/01 9:41:00 AM	11
7/18/01 9:24:00 AM	18	7/18/01 9:30:00 AM	17	7/18/01 9:36:00 AM	45	7/18/01 9:41:00 AM	16
7/18/01 9:24:00 AM	17	7/18/01 9:30:00 AM	18	7/18/01 9:36:00 AM	24	7/18/01 9:42:00 AM	25
7/18/01 9:24:00 AM	16	7/18/01 9:30:00 AM	18	7/18/01 9:36:00 AM	24	7/18/01 9:42:00 AM	17
7/18/01 9:24:00 AM	16	7/18/01 9:30:00 AM	19	7/18/01 9:36:00 AM	20	7/18/01 9:42:00 AM	14
7/18/01 9:25:00 AM	18	7/18/01 9:30:00 AM	17	7/18/01 9:36:00 AM	21	7/18/01 9:42:00 AM	17
7/18/01 9:25:00 AM	16	7/18/01 9:31:00 AM	17	7/18/01 9:36:00 AM	18	7/18/01 9:42:00 AM	15
7/18/01 9:25:00 AM	18	7/18/01 9:31:00 AM	16	7/18/01 9:37:00 AM	18	7/18/01 9:42:00 AM	15
7/18/01 9:25:00 AM	18	7/18/01 9:31:00 AM	18	7/18/01 9:37:00 AM	20	7/18/01 9:43:00 AM	19
7/18/01 9:25:00 AM	21	7/18/01 9:31:00 AM	19	7/18/01 9:37:00 AM	18	7/18/01 9:43:00 AM	16
7/18/01 9:25:00 AM	18	7/18/01 9:31:00 AM	14	7/18/01 9:37:00 AM	17	7/18/01 9:43:00 AM	15
7/18/01 9:26:00 AM	17	7/18/01 9:31:00 AM	14	7/18/01 9:37:00 AM	16	7/18/01 9:43:00 AM	18
7/18/01 9:26:00 AM	20	7/18/01 9:32:00 AM	17	7/18/01 9:37:00 AM	14	7/18/01 9:43:00 AM	17
7/18/01 9:26:00 AM	25	7/18/01 9:32:00 AM	16	7/18/01 9:38:00 AM	16	7/18/01 9:43:00 AM	15
7/18/01 9:26:00 AM	18	7/18/01 9:32:00 AM	20	7/18/01 9:38:00 AM	15	7/18/01 9:44:00 AM	16
7/18/01 9:26:00 AM	21	7/18/01 9:32:00 AM	18	7/18/01 9:38:00 AM	14	7/18/01 9:44:00 AM	13
7/18/01 9:26:00 AM	24	7/18/01 9:32:00 AM	16	7/18/01 9:38:00 AM	17	7/18/01 9:44:00 AM	14
7/18/01 9:27:00 AM	15	7/18/01 9:32:00 AM	18	7/18/01 9:38:00 AM	19	7/18/01 9:44:00 AM	13
7/18/01 9:27:00 AM	18	7/18/01 9:33:00 AM	20	7/18/01 9:38:00 AM	15	7/18/01 9:44:00 AM	12
7/18/01 9:27:00 AM	21	7/18/01 9:33:00 AM	19	7/18/01 9:39:00 AM	28	7/18/01 9:44:00 AM	14
7/18/01 9:27:00 AM	37	7/18/01 9:33:00 AM	18	7/18/01 9:39:00 AM	39	7/18/01 9:45:00 AM	15
7/18/01 9:27:00 AM	48	7/18/01 9:33:00 AM	15	7/18/01 9:39:00 AM	19	7/18/01 9:45:00 AM	16
7/18/01 9:27:00 AM	23	7/18/01 9:33:00 AM	14	7/18/01 9:39:00 AM	17	7/18/01 9:45:00 AM	15
7/18/01 9:28:00 AM	20	7/18/01 9:33:00 AM	17	7/18/01 9:39:00 AM	15	7/18/01 9:45:00 AM	14
7/18/01 9:28:00 AM	22	7/18/01 9:34:00 AM	16	7/18/01 9:39:00 AM	17	7/18/01 9:45:00 AM	17
7/18/01 9:28:00 AM	20	7/18/01 9:34:00 AM	17	7/18/01 9:40:00 AM	18	7/18/01 9:45:00 AM	28
7/18/01 9:28:00 AM	21	7/18/01 9:34:00 AM	18	7/18/01 9:40:00 AM	18	7/18/01 9:46:00 AM	36

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 9:46:00 AM	26	7/18/01 9:52:00 AM	19	7/18/01 9:57:00 AM	13	7/18/01 10:03:00 AM	15
7/18/01 9:46:00 AM	21	7/18/01 9:52:00 AM	26	7/18/01 9:58:00 AM	12	7/18/01 10:03:00 AM	14
7/18/01 9:46:00 AM	23	7/18/01 9:52:00 AM	22	7/18/01 9:58:00 AM	14	7/18/01 10:04:00 AM	16
7/18/01 9:46:00 AM	17	7/18/01 9:52:00 AM	12	7/18/01 9:58:00 AM	12	7/18/01 10:04:00 AM	15
7/18/01 9:46:00 AM	14	7/18/01 9:52:00 AM	11	7/18/01 9:58:00 AM	12	7/18/01 10:04:00 AM	12
7/18/01 9:47:00 AM	14	7/18/01 9:52:00 AM	14	7/18/01 9:58:00 AM	15	7/18/01 10:04:00 AM	15
7/18/01 9:47:00 AM	14	7/18/01 9:53:00 AM	16	7/18/01 9:58:00 AM	14	7/18/01 10:04:00 AM	13
7/18/01 9:47:00 AM	17	7/18/01 9:53:00 AM	17	7/18/01 9:59:00 AM	14	7/18/01 10:04:00 AM	12
7/18/01 9:47:00 AM	17	7/18/01 9:53:00 AM	17	7/18/01 9:59:00 AM	16	7/18/01 10:05:00 AM	14
7/18/01 9:47:00 AM	15	7/18/01 9:53:00 AM	16	7/18/01 9:59:00 AM	15	7/18/01 10:05:00 AM	15
7/18/01 9:47:00 AM	14	7/18/01 9:53:00 AM	16	7/18/01 9:59:00 AM	16	7/18/01 10:05:00 AM	15
7/18/01 9:48:00 AM	16	7/18/01 9:53:00 AM	18	7/18/01 9:59:00 AM	16	7/18/01 10:05:00 AM	14
7/18/01 9:48:00 AM	16	7/18/01 9:54:00 AM	17	7/18/01 9:59:00 AM	16	7/18/01 10:05:00 AM	14
7/18/01 9:48:00 AM	17	7/18/01 9:54:00 AM	17	7/18/01 10:00:00 AM	24	7/18/01 10:05:00 AM	15
7/18/01 9:48:00 AM	16	7/18/01 9:54:00 AM	18	7/18/01 10:00:00 AM	18	7/18/01 10:06:00 AM	17
7/18/01 9:48:00 AM	14	7/18/01 9:54:00 AM	16	7/18/01 10:00:00 AM	22	7/18/01 10:06:00 AM	15
7/18/01 9:48:00 AM	15	7/18/01 9:54:00 AM	12	7/18/01 10:00:00 AM	19	7/18/01 10:06:00 AM	15
7/18/01 9:49:00 AM	12	7/18/01 9:54:00 AM	15	7/18/01 10:00:00 AM	19	7/18/01 10:06:00 AM	13
7/18/01 9:49:00 AM	13	7/18/01 9:55:00 AM	20	7/18/01 10:00:00 AM	17	7/18/01 10:06:00 AM	15
7/18/01 9:49:00 AM	16	7/18/01 9:55:00 AM	17	7/18/01 10:01:00 AM	17	7/18/01 10:06:00 AM	14
7/18/01 9:49:00 AM	15	7/18/01 9:55:00 AM	19	7/18/01 10:01:00 AM	14	7/18/01 10:07:00 AM	14
7/18/01 9:49:00 AM	15	7/18/01 9:55:00 AM	22	7/18/01 10:01:00 AM	16	7/18/01 10:07:00 AM	11
7/18/01 9:49:00 AM	13	7/18/01 9:55:00 AM	14	7/18/01 10:01:00 AM	15	7/18/01 10:07:00 AM	12
7/18/01 9:50:00 AM	16	7/18/01 9:55:00 AM	12	7/18/01 10:01:00 AM	16	7/18/01 10:07:00 AM	16
7/18/01 9:50:00 AM	15	7/18/01 9:56:00 AM	14	7/18/01 10:01:00 AM	17	7/18/01 10:07:00 AM	16
7/18/01 9:50:00 AM	16	7/18/01 9:56:00 AM	17	7/18/01 10:02:00 AM	14	7/18/01 10:07:00 AM	13
7/18/01 9:50:00 AM	17	7/18/01 9:56:00 AM	18	7/18/01 10:02:00 AM	19	7/18/01 10:08:00 AM	13
7/18/01 9:50:00 AM	15	7/18/01 9:56:00 AM	24	7/18/01 10:02:00 AM	19	7/18/01 10:08:00 AM	14
7/18/01 9:50:00 AM	15	7/18/01 9:56:00 AM	29	7/18/01 10:02:00 AM	14	7/18/01 10:08:00 AM	15
7/18/01 9:51:00 AM	17	7/18/01 9:56:00 AM	42	7/18/01 10:02:00 AM	15	7/18/01 10:08:00 AM	15
7/18/01 9:51:00 AM	17	7/18/01 9:57:00 AM	22	7/18/01 10:02:00 AM	16	7/18/01 10:08:00 AM	15
7/18/01 9:51:00 AM	20	7/18/01 9:57:00 AM	18	7/18/01 10:03:00 AM	18	7/18/01 10:08:00 AM	18
7/18/01 9:51:00 AM	17	7/18/01 9:57:00 AM	25	7/18/01 10:03:00 AM	14	7/18/01 10:09:00 AM	17
7/18/01 9:51:00 AM	14	7/18/01 9:57:00 AM	22	7/18/01 10:03:00 AM	15	7/18/01 10:09:00 AM	15
7/18/01 9:51:00 AM	15	7/18/01 9:57:00 AM	15	7/18/01 10:03:00 AM	15	7/18/01 10:09:00 AM	15

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 10:09:00 AM	13	7/18/01 10:15:00 AM	15	7/18/01 10:21:00 AM	14	7/18/01 10:27:00 AM	16
7/18/01 10:09:00 AM	16	7/18/01 10:15:00 AM	18	7/18/01 10:21:00 AM	16	7/18/01 10:27:00 AM	14
7/18/01 10:09:00 AM	14	7/18/01 10:15:00 AM	20	7/18/01 10:21:00 AM	16	7/18/01 10:27:00 AM	13
7/18/01 10:10:00 AM	14	7/18/01 10:15:00 AM	15	7/18/01 10:21:00 AM	14	7/18/01 10:27:00 AM	14
7/18/01 10:10:00 AM	21	7/18/01 10:16:00 AM	15	7/18/01 10:21:00 AM	13	7/18/01 10:27:00 AM	11
7/18/01 10:10:00 AM	16	7/18/01 10:16:00 AM	16	7/18/01 10:22:00 AM	13	7/18/01 10:27:00 AM	15
7/18/01 10:10:00 AM	13	7/18/01 10:16:00 AM	16	7/18/01 10:22:00 AM	18	7/18/01 10:28:00 AM	16
7/18/01 10:10:00 AM	14	7/18/01 10:16:00 AM	16	7/18/01 10:22:00 AM	16	7/18/01 10:28:00 AM	15
7/18/01 10:10:00 AM	14	7/18/01 10:16:00 AM	14	7/18/01 10:22:00 AM	14	7/18/01 10:28:00 AM	15
7/18/01 10:11:00 AM	16	7/18/01 10:16:00 AM	17	7/18/01 10:22:00 AM	14	7/18/01 10:28:00 AM	14
7/18/01 10:11:00 AM	15	7/18/01 10:17:00 AM	19	7/18/01 10:22:00 AM	12	7/18/01 10:28:00 AM	15
7/18/01 10:11:00 AM	14	7/18/01 10:17:00 AM	17	7/18/01 10:23:00 AM	19	7/18/01 10:28:00 AM	15
7/18/01 10:11:00 AM	14	7/18/01 10:17:00 AM	13	7/18/01 10:23:00 AM	26	7/18/01 10:29:00 AM	13
7/18/01 10:11:00 AM	14	7/18/01 10:17:00 AM	14	7/18/01 10:23:00 AM	17	7/18/01 10:29:00 AM	13
7/18/01 10:11:00 AM	16	7/18/01 10:17:00 AM	14	7/18/01 10:23:00 AM	15	7/18/01 10:29:00 AM	14
7/18/01 10:12:00 AM	16	7/18/01 10:17:00 AM	14	7/18/01 10:23:00 AM	17	7/18/01 10:29:00 AM	14
7/18/01 10:12:00 AM	21	7/18/01 10:18:00 AM	15	7/18/01 10:23:00 AM	16	7/18/01 10:29:00 AM	15
7/18/01 10:12:00 AM	21	7/18/01 10:18:00 AM	17	7/18/01 10:24:00 AM	16	7/18/01 10:29:00 AM	14
7/18/01 10:12:00 AM	17	7/18/01 10:18:00 AM	13	7/18/01 10:24:00 AM	16	7/18/01 10:30:00 AM	13
7/18/01 10:12:00 AM	18	7/18/01 10:18:00 AM	15	7/18/01 10:24:00 AM	18	7/18/01 10:30:00 AM	14
7/18/01 10:12:00 AM	17	7/18/01 10:18:00 AM	17	7/18/01 10:24:00 AM	18	7/18/01 10:30:00 AM	16
7/18/01 10:13:00 AM	16	7/18/01 10:18:00 AM	15	7/18/01 10:24:00 AM	15	7/18/01 10:30:00 AM	14
7/18/01 10:13:00 AM	17	7/18/01 10:19:00 AM	14	7/18/01 10:24:00 AM	14	7/18/01 10:30:00 AM	13
7/18/01 10:13:00 AM	23	7/18/01 10:19:00 AM	15	7/18/01 10:25:00 AM	14	7/18/01 10:30:00 AM	14
7/18/01 10:13:00 AM	28	7/18/01 10:19:00 AM	14	7/18/01 10:25:00 AM	14	7/18/01 10:31:00 AM	16
7/18/01 10:13:00 AM	32	7/18/01 10:19:00 AM	14	7/18/01 10:25:00 AM	15	7/18/01 10:31:00 AM	16
7/18/01 10:13:00 AM	21	7/18/01 10:19:00 AM	15	7/18/01 10:25:00 AM	13	7/18/01 10:31:00 AM	15
7/18/01 10:14:00 AM	21	7/18/01 10:19:00 AM	16	7/18/01 10:25:00 AM	14	7/18/01 10:31:00 AM	15
7/18/01 10:14:00 AM	18	7/18/01 10:20:00 AM	13	7/18/01 10:25:00 AM	23	7/18/01 10:31:00 AM	16
7/18/01 10:14:00 AM	17	7/18/01 10:20:00 AM	14	7/18/01 10:26:00 AM	33	7/18/01 10:31:00 AM	15
7/18/01 10:14:00 AM	18	7/18/01 10:20:00 AM	13	7/18/01 10:26:00 AM	15	7/18/01 10:32:00 AM	15
7/18/01 10:14:00 AM	16	7/18/01 10:20:00 AM	15	7/18/01 10:26:00 AM	14	7/18/01 10:32:00 AM	14
7/18/01 10:14:00 AM	17	7/18/01 10:20:00 AM	14	7/18/01 10:26:00 AM	12	7/18/01 10:32:00 AM	13
7/18/01 10:15:00 AM	14	7/18/01 10:20:00 AM	16	7/18/01 10:26:00 AM	12	7/18/01 10:32:00 AM	13
7/18/01 10:15:00 AM	15	7/18/01 10:21:00 AM	14	7/18/01 10:26:00 AM	13	7/18/01 10:32:00 AM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 10:32:00 AM	14	7/18/01 10:38:00 AM	14	7/18/01 10:44:00 AM	16	7/18/01 10:50:00 AM	15
7/18/01 10:33:00 AM	16	7/18/01 10:38:00 AM	15	7/18/01 10:44:00 AM	15	7/18/01 10:50:00 AM	17
7/18/01 10:33:00 AM	12	7/18/01 10:39:00 AM	14	7/18/01 10:44:00 AM	14	7/18/01 10:50:00 AM	14
7/18/01 10:33:00 AM	15	7/18/01 10:39:00 AM	15	7/18/01 10:45:00 AM	15	7/18/01 10:50:00 AM	14
7/18/01 10:33:00 AM	16	7/18/01 10:39:00 AM	17	7/18/01 10:45:00 AM	14	7/18/01 10:51:00 AM	17
7/18/01 10:33:00 AM	14	7/18/01 10:39:00 AM	14	7/18/01 10:45:00 AM	15	7/18/01 10:51:00 AM	15
7/18/01 10:33:00 AM	10	7/18/01 10:39:00 AM	13	7/18/01 10:45:00 AM	17	7/18/01 10:51:00 AM	16
7/18/01 10:34:00 AM	14	7/18/01 10:39:00 AM	18	7/18/01 10:45:00 AM	17	7/18/01 10:51:00 AM	16
7/18/01 10:34:00 AM	14	7/18/01 10:40:00 AM	17	7/18/01 10:45:00 AM	18	7/18/01 10:51:00 AM	15
7/18/01 10:34:00 AM	13	7/18/01 10:40:00 AM	14	7/18/01 10:46:00 AM	15	7/18/01 10:51:00 AM	12
7/18/01 10:34:00 AM	14	7/18/01 10:40:00 AM	15	7/18/01 10:46:00 AM	15	7/18/01 10:52:00 AM	15
7/18/01 10:34:00 AM	14	7/18/01 10:40:00 AM	14	7/18/01 10:46:00 AM	13	7/18/01 10:52:00 AM	20
7/18/01 10:34:00 AM	14	7/18/01 10:40:00 AM	16	7/18/01 10:46:00 AM	16	7/18/01 10:52:00 AM	24
7/18/01 10:35:00 AM	17	7/18/01 10:40:00 AM	17	7/18/01 10:46:00 AM	18	7/18/01 10:52:00 AM	15
7/18/01 10:35:00 AM	16	7/18/01 10:41:00 AM	15	7/18/01 10:46:00 AM	19	7/18/01 10:52:00 AM	13
7/18/01 10:35:00 AM	13	7/18/01 10:41:00 AM	16	7/18/01 10:47:00 AM	14	7/18/01 10:52:00 AM	16
7/18/01 10:35:00 AM	12	7/18/01 10:41:00 AM	15	7/18/01 10:47:00 AM	15	7/18/01 10:53:00 AM	19
7/18/01 10:35:00 AM	14	7/18/01 10:41:00 AM	14	7/18/01 10:47:00 AM	14	7/18/01 10:53:00 AM	15
7/18/01 10:35:00 AM	15	7/18/01 10:41:00 AM	13	7/18/01 10:47:00 AM	15	7/18/01 10:53:00 AM	13
7/18/01 10:36:00 AM	17	7/18/01 10:41:00 AM	14	7/18/01 10:47:00 AM	16	7/18/01 10:53:00 AM	13
7/18/01 10:36:00 AM	16	7/18/01 10:42:00 AM	15	7/18/01 10:47:00 AM	17	7/18/01 10:53:00 AM	14
7/18/01 10:36:00 AM	13	7/18/01 10:42:00 AM	12	7/18/01 10:48:00 AM	16	7/18/01 10:53:00 AM	14
7/18/01 10:36:00 AM	12	7/18/01 10:42:00 AM	11	7/18/01 10:48:00 AM	17	7/18/01 10:54:00 AM	12
7/18/01 10:36:00 AM	14	7/18/01 10:42:00 AM	16	7/18/01 10:48:00 AM	16	7/18/01 10:54:00 AM	12
7/18/01 10:36:00 AM	17	7/18/01 10:42:00 AM	16	7/18/01 10:48:00 AM	18	7/18/01 10:54:00 AM	16
7/18/01 10:37:00 AM	17	7/18/01 10:42:00 AM	16	7/18/01 10:48:00 AM	19	7/18/01 10:54:00 AM	15
7/18/01 10:37:00 AM	17	7/18/01 10:43:00 AM	14	7/18/01 10:48:00 AM	16	7/18/01 10:54:00 AM	13
7/18/01 10:37:00 AM	19	7/18/01 10:43:00 AM	15	7/18/01 10:49:00 AM	16	7/18/01 10:54:00 AM	14
7/18/01 10:37:00 AM	15	7/18/01 10:43:00 AM	16	7/18/01 10:49:00 AM	14	7/18/01 10:55:00 AM	13
7/18/01 10:37:00 AM	13	7/18/01 10:43:00 AM	15	7/18/01 10:49:00 AM	14	7/18/01 10:55:00 AM	14
7/18/01 10:37:00 AM	11	7/18/01 10:43:00 AM	13	7/18/01 10:49:00 AM	16	7/18/01 10:55:00 AM	16
7/18/01 10:38:00 AM	15	7/18/01 10:43:00 AM	12	7/18/01 10:49:00 AM	14	7/18/01 10:55:00 AM	14
7/18/01 10:38:00 AM	19	7/18/01 10:44:00 AM	13	7/18/01 10:49:00 AM	14	7/18/01 10:55:00 AM	12
7/18/01 10:38:00 AM	17	7/18/01 10:44:00 AM	15	7/18/01 10:50:00 AM	15	7/18/01 10:55:00 AM	11
7/18/01 10:38:00 AM	16	7/18/01 10:44:00 AM	16	7/18/01 10:50:00 AM	16	7/18/01 10:56:00 AM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 10:56:00 AM	15	7/18/01 11:02:00 AM	14	7/18/01 11:07:00 AM	14	7/18/01 11:13:00 AM	13
7/18/01 10:56:00 AM	13	7/18/01 11:02:00 AM	17	7/18/01 11:08:00 AM	16	7/18/01 11:13:00 AM	13
7/18/01 10:56:00 AM	15	7/18/01 11:02:00 AM	16	7/18/01 11:08:00 AM	14	7/18/01 11:14:00 AM	13
7/18/01 10:56:00 AM	22	7/18/01 11:02:00 AM	16	7/18/01 11:08:00 AM	15	7/18/01 11:14:00 AM	15
7/18/01 10:56:00 AM	14	7/18/01 11:02:00 AM	16	7/18/01 11:08:00 AM	14	7/18/01 11:14:00 AM	15
7/18/01 10:57:00 AM	11	7/18/01 11:02:00 AM	16	7/18/01 11:08:00 AM	16	7/18/01 11:14:00 AM	16
7/18/01 10:57:00 AM	15	7/18/01 11:03:00 AM	16	7/18/01 11:08:00 AM	17	7/18/01 11:14:00 AM	14
7/18/01 10:57:00 AM	14	7/18/01 11:03:00 AM	12	7/18/01 11:09:00 AM	14	7/18/01 11:14:00 AM	14
7/18/01 10:57:00 AM	13	7/18/01 11:03:00 AM	12	7/18/01 11:09:00 AM	16	7/18/01 11:15:00 AM	12
7/18/01 10:57:00 AM	16	7/18/01 11:03:00 AM	14	7/18/01 11:09:00 AM	16	7/18/01 11:15:00 AM	12
7/18/01 10:57:00 AM	15	7/18/01 11:03:00 AM	16	7/18/01 11:09:00 AM	15	7/18/01 11:15:00 AM	16
7/18/01 10:58:00 AM	16	7/18/01 11:03:00 AM	17	7/18/01 11:09:00 AM	15	7/18/01 11:15:00 AM	14
7/18/01 10:58:00 AM	15	7/18/01 11:04:00 AM	17	7/18/01 11:09:00 AM	15	7/18/01 11:15:00 AM	13
7/18/01 10:58:00 AM	13	7/18/01 11:04:00 AM	15	7/18/01 11:10:00 AM	16	7/18/01 11:15:00 AM	14
7/18/01 10:58:00 AM	12	7/18/01 11:04:00 AM	15	7/18/01 11:10:00 AM	14	7/18/01 11:16:00 AM	21
7/18/01 10:58:00 AM	14	7/18/01 11:04:00 AM	16	7/18/01 11:10:00 AM	14	7/18/01 11:16:00 AM	23
7/18/01 10:58:00 AM	16	7/18/01 11:04:00 AM	12	7/18/01 11:10:00 AM	14	7/18/01 11:16:00 AM	14
7/18/01 10:59:00 AM	16	7/18/01 11:04:00 AM	14	7/18/01 11:10:00 AM	14	7/18/01 11:16:00 AM	12
7/18/01 10:59:00 AM	13	7/18/01 11:05:00 AM	12	7/18/01 11:10:00 AM	14	7/18/01 11:16:00 AM	16
7/18/01 10:59:00 AM	16	7/18/01 11:05:00 AM	13	7/18/01 11:11:00 AM	15	7/18/01 11:16:00 AM	17
7/18/01 10:59:00 AM	20	7/18/01 11:05:00 AM	15	7/18/01 11:11:00 AM	13	7/18/01 11:17:00 AM	14
7/18/01 10:59:00 AM	14	7/18/01 11:05:00 AM	16	7/18/01 11:11:00 AM	12	7/18/01 11:17:00 AM	15
7/18/01 10:59:00 AM	14	7/18/01 11:05:00 AM	14	7/18/01 11:11:00 AM	12	7/18/01 11:17:00 AM	12
7/18/01 11:00:00 AM	15	7/18/01 11:05:00 AM	14	7/18/01 11:11:00 AM	15	7/18/01 11:17:00 AM	15
7/18/01 11:00:00 AM	17	7/18/01 11:06:00 AM	14	7/18/01 11:11:00 AM	16	7/18/01 11:17:00 AM	12
7/18/01 11:00:00 AM	17	7/18/01 11:06:00 AM	15	7/18/01 11:12:00 AM	15	7/18/01 11:17:00 AM	13
7/18/01 11:00:00 AM	15	7/18/01 11:06:00 AM	14	7/18/01 11:12:00 AM	15	7/18/01 11:18:00 AM	14
7/18/01 11:00:00 AM	16	7/18/01 11:06:00 AM	14	7/18/01 11:12:00 AM	13	7/18/01 11:18:00 AM	13
7/18/01 11:00:00 AM	15	7/18/01 11:06:00 AM	17	7/18/01 11:12:00 AM	12	7/18/01 11:18:00 AM	15
7/18/01 11:01:00 AM	15	7/18/01 11:06:00 AM	21	7/18/01 11:12:00 AM	16	7/18/01 11:18:00 AM	15
7/18/01 11:01:00 AM	18	7/18/01 11:07:00 AM	25	7/18/01 11:12:00 AM	15	7/18/01 11:18:00 AM	14
7/18/01 11:01:00 AM	15	7/18/01 11:07:00 AM	16	7/18/01 11:13:00 AM	14	7/18/01 11:18:00 AM	15
7/18/01 11:01:00 AM	14	7/18/01 11:07:00 AM	15	7/18/01 11:13:00 AM	15	7/18/01 11:19:00 AM	14
7/18/01 11:01:00 AM	14	7/18/01 11:07:00 AM	18	7/18/01 11:13:00 AM	14	7/18/01 11:19:00 AM	15
7/18/01 11:01:00 AM	15	7/18/01 11:07:00 AM	17	7/18/01 11:13:00 AM	15	7/18/01 11:19:00 AM	15

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 11:19:00 AM	15	7/18/01 11:25:00 AM	16	7/18/01 11:31:00 AM	16	7/18/01 11:37:00 AM	16
7/18/01 11:19:00 AM	14	7/18/01 11:25:00 AM	15	7/18/01 11:31:00 AM	17	7/18/01 11:37:00 AM	16
7/18/01 11:19:00 AM	17	7/18/01 11:25:00 AM	14	7/18/01 11:31:00 AM	16	7/18/01 11:37:00 AM	19
7/18/01 11:20:00 AM	16	7/18/01 11:25:00 AM	17	7/18/01 11:31:00 AM	13	7/18/01 11:37:00 AM	20
7/18/01 11:20:00 AM	16	7/18/01 11:26:00 AM	15	7/18/01 11:31:00 AM	13	7/18/01 11:37:00 AM	17
7/18/01 11:20:00 AM	15	7/18/01 11:26:00 AM	14	7/18/01 11:32:00 AM	16	7/18/01 11:37:00 AM	21
7/18/01 11:20:00 AM	16	7/18/01 11:26:00 AM	15	7/18/01 11:32:00 AM	14	7/18/01 11:38:00 AM	17
7/18/01 11:20:00 AM	12	7/18/01 11:26:00 AM	14	7/18/01 11:32:00 AM	14	7/18/01 11:38:00 AM	15
7/18/01 11:20:00 AM	11	7/18/01 11:26:00 AM	15	7/18/01 11:32:00 AM	14	7/18/01 11:38:00 AM	14
7/18/01 11:21:00 AM	14	7/18/01 11:26:00 AM	16	7/18/01 11:32:00 AM	14	7/18/01 11:38:00 AM	16
7/18/01 11:21:00 AM	15	7/18/01 11:27:00 AM	15	7/18/01 11:32:00 AM	13	7/18/01 11:38:00 AM	15
7/18/01 11:21:00 AM	14	7/18/01 11:27:00 AM	15	7/18/01 11:33:00 AM	14	7/18/01 11:38:00 AM	16
7/18/01 11:21:00 AM	11	7/18/01 11:27:00 AM	14	7/18/01 11:33:00 AM	14	7/18/01 11:39:00 AM	14
7/18/01 11:21:00 AM	12	7/18/01 11:27:00 AM	13	7/18/01 11:33:00 AM	15	7/18/01 11:39:00 AM	13
7/18/01 11:21:00 AM	14	7/18/01 11:27:00 AM	12	7/18/01 11:33:00 AM	14	7/18/01 11:39:00 AM	15
7/18/01 11:22:00 AM	16	7/18/01 11:27:00 AM	12	7/18/01 11:33:00 AM	16	7/18/01 11:39:00 AM	16
7/18/01 11:22:00 AM	16	7/18/01 11:28:00 AM	14	7/18/01 11:33:00 AM	10	7/18/01 11:39:00 AM	16
7/18/01 11:22:00 AM	16	7/18/01 11:28:00 AM	15	7/18/01 11:34:00 AM	12	7/18/01 11:39:00 AM	16
7/18/01 11:22:00 AM	11	7/18/01 11:28:00 AM	14	7/18/01 11:34:00 AM	12	7/18/01 11:40:00 AM	18
7/18/01 11:22:00 AM	15	7/18/01 11:28:00 AM	13	7/18/01 11:34:00 AM	12	7/18/01 11:40:00 AM	16
7/18/01 11:22:00 AM	16	7/18/01 11:28:00 AM	14	7/18/01 11:34:00 AM	16	7/18/01 11:40:00 AM	13
7/18/01 11:23:00 AM	14	7/18/01 11:28:00 AM	13	7/18/01 11:34:00 AM	18	7/18/01 11:40:00 AM	14
7/18/01 11:23:00 AM	13	7/18/01 11:29:00 AM	13	7/18/01 11:34:00 AM	16	7/18/01 11:40:00 AM	14
7/18/01 11:23:00 AM	11	7/18/01 11:29:00 AM	16	7/18/01 11:35:00 AM	16	7/18/01 11:40:00 AM	15
7/18/01 11:23:00 AM	15	7/18/01 11:29:00 AM	16	7/18/01 11:35:00 AM	15	7/18/01 11:41:00 AM	13
7/18/01 11:23:00 AM	11	7/18/01 11:29:00 AM	15	7/18/01 11:35:00 AM	13	7/18/01 11:41:00 AM	14
7/18/01 11:23:00 AM	13	7/18/01 11:29:00 AM	15	7/18/01 11:35:00 AM	15	7/18/01 11:41:00 AM	13
7/18/01 11:24:00 AM	16	7/18/01 11:29:00 AM	17	7/18/01 11:35:00 AM	17	7/18/01 11:41:00 AM	12
7/18/01 11:24:00 AM	14	7/18/01 11:30:00 AM	15	7/18/01 11:35:00 AM	15	7/18/01 11:41:00 AM	12
7/18/01 11:24:00 AM	15	7/18/01 11:30:00 AM	18	7/18/01 11:36:00 AM	14	7/18/01 11:41:00 AM	13
7/18/01 11:24:00 AM	13	7/18/01 11:30:00 AM	13	7/18/01 11:36:00 AM	20	7/18/01 11:42:00 AM	12
7/18/01 11:24:00 AM	16	7/18/01 11:30:00 AM	14	7/18/01 11:36:00 AM	28	7/18/01 11:42:00 AM	10
7/18/01 11:24:00 AM	15	7/18/01 11:30:00 AM	17	7/18/01 11:36:00 AM	17	7/18/01 11:42:00 AM	15
7/18/01 11:25:00 AM	13	7/18/01 11:30:00 AM	18	7/18/01 11:36:00 AM	14	7/18/01 11:42:00 AM	13
7/18/01 11:25:00 AM	12	7/18/01 11:31:00 AM	15	7/18/01 11:36:00 AM	12	7/18/01 11:42:00 AM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 11:42:00 AM	11	7/18/01 11:48:00 AM	14	7/18/01 11:54:00 AM	10	7/18/01 12:00:00 PM	12
7/18/01 11:43:00 AM	13	7/18/01 11:48:00 AM	13	7/18/01 11:54:00 AM	12	7/18/01 12:00:00 PM	11
7/18/01 11:43:00 AM	12	7/18/01 11:49:00 AM	14	7/18/01 11:54:00 AM	14	7/18/01 12:00:00 PM	13
7/18/01 11:43:00 AM	12	7/18/01 11:49:00 AM	14	7/18/01 11:55:00 AM	14	7/18/01 12:00:00 PM	15
7/18/01 11:43:00 AM	14	7/18/01 11:49:00 AM	14	7/18/01 11:55:00 AM	15	7/18/01 12:01:00 PM	15
7/18/01 11:43:00 AM	13	7/18/01 11:49:00 AM	14	7/18/01 11:55:00 AM	14	7/18/01 12:01:00 PM	12
7/18/01 11:43:00 AM	14	7/18/01 11:49:00 AM	14	7/18/01 11:55:00 AM	13	7/18/01 12:01:00 PM	12
7/18/01 11:44:00 AM	14	7/18/01 11:49:00 AM	14	7/18/01 11:55:00 AM	14	7/18/01 12:01:00 PM	11
7/18/01 11:44:00 AM	12	7/18/01 11:50:00 AM	12	7/18/01 11:55:00 AM	10	7/18/01 12:01:00 PM	12
7/18/01 11:44:00 AM	13	7/18/01 11:50:00 AM	13	7/18/01 11:56:00 AM	11	7/18/01 12:01:00 PM	15
7/18/01 11:44:00 AM	14	7/18/01 11:50:00 AM	12	7/18/01 11:56:00 AM	11	7/18/01 12:02:00 PM	14
7/18/01 11:44:00 AM	11	7/18/01 11:50:00 AM	11	7/18/01 11:56:00 AM	12	7/18/01 12:02:00 PM	11
7/18/01 11:44:00 AM	12	7/18/01 11:50:00 AM	16	7/18/01 11:56:00 AM	11	7/18/01 12:02:00 PM	10
7/18/01 11:45:00 AM	13	7/18/01 11:50:00 AM	12	7/18/01 11:56:00 AM	10	7/18/01 12:02:00 PM	12
7/18/01 11:45:00 AM	14	7/18/01 11:51:00 AM	12	7/18/01 11:56:00 AM	14	7/18/01 12:02:00 PM	12
7/18/01 11:45:00 AM	13	7/18/01 11:51:00 AM	13	7/18/01 11:57:00 AM	15	7/18/01 12:02:00 PM	12
7/18/01 11:45:00 AM	12	7/18/01 11:51:00 AM	10	7/18/01 11:57:00 AM	16	7/18/01 12:03:00 PM	10
7/18/01 11:45:00 AM	16	7/18/01 11:51:00 AM	11	7/18/01 11:57:00 AM	16	7/18/01 12:03:00 PM	9
7/18/01 11:45:00 AM	20	7/18/01 11:51:00 AM	16	7/18/01 11:57:00 AM	19	7/18/01 12:03:00 PM	13
7/18/01 11:46:00 AM	12	7/18/01 11:51:00 AM	16	7/18/01 11:57:00 AM	14	7/18/01 12:03:00 PM	10
7/18/01 11:46:00 AM	12	7/18/01 11:52:00 AM	10	7/18/01 11:57:00 AM	14	7/18/01 12:03:00 PM	10
7/18/01 11:46:00 AM	19	7/18/01 11:52:00 AM	12	7/18/01 11:58:00 AM	14	7/18/01 12:03:00 PM	13
7/18/01 11:46:00 AM	30	7/18/01 11:52:00 AM	12	7/18/01 11:58:00 AM	15	7/18/01 12:04:00 PM	14
7/18/01 11:46:00 AM	16	7/18/01 11:52:00 AM	13	7/18/01 11:58:00 AM	15	7/18/01 12:04:00 PM	11
7/18/01 11:46:00 AM	15	7/18/01 11:52:00 AM	17	7/18/01 11:58:00 AM	14	7/18/01 12:04:00 PM	11
7/18/01 11:47:00 AM	18	7/18/01 11:52:00 AM	18	7/18/01 11:58:00 AM	14	7/18/01 12:04:00 PM	12
7/18/01 11:47:00 AM	14	7/18/01 11:53:00 AM	12	7/18/01 11:58:00 AM	12	7/18/01 12:04:00 PM	13
7/18/01 11:47:00 AM	15	7/18/01 11:53:00 AM	13	7/18/01 11:59:00 AM	11	7/18/01 12:04:00 PM	14
7/18/01 11:47:00 AM	19	7/18/01 11:53:00 AM	10	7/18/01 11:59:00 AM	18	7/18/01 12:05:00 PM	13
7/18/01 11:47:00 AM	13	7/18/01 11:53:00 AM	12	7/18/01 11:59:00 AM	27	7/18/01 12:05:00 PM	13
7/18/01 11:47:00 AM	15	7/18/01 11:53:00 AM	12	7/18/01 11:59:00 AM	11	7/18/01 12:05:00 PM	10
7/18/01 11:48:00 AM	16	7/18/01 11:53:00 AM	12	7/18/01 11:59:00 AM	13	7/18/01 12:05:00 PM	9
7/18/01 11:48:00 AM	14	7/18/01 11:54:00 AM	10	7/18/01 11:59:00 AM	12	7/18/01 12:05:00 PM	12
7/18/01 11:48:00 AM	17	7/18/01 11:54:00 AM	11	7/18/01 12:00:00 PM	11	7/18/01 12:05:00 PM	14
7/18/01 11:48:00 AM	13	7/18/01 11:54:00 AM	14	7/18/01 12:00:00 PM	13	7/18/01 12:06:00 PM	10

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 12:06:00 PM	14	7/18/01 12:12:00 PM	14	7/18/01 12:17:00 PM	11	7/18/01 12:23:00 PM	8
7/18/01 12:06:00 PM	13	7/18/01 12:12:00 PM	14	7/18/01 12:18:00 PM	8	7/18/01 12:23:00 PM	7
7/18/01 12:06:00 PM	13	7/18/01 12:12:00 PM	14	7/18/01 12:18:00 PM	8	7/18/01 12:24:00 PM	13
7/18/01 12:06:00 PM	12	7/18/01 12:12:00 PM	16	7/18/01 12:18:00 PM	10	7/18/01 12:24:00 PM	16
7/18/01 12:06:00 PM	13	7/18/01 12:12:00 PM	16	7/18/01 12:18:00 PM	11	7/18/01 12:24:00 PM	16
7/18/01 12:07:00 PM	15	7/18/01 12:12:00 PM	12	7/18/01 12:18:00 PM	9	7/18/01 12:24:00 PM	10
7/18/01 12:07:00 PM	15	7/18/01 12:13:00 PM	14	7/18/01 12:18:00 PM	10	7/18/01 12:24:00 PM	11
7/18/01 12:07:00 PM	13	7/18/01 12:13:00 PM	16	7/18/01 12:19:00 PM	12	7/18/01 12:24:00 PM	10
7/18/01 12:07:00 PM	13	7/18/01 12:13:00 PM	16	7/18/01 12:19:00 PM	11	7/18/01 12:25:00 PM	12
7/18/01 12:07:00 PM	14	7/18/01 12:13:00 PM	12	7/18/01 12:19:00 PM	10	7/18/01 12:25:00 PM	11
7/18/01 12:07:00 PM	13	7/18/01 12:13:00 PM	15	7/18/01 12:19:00 PM	12	7/18/01 12:25:00 PM	10
7/18/01 12:08:00 PM	12	7/18/01 12:13:00 PM	17	7/18/01 12:19:00 PM	16	7/18/01 12:25:00 PM	9
7/18/01 12:08:00 PM	11	7/18/01 12:14:00 PM	16	7/18/01 12:19:00 PM	13	7/18/01 12:25:00 PM	8
7/18/01 12:08:00 PM	15	7/18/01 12:14:00 PM	14	7/18/01 12:20:00 PM	13	7/18/01 12:25:00 PM	8
7/18/01 12:08:00 PM	16	7/18/01 12:14:00 PM	14	7/18/01 12:20:00 PM	11	7/18/01 12:26:00 PM	6
7/18/01 12:08:00 PM	9	7/18/01 12:14:00 PM	10	7/18/01 12:20:00 PM	11	7/18/01 12:26:00 PM	8
7/18/01 12:08:00 PM	9	7/18/01 12:14:00 PM	13	7/18/01 12:20:00 PM	11	7/18/01 12:26:00 PM	9
7/18/01 12:09:00 PM	12	7/18/01 12:14:00 PM	14	7/18/01 12:20:00 PM	12	7/18/01 12:26:00 PM	10
7/18/01 12:09:00 PM	14	7/18/01 12:15:00 PM	12	7/18/01 12:20:00 PM	10	7/18/01 12:26:00 PM	9
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7/18/01 12:09:00 PM	14	7/18/01 12:15:00 PM	11	7/18/01 12:21:00 PM	12	7/18/01 12:27:00 PM	11
7/18/01 12:09:00 PM	14	7/18/01 12:15:00 PM	14	7/18/01 12:21:00 PM	13	7/18/01 12:27:00 PM	10
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7/18/01 12:10:00 PM	10	7/18/01 12:15:00 PM	13	7/18/01 12:21:00 PM	11	7/18/01 12:27:00 PM	11
7/18/01 12:10:00 PM	9	7/18/01 12:16:00 PM	14	7/18/01 12:21:00 PM	9	7/18/01 12:27:00 PM	10
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7/18/01 12:10:00 PM	11	7/18/01 12:16:00 PM	12	7/18/01 12:22:00 PM	8	7/18/01 12:28:00 PM	9
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7/18/01 12:11:00 PM	16	7/18/01 12:17:00 PM	10	7/18/01 12:23:00 PM	13	7/18/01 12:29:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 12:29:00 PM	9	7/18/01 12:35:00 PM	11	7/18/01 12:41:00 PM	11	7/18/01 12:47:00 PM	11
7/18/01 12:29:00 PM	12	7/18/01 12:35:00 PM	10	7/18/01 12:41:00 PM	13	7/18/01 12:47:00 PM	12
7/18/01 12:29:00 PM	13	7/18/01 12:35:00 PM	11	7/18/01 12:41:00 PM	11	7/18/01 12:47:00 PM	13
7/18/01 12:30:00 PM	13	7/18/01 12:35:00 PM	12	7/18/01 12:41:00 PM	10	7/18/01 12:47:00 PM	10
7/18/01 12:30:00 PM	13	7/18/01 12:36:00 PM	10	7/18/01 12:41:00 PM	12	7/18/01 12:47:00 PM	10
7/18/01 12:30:00 PM	12	7/18/01 12:36:00 PM	8	7/18/01 12:42:00 PM	12	7/18/01 12:47:00 PM	11
7/18/01 12:30:00 PM	12	7/18/01 12:36:00 PM	9	7/18/01 12:42:00 PM	10	7/18/01 12:48:00 PM	12
7/18/01 12:30:00 PM	9	7/18/01 12:36:00 PM	11	7/18/01 12:42:00 PM	10	7/18/01 12:48:00 PM	12
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7/18/01 12:31:00 PM	9	7/18/01 12:37:00 PM	10	7/18/01 12:42:00 PM	12	7/18/01 12:48:00 PM	12
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7/18/01 12:32:00 PM	10	7/18/01 12:38:00 PM	11	7/18/01 12:44:00 PM	8	7/18/01 12:49:00 PM	9
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7/18/01 12:32:00 PM	8	7/18/01 12:38:00 PM	10	7/18/01 12:44:00 PM	9	7/18/01 12:50:00 PM	12
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7/18/01 12:35:00 PM	8	7/18/01 12:41:00 PM	9	7/18/01 12:46:00 PM	10	7/18/01 12:52:00 PM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 12:52:00 PM	10	7/18/01 12:58:00 PM	11	7/18/01 1:04:00 PM	12	7/18/01 1:10:00 PM	9
7/18/01 12:53:00 PM	11	7/18/01 12:58:00 PM	19	7/18/01 1:04:00 PM	13	7/18/01 1:10:00 PM	10
7/18/01 12:53:00 PM	12	7/18/01 12:59:00 PM	30	7/18/01 1:04:00 PM	12	7/18/01 1:10:00 PM	9
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7/18/01 12:53:00 PM	11	7/18/01 12:59:00 PM	11	7/18/01 1:05:00 PM	13	7/18/01 1:11:00 PM	14
7/18/01 12:53:00 PM	14	7/18/01 12:59:00 PM	12	7/18/01 1:05:00 PM	14	7/18/01 1:11:00 PM	16
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Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
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7/18/01 1:16:00 PM	10	7/18/01 1:22:00 PM	10	7/18/01 1:28:00 PM	7	7/18/01 1:33:00 PM	7
7/18/01 1:16:00 PM	11	7/18/01 1:22:00 PM	10	7/18/01 1:28:00 PM	9	7/18/01 1:34:00 PM	10
7/18/01 1:16:00 PM	12	7/18/01 1:22:00 PM	10	7/18/01 1:28:00 PM	8	7/18/01 1:34:00 PM	12
7/18/01 1:16:00 PM	11	7/18/01 1:22:00 PM	10	7/18/01 1:28:00 PM	11	7/18/01 1:34:00 PM	12
7/18/01 1:17:00 PM	10	7/18/01 1:22:00 PM	11	7/18/01 1:28:00 PM	12	7/18/01 1:34:00 PM	9
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Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
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7/18/01 1:39:00 PM	13	7/18/01 1:45:00 PM	8	7/18/01 1:51:00 PM	9	7/18/01 1:57:00 PM	7
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7/18/01 1:41:00 PM	9	7/18/01 1:47:00 PM	9	7/18/01 1:53:00 PM	9	7/18/01 1:58:00 PM	12
7/18/01 1:41:00 PM	8	7/18/01 1:47:00 PM	9	7/18/01 1:53:00 PM	9	7/18/01 1:59:00 PM	10
7/18/01 1:41:00 PM	8	7/18/01 1:47:00 PM	12	7/18/01 1:53:00 PM	9	7/18/01 1:59:00 PM	9
7/18/01 1:41:00 PM	10	7/18/01 1:47:00 PM	15	7/18/01 1:53:00 PM	10	7/18/01 1:59:00 PM	7
7/18/01 1:42:00 PM	12	7/18/01 1:47:00 PM	11	7/18/01 1:53:00 PM	11	7/18/01 1:59:00 PM	9
7/18/01 1:42:00 PM	12	7/18/01 1:48:00 PM	6	7/18/01 1:53:00 PM	8	7/18/01 1:59:00 PM	14
7/18/01 1:42:00 PM	12	7/18/01 1:48:00 PM	6	7/18/01 1:54:00 PM	8	7/18/01 1:59:00 PM	19
7/18/01 1:42:00 PM	16	7/18/01 1:48:00 PM	11	7/18/01 1:54:00 PM	7	7/18/01 2:00:00 PM	12
7/18/01 1:42:00 PM	12	7/18/01 1:48:00 PM	12	7/18/01 1:54:00 PM	9	7/18/01 2:00:00 PM	20
7/18/01 1:42:00 PM	11	7/18/01 1:48:00 PM	9	7/18/01 1:54:00 PM	11	7/18/01 2:00:00 PM	18
7/18/01 1:43:00 PM	11	7/18/01 1:48:00 PM	10	7/18/01 1:54:00 PM	8	7/18/01 2:00:00 PM	10
7/18/01 1:43:00 PM	6	7/18/01 1:49:00 PM	9	7/18/01 1:54:00 PM	6	7/18/01 2:00:00 PM	11
7/18/01 1:43:00 PM	10	7/18/01 1:49:00 PM	8	7/18/01 1:55:00 PM	8	7/18/01 2:00:00 PM	10
7/18/01 1:43:00 PM	8	7/18/01 1:49:00 PM	11	7/18/01 1:55:00 PM	9	7/18/01 2:01:00 PM	7
7/18/01 1:43:00 PM	8	7/18/01 1:49:00 PM	10	7/18/01 1:55:00 PM	9	7/18/01 2:01:00 PM	8
7/18/01 1:43:00 PM	10	7/18/01 1:49:00 PM	10	7/18/01 1:55:00 PM	10	7/18/01 2:01:00 PM	11
7/18/01 1:44:00 PM	11	7/18/01 1:49:00 PM	10	7/18/01 1:55:00 PM	12	7/18/01 2:01:00 PM	10
7/18/01 1:44:00 PM	10	7/18/01 1:50:00 PM	10	7/18/01 1:55:00 PM	11	7/18/01 2:01:00 PM	14
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7/18/01 1:44:00 PM	7	7/18/01 1:50:00 PM	13	7/18/01 1:56:00 PM	9	7/18/01 2:02:00 PM	9
7/18/01 1:44:00 PM	8	7/18/01 1:50:00 PM	11	7/18/01 1:56:00 PM	10	7/18/01 2:02:00 PM	10
7/18/01 1:44:00 PM	9	7/18/01 1:50:00 PM	11	7/18/01 1:56:00 PM	13	7/18/01 2:02:00 PM	9
7/18/01 1:45:00 PM	15	7/18/01 1:50:00 PM	9	7/18/01 1:56:00 PM	11	7/18/01 2:02:00 PM	12
7/18/01 1:45:00 PM	15	7/18/01 1:51:00 PM	9	7/18/01 1:56:00 PM	9	7/18/01 2:02:00 PM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 2:02:00 PM	6	7/18/01 2:08:00 PM	13	7/18/01 2:14:00 PM	7	7/18/01 2:20:00 PM	8
7/18/01 2:03:00 PM	8	7/18/01 2:08:00 PM	9	7/18/01 2:14:00 PM	9	7/18/01 2:20:00 PM	10
7/18/01 2:03:00 PM	10	7/18/01 2:09:00 PM	11	7/18/01 2:14:00 PM	11	7/18/01 2:20:00 PM	9
7/18/01 2:03:00 PM	11	7/18/01 2:09:00 PM	17	7/18/01 2:15:00 PM	10	7/18/01 2:20:00 PM	10
7/18/01 2:03:00 PM	11	7/18/01 2:09:00 PM	10	7/18/01 2:15:00 PM	11	7/18/01 2:21:00 PM	9
7/18/01 2:03:00 PM	8	7/18/01 2:09:00 PM	10	7/18/01 2:15:00 PM	8	7/18/01 2:21:00 PM	10
7/18/01 2:03:00 PM	8	7/18/01 2:09:00 PM	8	7/18/01 2:15:00 PM	8	7/18/01 2:21:00 PM	10
7/18/01 2:04:00 PM	8	7/18/01 2:09:00 PM	7	7/18/01 2:15:00 PM	8	7/18/01 2:21:00 PM	10
7/18/01 2:04:00 PM	9	7/18/01 2:10:00 PM	8	7/18/01 2:15:00 PM	11	7/18/01 2:21:00 PM	7
7/18/01 2:04:00 PM	8	7/18/01 2:10:00 PM	8	7/18/01 2:16:00 PM	7	7/18/01 2:21:00 PM	9
7/18/01 2:04:00 PM	10	7/18/01 2:10:00 PM	7	7/18/01 2:16:00 PM	9	7/18/01 2:22:00 PM	11
7/18/01 2:04:00 PM	9	7/18/01 2:10:00 PM	7	7/18/01 2:16:00 PM	8	7/18/01 2:22:00 PM	10
7/18/01 2:04:00 PM	11	7/18/01 2:10:00 PM	8	7/18/01 2:16:00 PM	10	7/18/01 2:22:00 PM	8
7/18/01 2:05:00 PM	7	7/18/01 2:10:00 PM	9	7/18/01 2:16:00 PM	9	7/18/01 2:22:00 PM	9
7/18/01 2:05:00 PM	9	7/18/01 2:11:00 PM	11	7/18/01 2:16:00 PM	8	7/18/01 2:22:00 PM	9
7/18/01 2:05:00 PM	11	7/18/01 2:11:00 PM	8	7/18/01 2:17:00 PM	9	7/18/01 2:22:00 PM	11
7/18/01 2:05:00 PM	8	7/18/01 2:11:00 PM	7	7/18/01 2:17:00 PM	9	7/18/01 2:23:00 PM	11
7/18/01 2:05:00 PM	11	7/18/01 2:11:00 PM	7	7/18/01 2:17:00 PM	9	7/18/01 2:23:00 PM	11
7/18/01 2:05:00 PM	9	7/18/01 2:11:00 PM	7	7/18/01 2:17:00 PM	9	7/18/01 2:23:00 PM	12
7/18/01 2:06:00 PM	8	7/18/01 2:11:00 PM	6	7/18/01 2:17:00 PM	8	7/18/01 2:23:00 PM	10
7/18/01 2:06:00 PM	9	7/18/01 2:12:00 PM	8	7/18/01 2:17:00 PM	11	7/18/01 2:23:00 PM	11
7/18/01 2:06:00 PM	9	7/18/01 2:12:00 PM	10	7/18/01 2:18:00 PM	10	7/18/01 2:23:00 PM	9
7/18/01 2:06:00 PM	7	7/18/01 2:12:00 PM	8	7/18/01 2:18:00 PM	10	7/18/01 2:24:00 PM	10
7/18/01 2:06:00 PM	8	7/18/01 2:12:00 PM	7	7/18/01 2:18:00 PM	10	7/18/01 2:24:00 PM	7
7/18/01 2:06:00 PM	10	7/18/01 2:12:00 PM	5	7/18/01 2:18:00 PM	8	7/18/01 2:24:00 PM	8
7/18/01 2:07:00 PM	11	7/18/01 2:12:00 PM	8	7/18/01 2:18:00 PM	10	7/18/01 2:24:00 PM	10
7/18/01 2:07:00 PM	11	7/18/01 2:13:00 PM	9	7/18/01 2:18:00 PM	8	7/18/01 2:24:00 PM	12
7/18/01 2:07:00 PM	10	7/18/01 2:13:00 PM	7	7/18/01 2:19:00 PM	8	7/18/01 2:24:00 PM	9
7/18/01 2:07:00 PM	10	7/18/01 2:13:00 PM	9	7/18/01 2:19:00 PM	8	7/18/01 2:25:00 PM	6
7/18/01 2:07:00 PM	7	7/18/01 2:13:00 PM	10	7/18/01 2:19:00 PM	10	7/18/01 2:25:00 PM	7
7/18/01 2:07:00 PM	6	7/18/01 2:13:00 PM	12	7/18/01 2:19:00 PM	9	7/18/01 2:25:00 PM	8
7/18/01 2:08:00 PM	9	7/18/01 2:13:00 PM	9	7/18/01 2:19:00 PM	7	7/18/01 2:25:00 PM	10
7/18/01 2:08:00 PM	9	7/18/01 2:14:00 PM	7	7/18/01 2:19:00 PM	9	7/18/01 2:25:00 PM	8
7/18/01 2:08:00 PM	8	7/18/01 2:14:00 PM	10	7/18/01 2:20:00 PM	8	7/18/01 2:25:00 PM	10
7/18/01 2:08:00 PM	11	7/18/01 2:14:00 PM	10	7/18/01 2:20:00 PM	6	7/18/01 2:26:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 2:26:00 PM	8	7/18/01 2:32:00 PM	9	7/18/01 2:37:00 PM	11	7/18/01 2:43:00 PM	8
7/18/01 2:26:00 PM	10	7/18/01 2:32:00 PM	7	7/18/01 2:38:00 PM	13	7/18/01 2:43:00 PM	9
7/18/01 2:26:00 PM	9	7/18/01 2:32:00 PM	8	7/18/01 2:38:00 PM	12	7/18/01 2:44:00 PM	10
7/18/01 2:26:00 PM	10	7/18/01 2:32:00 PM	8	7/18/01 2:38:00 PM	8	7/18/01 2:44:00 PM	10
7/18/01 2:26:00 PM	10	7/18/01 2:32:00 PM	8	7/18/01 2:38:00 PM	6	7/18/01 2:44:00 PM	9
7/18/01 2:27:00 PM	8	7/18/01 2:32:00 PM	8	7/18/01 2:38:00 PM	8	7/18/01 2:44:00 PM	9
7/18/01 2:27:00 PM	8	7/18/01 2:33:00 PM	9	7/18/01 2:38:00 PM	5	7/18/01 2:44:00 PM	8
7/18/01 2:27:00 PM	8	7/18/01 2:33:00 PM	8	7/18/01 2:39:00 PM	6	7/18/01 2:44:00 PM	10
7/18/01 2:27:00 PM	9	7/18/01 2:33:00 PM	6	7/18/01 2:39:00 PM	11	7/18/01 2:45:00 PM	8
7/18/01 2:27:00 PM	8	7/18/01 2:33:00 PM	4	7/18/01 2:39:00 PM	10	7/18/01 2:45:00 PM	6
7/18/01 2:27:00 PM	12	7/18/01 2:33:00 PM	10	7/18/01 2:39:00 PM	11	7/18/01 2:45:00 PM	8
7/18/01 2:28:00 PM	8	7/18/01 2:33:00 PM	8	7/18/01 2:39:00 PM	10	7/18/01 2:45:00 PM	10
7/18/01 2:28:00 PM	9	7/18/01 2:34:00 PM	9	7/18/01 2:39:00 PM	9	7/18/01 2:45:00 PM	10
7/18/01 2:28:00 PM	9	7/18/01 2:34:00 PM	8	7/18/01 2:40:00 PM	8	7/18/01 2:45:00 PM	9
7/18/01 2:28:00 PM	8	7/18/01 2:34:00 PM	7	7/18/01 2:40:00 PM	6	7/18/01 2:46:00 PM	10
7/18/01 2:28:00 PM	10	7/18/01 2:34:00 PM	6	7/18/01 2:40:00 PM	8	7/18/01 2:46:00 PM	7
7/18/01 2:28:00 PM	10	7/18/01 2:34:00 PM	8	7/18/01 2:40:00 PM	7	7/18/01 2:46:00 PM	10
7/18/01 2:29:00 PM	9	7/18/01 2:34:00 PM	8	7/18/01 2:40:00 PM	9	7/18/01 2:46:00 PM	13
7/18/01 2:29:00 PM	6	7/18/01 2:35:00 PM	10	7/18/01 2:40:00 PM	10	7/18/01 2:46:00 PM	13
7/18/01 2:29:00 PM	8	7/18/01 2:35:00 PM	8	7/18/01 2:41:00 PM	10	7/18/01 2:46:00 PM	19
7/18/01 2:29:00 PM	7	7/18/01 2:35:00 PM	7	7/18/01 2:41:00 PM	9	7/18/01 2:47:00 PM	23
7/18/01 2:29:00 PM	8	7/18/01 2:35:00 PM	11	7/18/01 2:41:00 PM	9	7/18/01 2:47:00 PM	6
7/18/01 2:29:00 PM	8	7/18/01 2:35:00 PM	10	7/18/01 2:41:00 PM	9	7/18/01 2:47:00 PM	6
7/18/01 2:30:00 PM	8	7/18/01 2:35:00 PM	8	7/18/01 2:41:00 PM	8	7/18/01 2:47:00 PM	7
7/18/01 2:30:00 PM	7	7/18/01 2:36:00 PM	9	7/18/01 2:41:00 PM	7	7/18/01 2:47:00 PM	10
7/18/01 2:30:00 PM	6	7/18/01 2:36:00 PM	9	7/18/01 2:42:00 PM	7	7/18/01 2:47:00 PM	12
7/18/01 2:30:00 PM	6	7/18/01 2:36:00 PM	9	7/18/01 2:42:00 PM	10	7/18/01 2:48:00 PM	9
7/18/01 2:30:00 PM	8	7/18/01 2:36:00 PM	8	7/18/01 2:42:00 PM	11	7/18/01 2:48:00 PM	8
7/18/01 2:30:00 PM	10	7/18/01 2:36:00 PM	6	7/18/01 2:42:00 PM	8	7/18/01 2:48:00 PM	9
7/18/01 2:31:00 PM	8	7/18/01 2:36:00 PM	10	7/18/01 2:42:00 PM	9	7/18/01 2:48:00 PM	10
7/18/01 2:31:00 PM	6	7/18/01 2:37:00 PM	10	7/18/01 2:42:00 PM	8	7/18/01 2:48:00 PM	12
7/18/01 2:31:00 PM	7	7/18/01 2:37:00 PM	7	7/18/01 2:43:00 PM	7	7/18/01 2:48:00 PM	13
7/18/01 2:31:00 PM	8	7/18/01 2:37:00 PM	7	7/18/01 2:43:00 PM	9	7/18/01 2:49:00 PM	10
7/18/01 2:31:00 PM	11	7/18/01 2:37:00 PM	8	7/18/01 2:43:00 PM	10	7/18/01 2:49:00 PM	10
7/18/01 2:31:00 PM	9	7/18/01 2:37:00 PM	8	7/18/01 2:43:00 PM	7	7/18/01 2:49:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/18/01 2:49:00 PM	10	7/18/01 2:55:00 PM	10	7/18/01 3:01:00 PM	8	7/18/01 3:07:00 PM	11
7/18/01 2:49:00 PM	17	7/18/01 2:55:00 PM	9	7/18/01 3:01:00 PM	8	7/18/01 3:07:00 PM	9
7/18/01 2:49:00 PM	26	7/18/01 2:55:00 PM	8	7/18/01 3:01:00 PM	9	7/18/01 3:07:00 PM	9
7/18/01 2:50:00 PM	10	7/18/01 2:55:00 PM	8	7/18/01 3:01:00 PM	9	7/18/01 3:07:00 PM	11
7/18/01 2:50:00 PM	11	7/18/01 2:56:00 PM	9	7/18/01 3:01:00 PM	12	7/18/01 3:07:00 PM	10
7/18/01 2:50:00 PM	9	7/18/01 2:56:00 PM	8	7/18/01 3:02:00 PM	13	7/18/01 3:07:00 PM	8
7/18/01 2:50:00 PM	8	7/18/01 2:56:00 PM	10	7/18/01 3:02:00 PM	10	7/18/01 3:08:00 PM	9
7/18/01 2:50:00 PM	10	7/18/01 2:56:00 PM	9	7/18/01 3:02:00 PM	10	7/18/01 3:08:00 PM	11
7/18/01 2:50:00 PM	11	7/18/01 2:56:00 PM	12	7/18/01 3:02:00 PM	10	7/18/01 3:08:00 PM	10
7/18/01 2:51:00 PM	9	7/18/01 2:56:00 PM	11	7/18/01 3:02:00 PM	8	7/18/01 3:08:00 PM	9
7/18/01 2:51:00 PM	11	7/18/01 2:57:00 PM	8	7/18/01 3:02:00 PM	11	7/18/01 3:08:00 PM	7
7/18/01 2:51:00 PM	12	7/18/01 2:57:00 PM	8	7/18/01 3:03:00 PM	12	7/18/01 3:08:00 PM	9
7/18/01 2:51:00 PM	10	7/18/01 2:57:00 PM	7	7/18/01 3:03:00 PM	9	7/19/01 2:44:00 PM	21
7/18/01 2:51:00 PM	9	7/18/01 2:57:00 PM	8	7/18/01 3:03:00 PM	9	7/19/01 2:45:00 PM	11
7/18/01 2:51:00 PM	10	7/18/01 2:57:00 PM	9	7/18/01 3:03:00 PM	12	7/19/01 2:46:00 PM	16
7/18/01 2:52:00 PM	9	7/18/01 2:57:00 PM	9	7/18/01 3:03:00 PM	11	7/19/01 2:47:00 PM	22
7/18/01 2:52:00 PM	9	7/18/01 2:58:00 PM	10	7/18/01 3:03:00 PM	10	7/19/01 2:48:00 PM	11
7/18/01 2:52:00 PM	11	7/18/01 2:58:00 PM	10	7/18/01 3:04:00 PM	10	7/19/01 2:49:00 PM	11
7/18/01 2:52:00 PM	10	7/18/01 2:58:00 PM	8	7/18/01 3:04:00 PM	8	7/19/01 2:50:00 PM	11
7/18/01 2:52:00 PM	10	7/18/01 2:58:00 PM	7	7/18/01 3:04:00 PM	7	7/19/01 2:51:00 PM	12
7/18/01 2:52:00 PM	8	7/18/01 2:58:00 PM	11	7/18/01 3:04:00 PM	8	7/19/01 2:52:00 PM	12
7/18/01 2:53:00 PM	10	7/18/01 2:58:00 PM	10	7/18/01 3:04:00 PM	8	7/19/01 2:53:00 PM	10
7/18/01 2:53:00 PM	12	7/18/01 2:59:00 PM	9	7/18/01 3:04:00 PM	11	7/19/01 2:54:00 PM	10
7/18/01 2:53:00 PM	10	7/18/01 2:59:00 PM	9	7/18/01 3:05:00 PM	10	7/19/01 2:55:00 PM	10
7/18/01 2:53:00 PM	8	7/18/01 2:59:00 PM	11	7/18/01 3:05:00 PM	10	7/19/01 2:56:00 PM	11
7/18/01 2:53:00 PM	10	7/18/01 2:59:00 PM	13	7/18/01 3:05:00 PM	9	7/19/01 2:57:00 PM	10
7/18/01 2:53:00 PM	9	7/18/01 2:59:00 PM	10	7/18/01 3:05:00 PM	9	7/19/01 2:58:00 PM	12
7/18/01 2:54:00 PM	8	7/18/01 2:59:00 PM	8	7/18/01 3:05:00 PM	11	7/19/01 2:59:00 PM	12
7/18/01 2:54:00 PM	10	7/18/01 3:00:00 PM	10	7/18/01 3:05:00 PM	11	7/19/01 3:00:00 PM	15
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7/18/01 2:54:00 PM	10	7/18/01 3:00:00 PM	12	7/18/01 3:06:00 PM	10	7/19/01 3:02:00 PM	17
7/18/01 2:54:00 PM	11	7/18/01 3:00:00 PM	12	7/18/01 3:06:00 PM	9	7/19/01 3:03:00 PM	14
7/18/01 2:54:00 PM	8	7/18/01 3:00:00 PM	11	7/18/01 3:06:00 PM	9	7/19/01 3:04:00 PM	12
7/18/01 2:55:00 PM	11	7/18/01 3:00:00 PM	6	7/18/01 3:06:00 PM	9	7/19/01 3:05:00 PM	12
7/18/01 2:55:00 PM	11	7/18/01 3:01:00 PM	8	7/18/01 3:06:00 PM	10	7/19/01 3:06:00 PM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/19/01 3:07:00 PM	14	7/23/01 12:35:00 PM	46	7/23/01 1:10:00 PM	54	7/23/01 1:45:00 PM	46
7/19/01 3:08:00 PM	15	7/23/01 12:36:00 PM	38	7/23/01 1:11:00 PM	42	7/23/01 1:46:00 PM	48
7/19/01 3:09:00 PM	13	7/23/01 12:37:00 PM	42	7/23/01 1:12:00 PM	40	7/23/01 1:47:00 PM	45
7/19/01 3:10:00 PM	12	7/23/01 12:38:00 PM	40	7/23/01 1:13:00 PM	40	7/23/01 1:48:00 PM	50
7/19/01 3:11:00 PM	25	7/23/01 12:39:00 PM	51	7/23/01 1:14:00 PM	51	7/23/01 1:49:00 PM	46
7/19/01 3:12:00 PM	21	7/23/01 12:40:00 PM	44	7/23/01 1:15:00 PM	46	7/23/01 1:50:00 PM	52
7/19/01 3:13:00 PM	14	7/23/01 12:41:00 PM	37	7/23/01 1:16:00 PM	47	7/23/01 1:51:00 PM	49
7/19/01 3:14:00 PM	23	7/23/01 12:42:00 PM	36	7/23/01 1:17:00 PM	42	7/23/01 1:52:00 PM	46
7/19/01 3:15:00 PM	16	7/23/01 12:43:00 PM	49	7/23/01 1:18:00 PM	60	7/23/01 1:53:00 PM	44
7/19/01 3:16:00 PM	11	7/23/01 12:44:00 PM	55	7/23/01 1:19:00 PM	49	7/23/01 1:54:00 PM	46
7/19/01 3:17:00 PM	15	7/23/01 12:45:00 PM	47	7/23/01 1:20:00 PM	48	7/23/01 1:55:00 PM	46
7/19/01 3:18:00 PM	12	7/23/01 12:46:00 PM	50	7/23/01 1:21:00 PM	46	7/23/01 1:56:00 PM	44
7/19/01 3:19:00 PM	12	7/23/01 12:47:00 PM	45	7/23/01 1:22:00 PM	42	7/23/01 1:57:00 PM	51
7/19/01 3:20:00 PM	12	7/23/01 12:48:00 PM	39	7/23/01 1:23:00 PM	51	7/23/01 1:58:00 PM	55
7/19/01 3:21:00 PM	12	7/23/01 12:49:00 PM	47	7/23/01 1:24:00 PM	44	7/23/01 1:59:00 PM	61
7/19/01 3:22:00 PM	20	7/23/01 12:50:00 PM	41	7/23/01 1:25:00 PM	52	7/23/01 2:00:00 PM	46
7/19/01 3:23:00 PM	11	7/23/01 12:51:00 PM	55	7/23/01 1:26:00 PM	45	7/23/01 2:01:00 PM	46
7/19/01 3:24:00 PM	12	7/23/01 12:52:00 PM	43	7/23/01 1:27:00 PM	45	7/23/01 2:02:00 PM	47
7/19/01 3:25:00 PM	13	7/23/01 12:53:00 PM	43	7/23/01 1:28:00 PM	43	7/23/01 2:03:00 PM	54
7/19/01 3:26:00 PM	12	7/23/01 12:54:00 PM	41	7/23/01 1:29:00 PM	44	7/23/01 2:04:00 PM	62
7/19/01 3:27:00 PM	13	7/23/01 12:55:00 PM	38	7/23/01 1:30:00 PM	43	7/23/01 2:05:00 PM	48
7/19/01 3:28:00 PM	12	7/23/01 12:56:00 PM	39	7/23/01 1:31:00 PM	45	7/23/01 2:06:00 PM	48
7/19/01 3:29:00 PM	11	7/23/01 12:57:00 PM	38	7/23/01 1:32:00 PM	43	7/23/01 2:07:00 PM	50
7/19/01 3:30:00 PM	20	7/23/01 12:58:00 PM	41	7/23/01 1:33:00 PM	43	7/23/01 2:08:00 PM	52
7/23/01 12:24:00 PM	56	7/23/01 12:59:00 PM	57	7/23/01 1:34:00 PM	46	7/23/01 2:09:00 PM	56
7/23/01 12:25:00 PM	81	7/23/01 1:00:00 PM	40	7/23/01 1:35:00 PM	42	7/23/01 2:10:00 PM	54
7/23/01 12:26:00 PM	38	7/23/01 1:01:00 PM	41	7/23/01 1:36:00 PM	49	7/23/01 2:11:00 PM	54
7/23/01 12:27:00 PM	36	7/23/01 1:02:00 PM	41	7/23/01 1:37:00 PM	46	7/23/01 2:12:00 PM	49
7/23/01 12:28:00 PM	36	7/23/01 1:03:00 PM	48	7/23/01 1:38:00 PM	48	7/23/01 2:13:00 PM	48
7/23/01 12:29:00 PM	40	7/23/01 1:04:00 PM	55	7/23/01 1:39:00 PM	45	7/23/01 2:14:00 PM	77
7/23/01 12:30:00 PM	38	7/23/01 1:05:00 PM	48	7/23/01 1:40:00 PM	55	7/23/01 2:15:00 PM	54
7/23/01 12:31:00 PM	36	7/23/01 1:06:00 PM	38	7/23/01 1:41:00 PM	46	7/23/01 2:16:00 PM	50
7/23/01 12:32:00 PM	38	7/23/01 1:07:00 PM	44	7/23/01 1:42:00 PM	49	7/23/01 2:17:00 PM	58
7/23/01 12:33:00 PM	46	7/23/01 1:08:00 PM	49	7/23/01 1:43:00 PM	45	7/23/01 2:18:00 PM	57
7/23/01 12:34:00 PM	43	7/23/01 1:09:00 PM	42	7/23/01 1:44:00 PM	43	7/23/01 2:19:00 PM	58

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/23/01 2:20:00 PM	65	7/23/01 2:55:00 PM	49	7/23/01 3:30:00 PM	70	7/23/01 4:05:00 PM	93
7/23/01 2:21:00 PM	46	7/23/01 2:56:00 PM	50	7/23/01 3:31:00 PM	53	7/23/01 4:06:00 PM	92
7/23/01 2:22:00 PM	46	7/23/01 2:57:00 PM	52	7/23/01 3:32:00 PM	60	7/23/01 4:07:00 PM	67
7/23/01 2:23:00 PM	46	7/23/01 2:58:00 PM	60	7/23/01 3:33:00 PM	55	7/23/01 4:08:00 PM	52
7/23/01 2:24:00 PM	48	7/23/01 2:59:00 PM	73	7/23/01 3:34:00 PM	56	7/23/01 4:09:00 PM	51
7/23/01 2:25:00 PM	85	7/23/01 3:00:00 PM	53	7/23/01 3:35:00 PM	51	7/23/01 4:10:00 PM	52
7/23/01 2:26:00 PM	79	7/23/01 3:01:00 PM	56	7/23/01 3:36:00 PM	54	7/23/01 4:11:00 PM	49
7/23/01 2:27:00 PM	58	7/23/01 3:02:00 PM	73	7/23/01 3:37:00 PM	51	7/23/01 4:12:00 PM	51
7/23/01 2:28:00 PM	58	7/23/01 3:03:00 PM	57	7/23/01 3:38:00 PM	55	7/23/01 4:13:00 PM	51
7/23/01 2:29:00 PM	59	7/23/01 3:04:00 PM	47	7/23/01 3:39:00 PM	54	7/23/01 4:14:00 PM	50
7/23/01 2:30:00 PM	53	7/23/01 3:05:00 PM	61	7/23/01 3:40:00 PM	51	7/23/01 4:15:00 PM	52
7/23/01 2:31:00 PM	52	7/23/01 3:06:00 PM	54	7/23/01 3:41:00 PM	56	7/23/01 4:16:00 PM	70
7/23/01 2:32:00 PM	53	7/23/01 3:07:00 PM	50	7/23/01 3:42:00 PM	52	7/23/01 4:17:00 PM	68
7/23/01 2:33:00 PM	52	7/23/01 3:08:00 PM	48	7/23/01 3:43:00 PM	58	7/23/01 4:18:00 PM	48
7/23/01 2:34:00 PM	53	7/23/01 3:09:00 PM	48	7/23/01 3:44:00 PM	53	7/23/01 4:19:00 PM	46
7/23/01 2:35:00 PM	53	7/23/01 3:10:00 PM	47	7/23/01 3:45:00 PM	49	7/23/01 4:20:00 PM	67
7/23/01 2:36:00 PM	53	7/23/01 3:11:00 PM	52	7/23/01 3:46:00 PM	52	7/23/01 4:21:00 PM	49
7/23/01 2:37:00 PM	47	7/23/01 3:12:00 PM	52	7/23/01 3:47:00 PM	48	7/23/01 4:22:00 PM	46
7/23/01 2:38:00 PM	46	7/23/01 3:13:00 PM	186	7/23/01 3:48:00 PM	55	7/23/01 4:23:00 PM	52
7/23/01 2:39:00 PM	48	7/23/01 3:14:00 PM	77	7/23/01 3:49:00 PM	55	7/23/01 4:24:00 PM	58
7/23/01 2:40:00 PM	51	7/23/01 3:15:00 PM	47	7/23/01 3:50:00 PM	54	7/24/01 8:09:00 AM	87
7/23/01 2:41:00 PM	58	7/23/01 3:16:00 PM	47	7/23/01 3:51:00 PM	67	7/24/01 8:10:00 AM	56
7/23/01 2:42:00 PM	53	7/23/01 3:17:00 PM	50	7/23/01 3:52:00 PM	58	7/24/01 8:11:00 AM	52
7/23/01 2:43:00 PM	50	7/23/01 3:18:00 PM	49	7/23/01 3:53:00 PM	60	7/24/01 8:12:00 AM	54
7/23/01 2:44:00 PM	54	7/23/01 3:19:00 PM	49	7/23/01 3:54:00 PM	56	7/24/01 8:13:00 AM	53
7/23/01 2:45:00 PM	57	7/23/01 3:20:00 PM	46	7/23/01 3:55:00 PM	54	7/24/01 8:14:00 AM	54
7/23/01 2:46:00 PM	52	7/23/01 3:21:00 PM	48	7/23/01 3:56:00 PM	66	7/24/01 8:15:00 AM	55
7/23/01 2:47:00 PM	46	7/23/01 3:22:00 PM	51	7/23/01 3:57:00 PM	54	7/24/01 8:16:00 AM	58
7/23/01 2:48:00 PM	51	7/23/01 3:23:00 PM	47	7/23/01 3:58:00 PM	51	7/24/01 8:17:00 AM	68
7/23/01 2:49:00 PM	64	7/23/01 3:24:00 PM	54	7/23/01 3:59:00 PM	50	7/24/01 8:18:00 AM	62
7/23/01 2:50:00 PM	50	7/23/01 3:25:00 PM	55	7/23/01 4:00:00 PM	52	7/24/01 8:19:00 AM	57
7/23/01 2:51:00 PM	58	7/23/01 3:26:00 PM	58	7/23/01 4:01:00 PM	47	7/24/01 8:20:00 AM	55
7/23/01 2:52:00 PM	47	7/23/01 3:27:00 PM	63	7/23/01 4:02:00 PM	48	7/24/01 8:21:00 AM	55
7/23/01 2:53:00 PM	55	7/23/01 3:28:00 PM	60	7/23/01 4:03:00 PM	56	7/24/01 8:22:00 AM	59
7/23/01 2:54:00 PM	49	7/23/01 3:29:00 PM	52	7/23/01 4:04:00 PM	83	7/24/01 8:23:00 AM	56

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/24/01 8:24:00 AM	58	7/24/01 8:59:00 AM	51	7/24/01 9:34:00 AM	48	7/24/01 10:09:00 AM	63
7/24/01 8:25:00 AM	58	7/24/01 9:00:00 AM	51	7/24/01 9:35:00 AM	52	7/24/01 10:10:00 AM	61
7/24/01 8:26:00 AM	61	7/24/01 9:01:00 AM	47	7/24/01 9:36:00 AM	49	7/24/01 10:11:00 AM	58
7/24/01 8:27:00 AM	57	7/24/01 9:02:00 AM	61	7/24/01 9:37:00 AM	60	7/24/01 10:12:00 AM	51
7/24/01 8:28:00 AM	55	7/24/01 9:03:00 AM	57	7/24/01 9:38:00 AM	54	7/24/01 10:13:00 AM	57
7/24/01 8:29:00 AM	57	7/24/01 9:04:00 AM	54	7/24/01 9:39:00 AM	52	7/24/01 10:14:00 AM	54
7/24/01 8:30:00 AM	55	7/24/01 9:05:00 AM	50	7/24/01 9:40:00 AM	60	7/24/01 10:15:00 AM	60
7/24/01 8:31:00 AM	63	7/24/01 9:06:00 AM	63	7/24/01 9:41:00 AM	53	7/24/01 10:16:00 AM	48
7/24/01 8:32:00 AM	53	7/24/01 9:07:00 AM	56	7/24/01 9:42:00 AM	52	7/24/01 10:17:00 AM	51
7/24/01 8:33:00 AM	58	7/24/01 9:08:00 AM	51	7/24/01 9:43:00 AM	50	7/24/01 10:18:00 AM	72
7/24/01 8:34:00 AM	59	7/24/01 9:09:00 AM	51	7/24/01 9:44:00 AM	50	7/24/01 10:19:00 AM	51
7/24/01 8:35:00 AM	54	7/24/01 9:10:00 AM	50	7/24/01 9:45:00 AM	56	7/24/01 10:20:00 AM	48
7/24/01 8:36:00 AM	53	7/24/01 9:11:00 AM	60	7/24/01 9:46:00 AM	50	7/24/01 10:21:00 AM	56
7/24/01 8:37:00 AM	58	7/24/01 9:12:00 AM	58	7/24/01 9:47:00 AM	50	7/24/01 10:22:00 AM	51
7/24/01 8:38:00 AM	56	7/24/01 9:13:00 AM	49	7/24/01 9:48:00 AM	50	7/24/01 10:23:00 AM	55
7/24/01 8:39:00 AM	55	7/24/01 9:14:00 AM	50	7/24/01 9:49:00 AM	51	7/24/01 10:24:00 AM	58
7/24/01 8:40:00 AM	193	7/24/01 9:15:00 AM	48	7/24/01 9:50:00 AM	54	7/24/01 10:25:00 AM	56
7/24/01 8:41:00 AM	73	7/24/01 9:16:00 AM	55	7/24/01 9:51:00 AM	51	7/24/01 10:26:00 AM	53
7/24/01 8:42:00 AM	55	7/24/01 9:17:00 AM	52	7/24/01 9:52:00 AM	48	7/24/01 10:27:00 AM	71
7/24/01 8:43:00 AM	52	7/24/01 9:18:00 AM	56	7/24/01 9:53:00 AM	51	7/24/01 10:28:00 AM	60
7/24/01 8:44:00 AM	54	7/24/01 9:19:00 AM	54	7/24/01 9:54:00 AM	56	7/24/01 10:29:00 AM	64
7/24/01 8:45:00 AM	53	7/24/01 9:20:00 AM	46	7/24/01 9:55:00 AM	52	7/24/01 10:30:00 AM	54
7/24/01 8:46:00 AM	51	7/24/01 9:21:00 AM	47	7/24/01 9:56:00 AM	49	7/24/01 10:31:00 AM	52
7/24/01 8:47:00 AM	50	7/24/01 9:22:00 AM	52	7/24/01 9:57:00 AM	55	7/24/01 10:32:00 AM	58
7/24/01 8:48:00 AM	52	7/24/01 9:23:00 AM	50	7/24/01 9:58:00 AM	53	7/24/01 10:33:00 AM	58
7/24/01 8:49:00 AM	51	7/24/01 9:24:00 AM	47	7/24/01 9:59:00 AM	52	7/24/01 10:34:00 AM	54
7/24/01 8:50:00 AM	60	7/24/01 9:25:00 AM	48	7/24/01 10:00:00 AM	62	7/24/01 10:35:00 AM	56
7/24/01 8:51:00 AM	60	7/24/01 9:26:00 AM	46	7/24/01 10:01:00 AM	64	7/24/01 10:36:00 AM	56
7/24/01 8:52:00 AM	60	7/24/01 9:27:00 AM	51	7/24/01 10:02:00 AM	55	7/24/01 10:37:00 AM	52
7/24/01 8:53:00 AM	55	7/24/01 9:28:00 AM	53	7/24/01 10:03:00 AM	64	7/24/01 10:38:00 AM	53
7/24/01 8:54:00 AM	59	7/24/01 9:29:00 AM	53	7/24/01 10:04:00 AM	53	7/24/01 10:39:00 AM	59
7/24/01 8:55:00 AM	57	7/24/01 9:30:00 AM	49	7/24/01 10:05:00 AM	49	7/24/01 10:40:00 AM	60
7/24/01 8:56:00 AM	55	7/24/01 9:31:00 AM	55	7/24/01 10:06:00 AM	62	7/24/01 10:41:00 AM	51
7/24/01 8:57:00 AM	55	7/24/01 9:32:00 AM	48	7/24/01 10:07:00 AM	50	7/24/01 10:42:00 AM	48
7/24/01 8:58:00 AM	55	7/24/01 9:33:00 AM	46	7/24/01 10:08:00 AM	63	7/24/01 10:43:00 AM	52

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/24/01 10:44:00 AM	52	7/24/01 11:19:00 AM	58	7/24/01 11:54:00 AM	56	7/24/01 12:29:00 PM	59
7/24/01 10:45:00 AM	50	7/24/01 11:20:00 AM	55	7/24/01 11:55:00 AM	55	7/24/01 12:30:00 PM	66
7/24/01 10:46:00 AM	51	7/24/01 11:21:00 AM	55	7/24/01 11:56:00 AM	53	7/24/01 12:31:00 PM	108
7/24/01 10:47:00 AM	50	7/24/01 11:22:00 AM	61	7/24/01 11:57:00 AM	57	7/24/01 12:32:00 PM	95
7/24/01 10:48:00 AM	50	7/24/01 11:23:00 AM	55	7/24/01 11:58:00 AM	59	7/24/01 12:33:00 PM	66
7/24/01 10:49:00 AM	53	7/24/01 11:24:00 AM	56	7/24/01 11:59:00 AM	56	7/24/01 12:34:00 PM	59
7/24/01 10:50:00 AM	51	7/24/01 11:25:00 AM	53	7/24/01 12:00:00 PM	56	7/24/01 12:35:00 PM	56
7/24/01 10:51:00 AM	51	7/24/01 11:26:00 AM	56	7/24/01 12:01:00 PM	60	7/24/01 12:36:00 PM	56
7/24/01 10:52:00 AM	57	7/24/01 11:27:00 AM	58	7/24/01 12:02:00 PM	59	7/24/01 12:37:00 PM	58
7/24/01 10:53:00 AM	54	7/24/01 11:28:00 AM	56	7/24/01 12:03:00 PM	54	7/24/01 12:38:00 PM	56
7/24/01 10:54:00 AM	53	7/24/01 11:29:00 AM	52	7/24/01 12:04:00 PM	57	7/24/01 12:39:00 PM	64
7/24/01 10:55:00 AM	57	7/24/01 11:30:00 AM	56	7/24/01 12:05:00 PM	60	7/24/01 12:40:00 PM	58
7/24/01 10:56:00 AM	75	7/24/01 11:31:00 AM	53	7/24/01 12:06:00 PM	72	7/24/01 12:41:00 PM	62
7/24/01 10:57:00 AM	60	7/24/01 11:32:00 AM	53	7/24/01 12:07:00 PM	64	7/24/01 12:42:00 PM	56
7/24/01 10:58:00 AM	61	7/24/01 11:33:00 AM	58	7/24/01 12:08:00 PM	58	7/24/01 12:43:00 PM	59
7/24/01 10:59:00 AM	56	7/24/01 11:34:00 AM	53	7/24/01 12:09:00 PM	59	7/24/01 12:44:00 PM	56
7/24/01 11:00:00 AM	57	7/24/01 11:35:00 AM	53	7/24/01 12:10:00 PM	65	7/24/01 12:45:00 PM	58
7/24/01 11:01:00 AM	48	7/24/01 11:36:00 AM	54	7/24/01 12:11:00 PM	74	7/24/01 12:46:00 PM	60
7/24/01 11:02:00 AM	50	7/24/01 11:37:00 AM	119	7/24/01 12:12:00 PM	59	7/24/01 12:47:00 PM	55
7/24/01 11:03:00 AM	49	7/24/01 11:38:00 AM	78	7/24/01 12:13:00 PM	62	7/24/01 12:48:00 PM	56
7/24/01 11:04:00 AM	51	7/24/01 11:39:00 AM	58	7/24/01 12:14:00 PM	55	7/24/01 12:49:00 PM	58
7/24/01 11:05:00 AM	52	7/24/01 11:40:00 AM	58	7/24/01 12:15:00 PM	56	7/24/01 12:50:00 PM	55
7/24/01 11:06:00 AM	53	7/24/01 11:41:00 AM	54	7/24/01 12:16:00 PM	60	7/24/01 12:51:00 PM	61
7/24/01 11:07:00 AM	61	7/24/01 11:42:00 AM	55	7/24/01 12:17:00 PM	57	7/24/01 12:52:00 PM	56
7/24/01 11:08:00 AM	88	7/24/01 11:43:00 AM	57	7/24/01 12:18:00 PM	55	7/24/01 12:53:00 PM	56
7/24/01 11:09:00 AM	59	7/24/01 11:44:00 AM	76	7/24/01 12:19:00 PM	61	7/24/01 12:54:00 PM	57
7/24/01 11:10:00 AM	57	7/24/01 11:45:00 AM	60	7/24/01 12:20:00 PM	65	7/24/01 12:55:00 PM	58
7/24/01 11:11:00 AM	53	7/24/01 11:46:00 AM	143	7/24/01 12:21:00 PM	60	7/24/01 12:56:00 PM	59
7/24/01 11:12:00 AM	52	7/24/01 11:47:00 AM	65	7/24/01 12:22:00 PM	57	7/24/01 12:57:00 PM	57
7/24/01 11:13:00 AM	57	7/24/01 11:48:00 AM	58	7/24/01 12:23:00 PM	57	7/24/01 12:58:00 PM	58
7/24/01 11:14:00 AM	65	7/24/01 11:49:00 AM	60	7/24/01 12:24:00 PM	55	7/24/01 12:59:00 PM	75
7/24/01 11:15:00 AM	83	7/24/01 11:50:00 AM	57	7/24/01 12:25:00 PM	53	7/24/01 1:00:00 PM	58
7/24/01 11:16:00 AM	85	7/24/01 11:51:00 AM	53	7/24/01 12:26:00 PM	55	7/24/01 1:01:00 PM	59
7/24/01 11:17:00 AM	56	7/24/01 11:52:00 AM	57	7/24/01 12:27:00 PM	56	7/24/01 1:02:00 PM	60
7/24/01 11:18:00 AM	56	7/24/01 11:53:00 AM	58	7/24/01 12:28:00 PM	72	7/24/01 1:03:00 PM	66

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/24/01 1:04:00 PM	72	7/24/01 1:39:00 PM	74	7/24/01 2:14:00 PM	78	7/25/01 1:34:00 PM	22
7/24/01 1:05:00 PM	67	7/24/01 1:40:00 PM	73	7/24/01 2:15:00 PM	108	7/25/01 1:35:00 PM	22
7/24/01 1:06:00 PM	73	7/24/01 1:41:00 PM	79	7/24/01 2:16:00 PM	83	7/25/01 1:36:00 PM	29
7/24/01 1:07:00 PM	66	7/24/01 1:42:00 PM	76	7/24/01 2:17:00 PM	77	7/25/01 1:37:00 PM	13
7/24/01 1:08:00 PM	66	7/24/01 1:43:00 PM	70	7/24/01 2:18:00 PM	78	7/25/01 1:38:00 PM	49
7/24/01 1:09:00 PM	71	7/24/01 1:44:00 PM	73	7/24/01 2:19:00 PM	76	7/25/01 1:39:00 PM	22
7/24/01 1:10:00 PM	76	7/24/01 1:45:00 PM	78	7/24/01 2:20:00 PM	67	7/25/01 1:40:00 PM	16
7/24/01 1:11:00 PM	78	7/24/01 1:46:00 PM	72	7/24/01 2:21:00 PM	69	7/25/01 1:41:00 PM	10
7/24/01 1:12:00 PM	87	7/24/01 1:47:00 PM	70	7/24/01 2:22:00 PM	135	7/25/01 1:42:00 PM	14
7/24/01 1:13:00 PM	70	7/24/01 1:48:00 PM	77	7/24/01 2:23:00 PM	65	7/25/01 1:43:00 PM	13
7/24/01 1:14:00 PM	75	7/24/01 1:49:00 PM	94	7/24/01 2:24:00 PM	56	7/25/01 1:44:00 PM	15
7/24/01 1:15:00 PM	100	7/24/01 1:50:00 PM	161	7/24/01 2:25:00 PM	59	7/25/01 1:45:00 PM	19
7/24/01 1:16:00 PM	91	7/24/01 1:51:00 PM	89	7/24/01 2:26:00 PM	63	7/25/01 1:46:00 PM	14
7/24/01 1:17:00 PM	83	7/24/01 1:52:00 PM	76	7/24/01 2:27:00 PM	66	7/25/01 1:47:00 PM	14
7/24/01 1:18:00 PM	80	7/24/01 1:53:00 PM	101	7/24/01 2:28:00 PM	58	7/25/01 1:48:00 PM	12
7/24/01 1:19:00 PM	76	7/24/01 1:54:00 PM	87	7/24/01 2:29:00 PM	102	7/25/01 1:49:00 PM	13
7/24/01 1:20:00 PM	71	7/24/01 1:55:00 PM	84	7/24/01 2:30:00 PM	98	7/25/01 1:50:00 PM	12
7/24/01 1:21:00 PM	78	7/24/01 1:56:00 PM	79	7/24/01 2:31:00 PM	92	7/25/01 1:51:00 PM	25
7/24/01 1:22:00 PM	70	7/24/01 1:57:00 PM	68	7/25/01 1:17:00 PM	26	7/25/01 1:52:00 PM	17
7/24/01 1:23:00 PM	71	7/24/01 1:58:00 PM	74	7/25/01 1:18:00 PM	40	7/25/01 1:53:00 PM	13
7/24/01 1:24:00 PM	92	7/24/01 1:59:00 PM	76	7/25/01 1:19:00 PM	87	7/25/01 1:54:00 PM	14
7/24/01 1:25:00 PM	71	7/24/01 2:00:00 PM	110	7/25/01 1:20:00 PM	28	7/25/01 1:55:00 PM	48
7/24/01 1:26:00 PM	71	7/24/01 2:01:00 PM	76	7/25/01 1:21:00 PM	49	7/25/01 1:56:00 PM	24
7/24/01 1:27:00 PM	73	7/24/01 2:02:00 PM	74	7/25/01 1:22:00 PM	12	7/25/01 1:57:00 PM	13
7/24/01 1:28:00 PM	71	7/24/01 2:03:00 PM	79	7/25/01 1:23:00 PM	10	7/25/01 1:58:00 PM	17
7/24/01 1:29:00 PM	70	7/24/01 2:04:00 PM	75	7/25/01 1:24:00 PM	11	7/25/01 1:59:00 PM	10
7/24/01 1:30:00 PM	68	7/24/01 2:05:00 PM	76	7/25/01 1:25:00 PM	11	7/25/01 2:00:00 PM	16
7/24/01 1:31:00 PM	75	7/24/01 2:06:00 PM	76	7/25/01 1:26:00 PM	10	7/25/01 2:01:00 PM	38
7/24/01 1:32:00 PM	84	7/24/01 2:07:00 PM	75	7/25/01 1:27:00 PM	11	7/25/01 2:02:00 PM	19
7/24/01 1:33:00 PM	82	7/24/01 2:08:00 PM	74	7/25/01 1:28:00 PM	10	7/25/01 2:03:00 PM	11
7/24/01 1:34:00 PM	84	7/24/01 2:09:00 PM	80	7/25/01 1:29:00 PM	11	7/25/01 2:04:00 PM	8
7/24/01 1:35:00 PM	116	7/24/01 2:10:00 PM	75	7/25/01 1:30:00 PM	13	7/25/01 2:05:00 PM	11
7/24/01 1:36:00 PM	80	7/24/01 2:11:00 PM	78	7/25/01 1:31:00 PM	17	7/25/01 2:06:00 PM	17
7/24/01 1:37:00 PM	78	7/24/01 2:12:00 PM	76	7/25/01 1:32:00 PM	14	7/25/01 2:07:00 PM	15
7/24/01 1:38:00 PM	73	7/24/01 2:13:00 PM	74	7/25/01 1:33:00 PM	9	7/25/01 2:08:00 PM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/25/01 2:09:00 PM	9	7/25/01 2:44:00 PM	13	7/26/01 12:36:00 PM	6	7/26/01 1:11:00 PM	9
7/25/01 2:10:00 PM	10	7/25/01 2:45:00 PM	9	7/26/01 12:37:00 PM	6	7/26/01 1:12:00 PM	11
7/25/01 2:11:00 PM	12	7/25/01 2:46:00 PM	14	7/26/01 12:38:00 PM	4	7/26/01 1:13:00 PM	61
7/25/01 2:12:00 PM	14	7/25/01 2:47:00 PM	14	7/26/01 12:39:00 PM	5	7/26/01 1:14:00 PM	18
7/25/01 2:13:00 PM	11	7/25/01 2:48:00 PM	23	7/26/01 12:40:00 PM	6	7/26/01 1:15:00 PM	28
7/25/01 2:14:00 PM	16	7/25/01 2:49:00 PM	14	7/26/01 12:41:00 PM	6	7/26/01 1:16:00 PM	9
7/25/01 2:15:00 PM	12	7/25/01 2:50:00 PM	53	7/26/01 12:42:00 PM	5	7/26/01 1:17:00 PM	8
7/25/01 2:16:00 PM	9	7/25/01 2:51:00 PM	21	7/26/01 12:43:00 PM	9	7/26/01 1:18:00 PM	7
7/25/01 2:17:00 PM	20	7/25/01 2:52:00 PM	10	7/26/01 12:44:00 PM	5	7/26/01 1:19:00 PM	8
7/25/01 2:18:00 PM	99	7/25/01 2:53:00 PM	7	7/26/01 12:45:00 PM	7	7/26/01 1:20:00 PM	6
7/25/01 2:19:00 PM	16	7/25/01 2:54:00 PM	22	7/26/01 12:46:00 PM	6	7/26/01 1:21:00 PM	6
7/25/01 2:20:00 PM	15	7/25/01 2:55:00 PM	19	7/26/01 12:47:00 PM	7	7/26/01 1:22:00 PM	8
7/25/01 2:21:00 PM	31	7/25/01 2:56:00 PM	7	7/26/01 12:48:00 PM	6	7/26/01 1:23:00 PM	7
7/25/01 2:22:00 PM	36	7/25/01 2:57:00 PM	87	7/26/01 12:49:00 PM	10	7/26/01 1:24:00 PM	5
7/25/01 2:23:00 PM	38	7/25/01 2:58:00 PM	11	7/26/01 12:50:00 PM	8	7/26/01 1:25:00 PM	6
7/25/01 2:24:00 PM	13	7/25/01 2:59:00 PM	7	7/26/01 12:51:00 PM	8	7/26/01 1:26:00 PM	6
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7/25/01 2:26:00 PM	10	7/25/01 3:01:00 PM	10	7/26/01 12:53:00 PM	6	7/26/01 1:28:00 PM	8
7/25/01 2:27:00 PM	12	7/25/01 3:02:00 PM	10	7/26/01 12:54:00 PM	6	7/26/01 1:29:00 PM	8
7/25/01 2:28:00 PM	11	7/25/01 3:03:00 PM	7	7/26/01 12:55:00 PM	6	7/26/01 1:30:00 PM	8
7/25/01 2:29:00 PM	7	7/25/01 3:04:00 PM	7	7/26/01 12:56:00 PM	16	7/26/01 1:31:00 PM	8
7/25/01 2:30:00 PM	8	7/25/01 3:05:00 PM	7	7/26/01 12:57:00 PM	7	7/26/01 1:32:00 PM	6
7/25/01 2:31:00 PM	12	7/25/01 3:06:00 PM	7	7/26/01 12:58:00 PM	6	7/26/01 1:33:00 PM	10
7/25/01 2:32:00 PM	17	7/25/01 3:07:00 PM	9	7/26/01 12:59:00 PM	5	7/26/01 1:34:00 PM	8
7/25/01 2:33:00 PM	9	7/25/01 3:08:00 PM	13	7/26/01 1:00:00 PM	8	7/26/01 1:35:00 PM	7
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7/25/01 2:41:00 PM	32	7/26/01 12:33:00 PM	48	7/26/01 1:08:00 PM	9	7/26/01 1:43:00 PM	7
7/25/01 2:42:00 PM	16	7/26/01 12:34:00 PM	67	7/26/01 1:09:00 PM	8	7/26/01 1:44:00 PM	8
7/25/01 2:43:00 PM	15	7/26/01 12:35:00 PM	27	7/26/01 1:10:00 PM	13	7/26/01 1:45:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/26/01 1:46:00 PM	5	7/26/01 2:21:00 PM	8	7/26/01 2:56:00 PM	5	7/26/01 3:31:00 PM	5
7/26/01 1:47:00 PM	15	7/26/01 2:22:00 PM	5	7/26/01 2:57:00 PM	7	7/26/01 3:32:00 PM	5
7/26/01 1:48:00 PM	9	7/26/01 2:23:00 PM	4	7/26/01 2:58:00 PM	5	7/26/01 3:33:00 PM	6
7/26/01 1:49:00 PM	7	7/26/01 2:24:00 PM	6	7/26/01 2:59:00 PM	6	7/26/01 3:34:00 PM	5
7/26/01 1:50:00 PM	16	7/26/01 2:25:00 PM	6	7/26/01 3:00:00 PM	5	7/26/01 3:35:00 PM	7
7/26/01 1:51:00 PM	29	7/26/01 2:26:00 PM	6	7/26/01 3:01:00 PM	7	7/26/01 3:36:00 PM	4
7/26/01 1:52:00 PM	6	7/26/01 2:27:00 PM	6	7/26/01 3:02:00 PM	8	7/26/01 3:37:00 PM	7
7/26/01 1:53:00 PM	6	7/26/01 2:28:00 PM	6	7/26/01 3:03:00 PM	5	7/26/01 3:38:00 PM	6
7/26/01 1:54:00 PM	7	7/26/01 2:29:00 PM	6	7/26/01 3:04:00 PM	8	7/26/01 3:39:00 PM	3
7/26/01 1:55:00 PM	6	7/26/01 2:30:00 PM	8	7/26/01 3:05:00 PM	5	7/26/01 3:40:00 PM	6
7/26/01 1:56:00 PM	7	7/26/01 2:31:00 PM	6	7/26/01 3:06:00 PM	8	7/26/01 3:41:00 PM	5
7/26/01 1:57:00 PM	6	7/26/01 2:32:00 PM	6	7/26/01 3:07:00 PM	7	7/26/01 3:42:00 PM	5
7/26/01 1:58:00 PM	5	7/26/01 2:33:00 PM	8	7/26/01 3:08:00 PM	10	7/26/01 3:43:00 PM	7
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7/26/01 2:03:00 PM	11	7/26/01 2:38:00 PM	16	7/26/01 3:13:00 PM	8	7/26/01 3:48:00 PM	5
7/26/01 2:04:00 PM	28	7/26/01 2:39:00 PM	7	7/26/01 3:14:00 PM	8	7/26/01 3:49:00 PM	6
7/26/01 2:05:00 PM	17	7/26/01 2:40:00 PM	6	7/26/01 3:15:00 PM	6	7/26/01 3:50:00 PM	8
7/26/01 2:06:00 PM	12	7/26/01 2:41:00 PM	16	7/26/01 3:16:00 PM	7	7/26/01 3:51:00 PM	8
7/26/01 2:07:00 PM	14	7/26/01 2:42:00 PM	6	7/26/01 3:17:00 PM	9	7/26/01 3:52:00 PM	9
7/26/01 2:08:00 PM	13	7/26/01 2:43:00 PM	6	7/26/01 3:18:00 PM	7	7/26/01 3:53:00 PM	8
7/26/01 2:09:00 PM	7	7/26/01 2:44:00 PM	18	7/26/01 3:19:00 PM	5	7/26/01 3:54:00 PM	10
7/26/01 2:10:00 PM	8	7/26/01 2:45:00 PM	13	7/26/01 3:20:00 PM	6	7/26/01 3:55:00 PM	6
7/26/01 2:11:00 PM	7	7/26/01 2:46:00 PM	9	7/26/01 3:21:00 PM	6	7/26/01 3:56:00 PM	5
7/26/01 2:12:00 PM	5	7/26/01 2:47:00 PM	11	7/26/01 3:22:00 PM	6	7/26/01 3:57:00 PM	6
7/26/01 2:13:00 PM	11	7/26/01 2:48:00 PM	8	7/26/01 3:23:00 PM	6	7/26/01 3:58:00 PM	5
7/26/01 2:14:00 PM	8	7/26/01 2:49:00 PM	15	7/26/01 3:24:00 PM	9	7/26/01 3:59:00 PM	10
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7/26/01 2:16:00 PM	7	7/26/01 2:51:00 PM	7	7/26/01 3:26:00 PM	7	7/26/01 4:01:00 PM	6
7/26/01 2:17:00 PM	10	7/26/01 2:52:00 PM	5	7/26/01 3:27:00 PM	6	7/26/01 4:02:00 PM	6
7/26/01 2:18:00 PM	10	7/26/01 2:53:00 PM	7	7/26/01 3:28:00 PM	6	7/26/01 4:03:00 PM	4
7/26/01 2:19:00 PM	5	7/26/01 2:54:00 PM	8	7/26/01 3:29:00 PM	8	7/26/01 4:04:00 PM	5
7/26/01 2:20:00 PM	10	7/26/01 2:55:00 PM	7	7/26/01 3:30:00 PM	5	7/26/01 4:05:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/27/01 8:17:00 AM	15	7/27/01 8:52:00 AM	5	7/27/01 9:27:00 AM	6	7/27/01 10:02:00 AM	16
7/27/01 8:18:00 AM	12	7/27/01 8:53:00 AM	9	7/27/01 9:28:00 AM	12	7/27/01 10:03:00 AM	15
7/27/01 8:19:00 AM	12	7/27/01 8:54:00 AM	9	7/27/01 9:29:00 AM	12	7/27/01 10:04:00 AM	5
7/27/01 8:20:00 AM	14	7/27/01 8:55:00 AM	6	7/27/01 9:30:00 AM	6	7/27/01 10:05:00 AM	4
7/27/01 8:21:00 AM	14	7/27/01 8:56:00 AM	8	7/27/01 9:31:00 AM	30	7/27/01 10:06:00 AM	6
7/27/01 8:22:00 AM	13	7/27/01 8:57:00 AM	6	7/27/01 9:32:00 AM	11	7/27/01 10:07:00 AM	5
7/27/01 8:23:00 AM	12	7/27/01 8:58:00 AM	5	7/27/01 9:33:00 AM	14	7/27/01 10:08:00 AM	4
7/27/01 8:24:00 AM	10	7/27/01 8:59:00 AM	7	7/27/01 9:34:00 AM	6	7/27/01 10:09:00 AM	5
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7/27/01 8:27:00 AM	10	7/27/01 9:02:00 AM	5	7/27/01 9:37:00 AM	4	7/27/01 10:12:00 AM	14
7/27/01 8:28:00 AM	8	7/27/01 9:03:00 AM	7	7/27/01 9:38:00 AM	5	7/27/01 10:13:00 AM	6
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7/27/01 8:37:00 AM	8	7/27/01 9:12:00 AM	19	7/27/01 9:47:00 AM	7	7/27/01 10:22:00 AM	6
7/27/01 8:38:00 AM	9	7/27/01 9:13:00 AM	9	7/27/01 9:48:00 AM	25	7/27/01 10:23:00 AM	6
7/27/01 8:39:00 AM	7	7/27/01 9:14:00 AM	9	7/27/01 9:49:00 AM	10	7/27/01 10:24:00 AM	5
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7/27/01 8:41:00 AM	8	7/27/01 9:16:00 AM	11	7/27/01 9:51:00 AM	6	7/27/01 10:26:00 AM	4
7/27/01 8:42:00 AM	6	7/27/01 9:17:00 AM	9	7/27/01 9:52:00 AM	5	7/27/01 10:27:00 AM	5
7/27/01 8:43:00 AM	7	7/27/01 9:18:00 AM	6	7/27/01 9:53:00 AM	10	7/27/01 10:28:00 AM	5
7/27/01 8:44:00 AM	9	7/27/01 9:19:00 AM	6	7/27/01 9:54:00 AM	15	7/27/01 10:29:00 AM	5
7/27/01 8:45:00 AM	10	7/27/01 9:20:00 AM	7	7/27/01 9:55:00 AM	10	7/27/01 10:30:00 AM	5
7/27/01 8:46:00 AM	13	7/27/01 9:21:00 AM	10	7/27/01 9:56:00 AM	9	7/27/01 10:31:00 AM	5
7/27/01 8:47:00 AM	11	7/27/01 9:22:00 AM	8	7/27/01 9:57:00 AM	8	7/27/01 10:32:00 AM	5
7/27/01 8:48:00 AM	8	7/27/01 9:23:00 AM	6	7/27/01 9:58:00 AM	7	7/27/01 10:33:00 AM	4
7/27/01 8:49:00 AM	8	7/27/01 9:24:00 AM	6	7/27/01 9:59:00 AM	9	7/27/01 10:34:00 AM	4
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Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
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7/27/01 10:38:00 AM	5	7/27/01 11:13:00 AM	9	7/27/01 11:48:00 AM	19	7/30/01 9:25:00 AM	10
7/27/01 10:39:00 AM	6	7/27/01 11:14:00 AM	21	7/27/01 11:49:00 AM	76	7/30/01 9:26:00 AM	12
7/27/01 10:40:00 AM	6	7/27/01 11:15:00 AM	15	7/27/01 11:50:00 AM	12	7/30/01 9:27:00 AM	9
7/27/01 10:41:00 AM	5	7/27/01 11:16:00 AM	5	7/27/01 11:51:00 AM	11	7/30/01 9:28:00 AM	10
7/27/01 10:42:00 AM	8	7/27/01 11:17:00 AM	4	7/27/01 11:52:00 AM	6	7/30/01 9:29:00 AM	13
7/27/01 10:43:00 AM	6	7/27/01 11:18:00 AM	5	7/27/01 11:53:00 AM	4	7/30/01 9:30:00 AM	9
7/27/01 10:44:00 AM	6	7/27/01 11:19:00 AM	7	7/27/01 11:54:00 AM	103	7/30/01 9:31:00 AM	48
7/27/01 10:45:00 AM	5	7/27/01 11:20:00 AM	58	7/27/01 11:55:00 AM	27	7/30/01 9:32:00 AM	21
7/27/01 10:46:00 AM	5	7/27/01 11:21:00 AM	12	7/30/01 8:58:00 AM	18	7/30/01 9:33:00 AM	16
7/27/01 10:47:00 AM	4	7/27/01 11:22:00 AM	11	7/30/01 8:59:00 AM	15	7/30/01 9:34:00 AM	10
7/27/01 10:48:00 AM	7	7/27/01 11:23:00 AM	11	7/30/01 9:00:00 AM	14	7/30/01 9:35:00 AM	15
7/27/01 10:49:00 AM	4	7/27/01 11:24:00 AM	18	7/30/01 9:01:00 AM	10	7/30/01 9:36:00 AM	17
7/27/01 10:50:00 AM	6	7/27/01 11:25:00 AM	15	7/30/01 9:02:00 AM	20	7/30/01 9:37:00 AM	10
7/27/01 10:51:00 AM	7	7/27/01 11:26:00 AM	4	7/30/01 9:03:00 AM	10	7/30/01 9:38:00 AM	10
7/27/01 10:52:00 AM	6	7/27/01 11:27:00 AM	5	7/30/01 9:04:00 AM	12	7/30/01 9:39:00 AM	8
7/27/01 10:53:00 AM	6	7/27/01 11:28:00 AM	5	7/30/01 9:05:00 AM	10	7/30/01 9:40:00 AM	8
7/27/01 10:54:00 AM	9	7/27/01 11:29:00 AM	6	7/30/01 9:06:00 AM	10	7/30/01 9:41:00 AM	9
7/27/01 10:55:00 AM	5	7/27/01 11:30:00 AM	10	7/30/01 9:07:00 AM	12	7/30/01 9:42:00 AM	11
7/27/01 10:56:00 AM	5	7/27/01 11:31:00 AM	7	7/30/01 9:08:00 AM	22	7/30/01 9:43:00 AM	9
7/27/01 10:57:00 AM	4	7/27/01 11:32:00 AM	6	7/30/01 9:09:00 AM	9	7/30/01 9:44:00 AM	13
7/27/01 10:58:00 AM	6	7/27/01 11:33:00 AM	8	7/30/01 9:10:00 AM	11	7/30/01 9:45:00 AM	10
7/27/01 10:59:00 AM	5	7/27/01 11:34:00 AM	23	7/30/01 9:11:00 AM	10	7/30/01 9:46:00 AM	14
7/27/01 11:00:00 AM	6	7/27/01 11:35:00 AM	9	7/30/01 9:12:00 AM	11	7/30/01 9:47:00 AM	9
7/27/01 11:01:00 AM	5	7/27/01 11:36:00 AM	11	7/30/01 9:13:00 AM	10	7/30/01 9:48:00 AM	51
7/27/01 11:02:00 AM	5	7/27/01 11:37:00 AM	33	7/30/01 9:14:00 AM	27	7/30/01 9:49:00 AM	27
7/27/01 11:03:00 AM	17	7/27/01 11:38:00 AM	5	7/30/01 9:15:00 AM	29	7/30/01 9:50:00 AM	9
7/27/01 11:04:00 AM	8	7/27/01 11:39:00 AM	5	7/30/01 9:16:00 AM	10	7/30/01 9:51:00 AM	7
7/27/01 11:05:00 AM	8	7/27/01 11:40:00 AM	5	7/30/01 9:17:00 AM	16	7/30/01 9:52:00 AM	9
7/27/01 11:06:00 AM	15	7/27/01 11:41:00 AM	6	7/30/01 9:18:00 AM	57	7/30/01 9:53:00 AM	8
7/27/01 11:07:00 AM	2	7/27/01 11:42:00 AM	17	7/30/01 9:19:00 AM	167	7/30/01 9:54:00 AM	24
7/27/01 11:08:00 AM	4	7/27/01 11:43:00 AM	37	7/30/01 9:20:00 AM	72	7/30/01 9:55:00 AM	11
7/27/01 11:09:00 AM	10	7/27/01 11:44:00 AM	42	7/30/01 9:21:00 AM	11	7/30/01 9:56:00 AM	10
7/27/01 11:10:00 AM	7	7/27/01 11:45:00 AM	8	7/30/01 9:22:00 AM	10	7/30/01 9:57:00 AM	8
7/27/01 11:11:00 AM	8	7/27/01 11:46:00 AM	4	7/30/01 9:23:00 AM	14	7/30/01 9:58:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/30/01 9:59:00 AM	9	7/30/01 10:34:00 AM	9	7/30/01 11:09:00 AM	10	7/30/01 11:44:00 AM	8
7/30/01 10:00:00 AM	8	7/30/01 10:35:00 AM	6	7/30/01 11:10:00 AM	15	7/30/01 11:45:00 AM	9
7/30/01 10:01:00 AM	10	7/30/01 10:36:00 AM	7	7/30/01 11:11:00 AM	9	7/30/01 11:46:00 AM	7
7/30/01 10:02:00 AM	8	7/30/01 10:37:00 AM	6	7/30/01 11:12:00 AM	13	7/30/01 11:47:00 AM	8
7/30/01 10:03:00 AM	9	7/30/01 10:38:00 AM	8	7/30/01 11:13:00 AM	16	7/30/01 11:48:00 AM	7
7/30/01 10:04:00 AM	8	7/30/01 10:39:00 AM	13	7/30/01 11:14:00 AM	9	7/30/01 11:49:00 AM	9
7/30/01 10:05:00 AM	8	7/30/01 10:40:00 AM	9	7/30/01 11:15:00 AM	11	7/30/01 11:50:00 AM	9
7/30/01 10:06:00 AM	51	7/30/01 10:41:00 AM	12	7/30/01 11:16:00 AM	18	7/30/01 11:51:00 AM	9
7/30/01 10:07:00 AM	8	7/30/01 10:42:00 AM	8	7/30/01 11:17:00 AM	27	7/30/01 11:52:00 AM	9
7/30/01 10:08:00 AM	14	7/30/01 10:43:00 AM	8	7/30/01 11:18:00 AM	6	7/30/01 11:53:00 AM	9
7/30/01 10:09:00 AM	10	7/30/01 10:44:00 AM	7	7/30/01 11:19:00 AM	9	7/30/01 11:54:00 AM	7
7/30/01 10:10:00 AM	8	7/30/01 10:45:00 AM	6	7/30/01 11:20:00 AM	8	7/30/01 11:55:00 AM	8
7/30/01 10:11:00 AM	11	7/30/01 10:46:00 AM	29	7/30/01 11:21:00 AM	9	7/30/01 11:56:00 AM	8
7/30/01 10:12:00 AM	21	7/30/01 10:47:00 AM	13	7/30/01 11:22:00 AM	8	7/30/01 11:57:00 AM	11
7/30/01 10:13:00 AM	8	7/30/01 10:48:00 AM	29	7/30/01 11:23:00 AM	6	7/30/01 11:58:00 AM	14
7/30/01 10:14:00 AM	6	7/30/01 10:49:00 AM	10	7/30/01 11:24:00 AM	7	7/30/01 11:59:00 AM	9
7/30/01 10:15:00 AM	8	7/30/01 10:50:00 AM	10	7/30/01 11:25:00 AM	12	7/30/01 12:00:00 PM	8
7/30/01 10:16:00 AM	7	7/30/01 10:51:00 AM	14	7/30/01 11:26:00 AM	19	7/30/01 12:01:00 PM	8
7/30/01 10:17:00 AM	7	7/30/01 10:52:00 AM	9	7/30/01 11:27:00 AM	7	7/30/01 12:02:00 PM	8
7/30/01 10:18:00 AM	7	7/30/01 10:53:00 AM	18	7/30/01 11:28:00 AM	7	7/30/01 12:03:00 PM	10
7/30/01 10:19:00 AM	18	7/30/01 10:54:00 AM	503	7/30/01 11:29:00 AM	9	7/30/01 12:04:00 PM	8
7/30/01 10:20:00 AM	8	7/30/01 10:55:00 AM	236	7/30/01 11:30:00 AM	8	7/30/01 12:05:00 PM	15
7/30/01 10:21:00 AM	13	7/30/01 10:56:00 AM	12	7/30/01 11:31:00 AM	10	7/30/01 12:06:00 PM	13
7/30/01 10:22:00 AM	8	7/30/01 10:57:00 AM	8	7/30/01 11:32:00 AM	14	7/30/01 12:07:00 PM	9
7/30/01 10:23:00 AM	6	7/30/01 10:58:00 AM	8	7/30/01 11:33:00 AM	10	7/30/01 12:08:00 PM	9
7/30/01 10:24:00 AM	17	7/30/01 10:59:00 AM	7	7/30/01 11:34:00 AM	8	7/30/01 12:09:00 PM	8
7/30/01 10:25:00 AM	22	7/30/01 11:00:00 AM	8	7/30/01 11:35:00 AM	7	7/30/01 12:10:00 PM	10
7/30/01 10:26:00 AM	15	7/30/01 11:01:00 AM	7	7/30/01 11:36:00 AM	7	7/30/01 12:11:00 PM	9
7/30/01 10:27:00 AM	8	7/30/01 11:02:00 AM	7	7/30/01 11:37:00 AM	7	7/30/01 12:12:00 PM	9
7/30/01 10:28:00 AM	7	7/30/01 11:03:00 AM	67	7/30/01 11:38:00 AM	8	7/30/01 12:13:00 PM	8
7/30/01 10:29:00 AM	6	7/30/01 11:04:00 AM	208	7/30/01 11:39:00 AM	8	7/30/01 12:14:00 PM	9
7/30/01 10:30:00 AM	9	7/30/01 11:05:00 AM	12	7/30/01 11:40:00 AM	8	7/30/01 12:15:00 PM	8
7/30/01 10:31:00 AM	13	7/30/01 11:06:00 AM	8	7/30/01 11:41:00 AM	8	7/30/01 12:16:00 PM	8
7/30/01 10:32:00 AM	23	7/30/01 11:07:00 AM	8	7/30/01 11:42:00 AM	11	7/30/01 12:17:00 PM	8
7/30/01 10:33:00 AM	13	7/30/01 11:08:00 AM	14	7/30/01 11:43:00 AM	9	7/30/01 12:18:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/30/01 12:19:00 PM	9	7/30/01 12:54:00 PM	9	7/30/01 1:29:00 PM	10	7/30/01 2:04:00 PM	14
7/30/01 12:20:00 PM	9	7/30/01 12:55:00 PM	10	7/30/01 1:30:00 PM	10	7/30/01 2:05:00 PM	10
7/30/01 12:21:00 PM	10	7/30/01 12:56:00 PM	9	7/30/01 1:31:00 PM	10	7/30/01 2:06:00 PM	8
7/30/01 12:22:00 PM	10	7/30/01 12:57:00 PM	9	7/30/01 1:32:00 PM	10	7/30/01 2:07:00 PM	10
7/30/01 12:23:00 PM	9	7/30/01 12:58:00 PM	11	7/30/01 1:33:00 PM	11	7/30/01 2:08:00 PM	10
7/30/01 12:24:00 PM	8	7/30/01 12:59:00 PM	11	7/30/01 1:34:00 PM	9	7/30/01 2:09:00 PM	10
7/30/01 12:25:00 PM	9	7/30/01 1:00:00 PM	10	7/30/01 1:35:00 PM	10	7/30/01 2:10:00 PM	14
7/30/01 12:26:00 PM	10	7/30/01 1:01:00 PM	9	7/30/01 1:36:00 PM	9	7/30/01 2:11:00 PM	37
7/30/01 12:27:00 PM	9	7/30/01 1:02:00 PM	11	7/30/01 1:37:00 PM	9	7/30/01 2:12:00 PM	13
7/30/01 12:28:00 PM	9	7/30/01 1:03:00 PM	9	7/30/01 1:38:00 PM	11	7/30/01 2:13:00 PM	13
7/30/01 12:29:00 PM	9	7/30/01 1:04:00 PM	10	7/30/01 1:39:00 PM	11	7/30/01 2:14:00 PM	8
7/30/01 12:30:00 PM	8	7/30/01 1:05:00 PM	16	7/30/01 1:40:00 PM	9	7/30/01 2:15:00 PM	10
7/30/01 12:31:00 PM	10	7/30/01 1:06:00 PM	9	7/30/01 1:41:00 PM	9	7/30/01 2:16:00 PM	10
7/30/01 12:32:00 PM	8	7/30/01 1:07:00 PM	9	7/30/01 1:42:00 PM	9	7/30/01 2:17:00 PM	10
7/30/01 12:33:00 PM	8	7/30/01 1:08:00 PM	11	7/30/01 1:43:00 PM	11	7/30/01 2:18:00 PM	9
7/30/01 12:34:00 PM	11	7/30/01 1:09:00 PM	7	7/30/01 1:44:00 PM	10	7/30/01 2:19:00 PM	11
7/30/01 12:35:00 PM	18	7/30/01 1:10:00 PM	10	7/30/01 1:45:00 PM	9	7/30/01 2:20:00 PM	18
7/30/01 12:36:00 PM	18	7/30/01 1:11:00 PM	7	7/30/01 1:46:00 PM	10	7/30/01 2:21:00 PM	26
7/30/01 12:37:00 PM	9	7/30/01 1:12:00 PM	9	7/30/01 1:47:00 PM	11	7/30/01 2:22:00 PM	10
7/30/01 12:38:00 PM	10	7/30/01 1:13:00 PM	10	7/30/01 1:48:00 PM	10	7/30/01 2:23:00 PM	10
7/30/01 12:39:00 PM	9	7/30/01 1:14:00 PM	7	7/30/01 1:49:00 PM	11	7/30/01 2:24:00 PM	11
7/30/01 12:40:00 PM	10	7/30/01 1:15:00 PM	11	7/30/01 1:50:00 PM	10	7/30/01 2:25:00 PM	19
7/30/01 12:41:00 PM	10	7/30/01 1:16:00 PM	8	7/30/01 1:51:00 PM	9	7/30/01 2:26:00 PM	12
7/30/01 12:42:00 PM	8	7/30/01 1:17:00 PM	11	7/30/01 1:52:00 PM	10	7/30/01 2:27:00 PM	24
7/30/01 12:43:00 PM	10	7/30/01 1:18:00 PM	9	7/30/01 1:53:00 PM	10	7/30/01 2:28:00 PM	9
7/30/01 12:44:00 PM	11	7/30/01 1:19:00 PM	9	7/30/01 1:54:00 PM	11	7/30/01 2:29:00 PM	11
7/30/01 12:45:00 PM	9	7/30/01 1:20:00 PM	7	7/30/01 1:55:00 PM	10	7/30/01 2:30:00 PM	19
7/30/01 12:46:00 PM	12	7/30/01 1:21:00 PM	12	7/30/01 1:56:00 PM	10	7/30/01 2:31:00 PM	12
7/30/01 12:47:00 PM	15	7/30/01 1:22:00 PM	10	7/30/01 1:57:00 PM	10	7/30/01 2:32:00 PM	12
7/30/01 12:48:00 PM	11	7/30/01 1:23:00 PM	10	7/30/01 1:58:00 PM	9	7/30/01 2:33:00 PM	13
7/30/01 12:49:00 PM	8	7/30/01 1:24:00 PM	10	7/30/01 1:59:00 PM	9	7/30/01 2:34:00 PM	14
7/30/01 12:50:00 PM	10	7/30/01 1:25:00 PM	10	7/30/01 2:00:00 PM	12	7/30/01 2:35:00 PM	10
7/30/01 12:51:00 PM	10	7/30/01 1:26:00 PM	9	7/30/01 2:01:00 PM	12	7/30/01 2:36:00 PM	26
7/30/01 12:52:00 PM	11	7/30/01 1:27:00 PM	10	7/30/01 2:02:00 PM	11	7/30/01 2:37:00 PM	14
7/30/01 12:53:00 PM	10	7/30/01 1:28:00 PM	12	7/30/01 2:03:00 PM	63	7/30/01 2:38:00 PM	33

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/30/01 2:39:00 PM	14	7/31/01 10:40:00 AM	20	7/31/01 11:15:00 AM	23	7/31/01 11:50:00 AM	25
7/30/01 2:40:00 PM	55	7/31/01 10:41:00 AM	24	7/31/01 11:16:00 AM	21	7/31/01 11:51:00 AM	27
7/30/01 2:41:00 PM	13	7/31/01 10:42:00 AM	22	7/31/01 11:17:00 AM	23	7/31/01 11:52:00 AM	25
7/30/01 2:42:00 PM	63	7/31/01 10:43:00 AM	21	7/31/01 11:18:00 AM	23	7/31/01 11:53:00 AM	24
7/30/01 2:43:00 PM	24	7/31/01 10:44:00 AM	22	7/31/01 11:19:00 AM	23	7/31/01 11:54:00 AM	25
7/30/01 2:44:00 PM	26	7/31/01 10:45:00 AM	22	7/31/01 11:20:00 AM	24	7/31/01 11:55:00 AM	24
7/30/01 2:45:00 PM	28	7/31/01 10:46:00 AM	25	7/31/01 11:21:00 AM	24	7/31/01 11:56:00 AM	24
7/30/01 2:46:00 PM	43	7/31/01 10:47:00 AM	30	7/31/01 11:22:00 AM	23	7/31/01 11:57:00 AM	23
7/30/01 2:47:00 PM	27	7/31/01 10:48:00 AM	58	7/31/01 11:23:00 AM	23	7/31/01 11:58:00 AM	22
7/30/01 2:48:00 PM	13	7/31/01 10:49:00 AM	71	7/31/01 11:24:00 AM	52	7/31/01 11:59:00 AM	24
7/30/01 2:49:00 PM	11	7/31/01 10:50:00 AM	27	7/31/01 11:25:00 AM	32	7/31/01 12:00:00 PM	24
7/30/01 2:50:00 PM	10	7/31/01 10:51:00 AM	30	7/31/01 11:26:00 AM	26	7/31/01 12:01:00 PM	24
7/30/01 2:51:00 PM	12	7/31/01 10:52:00 AM	36	7/31/01 11:27:00 AM	25	7/31/01 12:02:00 PM	24
7/30/01 2:52:00 PM	16	7/31/01 10:53:00 AM	28	7/31/01 11:28:00 AM	24	7/31/01 12:03:00 PM	24
7/30/01 2:53:00 PM	19	7/31/01 10:54:00 AM	28	7/31/01 11:29:00 AM	22	7/31/01 12:04:00 PM	25
7/30/01 2:54:00 PM	14	7/31/01 10:55:00 AM	40	7/31/01 11:30:00 AM	25	7/31/01 12:05:00 PM	23
7/30/01 2:55:00 PM	25	7/31/01 10:56:00 AM	79	7/31/01 11:31:00 AM	22	7/31/01 12:06:00 PM	23
7/30/01 2:56:00 PM	14	7/31/01 10:57:00 AM	63	7/31/01 11:32:00 AM	26	7/31/01 12:07:00 PM	24
7/30/01 2:57:00 PM	12	7/31/01 10:58:00 AM	40	7/31/01 11:33:00 AM	23	7/31/01 12:08:00 PM	28
7/30/01 2:58:00 PM	18	7/31/01 10:59:00 AM	24	7/31/01 11:34:00 AM	24	7/31/01 12:09:00 PM	24
7/30/01 2:59:00 PM	12	7/31/01 11:00:00 AM	24	7/31/01 11:35:00 AM	25	7/31/01 12:10:00 PM	24
7/30/01 3:00:00 PM	10	7/31/01 11:01:00 AM	25	7/31/01 11:36:00 AM	24	7/31/01 12:11:00 PM	26
7/30/01 3:01:00 PM	10	7/31/01 11:02:00 AM	25	7/31/01 11:37:00 AM	23	7/31/01 12:12:00 PM	26
7/30/01 3:02:00 PM	12	7/31/01 11:03:00 AM	25	7/31/01 11:38:00 AM	24	7/31/01 12:13:00 PM	25
7/30/01 3:03:00 PM	15	7/31/01 11:04:00 AM	23	7/31/01 11:39:00 AM	23	7/31/01 12:14:00 PM	24
7/31/01 10:30:00 AM	26	7/31/01 11:05:00 AM	22	7/31/01 11:40:00 AM	22	7/31/01 12:15:00 PM	24
7/31/01 10:31:00 AM	31	7/31/01 11:06:00 AM	21	7/31/01 11:41:00 AM	23	7/31/01 12:16:00 PM	26
7/31/01 10:32:00 AM	45	7/31/01 11:07:00 AM	22	7/31/01 11:42:00 AM	23	7/31/01 12:17:00 PM	27
7/31/01 10:33:00 AM	38	7/31/01 11:08:00 AM	23	7/31/01 11:43:00 AM	23	7/31/01 12:18:00 PM	25
7/31/01 10:34:00 AM	22	7/31/01 11:09:00 AM	23	7/31/01 11:44:00 AM	24	7/31/01 12:19:00 PM	29
7/31/01 10:35:00 AM	24	7/31/01 11:10:00 AM	23	7/31/01 11:45:00 AM	26	7/31/01 12:20:00 PM	27
7/31/01 10:36:00 AM	26	7/31/01 11:11:00 AM	22	7/31/01 11:46:00 AM	30	7/31/01 12:21:00 PM	23
7/31/01 10:37:00 AM	20	7/31/01 11:12:00 AM	25	7/31/01 11:47:00 AM	24	7/31/01 12:22:00 PM	24
7/31/01 10:38:00 AM	21	7/31/01 11:13:00 AM	22	7/31/01 11:48:00 AM	22	7/31/01 12:23:00 PM	27
7/31/01 10:39:00 AM	30	7/31/01 11:14:00 AM	23	7/31/01 11:49:00 AM	24	7/31/01 12:24:00 PM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
7/31/01 12:25:00 PM	30	7/31/01 1:00:00 PM	24	7/31/01 1:35:00 PM	165	8/1/01 10:48:00 AM	24
7/31/01 12:26:00 PM	24	7/31/01 1:01:00 PM	22	7/31/01 1:36:00 PM	33	8/1/01 10:49:00 AM	58
7/31/01 12:27:00 PM	23	7/31/01 1:02:00 PM	24	7/31/01 1:37:00 PM	26	8/1/01 10:50:00 AM	42
7/31/01 12:28:00 PM	27	7/31/01 1:03:00 PM	25	7/31/01 1:38:00 PM	29	8/1/01 10:51:00 AM	37
7/31/01 12:29:00 PM	251	7/31/01 1:04:00 PM	26	7/31/01 1:39:00 PM	26	8/1/01 10:52:00 AM	26
7/31/01 12:30:00 PM	195	7/31/01 1:05:00 PM	24	7/31/01 1:40:00 PM	23	8/1/01 10:53:00 AM	23
7/31/01 12:31:00 PM	56	7/31/01 1:06:00 PM	26	7/31/01 1:41:00 PM	32	8/1/01 10:54:00 AM	22
7/31/01 12:32:00 PM	376	7/31/01 1:07:00 PM	27	7/31/01 1:42:00 PM	28	8/1/01 10:55:00 AM	27
7/31/01 12:33:00 PM	325	7/31/01 1:08:00 PM	95	7/31/01 1:43:00 PM	30	8/1/01 10:56:00 AM	22
7/31/01 12:34:00 PM	228	7/31/01 1:09:00 PM	33	7/31/01 1:44:00 PM	25	8/1/01 10:57:00 AM	25
7/31/01 12:35:00 PM	111	7/31/01 1:10:00 PM	26	7/31/01 1:45:00 PM	24	8/1/01 10:58:00 AM	43
7/31/01 12:36:00 PM	64	7/31/01 1:11:00 PM	110	7/31/01 1:46:00 PM	25	8/1/01 10:59:00 AM	34
7/31/01 12:37:00 PM	68	7/31/01 1:12:00 PM	25	7/31/01 1:47:00 PM	27	8/1/01 11:00:00 AM	23
7/31/01 12:38:00 PM	49	7/31/01 1:13:00 PM	25	7/31/01 1:48:00 PM	26	8/1/01 11:01:00 AM	20
7/31/01 12:39:00 PM	65	7/31/01 1:14:00 PM	23	7/31/01 1:49:00 PM	24	8/1/01 11:02:00 AM	28
7/31/01 12:40:00 PM	30	7/31/01 1:15:00 PM	24	7/31/01 1:50:00 PM	27	8/1/01 11:03:00 AM	24
7/31/01 12:41:00 PM	25	7/31/01 1:16:00 PM	24	7/31/01 1:51:00 PM	55	8/1/01 11:04:00 AM	26
7/31/01 12:42:00 PM	26	7/31/01 1:17:00 PM	25	7/31/01 1:52:00 PM	35	8/1/01 11:05:00 AM	35
7/31/01 12:43:00 PM	26	7/31/01 1:18:00 PM	25	7/31/01 1:53:00 PM	218	8/1/01 11:06:00 AM	25
7/31/01 12:44:00 PM	25	7/31/01 1:19:00 PM	24	7/31/01 1:54:00 PM	41	8/1/01 11:07:00 AM	23
7/31/01 12:45:00 PM	25	7/31/01 1:20:00 PM	24	7/31/01 1:55:00 PM	33	8/1/01 11:08:00 AM	31
7/31/01 12:46:00 PM	33	7/31/01 1:21:00 PM	29	7/31/01 1:56:00 PM	49	8/1/01 11:09:00 AM	48
7/31/01 12:47:00 PM	24	7/31/01 1:22:00 PM	25	7/31/01 1:57:00 PM	37	8/1/01 11:10:00 AM	24
7/31/01 12:48:00 PM	24	7/31/01 1:23:00 PM	25	7/31/01 1:58:00 PM	24	8/1/01 11:11:00 AM	30
7/31/01 12:49:00 PM	26	7/31/01 1:24:00 PM	25	7/31/01 1:59:00 PM	25	8/1/01 11:12:00 AM	42
7/31/01 12:50:00 PM	24	7/31/01 1:25:00 PM	28	7/31/01 2:00:00 PM	25	8/1/01 11:13:00 AM	42
7/31/01 12:51:00 PM	28	7/31/01 1:26:00 PM	24	7/31/01 2:01:00 PM	23	8/1/01 11:14:00 AM	232
7/31/01 12:52:00 PM	42	7/31/01 1:27:00 PM	27	7/31/01 2:02:00 PM	25	8/1/01 11:15:00 AM	82
7/31/01 12:53:00 PM	24	7/31/01 1:28:00 PM	31	7/31/01 2:03:00 PM	26	8/1/01 11:16:00 AM	92
7/31/01 12:54:00 PM	24	7/31/01 1:29:00 PM	25	7/31/01 2:04:00 PM	25	8/1/01 11:17:00 AM	24
7/31/01 12:55:00 PM	26	7/31/01 1:30:00 PM	25	7/31/01 2:05:00 PM	26	8/1/01 11:18:00 AM	34
7/31/01 12:56:00 PM	27	7/31/01 1:31:00 PM	25	8/1/01 10:44:00 AM	70	8/1/01 11:19:00 AM	24
7/31/01 12:57:00 PM	30	7/31/01 1:32:00 PM	24	8/1/01 10:45:00 AM	39	8/1/01 11:20:00 AM	28
7/31/01 12:58:00 PM	26	7/31/01 1:33:00 PM	26	8/1/01 10:46:00 AM	34	8/1/01 11:21:00 AM	31
7/31/01 12:59:00 PM	27	7/31/01 1:34:00 PM	25	8/1/01 10:47:00 AM	67	8/1/01 11:22:00 AM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/1/01 11:23:00 AM	66	8/1/01 11:58:00 AM	22	8/1/01 12:33:00 PM	28	8/1/01 1:08:00 PM	30
8/1/01 11:24:00 AM	23	8/1/01 11:59:00 AM	26	8/1/01 12:34:00 PM	32	8/1/01 1:09:00 PM	30
8/1/01 11:25:00 AM	24	8/1/01 12:00:00 PM	24	8/1/01 12:35:00 PM	25	8/1/01 1:10:00 PM	26
8/1/01 11:26:00 AM	23	8/1/01 12:01:00 PM	27	8/1/01 12:36:00 PM	47	8/1/01 1:11:00 PM	28
8/1/01 11:27:00 AM	22	8/1/01 12:02:00 PM	28	8/1/01 12:37:00 PM	41	8/1/01 1:12:00 PM	28
8/1/01 11:28:00 AM	26	8/1/01 12:03:00 PM	23	8/1/01 12:38:00 PM	27	8/1/01 1:13:00 PM	34
8/1/01 11:29:00 AM	25	8/1/01 12:04:00 PM	25	8/1/01 12:39:00 PM	22	8/1/01 1:14:00 PM	23
8/1/01 11:30:00 AM	26	8/1/01 12:05:00 PM	37	8/1/01 12:40:00 PM	24	8/1/01 1:15:00 PM	30
8/1/01 11:31:00 AM	21	8/1/01 12:06:00 PM	26	8/1/01 12:41:00 PM	26	8/1/01 1:16:00 PM	39
8/1/01 11:32:00 AM	24	8/1/01 12:07:00 PM	24	8/1/01 12:42:00 PM	26	8/1/01 1:17:00 PM	28
8/1/01 11:33:00 AM	22	8/1/01 12:08:00 PM	38	8/1/01 12:43:00 PM	28	8/1/01 1:18:00 PM	67
8/1/01 11:34:00 AM	23	8/1/01 12:09:00 PM	23	8/1/01 12:44:00 PM	26	8/1/01 1:19:00 PM	54
8/1/01 11:35:00 AM	22	8/1/01 12:10:00 PM	25	8/1/01 12:45:00 PM	34	8/1/01 1:20:00 PM	18
8/1/01 11:36:00 AM	22	8/1/01 12:11:00 PM	22	8/1/01 12:46:00 PM	27	8/1/01 1:21:00 PM	22
8/1/01 11:37:00 AM	30	8/1/01 12:12:00 PM	33	8/1/01 12:47:00 PM	28	8/1/01 1:22:00 PM	19
8/1/01 11:38:00 AM	23	8/1/01 12:13:00 PM	26	8/1/01 12:48:00 PM	91	8/1/01 1:23:00 PM	22
8/1/01 11:39:00 AM	22	8/1/01 12:14:00 PM	26	8/1/01 12:49:00 PM	56	8/1/01 1:24:00 PM	28
8/1/01 11:40:00 AM	39	8/1/01 12:15:00 PM	25	8/1/01 12:50:00 PM	94	8/1/01 1:25:00 PM	37
8/1/01 11:41:00 AM	43	8/1/01 12:16:00 PM	21	8/1/01 12:51:00 PM	443	8/1/01 1:26:00 PM	26
8/1/01 11:42:00 AM	30	8/1/01 12:17:00 PM	24	8/1/01 12:52:00 PM	136	8/1/01 1:27:00 PM	22
8/1/01 11:43:00 AM	25	8/1/01 12:18:00 PM	25	8/1/01 12:53:00 PM	25	8/1/01 1:28:00 PM	420
8/1/01 11:44:00 AM	52	8/1/01 12:19:00 PM	22	8/1/01 12:54:00 PM	31	8/1/01 1:29:00 PM	107
8/1/01 11:45:00 AM	26	8/1/01 12:20:00 PM	24	8/1/01 12:55:00 PM	62	8/1/01 1:30:00 PM	25
8/1/01 11:46:00 AM	29	8/1/01 12:21:00 PM	26	8/1/01 12:56:00 PM	136	8/1/01 1:31:00 PM	23
8/1/01 11:47:00 AM	28	8/1/01 12:22:00 PM	22	8/1/01 12:57:00 PM	127	8/1/01 1:32:00 PM	25
8/1/01 11:48:00 AM	27	8/1/01 12:23:00 PM	37	8/1/01 12:58:00 PM	158	8/1/01 1:33:00 PM	24
8/1/01 11:49:00 AM	24	8/1/01 12:24:00 PM	27	8/1/01 12:59:00 PM	562	8/1/01 1:34:00 PM	18
8/1/01 11:50:00 AM	25	8/1/01 12:25:00 PM	21	8/1/01 1:00:00 PM	970	8/1/01 1:35:00 PM	38
8/1/01 11:51:00 AM	27	8/1/01 12:26:00 PM	22	8/1/01 1:01:00 PM	441	8/1/01 1:36:00 PM	148
8/1/01 11:52:00 AM	24	8/1/01 12:27:00 PM	19	8/1/01 1:02:00 PM	1209	8/1/01 1:37:00 PM	175
8/1/01 11:53:00 AM	29	8/1/01 12:28:00 PM	25	8/1/01 1:03:00 PM	16440	8/1/01 1:38:00 PM	32
8/1/01 11:54:00 AM	26	8/1/01 12:29:00 PM	23	8/1/01 1:04:00 PM	2619	8/1/01 1:39:00 PM	23
8/1/01 11:55:00 AM	26	8/1/01 12:30:00 PM	27	8/1/01 1:05:00 PM	86	8/1/01 1:40:00 PM	32
8/1/01 11:56:00 AM	25	8/1/01 12:31:00 PM	23	8/1/01 1:06:00 PM	96	8/1/01 1:41:00 PM	26
8/1/01 11:57:00 AM	26	8/1/01 12:32:00 PM	21	8/1/01 1:07:00 PM	134	8/1/01 1:42:00 PM	221

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/1/01 1:43:00 PM	30	8/1/01 2:18:00 PM	23	8/2/01 8:34:00 AM	63	8/2/01 9:09:00 AM	78
8/1/01 1:44:00 PM	70	8/1/01 2:19:00 PM	17	8/2/01 8:35:00 AM	28	8/2/01 9:10:00 AM	59
8/1/01 1:45:00 PM	32	8/1/01 2:20:00 PM	55	8/2/01 8:36:00 AM	30	8/2/01 9:11:00 AM	83
8/1/01 1:46:00 PM	37	8/1/01 2:21:00 PM	144	8/2/01 8:37:00 AM	28	8/2/01 9:12:00 AM	44
8/1/01 1:47:00 PM	34	8/1/01 2:22:00 PM	28	8/2/01 8:38:00 AM	34	8/2/01 9:13:00 AM	63
8/1/01 1:48:00 PM	17	8/1/01 2:23:00 PM	18	8/2/01 8:39:00 AM	71	8/2/01 9:14:00 AM	66
8/1/01 1:49:00 PM	19	8/1/01 2:24:00 PM	19	8/2/01 8:40:00 AM	116	8/2/01 9:15:00 AM	32
8/1/01 1:50:00 PM	21	8/1/01 2:25:00 PM	19	8/2/01 8:41:00 AM	138	8/2/01 9:16:00 AM	30
8/1/01 1:51:00 PM	23	8/1/01 2:26:00 PM	25	8/2/01 8:42:00 AM	62	8/2/01 9:17:00 AM	32
8/1/01 1:52:00 PM	18	8/1/01 2:27:00 PM	88	8/2/01 8:43:00 AM	32	8/2/01 9:18:00 AM	35
8/1/01 1:53:00 PM	18	8/1/01 2:28:00 PM	30	8/2/01 8:44:00 AM	26	8/2/01 9:19:00 AM	34
8/1/01 1:54:00 PM	19	8/1/01 2:29:00 PM	48	8/2/01 8:45:00 AM	35	8/2/01 9:20:00 AM	35
8/1/01 1:55:00 PM	82	8/1/01 2:30:00 PM	27	8/2/01 8:46:00 AM	33	8/2/01 9:21:00 AM	35
8/1/01 1:56:00 PM	42	8/1/01 2:31:00 PM	45	8/2/01 8:47:00 AM	31	8/2/01 9:22:00 AM	34
8/1/01 1:57:00 PM	49	8/1/01 2:32:00 PM	73	8/2/01 8:48:00 AM	35	8/2/01 9:23:00 AM	35
8/1/01 1:58:00 PM	83	8/1/01 2:33:00 PM	62	8/2/01 8:49:00 AM	72	8/2/01 9:24:00 AM	35
8/1/01 1:59:00 PM	20	8/1/01 2:34:00 PM	38	8/2/01 8:50:00 AM	44	8/2/01 9:25:00 AM	38
8/1/01 2:00:00 PM	19	8/1/01 2:35:00 PM	30	8/2/01 8:51:00 AM	32	8/2/01 9:26:00 AM	38
8/1/01 2:01:00 PM	18	8/1/01 2:36:00 PM	25	8/2/01 8:52:00 AM	32	8/2/01 9:27:00 AM	38
8/1/01 2:02:00 PM	29	8/1/01 2:37:00 PM	49	8/2/01 8:53:00 AM	42	8/2/01 9:28:00 AM	62
8/1/01 2:03:00 PM	50	8/1/01 2:38:00 PM	23	8/2/01 8:54:00 AM	40	8/2/01 9:29:00 AM	43
8/1/01 2:04:00 PM	23	8/1/01 2:39:00 PM	30	8/2/01 8:55:00 AM	33	8/2/01 9:30:00 AM	46
8/1/01 2:05:00 PM	43	8/1/01 2:40:00 PM	19	8/2/01 8:56:00 AM	36	8/2/01 9:31:00 AM	42
8/1/01 2:06:00 PM	34	8/1/01 2:41:00 PM	19	8/2/01 8:57:00 AM	32	8/2/01 9:32:00 AM	43
8/1/01 2:07:00 PM	30	8/1/01 2:42:00 PM	35	8/2/01 8:58:00 AM	32	8/2/01 9:33:00 AM	53
8/1/01 2:08:00 PM	24	8/1/01 2:43:00 PM	42	8/2/01 8:59:00 AM	35	8/2/01 9:34:00 AM	47
8/1/01 2:09:00 PM	27	8/1/01 2:44:00 PM	183	8/2/01 9:00:00 AM	30	8/2/01 9:35:00 AM	46
8/1/01 2:10:00 PM	26	8/1/01 2:45:00 PM	59	8/2/01 9:01:00 AM	31	8/2/01 9:36:00 AM	37
8/1/01 2:11:00 PM	25	8/1/01 2:46:00 PM	18	8/2/01 9:02:00 AM	39	8/2/01 9:37:00 AM	44
8/1/01 2:12:00 PM	36	8/1/01 2:47:00 PM	167	8/2/01 9:03:00 AM	46	8/2/01 9:38:00 AM	38
8/1/01 2:13:00 PM	33	8/1/01 2:48:00 PM	338	8/2/01 9:04:00 AM	54	8/2/01 9:39:00 AM	37
8/1/01 2:14:00 PM	34	8/1/01 2:49:00 PM	78	8/2/01 9:05:00 AM	34	8/2/01 9:40:00 AM	63
8/1/01 2:15:00 PM	21	8/1/01 2:50:00 PM	36	8/2/01 9:06:00 AM	34	8/2/01 9:41:00 AM	46
8/1/01 2:16:00 PM	22	8/1/01 2:51:00 PM	50	8/2/01 9:07:00 AM	40	8/2/01 9:42:00 AM	45
8/1/01 2:17:00 PM	32	8/1/01 2:52:00 PM	25	8/2/01 9:08:00 AM	42	8/2/01 9:43:00 AM	46

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/2/01 9:44:00 AM	42	8/2/01 10:19:00 AM	47	8/2/01 10:54:00 AM	46	8/2/01 11:29:00 AM	66
8/2/01 9:45:00 AM	73	8/2/01 10:20:00 AM	43	8/2/01 10:55:00 AM	47	8/2/01 11:30:00 AM	50
8/2/01 9:46:00 AM	76	8/2/01 10:21:00 AM	44	8/2/01 10:56:00 AM	147	8/2/01 11:31:00 AM	56
8/2/01 9:47:00 AM	41	8/2/01 10:22:00 AM	214	8/2/01 10:57:00 AM	52	8/2/01 11:32:00 AM	47
8/2/01 9:48:00 AM	48	8/2/01 10:23:00 AM	43	8/2/01 10:58:00 AM	59	8/2/01 11:33:00 AM	59
8/2/01 9:49:00 AM	49	8/2/01 10:24:00 AM	41	8/2/01 10:59:00 AM	41	8/2/01 11:34:00 AM	57
8/2/01 9:50:00 AM	44	8/2/01 10:25:00 AM	42	8/2/01 11:00:00 AM	110	8/2/01 11:35:00 AM	45
8/2/01 9:51:00 AM	39	8/2/01 10:26:00 AM	40	8/2/01 11:01:00 AM	76	8/2/01 11:36:00 AM	90
8/2/01 9:52:00 AM	44	8/2/01 10:27:00 AM	43	8/2/01 11:02:00 AM	48	8/2/01 11:37:00 AM	150
8/2/01 9:53:00 AM	38	8/2/01 10:28:00 AM	45	8/2/01 11:03:00 AM	82	8/2/01 11:38:00 AM	62
8/2/01 9:54:00 AM	45	8/2/01 10:29:00 AM	42	8/2/01 11:04:00 AM	256	8/2/01 11:39:00 AM	85
8/2/01 9:55:00 AM	39	8/2/01 10:30:00 AM	43	8/2/01 11:05:00 AM	94	8/2/01 11:40:00 AM	49
8/2/01 9:56:00 AM	76	8/2/01 10:31:00 AM	63	8/2/01 11:06:00 AM	50	8/2/01 11:41:00 AM	45
8/2/01 9:57:00 AM	88	8/2/01 10:32:00 AM	93	8/2/01 11:07:00 AM	48	8/2/01 11:42:00 AM	49
8/2/01 9:58:00 AM	44	8/2/01 10:33:00 AM	42	8/2/01 11:08:00 AM	48	8/2/01 11:43:00 AM	53
8/2/01 9:59:00 AM	36	8/2/01 10:34:00 AM	46	8/2/01 11:09:00 AM	44	8/2/01 11:44:00 AM	60
8/2/01 10:00:00 AM	72	8/2/01 10:35:00 AM	72	8/2/01 11:10:00 AM	48	8/2/01 11:45:00 AM	63
8/2/01 10:01:00 AM	40	8/2/01 10:36:00 AM	70	8/2/01 11:11:00 AM	51	8/2/01 11:46:00 AM	58
8/2/01 10:02:00 AM	42	8/2/01 10:37:00 AM	66	8/2/01 11:12:00 AM	48	8/2/01 11:47:00 AM	64
8/2/01 10:03:00 AM	42	8/2/01 10:38:00 AM	41	8/2/01 11:13:00 AM	51	8/2/01 11:48:00 AM	50
8/2/01 10:04:00 AM	38	8/2/01 10:39:00 AM	135	8/2/01 11:14:00 AM	81	8/2/01 11:49:00 AM	49
8/2/01 10:05:00 AM	39	8/2/01 10:40:00 AM	145	8/2/01 11:15:00 AM	51	8/2/01 11:50:00 AM	49
8/2/01 10:06:00 AM	46	8/2/01 10:41:00 AM	45	8/2/01 11:16:00 AM	83	8/2/01 11:51:00 AM	54
8/2/01 10:07:00 AM	92	8/2/01 10:42:00 AM	42	8/2/01 11:17:00 AM	45	8/2/01 11:52:00 AM	58
8/2/01 10:08:00 AM	65	8/2/01 10:43:00 AM	39	8/2/01 11:18:00 AM	46	8/2/01 11:53:00 AM	78
8/2/01 10:09:00 AM	47	8/2/01 10:44:00 AM	40	8/2/01 11:19:00 AM	54	8/2/01 11:54:00 AM	45
8/2/01 10:10:00 AM	42	8/2/01 10:45:00 AM	40	8/2/01 11:20:00 AM	78	8/2/01 11:55:00 AM	46
8/2/01 10:11:00 AM	36	8/2/01 10:46:00 AM	40	8/2/01 11:21:00 AM	49	8/2/01 11:56:00 AM	46
8/2/01 10:12:00 AM	39	8/2/01 10:47:00 AM	37	8/2/01 11:22:00 AM	50	8/2/01 11:57:00 AM	44
8/2/01 10:13:00 AM	95	8/2/01 10:48:00 AM	39	8/2/01 11:23:00 AM	55	8/2/01 11:58:00 AM	50
8/2/01 10:14:00 AM	110	8/2/01 10:49:00 AM	42	8/2/01 11:24:00 AM	54	8/2/01 11:59:00 AM	81
8/2/01 10:15:00 AM	193	8/2/01 10:50:00 AM	41	8/2/01 11:25:00 AM	56	8/2/01 12:00:00 PM	65
8/2/01 10:16:00 AM	119	8/2/01 10:51:00 AM	61	8/2/01 11:26:00 AM	51	8/2/01 12:01:00 PM	48
8/2/01 10:17:00 AM	76	8/2/01 10:52:00 AM	42	8/2/01 11:27:00 AM	47	8/2/01 12:02:00 PM	56
8/2/01 10:18:00 AM	65	8/2/01 10:53:00 AM	45	8/2/01 11:28:00 AM	48	8/2/01 12:03:00 PM	68

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/2/01 12:04:00 PM	69	8/2/01 12:39:00 PM	52	8/2/01 1:14:00 PM	71	8/2/01 1:49:00 PM	149
8/2/01 12:05:00 PM	49	8/2/01 12:40:00 PM	56	8/2/01 1:15:00 PM	68	8/2/01 1:50:00 PM	75
8/2/01 12:06:00 PM	57	8/2/01 12:41:00 PM	54	8/2/01 1:16:00 PM	63	8/2/01 1:51:00 PM	124
8/2/01 12:07:00 PM	51	8/2/01 12:42:00 PM	56	8/2/01 1:17:00 PM	61	8/2/01 1:52:00 PM	68
8/2/01 12:08:00 PM	61	8/2/01 12:43:00 PM	54	8/2/01 1:18:00 PM	58	8/2/01 1:53:00 PM	54
8/2/01 12:09:00 PM	49	8/2/01 12:44:00 PM	54	8/2/01 1:19:00 PM	90	8/2/01 1:54:00 PM	210
8/2/01 12:10:00 PM	57	8/2/01 12:45:00 PM	50	8/2/01 1:20:00 PM	52	8/2/01 1:55:00 PM	138
8/2/01 12:11:00 PM	117	8/2/01 12:46:00 PM	53	8/2/01 1:21:00 PM	118	8/2/01 1:56:00 PM	80
8/2/01 12:12:00 PM	82	8/2/01 12:47:00 PM	121	8/2/01 1:22:00 PM	57	8/2/01 1:57:00 PM	58
8/2/01 12:13:00 PM	717	8/2/01 12:48:00 PM	75	8/2/01 1:23:00 PM	54	8/2/01 1:58:00 PM	60
8/2/01 12:14:00 PM	89	8/2/01 12:49:00 PM	62	8/2/01 1:24:00 PM	55	8/2/01 1:59:00 PM	61
8/2/01 12:15:00 PM	105	8/2/01 12:50:00 PM	53	8/2/01 1:25:00 PM	60	8/2/01 2:00:00 PM	119
8/2/01 12:16:00 PM	78	8/2/01 12:51:00 PM	54	8/2/01 1:26:00 PM	58	8/2/01 2:01:00 PM	56
8/2/01 12:17:00 PM	52	8/2/01 12:52:00 PM	179	8/2/01 1:27:00 PM	58	8/2/01 2:02:00 PM	128
8/2/01 12:18:00 PM	54	8/2/01 12:53:00 PM	79	8/2/01 1:28:00 PM	59	8/2/01 2:03:00 PM	59
8/2/01 12:19:00 PM	61	8/2/01 12:54:00 PM	56	8/2/01 1:29:00 PM	78	8/2/01 2:04:00 PM	58
8/2/01 12:20:00 PM	54	8/2/01 12:55:00 PM	59	8/2/01 1:30:00 PM	80	8/2/01 2:05:00 PM	59
8/2/01 12:21:00 PM	50	8/2/01 12:56:00 PM	57	8/2/01 1:31:00 PM	59	8/2/01 2:06:00 PM	68
8/2/01 12:22:00 PM	52	8/2/01 12:57:00 PM	57	8/2/01 1:32:00 PM	60	8/2/01 2:07:00 PM	66
8/2/01 12:23:00 PM	49	8/2/01 12:58:00 PM	58	8/2/01 1:33:00 PM	53	8/2/01 2:08:00 PM	63
8/2/01 12:24:00 PM	52	8/2/01 12:59:00 PM	78	8/2/01 1:34:00 PM	54	8/2/01 2:09:00 PM	67
8/2/01 12:25:00 PM	50	8/2/01 1:00:00 PM	68	8/2/01 1:35:00 PM	96	8/2/01 2:10:00 PM	62
8/2/01 12:26:00 PM	52	8/2/01 1:01:00 PM	88	8/2/01 1:36:00 PM	64	8/2/01 2:11:00 PM	76
8/2/01 12:27:00 PM	52	8/2/01 1:02:00 PM	57	8/2/01 1:37:00 PM	57	8/2/01 2:12:00 PM	56
8/2/01 12:28:00 PM	52	8/2/01 1:03:00 PM	147	8/2/01 1:38:00 PM	87	8/2/01 2:13:00 PM	57
8/2/01 12:29:00 PM	50	8/2/01 1:04:00 PM	256	8/2/01 1:39:00 PM	96	8/2/01 2:14:00 PM	59
8/2/01 12:30:00 PM	51	8/2/01 1:05:00 PM	62	8/2/01 1:40:00 PM	69	8/2/01 2:15:00 PM	62
8/2/01 12:31:00 PM	56	8/2/01 1:06:00 PM	61	8/2/01 1:41:00 PM	70	8/2/01 2:16:00 PM	65
8/2/01 12:32:00 PM	52	8/2/01 1:07:00 PM	60	8/2/01 1:42:00 PM	65	8/2/01 2:17:00 PM	64
8/2/01 12:33:00 PM	53	8/2/01 1:08:00 PM	103	8/2/01 1:43:00 PM	63	8/2/01 2:18:00 PM	55
8/2/01 12:34:00 PM	53	8/2/01 1:09:00 PM	158	8/2/01 1:44:00 PM	71	8/2/01 2:19:00 PM	58
8/2/01 12:35:00 PM	52	8/2/01 1:10:00 PM	84	8/2/01 1:45:00 PM	94	8/2/01 2:20:00 PM	73
8/2/01 12:36:00 PM	54	8/2/01 1:11:00 PM	75	8/2/01 1:46:00 PM	67	8/2/01 2:21:00 PM	107
8/2/01 12:37:00 PM	54	8/2/01 1:12:00 PM	66	8/2/01 1:47:00 PM	65	8/2/01 2:22:00 PM	67
8/2/01 12:38:00 PM	53	8/2/01 1:13:00 PM	56	8/2/01 1:48:00 PM	59	8/2/01 2:23:00 PM	59

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/2/01 2:24:00 PM	82	8/2/01 2:59:00 PM	65	8/2/01 3:34:00 PM	60	8/3/01 8:38:00 AM	36
8/2/01 2:25:00 PM	84	8/2/01 3:00:00 PM	62	8/2/01 3:35:00 PM	106	8/3/01 8:39:00 AM	37
8/2/01 2:26:00 PM	65	8/2/01 3:01:00 PM	62	8/2/01 3:36:00 PM	104	8/3/01 8:40:00 AM	30
8/2/01 2:27:00 PM	59	8/2/01 3:02:00 PM	58	8/2/01 3:37:00 PM	66	8/3/01 8:41:00 AM	29
8/2/01 2:28:00 PM	77	8/2/01 3:03:00 PM	58	8/2/01 3:38:00 PM	224	8/3/01 8:42:00 AM	28
8/2/01 2:29:00 PM	55	8/2/01 3:04:00 PM	58	8/2/01 3:39:00 PM	237	8/3/01 8:43:00 AM	30
8/2/01 2:30:00 PM	62	8/2/01 3:05:00 PM	64	8/3/01 8:09:00 AM	32	8/3/01 8:44:00 AM	28
8/2/01 2:31:00 PM	61	8/2/01 3:06:00 PM	54	8/3/01 8:10:00 AM	35	8/3/01 8:45:00 AM	27
8/2/01 2:32:00 PM	57	8/2/01 3:07:00 PM	54	8/3/01 8:11:00 AM	30	8/3/01 8:46:00 AM	33
8/2/01 2:33:00 PM	115	8/2/01 3:08:00 PM	54	8/3/01 8:12:00 AM	64	8/3/01 8:47:00 AM	90
8/2/01 2:34:00 PM	61	8/2/01 3:09:00 PM	61	8/3/01 8:13:00 AM	27	8/3/01 8:48:00 AM	55
8/2/01 2:35:00 PM	65	8/2/01 3:10:00 PM	84	8/3/01 8:14:00 AM	28	8/3/01 8:49:00 AM	39
8/2/01 2:36:00 PM	58	8/2/01 3:11:00 PM	59	8/3/01 8:15:00 AM	31	8/3/01 8:50:00 AM	36
8/2/01 2:37:00 PM	88	8/2/01 3:12:00 PM	81	8/3/01 8:16:00 AM	34	8/3/01 8:51:00 AM	28
8/2/01 2:38:00 PM	241	8/2/01 3:13:00 PM	83	8/3/01 8:17:00 AM	29	8/3/01 8:52:00 AM	32
8/2/01 2:39:00 PM	61	8/2/01 3:14:00 PM	70	8/3/01 8:18:00 AM	47	8/3/01 8:53:00 AM	30
8/2/01 2:40:00 PM	65	8/2/01 3:15:00 PM	66	8/3/01 8:19:00 AM	52	8/3/01 8:54:00 AM	33
8/2/01 2:41:00 PM	57	8/2/01 3:16:00 PM	67	8/3/01 8:20:00 AM	30	8/3/01 8:55:00 AM	28
8/2/01 2:42:00 PM	58	8/2/01 3:17:00 PM	92	8/3/01 8:21:00 AM	34	8/3/01 8:56:00 AM	32
8/2/01 2:43:00 PM	120	8/2/01 3:18:00 PM	85	8/3/01 8:22:00 AM	26	8/3/01 8:57:00 AM	29
8/2/01 2:44:00 PM	76	8/2/01 3:19:00 PM	75	8/3/01 8:23:00 AM	28	8/3/01 8:58:00 AM	30
8/2/01 2:45:00 PM	64	8/2/01 3:20:00 PM	66	8/3/01 8:24:00 AM	35	8/3/01 8:59:00 AM	36
8/2/01 2:46:00 PM	85	8/2/01 3:21:00 PM	106	8/3/01 8:25:00 AM	30	8/3/01 9:00:00 AM	30
8/2/01 2:47:00 PM	65	8/2/01 3:22:00 PM	174	8/3/01 8:26:00 AM	151	8/3/01 9:01:00 AM	31
8/2/01 2:48:00 PM	67	8/2/01 3:23:00 PM	102	8/3/01 8:27:00 AM	53	8/3/01 9:02:00 AM	30
8/2/01 2:49:00 PM	58	8/2/01 3:24:00 PM	788	8/3/01 8:28:00 AM	95	8/3/01 9:03:00 AM	33
8/2/01 2:50:00 PM	60	8/2/01 3:25:00 PM	113	8/3/01 8:29:00 AM	37	8/3/01 9:04:00 AM	32
8/2/01 2:51:00 PM	76	8/2/01 3:26:00 PM	67	8/3/01 8:30:00 AM	34	8/3/01 9:05:00 AM	32
8/2/01 2:52:00 PM	77	8/2/01 3:27:00 PM	62	8/3/01 8:31:00 AM	31	8/3/01 9:06:00 AM	33
8/2/01 2:53:00 PM	86	8/2/01 3:28:00 PM	66	8/3/01 8:32:00 AM	34	8/3/01 9:07:00 AM	33
8/2/01 2:54:00 PM	95	8/2/01 3:29:00 PM	150	8/3/01 8:33:00 AM	28	8/3/01 9:08:00 AM	33
8/2/01 2:55:00 PM	86	8/2/01 3:30:00 PM	65	8/3/01 8:34:00 AM	39	8/3/01 9:09:00 AM	40
8/2/01 2:56:00 PM	107	8/2/01 3:31:00 PM	63	8/3/01 8:35:00 AM	47	8/3/01 9:10:00 AM	41
8/2/01 2:57:00 PM	67	8/2/01 3:32:00 PM	60	8/3/01 8:36:00 AM	38	8/3/01 9:11:00 AM	41
8/2/01 2:58:00 PM	60	8/2/01 3:33:00 PM	62	8/3/01 8:37:00 AM	29	8/3/01 9:12:00 AM	35

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/3/01 9:13:00 AM	37	8/3/01 9:48:00 AM	64	8/3/01 10:23:00 AM	47	8/3/01 10:58:00 AM	60
8/3/01 9:14:00 AM	36	8/3/01 9:49:00 AM	40	8/3/01 10:24:00 AM	46	8/3/01 10:59:00 AM	66
8/3/01 9:15:00 AM	40	8/3/01 9:50:00 AM	37	8/3/01 10:25:00 AM	43	8/3/01 11:00:00 AM	41
8/3/01 9:16:00 AM	78	8/3/01 9:51:00 AM	35	8/3/01 10:26:00 AM	44	8/3/01 11:01:00 AM	47
8/3/01 9:17:00 AM	56	8/3/01 9:52:00 AM	39	8/3/01 10:27:00 AM	56	8/3/01 11:02:00 AM	57
8/3/01 9:18:00 AM	126	8/3/01 9:53:00 AM	36	8/3/01 10:28:00 AM	46	8/3/01 11:03:00 AM	46
8/3/01 9:19:00 AM	50	8/3/01 9:54:00 AM	34	8/3/01 10:29:00 AM	44	8/3/01 11:04:00 AM	44
8/3/01 9:20:00 AM	50	8/3/01 9:55:00 AM	37	8/3/01 10:30:00 AM	99	8/3/01 11:05:00 AM	48
8/3/01 9:21:00 AM	39	8/3/01 9:56:00 AM	36	8/3/01 10:31:00 AM	64	8/3/01 11:06:00 AM	48
8/3/01 9:22:00 AM	56	8/3/01 9:57:00 AM	44	8/3/01 10:32:00 AM	77	8/3/01 11:07:00 AM	133
8/3/01 9:23:00 AM	35	8/3/01 9:58:00 AM	41	8/3/01 10:33:00 AM	63	8/3/01 11:08:00 AM	108
8/3/01 9:24:00 AM	54	8/3/01 9:59:00 AM	44	8/3/01 10:34:00 AM	42	8/3/01 11:09:00 AM	88
8/3/01 9:25:00 AM	37	8/3/01 10:00:00 AM	41	8/3/01 10:35:00 AM	60	8/3/01 11:10:00 AM	136
8/3/01 9:26:00 AM	34	8/3/01 10:01:00 AM	38	8/3/01 10:36:00 AM	496	8/3/01 11:11:00 AM	49
8/3/01 9:27:00 AM	32	8/3/01 10:02:00 AM	38	8/3/01 10:37:00 AM	252	8/3/01 11:12:00 AM	50
8/3/01 9:28:00 AM	31	8/3/01 10:03:00 AM	59	8/3/01 10:38:00 AM	266	8/3/01 11:13:00 AM	79
8/3/01 9:29:00 AM	36	8/3/01 10:04:00 AM	68	8/3/01 10:39:00 AM	52	8/3/01 11:14:00 AM	64
8/3/01 9:30:00 AM	159	8/3/01 10:05:00 AM	41	8/3/01 10:40:00 AM	55	8/3/01 11:15:00 AM	67
8/3/01 9:31:00 AM	79	8/3/01 10:06:00 AM	38	8/3/01 10:41:00 AM	46	8/3/01 11:16:00 AM	62
8/3/01 9:32:00 AM	68	8/3/01 10:07:00 AM	47	8/3/01 10:42:00 AM	53	8/3/01 11:17:00 AM	131
8/3/01 9:33:00 AM	38	8/3/01 10:08:00 AM	51	8/3/01 10:43:00 AM	97	8/3/01 11:18:00 AM	415
8/3/01 9:34:00 AM	38	8/3/01 10:09:00 AM	61	8/3/01 10:44:00 AM	280	8/3/01 11:19:00 AM	62
8/3/01 9:35:00 AM	61	8/3/01 10:10:00 AM	39	8/3/01 10:45:00 AM	50	8/3/01 11:20:00 AM	146
8/3/01 9:36:00 AM	49	8/3/01 10:11:00 AM	39	8/3/01 10:46:00 AM	132	8/3/01 11:21:00 AM	287
8/3/01 9:37:00 AM	37	8/3/01 10:12:00 AM	40	8/3/01 10:47:00 AM	37	8/3/01 11:22:00 AM	402
8/3/01 9:38:00 AM	36	8/3/01 10:13:00 AM	41	8/3/01 10:48:00 AM	39	8/3/01 11:23:00 AM	104
8/3/01 9:39:00 AM	40	8/3/01 10:14:00 AM	37	8/3/01 10:49:00 AM	48	8/3/01 11:24:00 AM	61
8/3/01 9:40:00 AM	39	8/3/01 10:15:00 AM	37	8/3/01 10:50:00 AM	96	8/3/01 11:25:00 AM	58
8/3/01 9:41:00 AM	323	8/3/01 10:16:00 AM	37	8/3/01 10:51:00 AM	165	8/3/01 11:26:00 AM	62
8/3/01 9:42:00 AM	49	8/3/01 10:17:00 AM	40	8/3/01 10:52:00 AM	48	8/3/01 11:27:00 AM	56
8/3/01 9:43:00 AM	40	8/3/01 10:18:00 AM	45	8/3/01 10:53:00 AM	61	8/3/01 11:28:00 AM	56
8/3/01 9:44:00 AM	54	8/3/01 10:19:00 AM	45	8/3/01 10:54:00 AM	68	8/3/01 11:29:00 AM	64
8/3/01 9:45:00 AM	82	8/3/01 10:20:00 AM	110	8/3/01 10:55:00 AM	167	8/3/01 11:30:00 AM	59
8/3/01 9:46:00 AM	69	8/3/01 10:21:00 AM	40	8/3/01 10:56:00 AM	158	8/3/01 11:31:00 AM	71
8/3/01 9:47:00 AM	102	8/3/01 10:22:00 AM	68	8/3/01 10:57:00 AM	74	8/3/01 11:32:00 AM	87

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/3/01 11:33:00 AM	68	8/3/01 12:08:00 PM	88	8/3/01 12:43:00 PM	84	8/6/01 8:28:00 AM	46
8/3/01 11:34:00 AM	85	8/3/01 12:09:00 PM	85	8/3/01 12:44:00 PM	95	8/6/01 8:29:00 AM	49
8/3/01 11:35:00 AM	162	8/3/01 12:10:00 PM	80	8/3/01 12:45:00 PM	99	8/6/01 8:30:00 AM	1216
8/3/01 11:36:00 AM	60	8/3/01 12:11:00 PM	80	8/3/01 12:46:00 PM	105	8/6/01 8:31:00 AM	324
8/3/01 11:37:00 AM	68	8/3/01 12:12:00 PM	82	8/3/01 12:47:00 PM	102	8/6/01 8:32:00 AM	50
8/3/01 11:38:00 AM	63	8/3/01 12:13:00 PM	83	8/6/01 7:58:00 AM	48	8/6/01 8:33:00 AM	318
8/3/01 11:39:00 AM	69	8/3/01 12:14:00 PM	83	8/6/01 7:59:00 AM	43	8/6/01 8:34:00 AM	238
8/3/01 11:40:00 AM	62	8/3/01 12:15:00 PM	82	8/6/01 8:00:00 AM	45	8/6/01 8:35:00 AM	46
8/3/01 11:41:00 AM	87	8/3/01 12:16:00 PM	80	8/6/01 8:01:00 AM	43	8/6/01 8:36:00 AM	44
8/3/01 11:42:00 AM	108	8/3/01 12:17:00 PM	82	8/6/01 8:02:00 AM	42	8/6/01 8:37:00 AM	46
8/3/01 11:43:00 AM	66	8/3/01 12:18:00 PM	77	8/6/01 8:03:00 AM	43	8/6/01 8:38:00 AM	46
8/3/01 11:44:00 AM	87	8/3/01 12:19:00 PM	75	8/6/01 8:04:00 AM	46	8/6/01 8:39:00 AM	51
8/3/01 11:45:00 AM	140	8/3/01 12:20:00 PM	74	8/6/01 8:05:00 AM	44	8/6/01 8:40:00 AM	630
8/3/01 11:46:00 AM	442	8/3/01 12:21:00 PM	78	8/6/01 8:06:00 AM	47	8/6/01 8:41:00 AM	65
8/3/01 11:47:00 AM	99	8/3/01 12:22:00 PM	75	8/6/01 8:07:00 AM	47	8/6/01 8:42:00 AM	46
8/3/01 11:48:00 AM	67	8/3/01 12:23:00 PM	76	8/6/01 8:08:00 AM	56	8/6/01 8:43:00 AM	3346
8/3/01 11:49:00 AM	68	8/3/01 12:24:00 PM	74	8/6/01 8:09:00 AM	44	8/6/01 8:44:00 AM	528
8/3/01 11:50:00 AM	71	8/3/01 12:25:00 PM	73	8/6/01 8:10:00 AM	45	8/6/01 8:45:00 AM	46
8/3/01 11:51:00 AM	119	8/3/01 12:26:00 PM	72	8/6/01 8:11:00 AM	44	8/6/01 8:46:00 AM	49
8/3/01 11:52:00 AM	67	8/3/01 12:27:00 PM	75	8/6/01 8:12:00 AM	45	8/6/01 8:47:00 AM	46
8/3/01 11:53:00 AM	87	8/3/01 12:28:00 PM	72	8/6/01 8:13:00 AM	40	8/6/01 8:48:00 AM	46
8/3/01 11:54:00 AM	81	8/3/01 12:29:00 PM	448	8/6/01 8:14:00 AM	47	8/6/01 8:49:00 AM	45
8/3/01 11:55:00 AM	71	8/3/01 12:30:00 PM	99	8/6/01 8:15:00 AM	43	8/6/01 8:50:00 AM	43
8/3/01 11:56:00 AM	69	8/3/01 12:31:00 PM	77	8/6/01 8:16:00 AM	58	8/6/01 8:51:00 AM	48
8/3/01 11:57:00 AM	72	8/3/01 12:32:00 PM	79	8/6/01 8:17:00 AM	53	8/6/01 8:52:00 AM	46
8/3/01 11:58:00 AM	163	8/3/01 12:33:00 PM	74	8/6/01 8:18:00 AM	50	8/6/01 8:53:00 AM	49
8/3/01 11:59:00 AM	83	8/3/01 12:34:00 PM	84	8/6/01 8:19:00 AM	46	8/6/01 8:54:00 AM	49
8/3/01 12:00:00 PM	73	8/3/01 12:35:00 PM	77	8/6/01 8:20:00 AM	48	8/6/01 8:55:00 AM	46
8/3/01 12:01:00 PM	78	8/3/01 12:36:00 PM	323	8/6/01 8:21:00 AM	43	8/6/01 8:56:00 AM	46
8/3/01 12:02:00 PM	176	8/3/01 12:37:00 PM	548	8/6/01 8:22:00 AM	48	8/6/01 8:57:00 AM	46
8/3/01 12:03:00 PM	150	8/3/01 12:38:00 PM	78	8/6/01 8:23:00 AM	46	8/6/01 8:58:00 AM	45
8/3/01 12:04:00 PM	99	8/3/01 12:39:00 PM	202	8/6/01 8:24:00 AM	44	8/6/01 8:59:00 AM	49
8/3/01 12:05:00 PM	322	8/3/01 12:40:00 PM	148	8/6/01 8:25:00 AM	42	8/6/01 9:00:00 AM	47
8/3/01 12:06:00 PM	362	8/3/01 12:41:00 PM	82	8/6/01 8:26:00 AM	42	8/6/01 9:01:00 AM	45
8/3/01 12:07:00 PM	611	8/3/01 12:42:00 PM	144	8/6/01 8:27:00 AM	42	8/6/01 9:02:00 AM	48

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/6/01 9:03:00 AM	48	8/6/01 9:38:00 AM	37	8/6/01 10:13:00 AM	282	8/6/01 10:48:00 AM	29
8/6/01 9:04:00 AM	49	8/6/01 9:39:00 AM	35	8/6/01 10:14:00 AM	337	8/6/01 10:49:00 AM	197
8/6/01 9:05:00 AM	57	8/6/01 9:40:00 AM	33	8/6/01 10:15:00 AM	105	8/6/01 10:50:00 AM	340
8/6/01 9:06:00 AM	53	8/6/01 9:41:00 AM	29	8/6/01 10:16:00 AM	31	8/6/01 10:51:00 AM	53
8/6/01 9:07:00 AM	54	8/6/01 9:42:00 AM	36	8/6/01 10:17:00 AM	64	8/6/01 10:52:00 AM	110
8/6/01 9:08:00 AM	50	8/6/01 9:43:00 AM	30	8/6/01 10:18:00 AM	32	8/6/01 10:53:00 AM	31
8/6/01 9:09:00 AM	48	8/6/01 9:44:00 AM	34	8/6/01 10:19:00 AM	30	8/6/01 10:54:00 AM	26
8/6/01 9:10:00 AM	43	8/6/01 9:45:00 AM	34	8/6/01 10:20:00 AM	30	8/6/01 10:55:00 AM	30
8/6/01 9:11:00 AM	45	8/6/01 9:46:00 AM	40	8/6/01 10:21:00 AM	50	8/6/01 10:56:00 AM	59
8/6/01 9:12:00 AM	45	8/6/01 9:47:00 AM	40	8/6/01 10:22:00 AM	541	8/6/01 10:57:00 AM	55
8/6/01 9:13:00 AM	48	8/6/01 9:48:00 AM	43	8/6/01 10:23:00 AM	626	8/6/01 10:58:00 AM	162
8/6/01 9:14:00 AM	52	8/6/01 9:49:00 AM	60	8/6/01 10:24:00 AM	22	8/6/01 10:59:00 AM	45
8/6/01 9:15:00 AM	50	8/6/01 9:50:00 AM	198	8/6/01 10:25:00 AM	31	8/6/01 11:00:00 AM	82
8/6/01 9:16:00 AM	46	8/6/01 9:51:00 AM	294	8/6/01 10:26:00 AM	431	8/6/01 11:01:00 AM	141
8/6/01 9:17:00 AM	50	8/6/01 9:52:00 AM	233	8/6/01 10:27:00 AM	164	8/6/01 11:02:00 AM	26
8/6/01 9:18:00 AM	52	8/6/01 9:53:00 AM	221	8/6/01 10:28:00 AM	31	8/6/01 11:03:00 AM	240
8/6/01 9:19:00 AM	49	8/6/01 9:54:00 AM	232	8/6/01 10:29:00 AM	30	8/6/01 11:04:00 AM	228
8/6/01 9:20:00 AM	54	8/6/01 9:55:00 AM	313	8/6/01 10:30:00 AM	33	8/6/01 11:05:00 AM	381
8/6/01 9:21:00 AM	47	8/6/01 9:56:00 AM	535	8/6/01 10:31:00 AM	38	8/6/01 11:06:00 AM	397
8/6/01 9:22:00 AM	49	8/6/01 9:57:00 AM	122	8/6/01 10:32:00 AM	43	8/6/01 11:07:00 AM	153
8/6/01 9:23:00 AM	69	8/6/01 9:58:00 AM	349	8/6/01 10:33:00 AM	26	8/6/01 11:08:00 AM	60
8/6/01 9:24:00 AM	56	8/6/01 9:59:00 AM	534	8/6/01 10:34:00 AM	26	8/6/01 11:09:00 AM	28
8/6/01 9:25:00 AM	47	8/6/01 10:00:00 AM	51	8/6/01 10:35:00 AM	281	8/6/01 11:10:00 AM	26
8/6/01 9:26:00 AM	43	8/6/01 10:01:00 AM	36	8/6/01 10:36:00 AM	240	8/6/01 11:11:00 AM	83
8/6/01 9:27:00 AM	39	8/6/01 10:02:00 AM	52	8/6/01 10:37:00 AM	215	8/6/01 11:12:00 AM	25
8/6/01 9:28:00 AM	37	8/6/01 10:03:00 AM	253	8/6/01 10:38:00 AM	508	8/6/01 11:13:00 AM	260
8/6/01 9:29:00 AM	63	8/6/01 10:04:00 AM	34	8/6/01 10:39:00 AM	415	8/6/01 11:14:00 AM	646
8/6/01 9:30:00 AM	67	8/6/01 10:05:00 AM	31	8/6/01 10:40:00 AM	296	8/6/01 11:15:00 AM	111
8/6/01 9:31:00 AM	114	8/6/01 10:06:00 AM	35	8/6/01 10:41:00 AM	58	8/6/01 11:16:00 AM	393
8/6/01 9:32:00 AM	191	8/6/01 10:07:00 AM	95	8/6/01 10:42:00 AM	215	8/6/01 11:17:00 AM	106
8/6/01 9:33:00 AM	43	8/6/01 10:08:00 AM	93	8/6/01 10:43:00 AM	31	8/6/01 11:18:00 AM	33
8/6/01 9:34:00 AM	32	8/6/01 10:09:00 AM	151	8/6/01 10:44:00 AM	93	8/6/01 11:19:00 AM	80
8/6/01 9:35:00 AM	33	8/6/01 10:10:00 AM	365	8/6/01 10:45:00 AM	264	8/6/01 11:20:00 AM	192
8/6/01 9:36:00 AM	35	8/6/01 10:11:00 AM	36	8/6/01 10:46:00 AM	147	8/6/01 11:21:00 AM	23
8/6/01 9:37:00 AM	32	8/6/01 10:12:00 AM	268	8/6/01 10:47:00 AM	48	8/6/01 11:22:00 AM	42

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/6/01 11:23:00 AM	272	8/6/01 11:58:00 AM	29	8/6/01 12:33:00 PM	21	8/6/01 1:08:00 PM	15
8/6/01 11:24:00 AM	372	8/6/01 11:59:00 AM	24	8/6/01 12:34:00 PM	19	8/6/01 1:09:00 PM	11
8/6/01 11:25:00 AM	306	8/6/01 12:00:00 PM	28	8/6/01 12:35:00 PM	20	8/6/01 1:10:00 PM	13
8/6/01 11:26:00 AM	1023	8/6/01 12:01:00 PM	27	8/6/01 12:36:00 PM	22	8/6/01 1:11:00 PM	14
8/6/01 11:27:00 AM	1239	8/6/01 12:02:00 PM	25	8/6/01 12:37:00 PM	19	8/6/01 1:12:00 PM	35
8/6/01 11:28:00 AM	372	8/6/01 12:03:00 PM	24	8/6/01 12:38:00 PM	22	8/6/01 1:13:00 PM	21
8/6/01 11:29:00 AM	22	8/6/01 12:04:00 PM	27	8/6/01 12:39:00 PM	22	8/6/01 1:14:00 PM	24
8/6/01 11:30:00 AM	154	8/6/01 12:05:00 PM	28	8/6/01 12:40:00 PM	28	8/6/01 1:15:00 PM	18
8/6/01 11:31:00 AM	44	8/6/01 12:06:00 PM	27	8/6/01 12:41:00 PM	23	8/6/01 1:16:00 PM	15
8/6/01 11:32:00 AM	42	8/6/01 12:07:00 PM	26	8/6/01 12:42:00 PM	22	8/6/01 1:17:00 PM	18
8/6/01 11:33:00 AM	39	8/6/01 12:08:00 PM	29	8/6/01 12:43:00 PM	22	8/6/01 1:18:00 PM	18
8/6/01 11:34:00 AM	34	8/6/01 12:09:00 PM	33	8/6/01 12:44:00 PM	26	8/6/01 1:19:00 PM	57
8/6/01 11:35:00 AM	39	8/6/01 12:10:00 PM	25	8/6/01 12:45:00 PM	22	8/6/01 1:20:00 PM	19
8/6/01 11:36:00 AM	22	8/6/01 12:11:00 PM	24	8/6/01 12:46:00 PM	32	8/6/01 1:21:00 PM	28
8/6/01 11:37:00 AM	68	8/6/01 12:12:00 PM	24	8/6/01 12:47:00 PM	24	8/6/01 1:22:00 PM	160
8/6/01 11:38:00 AM	124	8/6/01 12:13:00 PM	23	8/6/01 12:48:00 PM	30	8/6/01 1:23:00 PM	18
8/6/01 11:39:00 AM	22	8/6/01 12:14:00 PM	24	8/6/01 12:49:00 PM	37	8/6/01 1:24:00 PM	75
8/6/01 11:40:00 AM	19	8/6/01 12:15:00 PM	25	8/6/01 12:50:00 PM	34	8/6/01 1:25:00 PM	108
8/6/01 11:41:00 AM	23	8/6/01 12:16:00 PM	25	8/6/01 12:51:00 PM	45	8/6/01 1:26:00 PM	32
8/6/01 11:42:00 AM	21	8/6/01 12:17:00 PM	25	8/6/01 12:52:00 PM	21	8/6/01 1:27:00 PM	54
8/6/01 11:43:00 AM	20	8/6/01 12:18:00 PM	24	8/6/01 12:53:00 PM	38	8/6/01 1:28:00 PM	52
8/6/01 11:44:00 AM	17	8/6/01 12:19:00 PM	24	8/6/01 12:54:00 PM	36	8/6/01 1:29:00 PM	19
8/6/01 11:45:00 AM	18	8/6/01 12:20:00 PM	26	8/6/01 12:55:00 PM	31	8/6/01 1:30:00 PM	18
8/6/01 11:46:00 AM	33	8/6/01 12:21:00 PM	23	8/6/01 12:56:00 PM	26	8/6/01 1:31:00 PM	24
8/6/01 11:47:00 AM	16	8/6/01 12:22:00 PM	24	8/6/01 12:57:00 PM	22	8/6/01 1:32:00 PM	26
8/6/01 11:48:00 AM	19	8/6/01 12:23:00 PM	34	8/6/01 12:58:00 PM	26	8/6/01 1:33:00 PM	21
8/6/01 11:49:00 AM	42	8/6/01 12:24:00 PM	23	8/6/01 12:59:00 PM	24	8/6/01 1:34:00 PM	17
8/6/01 11:50:00 AM	27	8/6/01 12:25:00 PM	20	8/6/01 1:00:00 PM	36	8/6/01 1:35:00 PM	31
8/6/01 11:51:00 AM	28	8/6/01 12:26:00 PM	18	8/6/01 1:01:00 PM	15	8/6/01 1:36:00 PM	35
8/6/01 11:52:00 AM	24	8/6/01 12:27:00 PM	19	8/6/01 1:02:00 PM	17	8/6/01 1:37:00 PM	13
8/6/01 11:53:00 AM	44	8/6/01 12:28:00 PM	24	8/6/01 1:03:00 PM	20	8/6/01 1:38:00 PM	17
8/6/01 11:54:00 AM	37	8/6/01 12:29:00 PM	24	8/6/01 1:04:00 PM	15	8/6/01 1:39:00 PM	20
8/6/01 11:55:00 AM	31	8/6/01 12:30:00 PM	24	8/6/01 1:05:00 PM	65	8/6/01 1:40:00 PM	15
8/6/01 11:56:00 AM	27	8/6/01 12:31:00 PM	23	8/6/01 1:06:00 PM	41	8/6/01 1:41:00 PM	14
8/6/01 11:57:00 AM	29	8/6/01 12:32:00 PM	25	8/6/01 1:07:00 PM	22	8/6/01 1:42:00 PM	18

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/6/01 1:43:00 PM	33	8/6/01 2:18:00 PM	78	8/6/01 2:53:00 PM	14	8/7/01 11:48:00 AM	30
8/6/01 1:44:00 PM	18	8/6/01 2:19:00 PM	442	8/6/01 2:54:00 PM	22	8/7/01 11:49:00 AM	29
8/6/01 1:45:00 PM	12	8/6/01 2:20:00 PM	920	8/6/01 2:55:00 PM	21	8/7/01 11:50:00 AM	35
8/6/01 1:46:00 PM	12	8/6/01 2:21:00 PM	308	8/6/01 2:56:00 PM	14	8/7/01 11:51:00 AM	33
8/6/01 1:47:00 PM	16	8/6/01 2:22:00 PM	31	8/6/01 2:57:00 PM	13	8/7/01 11:52:00 AM	30
8/6/01 1:48:00 PM	43	8/6/01 2:23:00 PM	16	8/6/01 2:58:00 PM	14	8/7/01 11:53:00 AM	32
8/6/01 1:49:00 PM	18	8/6/01 2:24:00 PM	12	8/6/01 2:59:00 PM	36	8/7/01 11:54:00 AM	31
8/6/01 1:50:00 PM	296	8/6/01 2:25:00 PM	12	8/6/01 3:00:00 PM	11	8/7/01 11:55:00 AM	26
8/6/01 1:51:00 PM	124	8/6/01 2:26:00 PM	13	8/7/01 11:21:00 AM	31	8/7/01 11:56:00 AM	28
8/6/01 1:52:00 PM	30	8/6/01 2:27:00 PM	25	8/7/01 11:22:00 AM	27	8/7/01 11:57:00 AM	30
8/6/01 1:53:00 PM	15	8/6/01 2:28:00 PM	17	8/7/01 11:23:00 AM	38	8/7/01 11:58:00 AM	36
8/6/01 1:54:00 PM	13	8/6/01 2:29:00 PM	23	8/7/01 11:24:00 AM	29	8/7/01 11:59:00 AM	28
8/6/01 1:55:00 PM	62	8/6/01 2:30:00 PM	21	8/7/01 11:25:00 AM	25	8/7/01 12:00:00 PM	29
8/6/01 1:56:00 PM	27	8/6/01 2:31:00 PM	306	8/7/01 11:26:00 AM	48	8/7/01 12:01:00 PM	28
8/6/01 1:57:00 PM	19	8/6/01 2:32:00 PM	14	8/7/01 11:27:00 AM	26	8/7/01 12:02:00 PM	34
8/6/01 1:58:00 PM	33	8/6/01 2:33:00 PM	20	8/7/01 11:28:00 AM	25	8/7/01 12:03:00 PM	33
8/6/01 1:59:00 PM	347	8/6/01 2:34:00 PM	251	8/7/01 11:29:00 AM	26	8/7/01 12:04:00 PM	42
8/6/01 2:00:00 PM	30	8/6/01 2:35:00 PM	116	8/7/01 11:30:00 AM	25	8/7/01 12:05:00 PM	34
8/6/01 2:01:00 PM	15	8/6/01 2:36:00 PM	16	8/7/01 11:31:00 AM	27	8/7/01 12:06:00 PM	35
8/6/01 2:02:00 PM	17	8/6/01 2:37:00 PM	40	8/7/01 11:32:00 AM	25	8/7/01 12:07:00 PM	35
8/6/01 2:03:00 PM	270	8/6/01 2:38:00 PM	21	8/7/01 11:33:00 AM	27	8/7/01 12:08:00 PM	30
8/6/01 2:04:00 PM	12	8/6/01 2:39:00 PM	60	8/7/01 11:34:00 AM	24	8/7/01 12:09:00 PM	33
8/6/01 2:05:00 PM	12	8/6/01 2:40:00 PM	12	8/7/01 11:35:00 AM	25	8/7/01 12:10:00 PM	31
8/6/01 2:06:00 PM	19	8/6/01 2:41:00 PM	22	8/7/01 11:36:00 AM	27	8/7/01 12:11:00 PM	29
8/6/01 2:07:00 PM	11	8/6/01 2:42:00 PM	17	8/7/01 11:37:00 AM	26	8/7/01 12:12:00 PM	30
8/6/01 2:08:00 PM	18	8/6/01 2:43:00 PM	26	8/7/01 11:38:00 AM	28	8/7/01 12:13:00 PM	38
8/6/01 2:09:00 PM	13	8/6/01 2:44:00 PM	11	8/7/01 11:39:00 AM	48	8/7/01 12:14:00 PM	32
8/6/01 2:10:00 PM	12	8/6/01 2:45:00 PM	18	8/7/01 11:40:00 AM	28	8/7/01 12:15:00 PM	36
8/6/01 2:11:00 PM	30	8/6/01 2:46:00 PM	19	8/7/01 11:41:00 AM	27	8/7/01 12:16:00 PM	49
8/6/01 2:12:00 PM	11	8/6/01 2:47:00 PM	14	8/7/01 11:42:00 AM	31	8/7/01 12:17:00 PM	32
8/6/01 2:13:00 PM	11	8/6/01 2:48:00 PM	17	8/7/01 11:43:00 AM	28	8/7/01 12:18:00 PM	36
8/6/01 2:14:00 PM	9	8/6/01 2:49:00 PM	20	8/7/01 11:44:00 AM	26	8/7/01 12:19:00 PM	37
8/6/01 2:15:00 PM	12	8/6/01 2:50:00 PM	23	8/7/01 11:45:00 AM	28	8/7/01 12:20:00 PM	33
8/6/01 2:16:00 PM	10	8/6/01 2:51:00 PM	21	8/7/01 11:46:00 AM	30	8/7/01 12:21:00 PM	35
8/6/01 2:17:00 PM	12	8/6/01 2:52:00 PM	18	8/7/01 11:47:00 AM	35	8/7/01 12:22:00 PM	44

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/7/01 12:23:00 PM	32	8/7/01 12:58:00 PM	35	8/7/01 1:33:00 PM	38	8/7/01 2:08:00 PM	37
8/7/01 12:24:00 PM	34	8/7/01 12:59:00 PM	33	8/7/01 1:34:00 PM	44	8/7/01 2:09:00 PM	39
8/7/01 12:25:00 PM	34	8/7/01 1:00:00 PM	33	8/7/01 1:35:00 PM	39	8/7/01 2:10:00 PM	37
8/7/01 12:26:00 PM	34	8/7/01 1:01:00 PM	33	8/7/01 1:36:00 PM	54	8/7/01 2:11:00 PM	42
8/7/01 12:27:00 PM	31	8/7/01 1:02:00 PM	38	8/7/01 1:37:00 PM	36	8/7/01 2:12:00 PM	38
8/7/01 12:28:00 PM	33	8/7/01 1:03:00 PM	36	8/7/01 1:38:00 PM	35	8/7/01 2:13:00 PM	38
8/7/01 12:29:00 PM	33	8/7/01 1:04:00 PM	32	8/7/01 1:39:00 PM	35	8/7/01 2:14:00 PM	38
8/7/01 12:30:00 PM	35	8/7/01 1:05:00 PM	44	8/7/01 1:40:00 PM	36	8/7/01 2:15:00 PM	51
8/7/01 12:31:00 PM	31	8/7/01 1:06:00 PM	32	8/7/01 1:41:00 PM	37	8/7/01 2:16:00 PM	39
8/7/01 12:32:00 PM	32	8/7/01 1:07:00 PM	32	8/7/01 1:42:00 PM	39	8/7/01 2:17:00 PM	42
8/7/01 12:33:00 PM	31	8/7/01 1:08:00 PM	35	8/7/01 1:43:00 PM	37	8/7/01 2:18:00 PM	42
8/7/01 12:34:00 PM	48	8/7/01 1:09:00 PM	34	8/7/01 1:44:00 PM	34	8/7/01 2:19:00 PM	42
8/7/01 12:35:00 PM	35	8/7/01 1:10:00 PM	39	8/7/01 1:45:00 PM	36	8/7/01 2:20:00 PM	47
8/7/01 12:36:00 PM	33	8/7/01 1:11:00 PM	33	8/7/01 1:46:00 PM	37	8/7/01 2:21:00 PM	45
8/7/01 12:37:00 PM	35	8/7/01 1:12:00 PM	32	8/7/01 1:47:00 PM	35	8/7/01 2:22:00 PM	42
8/7/01 12:38:00 PM	34	8/7/01 1:13:00 PM	35	8/7/01 1:48:00 PM	38	8/7/01 2:23:00 PM	45
8/7/01 12:39:00 PM	32	8/7/01 1:14:00 PM	32	8/7/01 1:49:00 PM	36	8/7/01 2:24:00 PM	43
8/7/01 12:40:00 PM	34	8/7/01 1:15:00 PM	35	8/7/01 1:50:00 PM	38	8/7/01 2:25:00 PM	46
8/7/01 12:41:00 PM	38	8/7/01 1:16:00 PM	34	8/7/01 1:51:00 PM	38	8/7/01 2:26:00 PM	39
8/7/01 12:42:00 PM	32	8/7/01 1:17:00 PM	36	8/7/01 1:52:00 PM	41	8/7/01 2:27:00 PM	44
8/7/01 12:43:00 PM	33	8/7/01 1:18:00 PM	32	8/7/01 1:53:00 PM	39	8/7/01 2:28:00 PM	42
8/7/01 12:44:00 PM	36	8/7/01 1:19:00 PM	35	8/7/01 1:54:00 PM	43	8/7/01 2:29:00 PM	41
8/7/01 12:45:00 PM	54	8/7/01 1:20:00 PM	40	8/7/01 1:55:00 PM	39	8/7/01 2:30:00 PM	56
8/7/01 12:46:00 PM	31	8/7/01 1:21:00 PM	36	8/7/01 1:56:00 PM	36	8/7/01 2:31:00 PM	44
8/7/01 12:47:00 PM	32	8/7/01 1:22:00 PM	33	8/7/01 1:57:00 PM	39	8/7/01 2:32:00 PM	41
8/7/01 12:48:00 PM	34	8/7/01 1:23:00 PM	33	8/7/01 1:58:00 PM	46	8/7/01 2:33:00 PM	41
8/7/01 12:49:00 PM	34	8/7/01 1:24:00 PM	36	8/7/01 1:59:00 PM	36	8/7/01 2:34:00 PM	43
8/7/01 12:50:00 PM	35	8/7/01 1:25:00 PM	33	8/7/01 2:00:00 PM	36	8/7/01 2:35:00 PM	44
8/7/01 12:51:00 PM	33	8/7/01 1:26:00 PM	32	8/7/01 2:01:00 PM	39	8/7/01 2:36:00 PM	42
8/7/01 12:52:00 PM	35	8/7/01 1:27:00 PM	32	8/7/01 2:02:00 PM	38	8/7/01 2:37:00 PM	44
8/7/01 12:53:00 PM	40	8/7/01 1:28:00 PM	38	8/7/01 2:03:00 PM	37	8/7/01 2:38:00 PM	40
8/7/01 12:54:00 PM	45	8/7/01 1:29:00 PM	35	8/7/01 2:04:00 PM	38	8/7/01 2:39:00 PM	38
8/7/01 12:55:00 PM	41	8/7/01 1:30:00 PM	37	8/7/01 2:05:00 PM	37	8/7/01 2:40:00 PM	44
8/7/01 12:56:00 PM	39	8/7/01 1:31:00 PM	38	8/7/01 2:06:00 PM	34	8/7/01 2:41:00 PM	42
8/7/01 12:57:00 PM	40	8/7/01 1:32:00 PM	36	8/7/01 2:07:00 PM	37	8/7/01 2:42:00 PM	43

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/7/01 2:43:00 PM	39	8/7/01 3:18:00 PM	39	8/8/01 8:02:00 AM	67	8/8/01 8:37:00 AM	56
8/7/01 2:44:00 PM	43	8/7/01 3:19:00 PM	39	8/8/01 8:03:00 AM	66	8/8/01 8:38:00 AM	57
8/7/01 2:45:00 PM	40	8/7/01 3:20:00 PM	39	8/8/01 8:04:00 AM	64	8/8/01 8:39:00 AM	60
8/7/01 2:46:00 PM	40	8/7/01 3:21:00 PM	39	8/8/01 8:05:00 AM	67	8/8/01 8:40:00 AM	60
8/7/01 2:47:00 PM	44	8/7/01 3:22:00 PM	38	8/8/01 8:06:00 AM	70	8/8/01 8:41:00 AM	58
8/7/01 2:48:00 PM	40	8/7/01 3:23:00 PM	36	8/8/01 8:07:00 AM	64	8/8/01 8:42:00 AM	58
8/7/01 2:49:00 PM	38	8/7/01 3:24:00 PM	39	8/8/01 8:08:00 AM	64	8/8/01 8:43:00 AM	58
8/7/01 2:50:00 PM	45	8/7/01 3:25:00 PM	37	8/8/01 8:09:00 AM	69	8/8/01 8:44:00 AM	57
8/7/01 2:51:00 PM	43	8/7/01 3:26:00 PM	39	8/8/01 8:10:00 AM	66	8/8/01 8:45:00 AM	58
8/7/01 2:52:00 PM	41	8/7/01 3:27:00 PM	40	8/8/01 8:11:00 AM	64	8/8/01 8:46:00 AM	55
8/7/01 2:53:00 PM	39	8/7/01 3:28:00 PM	39	8/8/01 8:12:00 AM	65	8/8/01 8:47:00 AM	56
8/7/01 2:54:00 PM	40	8/7/01 3:29:00 PM	39	8/8/01 8:13:00 AM	66	8/8/01 8:48:00 AM	86
8/7/01 2:55:00 PM	41	8/7/01 3:30:00 PM	38	8/8/01 8:14:00 AM	62	8/8/01 8:49:00 AM	57
8/7/01 2:56:00 PM	43	8/7/01 3:31:00 PM	40	8/8/01 8:15:00 AM	93	8/8/01 8:50:00 AM	56
8/7/01 2:57:00 PM	38	8/7/01 3:32:00 PM	42	8/8/01 8:16:00 AM	67	8/8/01 8:51:00 AM	56
8/7/01 2:58:00 PM	41	8/7/01 3:33:00 PM	42	8/8/01 8:17:00 AM	216	8/8/01 8:52:00 AM	57
8/7/01 2:59:00 PM	36	8/7/01 3:34:00 PM	38	8/8/01 8:18:00 AM	66	8/8/01 8:53:00 AM	57
8/7/01 3:00:00 PM	47	8/7/01 3:35:00 PM	41	8/8/01 8:19:00 AM	62	8/8/01 8:54:00 AM	56
8/7/01 3:01:00 PM	39	8/8/01 7:45:00 AM	94	8/8/01 8:20:00 AM	61	8/8/01 8:55:00 AM	53
8/7/01 3:02:00 PM	38	8/8/01 7:46:00 AM	75	8/8/01 8:21:00 AM	56	8/8/01 8:56:00 AM	54
8/7/01 3:03:00 PM	40	8/8/01 7:47:00 AM	73	8/8/01 8:22:00 AM	62	8/8/01 8:57:00 AM	53
8/7/01 3:04:00 PM	39	8/8/01 7:48:00 AM	72	8/8/01 8:23:00 AM	62	8/8/01 8:58:00 AM	52
8/7/01 3:05:00 PM	39	8/8/01 7:49:00 AM	71	8/8/01 8:24:00 AM	64	8/8/01 8:59:00 AM	52
8/7/01 3:06:00 PM	38	8/8/01 7:50:00 AM	73	8/8/01 8:25:00 AM	60	8/8/01 9:00:00 AM	52
8/7/01 3:07:00 PM	39	8/8/01 7:51:00 AM	74	8/8/01 8:26:00 AM	60	8/8/01 9:01:00 AM	56
8/7/01 3:08:00 PM	36	8/8/01 7:52:00 AM	71	8/8/01 8:27:00 AM	60	8/8/01 9:02:00 AM	55
8/7/01 3:09:00 PM	36	8/8/01 7:53:00 AM	72	8/8/01 8:28:00 AM	58	8/8/01 9:03:00 AM	54
8/7/01 3:10:00 PM	44	8/8/01 7:54:00 AM	73	8/8/01 8:29:00 AM	57	8/8/01 9:04:00 AM	55
8/7/01 3:11:00 PM	50	8/8/01 7:55:00 AM	73	8/8/01 8:30:00 AM	53	8/8/01 9:05:00 AM	53
8/7/01 3:12:00 PM	37	8/8/01 7:56:00 AM	73	8/8/01 8:31:00 AM	56	8/8/01 9:06:00 AM	56
8/7/01 3:13:00 PM	42	8/8/01 7:57:00 AM	70	8/8/01 8:32:00 AM	50	8/8/01 9:07:00 AM	54
8/7/01 3:14:00 PM	42	8/8/01 7:58:00 AM	64	8/8/01 8:33:00 AM	56	8/8/01 9:08:00 AM	53
8/7/01 3:15:00 PM	43	8/8/01 7:59:00 AM	68	8/8/01 8:34:00 AM	56	8/8/01 9:09:00 AM	53
8/7/01 3:16:00 PM	42	8/8/01 8:00:00 AM	67	8/8/01 8:35:00 AM	57	8/8/01 9:10:00 AM	55
8/7/01 3:17:00 PM	38	8/8/01 8:01:00 AM	63	8/8/01 8:36:00 AM	56	8/8/01 9:11:00 AM	58

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/8/01 9:12:00 AM	59	8/8/01 9:47:00 AM	62	8/8/01 10:22:00 AM	55	8/8/01 10:57:00 AM	51
8/8/01 9:13:00 AM	59	8/8/01 9:48:00 AM	64	8/8/01 10:23:00 AM	52	8/8/01 10:58:00 AM	62
8/8/01 9:14:00 AM	56	8/8/01 9:49:00 AM	63	8/8/01 10:24:00 AM	49	8/8/01 10:59:00 AM	48
8/8/01 9:15:00 AM	62	8/8/01 9:50:00 AM	67	8/8/01 10:25:00 AM	53	8/8/01 11:00:00 AM	45
8/8/01 9:16:00 AM	61	8/8/01 9:51:00 AM	61	8/8/01 10:26:00 AM	52	8/8/01 11:01:00 AM	47
8/8/01 9:17:00 AM	60	8/8/01 9:52:00 AM	62	8/8/01 10:27:00 AM	118	8/8/01 11:02:00 AM	48
8/8/01 9:18:00 AM	59	8/8/01 9:53:00 AM	62	8/8/01 10:28:00 AM	49	8/8/01 11:03:00 AM	45
8/8/01 9:19:00 AM	63	8/8/01 9:54:00 AM	55	8/8/01 10:29:00 AM	50	8/8/01 11:04:00 AM	46
8/8/01 9:20:00 AM	61	8/8/01 9:55:00 AM	55	8/8/01 10:30:00 AM	50	8/8/01 11:05:00 AM	46
8/8/01 9:21:00 AM	60	8/8/01 9:56:00 AM	56	8/8/01 10:31:00 AM	51	8/8/01 11:06:00 AM	45
8/8/01 9:22:00 AM	59	8/8/01 9:57:00 AM	58	8/8/01 10:32:00 AM	52	8/8/01 11:07:00 AM	49
8/8/01 9:23:00 AM	56	8/8/01 9:58:00 AM	60	8/8/01 10:33:00 AM	54	8/8/01 11:08:00 AM	47
8/8/01 9:24:00 AM	59	8/8/01 9:59:00 AM	64	8/8/01 10:34:00 AM	51	8/8/01 11:09:00 AM	46
8/8/01 9:25:00 AM	62	8/8/01 10:00:00 AM	64	8/8/01 10:35:00 AM	52	8/8/01 11:10:00 AM	46
8/8/01 9:26:00 AM	61	8/8/01 10:01:00 AM	65	8/8/01 10:36:00 AM	54	8/8/01 11:11:00 AM	44
8/8/01 9:27:00 AM	58	8/8/01 10:02:00 AM	60	8/8/01 10:37:00 AM	79	8/8/01 11:12:00 AM	42
8/8/01 9:28:00 AM	57	8/8/01 10:03:00 AM	61	8/8/01 10:38:00 AM	59	8/8/01 11:13:00 AM	43
8/8/01 9:29:00 AM	58	8/8/01 10:04:00 AM	60	8/8/01 10:39:00 AM	55	8/8/01 11:14:00 AM	45
8/8/01 9:30:00 AM	60	8/8/01 10:05:00 AM	60	8/8/01 10:40:00 AM	59	8/8/01 11:15:00 AM	46
8/8/01 9:31:00 AM	62	8/8/01 10:06:00 AM	58	8/8/01 10:41:00 AM	55	8/8/01 11:16:00 AM	47
8/8/01 9:32:00 AM	61	8/8/01 10:07:00 AM	60	8/8/01 10:42:00 AM	58	8/8/01 11:17:00 AM	43
8/8/01 9:33:00 AM	61	8/8/01 10:08:00 AM	55	8/8/01 10:43:00 AM	55	8/8/01 11:18:00 AM	44
8/8/01 9:34:00 AM	75	8/8/01 10:09:00 AM	54	8/8/01 10:44:00 AM	57	8/8/01 11:19:00 AM	42
8/8/01 9:35:00 AM	60	8/8/01 10:10:00 AM	51	8/8/01 10:45:00 AM	62	8/8/01 11:20:00 AM	43
8/8/01 9:36:00 AM	61	8/8/01 10:11:00 AM	50	8/8/01 10:46:00 AM	54	8/8/01 11:21:00 AM	38
8/8/01 9:37:00 AM	60	8/8/01 10:12:00 AM	46	8/8/01 10:47:00 AM	50	8/8/01 11:22:00 AM	39
8/8/01 9:38:00 AM	60	8/8/01 10:13:00 AM	49	8/8/01 10:48:00 AM	49	8/8/01 11:23:00 AM	42
8/8/01 9:39:00 AM	62	8/8/01 10:14:00 AM	51	8/8/01 10:49:00 AM	52	8/8/01 11:24:00 AM	41
8/8/01 9:40:00 AM	60	8/8/01 10:15:00 AM	49	8/8/01 10:50:00 AM	49	8/8/01 11:25:00 AM	40
8/8/01 9:41:00 AM	69	8/8/01 10:16:00 AM	58	8/8/01 10:51:00 AM	47	8/8/01 11:26:00 AM	43
8/8/01 9:42:00 AM	59	8/8/01 10:17:00 AM	52	8/8/01 10:52:00 AM	48	8/8/01 11:27:00 AM	40
8/8/01 9:43:00 AM	55	8/8/01 10:18:00 AM	59	8/8/01 10:53:00 AM	46	8/8/01 11:28:00 AM	42
8/8/01 9:44:00 AM	58	8/8/01 10:19:00 AM	52	8/8/01 10:54:00 AM	51	8/8/01 11:29:00 AM	43
8/8/01 9:45:00 AM	57	8/8/01 10:20:00 AM	54	8/8/01 10:55:00 AM	47	8/8/01 11:30:00 AM	40
8/8/01 9:46:00 AM	58	8/8/01 10:21:00 AM	56	8/8/01 10:56:00 AM	48	8/8/01 11:31:00 AM	42

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/8/01 11:32:00 AM	45	8/8/01 12:07:00 PM	41	8/8/01 12:42:00 PM	31	8/8/01 1:17:00 PM	28
8/8/01 11:33:00 AM	44	8/8/01 12:08:00 PM	40	8/8/01 12:43:00 PM	32	8/8/01 1:18:00 PM	45
8/8/01 11:34:00 AM	52	8/8/01 12:09:00 PM	40	8/8/01 12:44:00 PM	30	8/8/01 1:19:00 PM	30
8/8/01 11:35:00 AM	47	8/8/01 12:10:00 PM	40	8/8/01 12:45:00 PM	30	8/8/01 1:20:00 PM	33
8/8/01 11:36:00 AM	45	8/8/01 12:11:00 PM	41	8/8/01 12:46:00 PM	31	8/8/01 1:21:00 PM	31
8/8/01 11:37:00 AM	42	8/8/01 12:12:00 PM	34	8/8/01 12:47:00 PM	32	8/8/01 1:22:00 PM	29
8/8/01 11:38:00 AM	40	8/8/01 12:13:00 PM	42	8/8/01 12:48:00 PM	30	8/8/01 1:23:00 PM	30
8/8/01 11:39:00 AM	45	8/8/01 12:14:00 PM	43	8/8/01 12:49:00 PM	35	8/8/01 1:24:00 PM	34
8/8/01 11:40:00 AM	45	8/8/01 12:15:00 PM	35	8/8/01 12:50:00 PM	47	8/8/01 1:25:00 PM	30
8/8/01 11:41:00 AM	46	8/8/01 12:16:00 PM	39	8/8/01 12:51:00 PM	33	8/8/01 1:26:00 PM	32
8/8/01 11:42:00 AM	43	8/8/01 12:17:00 PM	31	8/8/01 12:52:00 PM	34	8/8/01 1:27:00 PM	35
8/8/01 11:43:00 AM	42	8/8/01 12:18:00 PM	40	8/8/01 12:53:00 PM	35	8/8/01 1:28:00 PM	32
8/8/01 11:44:00 AM	38	8/8/01 12:19:00 PM	37	8/8/01 12:54:00 PM	34	8/8/01 1:29:00 PM	33
8/8/01 11:45:00 AM	43	8/8/01 12:20:00 PM	45	8/8/01 12:55:00 PM	35	8/8/01 1:30:00 PM	29
8/8/01 11:46:00 AM	43	8/8/01 12:21:00 PM	41	8/8/01 12:56:00 PM	35	8/8/01 1:31:00 PM	32
8/8/01 11:47:00 AM	46	8/8/01 12:22:00 PM	34	8/8/01 12:57:00 PM	33	8/8/01 1:32:00 PM	34
8/8/01 11:48:00 AM	44	8/8/01 12:23:00 PM	44	8/8/01 12:58:00 PM	34	8/8/01 1:33:00 PM	39
8/8/01 11:49:00 AM	41	8/8/01 12:24:00 PM	48	8/8/01 12:59:00 PM	32	8/8/01 1:34:00 PM	31
8/8/01 11:50:00 AM	41	8/8/01 12:25:00 PM	36	8/8/01 1:00:00 PM	34	8/8/01 1:35:00 PM	35
8/8/01 11:51:00 AM	38	8/8/01 12:26:00 PM	35	8/8/01 1:01:00 PM	48	8/8/01 1:36:00 PM	44
8/8/01 11:52:00 AM	39	8/8/01 12:27:00 PM	32	8/8/01 1:02:00 PM	32	8/8/01 1:37:00 PM	48
8/8/01 11:53:00 AM	42	8/8/01 12:28:00 PM	34	8/8/01 1:03:00 PM	31	8/8/01 1:38:00 PM	38
8/8/01 11:54:00 AM	35	8/8/01 12:29:00 PM	35	8/8/01 1:04:00 PM	30	8/8/01 1:39:00 PM	43
8/8/01 11:55:00 AM	34	8/8/01 12:30:00 PM	30	8/8/01 1:05:00 PM	32	8/8/01 1:40:00 PM	36
8/8/01 11:56:00 AM	35	8/8/01 12:31:00 PM	31	8/8/01 1:06:00 PM	30	8/8/01 1:41:00 PM	43
8/8/01 11:57:00 AM	36	8/8/01 12:32:00 PM	32	8/8/01 1:07:00 PM	30	8/8/01 1:42:00 PM	44
8/8/01 11:58:00 AM	36	8/8/01 12:33:00 PM	31	8/8/01 1:08:00 PM	28	8/8/01 1:43:00 PM	37
8/8/01 11:59:00 AM	38	8/8/01 12:34:00 PM	32	8/8/01 1:09:00 PM	29	8/8/01 1:44:00 PM	34
8/8/01 12:00:00 PM	39	8/8/01 12:35:00 PM	34	8/8/01 1:10:00 PM	34	8/8/01 1:45:00 PM	35
8/8/01 12:01:00 PM	48	8/8/01 12:36:00 PM	35	8/8/01 1:11:00 PM	32	8/8/01 1:46:00 PM	32
8/8/01 12:02:00 PM	44	8/8/01 12:37:00 PM	39	8/8/01 1:12:00 PM	33	8/8/01 1:47:00 PM	37
8/8/01 12:03:00 PM	40	8/8/01 12:38:00 PM	39	8/8/01 1:13:00 PM	31	8/8/01 1:48:00 PM	34
8/8/01 12:04:00 PM	37	8/8/01 12:39:00 PM	33	8/8/01 1:14:00 PM	29	8/8/01 1:49:00 PM	34
8/8/01 12:05:00 PM	38	8/8/01 12:40:00 PM	37	8/8/01 1:15:00 PM	31	8/8/01 1:50:00 PM	37
8/8/01 12:06:00 PM	37	8/8/01 12:41:00 PM	32	8/8/01 1:16:00 PM	30	8/8/01 1:51:00 PM	34

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/8/01 1:52:00 PM	31	8/8/01 2:27:00 PM	35	8/8/01 3:02:00 PM	37	8/8/01 3:37:00 PM	33
8/8/01 1:53:00 PM	32	8/8/01 2:28:00 PM	35	8/8/01 3:03:00 PM	32	8/8/01 3:38:00 PM	31
8/8/01 1:54:00 PM	34	8/8/01 2:29:00 PM	35	8/8/01 3:04:00 PM	31	8/8/01 3:39:00 PM	30
8/8/01 1:55:00 PM	31	8/8/01 2:30:00 PM	34	8/8/01 3:05:00 PM	31	8/8/01 3:40:00 PM	34
8/8/01 1:56:00 PM	36	8/8/01 2:31:00 PM	35	8/8/01 3:06:00 PM	35	8/8/01 3:41:00 PM	35
8/8/01 1:57:00 PM	31	8/8/01 2:32:00 PM	40	8/8/01 3:07:00 PM	38	8/8/01 3:42:00 PM	35
8/8/01 1:58:00 PM	28	8/8/01 2:33:00 PM	32	8/8/01 3:08:00 PM	38	8/8/01 3:43:00 PM	35
8/8/01 1:59:00 PM	27	8/8/01 2:34:00 PM	34	8/8/01 3:09:00 PM	35	8/8/01 3:44:00 PM	32
8/8/01 2:00:00 PM	32	8/8/01 2:35:00 PM	44	8/8/01 3:10:00 PM	33	8/8/01 3:45:00 PM	29
8/8/01 2:01:00 PM	31	8/8/01 2:36:00 PM	31	8/8/01 3:11:00 PM	34	8/8/01 3:46:00 PM	45
8/8/01 2:02:00 PM	30	8/8/01 2:37:00 PM	35	8/8/01 3:12:00 PM	32	8/8/01 3:47:00 PM	31
8/8/01 2:03:00 PM	30	8/8/01 2:38:00 PM	36	8/8/01 3:13:00 PM	31	8/8/01 3:48:00 PM	37
8/8/01 2:04:00 PM	31	8/8/01 2:39:00 PM	38	8/8/01 3:14:00 PM	33	8/8/01 3:49:00 PM	32
8/8/01 2:05:00 PM	34	8/8/01 2:40:00 PM	33	8/8/01 3:15:00 PM	32	8/8/01 3:50:00 PM	34
8/8/01 2:06:00 PM	30	8/8/01 2:41:00 PM	32	8/8/01 3:16:00 PM	37	8/8/01 3:51:00 PM	38
8/8/01 2:07:00 PM	35	8/8/01 2:42:00 PM	35	8/8/01 3:17:00 PM	35	8/8/01 3:52:00 PM	33
8/8/01 2:08:00 PM	33	8/8/01 2:43:00 PM	61	8/8/01 3:18:00 PM	35	8/8/01 3:53:00 PM	33
8/8/01 2:09:00 PM	34	8/8/01 2:44:00 PM	45	8/8/01 3:19:00 PM	33	8/8/01 3:54:00 PM	29
8/8/01 2:10:00 PM	34	8/8/01 2:45:00 PM	31	8/8/01 3:20:00 PM	38	8/8/01 3:55:00 PM	29
8/8/01 2:11:00 PM	33	8/8/01 2:46:00 PM	31	8/8/01 3:21:00 PM	33	8/8/01 3:56:00 PM	32
8/8/01 2:12:00 PM	29	8/8/01 2:47:00 PM	32	8/8/01 3:22:00 PM	34	8/8/01 3:57:00 PM	32
8/8/01 2:13:00 PM	36	8/8/01 2:48:00 PM	32	8/8/01 3:23:00 PM	34	8/8/01 3:58:00 PM	51
8/8/01 2:14:00 PM	32	8/8/01 2:49:00 PM	42	8/8/01 3:24:00 PM	41	8/8/01 3:59:00 PM	29
8/8/01 2:15:00 PM	31	8/8/01 2:50:00 PM	33	8/8/01 3:25:00 PM	49	8/8/01 4:00:00 PM	30
8/8/01 2:16:00 PM	31	8/8/01 2:51:00 PM	35	8/8/01 3:26:00 PM	38	8/8/01 4:01:00 PM	31
8/8/01 2:17:00 PM	33	8/8/01 2:52:00 PM	33	8/8/01 3:27:00 PM	34	8/8/01 4:02:00 PM	30
8/8/01 2:18:00 PM	31	8/8/01 2:53:00 PM	30	8/8/01 3:28:00 PM	32	8/8/01 4:03:00 PM	30
8/8/01 2:19:00 PM	35	8/8/01 2:54:00 PM	31	8/8/01 3:29:00 PM	33	8/8/01 4:04:00 PM	29
8/8/01 2:20:00 PM	34	8/8/01 2:55:00 PM	30	8/8/01 3:30:00 PM	38	8/8/01 4:05:00 PM	29
8/8/01 2:21:00 PM	36	8/8/01 2:56:00 PM	30	8/8/01 3:31:00 PM	37	8/8/01 4:06:00 PM	29
8/8/01 2:22:00 PM	35	8/8/01 2:57:00 PM	30	8/8/01 3:32:00 PM	47	8/8/01 4:07:00 PM	29
8/8/01 2:23:00 PM	28	8/8/01 2:58:00 PM	41	8/8/01 3:33:00 PM	35	8/8/01 4:08:00 PM	33
8/8/01 2:24:00 PM	32	8/8/01 2:59:00 PM	36	8/8/01 3:34:00 PM	41	8/8/01 4:09:00 PM	30
8/8/01 2:25:00 PM	34	8/8/01 3:00:00 PM	36	8/8/01 3:35:00 PM	32	8/8/01 4:10:00 PM	31
8/8/01 2:26:00 PM	31	8/8/01 3:01:00 PM	37	8/8/01 3:36:00 PM	30	8/8/01 4:11:00 PM	32

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/8/01 4:12:00 PM	33	8/9/01 7:42:00 AM	35	8/9/01 8:17:00 AM	33	8/9/01 8:52:00 AM	44
8/8/01 4:13:00 PM	32	8/9/01 7:43:00 AM	35	8/9/01 8:18:00 AM	35	8/9/01 8:53:00 AM	36
8/8/01 4:14:00 PM	45	8/9/01 7:44:00 AM	37	8/9/01 8:19:00 AM	32	8/9/01 8:54:00 AM	32
8/8/01 4:15:00 PM	124	8/9/01 7:45:00 AM	39	8/9/01 8:20:00 AM	35	8/9/01 8:55:00 AM	32
8/8/01 4:16:00 PM	31	8/9/01 7:46:00 AM	36	8/9/01 8:21:00 AM	35	8/9/01 8:56:00 AM	33
8/8/01 4:17:00 PM	242	8/9/01 7:47:00 AM	32	8/9/01 8:22:00 AM	36	8/9/01 8:57:00 AM	33
8/8/01 4:18:00 PM	230	8/9/01 7:48:00 AM	38	8/9/01 8:23:00 AM	32	8/9/01 8:58:00 AM	34
8/8/01 4:19:00 PM	32	8/9/01 7:49:00 AM	33	8/9/01 8:24:00 AM	32	8/9/01 8:59:00 AM	37
8/9/01 7:15:00 AM	46	8/9/01 7:50:00 AM	34	8/9/01 8:25:00 AM	31	8/9/01 9:00:00 AM	35
8/9/01 7:16:00 AM	43	8/9/01 7:51:00 AM	33	8/9/01 8:26:00 AM	37	8/9/01 9:01:00 AM	36
8/9/01 7:17:00 AM	38	8/9/01 7:52:00 AM	35	8/9/01 8:27:00 AM	33	8/9/01 9:02:00 AM	32
8/9/01 7:18:00 AM	51	8/9/01 7:53:00 AM	37	8/9/01 8:28:00 AM	35	8/9/01 9:03:00 AM	34
8/9/01 7:19:00 AM	86	8/9/01 7:54:00 AM	37	8/9/01 8:29:00 AM	35	8/9/01 9:04:00 AM	37
8/9/01 7:20:00 AM	43	8/9/01 7:55:00 AM	35	8/9/01 8:30:00 AM	34	8/9/01 9:05:00 AM	32
8/9/01 7:21:00 AM	36	8/9/01 7:56:00 AM	33	8/9/01 8:31:00 AM	33	8/9/01 9:06:00 AM	37
8/9/01 7:22:00 AM	33	8/9/01 7:57:00 AM	37	8/9/01 8:32:00 AM	32	8/9/01 9:07:00 AM	35
8/9/01 7:23:00 AM	34	8/9/01 7:58:00 AM	33	8/9/01 8:33:00 AM	34	8/9/01 9:08:00 AM	34
8/9/01 7:24:00 AM	34	8/9/01 7:59:00 AM	37	8/9/01 8:34:00 AM	34	8/9/01 9:09:00 AM	35
8/9/01 7:25:00 AM	39	8/9/01 8:00:00 AM	31	8/9/01 8:35:00 AM	33	8/9/01 9:10:00 AM	32
8/9/01 7:26:00 AM	47	8/9/01 8:01:00 AM	35	8/9/01 8:36:00 AM	34	8/9/01 9:11:00 AM	34
8/9/01 7:27:00 AM	36	8/9/01 8:02:00 AM	32	8/9/01 8:37:00 AM	31	8/9/01 9:12:00 AM	36
8/9/01 7:28:00 AM	38	8/9/01 8:03:00 AM	35	8/9/01 8:38:00 AM	32	8/9/01 9:13:00 AM	34
8/9/01 7:29:00 AM	36	8/9/01 8:04:00 AM	35	8/9/01 8:39:00 AM	35	8/9/01 9:14:00 AM	31
8/9/01 7:30:00 AM	38	8/9/01 8:05:00 AM	34	8/9/01 8:40:00 AM	39	8/9/01 9:15:00 AM	32
8/9/01 7:31:00 AM	36	8/9/01 8:06:00 AM	30	8/9/01 8:41:00 AM	35	8/9/01 9:16:00 AM	33
8/9/01 7:32:00 AM	38	8/9/01 8:07:00 AM	33	8/9/01 8:42:00 AM	38	8/9/01 9:17:00 AM	34
8/9/01 7:33:00 AM	36	8/9/01 8:08:00 AM	32	8/9/01 8:43:00 AM	36	8/9/01 9:18:00 AM	31
8/9/01 7:34:00 AM	36	8/9/01 8:09:00 AM	33	8/9/01 8:44:00 AM	36	8/9/01 9:19:00 AM	31
8/9/01 7:35:00 AM	37	8/9/01 8:10:00 AM	33	8/9/01 8:45:00 AM	36	8/9/01 9:20:00 AM	34
8/9/01 7:36:00 AM	34	8/9/01 8:11:00 AM	33	8/9/01 8:46:00 AM	36	8/9/01 9:21:00 AM	29
8/9/01 7:37:00 AM	38	8/9/01 8:12:00 AM	32	8/9/01 8:47:00 AM	37	8/9/01 9:22:00 AM	31
8/9/01 7:38:00 AM	36	8/9/01 8:13:00 AM	30	8/9/01 8:48:00 AM	39	8/9/01 9:23:00 AM	38
8/9/01 7:39:00 AM	34	8/9/01 8:14:00 AM	34	8/9/01 8:49:00 AM	38	8/9/01 9:24:00 AM	32
8/9/01 7:40:00 AM	35	8/9/01 8:15:00 AM	33	8/9/01 8:50:00 AM	34	8/9/01 9:25:00 AM	29
8/9/01 7:41:00 AM	32	8/9/01 8:16:00 AM	32	8/9/01 8:51:00 AM	35	8/9/01 9:26:00 AM	32

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/9/01 9:27:00 AM	34	8/9/01 10:02:00 AM	21	8/9/01 10:37:00 AM	15	8/9/01 11:12:00 AM	18
8/9/01 9:28:00 AM	34	8/9/01 10:03:00 AM	25	8/9/01 10:38:00 AM	16	8/9/01 11:13:00 AM	19
8/9/01 9:29:00 AM	37	8/9/01 10:04:00 AM	52	8/9/01 10:39:00 AM	16	8/9/01 11:14:00 AM	17
8/9/01 9:30:00 AM	32	8/9/01 10:05:00 AM	58	8/9/01 10:40:00 AM	15	8/9/01 11:15:00 AM	18
8/9/01 9:31:00 AM	30	8/9/01 10:06:00 AM	22	8/9/01 10:41:00 AM	16	8/9/01 11:16:00 AM	16
8/9/01 9:32:00 AM	31	8/9/01 10:07:00 AM	20	8/9/01 10:42:00 AM	18	8/9/01 11:17:00 AM	18
8/9/01 9:33:00 AM	30	8/9/01 10:08:00 AM	18	8/9/01 10:43:00 AM	20	8/9/01 11:18:00 AM	18
8/9/01 9:34:00 AM	33	8/9/01 10:09:00 AM	16	8/9/01 10:44:00 AM	20	8/9/01 11:19:00 AM	19
8/9/01 9:35:00 AM	31	8/9/01 10:10:00 AM	16	8/9/01 10:45:00 AM	21	8/9/01 11:20:00 AM	18
8/9/01 9:36:00 AM	30	8/9/01 10:11:00 AM	13	8/9/01 10:46:00 AM	17	8/9/01 11:21:00 AM	19
8/9/01 9:37:00 AM	31	8/9/01 10:12:00 AM	16	8/9/01 10:47:00 AM	18	8/9/01 11:22:00 AM	18
8/9/01 9:38:00 AM	32	8/9/01 10:13:00 AM	19	8/9/01 10:48:00 AM	17	8/9/01 11:23:00 AM	16
8/9/01 9:39:00 AM	29	8/9/01 10:14:00 AM	22	8/9/01 10:49:00 AM	18	8/9/01 11:24:00 AM	17
8/9/01 9:40:00 AM	31	8/9/01 10:15:00 AM	23	8/9/01 10:50:00 AM	16	8/9/01 11:25:00 AM	17
8/9/01 9:41:00 AM	33	8/9/01 10:16:00 AM	22	8/9/01 10:51:00 AM	18	8/9/01 11:26:00 AM	18
8/9/01 9:42:00 AM	28	8/9/01 10:17:00 AM	25	8/9/01 10:52:00 AM	19	8/9/01 11:27:00 AM	18
8/9/01 9:43:00 AM	29	8/9/01 10:18:00 AM	24	8/9/01 10:53:00 AM	17	8/9/01 11:28:00 AM	18
8/9/01 9:44:00 AM	28	8/9/01 10:19:00 AM	22	8/9/01 10:54:00 AM	19	8/9/01 11:29:00 AM	18
8/9/01 9:45:00 AM	29	8/9/01 10:20:00 AM	20	8/9/01 10:55:00 AM	20	8/9/01 11:30:00 AM	20
8/9/01 9:46:00 AM	28	8/9/01 10:21:00 AM	21	8/9/01 10:56:00 AM	19	8/9/01 11:31:00 AM	19
8/9/01 9:47:00 AM	32	8/9/01 10:22:00 AM	21	8/9/01 10:57:00 AM	19	8/9/01 11:32:00 AM	19
8/9/01 9:48:00 AM	27	8/9/01 10:23:00 AM	22	8/9/01 10:58:00 AM	20	8/9/01 11:33:00 AM	19
8/9/01 9:49:00 AM	31	8/9/01 10:24:00 AM	21	8/9/01 10:59:00 AM	20	8/9/01 11:34:00 AM	18
8/9/01 9:50:00 AM	42	8/9/01 10:25:00 AM	22	8/9/01 11:00:00 AM	21	8/9/01 11:35:00 AM	20
8/9/01 9:51:00 AM	30	8/9/01 10:26:00 AM	21	8/9/01 11:01:00 AM	20	8/9/01 11:36:00 AM	18
8/9/01 9:52:00 AM	30	8/9/01 10:27:00 AM	24	8/9/01 11:02:00 AM	20	8/9/01 11:37:00 AM	18
8/9/01 9:53:00 AM	62	8/9/01 10:28:00 AM	27	8/9/01 11:03:00 AM	20	8/9/01 11:38:00 AM	18
8/9/01 9:54:00 AM	198	8/9/01 10:29:00 AM	19	8/9/01 11:04:00 AM	19	8/9/01 11:39:00 AM	17
8/9/01 9:55:00 AM	131	8/9/01 10:30:00 AM	16	8/9/01 11:05:00 AM	18	8/9/01 11:40:00 AM	17
8/9/01 9:56:00 AM	32	8/9/01 10:31:00 AM	16	8/9/01 11:06:00 AM	17	8/9/01 11:41:00 AM	17
8/9/01 9:57:00 AM	55	8/9/01 10:32:00 AM	14	8/9/01 11:07:00 AM	18	8/9/01 11:42:00 AM	17
8/9/01 9:58:00 AM	44	8/9/01 10:33:00 AM	18	8/9/01 11:08:00 AM	19	8/9/01 11:43:00 AM	17
8/9/01 9:59:00 AM	28	8/9/01 10:34:00 AM	14	8/9/01 11:09:00 AM	20	8/9/01 11:44:00 AM	19
8/9/01 10:00:00 AM	20	8/9/01 10:35:00 AM	141	8/9/01 11:10:00 AM	19	8/9/01 11:45:00 AM	20
8/9/01 10:01:00 AM	40	8/9/01 10:36:00 AM	59	8/9/01 11:11:00 AM	19	8/9/01 11:46:00 AM	20

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/9/01 11:47:00 AM	20	8/9/01 12:22:00 PM	25	8/9/01 12:57:00 PM	75	8/10/01 8:56:00 AM	117
8/9/01 11:48:00 AM	21	8/9/01 12:23:00 PM	26	8/9/01 12:58:00 PM	14	8/10/01 8:57:00 AM	118
8/9/01 11:49:00 AM	20	8/9/01 12:24:00 PM	22	8/9/01 12:59:00 PM	17	8/10/01 8:58:00 AM	122
8/9/01 11:50:00 AM	21	8/9/01 12:25:00 PM	23	8/9/01 1:00:00 PM	31	8/10/01 8:59:00 AM	119
8/9/01 11:51:00 AM	23	8/9/01 12:26:00 PM	24	8/10/01 8:25:00 AM	134	8/10/01 9:00:00 AM	113
8/9/01 11:52:00 AM	23	8/9/01 12:27:00 PM	24	8/10/01 8:26:00 AM	150	8/10/01 9:01:00 AM	126
8/9/01 11:53:00 AM	22	8/9/01 12:28:00 PM	25	8/10/01 8:27:00 AM	141	8/10/01 9:02:00 AM	122
8/9/01 11:54:00 AM	29	8/9/01 12:29:00 PM	20	8/10/01 8:28:00 AM	138	8/10/01 9:03:00 AM	126
8/9/01 11:55:00 AM	30	8/9/01 12:30:00 PM	23	8/10/01 8:29:00 AM	134	8/10/01 9:04:00 AM	119
8/9/01 11:56:00 AM	24	8/9/01 12:31:00 PM	21	8/10/01 8:30:00 AM	140	8/10/01 9:05:00 AM	122
8/9/01 11:57:00 AM	22	8/9/01 12:32:00 PM	22	8/10/01 8:31:00 AM	138	8/10/01 9:06:00 AM	120
8/9/01 11:58:00 AM	30	8/9/01 12:33:00 PM	22	8/10/01 8:32:00 AM	138	8/10/01 9:07:00 AM	121
8/9/01 11:59:00 AM	23	8/9/01 12:34:00 PM	62	8/10/01 8:33:00 AM	141	8/10/01 9:08:00 AM	123
8/9/01 12:00:00 PM	26	8/9/01 12:35:00 PM	72	8/10/01 8:34:00 AM	135	8/10/01 9:09:00 AM	126
8/9/01 12:01:00 PM	23	8/9/01 12:36:00 PM	28	8/10/01 8:35:00 AM	132	8/10/01 9:10:00 AM	120
8/9/01 12:02:00 PM	23	8/9/01 12:37:00 PM	26	8/10/01 8:36:00 AM	138	8/10/01 9:11:00 AM	120
8/9/01 12:03:00 PM	22	8/9/01 12:38:00 PM	26	8/10/01 8:37:00 AM	150	8/10/01 9:12:00 AM	124
8/9/01 12:04:00 PM	24	8/9/01 12:39:00 PM	22	8/10/01 8:38:00 AM	132	8/10/01 9:13:00 AM	120
8/9/01 12:05:00 PM	23	8/9/01 12:40:00 PM	24	8/10/01 8:39:00 AM	126	8/10/01 9:14:00 AM	122
8/9/01 12:06:00 PM	23	8/9/01 12:41:00 PM	26	8/10/01 8:40:00 AM	127	8/10/01 9:15:00 AM	128
8/9/01 12:07:00 PM	22	8/9/01 12:42:00 PM	26	8/10/01 8:41:00 AM	125	8/10/01 9:16:00 AM	129
8/9/01 12:08:00 PM	23	8/9/01 12:43:00 PM	23	8/10/01 8:42:00 AM	124	8/10/01 9:17:00 AM	123
8/9/01 12:09:00 PM	24	8/9/01 12:44:00 PM	28	8/10/01 8:43:00 AM	125	8/10/01 9:18:00 AM	127
8/9/01 12:10:00 PM	22	8/9/01 12:45:00 PM	32	8/10/01 8:44:00 AM	119	8/10/01 9:19:00 AM	124
8/9/01 12:11:00 PM	24	8/9/01 12:46:00 PM	19	8/10/01 8:45:00 AM	125	8/10/01 9:20:00 AM	129
8/9/01 12:12:00 PM	22	8/9/01 12:47:00 PM	24	8/10/01 8:46:00 AM	124	8/10/01 9:21:00 AM	146
8/9/01 12:13:00 PM	21	8/9/01 12:48:00 PM	17	8/10/01 8:47:00 AM	122	8/10/01 9:22:00 AM	127
8/9/01 12:14:00 PM	22	8/9/01 12:49:00 PM	16	8/10/01 8:48:00 AM	115	8/10/01 9:23:00 AM	130
8/9/01 12:15:00 PM	24	8/9/01 12:50:00 PM	20	8/10/01 8:49:00 AM	120	8/10/01 9:24:00 AM	128
8/9/01 12:16:00 PM	26	8/9/01 12:51:00 PM	16	8/10/01 8:50:00 AM	116	8/10/01 9:25:00 AM	129
8/9/01 12:17:00 PM	30	8/9/01 12:52:00 PM	18	8/10/01 8:51:00 AM	118	8/10/01 9:26:00 AM	125
8/9/01 12:18:00 PM	27	8/9/01 12:53:00 PM	16	8/10/01 8:52:00 AM	120	8/10/01 9:27:00 AM	125
8/9/01 12:19:00 PM	27	8/9/01 12:54:00 PM	20	8/10/01 8:53:00 AM	121	8/10/01 9:28:00 AM	118
8/9/01 12:20:00 PM	21	8/9/01 12:55:00 PM	18	8/10/01 8:54:00 AM	113	8/10/01 9:29:00 AM	123
8/9/01 12:21:00 PM	25	8/9/01 12:56:00 PM	20	8/10/01 8:55:00 AM	120	8/10/01 9:30:00 AM	118

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/10/01 9:31:00 AM	126	8/10/01 10:06:00 AM	74	8/10/01 10:41:00 AM	89	8/10/01 11:16:00 AM	72
8/10/01 9:32:00 AM	133	8/10/01 10:07:00 AM	86	8/10/01 10:42:00 AM	86	8/10/01 11:17:00 AM	72
8/10/01 9:33:00 AM	124	8/10/01 10:08:00 AM	71	8/10/01 10:43:00 AM	86	8/10/01 11:18:00 AM	70
8/10/01 9:34:00 AM	130	8/10/01 10:09:00 AM	82	8/10/01 10:44:00 AM	84	8/10/01 11:19:00 AM	69
8/10/01 9:35:00 AM	149	8/10/01 10:10:00 AM	86	8/10/01 10:45:00 AM	86	8/10/01 11:20:00 AM	72
8/10/01 9:36:00 AM	128	8/10/01 10:11:00 AM	108	8/10/01 10:46:00 AM	84	8/10/01 11:21:00 AM	73
8/10/01 9:37:00 AM	136	8/10/01 10:12:00 AM	121	8/10/01 10:47:00 AM	84	8/10/01 11:22:00 AM	75
8/10/01 9:38:00 AM	131	8/10/01 10:13:00 AM	109	8/10/01 10:48:00 AM	83	8/10/01 11:23:00 AM	73
8/10/01 9:39:00 AM	224	8/10/01 10:14:00 AM	103	8/10/01 10:49:00 AM	82	8/10/01 11:24:00 AM	72
8/10/01 9:40:00 AM	132	8/10/01 10:15:00 AM	101	8/10/01 10:50:00 AM	78	8/10/01 11:25:00 AM	72
8/10/01 9:41:00 AM	139	8/10/01 10:16:00 AM	102	8/10/01 10:51:00 AM	79	8/10/01 11:26:00 AM	74
8/10/01 9:42:00 AM	137	8/10/01 10:17:00 AM	100	8/10/01 10:52:00 AM	79	8/10/01 11:27:00 AM	70
8/10/01 9:43:00 AM	204	8/10/01 10:18:00 AM	96	8/10/01 10:53:00 AM	76	8/10/01 11:28:00 AM	68
8/10/01 9:44:00 AM	130	8/10/01 10:19:00 AM	96	8/10/01 10:54:00 AM	78	8/10/01 11:29:00 AM	74
8/10/01 9:45:00 AM	100	8/10/01 10:20:00 AM	96	8/10/01 10:55:00 AM	75	8/10/01 11:30:00 AM	70
8/10/01 9:46:00 AM	128	8/10/01 10:21:00 AM	98	8/10/01 10:56:00 AM	74	8/10/01 11:31:00 AM	72
8/10/01 9:47:00 AM	138	8/10/01 10:22:00 AM	93	8/10/01 10:57:00 AM	80	8/10/01 11:32:00 AM	73
8/10/01 9:48:00 AM	117	8/10/01 10:23:00 AM	95	8/10/01 10:58:00 AM	70	8/10/01 11:33:00 AM	70
8/10/01 9:49:00 AM	131	8/10/01 10:24:00 AM	94	8/10/01 10:59:00 AM	66	8/10/01 11:34:00 AM	72
8/10/01 9:50:00 AM	133	8/10/01 10:25:00 AM	88	8/10/01 11:00:00 AM	86	8/10/01 11:35:00 AM	71
8/10/01 9:51:00 AM	127	8/10/01 10:26:00 AM	90	8/10/01 11:01:00 AM	79	8/10/01 11:36:00 AM	69
8/10/01 9:52:00 AM	128	8/10/01 10:27:00 AM	89	8/10/01 11:02:00 AM	102	8/10/01 11:37:00 AM	70
8/10/01 9:53:00 AM	123	8/10/01 10:28:00 AM	88	8/10/01 11:03:00 AM	70	8/10/01 11:38:00 AM	78
8/10/01 9:54:00 AM	124	8/10/01 10:29:00 AM	87	8/10/01 11:04:00 AM	71	8/10/01 11:39:00 AM	67
8/10/01 9:55:00 AM	126	8/10/01 10:30:00 AM	88	8/10/01 11:05:00 AM	70	8/10/01 11:40:00 AM	74
8/10/01 9:56:00 AM	125	8/10/01 10:31:00 AM	90	8/10/01 11:06:00 AM	75	8/10/01 11:41:00 AM	70
8/10/01 9:57:00 AM	130	8/10/01 10:32:00 AM	92	8/10/01 11:07:00 AM	69	8/10/01 11:42:00 AM	70
8/10/01 9:58:00 AM	161	8/10/01 10:33:00 AM	89	8/10/01 11:08:00 AM	75	8/10/01 11:43:00 AM	71
8/10/01 9:59:00 AM	107	8/10/01 10:34:00 AM	88	8/10/01 11:09:00 AM	72	8/10/01 11:44:00 AM	67
8/10/01 10:00:00 AM	86	8/10/01 10:35:00 AM	90	8/10/01 11:10:00 AM	67	8/10/01 11:45:00 AM	76
8/10/01 10:01:00 AM	98	8/10/01 10:36:00 AM	89	8/10/01 11:11:00 AM	70	8/10/01 11:46:00 AM	69
8/10/01 10:02:00 AM	120	8/10/01 10:37:00 AM	89	8/10/01 11:12:00 AM	73	8/10/01 11:47:00 AM	69
8/10/01 10:03:00 AM	97	8/10/01 10:38:00 AM	88	8/10/01 11:13:00 AM	66	8/10/01 11:48:00 AM	67
8/10/01 10:04:00 AM	85	8/10/01 10:39:00 AM	89	8/10/01 11:14:00 AM	68	8/10/01 11:49:00 AM	67
8/10/01 10:05:00 AM	75	8/10/01 10:40:00 AM	88	8/10/01 11:15:00 AM	72	8/10/01 11:50:00 AM	68

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/10/01 11:51:00 AM	67	8/10/01 12:26:00 PM	60	8/10/01 1:01:00 PM	63	8/10/01 1:36:00 PM	67
8/10/01 11:52:00 AM	70	8/10/01 12:27:00 PM	62	8/10/01 1:02:00 PM	66	8/10/01 1:37:00 PM	59
8/10/01 11:53:00 AM	66	8/10/01 12:28:00 PM	64	8/10/01 1:03:00 PM	64	8/10/01 1:38:00 PM	60
8/10/01 11:54:00 AM	65	8/10/01 12:29:00 PM	65	8/10/01 1:04:00 PM	68	8/10/01 1:39:00 PM	60
8/10/01 11:55:00 AM	65	8/10/01 12:30:00 PM	64	8/10/01 1:05:00 PM	72	8/10/01 1:40:00 PM	57
8/10/01 11:56:00 AM	69	8/10/01 12:31:00 PM	64	8/10/01 1:06:00 PM	63	8/10/01 1:41:00 PM	60
8/10/01 11:57:00 AM	71	8/10/01 12:32:00 PM	62	8/10/01 1:07:00 PM	67	8/10/01 1:42:00 PM	61
8/10/01 11:58:00 AM	67	8/10/01 12:33:00 PM	60	8/10/01 1:08:00 PM	61	8/10/01 1:43:00 PM	62
8/10/01 11:59:00 AM	68	8/10/01 12:34:00 PM	63	8/10/01 1:09:00 PM	61	8/10/01 1:44:00 PM	57
8/10/01 12:00:00 PM	67	8/10/01 12:35:00 PM	66	8/10/01 1:10:00 PM	62	8/10/01 1:45:00 PM	60
8/10/01 12:01:00 PM	68	8/10/01 12:36:00 PM	59	8/10/01 1:11:00 PM	65	8/10/01 1:46:00 PM	64
8/10/01 12:02:00 PM	67	8/10/01 12:37:00 PM	62	8/10/01 1:12:00 PM	61	8/10/01 1:47:00 PM	62
8/10/01 12:03:00 PM	66	8/10/01 12:38:00 PM	70	8/10/01 1:13:00 PM	60	8/10/01 1:48:00 PM	66
8/10/01 12:04:00 PM	71	8/10/01 12:39:00 PM	64	8/10/01 1:14:00 PM	60	8/10/01 1:49:00 PM	59
8/10/01 12:05:00 PM	71	8/10/01 12:40:00 PM	66	8/10/01 1:15:00 PM	58	8/10/01 1:50:00 PM	60
8/10/01 12:06:00 PM	69	8/10/01 12:41:00 PM	61	8/10/01 1:16:00 PM	58	8/10/01 1:51:00 PM	56
8/10/01 12:07:00 PM	67	8/10/01 12:42:00 PM	63	8/10/01 1:17:00 PM	69	8/10/01 1:52:00 PM	61
8/10/01 12:08:00 PM	67	8/10/01 12:43:00 PM	64	8/10/01 1:18:00 PM	61	8/10/01 1:53:00 PM	58
8/10/01 12:09:00 PM	66	8/10/01 12:44:00 PM	63	8/10/01 1:19:00 PM	84	8/10/01 1:54:00 PM	57
8/10/01 12:10:00 PM	67	8/10/01 12:45:00 PM	65	8/10/01 1:20:00 PM	62	8/10/01 1:55:00 PM	57
8/10/01 12:11:00 PM	67	8/10/01 12:46:00 PM	64	8/10/01 1:21:00 PM	57	8/10/01 1:56:00 PM	60
8/10/01 12:12:00 PM	70	8/10/01 12:47:00 PM	70	8/10/01 1:22:00 PM	55	8/10/01 1:57:00 PM	59
8/10/01 12:13:00 PM	70	8/10/01 12:48:00 PM	66	8/10/01 1:23:00 PM	58	8/10/01 1:58:00 PM	56
8/10/01 12:14:00 PM	61	8/10/01 12:49:00 PM	67	8/10/01 1:24:00 PM	53	8/10/01 1:59:00 PM	58
8/10/01 12:15:00 PM	72	8/10/01 12:50:00 PM	66	8/10/01 1:25:00 PM	55	8/10/01 2:00:00 PM	58
8/10/01 12:16:00 PM	68	8/10/01 12:51:00 PM	62	8/10/01 1:26:00 PM	55	8/10/01 2:01:00 PM	53
8/10/01 12:17:00 PM	63	8/10/01 12:52:00 PM	62	8/10/01 1:27:00 PM	57	8/10/01 2:02:00 PM	56
8/10/01 12:18:00 PM	67	8/10/01 12:53:00 PM	59	8/10/01 1:28:00 PM	55	8/10/01 2:03:00 PM	53
8/10/01 12:19:00 PM	66	8/10/01 12:54:00 PM	58	8/10/01 1:29:00 PM	59	8/10/01 2:04:00 PM	59
8/10/01 12:20:00 PM	62	8/10/01 12:55:00 PM	59	8/10/01 1:30:00 PM	60	8/10/01 2:05:00 PM	54
8/10/01 12:21:00 PM	61	8/10/01 12:56:00 PM	62	8/10/01 1:31:00 PM	57	8/10/01 2:06:00 PM	56
8/10/01 12:22:00 PM	61	8/10/01 12:57:00 PM	71	8/10/01 1:32:00 PM	56	8/10/01 2:07:00 PM	59
8/10/01 12:23:00 PM	61	8/10/01 12:58:00 PM	58	8/10/01 1:33:00 PM	64	8/10/01 2:08:00 PM	56
8/10/01 12:24:00 PM	60	8/10/01 12:59:00 PM	62	8/10/01 1:34:00 PM	68	8/10/01 2:09:00 PM	50
8/10/01 12:25:00 PM	61	8/10/01 1:00:00 PM	63	8/10/01 1:35:00 PM	59	8/10/01 2:10:00 PM	58

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/10/01 2:11:00 PM	53	8/10/01 2:46:00 PM	41	8/14/01 9:27:00 AM	46	8/15/01 8:05:00 AM	11
8/10/01 2:12:00 PM	53	8/10/01 2:47:00 PM	41	8/14/01 9:27:00 AM	122	8/15/01 8:06:00 AM	11
8/10/01 2:13:00 PM	50	8/10/01 2:48:00 PM	40	8/14/01 9:27:00 AM	377	8/15/01 8:07:00 AM	12
8/10/01 2:14:00 PM	50	8/10/01 2:49:00 PM	43	8/14/01 9:27:00 AM	486	8/15/01 8:08:00 AM	10
8/10/01 2:15:00 PM	50	8/10/01 2:50:00 PM	44	8/14/01 9:27:00 AM	362	8/15/01 8:09:00 AM	10
8/10/01 2:16:00 PM	47	8/10/01 2:51:00 PM	41	8/14/01 9:27:00 AM	22	8/15/01 8:10:00 AM	24
8/10/01 2:17:00 PM	51	8/10/01 2:52:00 PM	39	8/14/01 9:28:00 AM	11	8/15/01 8:11:00 AM	81
8/10/01 2:18:00 PM	48	8/10/01 2:53:00 PM	40	8/14/01 9:28:00 AM	24	8/15/01 8:12:00 AM	54
8/10/01 2:19:00 PM	48	8/10/01 2:54:00 PM	43	8/15/01 7:38:00 AM	89	8/15/01 8:13:00 AM	13
8/10/01 2:20:00 PM	46	8/10/01 2:55:00 PM	42	8/15/01 7:39:00 AM	95	8/15/01 8:14:00 AM	12
8/10/01 2:21:00 PM	47	8/10/01 2:56:00 PM	42	8/15/01 7:40:00 AM	41	8/15/01 8:15:00 AM	11
8/10/01 2:22:00 PM	46	8/10/01 2:57:00 PM	41	8/15/01 7:41:00 AM	25	8/15/01 8:16:00 AM	9
8/10/01 2:23:00 PM	50	8/10/01 2:58:00 PM	41	8/15/01 7:42:00 AM	16	8/15/01 8:17:00 AM	12
8/10/01 2:24:00 PM	48	8/10/01 2:59:00 PM	42	8/15/01 7:43:00 AM	23	8/15/01 8:18:00 AM	9
8/10/01 2:25:00 PM	46	8/10/01 3:00:00 PM	41	8/15/01 7:44:00 AM	12	8/15/01 8:19:00 AM	12
8/10/01 2:26:00 PM	49	8/10/01 3:01:00 PM	37	8/15/01 7:45:00 AM	15	8/15/01 8:20:00 AM	10
8/10/01 2:27:00 PM	40	8/10/01 3:02:00 PM	38	8/15/01 7:46:00 AM	13	8/15/01 8:21:00 AM	11
8/10/01 2:28:00 PM	41	8/10/01 3:03:00 PM	40	8/15/01 7:47:00 AM	13	8/15/01 8:22:00 AM	12
8/10/01 2:29:00 PM	39	8/10/01 3:04:00 PM	39	8/15/01 7:48:00 AM	12	8/15/01 8:23:00 AM	10
8/10/01 2:30:00 PM	46	8/10/01 3:05:00 PM	39	8/15/01 7:49:00 AM	11	8/15/01 8:24:00 AM	11
8/10/01 2:31:00 PM	40	8/10/01 3:06:00 PM	39	8/15/01 7:50:00 AM	17	8/15/01 8:25:00 AM	14
8/10/01 2:32:00 PM	40	8/14/01 9:24:00 AM	39	8/15/01 7:51:00 AM	14	8/15/01 8:26:00 AM	29
8/10/01 2:33:00 PM	44	8/14/01 9:24:00 AM	27	8/15/01 7:52:00 AM	20	8/15/01 8:27:00 AM	11
8/10/01 2:34:00 PM	44	8/14/01 9:25:00 AM	24	8/15/01 7:53:00 AM	13	8/15/01 8:28:00 AM	12
8/10/01 2:35:00 PM	41	8/14/01 9:25:00 AM	36	8/15/01 7:54:00 AM	10	8/15/01 8:29:00 AM	12
8/10/01 2:36:00 PM	43	8/14/01 9:25:00 AM	54	8/15/01 7:55:00 AM	11	8/15/01 8:30:00 AM	12
8/10/01 2:37:00 PM	44	8/14/01 9:25:00 AM	16	8/15/01 7:56:00 AM	14	8/15/01 8:31:00 AM	12
8/10/01 2:38:00 PM	39	8/14/01 9:25:00 AM	15	8/15/01 7:57:00 AM	11	8/15/01 8:32:00 AM	10
8/10/01 2:39:00 PM	40	8/14/01 9:25:00 AM	23	8/15/01 7:58:00 AM	11	8/15/01 8:33:00 AM	15
8/10/01 2:40:00 PM	38	8/14/01 9:26:00 AM	14	8/15/01 7:59:00 AM	13	8/15/01 8:34:00 AM	10
8/10/01 2:41:00 PM	38	8/14/01 9:26:00 AM	13	8/15/01 8:00:00 AM	11	8/15/01 8:35:00 AM	11
8/10/01 2:42:00 PM	41	8/14/01 9:26:00 AM	21	8/15/01 8:01:00 AM	11	8/15/01 8:36:00 AM	14
8/10/01 2:43:00 PM	39	8/14/01 9:26:00 AM	46	8/15/01 8:02:00 AM	10	8/15/01 8:37:00 AM	11
8/10/01 2:44:00 PM	42	8/14/01 9:26:00 AM	60	8/15/01 8:03:00 AM	11	8/15/01 8:38:00 AM	11
8/10/01 2:45:00 PM	41	8/14/01 9:26:00 AM	43	8/15/01 8:04:00 AM	13	8/15/01 8:39:00 AM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/15/01 8:40:00 AM	15	8/15/01 9:15:00 AM	10	8/15/01 9:50:00 AM	14	8/15/01 10:25:00 AM	12
8/15/01 8:41:00 AM	13	8/15/01 9:16:00 AM	25	8/15/01 9:51:00 AM	13	8/15/01 10:26:00 AM	10
8/15/01 8:42:00 AM	10	8/15/01 9:17:00 AM	14	8/15/01 9:52:00 AM	10	8/15/01 10:27:00 AM	16
8/15/01 8:43:00 AM	12	8/15/01 9:18:00 AM	15	8/15/01 9:53:00 AM	9	8/15/01 10:28:00 AM	13
8/15/01 8:44:00 AM	16	8/15/01 9:19:00 AM	15	8/15/01 9:54:00 AM	8	8/15/01 10:29:00 AM	16
8/15/01 8:45:00 AM	15	8/15/01 9:20:00 AM	64	8/15/01 9:55:00 AM	10	8/15/01 10:30:00 AM	9
8/15/01 8:46:00 AM	19	8/15/01 9:21:00 AM	11	8/15/01 9:56:00 AM	10	8/15/01 10:31:00 AM	10
8/15/01 8:47:00 AM	10	8/15/01 9:22:00 AM	10	8/15/01 9:57:00 AM	11	8/15/01 10:32:00 AM	13
8/15/01 8:48:00 AM	11	8/15/01 9:23:00 AM	11	8/15/01 9:58:00 AM	11	8/15/01 10:33:00 AM	10
8/15/01 8:49:00 AM	9	8/15/01 9:24:00 AM	31	8/15/01 9:59:00 AM	21	8/15/01 10:34:00 AM	12
8/15/01 8:50:00 AM	10	8/15/01 9:25:00 AM	13	8/15/01 10:00:00 AM	19	8/15/01 10:35:00 AM	7
8/15/01 8:51:00 AM	10	8/15/01 9:26:00 AM	12	8/15/01 10:01:00 AM	9	8/15/01 10:36:00 AM	108
8/15/01 8:52:00 AM	13	8/15/01 9:27:00 AM	10	8/15/01 10:02:00 AM	8	8/15/01 10:37:00 AM	110
8/15/01 8:53:00 AM	11	8/15/01 9:28:00 AM	10	8/15/01 10:03:00 AM	11	8/15/01 10:38:00 AM	8
8/15/01 8:54:00 AM	10	8/15/01 9:29:00 AM	28	8/15/01 10:04:00 AM	10	8/15/01 10:39:00 AM	16
8/15/01 8:55:00 AM	12	8/15/01 9:30:00 AM	13	8/15/01 10:05:00 AM	14	8/15/01 10:40:00 AM	37
8/15/01 8:56:00 AM	11	8/15/01 9:31:00 AM	14	8/15/01 10:06:00 AM	16	8/15/01 10:41:00 AM	47
8/15/01 8:57:00 AM	14	8/15/01 9:32:00 AM	23	8/15/01 10:07:00 AM	14	8/15/01 10:42:00 AM	10
8/15/01 8:58:00 AM	11	8/15/01 9:33:00 AM	31	8/15/01 10:08:00 AM	11	8/15/01 10:43:00 AM	11
8/15/01 8:59:00 AM	10	8/15/01 9:34:00 AM	12	8/15/01 10:09:00 AM	10	8/15/01 10:44:00 AM	8
8/15/01 9:00:00 AM	9	8/15/01 9:35:00 AM	12	8/15/01 10:10:00 AM	36	8/15/01 10:45:00 AM	10
8/15/01 9:01:00 AM	9	8/15/01 9:36:00 AM	11	8/15/01 10:11:00 AM	92	8/15/01 10:46:00 AM	10
8/15/01 9:02:00 AM	9	8/15/01 9:37:00 AM	10	8/15/01 10:12:00 AM	14	8/15/01 10:47:00 AM	7
8/15/01 9:03:00 AM	12	8/15/01 9:38:00 AM	10	8/15/01 10:13:00 AM	6	8/15/01 10:48:00 AM	9
8/15/01 9:04:00 AM	12	8/15/01 9:39:00 AM	9	8/15/01 10:14:00 AM	8	8/15/01 10:49:00 AM	26
8/15/01 9:05:00 AM	13	8/15/01 9:40:00 AM	11	8/15/01 10:15:00 AM	8	8/15/01 10:50:00 AM	16
8/15/01 9:06:00 AM	14	8/15/01 9:41:00 AM	48	8/15/01 10:16:00 AM	55	8/15/01 10:51:00 AM	9
8/15/01 9:07:00 AM	12	8/15/01 9:42:00 AM	10	8/15/01 10:17:00 AM	14	8/15/01 10:52:00 AM	6
8/15/01 9:08:00 AM	16	8/15/01 9:43:00 AM	11	8/15/01 10:18:00 AM	8	8/15/01 10:53:00 AM	8
8/15/01 9:09:00 AM	21	8/15/01 9:44:00 AM	11	8/15/01 10:19:00 AM	11	8/15/01 10:54:00 AM	15
8/15/01 9:10:00 AM	18	8/15/01 9:45:00 AM	16	8/15/01 10:20:00 AM	9	8/15/01 10:55:00 AM	86
8/15/01 9:11:00 AM	23	8/15/01 9:46:00 AM	12	8/15/01 10:21:00 AM	13	8/15/01 10:56:00 AM	14
8/15/01 9:12:00 AM	16	8/15/01 9:47:00 AM	20	8/15/01 10:22:00 AM	8	8/15/01 10:57:00 AM	11
8/15/01 9:13:00 AM	13	8/15/01 9:48:00 AM	46	8/15/01 10:23:00 AM	9	8/15/01 10:58:00 AM	11
8/15/01 9:14:00 AM	8	8/15/01 9:49:00 AM	17	8/15/01 10:24:00 AM	10	8/15/01 10:59:00 AM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/15/01 11:00:00 AM	23	8/15/01 11:35:00 AM	8	8/15/01 12:10:00 PM	10	8/15/01 12:45:00 PM	11
8/15/01 11:01:00 AM	22	8/15/01 11:36:00 AM	8	8/15/01 12:11:00 PM	21	8/15/01 12:46:00 PM	11
8/15/01 11:02:00 AM	21	8/15/01 11:37:00 AM	9	8/15/01 12:12:00 PM	10	8/15/01 12:47:00 PM	8
8/15/01 11:03:00 AM	17	8/15/01 11:38:00 AM	10	8/15/01 12:13:00 PM	21	8/15/01 12:48:00 PM	10
8/15/01 11:04:00 AM	7	8/15/01 11:39:00 AM	9	8/15/01 12:14:00 PM	9	8/15/01 12:49:00 PM	10
8/15/01 11:05:00 AM	46	8/15/01 11:40:00 AM	11	8/15/01 12:15:00 PM	61	8/15/01 12:50:00 PM	10
8/15/01 11:06:00 AM	28	8/15/01 11:41:00 AM	12	8/15/01 12:16:00 PM	13	8/15/01 12:51:00 PM	9
8/15/01 11:07:00 AM	28	8/15/01 11:42:00 AM	17	8/15/01 12:17:00 PM	9	8/15/01 12:52:00 PM	8
8/15/01 11:08:00 AM	29	8/15/01 11:43:00 AM	35	8/15/01 12:18:00 PM	11	8/15/01 12:53:00 PM	8
8/15/01 11:09:00 AM	20	8/15/01 11:44:00 AM	9	8/15/01 12:19:00 PM	10	8/15/01 12:54:00 PM	10
8/15/01 11:10:00 AM	19	8/15/01 11:45:00 AM	35	8/15/01 12:20:00 PM	14	8/15/01 12:55:00 PM	20
8/15/01 11:11:00 AM	21	8/15/01 11:46:00 AM	42	8/15/01 12:21:00 PM	33	8/15/01 12:56:00 PM	11
8/15/01 11:12:00 AM	22	8/15/01 11:47:00 AM	26	8/15/01 12:22:00 PM	19	8/15/01 12:57:00 PM	9
8/15/01 11:13:00 AM	10	8/15/01 11:48:00 AM	15	8/15/01 12:23:00 PM	9	8/15/01 12:58:00 PM	10
8/15/01 11:14:00 AM	23	8/15/01 11:49:00 AM	9	8/15/01 12:24:00 PM	10	8/15/01 12:59:00 PM	10
8/15/01 11:15:00 AM	15	8/15/01 11:50:00 AM	9	8/15/01 12:25:00 PM	10	8/15/01 1:00:00 PM	10
8/15/01 11:16:00 AM	20	8/15/01 11:51:00 AM	28	8/15/01 12:26:00 PM	9	8/15/01 1:01:00 PM	9
8/15/01 11:17:00 AM	58	8/15/01 11:52:00 AM	140	8/15/01 12:27:00 PM	13	8/15/01 1:02:00 PM	13
8/15/01 11:18:00 AM	17	8/15/01 11:53:00 AM	12	8/15/01 12:28:00 PM	8	8/15/01 1:03:00 PM	19
8/15/01 11:19:00 AM	17	8/15/01 11:54:00 AM	53	8/15/01 12:29:00 PM	9	8/15/01 1:04:00 PM	17
8/15/01 11:20:00 AM	27	8/15/01 11:55:00 AM	16	8/15/01 12:30:00 PM	14	8/15/01 1:05:00 PM	16
8/15/01 11:21:00 AM	15	8/15/01 11:56:00 AM	19	8/15/01 12:31:00 PM	8	8/15/01 1:06:00 PM	13
8/15/01 11:22:00 AM	16	8/15/01 11:57:00 AM	29	8/15/01 12:32:00 PM	8	8/15/01 1:07:00 PM	18
8/15/01 11:23:00 AM	8	8/15/01 11:58:00 AM	12	8/15/01 12:33:00 PM	8	8/15/01 1:08:00 PM	425
8/15/01 11:24:00 AM	11	8/15/01 11:59:00 AM	27	8/15/01 12:34:00 PM	14	8/15/01 1:09:00 PM	12
8/15/01 11:25:00 AM	8	8/15/01 12:00:00 PM	60	8/15/01 12:35:00 PM	10	8/15/01 1:10:00 PM	18
8/15/01 11:26:00 AM	8	8/15/01 12:01:00 PM	26	8/15/01 12:36:00 PM	73	8/15/01 1:11:00 PM	11
8/15/01 11:27:00 AM	13	8/15/01 12:02:00 PM	8	8/15/01 12:37:00 PM	44	8/15/01 1:12:00 PM	10
8/15/01 11:28:00 AM	11	8/15/01 12:03:00 PM	16	8/15/01 12:38:00 PM	10	8/15/01 1:13:00 PM	25
8/15/01 11:29:00 AM	7	8/15/01 12:04:00 PM	9	8/15/01 12:39:00 PM	12	8/15/01 1:14:00 PM	33
8/15/01 11:30:00 AM	10	8/15/01 12:05:00 PM	11	8/15/01 12:40:00 PM	12	8/15/01 1:15:00 PM	13
8/15/01 11:31:00 AM	16	8/15/01 12:06:00 PM	9	8/15/01 12:41:00 PM	9	8/15/01 1:16:00 PM	13
8/15/01 11:32:00 AM	12	8/15/01 12:07:00 PM	9	8/15/01 12:42:00 PM	10	8/15/01 1:17:00 PM	15
8/15/01 11:33:00 AM	15	8/15/01 12:08:00 PM	35	8/15/01 12:43:00 PM	11	8/15/01 1:18:00 PM	11
8/15/01 11:34:00 AM	9	8/15/01 12:09:00 PM	10	8/15/01 12:44:00 PM	12	8/15/01 1:19:00 PM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/15/01 1:20:00 PM	21	8/15/01 1:55:00 PM	15	8/15/01 2:30:00 PM	14	8/15/01 3:05:00 PM	10
8/15/01 1:21:00 PM	25	8/15/01 1:56:00 PM	14	8/15/01 2:31:00 PM	30	8/15/01 3:06:00 PM	13
8/15/01 1:22:00 PM	10	8/15/01 1:57:00 PM	10	8/15/01 2:32:00 PM	13	8/15/01 3:07:00 PM	23
8/15/01 1:23:00 PM	10	8/15/01 1:58:00 PM	11	8/15/01 2:33:00 PM	9	8/15/01 3:08:00 PM	22
8/15/01 1:24:00 PM	15	8/15/01 1:59:00 PM	23	8/15/01 2:34:00 PM	16	8/15/01 3:09:00 PM	11
8/15/01 1:25:00 PM	29	8/15/01 2:00:00 PM	19	8/15/01 2:35:00 PM	10	8/15/01 3:10:00 PM	9
8/15/01 1:26:00 PM	11	8/15/01 2:01:00 PM	12	8/15/01 2:36:00 PM	11	8/15/01 3:11:00 PM	11
8/15/01 1:27:00 PM	10	8/15/01 2:02:00 PM	10	8/15/01 2:37:00 PM	9	8/15/01 3:12:00 PM	11
8/15/01 1:28:00 PM	15	8/15/01 2:03:00 PM	60	8/15/01 2:38:00 PM	12	8/15/01 3:13:00 PM	44
8/15/01 1:29:00 PM	12	8/15/01 2:04:00 PM	18	8/15/01 2:39:00 PM	10	8/15/01 3:14:00 PM	13
8/15/01 1:30:00 PM	12	8/15/01 2:05:00 PM	118	8/15/01 2:40:00 PM	12	8/15/01 3:15:00 PM	11
8/15/01 1:31:00 PM	10	8/15/01 2:06:00 PM	95	8/15/01 2:41:00 PM	11	8/15/01 3:16:00 PM	16
8/15/01 1:32:00 PM	10	8/15/01 2:07:00 PM	15	8/15/01 2:42:00 PM	14	8/15/01 3:17:00 PM	12
8/15/01 1:33:00 PM	11	8/15/01 2:08:00 PM	26	8/15/01 2:43:00 PM	21	8/15/01 3:18:00 PM	15
8/15/01 1:34:00 PM	8	8/15/01 2:09:00 PM	13	8/15/01 2:44:00 PM	21	8/15/01 3:19:00 PM	11
8/15/01 1:35:00 PM	8	8/15/01 2:10:00 PM	12	8/15/01 2:45:00 PM	11	8/15/01 3:20:00 PM	11
8/15/01 1:36:00 PM	10	8/15/01 2:11:00 PM	20	8/15/01 2:46:00 PM	13	8/15/01 3:21:00 PM	9
8/15/01 1:37:00 PM	14	8/15/01 2:12:00 PM	40	8/15/01 2:47:00 PM	10	8/15/01 3:22:00 PM	13
8/15/01 1:38:00 PM	12	8/15/01 2:13:00 PM	39	8/15/01 2:48:00 PM	14	8/15/01 3:23:00 PM	24
8/15/01 1:39:00 PM	11	8/15/01 2:14:00 PM	31	8/15/01 2:49:00 PM	10	8/15/01 3:24:00 PM	16
8/15/01 1:40:00 PM	8	8/15/01 2:15:00 PM	12	8/15/01 2:50:00 PM	13	8/15/01 3:25:00 PM	10
8/15/01 1:41:00 PM	16	8/15/01 2:16:00 PM	13	8/15/01 2:51:00 PM	13	8/15/01 3:26:00 PM	24
8/15/01 1:42:00 PM	13	8/15/01 2:17:00 PM	24	8/15/01 2:52:00 PM	10	8/15/01 3:27:00 PM	29
8/15/01 1:43:00 PM	33	8/15/01 2:18:00 PM	15	8/15/01 2:53:00 PM	16	8/15/01 3:28:00 PM	13
8/15/01 1:44:00 PM	18	8/15/01 2:19:00 PM	14	8/15/01 2:54:00 PM	34	8/15/01 3:29:00 PM	16
8/15/01 1:45:00 PM	22	8/15/01 2:20:00 PM	11	8/15/01 2:55:00 PM	17	8/15/01 3:30:00 PM	72
8/15/01 1:46:00 PM	35	8/15/01 2:21:00 PM	10	8/15/01 2:56:00 PM	14	8/15/01 3:31:00 PM	9
8/15/01 1:47:00 PM	28	8/15/01 2:22:00 PM	22	8/15/01 2:57:00 PM	12	8/15/01 3:32:00 PM	12
8/15/01 1:48:00 PM	15	8/15/01 2:23:00 PM	24	8/15/01 2:58:00 PM	13	8/15/01 3:33:00 PM	19
8/15/01 1:49:00 PM	36	8/15/01 2:24:00 PM	16	8/15/01 2:59:00 PM	17	8/15/01 3:34:00 PM	28
8/15/01 1:50:00 PM	16	8/15/01 2:25:00 PM	12	8/15/01 3:00:00 PM	11	8/15/01 3:35:00 PM	29
8/15/01 1:51:00 PM	10	8/15/01 2:26:00 PM	22	8/15/01 3:01:00 PM	9	8/15/01 3:36:00 PM	11
8/15/01 1:52:00 PM	12	8/15/01 2:27:00 PM	19	8/15/01 3:02:00 PM	9	8/15/01 3:37:00 PM	45
8/15/01 1:53:00 PM	17	8/15/01 2:28:00 PM	12	8/15/01 3:03:00 PM	10	8/15/01 3:38:00 PM	17
8/15/01 1:54:00 PM	16	8/15/01 2:29:00 PM	39	8/15/01 3:04:00 PM	8	8/15/01 3:39:00 PM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/15/01 3:40:00 PM	19	8/15/01 4:15:00 PM	9	8/16/01 8:23:00 AM	88	8/16/01 8:29:00 AM	19
8/15/01 3:41:00 PM	16	8/15/01 4:16:00 PM	14	8/16/01 8:23:00 AM	104	8/16/01 8:29:00 AM	22
8/15/01 3:42:00 PM	13	8/15/01 4:17:00 PM	18	8/16/01 8:23:00 AM	89	8/16/01 8:29:00 AM	21
8/15/01 3:43:00 PM	13	8/15/01 4:18:00 PM	10	8/16/01 8:23:00 AM	69	8/16/01 8:29:00 AM	23
8/15/01 3:44:00 PM	16	8/15/01 4:19:00 PM	10	8/16/01 8:23:00 AM	93	8/16/01 8:29:00 AM	25
8/15/01 3:45:00 PM	24	8/15/01 4:20:00 PM	14	8/16/01 8:24:00 AM	96	8/16/01 8:29:00 AM	27
8/15/01 3:46:00 PM	13	8/15/01 4:21:00 PM	11	8/16/01 8:24:00 AM	106	8/16/01 8:30:00 AM	24
8/15/01 3:47:00 PM	26	8/15/01 4:22:00 PM	10	8/16/01 8:24:00 AM	139	8/16/01 8:30:00 AM	20
8/15/01 3:48:00 PM	14	8/15/01 4:23:00 PM	8	8/16/01 8:24:00 AM	86	8/16/01 8:30:00 AM	22
8/15/01 3:49:00 PM	11	8/15/01 4:24:00 PM	12	8/16/01 8:24:00 AM	24	8/16/01 8:30:00 AM	26
8/15/01 3:50:00 PM	19	8/15/01 4:25:00 PM	57	8/16/01 8:24:00 AM	31	8/16/01 8:30:00 AM	30
8/15/01 3:51:00 PM	16	8/15/01 4:26:00 PM	12	8/16/01 8:25:00 AM	34	8/16/01 8:30:00 AM	23
8/15/01 3:52:00 PM	12	8/15/01 4:27:00 PM	13	8/16/01 8:25:00 AM	24	8/16/01 8:31:00 AM	16
8/15/01 3:53:00 PM	10	8/15/01 4:28:00 PM	13	8/16/01 8:25:00 AM	25	8/16/01 8:31:00 AM	17
8/15/01 3:54:00 PM	25	8/15/01 4:29:00 PM	18	8/16/01 8:25:00 AM	32	8/16/01 8:31:00 AM	19
8/15/01 3:55:00 PM	8	8/15/01 4:30:00 PM	25	8/16/01 8:25:00 AM	23	8/16/01 8:31:00 AM	22
8/15/01 3:56:00 PM	12	8/15/01 4:31:00 PM	13	8/16/01 8:25:00 AM	22	8/16/01 8:31:00 AM	24
8/15/01 3:57:00 PM	76	8/15/01 4:32:00 PM	142	8/16/01 8:26:00 AM	21	8/16/01 8:31:00 AM	22
8/15/01 3:58:00 PM	36	8/15/01 4:33:00 PM	92	8/16/01 8:26:00 AM	23	8/16/01 8:32:00 AM	27
8/15/01 3:59:00 PM	23	8/15/01 4:34:00 PM	68	8/16/01 8:26:00 AM	22	8/16/01 8:32:00 AM	22
8/15/01 4:00:00 PM	10	8/15/01 4:35:00 PM	29	8/16/01 8:26:00 AM	23	8/16/01 8:32:00 AM	28
8/15/01 4:01:00 PM	26	8/16/01 8:20:00 AM	129	8/16/01 8:26:00 AM	23	8/16/01 8:32:00 AM	31
8/15/01 4:02:00 PM	31	8/16/01 8:21:00 AM	139	8/16/01 8:26:00 AM	24	8/16/01 8:32:00 AM	44
8/15/01 4:03:00 PM	18	8/16/01 8:21:00 AM	102	8/16/01 8:27:00 AM	26	8/16/01 8:32:00 AM	73
8/15/01 4:04:00 PM	16	8/16/01 8:21:00 AM	102	8/16/01 8:27:00 AM	20	8/16/01 8:33:00 AM	21
8/15/01 4:05:00 PM	8	8/16/01 8:21:00 AM	84	8/16/01 8:27:00 AM	18	8/16/01 8:33:00 AM	23
8/15/01 4:06:00 PM	29	8/16/01 8:21:00 AM	93	8/16/01 8:27:00 AM	23	8/16/01 8:33:00 AM	19
8/15/01 4:07:00 PM	31	8/16/01 8:21:00 AM	120	8/16/01 8:27:00 AM	26	8/16/01 8:33:00 AM	16
8/15/01 4:08:00 PM	9	8/16/01 8:22:00 AM	92	8/16/01 8:27:00 AM	27	8/16/01 8:33:00 AM	18
8/15/01 4:09:00 PM	18	8/16/01 8:22:00 AM	88	8/16/01 8:28:00 AM	24	8/16/01 8:33:00 AM	21
8/15/01 4:10:00 PM	20	8/16/01 8:22:00 AM	82	8/16/01 8:28:00 AM	25	8/16/01 8:34:00 AM	23
8/15/01 4:11:00 PM	18	8/16/01 8:22:00 AM	101	8/16/01 8:28:00 AM	23	8/16/01 8:34:00 AM	24
8/15/01 4:12:00 PM	12	8/16/01 8:22:00 AM	85	8/16/01 8:28:00 AM	25	8/16/01 8:34:00 AM	19
8/15/01 4:13:00 PM	22	8/16/01 8:22:00 AM	70	8/16/01 8:28:00 AM	19	8/16/01 8:34:00 AM	28
8/15/01 4:14:00 PM	13	8/16/01 8:23:00 AM	78	8/16/01 8:28:00 AM	21	8/16/01 8:34:00 AM	56

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 8:34:00 AM	85	8/16/01 8:40:00 AM	32	8/16/01 8:46:00 AM	16	8/16/01 8:52:00 AM	19
8/16/01 8:35:00 AM	22	8/16/01 8:40:00 AM	37	8/16/01 8:46:00 AM	20	8/16/01 8:52:00 AM	18
8/16/01 8:35:00 AM	32	8/16/01 8:41:00 AM	42	8/16/01 8:46:00 AM	32	8/16/01 8:52:00 AM	18
8/16/01 8:35:00 AM	31	8/16/01 8:41:00 AM	44	8/16/01 8:47:00 AM	45	8/16/01 8:52:00 AM	22
8/16/01 8:35:00 AM	27	8/16/01 8:41:00 AM	65	8/16/01 8:47:00 AM	48	8/16/01 8:53:00 AM	22
8/16/01 8:35:00 AM	29	8/16/01 8:41:00 AM	64	8/16/01 8:47:00 AM	34	8/16/01 8:53:00 AM	19
8/16/01 8:35:00 AM	23	8/16/01 8:41:00 AM	36	8/16/01 8:47:00 AM	33	8/16/01 8:53:00 AM	18
8/16/01 8:36:00 AM	30	8/16/01 8:41:00 AM	24	8/16/01 8:47:00 AM	26	8/16/01 8:53:00 AM	20
8/16/01 8:36:00 AM	33	8/16/01 8:42:00 AM	27	8/16/01 8:47:00 AM	19	8/16/01 8:53:00 AM	16
8/16/01 8:36:00 AM	28	8/16/01 8:42:00 AM	38	8/16/01 8:48:00 AM	16	8/16/01 8:53:00 AM	15
8/16/01 8:36:00 AM	25	8/16/01 8:42:00 AM	27	8/16/01 8:48:00 AM	19	8/16/01 8:54:00 AM	14
8/16/01 8:36:00 AM	23	8/16/01 8:42:00 AM	41	8/16/01 8:48:00 AM	31	8/16/01 8:54:00 AM	14
8/16/01 8:36:00 AM	29	8/16/01 8:42:00 AM	44	8/16/01 8:48:00 AM	32	8/16/01 8:54:00 AM	20
8/16/01 8:37:00 AM	28	8/16/01 8:42:00 AM	42	8/16/01 8:48:00 AM	24	8/16/01 8:54:00 AM	24
8/16/01 8:37:00 AM	28	8/16/01 8:43:00 AM	31	8/16/01 8:48:00 AM	32	8/16/01 8:54:00 AM	26
8/16/01 8:37:00 AM	28	8/16/01 8:43:00 AM	28	8/16/01 8:49:00 AM	31	8/16/01 8:54:00 AM	28
8/16/01 8:37:00 AM	34	8/16/01 8:43:00 AM	22	8/16/01 8:49:00 AM	30	8/16/01 8:55:00 AM	44
8/16/01 8:37:00 AM	38	8/16/01 8:43:00 AM	27	8/16/01 8:49:00 AM	24	8/16/01 8:55:00 AM	57
8/16/01 8:37:00 AM	25	8/16/01 8:43:00 AM	22	8/16/01 8:49:00 AM	26	8/16/01 8:55:00 AM	92
8/16/01 8:38:00 AM	24	8/16/01 8:43:00 AM	24	8/16/01 8:49:00 AM	29	8/16/01 8:55:00 AM	42
8/16/01 8:38:00 AM	35	8/16/01 8:44:00 AM	20	8/16/01 8:49:00 AM	28	8/16/01 8:55:00 AM	23
8/16/01 8:38:00 AM	34	8/16/01 8:44:00 AM	19	8/16/01 8:50:00 AM	30	8/16/01 8:55:00 AM	20
8/16/01 8:38:00 AM	23	8/16/01 8:44:00 AM	16	8/16/01 8:50:00 AM	30	8/16/01 8:56:00 AM	18
8/16/01 8:38:00 AM	25	8/16/01 8:44:00 AM	20	8/16/01 8:50:00 AM	24	8/16/01 8:56:00 AM	16
8/16/01 8:38:00 AM	31	8/16/01 8:44:00 AM	19	8/16/01 8:50:00 AM	17	8/16/01 8:56:00 AM	16
8/16/01 8:39:00 AM	31	8/16/01 8:44:00 AM	21	8/16/01 8:50:00 AM	24	8/16/01 8:56:00 AM	22
8/16/01 8:39:00 AM	26	8/16/01 8:45:00 AM	27	8/16/01 8:50:00 AM	31	8/16/01 8:56:00 AM	24
8/16/01 8:39:00 AM	24	8/16/01 8:45:00 AM	26	8/16/01 8:51:00 AM	33	8/16/01 8:56:00 AM	22
8/16/01 8:39:00 AM	30	8/16/01 8:45:00 AM	21	8/16/01 8:51:00 AM	19	8/16/01 8:57:00 AM	23
8/16/01 8:39:00 AM	24	8/16/01 8:45:00 AM	29	8/16/01 8:51:00 AM	23	8/16/01 8:57:00 AM	30
8/16/01 8:39:00 AM	38	8/16/01 8:45:00 AM	25	8/16/01 8:51:00 AM	43	8/16/01 8:57:00 AM	17
8/16/01 8:40:00 AM	39	8/16/01 8:45:00 AM	27	8/16/01 8:51:00 AM	36	8/16/01 8:57:00 AM	18
8/16/01 8:40:00 AM	30	8/16/01 8:46:00 AM	22	8/16/01 8:51:00 AM	29	8/16/01 8:57:00 AM	20
8/16/01 8:40:00 AM	30	8/16/01 8:46:00 AM	26	8/16/01 8:52:00 AM	21	8/16/01 8:57:00 AM	29
8/16/01 8:40:00 AM	34	8/16/01 8:46:00 AM	22	8/16/01 8:52:00 AM	22	8/16/01 8:58:00 AM	22

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 8:58:00 AM	21	8/16/01 9:04:00 AM	33	8/16/01 9:09:00 AM	19	8/16/01 9:15:00 AM	24
8/16/01 8:58:00 AM	31	8/16/01 9:04:00 AM	35	8/16/01 9:10:00 AM	23	8/16/01 9:15:00 AM	27
8/16/01 8:58:00 AM	39	8/16/01 9:04:00 AM	32	8/16/01 9:10:00 AM	23	8/16/01 9:16:00 AM	19
8/16/01 8:58:00 AM	48	8/16/01 9:04:00 AM	30	8/16/01 9:10:00 AM	17	8/16/01 9:16:00 AM	21
8/16/01 8:58:00 AM	43	8/16/01 9:04:00 AM	40	8/16/01 9:10:00 AM	18	8/16/01 9:16:00 AM	17
8/16/01 8:59:00 AM	21	8/16/01 9:04:00 AM	36	8/16/01 9:10:00 AM	22	8/16/01 9:16:00 AM	17
8/16/01 8:59:00 AM	22	8/16/01 9:05:00 AM	26	8/16/01 9:10:00 AM	25	8/16/01 9:16:00 AM	21
8/16/01 8:59:00 AM	40	8/16/01 9:05:00 AM	32	8/16/01 9:11:00 AM	25	8/16/01 9:16:00 AM	25
8/16/01 8:59:00 AM	52	8/16/01 9:05:00 AM	24	8/16/01 9:11:00 AM	30	8/16/01 9:17:00 AM	27
8/16/01 8:59:00 AM	24	8/16/01 9:05:00 AM	20	8/16/01 9:11:00 AM	22	8/16/01 9:17:00 AM	30
8/16/01 8:59:00 AM	21	8/16/01 9:05:00 AM	24	8/16/01 9:11:00 AM	18	8/16/01 9:17:00 AM	20
8/16/01 9:00:00 AM	26	8/16/01 9:05:00 AM	31	8/16/01 9:11:00 AM	22	8/16/01 9:17:00 AM	31
8/16/01 9:00:00 AM	31	8/16/01 9:06:00 AM	43	8/16/01 9:11:00 AM	36	8/16/01 9:17:00 AM	58
8/16/01 9:00:00 AM	30	8/16/01 9:06:00 AM	36	8/16/01 9:12:00 AM	49	8/16/01 9:17:00 AM	41
8/16/01 9:00:00 AM	36	8/16/01 9:06:00 AM	35	8/16/01 9:12:00 AM	27	8/16/01 9:18:00 AM	25
8/16/01 9:00:00 AM	65	8/16/01 9:06:00 AM	48	8/16/01 9:12:00 AM	22	8/16/01 9:18:00 AM	15
8/16/01 9:00:00 AM	56	8/16/01 9:06:00 AM	36	8/16/01 9:12:00 AM	24	8/16/01 9:18:00 AM	18
8/16/01 9:01:00 AM	44	8/16/01 9:06:00 AM	22	8/16/01 9:12:00 AM	19	8/16/01 9:18:00 AM	21
8/16/01 9:01:00 AM	64	8/16/01 9:07:00 AM	28	8/16/01 9:12:00 AM	27	8/16/01 9:18:00 AM	22
8/16/01 9:01:00 AM	58	8/16/01 9:07:00 AM	34	8/16/01 9:13:00 AM	24	8/16/01 9:18:00 AM	21
8/16/01 9:01:00 AM	27	8/16/01 9:07:00 AM	28	8/16/01 9:13:00 AM	22	8/16/01 9:19:00 AM	22
8/16/01 9:01:00 AM	36	8/16/01 9:07:00 AM	37	8/16/01 9:13:00 AM	25	8/16/01 9:19:00 AM	22
8/16/01 9:01:00 AM	28	8/16/01 9:07:00 AM	45	8/16/01 9:13:00 AM	27	8/16/01 9:19:00 AM	26
8/16/01 9:02:00 AM	28	8/16/01 9:07:00 AM	28	8/16/01 9:13:00 AM	18	8/16/01 9:19:00 AM	32
8/16/01 9:02:00 AM	28	8/16/01 9:08:00 AM	26	8/16/01 9:13:00 AM	21	8/16/01 9:19:00 AM	24
8/16/01 9:02:00 AM	30	8/16/01 9:08:00 AM	23	8/16/01 9:14:00 AM	29	8/16/01 9:19:00 AM	24
8/16/01 9:02:00 AM	26	8/16/01 9:08:00 AM	39	8/16/01 9:14:00 AM	23	8/16/01 9:20:00 AM	26
8/16/01 9:02:00 AM	30	8/16/01 9:08:00 AM	36	8/16/01 9:14:00 AM	28	8/16/01 9:20:00 AM	28
8/16/01 9:02:00 AM	36	8/16/01 9:08:00 AM	36	8/16/01 9:14:00 AM	22	8/16/01 9:20:00 AM	28
8/16/01 9:03:00 AM	34	8/16/01 9:08:00 AM	36	8/16/01 9:14:00 AM	17	8/16/01 9:20:00 AM	29
8/16/01 9:03:00 AM	29	8/16/01 9:09:00 AM	35	8/16/01 9:14:00 AM	30	8/16/01 9:20:00 AM	39
8/16/01 9:03:00 AM	28	8/16/01 9:09:00 AM	34	8/16/01 9:15:00 AM	49	8/16/01 9:20:00 AM	66
8/16/01 9:03:00 AM	41	8/16/01 9:09:00 AM	34	8/16/01 9:15:00 AM	20	8/16/01 9:21:00 AM	38
8/16/01 9:03:00 AM	41	8/16/01 9:09:00 AM	32	8/16/01 9:15:00 AM	22	8/16/01 9:21:00 AM	41
8/16/01 9:03:00 AM	30	8/16/01 9:09:00 AM	21	8/16/01 9:15:00 AM	27	8/16/01 9:21:00 AM	53

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 9:21:00 AM	39	8/16/01 9:27:00 AM	26	8/16/01 9:33:00 AM	33	8/16/01 9:39:00 AM	48
8/16/01 9:21:00 AM	24	8/16/01 9:27:00 AM	32	8/16/01 9:33:00 AM	26	8/16/01 9:39:00 AM	38
8/16/01 9:21:00 AM	31	8/16/01 9:27:00 AM	31	8/16/01 9:33:00 AM	24	8/16/01 9:39:00 AM	37
8/16/01 9:22:00 AM	30	8/16/01 9:27:00 AM	36	8/16/01 9:33:00 AM	29	8/16/01 9:39:00 AM	23
8/16/01 9:22:00 AM	25	8/16/01 9:28:00 AM	49	8/16/01 9:33:00 AM	24	8/16/01 9:39:00 AM	18
8/16/01 9:22:00 AM	26	8/16/01 9:28:00 AM	37	8/16/01 9:34:00 AM	34	8/16/01 9:39:00 AM	20
8/16/01 9:22:00 AM	23	8/16/01 9:28:00 AM	50	8/16/01 9:34:00 AM	46	8/16/01 9:40:00 AM	20
8/16/01 9:22:00 AM	30	8/16/01 9:28:00 AM	58	8/16/01 9:34:00 AM	46	8/16/01 9:40:00 AM	20
8/16/01 9:22:00 AM	24	8/16/01 9:28:00 AM	47	8/16/01 9:34:00 AM	36	8/16/01 9:40:00 AM	22
8/16/01 9:23:00 AM	24	8/16/01 9:28:00 AM	33	8/16/01 9:34:00 AM	34	8/16/01 9:40:00 AM	22
8/16/01 9:23:00 AM	22	8/16/01 9:29:00 AM	36	8/16/01 9:34:00 AM	26	8/16/01 9:40:00 AM	28
8/16/01 9:23:00 AM	26	8/16/01 9:29:00 AM	38	8/16/01 9:35:00 AM	22	8/16/01 9:40:00 AM	18
8/16/01 9:23:00 AM	32	8/16/01 9:29:00 AM	39	8/16/01 9:35:00 AM	24	8/16/01 9:41:00 AM	23
8/16/01 9:23:00 AM	23	8/16/01 9:29:00 AM	44	8/16/01 9:35:00 AM	33	8/16/01 9:41:00 AM	24
8/16/01 9:23:00 AM	28	8/16/01 9:29:00 AM	44	8/16/01 9:35:00 AM	40	8/16/01 9:41:00 AM	36
8/16/01 9:24:00 AM	31	8/16/01 9:29:00 AM	43	8/16/01 9:35:00 AM	32	8/16/01 9:41:00 AM	50
8/16/01 9:24:00 AM	27	8/16/01 9:30:00 AM	49	8/16/01 9:35:00 AM	28	8/16/01 9:41:00 AM	50
8/16/01 9:24:00 AM	32	8/16/01 9:30:00 AM	42	8/16/01 9:36:00 AM	28	8/16/01 9:41:00 AM	62
8/16/01 9:24:00 AM	36	8/16/01 9:30:00 AM	61	8/16/01 9:36:00 AM	20	8/16/01 9:42:00 AM	102
8/16/01 9:24:00 AM	42	8/16/01 9:30:00 AM	62	8/16/01 9:36:00 AM	30	8/16/01 9:42:00 AM	124
8/16/01 9:24:00 AM	34	8/16/01 9:30:00 AM	20	8/16/01 9:36:00 AM	39	8/16/01 9:42:00 AM	76
8/16/01 9:25:00 AM	37	8/16/01 9:30:00 AM	20	8/16/01 9:36:00 AM	40	8/16/01 9:42:00 AM	29
8/16/01 9:25:00 AM	52	8/16/01 9:31:00 AM	20	8/16/01 9:36:00 AM	30	8/16/01 9:42:00 AM	16
8/16/01 9:25:00 AM	38	8/16/01 9:31:00 AM	25	8/16/01 9:37:00 AM	35	8/16/01 9:42:00 AM	31
8/16/01 9:25:00 AM	38	8/16/01 9:31:00 AM	20	8/16/01 9:37:00 AM	55	8/16/01 9:43:00 AM	43
8/16/01 9:25:00 AM	38	8/16/01 9:31:00 AM	22	8/16/01 9:37:00 AM	49	8/16/01 9:43:00 AM	37
8/16/01 9:25:00 AM	37	8/16/01 9:31:00 AM	32	8/16/01 9:37:00 AM	45	8/16/01 9:43:00 AM	41
8/16/01 9:26:00 AM	39	8/16/01 9:31:00 AM	20	8/16/01 9:37:00 AM	56	8/16/01 9:43:00 AM	48
8/16/01 9:26:00 AM	25	8/16/01 9:32:00 AM	25	8/16/01 9:37:00 AM	33	8/16/01 9:43:00 AM	38
8/16/01 9:26:00 AM	24	8/16/01 9:32:00 AM	42	8/16/01 9:38:00 AM	19	8/16/01 9:43:00 AM	21
8/16/01 9:26:00 AM	31	8/16/01 9:32:00 AM	32	8/16/01 9:38:00 AM	19	8/16/01 9:44:00 AM	20
8/16/01 9:26:00 AM	37	8/16/01 9:32:00 AM	21	8/16/01 9:38:00 AM	28	8/16/01 9:44:00 AM	25
8/16/01 9:26:00 AM	39	8/16/01 9:32:00 AM	24	8/16/01 9:38:00 AM	27	8/16/01 9:44:00 AM	35
8/16/01 9:27:00 AM	31	8/16/01 9:32:00 AM	19	8/16/01 9:38:00 AM	22	8/16/01 9:44:00 AM	30
8/16/01 9:27:00 AM	32	8/16/01 9:33:00 AM	21	8/16/01 9:38:00 AM	29	8/16/01 9:44:00 AM	40

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 9:44:00 AM	29	8/16/01 9:50:00 AM	25	8/16/01 9:56:00 AM	18	8/16/01 10:02:00 AM	44
8/16/01 9:45:00 AM	28	8/16/01 9:50:00 AM	28	8/16/01 9:56:00 AM	23	8/16/01 10:02:00 AM	79
8/16/01 9:45:00 AM	31	8/16/01 9:51:00 AM	18	8/16/01 9:56:00 AM	37	8/16/01 10:02:00 AM	27
8/16/01 9:45:00 AM	25	8/16/01 9:51:00 AM	17	8/16/01 9:57:00 AM	36	8/16/01 10:02:00 AM	29
8/16/01 9:45:00 AM	26	8/16/01 9:51:00 AM	18	8/16/01 9:57:00 AM	31	8/16/01 10:03:00 AM	35
8/16/01 9:45:00 AM	27	8/16/01 9:51:00 AM	21	8/16/01 9:57:00 AM	35	8/16/01 10:03:00 AM	85
8/16/01 9:45:00 AM	31	8/16/01 9:51:00 AM	22	8/16/01 9:57:00 AM	32	8/16/01 10:03:00 AM	126
8/16/01 9:46:00 AM	29	8/16/01 9:51:00 AM	30	8/16/01 9:57:00 AM	23	8/16/01 10:03:00 AM	44
8/16/01 9:46:00 AM	33	8/16/01 9:52:00 AM	38	8/16/01 9:57:00 AM	28	8/16/01 10:03:00 AM	36
8/16/01 9:46:00 AM	29	8/16/01 9:52:00 AM	27	8/16/01 9:58:00 AM	39	8/16/01 10:03:00 AM	23
8/16/01 9:46:00 AM	17	8/16/01 9:52:00 AM	14	8/16/01 9:58:00 AM	82	8/16/01 10:04:00 AM	24
8/16/01 9:46:00 AM	25	8/16/01 9:52:00 AM	17	8/16/01 9:58:00 AM	158	8/16/01 10:04:00 AM	36
8/16/01 9:46:00 AM	42	8/16/01 9:52:00 AM	22	8/16/01 9:58:00 AM	61	8/16/01 10:04:00 AM	57
8/16/01 9:47:00 AM	38	8/16/01 9:52:00 AM	22	8/16/01 9:58:00 AM	87	8/16/01 10:04:00 AM	83
8/16/01 9:47:00 AM	38	8/16/01 9:53:00 AM	16	8/16/01 9:58:00 AM	77	8/16/01 10:04:00 AM	72
8/16/01 9:47:00 AM	42	8/16/01 9:53:00 AM	23	8/16/01 9:59:00 AM	41	8/16/01 10:04:00 AM	22
8/16/01 9:47:00 AM	46	8/16/01 9:53:00 AM	27	8/16/01 9:59:00 AM	27	8/16/01 10:05:00 AM	23
8/16/01 9:47:00 AM	26	8/16/01 9:53:00 AM	29	8/16/01 9:59:00 AM	24	8/16/01 10:05:00 AM	28
8/16/01 9:47:00 AM	35	8/16/01 9:53:00 AM	32	8/16/01 9:59:00 AM	29	8/16/01 10:05:00 AM	35
8/16/01 9:48:00 AM	27	8/16/01 9:53:00 AM	53	8/16/01 9:59:00 AM	38	8/16/01 10:05:00 AM	32
8/16/01 9:48:00 AM	32	8/16/01 9:54:00 AM	78	8/16/01 9:59:00 AM	32	8/16/01 10:05:00 AM	27
8/16/01 9:48:00 AM	20	8/16/01 9:54:00 AM	25	8/16/01 10:00:00 AM	59	8/16/01 10:05:00 AM	22
8/16/01 9:48:00 AM	21	8/16/01 9:54:00 AM	36	8/16/01 10:00:00 AM	129	8/16/01 10:06:00 AM	18
8/16/01 9:48:00 AM	24	8/16/01 9:54:00 AM	36	8/16/01 10:00:00 AM	121	8/16/01 10:06:00 AM	22
8/16/01 9:48:00 AM	26	8/16/01 9:54:00 AM	27	8/16/01 10:00:00 AM	66	8/16/01 10:06:00 AM	30
8/16/01 9:49:00 AM	26	8/16/01 9:54:00 AM	32	8/16/01 10:00:00 AM	61	8/16/01 10:06:00 AM	28
8/16/01 9:49:00 AM	28	8/16/01 9:55:00 AM	28	8/16/01 10:00:00 AM	50	8/16/01 10:06:00 AM	17
8/16/01 9:49:00 AM	39	8/16/01 9:55:00 AM	33	8/16/01 10:01:00 AM	35	8/16/01 10:06:00 AM	17
8/16/01 9:49:00 AM	36	8/16/01 9:55:00 AM	46	8/16/01 10:01:00 AM	36	8/16/01 10:07:00 AM	19
8/16/01 9:49:00 AM	36	8/16/01 9:55:00 AM	42	8/16/01 10:01:00 AM	39	8/16/01 10:07:00 AM	21
8/16/01 9:49:00 AM	17	8/16/01 9:55:00 AM	22	8/16/01 10:01:00 AM	39	8/16/01 10:07:00 AM	19
8/16/01 9:50:00 AM	21	8/16/01 9:55:00 AM	24	8/16/01 10:01:00 AM	35	8/16/01 10:07:00 AM	26
8/16/01 9:50:00 AM	37	8/16/01 9:56:00 AM	20	8/16/01 10:01:00 AM	19	8/16/01 10:07:00 AM	48
8/16/01 9:50:00 AM	38	8/16/01 9:56:00 AM	26	8/16/01 10:02:00 AM	16	8/16/01 10:07:00 AM	46
8/16/01 9:50:00 AM	21	8/16/01 9:56:00 AM	34	8/16/01 10:02:00 AM	20	8/16/01 10:08:00 AM	40

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 10:08:00 AM	48	8/16/01 10:14:00 AM	63	8/16/01 10:19:00 AM	36	8/16/01 10:25:00 AM	38
8/16/01 10:08:00 AM	49	8/16/01 10:14:00 AM	39	8/16/01 10:20:00 AM	53	8/16/01 10:25:00 AM	43
8/16/01 10:08:00 AM	25	8/16/01 10:14:00 AM	48	8/16/01 10:20:00 AM	64	8/16/01 10:26:00 AM	28
8/16/01 10:08:00 AM	23	8/16/01 10:14:00 AM	38	8/16/01 10:20:00 AM	44	8/16/01 10:26:00 AM	29
8/16/01 10:08:00 AM	300	8/16/01 10:14:00 AM	37	8/16/01 10:20:00 AM	49	8/16/01 10:26:00 AM	28
8/16/01 10:09:00 AM	681	8/16/01 10:14:00 AM	43	8/16/01 10:20:00 AM	56	8/16/01 10:26:00 AM	30
8/16/01 10:09:00 AM	73	8/16/01 10:15:00 AM	41	8/16/01 10:20:00 AM	43	8/16/01 10:26:00 AM	40
8/16/01 10:09:00 AM	47	8/16/01 10:15:00 AM	57	8/16/01 10:21:00 AM	43	8/16/01 10:26:00 AM	43
8/16/01 10:09:00 AM	43	8/16/01 10:15:00 AM	60	8/16/01 10:21:00 AM	24	8/16/01 10:27:00 AM	41
8/16/01 10:09:00 AM	33	8/16/01 10:15:00 AM	47	8/16/01 10:21:00 AM	34	8/16/01 10:27:00 AM	37
8/16/01 10:09:00 AM	44	8/16/01 10:15:00 AM	64	8/16/01 10:21:00 AM	30	8/16/01 10:27:00 AM	42
8/16/01 10:10:00 AM	38	8/16/01 10:15:00 AM	30	8/16/01 10:21:00 AM	44	8/16/01 10:27:00 AM	32
8/16/01 10:10:00 AM	50	8/16/01 10:16:00 AM	43	8/16/01 10:21:00 AM	86	8/16/01 10:27:00 AM	32
8/16/01 10:10:00 AM	38	8/16/01 10:16:00 AM	64	8/16/01 10:22:00 AM	279	8/16/01 10:27:00 AM	29
8/16/01 10:10:00 AM	33	8/16/01 10:16:00 AM	65	8/16/01 10:22:00 AM	532	8/16/01 10:28:00 AM	34
8/16/01 10:10:00 AM	34	8/16/01 10:16:00 AM	91	8/16/01 10:22:00 AM	91	8/16/01 10:28:00 AM	24
8/16/01 10:10:00 AM	134	8/16/01 10:16:00 AM	42	8/16/01 10:22:00 AM	127	8/16/01 10:28:00 AM	28
8/16/01 10:11:00 AM	253	8/16/01 10:16:00 AM	72	8/16/01 10:22:00 AM	92	8/16/01 10:28:00 AM	26
8/16/01 10:11:00 AM	60	8/16/01 10:17:00 AM	146	8/16/01 10:22:00 AM	39	8/16/01 10:28:00 AM	22
8/16/01 10:11:00 AM	43	8/16/01 10:17:00 AM	187	8/16/01 10:23:00 AM	49	8/16/01 10:28:00 AM	26
8/16/01 10:11:00 AM	34	8/16/01 10:17:00 AM	47	8/16/01 10:23:00 AM	35	8/16/01 10:29:00 AM	22
8/16/01 10:11:00 AM	25	8/16/01 10:17:00 AM	79	8/16/01 10:23:00 AM	19	8/16/01 10:29:00 AM	20
8/16/01 10:11:00 AM	35	8/16/01 10:17:00 AM	65	8/16/01 10:23:00 AM	22	8/16/01 10:29:00 AM	26
8/16/01 10:12:00 AM	46	8/16/01 10:17:00 AM	38	8/16/01 10:23:00 AM	28	8/16/01 10:29:00 AM	28
8/16/01 10:12:00 AM	28	8/16/01 10:18:00 AM	44	8/16/01 10:23:00 AM	26	8/16/01 10:29:00 AM	39
8/16/01 10:12:00 AM	19	8/16/01 10:18:00 AM	23	8/16/01 10:24:00 AM	22	8/16/01 10:29:00 AM	44
8/16/01 10:12:00 AM	25	8/16/01 10:18:00 AM	23	8/16/01 10:24:00 AM	24	8/16/01 10:30:00 AM	50
8/16/01 10:12:00 AM	38	8/16/01 10:18:00 AM	28	8/16/01 10:24:00 AM	21	8/16/01 10:30:00 AM	40
8/16/01 10:12:00 AM	35	8/16/01 10:18:00 AM	37	8/16/01 10:24:00 AM	27	8/16/01 10:30:00 AM	40
8/16/01 10:13:00 AM	28	8/16/01 10:18:00 AM	25	8/16/01 10:24:00 AM	27	8/16/01 10:30:00 AM	47
8/16/01 10:13:00 AM	32	8/16/01 10:19:00 AM	32	8/16/01 10:24:00 AM	19	8/16/01 10:30:00 AM	52
8/16/01 10:13:00 AM	38	8/16/01 10:19:00 AM	44	8/16/01 10:25:00 AM	26	8/16/01 10:30:00 AM	42
8/16/01 10:13:00 AM	52	8/16/01 10:19:00 AM	44	8/16/01 10:25:00 AM	32	8/16/01 10:31:00 AM	39
8/16/01 10:13:00 AM	88	8/16/01 10:19:00 AM	49	8/16/01 10:25:00 AM	36	8/16/01 10:31:00 AM	38
8/16/01 10:13:00 AM	104	8/16/01 10:19:00 AM	44	8/16/01 10:25:00 AM	37	8/16/01 10:31:00 AM	32

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 10:31:00 AM	28	8/16/01 10:37:00 AM	28	8/16/01 10:43:00 AM	760	8/16/01 10:49:00 AM	29
8/16/01 10:31:00 AM	30	8/16/01 10:37:00 AM	31	8/16/01 10:43:00 AM	1810	8/16/01 10:49:00 AM	34
8/16/01 10:31:00 AM	27	8/16/01 10:37:00 AM	34	8/16/01 10:43:00 AM	229	8/16/01 10:49:00 AM	60
8/16/01 10:32:00 AM	20	8/16/01 10:37:00 AM	33	8/16/01 10:43:00 AM	74	8/16/01 10:49:00 AM	110
8/16/01 10:32:00 AM	27	8/16/01 10:38:00 AM	41	8/16/01 10:43:00 AM	64	8/16/01 10:49:00 AM	72
8/16/01 10:32:00 AM	45	8/16/01 10:38:00 AM	72	8/16/01 10:44:00 AM	42	8/16/01 10:49:00 AM	66
8/16/01 10:32:00 AM	40	8/16/01 10:38:00 AM	53	8/16/01 10:44:00 AM	29	8/16/01 10:50:00 AM	80
8/16/01 10:32:00 AM	30	8/16/01 10:38:00 AM	45	8/16/01 10:44:00 AM	42	8/16/01 10:50:00 AM	44
8/16/01 10:32:00 AM	23	8/16/01 10:38:00 AM	34	8/16/01 10:44:00 AM	51	8/16/01 10:50:00 AM	72
8/16/01 10:33:00 AM	33	8/16/01 10:38:00 AM	21	8/16/01 10:44:00 AM	32	8/16/01 10:50:00 AM	40
8/16/01 10:33:00 AM	41	8/16/01 10:39:00 AM	30	8/16/01 10:44:00 AM	52	8/16/01 10:50:00 AM	56
8/16/01 10:33:00 AM	38	8/16/01 10:39:00 AM	32	8/16/01 10:45:00 AM	43	8/16/01 10:50:00 AM	65
8/16/01 10:33:00 AM	30	8/16/01 10:39:00 AM	29	8/16/01 10:45:00 AM	34	8/16/01 10:51:00 AM	40
8/16/01 10:33:00 AM	43	8/16/01 10:39:00 AM	26	8/16/01 10:45:00 AM	33	8/16/01 10:51:00 AM	83
8/16/01 10:33:00 AM	67	8/16/01 10:39:00 AM	35	8/16/01 10:45:00 AM	28	8/16/01 10:51:00 AM	209
8/16/01 10:34:00 AM	107	8/16/01 10:39:00 AM	34	8/16/01 10:45:00 AM	36	8/16/01 10:51:00 AM	238
8/16/01 10:34:00 AM	161	8/16/01 10:40:00 AM	32	8/16/01 10:45:00 AM	43	8/16/01 10:51:00 AM	114
8/16/01 10:34:00 AM	34	8/16/01 10:40:00 AM	30	8/16/01 10:46:00 AM	77	8/16/01 10:51:00 AM	76
8/16/01 10:34:00 AM	35	8/16/01 10:40:00 AM	30	8/16/01 10:46:00 AM	129	8/16/01 10:52:00 AM	76
8/16/01 10:34:00 AM	153	8/16/01 10:40:00 AM	29	8/16/01 10:46:00 AM	57	8/16/01 10:52:00 AM	58
8/16/01 10:34:00 AM	298	8/16/01 10:40:00 AM	27	8/16/01 10:46:00 AM	56	8/16/01 10:52:00 AM	50
8/16/01 10:35:00 AM	83	8/16/01 10:40:00 AM	30	8/16/01 10:46:00 AM	39	8/16/01 10:52:00 AM	45
8/16/01 10:35:00 AM	164	8/16/01 10:41:00 AM	23	8/16/01 10:46:00 AM	45	8/16/01 10:52:00 AM	55
8/16/01 10:35:00 AM	47	8/16/01 10:41:00 AM	24	8/16/01 10:47:00 AM	54	8/16/01 10:52:00 AM	55
8/16/01 10:35:00 AM	44	8/16/01 10:41:00 AM	34	8/16/01 10:47:00 AM	44	8/16/01 10:53:00 AM	54
8/16/01 10:35:00 AM	41	8/16/01 10:41:00 AM	38	8/16/01 10:47:00 AM	31	8/16/01 10:53:00 AM	43
8/16/01 10:35:00 AM	38	8/16/01 10:41:00 AM	32	8/16/01 10:47:00 AM	28	8/16/01 10:53:00 AM	38
8/16/01 10:36:00 AM	42	8/16/01 10:41:00 AM	25	8/16/01 10:47:00 AM	25	8/16/01 10:53:00 AM	29
8/16/01 10:36:00 AM	27	8/16/01 10:42:00 AM	19	8/16/01 10:47:00 AM	27	8/16/01 10:53:00 AM	29
8/16/01 10:36:00 AM	42	8/16/01 10:42:00 AM	27	8/16/01 10:48:00 AM	44	8/16/01 10:53:00 AM	24
8/16/01 10:36:00 AM	57	8/16/01 10:42:00 AM	42	8/16/01 10:48:00 AM	44	8/16/01 10:54:00 AM	27
8/16/01 10:36:00 AM	91	8/16/01 10:42:00 AM	32	8/16/01 10:48:00 AM	27	8/16/01 10:54:00 AM	34
8/16/01 10:36:00 AM	155	8/16/01 10:42:00 AM	34	8/16/01 10:48:00 AM	36	8/16/01 10:54:00 AM	51
8/16/01 10:37:00 AM	33	8/16/01 10:42:00 AM	29	8/16/01 10:48:00 AM	27	8/16/01 10:54:00 AM	36
8/16/01 10:37:00 AM	34	8/16/01 10:43:00 AM	31	8/16/01 10:48:00 AM	25	8/16/01 10:54:00 AM	34

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 10:54:00 AM	29	8/16/01 11:00:00 AM	51	8/16/01 11:06:00 AM	33	8/16/01 11:12:00 AM	41
8/16/01 10:55:00 AM	27	8/16/01 11:00:00 AM	44	8/16/01 11:06:00 AM	36	8/16/01 11:12:00 AM	38
8/16/01 10:55:00 AM	30	8/16/01 11:01:00 AM	25	8/16/01 11:06:00 AM	37	8/16/01 11:12:00 AM	43
8/16/01 10:55:00 AM	31	8/16/01 11:01:00 AM	28	8/16/01 11:07:00 AM	54	8/16/01 11:12:00 AM	86
8/16/01 10:55:00 AM	32	8/16/01 11:01:00 AM	26	8/16/01 11:07:00 AM	66	8/16/01 11:13:00 AM	92
8/16/01 10:55:00 AM	42	8/16/01 11:01:00 AM	22	8/16/01 11:07:00 AM	49	8/16/01 11:13:00 AM	77
8/16/01 10:55:00 AM	44	8/16/01 11:01:00 AM	28	8/16/01 11:07:00 AM	57	8/16/01 11:13:00 AM	32
8/16/01 10:56:00 AM	38	8/16/01 11:01:00 AM	25	8/16/01 11:07:00 AM	48	8/16/01 11:13:00 AM	47
8/16/01 10:56:00 AM	44	8/16/01 11:02:00 AM	25	8/16/01 11:07:00 AM	54	8/16/01 11:13:00 AM	85
8/16/01 10:56:00 AM	38	8/16/01 11:02:00 AM	31	8/16/01 11:08:00 AM	58	8/16/01 11:13:00 AM	93
8/16/01 10:56:00 AM	34	8/16/01 11:02:00 AM	21	8/16/01 11:08:00 AM	30	8/16/01 11:14:00 AM	87
8/16/01 10:56:00 AM	77	8/16/01 11:02:00 AM	23	8/16/01 11:08:00 AM	32	8/16/01 11:14:00 AM	117
8/16/01 10:56:00 AM	122	8/16/01 11:02:00 AM	26	8/16/01 11:08:00 AM	39	8/16/01 11:14:00 AM	82
8/16/01 10:57:00 AM	38	8/16/01 11:02:00 AM	33	8/16/01 11:08:00 AM	37	8/16/01 11:14:00 AM	43
8/16/01 10:57:00 AM	32	8/16/01 11:03:00 AM	44	8/16/01 11:08:00 AM	25	8/16/01 11:14:00 AM	30
8/16/01 10:57:00 AM	32	8/16/01 11:03:00 AM	37	8/16/01 11:09:00 AM	30	8/16/01 11:14:00 AM	51
8/16/01 10:57:00 AM	47	8/16/01 11:03:00 AM	39	8/16/01 11:09:00 AM	47	8/16/01 11:15:00 AM	81
8/16/01 10:57:00 AM	61	8/16/01 11:03:00 AM	52	8/16/01 11:09:00 AM	64	8/16/01 11:15:00 AM	57
8/16/01 10:57:00 AM	34	8/16/01 11:03:00 AM	48	8/16/01 11:09:00 AM	60	8/16/01 11:15:00 AM	31
8/16/01 10:58:00 AM	29	8/16/01 11:03:00 AM	66	8/16/01 11:09:00 AM	36	8/16/01 11:15:00 AM	26
8/16/01 10:58:00 AM	27	8/16/01 11:04:00 AM	92	8/16/01 11:09:00 AM	31	8/16/01 11:15:00 AM	29
8/16/01 10:58:00 AM	25	8/16/01 11:04:00 AM	40	8/16/01 11:10:00 AM	46	8/16/01 11:15:00 AM	47
8/16/01 10:58:00 AM	30	8/16/01 11:04:00 AM	34	8/16/01 11:10:00 AM	41	8/16/01 11:16:00 AM	57
8/16/01 10:58:00 AM	48	8/16/01 11:04:00 AM	31	8/16/01 11:10:00 AM	42	8/16/01 11:16:00 AM	52
8/16/01 10:58:00 AM	74	8/16/01 11:04:00 AM	29	8/16/01 11:10:00 AM	38	8/16/01 11:16:00 AM	104
8/16/01 10:59:00 AM	37	8/16/01 11:04:00 AM	30	8/16/01 11:10:00 AM	40	8/16/01 11:16:00 AM	177
8/16/01 10:59:00 AM	30	8/16/01 11:05:00 AM	39	8/16/01 11:10:00 AM	45	8/16/01 11:16:00 AM	44
8/16/01 10:59:00 AM	24	8/16/01 11:05:00 AM	35	8/16/01 11:11:00 AM	72	8/16/01 11:16:00 AM	34
8/16/01 10:59:00 AM	22	8/16/01 11:05:00 AM	29	8/16/01 11:11:00 AM	94	8/16/01 11:17:00 AM	39
8/16/01 10:59:00 AM	37	8/16/01 11:05:00 AM	22	8/16/01 11:11:00 AM	56	8/16/01 11:17:00 AM	57
8/16/01 10:59:00 AM	50	8/16/01 11:05:00 AM	28	8/16/01 11:11:00 AM	65	8/16/01 11:17:00 AM	68
8/16/01 11:00:00 AM	35	8/16/01 11:05:00 AM	44	8/16/01 11:11:00 AM	29	8/16/01 11:17:00 AM	50
8/16/01 11:00:00 AM	36	8/16/01 11:06:00 AM	39	8/16/01 11:11:00 AM	38	8/16/01 11:17:00 AM	34
8/16/01 11:00:00 AM	45	8/16/01 11:06:00 AM	43	8/16/01 11:12:00 AM	33	8/16/01 11:17:00 AM	38
8/16/01 11:00:00 AM	43	8/16/01 11:06:00 AM	46	8/16/01 11:12:00 AM	38	8/16/01 11:18:00 AM	54

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 11:18:00 AM	60	8/16/01 11:24:00 AM	45	8/16/01 11:29:00 AM	54	8/16/01 11:35:00 AM	32
8/16/01 11:18:00 AM	38	8/16/01 11:24:00 AM	56	8/16/01 11:30:00 AM	54	8/16/01 11:35:00 AM	53
8/16/01 11:18:00 AM	109	8/16/01 11:24:00 AM	51	8/16/01 11:30:00 AM	66	8/16/01 11:36:00 AM	83
8/16/01 11:18:00 AM	253	8/16/01 11:24:00 AM	38	8/16/01 11:30:00 AM	69	8/16/01 11:36:00 AM	27
8/16/01 11:18:00 AM	165	8/16/01 11:24:00 AM	59	8/16/01 11:30:00 AM	92	8/16/01 11:36:00 AM	28
8/16/01 11:19:00 AM	44	8/16/01 11:24:00 AM	60	8/16/01 11:30:00 AM	73	8/16/01 11:36:00 AM	30
8/16/01 11:19:00 AM	31	8/16/01 11:25:00 AM	49	8/16/01 11:30:00 AM	85	8/16/01 11:36:00 AM	30
8/16/01 11:19:00 AM	34	8/16/01 11:25:00 AM	39	8/16/01 11:31:00 AM	38	8/16/01 11:36:00 AM	33
8/16/01 11:19:00 AM	42	8/16/01 11:25:00 AM	47	8/16/01 11:31:00 AM	37	8/16/01 11:37:00 AM	28
8/16/01 11:19:00 AM	50	8/16/01 11:25:00 AM	44	8/16/01 11:31:00 AM	49	8/16/01 11:37:00 AM	27
8/16/01 11:19:00 AM	40	8/16/01 11:25:00 AM	47	8/16/01 11:31:00 AM	34	8/16/01 11:37:00 AM	33
8/16/01 11:20:00 AM	34	8/16/01 11:25:00 AM	46	8/16/01 11:31:00 AM	30	8/16/01 11:37:00 AM	39
8/16/01 11:20:00 AM	34	8/16/01 11:26:00 AM	36	8/16/01 11:31:00 AM	43	8/16/01 11:37:00 AM	34
8/16/01 11:20:00 AM	33	8/16/01 11:26:00 AM	31	8/16/01 11:32:00 AM	46	8/16/01 11:37:00 AM	33
8/16/01 11:20:00 AM	29	8/16/01 11:26:00 AM	38	8/16/01 11:32:00 AM	40	8/16/01 11:38:00 AM	27
8/16/01 11:20:00 AM	38	8/16/01 11:26:00 AM	57	8/16/01 11:32:00 AM	45	8/16/01 11:38:00 AM	24
8/16/01 11:20:00 AM	38	8/16/01 11:26:00 AM	59	8/16/01 11:32:00 AM	34	8/16/01 11:38:00 AM	25
8/16/01 11:21:00 AM	39	8/16/01 11:26:00 AM	47	8/16/01 11:32:00 AM	24	8/16/01 11:38:00 AM	32
8/16/01 11:21:00 AM	46	8/16/01 11:27:00 AM	45	8/16/01 11:32:00 AM	36	8/16/01 11:38:00 AM	41
8/16/01 11:21:00 AM	65	8/16/01 11:27:00 AM	56	8/16/01 11:33:00 AM	45	8/16/01 11:38:00 AM	50
8/16/01 11:21:00 AM	97	8/16/01 11:27:00 AM	66	8/16/01 11:33:00 AM	27	8/16/01 11:39:00 AM	43
8/16/01 11:21:00 AM	79	8/16/01 11:27:00 AM	91	8/16/01 11:33:00 AM	25	8/16/01 11:39:00 AM	44
8/16/01 11:21:00 AM	40	8/16/01 11:27:00 AM	51	8/16/01 11:33:00 AM	31	8/16/01 11:39:00 AM	51
8/16/01 11:22:00 AM	53	8/16/01 11:27:00 AM	66	8/16/01 11:33:00 AM	43	8/16/01 11:39:00 AM	27
8/16/01 11:22:00 AM	173	8/16/01 11:28:00 AM	63	8/16/01 11:33:00 AM	32	8/16/01 11:39:00 AM	30
8/16/01 11:22:00 AM	345	8/16/01 11:28:00 AM	60	8/16/01 11:34:00 AM	28	8/16/01 11:39:00 AM	39
8/16/01 11:22:00 AM	231	8/16/01 11:28:00 AM	51	8/16/01 11:34:00 AM	30	8/16/01 11:40:00 AM	49
8/16/01 11:22:00 AM	182	8/16/01 11:28:00 AM	57	8/16/01 11:34:00 AM	28	8/16/01 11:40:00 AM	26
8/16/01 11:22:00 AM	196	8/16/01 11:28:00 AM	60	8/16/01 11:34:00 AM	36	8/16/01 11:40:00 AM	35
8/16/01 11:23:00 AM	110	8/16/01 11:28:00 AM	87	8/16/01 11:34:00 AM	51	8/16/01 11:40:00 AM	41
8/16/01 11:23:00 AM	74	8/16/01 11:29:00 AM	107	8/16/01 11:34:00 AM	37	8/16/01 11:40:00 AM	33
8/16/01 11:23:00 AM	38	8/16/01 11:29:00 AM	130	8/16/01 11:35:00 AM	32	8/16/01 11:40:00 AM	29
8/16/01 11:23:00 AM	53	8/16/01 11:29:00 AM	154	8/16/01 11:35:00 AM	36	8/16/01 11:41:00 AM	24
8/16/01 11:23:00 AM	70	8/16/01 11:29:00 AM	53	8/16/01 11:35:00 AM	37	8/16/01 11:41:00 AM	71
8/16/01 11:23:00 AM	70	8/16/01 11:29:00 AM	41	8/16/01 11:35:00 AM	27	8/16/01 11:41:00 AM	139

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 11:41:00 AM	44	8/16/01 11:47:00 AM	53	8/16/01 11:53:00 AM	46	8/16/01 11:59:00 AM	57
8/16/01 11:41:00 AM	38	8/16/01 11:47:00 AM	36	8/16/01 11:53:00 AM	31	8/16/01 11:59:00 AM	41
8/16/01 11:41:00 AM	48	8/16/01 11:47:00 AM	27	8/16/01 11:53:00 AM	29	8/16/01 11:59:00 AM	53
8/16/01 11:42:00 AM	29	8/16/01 11:47:00 AM	46	8/16/01 11:53:00 AM	33	8/16/01 11:59:00 AM	55
8/16/01 11:42:00 AM	32	8/16/01 11:48:00 AM	84	8/16/01 11:53:00 AM	37	8/16/01 11:59:00 AM	41
8/16/01 11:42:00 AM	35	8/16/01 11:48:00 AM	34	8/16/01 11:54:00 AM	91	8/16/01 11:59:00 AM	28
8/16/01 11:42:00 AM	33	8/16/01 11:48:00 AM	27	8/16/01 11:54:00 AM	174	8/16/01 12:00:00 PM	172
8/16/01 11:42:00 AM	33	8/16/01 11:48:00 AM	28	8/16/01 11:54:00 AM	49	8/16/01 12:00:00 PM	365
8/16/01 11:42:00 AM	27	8/16/01 11:48:00 AM	33	8/16/01 11:54:00 AM	41	8/16/01 12:00:00 PM	47
8/16/01 11:43:00 AM	28	8/16/01 11:48:00 AM	43	8/16/01 11:54:00 AM	46	8/16/01 12:00:00 PM	40
8/16/01 11:43:00 AM	31	8/16/01 11:49:00 AM	63	8/16/01 11:54:00 AM	34	8/16/01 12:00:00 PM	47
8/16/01 11:43:00 AM	36	8/16/01 11:49:00 AM	47	8/16/01 11:55:00 AM	52	8/16/01 12:00:00 PM	60
8/16/01 11:43:00 AM	28	8/16/01 11:49:00 AM	29	8/16/01 11:55:00 AM	116	8/16/01 12:01:00 PM	55
8/16/01 11:43:00 AM	41	8/16/01 11:49:00 AM	37	8/16/01 11:55:00 AM	124	8/16/01 12:01:00 PM	65
8/16/01 11:43:00 AM	57	8/16/01 11:49:00 AM	47	8/16/01 11:55:00 AM	67	8/16/01 12:01:00 PM	101
8/16/01 11:44:00 AM	29	8/16/01 11:49:00 AM	46	8/16/01 11:55:00 AM	119	8/16/01 12:01:00 PM	81
8/16/01 11:44:00 AM	32	8/16/01 11:50:00 AM	28	8/16/01 11:55:00 AM	199	8/16/01 12:01:00 PM	37
8/16/01 11:44:00 AM	33	8/16/01 11:50:00 AM	59	8/16/01 11:56:00 AM	69	8/16/01 12:01:00 PM	41
8/16/01 11:44:00 AM	30	8/16/01 11:50:00 AM	112	8/16/01 11:56:00 AM	66	8/16/01 12:02:00 PM	56
8/16/01 11:44:00 AM	41	8/16/01 11:50:00 AM	72	8/16/01 11:56:00 AM	62	8/16/01 12:02:00 PM	58
8/16/01 11:44:00 AM	36	8/16/01 11:50:00 AM	106	8/16/01 11:56:00 AM	94	8/16/01 12:02:00 PM	137
8/16/01 11:45:00 AM	30	8/16/01 11:50:00 AM	86	8/16/01 11:56:00 AM	134	8/16/01 12:02:00 PM	241
8/16/01 11:45:00 AM	29	8/16/01 11:51:00 AM	81	8/16/01 11:56:00 AM	37	8/16/01 12:02:00 PM	38
8/16/01 11:45:00 AM	30	8/16/01 11:51:00 AM	53	8/16/01 11:57:00 AM	70	8/16/01 12:02:00 PM	39
8/16/01 11:45:00 AM	30	8/16/01 11:51:00 AM	87	8/16/01 11:57:00 AM	119	8/16/01 12:03:00 PM	40
8/16/01 11:45:00 AM	30	8/16/01 11:51:00 AM	229	8/16/01 11:57:00 AM	32	8/16/01 12:03:00 PM	36
8/16/01 11:45:00 AM	34	8/16/01 11:51:00 AM	286	8/16/01 11:57:00 AM	34	8/16/01 12:03:00 PM	124
8/16/01 11:46:00 AM	32	8/16/01 11:51:00 AM	161	8/16/01 11:57:00 AM	38	8/16/01 12:03:00 PM	247
8/16/01 11:46:00 AM	36	8/16/01 11:52:00 AM	100	8/16/01 11:57:00 AM	46	8/16/01 12:03:00 PM	50
8/16/01 11:46:00 AM	50	8/16/01 11:52:00 AM	62	8/16/01 11:58:00 AM	126	8/16/01 12:03:00 PM	59
8/16/01 11:46:00 AM	57	8/16/01 11:52:00 AM	35	8/16/01 11:58:00 AM	213	8/16/01 12:04:00 PM	32
8/16/01 11:46:00 AM	56	8/16/01 11:52:00 AM	37	8/16/01 11:58:00 AM	41	8/16/01 12:04:00 PM	34
8/16/01 11:46:00 AM	56	8/16/01 11:52:00 AM	37	8/16/01 11:58:00 AM	66	8/16/01 12:04:00 PM	33
8/16/01 11:47:00 AM	40	8/16/01 11:52:00 AM	35	8/16/01 11:58:00 AM	116	8/16/01 12:04:00 PM	36
8/16/01 11:47:00 AM	38	8/16/01 11:53:00 AM	38	8/16/01 11:58:00 AM	84	8/16/01 12:04:00 PM	40

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 12:04:00 PM	33	8/16/01 12:10:00 PM	35	8/16/01 12:16:00 PM	38	8/16/01 12:22:00 PM	32
8/16/01 12:05:00 PM	34	8/16/01 12:10:00 PM	44	8/16/01 12:16:00 PM	36	8/16/01 12:22:00 PM	32
8/16/01 12:05:00 PM	37	8/16/01 12:11:00 PM	57	8/16/01 12:16:00 PM	45	8/16/01 12:22:00 PM	37
8/16/01 12:05:00 PM	32	8/16/01 12:11:00 PM	38	8/16/01 12:17:00 PM	35	8/16/01 12:22:00 PM	52
8/16/01 12:05:00 PM	33	8/16/01 12:11:00 PM	31	8/16/01 12:17:00 PM	38	8/16/01 12:23:00 PM	74
8/16/01 12:05:00 PM	32	8/16/01 12:11:00 PM	34	8/16/01 12:17:00 PM	36	8/16/01 12:23:00 PM	54
8/16/01 12:05:00 PM	35	8/16/01 12:11:00 PM	42	8/16/01 12:17:00 PM	36	8/16/01 12:23:00 PM	34
8/16/01 12:06:00 PM	45	8/16/01 12:11:00 PM	47	8/16/01 12:17:00 PM	34	8/16/01 12:23:00 PM	39
8/16/01 12:06:00 PM	47	8/16/01 12:12:00 PM	35	8/16/01 12:17:00 PM	32	8/16/01 12:23:00 PM	52
8/16/01 12:06:00 PM	30	8/16/01 12:12:00 PM	35	8/16/01 12:18:00 PM	46	8/16/01 12:23:00 PM	36
8/16/01 12:06:00 PM	32	8/16/01 12:12:00 PM	46	8/16/01 12:18:00 PM	74	8/16/01 12:24:00 PM	37
8/16/01 12:06:00 PM	42	8/16/01 12:12:00 PM	50	8/16/01 12:18:00 PM	119	8/16/01 12:24:00 PM	44
8/16/01 12:06:00 PM	46	8/16/01 12:12:00 PM	54	8/16/01 12:18:00 PM	46	8/16/01 12:24:00 PM	62
8/16/01 12:07:00 PM	38	8/16/01 12:12:00 PM	57	8/16/01 12:18:00 PM	39	8/16/01 12:24:00 PM	92
8/16/01 12:07:00 PM	32	8/16/01 12:13:00 PM	33	8/16/01 12:18:00 PM	34	8/16/01 12:24:00 PM	127
8/16/01 12:07:00 PM	32	8/16/01 12:13:00 PM	34	8/16/01 12:19:00 PM	39	8/16/01 12:24:00 PM	254
8/16/01 12:07:00 PM	33	8/16/01 12:13:00 PM	36	8/16/01 12:19:00 PM	52	8/16/01 12:25:00 PM	115
8/16/01 12:07:00 PM	39	8/16/01 12:13:00 PM	43	8/16/01 12:19:00 PM	34	8/16/01 12:25:00 PM	110
8/16/01 12:07:00 PM	41	8/16/01 12:13:00 PM	47	8/16/01 12:19:00 PM	34	8/16/01 12:25:00 PM	74
8/16/01 12:08:00 PM	34	8/16/01 12:13:00 PM	38	8/16/01 12:19:00 PM	31	8/16/01 12:25:00 PM	108
8/16/01 12:08:00 PM	33	8/16/01 12:14:00 PM	39	8/16/01 12:19:00 PM	30	8/16/01 12:25:00 PM	246
8/16/01 12:08:00 PM	97	8/16/01 12:14:00 PM	37	8/16/01 12:20:00 PM	32	8/16/01 12:25:00 PM	551
8/16/01 12:08:00 PM	178	8/16/01 12:14:00 PM	33	8/16/01 12:20:00 PM	36	8/16/01 12:26:00 PM	127
8/16/01 12:08:00 PM	39	8/16/01 12:14:00 PM	36	8/16/01 12:20:00 PM	62	8/16/01 12:26:00 PM	48
8/16/01 12:08:00 PM	44	8/16/01 12:14:00 PM	38	8/16/01 12:20:00 PM	84	8/16/01 12:26:00 PM	66
8/16/01 12:09:00 PM	45	8/16/01 12:14:00 PM	34	8/16/01 12:20:00 PM	34	8/16/01 12:26:00 PM	77
8/16/01 12:09:00 PM	36	8/16/01 12:15:00 PM	34	8/16/01 12:20:00 PM	38	8/16/01 12:26:00 PM	59
8/16/01 12:09:00 PM	30	8/16/01 12:15:00 PM	38	8/16/01 12:21:00 PM	33	8/16/01 12:26:00 PM	42
8/16/01 12:09:00 PM	34	8/16/01 12:15:00 PM	41	8/16/01 12:21:00 PM	34	8/16/01 12:27:00 PM	39
8/16/01 12:09:00 PM	32	8/16/01 12:15:00 PM	36	8/16/01 12:21:00 PM	38	8/16/01 12:27:00 PM	92
8/16/01 12:09:00 PM	31	8/16/01 12:15:00 PM	35	8/16/01 12:21:00 PM	38	8/16/01 12:27:00 PM	157
8/16/01 12:10:00 PM	33	8/16/01 12:15:00 PM	37	8/16/01 12:21:00 PM	33	8/16/01 12:27:00 PM	50
8/16/01 12:10:00 PM	33	8/16/01 12:16:00 PM	38	8/16/01 12:21:00 PM	37	8/16/01 12:27:00 PM	36
8/16/01 12:10:00 PM	36	8/16/01 12:16:00 PM	39	8/16/01 12:22:00 PM	42	8/16/01 12:27:00 PM	36
8/16/01 12:10:00 PM	36	8/16/01 12:16:00 PM	38	8/16/01 12:22:00 PM	38	8/16/01 12:28:00 PM	75

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 12:28:00 PM	138	8/16/01 12:34:00 PM	35	8/16/01 12:39:00 PM	78	8/16/01 12:45:00 PM	46
8/16/01 12:28:00 PM	68	8/16/01 12:34:00 PM	41	8/16/01 12:40:00 PM	101	8/16/01 12:45:00 PM	48
8/16/01 12:28:00 PM	41	8/16/01 12:34:00 PM	49	8/16/01 12:40:00 PM	61	8/16/01 12:46:00 PM	38
8/16/01 12:28:00 PM	32	8/16/01 12:34:00 PM	38	8/16/01 12:40:00 PM	34	8/16/01 12:46:00 PM	50
8/16/01 12:28:00 PM	33	8/16/01 12:34:00 PM	47	8/16/01 12:40:00 PM	34	8/16/01 12:46:00 PM	73
8/16/01 12:29:00 PM	33	8/16/01 12:34:00 PM	60	8/16/01 12:40:00 PM	80	8/16/01 12:46:00 PM	71
8/16/01 12:29:00 PM	35	8/16/01 12:35:00 PM	59	8/16/01 12:40:00 PM	158	8/16/01 12:46:00 PM	62
8/16/01 12:29:00 PM	42	8/16/01 12:35:00 PM	41	8/16/01 12:41:00 PM	80	8/16/01 12:46:00 PM	44
8/16/01 12:29:00 PM	46	8/16/01 12:35:00 PM	49	8/16/01 12:41:00 PM	52	8/16/01 12:47:00 PM	39
8/16/01 12:29:00 PM	43	8/16/01 12:35:00 PM	34	8/16/01 12:41:00 PM	67	8/16/01 12:47:00 PM	36
8/16/01 12:29:00 PM	39	8/16/01 12:35:00 PM	63	8/16/01 12:41:00 PM	56	8/16/01 12:47:00 PM	49
8/16/01 12:30:00 PM	39	8/16/01 12:35:00 PM	601	8/16/01 12:41:00 PM	40	8/16/01 12:47:00 PM	73
8/16/01 12:30:00 PM	39	8/16/01 12:36:00 PM	1404	8/16/01 12:41:00 PM	49	8/16/01 12:47:00 PM	80
8/16/01 12:30:00 PM	46	8/16/01 12:36:00 PM	475	8/16/01 12:42:00 PM	48	8/16/01 12:47:00 PM	38
8/16/01 12:30:00 PM	55	8/16/01 12:36:00 PM	74	8/16/01 12:42:00 PM	62	8/16/01 12:48:00 PM	40
8/16/01 12:30:00 PM	40	8/16/01 12:36:00 PM	90	8/16/01 12:42:00 PM	75	8/16/01 12:48:00 PM	48
8/16/01 12:30:00 PM	35	8/16/01 12:36:00 PM	78	8/16/01 12:42:00 PM	50	8/16/01 12:48:00 PM	59
8/16/01 12:31:00 PM	36	8/16/01 12:36:00 PM	60	8/16/01 12:42:00 PM	67	8/16/01 12:48:00 PM	56
8/16/01 12:31:00 PM	38	8/16/01 12:37:00 PM	52	8/16/01 12:42:00 PM	88	8/16/01 12:48:00 PM	78
8/16/01 12:31:00 PM	38	8/16/01 12:37:00 PM	57	8/16/01 12:43:00 PM	85	8/16/01 12:48:00 PM	107
8/16/01 12:31:00 PM	35	8/16/01 12:37:00 PM	53	8/16/01 12:43:00 PM	73	8/16/01 12:49:00 PM	56
8/16/01 12:31:00 PM	32	8/16/01 12:37:00 PM	62	8/16/01 12:43:00 PM	65	8/16/01 12:49:00 PM	60
8/16/01 12:31:00 PM	34	8/16/01 12:37:00 PM	116	8/16/01 12:43:00 PM	66	8/16/01 12:49:00 PM	58
8/16/01 12:32:00 PM	35	8/16/01 12:37:00 PM	228	8/16/01 12:43:00 PM	136	8/16/01 12:49:00 PM	42
8/16/01 12:32:00 PM	38	8/16/01 12:38:00 PM	124	8/16/01 12:43:00 PM	194	8/16/01 12:49:00 PM	43
8/16/01 12:32:00 PM	36	8/16/01 12:38:00 PM	96	8/16/01 12:44:00 PM	98	8/16/01 12:49:00 PM	46
8/16/01 12:32:00 PM	39	8/16/01 12:38:00 PM	68	8/16/01 12:44:00 PM	62	8/16/01 12:50:00 PM	58
8/16/01 12:32:00 PM	59	8/16/01 12:38:00 PM	64	8/16/01 12:44:00 PM	71	8/16/01 12:50:00 PM	53
8/16/01 12:32:00 PM	89	8/16/01 12:38:00 PM	62	8/16/01 12:44:00 PM	66	8/16/01 12:50:00 PM	51
8/16/01 12:33:00 PM	70	8/16/01 12:38:00 PM	55	8/16/01 12:44:00 PM	74	8/16/01 12:50:00 PM	43
8/16/01 12:33:00 PM	37	8/16/01 12:39:00 PM	70	8/16/01 12:44:00 PM	56	8/16/01 12:50:00 PM	45
8/16/01 12:33:00 PM	41	8/16/01 12:39:00 PM	51	8/16/01 12:45:00 PM	59	8/16/01 12:50:00 PM	61
8/16/01 12:33:00 PM	50	8/16/01 12:39:00 PM	56	8/16/01 12:45:00 PM	50	8/16/01 12:51:00 PM	58
8/16/01 12:33:00 PM	41	8/16/01 12:39:00 PM	64	8/16/01 12:45:00 PM	75	8/16/01 12:51:00 PM	50
8/16/01 12:33:00 PM	38	8/16/01 12:39:00 PM	63	8/16/01 12:45:00 PM	98	8/16/01 12:51:00 PM	49

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 12:51:00 PM	64	8/16/01 12:57:00 PM	123	8/16/01 1:03:00 PM	37	8/16/01 1:09:00 PM	243
8/16/01 12:51:00 PM	77	8/16/01 12:57:00 PM	43	8/16/01 1:03:00 PM	34	8/16/01 1:09:00 PM	72
8/16/01 12:51:00 PM	56	8/16/01 12:57:00 PM	54	8/16/01 1:03:00 PM	40	8/16/01 1:09:00 PM	53
8/16/01 12:52:00 PM	45	8/16/01 12:57:00 PM	48	8/16/01 1:03:00 PM	39	8/16/01 1:09:00 PM	60
8/16/01 12:52:00 PM	43	8/16/01 12:58:00 PM	38	8/16/01 1:03:00 PM	37	8/16/01 1:09:00 PM	72
8/16/01 12:52:00 PM	46	8/16/01 12:58:00 PM	33	8/16/01 1:04:00 PM	36	8/16/01 1:09:00 PM	54
8/16/01 12:52:00 PM	41	8/16/01 12:58:00 PM	31	8/16/01 1:04:00 PM	39	8/16/01 1:10:00 PM	48
8/16/01 12:52:00 PM	40	8/16/01 12:58:00 PM	34	8/16/01 1:04:00 PM	45	8/16/01 1:10:00 PM	40
8/16/01 12:52:00 PM	49	8/16/01 12:58:00 PM	34	8/16/01 1:04:00 PM	51	8/16/01 1:10:00 PM	40
8/16/01 12:53:00 PM	38	8/16/01 12:58:00 PM	36	8/16/01 1:04:00 PM	53	8/16/01 1:10:00 PM	46
8/16/01 12:53:00 PM	35	8/16/01 12:59:00 PM	34	8/16/01 1:04:00 PM	60	8/16/01 1:10:00 PM	65
8/16/01 12:53:00 PM	40	8/16/01 12:59:00 PM	36	8/16/01 1:05:00 PM	76	8/16/01 1:10:00 PM	65
8/16/01 12:53:00 PM	49	8/16/01 12:59:00 PM	42	8/16/01 1:05:00 PM	41	8/16/01 1:11:00 PM	64
8/16/01 12:53:00 PM	68	8/16/01 12:59:00 PM	46	8/16/01 1:05:00 PM	39	8/16/01 1:11:00 PM	133
8/16/01 12:53:00 PM	81	8/16/01 12:59:00 PM	38	8/16/01 1:05:00 PM	41	8/16/01 1:11:00 PM	223
8/16/01 12:54:00 PM	55	8/16/01 12:59:00 PM	63	8/16/01 1:05:00 PM	77	8/16/01 1:11:00 PM	63
8/16/01 12:54:00 PM	62	8/16/01 1:00:00 PM	97	8/16/01 1:05:00 PM	124	8/16/01 1:11:00 PM	80
8/16/01 12:54:00 PM	49	8/16/01 1:00:00 PM	45	8/16/01 1:06:00 PM	35	8/16/01 1:11:00 PM	47
8/16/01 12:54:00 PM	42	8/16/01 1:00:00 PM	53	8/16/01 1:06:00 PM	37	8/16/01 1:12:00 PM	39
8/16/01 12:54:00 PM	62	8/16/01 1:00:00 PM	68	8/16/01 1:06:00 PM	37	8/16/01 1:12:00 PM	43
8/16/01 12:54:00 PM	93	8/16/01 1:00:00 PM	56	8/16/01 1:06:00 PM	38	8/16/01 1:12:00 PM	40
8/16/01 12:55:00 PM	34	8/16/01 1:00:00 PM	51	8/16/01 1:06:00 PM	37	8/16/01 1:12:00 PM	40
8/16/01 12:55:00 PM	37	8/16/01 1:01:00 PM	50	8/16/01 1:06:00 PM	38	8/16/01 1:12:00 PM	38
8/16/01 12:55:00 PM	44	8/16/01 1:01:00 PM	183	8/16/01 1:07:00 PM	34	8/16/01 1:12:00 PM	40
8/16/01 12:55:00 PM	48	8/16/01 1:01:00 PM	398	8/16/01 1:07:00 PM	39	8/16/01 1:13:00 PM	53
8/16/01 12:55:00 PM	41	8/16/01 1:01:00 PM	106	8/16/01 1:07:00 PM	50	8/16/01 1:13:00 PM	74
8/16/01 12:55:00 PM	34	8/16/01 1:01:00 PM	105	8/16/01 1:07:00 PM	110	8/16/01 1:13:00 PM	56
8/16/01 12:56:00 PM	39	8/16/01 1:01:00 PM	130	8/16/01 1:07:00 PM	197	8/16/01 1:13:00 PM	37
8/16/01 12:56:00 PM	35	8/16/01 1:02:00 PM	64	8/16/01 1:07:00 PM	96	8/16/01 1:13:00 PM	45
8/16/01 12:56:00 PM	36	8/16/01 1:02:00 PM	68	8/16/01 1:08:00 PM	291	8/16/01 1:13:00 PM	65
8/16/01 12:56:00 PM	40	8/16/01 1:02:00 PM	55	8/16/01 1:08:00 PM	581	8/16/01 1:14:00 PM	98
8/16/01 12:56:00 PM	37	8/16/01 1:02:00 PM	68	8/16/01 1:08:00 PM	74	8/16/01 1:14:00 PM	142
8/16/01 12:56:00 PM	45	8/16/01 1:02:00 PM	105	8/16/01 1:08:00 PM	97	8/16/01 1:14:00 PM	82
8/16/01 12:57:00 PM	55	8/16/01 1:02:00 PM	52	8/16/01 1:08:00 PM	127	8/16/01 1:14:00 PM	65
8/16/01 12:57:00 PM	76	8/16/01 1:03:00 PM	54	8/16/01 1:08:00 PM	142	8/16/01 1:14:00 PM	54

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 1:14:00 PM	96	8/16/01 1:20:00 PM	100	8/16/01 1:26:00 PM	106	8/16/01 1:32:00 PM	82
8/16/01 1:15:00 PM	172	8/16/01 1:20:00 PM	75	8/16/01 1:26:00 PM	91	8/16/01 1:32:00 PM	68
8/16/01 1:15:00 PM	62	8/16/01 1:21:00 PM	67	8/16/01 1:26:00 PM	106	8/16/01 1:32:00 PM	68
8/16/01 1:15:00 PM	73	8/16/01 1:21:00 PM	66	8/16/01 1:27:00 PM	210	8/16/01 1:32:00 PM	67
8/16/01 1:15:00 PM	58	8/16/01 1:21:00 PM	49	8/16/01 1:27:00 PM	174	8/16/01 1:33:00 PM	66
8/16/01 1:15:00 PM	49	8/16/01 1:21:00 PM	52	8/16/01 1:27:00 PM	192	8/16/01 1:33:00 PM	65
8/16/01 1:15:00 PM	60	8/16/01 1:21:00 PM	52	8/16/01 1:27:00 PM	90	8/16/01 1:33:00 PM	59
8/16/01 1:16:00 PM	86	8/16/01 1:21:00 PM	59	8/16/01 1:27:00 PM	106	8/16/01 1:33:00 PM	61
8/16/01 1:16:00 PM	97	8/16/01 1:22:00 PM	80	8/16/01 1:27:00 PM	117	8/16/01 1:33:00 PM	58
8/16/01 1:16:00 PM	76	8/16/01 1:22:00 PM	102	8/16/01 1:28:00 PM	160	8/16/01 1:33:00 PM	55
8/16/01 1:16:00 PM	72	8/16/01 1:22:00 PM	66	8/16/01 1:28:00 PM	224	8/16/01 1:34:00 PM	57
8/16/01 1:16:00 PM	98	8/16/01 1:22:00 PM	47	8/16/01 1:28:00 PM	135	8/16/01 1:34:00 PM	64
8/16/01 1:16:00 PM	80	8/16/01 1:22:00 PM	69	8/16/01 1:28:00 PM	51	8/16/01 1:34:00 PM	79
8/16/01 1:17:00 PM	37	8/16/01 1:22:00 PM	70	8/16/01 1:28:00 PM	52	8/16/01 1:34:00 PM	80
8/16/01 1:17:00 PM	34	8/16/01 1:23:00 PM	67	8/16/01 1:28:00 PM	49	8/16/01 1:34:00 PM	106
8/16/01 1:17:00 PM	38	8/16/01 1:23:00 PM	46	8/16/01 1:29:00 PM	68	8/16/01 1:34:00 PM	118
8/16/01 1:17:00 PM	39	8/16/01 1:23:00 PM	45	8/16/01 1:29:00 PM	115	8/16/01 1:35:00 PM	69
8/16/01 1:17:00 PM	40	8/16/01 1:23:00 PM	72	8/16/01 1:29:00 PM	56	8/16/01 1:35:00 PM	78
8/16/01 1:17:00 PM	40	8/16/01 1:23:00 PM	96	8/16/01 1:29:00 PM	65	8/16/01 1:35:00 PM	82
8/16/01 1:18:00 PM	35	8/16/01 1:23:00 PM	52	8/16/01 1:29:00 PM	106	8/16/01 1:35:00 PM	96
8/16/01 1:18:00 PM	36	8/16/01 1:24:00 PM	66	8/16/01 1:29:00 PM	155	8/16/01 1:35:00 PM	94
8/16/01 1:18:00 PM	37	8/16/01 1:24:00 PM	78	8/16/01 1:30:00 PM	129	8/16/01 1:35:00 PM	81
8/16/01 1:18:00 PM	41	8/16/01 1:24:00 PM	93	8/16/01 1:30:00 PM	97	8/16/01 1:36:00 PM	86
8/16/01 1:18:00 PM	56	8/16/01 1:24:00 PM	84	8/16/01 1:30:00 PM	79	8/16/01 1:36:00 PM	40
8/16/01 1:18:00 PM	72	8/16/01 1:24:00 PM	88	8/16/01 1:30:00 PM	85	8/16/01 1:36:00 PM	40
8/16/01 1:19:00 PM	41	8/16/01 1:24:00 PM	59	8/16/01 1:30:00 PM	57	8/16/01 1:36:00 PM	47
8/16/01 1:19:00 PM	36	8/16/01 1:25:00 PM	66	8/16/01 1:30:00 PM	55	8/16/01 1:36:00 PM	106
8/16/01 1:19:00 PM	47	8/16/01 1:25:00 PM	57	8/16/01 1:31:00 PM	44	8/16/01 1:36:00 PM	204
8/16/01 1:19:00 PM	118	8/16/01 1:25:00 PM	56	8/16/01 1:31:00 PM	45	8/16/01 1:37:00 PM	80
8/16/01 1:19:00 PM	208	8/16/01 1:25:00 PM	51	8/16/01 1:31:00 PM	48	8/16/01 1:37:00 PM	56
8/16/01 1:19:00 PM	134	8/16/01 1:25:00 PM	55	8/16/01 1:31:00 PM	47	8/16/01 1:37:00 PM	40
8/16/01 1:20:00 PM	78	8/16/01 1:25:00 PM	59	8/16/01 1:31:00 PM	45	8/16/01 1:37:00 PM	42
8/16/01 1:20:00 PM	48	8/16/01 1:26:00 PM	51	8/16/01 1:31:00 PM	46	8/16/01 1:37:00 PM	64
8/16/01 1:20:00 PM	106	8/16/01 1:26:00 PM	53	8/16/01 1:32:00 PM	67	8/16/01 1:37:00 PM	89
8/16/01 1:20:00 PM	185	8/16/01 1:26:00 PM	75	8/16/01 1:32:00 PM	87	8/16/01 1:38:00 PM	88

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 1:38:00 PM	48	8/16/01 1:44:00 PM	109	8/16/01 1:49:00 PM	44	8/16/01 1:55:00 PM	99
8/16/01 1:38:00 PM	46	8/16/01 1:44:00 PM	109	8/16/01 1:50:00 PM	61	8/16/01 1:55:00 PM	95
8/16/01 1:38:00 PM	49	8/16/01 1:44:00 PM	275	8/16/01 1:50:00 PM	91	8/16/01 1:56:00 PM	75
8/16/01 1:38:00 PM	64	8/16/01 1:44:00 PM	460	8/16/01 1:50:00 PM	46	8/16/01 1:56:00 PM	97
8/16/01 1:38:00 PM	76	8/16/01 1:44:00 PM	245	8/16/01 1:50:00 PM	43	8/16/01 1:56:00 PM	110
8/16/01 1:39:00 PM	178	8/16/01 1:44:00 PM	563	8/16/01 1:50:00 PM	42	8/16/01 1:56:00 PM	78
8/16/01 1:39:00 PM	255	8/16/01 1:45:00 PM	1931	8/16/01 1:50:00 PM	42	8/16/01 1:56:00 PM	65
8/16/01 1:39:00 PM	159	8/16/01 1:45:00 PM	2175	8/16/01 1:51:00 PM	39	8/16/01 1:56:00 PM	85
8/16/01 1:39:00 PM	109	8/16/01 1:45:00 PM	617	8/16/01 1:51:00 PM	45	8/16/01 1:57:00 PM	72
8/16/01 1:39:00 PM	61	8/16/01 1:45:00 PM	83	8/16/01 1:51:00 PM	50	8/16/01 1:57:00 PM	82
8/16/01 1:39:00 PM	43	8/16/01 1:45:00 PM	81	8/16/01 1:51:00 PM	46	8/16/01 1:57:00 PM	117
8/16/01 1:40:00 PM	44	8/16/01 1:45:00 PM	71	8/16/01 1:51:00 PM	45	8/16/01 1:57:00 PM	60
8/16/01 1:40:00 PM	39	8/16/01 1:46:00 PM	69	8/16/01 1:51:00 PM	58	8/16/01 1:57:00 PM	68
8/16/01 1:40:00 PM	52	8/16/01 1:46:00 PM	76	8/16/01 1:52:00 PM	55	8/16/01 1:57:00 PM	119
8/16/01 1:40:00 PM	56	8/16/01 1:46:00 PM	77	8/16/01 1:52:00 PM	62	8/16/01 1:58:00 PM	198
8/16/01 1:40:00 PM	41	8/16/01 1:46:00 PM	58	8/16/01 1:52:00 PM	59	8/16/01 1:58:00 PM	86
8/16/01 1:40:00 PM	42	8/16/01 1:46:00 PM	75	8/16/01 1:52:00 PM	52	8/16/01 1:58:00 PM	86
8/16/01 1:41:00 PM	52	8/16/01 1:46:00 PM	75	8/16/01 1:52:00 PM	54	8/16/01 1:58:00 PM	90
8/16/01 1:41:00 PM	53	8/16/01 1:47:00 PM	77	8/16/01 1:52:00 PM	52	8/16/01 1:58:00 PM	152
8/16/01 1:41:00 PM	44	8/16/01 1:47:00 PM	95	8/16/01 1:53:00 PM	40	8/16/01 1:58:00 PM	234
8/16/01 1:41:00 PM	41	8/16/01 1:47:00 PM	90	8/16/01 1:53:00 PM	44	8/16/01 1:59:00 PM	320
8/16/01 1:41:00 PM	35	8/16/01 1:47:00 PM	63	8/16/01 1:53:00 PM	51	8/16/01 1:59:00 PM	427
8/16/01 1:41:00 PM	44	8/16/01 1:47:00 PM	56	8/16/01 1:53:00 PM	50	8/16/01 1:59:00 PM	322
8/16/01 1:42:00 PM	70	8/16/01 1:47:00 PM	51	8/16/01 1:53:00 PM	44	8/16/01 1:59:00 PM	128
8/16/01 1:42:00 PM	71	8/16/01 1:48:00 PM	46	8/16/01 1:53:00 PM	54	8/16/01 1:59:00 PM	107
8/16/01 1:42:00 PM	66	8/16/01 1:48:00 PM	45	8/16/01 1:54:00 PM	63	8/16/01 1:59:00 PM	64
8/16/01 1:42:00 PM	81	8/16/01 1:48:00 PM	50	8/16/01 1:54:00 PM	48	8/16/01 2:00:00 PM	100
8/16/01 1:42:00 PM	68	8/16/01 1:48:00 PM	43	8/16/01 1:54:00 PM	42	8/16/01 2:00:00 PM	95
8/16/01 1:42:00 PM	87	8/16/01 1:48:00 PM	46	8/16/01 1:54:00 PM	45	8/16/01 2:00:00 PM	73
8/16/01 1:43:00 PM	246	8/16/01 1:48:00 PM	48	8/16/01 1:54:00 PM	43	8/16/01 2:00:00 PM	78
8/16/01 1:43:00 PM	499	8/16/01 1:49:00 PM	47	8/16/01 1:54:00 PM	50	8/16/01 2:00:00 PM	87
8/16/01 1:43:00 PM	165	8/16/01 1:49:00 PM	55	8/16/01 1:55:00 PM	56	8/16/01 2:00:00 PM	74
8/16/01 1:43:00 PM	326	8/16/01 1:49:00 PM	49	8/16/01 1:55:00 PM	85	8/16/01 2:01:00 PM	64
8/16/01 1:43:00 PM	323	8/16/01 1:49:00 PM	54	8/16/01 1:55:00 PM	176	8/16/01 2:01:00 PM	60
8/16/01 1:43:00 PM	218	8/16/01 1:49:00 PM	42	8/16/01 1:55:00 PM	132	8/16/01 2:01:00 PM	64

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 2:01:00 PM	78	8/16/01 2:07:00 PM	75	8/16/01 2:13:00 PM	36	8/16/01 2:19:00 PM	46
8/16/01 2:01:00 PM	52	8/16/01 2:07:00 PM	84	8/16/01 2:13:00 PM	36	8/16/01 2:19:00 PM	58
8/16/01 2:01:00 PM	61	8/16/01 2:07:00 PM	84	8/16/01 2:13:00 PM	50	8/16/01 2:19:00 PM	88
8/16/01 2:02:00 PM	64	8/16/01 2:07:00 PM	104	8/16/01 2:13:00 PM	66	8/16/01 2:19:00 PM	103
8/16/01 2:02:00 PM	63	8/16/01 2:08:00 PM	127	8/16/01 2:13:00 PM	52	8/16/01 2:19:00 PM	54
8/16/01 2:02:00 PM	52	8/16/01 2:08:00 PM	264	8/16/01 2:14:00 PM	39	8/16/01 2:19:00 PM	136
8/16/01 2:02:00 PM	583	8/16/01 2:08:00 PM	326	8/16/01 2:14:00 PM	50	8/16/01 2:20:00 PM	247
8/16/01 2:02:00 PM	1410	8/16/01 2:08:00 PM	61	8/16/01 2:14:00 PM	55	8/16/01 2:20:00 PM	90
8/16/01 2:02:00 PM	436	8/16/01 2:08:00 PM	57	8/16/01 2:14:00 PM	44	8/16/01 2:20:00 PM	116
8/16/01 2:03:00 PM	307	8/16/01 2:08:00 PM	52	8/16/01 2:14:00 PM	41	8/16/01 2:20:00 PM	99
8/16/01 2:03:00 PM	214	8/16/01 2:09:00 PM	58	8/16/01 2:14:00 PM	45	8/16/01 2:20:00 PM	59
8/16/01 2:03:00 PM	141	8/16/01 2:09:00 PM	55	8/16/01 2:15:00 PM	57	8/16/01 2:20:00 PM	60
8/16/01 2:03:00 PM	62	8/16/01 2:09:00 PM	56	8/16/01 2:15:00 PM	66	8/16/01 2:21:00 PM	42
8/16/01 2:03:00 PM	169	8/16/01 2:09:00 PM	53	8/16/01 2:15:00 PM	69	8/16/01 2:21:00 PM	39
8/16/01 2:03:00 PM	329	8/16/01 2:09:00 PM	49	8/16/01 2:15:00 PM	73	8/16/01 2:21:00 PM	42
8/16/01 2:04:00 PM	69	8/16/01 2:09:00 PM	38	8/16/01 2:15:00 PM	89	8/16/01 2:21:00 PM	44
8/16/01 2:04:00 PM	43	8/16/01 2:10:00 PM	43	8/16/01 2:15:00 PM	70	8/16/01 2:21:00 PM	56
8/16/01 2:04:00 PM	62	8/16/01 2:10:00 PM	44	8/16/01 2:16:00 PM	64	8/16/01 2:21:00 PM	49
8/16/01 2:04:00 PM	83	8/16/01 2:10:00 PM	48	8/16/01 2:16:00 PM	61	8/16/01 2:22:00 PM	46
8/16/01 2:04:00 PM	76	8/16/01 2:10:00 PM	47	8/16/01 2:16:00 PM	57	8/16/01 2:22:00 PM	112
8/16/01 2:04:00 PM	104	8/16/01 2:10:00 PM	49	8/16/01 2:16:00 PM	46	8/16/01 2:22:00 PM	205
8/16/01 2:05:00 PM	100	8/16/01 2:10:00 PM	47	8/16/01 2:16:00 PM	59	8/16/01 2:22:00 PM	159
8/16/01 2:05:00 PM	76	8/16/01 2:11:00 PM	44	8/16/01 2:16:00 PM	42	8/16/01 2:22:00 PM	159
8/16/01 2:05:00 PM	75	8/16/01 2:11:00 PM	48	8/16/01 2:17:00 PM	53	8/16/01 2:22:00 PM	53
8/16/01 2:05:00 PM	77	8/16/01 2:11:00 PM	42	8/16/01 2:17:00 PM	57	8/16/01 2:23:00 PM	42
8/16/01 2:05:00 PM	105	8/16/01 2:11:00 PM	46	8/16/01 2:17:00 PM	54	8/16/01 2:23:00 PM	88
8/16/01 2:05:00 PM	95	8/16/01 2:11:00 PM	38	8/16/01 2:17:00 PM	51	8/16/01 2:23:00 PM	162
8/16/01 2:06:00 PM	125	8/16/01 2:11:00 PM	37	8/16/01 2:17:00 PM	45	8/16/01 2:23:00 PM	113
8/16/01 2:06:00 PM	52	8/16/01 2:12:00 PM	36	8/16/01 2:17:00 PM	50	8/16/01 2:23:00 PM	117
8/16/01 2:06:00 PM	108	8/16/01 2:12:00 PM	45	8/16/01 2:18:00 PM	49	8/16/01 2:23:00 PM	141
8/16/01 2:06:00 PM	223	8/16/01 2:12:00 PM	58	8/16/01 2:18:00 PM	59	8/16/01 2:24:00 PM	118
8/16/01 2:06:00 PM	138	8/16/01 2:12:00 PM	77	8/16/01 2:18:00 PM	80	8/16/01 2:24:00 PM	73
8/16/01 2:06:00 PM	62	8/16/01 2:12:00 PM	119	8/16/01 2:18:00 PM	105	8/16/01 2:24:00 PM	87
8/16/01 2:07:00 PM	55	8/16/01 2:12:00 PM	62	8/16/01 2:18:00 PM	135	8/16/01 2:24:00 PM	70
8/16/01 2:07:00 PM	57	8/16/01 2:13:00 PM	40	8/16/01 2:18:00 PM	63	8/16/01 2:24:00 PM	123

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 2:24:00 PM	83	8/16/01 2:30:00 PM	54	8/16/01 2:36:00 PM	49	8/16/01 2:42:00 PM	49
8/16/01 2:25:00 PM	81	8/16/01 2:30:00 PM	55	8/16/01 2:36:00 PM	55	8/16/01 2:42:00 PM	63
8/16/01 2:25:00 PM	71	8/16/01 2:31:00 PM	74	8/16/01 2:36:00 PM	55	8/16/01 2:42:00 PM	36
8/16/01 2:25:00 PM	55	8/16/01 2:31:00 PM	96	8/16/01 2:37:00 PM	61	8/16/01 2:42:00 PM	42
8/16/01 2:25:00 PM	57	8/16/01 2:31:00 PM	72	8/16/01 2:37:00 PM	57	8/16/01 2:43:00 PM	70
8/16/01 2:25:00 PM	40	8/16/01 2:31:00 PM	90	8/16/01 2:37:00 PM	62	8/16/01 2:43:00 PM	86
8/16/01 2:25:00 PM	55	8/16/01 2:31:00 PM	59	8/16/01 2:37:00 PM	58	8/16/01 2:43:00 PM	90
8/16/01 2:26:00 PM	69	8/16/01 2:31:00 PM	59	8/16/01 2:37:00 PM	66	8/16/01 2:43:00 PM	215
8/16/01 2:26:00 PM	58	8/16/01 2:32:00 PM	64	8/16/01 2:37:00 PM	107	8/16/01 2:43:00 PM	175
8/16/01 2:26:00 PM	59	8/16/01 2:32:00 PM	94	8/16/01 2:38:00 PM	79	8/16/01 2:43:00 PM	112
8/16/01 2:26:00 PM	55	8/16/01 2:32:00 PM	74	8/16/01 2:38:00 PM	52	8/16/01 2:44:00 PM	70
8/16/01 2:26:00 PM	69	8/16/01 2:32:00 PM	92	8/16/01 2:38:00 PM	66	8/16/01 2:44:00 PM	58
8/16/01 2:26:00 PM	79	8/16/01 2:32:00 PM	126	8/16/01 2:38:00 PM	50	8/16/01 2:44:00 PM	61
8/16/01 2:27:00 PM	82	8/16/01 2:32:00 PM	90	8/16/01 2:38:00 PM	48	8/16/01 2:44:00 PM	66
8/16/01 2:27:00 PM	99	8/16/01 2:33:00 PM	74	8/16/01 2:38:00 PM	56	8/16/01 2:44:00 PM	56
8/16/01 2:27:00 PM	68	8/16/01 2:33:00 PM	55	8/16/01 2:39:00 PM	41	8/16/01 2:44:00 PM	56
8/16/01 2:27:00 PM	84	8/16/01 2:33:00 PM	86	8/16/01 2:39:00 PM	46	8/16/01 2:45:00 PM	54
8/16/01 2:27:00 PM	67	8/16/01 2:33:00 PM	1101	8/16/01 2:39:00 PM	67	8/16/01 2:45:00 PM	54
8/16/01 2:27:00 PM	63	8/16/01 2:33:00 PM	2462	8/16/01 2:39:00 PM	55	8/16/01 2:45:00 PM	68
8/16/01 2:28:00 PM	62	8/16/01 2:33:00 PM	109	8/16/01 2:39:00 PM	45	8/16/01 2:45:00 PM	55
8/16/01 2:28:00 PM	75	8/16/01 2:34:00 PM	77	8/16/01 2:39:00 PM	40	8/16/01 2:45:00 PM	63
8/16/01 2:28:00 PM	63	8/16/01 2:34:00 PM	129	8/16/01 2:40:00 PM	45	8/16/01 2:45:00 PM	37
8/16/01 2:28:00 PM	53	8/16/01 2:34:00 PM	54	8/16/01 2:40:00 PM	44	8/16/01 2:46:00 PM	45
8/16/01 2:28:00 PM	131	8/16/01 2:34:00 PM	50	8/16/01 2:40:00 PM	54	8/16/01 2:46:00 PM	39
8/16/01 2:28:00 PM	205	8/16/01 2:34:00 PM	39	8/16/01 2:40:00 PM	46	8/16/01 2:46:00 PM	46
8/16/01 2:29:00 PM	81	8/16/01 2:34:00 PM	53	8/16/01 2:40:00 PM	50	8/16/01 2:46:00 PM	46
8/16/01 2:29:00 PM	61	8/16/01 2:35:00 PM	61	8/16/01 2:40:00 PM	38	8/16/01 2:46:00 PM	56
8/16/01 2:29:00 PM	59	8/16/01 2:35:00 PM	37	8/16/01 2:41:00 PM	40	8/16/01 2:46:00 PM	44
8/16/01 2:29:00 PM	82	8/16/01 2:35:00 PM	46	8/16/01 2:41:00 PM	46	8/16/01 2:47:00 PM	55
8/16/01 2:29:00 PM	179	8/16/01 2:35:00 PM	82	8/16/01 2:41:00 PM	58	8/16/01 2:47:00 PM	68
8/16/01 2:29:00 PM	168	8/16/01 2:35:00 PM	106	8/16/01 2:41:00 PM	47	8/16/01 2:47:00 PM	37
8/16/01 2:30:00 PM	93	8/16/01 2:35:00 PM	88	8/16/01 2:41:00 PM	45	8/16/01 2:47:00 PM	35
8/16/01 2:30:00 PM	142	8/16/01 2:36:00 PM	54	8/16/01 2:41:00 PM	60	8/16/01 2:47:00 PM	52
8/16/01 2:30:00 PM	45	8/16/01 2:36:00 PM	46	8/16/01 2:42:00 PM	97	8/16/01 2:47:00 PM	62
8/16/01 2:30:00 PM	53	8/16/01 2:36:00 PM	52	8/16/01 2:42:00 PM	66	8/16/01 2:48:00 PM	68

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 2:48:00 PM	52	8/16/01 2:54:00 PM	38	8/16/01 2:59:00 PM	92	8/16/01 3:05:00 PM	77
8/16/01 2:48:00 PM	46	8/16/01 2:54:00 PM	46	8/16/01 3:00:00 PM	48	8/16/01 3:05:00 PM	56
8/16/01 2:48:00 PM	56	8/16/01 2:54:00 PM	62	8/16/01 3:00:00 PM	33	8/16/01 3:06:00 PM	32
8/16/01 2:48:00 PM	66	8/16/01 2:54:00 PM	39	8/16/01 3:00:00 PM	30	8/16/01 3:06:00 PM	33
8/16/01 2:48:00 PM	76	8/16/01 2:54:00 PM	50	8/16/01 3:00:00 PM	40	8/16/01 3:06:00 PM	39
8/16/01 2:49:00 PM	71	8/16/01 2:54:00 PM	70	8/16/01 3:00:00 PM	57	8/16/01 3:06:00 PM	56
8/16/01 2:49:00 PM	62	8/16/01 2:55:00 PM	50	8/16/01 3:00:00 PM	64	8/16/01 3:06:00 PM	87
8/16/01 2:49:00 PM	50	8/16/01 2:55:00 PM	57	8/16/01 3:01:00 PM	69	8/16/01 3:06:00 PM	62
8/16/01 2:49:00 PM	42	8/16/01 2:55:00 PM	55	8/16/01 3:01:00 PM	37	8/16/01 3:07:00 PM	52
8/16/01 2:49:00 PM	52	8/16/01 2:55:00 PM	57	8/16/01 3:01:00 PM	33	8/16/01 3:07:00 PM	28
8/16/01 2:49:00 PM	37	8/16/01 2:55:00 PM	58	8/16/01 3:01:00 PM	49	8/16/01 3:07:00 PM	33
8/16/01 2:50:00 PM	34	8/16/01 2:55:00 PM	94	8/16/01 3:01:00 PM	57	8/16/01 3:07:00 PM	44
8/16/01 2:50:00 PM	37	8/16/01 2:56:00 PM	122	8/16/01 3:01:00 PM	43	8/16/01 3:07:00 PM	35
8/16/01 2:50:00 PM	42	8/16/01 2:56:00 PM	38	8/16/01 3:02:00 PM	42	8/16/01 3:07:00 PM	31
8/16/01 2:50:00 PM	33	8/16/01 2:56:00 PM	57	8/16/01 3:02:00 PM	59	8/16/01 3:08:00 PM	30
8/16/01 2:50:00 PM	32	8/16/01 2:56:00 PM	64	8/16/01 3:02:00 PM	61	8/16/01 3:08:00 PM	31
8/16/01 2:50:00 PM	33	8/16/01 2:56:00 PM	75	8/16/01 3:02:00 PM	47	8/16/01 3:08:00 PM	32
8/16/01 2:51:00 PM	39	8/16/01 2:56:00 PM	114	8/16/01 3:02:00 PM	42	8/16/01 3:08:00 PM	31
8/16/01 2:51:00 PM	53	8/16/01 2:57:00 PM	52	8/16/01 3:02:00 PM	56	8/16/01 3:08:00 PM	35
8/16/01 2:51:00 PM	60	8/16/01 2:57:00 PM	47	8/16/01 3:03:00 PM	67	8/16/01 3:08:00 PM	40
8/16/01 2:51:00 PM	62	8/16/01 2:57:00 PM	33	8/16/01 3:03:00 PM	90	8/16/01 3:09:00 PM	26
8/16/01 2:51:00 PM	56	8/16/01 2:57:00 PM	34	8/16/01 3:03:00 PM	46	8/16/01 3:09:00 PM	27
8/16/01 2:51:00 PM	50	8/16/01 2:57:00 PM	49	8/16/01 3:03:00 PM	39	8/16/01 3:09:00 PM	31
8/16/01 2:52:00 PM	53	8/16/01 2:57:00 PM	58	8/16/01 3:03:00 PM	39	8/16/01 3:09:00 PM	35
8/16/01 2:52:00 PM	46	8/16/01 2:58:00 PM	41	8/16/01 3:03:00 PM	39	8/16/01 3:09:00 PM	46
8/16/01 2:52:00 PM	53	8/16/01 2:58:00 PM	42	8/16/01 3:04:00 PM	38	8/16/01 3:09:00 PM	44
8/16/01 2:52:00 PM	54	8/16/01 2:58:00 PM	53	8/16/01 3:04:00 PM	52	8/16/01 3:10:00 PM	31
8/16/01 2:52:00 PM	108	8/16/01 2:58:00 PM	35	8/16/01 3:04:00 PM	79	8/16/01 3:10:00 PM	30
8/16/01 2:52:00 PM	444	8/16/01 2:58:00 PM	40	8/16/01 3:04:00 PM	91	8/16/01 3:10:00 PM	30
8/16/01 2:53:00 PM	767	8/16/01 2:58:00 PM	50	8/16/01 3:04:00 PM	121	8/16/01 3:10:00 PM	35
8/16/01 2:53:00 PM	330	8/16/01 2:59:00 PM	65	8/16/01 3:04:00 PM	39	8/16/01 3:10:00 PM	33
8/16/01 2:53:00 PM	156	8/16/01 2:59:00 PM	52	8/16/01 3:05:00 PM	49	8/16/01 3:10:00 PM	35
8/16/01 2:53:00 PM	138	8/16/01 2:59:00 PM	44	8/16/01 3:05:00 PM	62	8/16/01 3:11:00 PM	67
8/16/01 2:53:00 PM	58	8/16/01 2:59:00 PM	56	8/16/01 3:05:00 PM	33	8/16/01 3:11:00 PM	133
8/16/01 2:53:00 PM	44	8/16/01 2:59:00 PM	95	8/16/01 3:05:00 PM	45	8/16/01 3:11:00 PM	69

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 3:11:00 PM	31	8/16/01 3:17:00 PM	104	8/16/01 3:23:00 PM	51	8/16/01 3:29:00 PM	118
8/16/01 3:11:00 PM	27	8/16/01 3:17:00 PM	143	8/16/01 3:23:00 PM	35	8/16/01 3:29:00 PM	80
8/16/01 3:11:00 PM	81	8/16/01 3:17:00 PM	141	8/16/01 3:23:00 PM	36	8/16/01 3:29:00 PM	37
8/16/01 3:12:00 PM	364	8/16/01 3:17:00 PM	148	8/16/01 3:23:00 PM	35	8/16/01 3:29:00 PM	34
8/16/01 3:12:00 PM	544	8/16/01 3:18:00 PM	220	8/16/01 3:23:00 PM	30	8/16/01 3:29:00 PM	39
8/16/01 3:12:00 PM	90	8/16/01 3:18:00 PM	350	8/16/01 3:24:00 PM	33	8/16/01 3:29:00 PM	38
8/16/01 3:12:00 PM	94	8/16/01 3:18:00 PM	77	8/16/01 3:24:00 PM	34	8/16/01 3:30:00 PM	34
8/16/01 3:12:00 PM	173	8/16/01 3:18:00 PM	75	8/16/01 3:24:00 PM	34	8/16/01 3:30:00 PM	33
8/16/01 3:12:00 PM	124	8/16/01 3:18:00 PM	117	8/16/01 3:24:00 PM	168	8/16/01 3:30:00 PM	33
8/16/01 3:13:00 PM	83	8/16/01 3:18:00 PM	227	8/16/01 3:24:00 PM	350	8/16/01 3:30:00 PM	38
8/16/01 3:13:00 PM	75	8/16/01 3:19:00 PM	194	8/16/01 3:24:00 PM	63	8/16/01 3:30:00 PM	31
8/16/01 3:13:00 PM	86	8/16/01 3:19:00 PM	168	8/16/01 3:25:00 PM	28	8/16/01 3:30:00 PM	30
8/16/01 3:13:00 PM	145	8/16/01 3:19:00 PM	75	8/16/01 3:25:00 PM	36	8/16/01 3:31:00 PM	33
8/16/01 3:13:00 PM	94	8/16/01 3:19:00 PM	112	8/16/01 3:25:00 PM	36	8/16/01 3:31:00 PM	36
8/16/01 3:13:00 PM	62	8/16/01 3:19:00 PM	128	8/16/01 3:25:00 PM	36	8/16/01 3:31:00 PM	27
8/16/01 3:14:00 PM	51	8/16/01 3:19:00 PM	117	8/16/01 3:25:00 PM	32	8/16/01 3:31:00 PM	29
8/16/01 3:14:00 PM	66	8/16/01 3:20:00 PM	144	8/16/01 3:25:00 PM	35	8/16/01 3:31:00 PM	32
8/16/01 3:14:00 PM	150	8/16/01 3:20:00 PM	127	8/16/01 3:26:00 PM	49	8/16/01 3:31:00 PM	30
8/16/01 3:14:00 PM	267	8/16/01 3:20:00 PM	102	8/16/01 3:26:00 PM	36	8/16/01 3:32:00 PM	31
8/16/01 3:14:00 PM	109	8/16/01 3:20:00 PM	69	8/16/01 3:26:00 PM	35	8/16/01 3:32:00 PM	36
8/16/01 3:14:00 PM	234	8/16/01 3:20:00 PM	231	8/16/01 3:26:00 PM	41	8/16/01 3:32:00 PM	52
8/16/01 3:15:00 PM	810	8/16/01 3:20:00 PM	507	8/16/01 3:26:00 PM	63	8/16/01 3:32:00 PM	78
8/16/01 3:15:00 PM	1054	8/16/01 3:21:00 PM	90	8/16/01 3:26:00 PM	116	8/16/01 3:32:00 PM	93
8/16/01 3:15:00 PM	273	8/16/01 3:21:00 PM	43	8/16/01 3:27:00 PM	90	8/16/01 3:32:00 PM	39
8/16/01 3:15:00 PM	316	8/16/01 3:21:00 PM	48	8/16/01 3:27:00 PM	96	8/16/01 3:33:00 PM	30
8/16/01 3:15:00 PM	104	8/16/01 3:21:00 PM	67	8/16/01 3:27:00 PM	61	8/16/01 3:33:00 PM	34
8/16/01 3:15:00 PM	372	8/16/01 3:21:00 PM	65	8/16/01 3:27:00 PM	40	8/16/01 3:33:00 PM	32
8/16/01 3:16:00 PM	607	8/16/01 3:21:00 PM	39	8/16/01 3:27:00 PM	57	8/16/01 3:33:00 PM	36
8/16/01 3:16:00 PM	108	8/16/01 3:22:00 PM	45	8/16/01 3:27:00 PM	90	8/16/01 3:33:00 PM	41
8/16/01 3:16:00 PM	81	8/16/01 3:22:00 PM	62	8/16/01 3:28:00 PM	58	8/16/01 3:33:00 PM	29
8/16/01 3:16:00 PM	56	8/16/01 3:22:00 PM	39	8/16/01 3:28:00 PM	102	8/16/01 3:34:00 PM	30
8/16/01 3:16:00 PM	57	8/16/01 3:22:00 PM	38	8/16/01 3:28:00 PM	72	8/16/01 3:34:00 PM	31
8/16/01 3:16:00 PM	72	8/16/01 3:22:00 PM	38	8/16/01 3:28:00 PM	38	8/16/01 3:34:00 PM	39
8/16/01 3:17:00 PM	70	8/16/01 3:22:00 PM	33	8/16/01 3:28:00 PM	48	8/16/01 3:34:00 PM	51
8/16/01 3:17:00 PM	111	8/16/01 3:23:00 PM	35	8/16/01 3:28:00 PM	73	8/16/01 3:34:00 PM	37

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/16/01 3:34:00 PM	30	8/20/01 7:35:00 AM	44	8/20/01 7:41:00 AM	44	8/20/01 7:47:00 AM	82
8/16/01 3:35:00 PM	32	8/20/01 7:35:00 AM	47	8/20/01 7:41:00 AM	46	8/20/01 7:47:00 AM	74
8/16/01 3:35:00 PM	33	8/20/01 7:35:00 AM	46	8/20/01 7:41:00 AM	46	8/20/01 7:47:00 AM	75
8/16/01 3:35:00 PM	57	8/20/01 7:35:00 AM	46	8/20/01 7:41:00 AM	47	8/20/01 7:47:00 AM	82
8/16/01 3:35:00 PM	106	8/20/01 7:36:00 AM	47	8/20/01 7:41:00 AM	45	8/20/01 7:47:00 AM	85
8/16/01 3:35:00 PM	110	8/20/01 7:36:00 AM	48	8/20/01 7:42:00 AM	72	8/20/01 7:47:00 AM	82
8/16/01 3:35:00 PM	113	8/20/01 7:36:00 AM	45	8/20/01 7:42:00 AM	105	8/20/01 7:48:00 AM	76
8/16/01 3:36:00 PM	58	8/20/01 7:36:00 AM	43	8/20/01 7:42:00 AM	60	8/20/01 7:48:00 AM	75
8/16/01 3:36:00 PM	37	8/20/01 7:36:00 AM	44	8/20/01 7:42:00 AM	1148	8/20/01 7:48:00 AM	78
8/16/01 3:36:00 PM	50	8/20/01 7:36:00 AM	45	8/20/01 7:42:00 AM	354	8/20/01 7:48:00 AM	79
8/16/01 3:36:00 PM	108	8/20/01 7:37:00 AM	46	8/20/01 7:42:00 AM	84	8/20/01 7:48:00 AM	75
8/16/01 3:36:00 PM	171	8/20/01 7:37:00 AM	41	8/20/01 7:43:00 AM	76	8/20/01 7:48:00 AM	80
8/20/01 7:31:00 AM	159	8/20/01 7:37:00 AM	42	8/20/01 7:43:00 AM	74	8/20/01 7:49:00 AM	75
8/20/01 7:31:00 AM	95	8/20/01 7:37:00 AM	49	8/20/01 7:43:00 AM	82	8/20/01 7:49:00 AM	76
8/20/01 7:31:00 AM	80	8/20/01 7:37:00 AM	46	8/20/01 7:43:00 AM	83	8/20/01 7:49:00 AM	76
8/20/01 7:32:00 AM	113	8/20/01 7:37:00 AM	43	8/20/01 7:43:00 AM	78	8/20/01 7:49:00 AM	75
8/20/01 7:32:00 AM	60	8/20/01 7:38:00 AM	43	8/20/01 7:43:00 AM	78	8/20/01 7:49:00 AM	151
8/20/01 7:32:00 AM	46	8/20/01 7:38:00 AM	44	8/20/01 7:44:00 AM	74	8/20/01 7:49:00 AM	91
8/20/01 7:32:00 AM	48	8/20/01 7:38:00 AM	43	8/20/01 7:44:00 AM	72	8/20/01 7:50:00 AM	70
8/20/01 7:32:00 AM	47	8/20/01 7:38:00 AM	44	8/20/01 7:44:00 AM	72	8/20/01 7:50:00 AM	74
8/20/01 7:32:00 AM	43	8/20/01 7:38:00 AM	47	8/20/01 7:44:00 AM	78	8/20/01 7:50:00 AM	97
8/20/01 7:33:00 AM	47	8/20/01 7:38:00 AM	44	8/20/01 7:44:00 AM	74	8/20/01 7:50:00 AM	85
8/20/01 7:33:00 AM	49	8/20/01 7:39:00 AM	45	8/20/01 7:44:00 AM	95	8/20/01 7:50:00 AM	69
8/20/01 7:33:00 AM	44	8/20/01 7:39:00 AM	42	8/20/01 7:45:00 AM	122	8/20/01 7:50:00 AM	70
8/20/01 7:33:00 AM	47	8/20/01 7:39:00 AM	46	8/20/01 7:45:00 AM	126	8/20/01 7:51:00 AM	68
8/20/01 7:33:00 AM	44	8/20/01 7:39:00 AM	43	8/20/01 7:45:00 AM	114	8/20/01 7:51:00 AM	72
8/20/01 7:33:00 AM	44	8/20/01 7:39:00 AM	44	8/20/01 7:45:00 AM	96	8/20/01 7:51:00 AM	96
8/20/01 7:34:00 AM	45	8/20/01 7:39:00 AM	44	8/20/01 7:45:00 AM	116	8/20/01 7:51:00 AM	82
8/20/01 7:34:00 AM	43	8/20/01 7:40:00 AM	45	8/20/01 7:45:00 AM	103	8/20/01 7:51:00 AM	79
8/20/01 7:34:00 AM	42	8/20/01 7:40:00 AM	44	8/20/01 7:46:00 AM	113	8/20/01 7:51:00 AM	92
8/20/01 7:34:00 AM	44	8/20/01 7:40:00 AM	41	8/20/01 7:46:00 AM	86	8/20/01 7:52:00 AM	73
8/20/01 7:34:00 AM	44	8/20/01 7:40:00 AM	39	8/20/01 7:46:00 AM	83	8/20/01 7:52:00 AM	84
8/20/01 7:34:00 AM	57	8/20/01 7:40:00 AM	43	8/20/01 7:46:00 AM	99	8/20/01 7:52:00 AM	89
8/20/01 7:35:00 AM	52	8/20/01 7:40:00 AM	43	8/20/01 7:46:00 AM	85	8/20/01 7:52:00 AM	68
8/20/01 7:35:00 AM	46	8/20/01 7:41:00 AM	43	8/20/01 7:46:00 AM	74	8/20/01 7:52:00 AM	63

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 7:52:00 AM	66	8/20/01 7:58:00 AM	71	8/20/01 8:04:00 AM	62	8/20/01 8:10:00 AM	61
8/20/01 7:53:00 AM	59	8/20/01 7:58:00 AM	63	8/20/01 8:04:00 AM	64	8/20/01 8:10:00 AM	59
8/20/01 7:53:00 AM	54	8/20/01 7:59:00 AM	76	8/20/01 8:04:00 AM	63	8/20/01 8:10:00 AM	62
8/20/01 7:53:00 AM	61	8/20/01 7:59:00 AM	65	8/20/01 8:05:00 AM	78	8/20/01 8:10:00 AM	60
8/20/01 7:53:00 AM	74	8/20/01 7:59:00 AM	68	8/20/01 8:05:00 AM	75	8/20/01 8:11:00 AM	63
8/20/01 7:53:00 AM	71	8/20/01 7:59:00 AM	77	8/20/01 8:05:00 AM	70	8/20/01 8:11:00 AM	66
8/20/01 7:53:00 AM	84	8/20/01 7:59:00 AM	76	8/20/01 8:05:00 AM	68	8/20/01 8:11:00 AM	60
8/20/01 7:54:00 AM	67	8/20/01 7:59:00 AM	79	8/20/01 8:05:00 AM	71	8/20/01 8:11:00 AM	59
8/20/01 7:54:00 AM	71	8/20/01 8:00:00 AM	63	8/20/01 8:05:00 AM	70	8/20/01 8:11:00 AM	57
8/20/01 7:54:00 AM	64	8/20/01 8:00:00 AM	63	8/20/01 8:06:00 AM	71	8/20/01 8:11:00 AM	61
8/20/01 7:54:00 AM	66	8/20/01 8:00:00 AM	62	8/20/01 8:06:00 AM	88	8/20/01 8:12:00 AM	60
8/20/01 7:54:00 AM	72	8/20/01 8:00:00 AM	70	8/20/01 8:06:00 AM	73	8/20/01 8:12:00 AM	62
8/20/01 7:54:00 AM	84	8/20/01 8:00:00 AM	68	8/20/01 8:06:00 AM	75	8/20/01 8:12:00 AM	63
8/20/01 7:55:00 AM	99	8/20/01 8:00:00 AM	66	8/20/01 8:06:00 AM	76	8/20/01 8:12:00 AM	62
8/20/01 7:55:00 AM	96	8/20/01 8:01:00 AM	64	8/20/01 8:06:00 AM	76	8/20/01 8:12:00 AM	63
8/20/01 7:55:00 AM	84	8/20/01 8:01:00 AM	62	8/20/01 8:07:00 AM	68	8/20/01 8:12:00 AM	59
8/20/01 7:55:00 AM	87	8/20/01 8:01:00 AM	67	8/20/01 8:07:00 AM	68	8/20/01 8:13:00 AM	59
8/20/01 7:55:00 AM	78	8/20/01 8:01:00 AM	78	8/20/01 8:07:00 AM	71	8/20/01 8:13:00 AM	59
8/20/01 7:55:00 AM	91	8/20/01 8:01:00 AM	72	8/20/01 8:07:00 AM	64	8/20/01 8:13:00 AM	58
8/20/01 7:56:00 AM	84	8/20/01 8:01:00 AM	59	8/20/01 8:07:00 AM	65	8/20/01 8:13:00 AM	58
8/20/01 7:56:00 AM	85	8/20/01 8:02:00 AM	68	8/20/01 8:07:00 AM	67	8/20/01 8:13:00 AM	55
8/20/01 7:56:00 AM	85	8/20/01 8:02:00 AM	74	8/20/01 8:08:00 AM	74	8/20/01 8:13:00 AM	57
8/20/01 7:56:00 AM	73	8/20/01 8:02:00 AM	63	8/20/01 8:08:00 AM	66	8/20/01 8:14:00 AM	60
8/20/01 7:56:00 AM	104	8/20/01 8:02:00 AM	69	8/20/01 8:08:00 AM	64	8/20/01 8:14:00 AM	56
8/20/01 7:56:00 AM	84	8/20/01 8:02:00 AM	67	8/20/01 8:08:00 AM	58	8/20/01 8:14:00 AM	60
8/20/01 7:57:00 AM	74	8/20/01 8:02:00 AM	66	8/20/01 8:08:00 AM	59	8/20/01 8:14:00 AM	57
8/20/01 7:57:00 AM	91	8/20/01 8:03:00 AM	60	8/20/01 8:08:00 AM	62	8/20/01 8:14:00 AM	62
8/20/01 7:57:00 AM	75	8/20/01 8:03:00 AM	59	8/20/01 8:09:00 AM	65	8/20/01 8:14:00 AM	58
8/20/01 7:57:00 AM	76	8/20/01 8:03:00 AM	64	8/20/01 8:09:00 AM	60	8/20/01 8:15:00 AM	58
8/20/01 7:57:00 AM	72	8/20/01 8:03:00 AM	57	8/20/01 8:09:00 AM	72	8/20/01 8:15:00 AM	59
8/20/01 7:57:00 AM	70	8/20/01 8:03:00 AM	58	8/20/01 8:09:00 AM	68	8/20/01 8:15:00 AM	55
8/20/01 7:58:00 AM	77	8/20/01 8:03:00 AM	66	8/20/01 8:09:00 AM	66	8/20/01 8:15:00 AM	59
8/20/01 7:58:00 AM	85	8/20/01 8:04:00 AM	63	8/20/01 8:09:00 AM	66	8/20/01 8:15:00 AM	62
8/20/01 7:58:00 AM	73	8/20/01 8:04:00 AM	58	8/20/01 8:10:00 AM	65	8/20/01 8:15:00 AM	63
8/20/01 7:58:00 AM	70	8/20/01 8:04:00 AM	59	8/20/01 8:10:00 AM	63	8/20/01 8:16:00 AM	64

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 8:16:00 AM	64	8/20/01 8:22:00 AM	54	8/20/01 8:27:00 AM	52	8/20/01 8:33:00 AM	49
8/20/01 8:16:00 AM	62	8/20/01 8:22:00 AM	55	8/20/01 8:28:00 AM	51	8/20/01 8:33:00 AM	47
8/20/01 8:16:00 AM	62	8/20/01 8:22:00 AM	52	8/20/01 8:28:00 AM	50	8/20/01 8:34:00 AM	50
8/20/01 8:16:00 AM	64	8/20/01 8:22:00 AM	51	8/20/01 8:28:00 AM	48	8/20/01 8:34:00 AM	47
8/20/01 8:16:00 AM	65	8/20/01 8:22:00 AM	55	8/20/01 8:28:00 AM	47	8/20/01 8:34:00 AM	45
8/20/01 8:17:00 AM	61	8/20/01 8:22:00 AM	56	8/20/01 8:28:00 AM	50	8/20/01 8:34:00 AM	48
8/20/01 8:17:00 AM	58	8/20/01 8:23:00 AM	54	8/20/01 8:28:00 AM	49	8/20/01 8:34:00 AM	49
8/20/01 8:17:00 AM	54	8/20/01 8:23:00 AM	51	8/20/01 8:29:00 AM	49	8/20/01 8:34:00 AM	49
8/20/01 8:17:00 AM	58	8/20/01 8:23:00 AM	53	8/20/01 8:29:00 AM	50	8/20/01 8:35:00 AM	48
8/20/01 8:17:00 AM	54	8/20/01 8:23:00 AM	53	8/20/01 8:29:00 AM	48	8/20/01 8:35:00 AM	45
8/20/01 8:17:00 AM	56	8/20/01 8:23:00 AM	54	8/20/01 8:29:00 AM	51	8/20/01 8:35:00 AM	47
8/20/01 8:18:00 AM	60	8/20/01 8:23:00 AM	53	8/20/01 8:29:00 AM	52	8/20/01 8:35:00 AM	44
8/20/01 8:18:00 AM	64	8/20/01 8:24:00 AM	51	8/20/01 8:29:00 AM	49	8/20/01 8:35:00 AM	45
8/20/01 8:18:00 AM	57	8/20/01 8:24:00 AM	51	8/20/01 8:30:00 AM	47	8/20/01 8:35:00 AM	48
8/20/01 8:18:00 AM	57	8/20/01 8:24:00 AM	53	8/20/01 8:30:00 AM	48	8/20/01 8:36:00 AM	50
8/20/01 8:18:00 AM	56	8/20/01 8:24:00 AM	52	8/20/01 8:30:00 AM	51	8/20/01 8:36:00 AM	48
8/20/01 8:18:00 AM	58	8/20/01 8:24:00 AM	52	8/20/01 8:30:00 AM	51	8/20/01 8:36:00 AM	42
8/20/01 8:19:00 AM	55	8/20/01 8:24:00 AM	53	8/20/01 8:30:00 AM	51	8/20/01 8:36:00 AM	48
8/20/01 8:19:00 AM	56	8/20/01 8:25:00 AM	52	8/20/01 8:30:00 AM	50	8/20/01 8:36:00 AM	49
8/20/01 8:19:00 AM	62	8/20/01 8:25:00 AM	53	8/20/01 8:31:00 AM	49	8/20/01 8:36:00 AM	45
8/20/01 8:19:00 AM	61	8/20/01 8:25:00 AM	52	8/20/01 8:31:00 AM	46	8/20/01 8:37:00 AM	46
8/20/01 8:19:00 AM	58	8/20/01 8:25:00 AM	54	8/20/01 8:31:00 AM	48	8/20/01 8:37:00 AM	46
8/20/01 8:19:00 AM	56	8/20/01 8:25:00 AM	58	8/20/01 8:31:00 AM	48	8/20/01 8:37:00 AM	48
8/20/01 8:20:00 AM	55	8/20/01 8:25:00 AM	53	8/20/01 8:31:00 AM	52	8/20/01 8:37:00 AM	46
8/20/01 8:20:00 AM	55	8/20/01 8:26:00 AM	50	8/20/01 8:31:00 AM	49	8/20/01 8:37:00 AM	46
8/20/01 8:20:00 AM	57	8/20/01 8:26:00 AM	50	8/20/01 8:32:00 AM	50	8/20/01 8:37:00 AM	45
8/20/01 8:20:00 AM	53	8/20/01 8:26:00 AM	52	8/20/01 8:32:00 AM	47	8/20/01 8:38:00 AM	43
8/20/01 8:20:00 AM	52	8/20/01 8:26:00 AM	48	8/20/01 8:32:00 AM	47	8/20/01 8:38:00 AM	45
8/20/01 8:20:00 AM	55	8/20/01 8:26:00 AM	50	8/20/01 8:32:00 AM	49	8/20/01 8:38:00 AM	48
8/20/01 8:21:00 AM	60	8/20/01 8:26:00 AM	49	8/20/01 8:32:00 AM	50	8/20/01 8:38:00 AM	47
8/20/01 8:21:00 AM	56	8/20/01 8:27:00 AM	50	8/20/01 8:32:00 AM	50	8/20/01 8:38:00 AM	44
8/20/01 8:21:00 AM	53	8/20/01 8:27:00 AM	47	8/20/01 8:33:00 AM	49	8/20/01 8:38:00 AM	44
8/20/01 8:21:00 AM	55	8/20/01 8:27:00 AM	52	8/20/01 8:33:00 AM	53	8/20/01 8:39:00 AM	49
8/20/01 8:21:00 AM	53	8/20/01 8:27:00 AM	54	8/20/01 8:33:00 AM	50	8/20/01 8:39:00 AM	46
8/20/01 8:21:00 AM	55	8/20/01 8:27:00 AM	50	8/20/01 8:33:00 AM	48	8/20/01 8:39:00 AM	44

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 8:39:00 AM	42	8/20/01 8:45:00 AM	43	8/20/01 8:51:00 AM	41	8/20/01 8:57:00 AM	36
8/20/01 8:39:00 AM	47	8/20/01 8:45:00 AM	48	8/20/01 8:51:00 AM	40	8/20/01 8:57:00 AM	37
8/20/01 8:39:00 AM	46	8/20/01 8:45:00 AM	48	8/20/01 8:51:00 AM	38	8/20/01 8:57:00 AM	34
8/20/01 8:40:00 AM	44	8/20/01 8:45:00 AM	42	8/20/01 8:51:00 AM	38	8/20/01 8:57:00 AM	38
8/20/01 8:40:00 AM	45	8/20/01 8:46:00 AM	43	8/20/01 8:51:00 AM	40	8/20/01 8:57:00 AM	38
8/20/01 8:40:00 AM	42	8/20/01 8:46:00 AM	43	8/20/01 8:52:00 AM	37	8/20/01 8:57:00 AM	36
8/20/01 8:40:00 AM	44	8/20/01 8:46:00 AM	41	8/20/01 8:52:00 AM	39	8/20/01 8:58:00 AM	37
8/20/01 8:40:00 AM	44	8/20/01 8:46:00 AM	36	8/20/01 8:52:00 AM	43	8/20/01 8:58:00 AM	35
8/20/01 8:40:00 AM	46	8/20/01 8:46:00 AM	39	8/20/01 8:52:00 AM	40	8/20/01 8:58:00 AM	35
8/20/01 8:41:00 AM	45	8/20/01 8:46:00 AM	42	8/20/01 8:52:00 AM	40	8/20/01 8:58:00 AM	36
8/20/01 8:41:00 AM	44	8/20/01 8:47:00 AM	39	8/20/01 8:52:00 AM	40	8/20/01 8:58:00 AM	37
8/20/01 8:41:00 AM	41	8/20/01 8:47:00 AM	41	8/20/01 8:53:00 AM	35	8/20/01 8:58:00 AM	38
8/20/01 8:41:00 AM	45	8/20/01 8:47:00 AM	44	8/20/01 8:53:00 AM	38	8/20/01 8:59:00 AM	39
8/20/01 8:41:00 AM	43	8/20/01 8:47:00 AM	40	8/20/01 8:53:00 AM	40	8/20/01 8:59:00 AM	38
8/20/01 8:41:00 AM	45	8/20/01 8:47:00 AM	42	8/20/01 8:53:00 AM	38	8/20/01 8:59:00 AM	37
8/20/01 8:42:00 AM	44	8/20/01 8:47:00 AM	40	8/20/01 8:53:00 AM	36	8/20/01 8:59:00 AM	36
8/20/01 8:42:00 AM	46	8/20/01 8:48:00 AM	42	8/20/01 8:53:00 AM	37	8/20/01 8:59:00 AM	36
8/20/01 8:42:00 AM	47	8/20/01 8:48:00 AM	42	8/20/01 8:54:00 AM	38	8/20/01 8:59:00 AM	36
8/20/01 8:42:00 AM	44	8/20/01 8:48:00 AM	44	8/20/01 8:54:00 AM	36	8/20/01 9:00:00 AM	35
8/20/01 8:42:00 AM	46	8/20/01 8:48:00 AM	44	8/20/01 8:54:00 AM	39	8/20/01 9:00:00 AM	35
8/20/01 8:42:00 AM	43	8/20/01 8:48:00 AM	42	8/20/01 8:54:00 AM	37	8/20/01 9:00:00 AM	39
8/20/01 8:43:00 AM	46	8/20/01 8:48:00 AM	42	8/20/01 8:54:00 AM	38	8/20/01 9:00:00 AM	37
8/20/01 8:43:00 AM	44	8/20/01 8:49:00 AM	40	8/20/01 8:54:00 AM	40	8/20/01 9:00:00 AM	36
8/20/01 8:43:00 AM	47	8/20/01 8:49:00 AM	40	8/20/01 8:55:00 AM	38	8/20/01 9:00:00 AM	34
8/20/01 8:43:00 AM	43	8/20/01 8:49:00 AM	42	8/20/01 8:55:00 AM	40	8/20/01 9:01:00 AM	34
8/20/01 8:43:00 AM	42	8/20/01 8:49:00 AM	42	8/20/01 8:55:00 AM	38	8/20/01 9:01:00 AM	33
8/20/01 8:43:00 AM	42	8/20/01 8:49:00 AM	43	8/20/01 8:55:00 AM	38	8/20/01 9:01:00 AM	36
8/20/01 8:44:00 AM	43	8/20/01 8:49:00 AM	42	8/20/01 8:55:00 AM	41	8/20/01 9:01:00 AM	38
8/20/01 8:44:00 AM	44	8/20/01 8:50:00 AM	40	8/20/01 8:55:00 AM	36	8/20/01 9:01:00 AM	35
8/20/01 8:44:00 AM	43	8/20/01 8:50:00 AM	42	8/20/01 8:56:00 AM	39	8/20/01 9:01:00 AM	33
8/20/01 8:44:00 AM	41	8/20/01 8:50:00 AM	42	8/20/01 8:56:00 AM	38	8/20/01 9:02:00 AM	35
8/20/01 8:44:00 AM	44	8/20/01 8:50:00 AM	39	8/20/01 8:56:00 AM	37	8/20/01 9:02:00 AM	34
8/20/01 8:44:00 AM	42	8/20/01 8:50:00 AM	40	8/20/01 8:56:00 AM	36	8/20/01 9:02:00 AM	37
8/20/01 8:45:00 AM	41	8/20/01 8:50:00 AM	38	8/20/01 8:56:00 AM	38	8/20/01 9:02:00 AM	36
8/20/01 8:45:00 AM	39	8/20/01 8:51:00 AM	42	8/20/01 8:56:00 AM	37	8/20/01 9:02:00 AM	35

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 9:02:00 AM	32	8/20/01 9:08:00 AM	30	8/20/01 9:14:00 AM	33	8/20/01 9:20:00 AM	30
8/20/01 9:03:00 AM	35	8/20/01 9:08:00 AM	32	8/20/01 9:14:00 AM	33	8/20/01 9:20:00 AM	31
8/20/01 9:03:00 AM	36	8/20/01 9:09:00 AM	35	8/20/01 9:14:00 AM	33	8/20/01 9:20:00 AM	30
8/20/01 9:03:00 AM	35	8/20/01 9:09:00 AM	36	8/20/01 9:15:00 AM	35	8/20/01 9:20:00 AM	36
8/20/01 9:03:00 AM	32	8/20/01 9:09:00 AM	34	8/20/01 9:15:00 AM	33	8/20/01 9:21:00 AM	35
8/20/01 9:03:00 AM	31	8/20/01 9:09:00 AM	34	8/20/01 9:15:00 AM	31	8/20/01 9:21:00 AM	32
8/20/01 9:03:00 AM	33	8/20/01 9:09:00 AM	38	8/20/01 9:15:00 AM	33	8/20/01 9:21:00 AM	32
8/20/01 9:04:00 AM	34	8/20/01 9:09:00 AM	38	8/20/01 9:15:00 AM	35	8/20/01 9:21:00 AM	32
8/20/01 9:04:00 AM	36	8/20/01 9:10:00 AM	37	8/20/01 9:15:00 AM	34	8/20/01 9:21:00 AM	30
8/20/01 9:04:00 AM	35	8/20/01 9:10:00 AM	39	8/20/01 9:16:00 AM	34	8/20/01 9:21:00 AM	30
8/20/01 9:04:00 AM	34	8/20/01 9:10:00 AM	41	8/20/01 9:16:00 AM	36	8/20/01 9:22:00 AM	35
8/20/01 9:04:00 AM	30	8/20/01 9:10:00 AM	40	8/20/01 9:16:00 AM	35	8/20/01 9:22:00 AM	32
8/20/01 9:04:00 AM	34	8/20/01 9:10:00 AM	38	8/20/01 9:16:00 AM	34	8/20/01 9:22:00 AM	31
8/20/01 9:05:00 AM	33	8/20/01 9:10:00 AM	35	8/20/01 9:16:00 AM	32	8/20/01 9:22:00 AM	32
8/20/01 9:05:00 AM	32	8/20/01 9:11:00 AM	93	8/20/01 9:16:00 AM	32	8/20/01 9:22:00 AM	31
8/20/01 9:05:00 AM	35	8/20/01 9:11:00 AM	49	8/20/01 9:17:00 AM	35	8/20/01 9:22:00 AM	33
8/20/01 9:05:00 AM	33	8/20/01 9:11:00 AM	37	8/20/01 9:17:00 AM	32	8/20/01 9:23:00 AM	34
8/20/01 9:05:00 AM	34	8/20/01 9:11:00 AM	37	8/20/01 9:17:00 AM	33	8/20/01 9:23:00 AM	34
8/20/01 9:05:00 AM	34	8/20/01 9:11:00 AM	38	8/20/01 9:17:00 AM	33	8/20/01 9:23:00 AM	32
8/20/01 9:06:00 AM	36	8/20/01 9:11:00 AM	36	8/20/01 9:17:00 AM	33	8/20/01 9:23:00 AM	30
8/20/01 9:06:00 AM	33	8/20/01 9:12:00 AM	36	8/20/01 9:17:00 AM	32	8/20/01 9:23:00 AM	30
8/20/01 9:06:00 AM	30	8/20/01 9:12:00 AM	37	8/20/01 9:18:00 AM	36	8/20/01 9:23:00 AM	31
8/20/01 9:06:00 AM	33	8/20/01 9:12:00 AM	37	8/20/01 9:18:00 AM	38	8/20/01 9:24:00 AM	31
8/20/01 9:06:00 AM	37	8/20/01 9:12:00 AM	36	8/20/01 9:18:00 AM	34	8/20/01 9:24:00 AM	29
8/20/01 9:06:00 AM	34	8/20/01 9:12:00 AM	34	8/20/01 9:18:00 AM	31	8/20/01 9:24:00 AM	32
8/20/01 9:07:00 AM	33	8/20/01 9:12:00 AM	35	8/20/01 9:18:00 AM	35	8/20/01 9:24:00 AM	32
8/20/01 9:07:00 AM	35	8/20/01 9:13:00 AM	34	8/20/01 9:18:00 AM	32	8/20/01 9:24:00 AM	30
8/20/01 9:07:00 AM	34	8/20/01 9:13:00 AM	34	8/20/01 9:19:00 AM	32	8/20/01 9:24:00 AM	31
8/20/01 9:07:00 AM	35	8/20/01 9:13:00 AM	31	8/20/01 9:19:00 AM	36	8/20/01 9:25:00 AM	29
8/20/01 9:07:00 AM	33	8/20/01 9:13:00 AM	36	8/20/01 9:19:00 AM	32	8/20/01 9:25:00 AM	34
8/20/01 9:07:00 AM	34	8/20/01 9:13:00 AM	34	8/20/01 9:19:00 AM	30	8/20/01 9:25:00 AM	32
8/20/01 9:08:00 AM	32	8/20/01 9:13:00 AM	33	8/20/01 9:19:00 AM	30	8/20/01 9:25:00 AM	31
8/20/01 9:08:00 AM	33	8/20/01 9:14:00 AM	38	8/20/01 9:19:00 AM	31	8/20/01 9:25:00 AM	28
8/20/01 9:08:00 AM	32	8/20/01 9:14:00 AM	35	8/20/01 9:20:00 AM	31	8/20/01 9:25:00 AM	31
8/20/01 9:08:00 AM	30	8/20/01 9:14:00 AM	36	8/20/01 9:20:00 AM	31	8/20/01 9:26:00 AM	33

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 9:26:00 AM	36	8/20/01 9:32:00 AM	27	8/20/01 9:37:00 AM	40	8/20/01 9:43:00 AM	30
8/20/01 9:26:00 AM	32	8/20/01 9:32:00 AM	27	8/20/01 9:38:00 AM	39	8/20/01 9:43:00 AM	31
8/20/01 9:26:00 AM	32	8/20/01 9:32:00 AM	30	8/20/01 9:38:00 AM	35	8/20/01 9:44:00 AM	33
8/20/01 9:26:00 AM	32	8/20/01 9:32:00 AM	28	8/20/01 9:38:00 AM	38	8/20/01 9:44:00 AM	30
8/20/01 9:26:00 AM	33	8/20/01 9:32:00 AM	30	8/20/01 9:38:00 AM	34	8/20/01 9:44:00 AM	30
8/20/01 9:27:00 AM	28	8/20/01 9:32:00 AM	30	8/20/01 9:38:00 AM	32	8/20/01 9:44:00 AM	34
8/20/01 9:27:00 AM	30	8/20/01 9:33:00 AM	30	8/20/01 9:38:00 AM	36	8/20/01 9:44:00 AM	33
8/20/01 9:27:00 AM	28	8/20/01 9:33:00 AM	32	8/20/01 9:39:00 AM	33	8/20/01 9:44:00 AM	28
8/20/01 9:27:00 AM	29	8/20/01 9:33:00 AM	29	8/20/01 9:39:00 AM	36	8/20/01 9:45:00 AM	32
8/20/01 9:27:00 AM	30	8/20/01 9:33:00 AM	29	8/20/01 9:39:00 AM	34	8/20/01 9:45:00 AM	29
8/20/01 9:27:00 AM	30	8/20/01 9:33:00 AM	29	8/20/01 9:39:00 AM	32	8/20/01 9:45:00 AM	33
8/20/01 9:28:00 AM	31	8/20/01 9:33:00 AM	29	8/20/01 9:39:00 AM	33	8/20/01 9:45:00 AM	32
8/20/01 9:28:00 AM	31	8/20/01 9:34:00 AM	29	8/20/01 9:39:00 AM	34	8/20/01 9:45:00 AM	35
8/20/01 9:28:00 AM	32	8/20/01 9:34:00 AM	27	8/20/01 9:40:00 AM	32	8/20/01 9:45:00 AM	30
8/20/01 9:28:00 AM	32	8/20/01 9:34:00 AM	29	8/20/01 9:40:00 AM	31	8/20/01 9:46:00 AM	33
8/20/01 9:28:00 AM	30	8/20/01 9:34:00 AM	30	8/20/01 9:40:00 AM	34	8/20/01 9:46:00 AM	32
8/20/01 9:28:00 AM	30	8/20/01 9:34:00 AM	27	8/20/01 9:40:00 AM	36	8/20/01 9:46:00 AM	31
8/20/01 9:29:00 AM	28	8/20/01 9:34:00 AM	31	8/20/01 9:40:00 AM	33	8/20/01 9:46:00 AM	30
8/20/01 9:29:00 AM	28	8/20/01 9:35:00 AM	30	8/20/01 9:40:00 AM	33	8/20/01 9:46:00 AM	31
8/20/01 9:29:00 AM	32	8/20/01 9:35:00 AM	32	8/20/01 9:41:00 AM	36	8/20/01 9:46:00 AM	31
8/20/01 9:29:00 AM	31	8/20/01 9:35:00 AM	29	8/20/01 9:41:00 AM	34	8/20/01 9:47:00 AM	30
8/20/01 9:29:00 AM	29	8/20/01 9:35:00 AM	30	8/20/01 9:41:00 AM	31	8/20/01 9:47:00 AM	28
8/20/01 9:29:00 AM	28	8/20/01 9:35:00 AM	30	8/20/01 9:41:00 AM	34	8/20/01 9:47:00 AM	29
8/20/01 9:30:00 AM	28	8/20/01 9:35:00 AM	33	8/20/01 9:41:00 AM	34	8/20/01 9:47:00 AM	28
8/20/01 9:30:00 AM	27	8/20/01 9:36:00 AM	32	8/20/01 9:41:00 AM	33	8/20/01 9:47:00 AM	31
8/20/01 9:30:00 AM	28	8/20/01 9:36:00 AM	30	8/20/01 9:42:00 AM	30	8/20/01 9:47:00 AM	30
8/20/01 9:30:00 AM	27	8/20/01 9:36:00 AM	30	8/20/01 9:42:00 AM	26	8/20/01 9:48:00 AM	27
8/20/01 9:30:00 AM	28	8/20/01 9:36:00 AM	31	8/20/01 9:42:00 AM	31	8/20/01 9:48:00 AM	28
8/20/01 9:30:00 AM	33	8/20/01 9:36:00 AM	34	8/20/01 9:42:00 AM	30	8/20/01 9:48:00 AM	31
8/20/01 9:31:00 AM	32	8/20/01 9:36:00 AM	33	8/20/01 9:42:00 AM	34	8/20/01 9:48:00 AM	31
8/20/01 9:31:00 AM	32	8/20/01 9:37:00 AM	32	8/20/01 9:42:00 AM	34	8/20/01 9:48:00 AM	27
8/20/01 9:31:00 AM	30	8/20/01 9:37:00 AM	32	8/20/01 9:43:00 AM	34	8/20/01 9:48:00 AM	32
8/20/01 9:31:00 AM	31	8/20/01 9:37:00 AM	36	8/20/01 9:43:00 AM	34	8/20/01 9:49:00 AM	33
8/20/01 9:31:00 AM	29	8/20/01 9:37:00 AM	38	8/20/01 9:43:00 AM	30	8/20/01 9:49:00 AM	31
8/20/01 9:31:00 AM	29	8/20/01 9:37:00 AM	41	8/20/01 9:43:00 AM	31	8/20/01 9:49:00 AM	27

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 9:49:00 AM	31	8/20/01 9:55:00 AM	28	8/20/01 10:01:00 AM	71	8/20/01 10:07:00 AM	72
8/20/01 9:49:00 AM	30	8/20/01 9:55:00 AM	30	8/20/01 10:01:00 AM	71	8/20/01 10:07:00 AM	69
8/20/01 9:49:00 AM	28	8/20/01 9:55:00 AM	33	8/20/01 10:01:00 AM	75	8/20/01 10:07:00 AM	66
8/20/01 9:50:00 AM	31	8/20/01 9:55:00 AM	28	8/20/01 10:01:00 AM	77	8/20/01 10:07:00 AM	69
8/20/01 9:50:00 AM	33	8/20/01 9:56:00 AM	31	8/20/01 10:01:00 AM	72	8/20/01 10:07:00 AM	71
8/20/01 9:50:00 AM	30	8/20/01 9:56:00 AM	30	8/20/01 10:02:00 AM	74	8/20/01 10:07:00 AM	71
8/20/01 9:50:00 AM	31	8/20/01 9:56:00 AM	29	8/20/01 10:02:00 AM	74	8/20/01 10:08:00 AM	71
8/20/01 9:50:00 AM	32	8/20/01 9:56:00 AM	28	8/20/01 10:02:00 AM	71	8/20/01 10:08:00 AM	67
8/20/01 9:50:00 AM	33	8/20/01 9:56:00 AM	27	8/20/01 10:02:00 AM	70	8/20/01 10:08:00 AM	64
8/20/01 9:51:00 AM	31	8/20/01 9:56:00 AM	30	8/20/01 10:02:00 AM	73	8/20/01 10:08:00 AM	88
8/20/01 9:51:00 AM	28	8/20/01 9:57:00 AM	32	8/20/01 10:02:00 AM	68	8/20/01 10:08:00 AM	75
8/20/01 9:51:00 AM	30	8/20/01 9:57:00 AM	30	8/20/01 10:03:00 AM	72	8/20/01 10:08:00 AM	73
8/20/01 9:51:00 AM	34	8/20/01 9:57:00 AM	30	8/20/01 10:03:00 AM	73	8/20/01 10:09:00 AM	75
8/20/01 9:51:00 AM	31	8/20/01 9:57:00 AM	32	8/20/01 10:03:00 AM	74	8/20/01 10:09:00 AM	71
8/20/01 9:51:00 AM	31	8/20/01 9:57:00 AM	33	8/20/01 10:03:00 AM	71	8/20/01 10:09:00 AM	72
8/20/01 9:52:00 AM	27	8/20/01 9:57:00 AM	31	8/20/01 10:03:00 AM	75	8/20/01 10:09:00 AM	75
8/20/01 9:52:00 AM	29	8/20/01 9:58:00 AM	33	8/20/01 10:03:00 AM	72	8/20/01 10:09:00 AM	75
8/20/01 9:52:00 AM	32	8/20/01 9:58:00 AM	29	8/20/01 10:04:00 AM	71	8/20/01 10:09:00 AM	71
8/20/01 9:52:00 AM	28	8/20/01 9:58:00 AM	31	8/20/01 10:04:00 AM	74	8/20/01 10:10:00 AM	74
8/20/01 9:52:00 AM	25	8/20/01 9:58:00 AM	31	8/20/01 10:04:00 AM	69	8/20/01 10:10:00 AM	74
8/20/01 9:52:00 AM	26	8/20/01 9:58:00 AM	26	8/20/01 10:04:00 AM	72	8/20/01 10:10:00 AM	76
8/20/01 9:53:00 AM	28	8/20/01 9:58:00 AM	26	8/20/01 10:04:00 AM	71	8/20/01 10:10:00 AM	72
8/20/01 9:53:00 AM	31	8/20/01 9:59:00 AM	27	8/20/01 10:04:00 AM	77	8/20/01 10:10:00 AM	67
8/20/01 9:53:00 AM	29	8/20/01 9:59:00 AM	30	8/20/01 10:05:00 AM	74	8/20/01 10:10:00 AM	66
8/20/01 9:53:00 AM	30	8/20/01 9:59:00 AM	31	8/20/01 10:05:00 AM	70	8/20/01 10:11:00 AM	69
8/20/01 9:53:00 AM	31	8/20/01 9:59:00 AM	31	8/20/01 10:05:00 AM	76	8/20/01 10:11:00 AM	68
8/20/01 9:53:00 AM	32	8/20/01 9:59:00 AM	48	8/20/01 10:05:00 AM	78	8/20/01 10:11:00 AM	66
8/20/01 9:54:00 AM	29	8/20/01 9:59:00 AM	60	8/20/01 10:05:00 AM	73	8/20/01 10:11:00 AM	66
8/20/01 9:54:00 AM	30	8/20/01 10:00:00 AM	64	8/20/01 10:05:00 AM	75	8/20/01 10:11:00 AM	63
8/20/01 9:54:00 AM	32	8/20/01 10:00:00 AM	71	8/20/01 10:06:00 AM	72	8/20/01 10:11:00 AM	70
8/20/01 9:54:00 AM	30	8/20/01 10:00:00 AM	78	8/20/01 10:06:00 AM	75	8/20/01 10:12:00 AM	82
8/20/01 9:54:00 AM	29	8/20/01 10:00:00 AM	81	8/20/01 10:06:00 AM	72	8/20/01 10:12:00 AM	75
8/20/01 9:54:00 AM	28	8/20/01 10:00:00 AM	76	8/20/01 10:06:00 AM	72	8/20/01 10:12:00 AM	75
8/20/01 9:55:00 AM	28	8/20/01 10:00:00 AM	76	8/20/01 10:06:00 AM	77	8/20/01 10:12:00 AM	74
8/20/01 9:55:00 AM	28	8/20/01 10:01:00 AM	72	8/20/01 10:06:00 AM	72	8/20/01 10:12:00 AM	73

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 10:12:00 AM	72	8/20/01 10:18:00 AM	72	8/20/01 10:24:00 AM	65	8/20/01 10:30:00 AM	67
8/20/01 10:13:00 AM	71	8/20/01 10:18:00 AM	72	8/20/01 10:24:00 AM	69	8/20/01 10:30:00 AM	66
8/20/01 10:13:00 AM	81	8/20/01 10:19:00 AM	72	8/20/01 10:24:00 AM	74	8/20/01 10:30:00 AM	70
8/20/01 10:13:00 AM	75	8/20/01 10:19:00 AM	68	8/20/01 10:25:00 AM	68	8/20/01 10:30:00 AM	68
8/20/01 10:13:00 AM	74	8/20/01 10:19:00 AM	66	8/20/01 10:25:00 AM	70	8/20/01 10:31:00 AM	67
8/20/01 10:13:00 AM	72	8/20/01 10:19:00 AM	63	8/20/01 10:25:00 AM	72	8/20/01 10:31:00 AM	66
8/20/01 10:13:00 AM	71	8/20/01 10:19:00 AM	61	8/20/01 10:25:00 AM	80	8/20/01 10:31:00 AM	67
8/20/01 10:14:00 AM	68	8/20/01 10:19:00 AM	64	8/20/01 10:25:00 AM	78	8/20/01 10:31:00 AM	70
8/20/01 10:14:00 AM	68	8/20/01 10:20:00 AM	61	8/20/01 10:25:00 AM	74	8/20/01 10:31:00 AM	66
8/20/01 10:14:00 AM	67	8/20/01 10:20:00 AM	66	8/20/01 10:26:00 AM	75	8/20/01 10:31:00 AM	75
8/20/01 10:14:00 AM	71	8/20/01 10:20:00 AM	63	8/20/01 10:26:00 AM	78	8/20/01 10:32:00 AM	71
8/20/01 10:14:00 AM	137	8/20/01 10:20:00 AM	57	8/20/01 10:26:00 AM	73	8/20/01 10:32:00 AM	70
8/20/01 10:14:00 AM	87	8/20/01 10:20:00 AM	60	8/20/01 10:26:00 AM	71	8/20/01 10:32:00 AM	73
8/20/01 10:15:00 AM	70	8/20/01 10:20:00 AM	59	8/20/01 10:26:00 AM	76	8/20/01 10:32:00 AM	73
8/20/01 10:15:00 AM	76	8/20/01 10:21:00 AM	58	8/20/01 10:26:00 AM	73	8/20/01 10:32:00 AM	78
8/20/01 10:15:00 AM	77	8/20/01 10:21:00 AM	57	8/20/01 10:27:00 AM	76	8/20/01 10:32:00 AM	68
8/20/01 10:15:00 AM	74	8/20/01 10:21:00 AM	53	8/20/01 10:27:00 AM	70	8/20/01 10:33:00 AM	68
8/20/01 10:15:00 AM	77	8/20/01 10:21:00 AM	54	8/20/01 10:27:00 AM	70	8/20/01 10:33:00 AM	67
8/20/01 10:15:00 AM	76	8/20/01 10:21:00 AM	52	8/20/01 10:27:00 AM	71	8/20/01 10:33:00 AM	68
8/20/01 10:16:00 AM	84	8/20/01 10:21:00 AM	53	8/20/01 10:27:00 AM	70	8/20/01 10:33:00 AM	66
8/20/01 10:16:00 AM	79	8/20/01 10:22:00 AM	53	8/20/01 10:27:00 AM	71	8/20/01 10:33:00 AM	66
8/20/01 10:16:00 AM	74	8/20/01 10:22:00 AM	52	8/20/01 10:28:00 AM	68	8/20/01 10:33:00 AM	84
8/20/01 10:16:00 AM	78	8/20/01 10:22:00 AM	54	8/20/01 10:28:00 AM	69	8/20/01 10:34:00 AM	69
8/20/01 10:16:00 AM	76	8/20/01 10:22:00 AM	58	8/20/01 10:28:00 AM	67	8/20/01 10:34:00 AM	70
8/20/01 10:16:00 AM	75	8/20/01 10:22:00 AM	55	8/20/01 10:28:00 AM	66	8/20/01 10:34:00 AM	73
8/20/01 10:17:00 AM	79	8/20/01 10:22:00 AM	56	8/20/01 10:28:00 AM	82	8/20/01 10:34:00 AM	70
8/20/01 10:17:00 AM	76	8/20/01 10:23:00 AM	55	8/20/01 10:28:00 AM	77	8/20/01 10:34:00 AM	72
8/20/01 10:17:00 AM	84	8/20/01 10:23:00 AM	53	8/20/01 10:29:00 AM	76	8/20/01 10:34:00 AM	75
8/20/01 10:17:00 AM	80	8/20/01 10:23:00 AM	52	8/20/01 10:29:00 AM	88	8/20/01 10:35:00 AM	71
8/20/01 10:17:00 AM	82	8/20/01 10:23:00 AM	54	8/20/01 10:29:00 AM	86	8/20/01 10:35:00 AM	76
8/20/01 10:17:00 AM	78	8/20/01 10:23:00 AM	59	8/20/01 10:29:00 AM	74	8/20/01 10:35:00 AM	74
8/20/01 10:18:00 AM	83	8/20/01 10:23:00 AM	64	8/20/01 10:29:00 AM	72	8/20/01 10:35:00 AM	72
8/20/01 10:18:00 AM	79	8/20/01 10:24:00 AM	63	8/20/01 10:29:00 AM	130	8/20/01 10:35:00 AM	70
8/20/01 10:18:00 AM	75	8/20/01 10:24:00 AM	74	8/20/01 10:30:00 AM	85	8/20/01 10:35:00 AM	70
8/20/01 10:18:00 AM	76	8/20/01 10:24:00 AM	68	8/20/01 10:30:00 AM	69	8/20/01 10:36:00 AM	67

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 10:36:00 AM	68	8/20/01 10:42:00 AM	72	8/20/01 10:47:00 AM	68	8/20/01 10:53:00 AM	66
8/20/01 10:36:00 AM	69	8/20/01 10:42:00 AM	68	8/20/01 10:48:00 AM	66	8/20/01 10:53:00 AM	64
8/20/01 10:36:00 AM	68	8/20/01 10:42:00 AM	66	8/20/01 10:48:00 AM	64	8/20/01 10:54:00 AM	61
8/20/01 10:36:00 AM	68	8/20/01 10:42:00 AM	70	8/20/01 10:48:00 AM	64	8/20/01 10:54:00 AM	65
8/20/01 10:36:00 AM	67	8/20/01 10:42:00 AM	66	8/20/01 10:48:00 AM	64	8/20/01 10:54:00 AM	60
8/20/01 10:37:00 AM	63	8/20/01 10:42:00 AM	63	8/20/01 10:48:00 AM	68	8/20/01 10:54:00 AM	57
8/20/01 10:37:00 AM	66	8/20/01 10:43:00 AM	64	8/20/01 10:48:00 AM	66	8/20/01 10:54:00 AM	58
8/20/01 10:37:00 AM	60	8/20/01 10:43:00 AM	67	8/20/01 10:49:00 AM	66	8/20/01 10:54:00 AM	60
8/20/01 10:37:00 AM	64	8/20/01 10:43:00 AM	68	8/20/01 10:49:00 AM	72	8/20/01 10:55:00 AM	62
8/20/01 10:37:00 AM	68	8/20/01 10:43:00 AM	67	8/20/01 10:49:00 AM	66	8/20/01 10:55:00 AM	63
8/20/01 10:37:00 AM	64	8/20/01 10:43:00 AM	67	8/20/01 10:49:00 AM	66	8/20/01 10:55:00 AM	61
8/20/01 10:38:00 AM	66	8/20/01 10:43:00 AM	68	8/20/01 10:49:00 AM	67	8/20/01 10:55:00 AM	63
8/20/01 10:38:00 AM	68	8/20/01 10:44:00 AM	67	8/20/01 10:49:00 AM	68	8/20/01 10:55:00 AM	64
8/20/01 10:38:00 AM	68	8/20/01 10:44:00 AM	66	8/20/01 10:50:00 AM	72	8/20/01 10:55:00 AM	60
8/20/01 10:38:00 AM	67	8/20/01 10:44:00 AM	70	8/20/01 10:50:00 AM	69	8/20/01 10:56:00 AM	58
8/20/01 10:38:00 AM	66	8/20/01 10:44:00 AM	69	8/20/01 10:50:00 AM	66	8/20/01 10:56:00 AM	60
8/20/01 10:38:00 AM	71	8/20/01 10:44:00 AM	63	8/20/01 10:50:00 AM	69	8/20/01 10:56:00 AM	63
8/20/01 10:39:00 AM	68	8/20/01 10:44:00 AM	65	8/20/01 10:50:00 AM	71	8/20/01 10:56:00 AM	62
8/20/01 10:39:00 AM	72	8/20/01 10:45:00 AM	64	8/20/01 10:50:00 AM	67	8/20/01 10:56:00 AM	56
8/20/01 10:39:00 AM	70	8/20/01 10:45:00 AM	64	8/20/01 10:51:00 AM	65	8/20/01 10:56:00 AM	56
8/20/01 10:39:00 AM	77	8/20/01 10:45:00 AM	66	8/20/01 10:51:00 AM	65	8/20/01 10:57:00 AM	54
8/20/01 10:39:00 AM	74	8/20/01 10:45:00 AM	66	8/20/01 10:51:00 AM	61	8/20/01 10:57:00 AM	58
8/20/01 10:39:00 AM	65	8/20/01 10:45:00 AM	66	8/20/01 10:51:00 AM	58	8/20/01 10:57:00 AM	55
8/20/01 10:40:00 AM	67	8/20/01 10:45:00 AM	65	8/20/01 10:51:00 AM	60	8/20/01 10:57:00 AM	56
8/20/01 10:40:00 AM	69	8/20/01 10:46:00 AM	61	8/20/01 10:51:00 AM	66	8/20/01 10:57:00 AM	58
8/20/01 10:40:00 AM	82	8/20/01 10:46:00 AM	65	8/20/01 10:52:00 AM	62	8/20/01 10:57:00 AM	56
8/20/01 10:40:00 AM	79	8/20/01 10:46:00 AM	66	8/20/01 10:52:00 AM	61	8/20/01 10:58:00 AM	57
8/20/01 10:40:00 AM	69	8/20/01 10:46:00 AM	66	8/20/01 10:52:00 AM	60	8/20/01 10:58:00 AM	61
8/20/01 10:40:00 AM	62	8/20/01 10:46:00 AM	62	8/20/01 10:52:00 AM	62	8/20/01 10:58:00 AM	61
8/20/01 10:41:00 AM	66	8/20/01 10:46:00 AM	62	8/20/01 10:52:00 AM	61	8/20/01 10:58:00 AM	56
8/20/01 10:41:00 AM	71	8/20/01 10:47:00 AM	66	8/20/01 10:52:00 AM	68	8/20/01 10:58:00 AM	62
8/20/01 10:41:00 AM	71	8/20/01 10:47:00 AM	65	8/20/01 10:53:00 AM	62	8/20/01 10:58:00 AM	55
8/20/01 10:41:00 AM	81	8/20/01 10:47:00 AM	66	8/20/01 10:53:00 AM	58	8/20/01 10:59:00 AM	55
8/20/01 10:41:00 AM	71	8/20/01 10:47:00 AM	65	8/20/01 10:53:00 AM	61	8/20/01 10:59:00 AM	59
8/20/01 10:41:00 AM	68	8/20/01 10:47:00 AM	66	8/20/01 10:53:00 AM	58	8/20/01 10:59:00 AM	60

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 10:59:00 AM	61	8/20/01 11:05:00 AM	71	8/20/01 11:11:00 AM	64	8/20/01 11:17:00 AM	66
8/20/01 10:59:00 AM	61	8/20/01 11:05:00 AM	68	8/20/01 11:11:00 AM	66	8/20/01 11:17:00 AM	77
8/20/01 10:59:00 AM	60	8/20/01 11:05:00 AM	66	8/20/01 11:11:00 AM	65	8/20/01 11:17:00 AM	69
8/20/01 11:00:00 AM	62	8/20/01 11:05:00 AM	61	8/20/01 11:11:00 AM	64	8/20/01 11:17:00 AM	65
8/20/01 11:00:00 AM	61	8/20/01 11:06:00 AM	65	8/20/01 11:11:00 AM	68	8/20/01 11:17:00 AM	65
8/20/01 11:00:00 AM	61	8/20/01 11:06:00 AM	64	8/20/01 11:12:00 AM	64	8/20/01 11:17:00 AM	65
8/20/01 11:00:00 AM	63	8/20/01 11:06:00 AM	64	8/20/01 11:12:00 AM	65	8/20/01 11:18:00 AM	66
8/20/01 11:00:00 AM	72	8/20/01 11:06:00 AM	74	8/20/01 11:12:00 AM	65	8/20/01 11:18:00 AM	67
8/20/01 11:00:00 AM	63	8/20/01 11:06:00 AM	67	8/20/01 11:12:00 AM	66	8/20/01 11:18:00 AM	66
8/20/01 11:01:00 AM	68	8/20/01 11:06:00 AM	63	8/20/01 11:12:00 AM	64	8/20/01 11:18:00 AM	68
8/20/01 11:01:00 AM	66	8/20/01 11:07:00 AM	65	8/20/01 11:12:00 AM	65	8/20/01 11:18:00 AM	66
8/20/01 11:01:00 AM	67	8/20/01 11:07:00 AM	68	8/20/01 11:13:00 AM	64	8/20/01 11:18:00 AM	64
8/20/01 11:01:00 AM	75	8/20/01 11:07:00 AM	71	8/20/01 11:13:00 AM	65	8/20/01 11:19:00 AM	65
8/20/01 11:01:00 AM	75	8/20/01 11:07:00 AM	69	8/20/01 11:13:00 AM	71	8/20/01 11:19:00 AM	62
8/20/01 11:01:00 AM	63	8/20/01 11:07:00 AM	71	8/20/01 11:13:00 AM	63	8/20/01 11:19:00 AM	65
8/20/01 11:02:00 AM	65	8/20/01 11:07:00 AM	68	8/20/01 11:13:00 AM	66	8/20/01 11:19:00 AM	65
8/20/01 11:02:00 AM	68	8/20/01 11:08:00 AM	67	8/20/01 11:13:00 AM	67	8/20/01 11:19:00 AM	66
8/20/01 11:02:00 AM	75	8/20/01 11:08:00 AM	66	8/20/01 11:14:00 AM	68	8/20/01 11:19:00 AM	66
8/20/01 11:02:00 AM	65	8/20/01 11:08:00 AM	67	8/20/01 11:14:00 AM	66	8/20/01 11:20:00 AM	61
8/20/01 11:02:00 AM	57	8/20/01 11:08:00 AM	69	8/20/01 11:14:00 AM	66	8/20/01 11:20:00 AM	61
8/20/01 11:02:00 AM	65	8/20/01 11:08:00 AM	65	8/20/01 11:14:00 AM	61	8/20/01 11:20:00 AM	61
8/20/01 11:03:00 AM	64	8/20/01 11:08:00 AM	68	8/20/01 11:14:00 AM	64	8/20/01 11:20:00 AM	62
8/20/01 11:03:00 AM	64	8/20/01 11:09:00 AM	71	8/20/01 11:14:00 AM	65	8/20/01 11:20:00 AM	69
8/20/01 11:03:00 AM	66	8/20/01 11:09:00 AM	67	8/20/01 11:15:00 AM	64	8/20/01 11:20:00 AM	66
8/20/01 11:03:00 AM	68	8/20/01 11:09:00 AM	70	8/20/01 11:15:00 AM	66	8/20/01 11:21:00 AM	64
8/20/01 11:03:00 AM	65	8/20/01 11:09:00 AM	67	8/20/01 11:15:00 AM	67	8/20/01 11:21:00 AM	65
8/20/01 11:03:00 AM	64	8/20/01 11:09:00 AM	65	8/20/01 11:15:00 AM	64	8/20/01 11:21:00 AM	67
8/20/01 11:04:00 AM	61	8/20/01 11:09:00 AM	68	8/20/01 11:15:00 AM	72	8/20/01 11:21:00 AM	67
8/20/01 11:04:00 AM	62	8/20/01 11:10:00 AM	71	8/20/01 11:15:00 AM	70	8/20/01 11:21:00 AM	69
8/20/01 11:04:00 AM	61	8/20/01 11:10:00 AM	72	8/20/01 11:16:00 AM	65	8/20/01 11:21:00 AM	66
8/20/01 11:04:00 AM	63	8/20/01 11:10:00 AM	67	8/20/01 11:16:00 AM	71	8/20/01 11:22:00 AM	69
8/20/01 11:04:00 AM	61	8/20/01 11:10:00 AM	64	8/20/01 11:16:00 AM	70	8/20/01 11:22:00 AM	73
8/20/01 11:04:00 AM	60	8/20/01 11:10:00 AM	66	8/20/01 11:16:00 AM	69	8/20/01 11:22:00 AM	70
8/20/01 11:05:00 AM	63	8/20/01 11:10:00 AM	64	8/20/01 11:16:00 AM	69	8/20/01 11:22:00 AM	67
8/20/01 11:05:00 AM	62	8/20/01 11:11:00 AM	62	8/20/01 11:16:00 AM	63	8/20/01 11:22:00 AM	64

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 11:22:00 AM	69	8/20/01 11:28:00 AM	63	8/20/01 11:34:00 AM	61	8/20/01 11:40:00 AM	56
8/20/01 11:23:00 AM	63	8/20/01 11:28:00 AM	67	8/20/01 11:34:00 AM	64	8/20/01 11:40:00 AM	62
8/20/01 11:23:00 AM	62	8/20/01 11:29:00 AM	67	8/20/01 11:34:00 AM	60	8/20/01 11:40:00 AM	70
8/20/01 11:23:00 AM	65	8/20/01 11:29:00 AM	63	8/20/01 11:35:00 AM	66	8/20/01 11:40:00 AM	66
8/20/01 11:23:00 AM	68	8/20/01 11:29:00 AM	60	8/20/01 11:35:00 AM	64	8/20/01 11:41:00 AM	67
8/20/01 11:23:00 AM	64	8/20/01 11:29:00 AM	63	8/20/01 11:35:00 AM	67	8/20/01 11:41:00 AM	61
8/20/01 11:23:00 AM	65	8/20/01 11:29:00 AM	76	8/20/01 11:35:00 AM	79	8/20/01 11:41:00 AM	59
8/20/01 11:24:00 AM	68	8/20/01 11:29:00 AM	264	8/20/01 11:35:00 AM	67	8/20/01 11:41:00 AM	56
8/20/01 11:24:00 AM	68	8/20/01 11:30:00 AM	112	8/20/01 11:35:00 AM	85	8/20/01 11:41:00 AM	63
8/20/01 11:24:00 AM	68	8/20/01 11:30:00 AM	57	8/20/01 11:36:00 AM	81	8/20/01 11:41:00 AM	64
8/20/01 11:24:00 AM	68	8/20/01 11:30:00 AM	57	8/20/01 11:36:00 AM	66	8/20/01 11:42:00 AM	64
8/20/01 11:24:00 AM	65	8/20/01 11:30:00 AM	61	8/20/01 11:36:00 AM	65	8/20/01 11:42:00 AM	64
8/20/01 11:24:00 AM	66	8/20/01 11:30:00 AM	57	8/20/01 11:36:00 AM	62	8/20/01 11:42:00 AM	67
8/20/01 11:25:00 AM	66	8/20/01 11:30:00 AM	57	8/20/01 11:36:00 AM	65	8/20/01 11:42:00 AM	67
8/20/01 11:25:00 AM	67	8/20/01 11:31:00 AM	62	8/20/01 11:36:00 AM	166	8/20/01 11:42:00 AM	67
8/20/01 11:25:00 AM	70	8/20/01 11:31:00 AM	53	8/20/01 11:37:00 AM	105	8/20/01 11:42:00 AM	63
8/20/01 11:25:00 AM	70	8/20/01 11:31:00 AM	58	8/20/01 11:37:00 AM	60	8/20/01 11:43:00 AM	66
8/20/01 11:25:00 AM	68	8/20/01 11:31:00 AM	58	8/20/01 11:37:00 AM	60	8/20/01 11:43:00 AM	64
8/20/01 11:25:00 AM	65	8/20/01 11:31:00 AM	53	8/20/01 11:37:00 AM	65	8/20/01 11:43:00 AM	64
8/20/01 11:26:00 AM	64	8/20/01 11:31:00 AM	59	8/20/01 11:37:00 AM	65	8/20/01 11:43:00 AM	63
8/20/01 11:26:00 AM	63	8/20/01 11:32:00 AM	75	8/20/01 11:37:00 AM	65	8/20/01 11:43:00 AM	63
8/20/01 11:26:00 AM	63	8/20/01 11:32:00 AM	63	8/20/01 11:38:00 AM	61	8/20/01 11:43:00 AM	67
8/20/01 11:26:00 AM	60	8/20/01 11:32:00 AM	62	8/20/01 11:38:00 AM	60	8/20/01 11:44:00 AM	64
8/20/01 11:26:00 AM	61	8/20/01 11:32:00 AM	65	8/20/01 11:38:00 AM	59	8/20/01 11:44:00 AM	63
8/20/01 11:26:00 AM	62	8/20/01 11:32:00 AM	70	8/20/01 11:38:00 AM	61	8/20/01 11:44:00 AM	61
8/20/01 11:27:00 AM	57	8/20/01 11:32:00 AM	69	8/20/01 11:38:00 AM	63	8/20/01 11:44:00 AM	58
8/20/01 11:27:00 AM	59	8/20/01 11:33:00 AM	63	8/20/01 11:38:00 AM	59	8/20/01 11:44:00 AM	60
8/20/01 11:27:00 AM	60	8/20/01 11:33:00 AM	68	8/20/01 11:39:00 AM	61	8/20/01 11:44:00 AM	59
8/20/01 11:27:00 AM	54	8/20/01 11:33:00 AM	62	8/20/01 11:39:00 AM	72	8/20/01 11:45:00 AM	64
8/20/01 11:27:00 AM	59	8/20/01 11:33:00 AM	64	8/20/01 11:39:00 AM	66	8/20/01 11:45:00 AM	64
8/20/01 11:27:00 AM	59	8/20/01 11:33:00 AM	62	8/20/01 11:39:00 AM	57	8/20/01 11:45:00 AM	58
8/20/01 11:28:00 AM	61	8/20/01 11:33:00 AM	64	8/20/01 11:39:00 AM	62	8/20/01 11:45:00 AM	60
8/20/01 11:28:00 AM	57	8/20/01 11:34:00 AM	60	8/20/01 11:39:00 AM	66	8/20/01 11:45:00 AM	61
8/20/01 11:28:00 AM	59	8/20/01 11:34:00 AM	65	8/20/01 11:40:00 AM	61	8/20/01 11:45:00 AM	68
8/20/01 11:28:00 AM	63	8/20/01 11:34:00 AM	62	8/20/01 11:40:00 AM	58	8/20/01 11:46:00 AM	67

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 11:46:00 AM	65	8/20/01 11:52:00 AM	69	8/20/01 11:57:00 AM	61	8/20/01 12:03:00 PM	66
8/20/01 11:46:00 AM	67	8/20/01 11:52:00 AM	67	8/20/01 11:58:00 AM	60	8/20/01 12:03:00 PM	69
8/20/01 11:46:00 AM	68	8/20/01 11:52:00 AM	62	8/20/01 11:58:00 AM	61	8/20/01 12:04:00 PM	65
8/20/01 11:46:00 AM	66	8/20/01 11:52:00 AM	63	8/20/01 11:58:00 AM	66	8/20/01 12:04:00 PM	64
8/20/01 11:46:00 AM	66	8/20/01 11:52:00 AM	62	8/20/01 11:58:00 AM	66	8/20/01 12:04:00 PM	64
8/20/01 11:47:00 AM	71	8/20/01 11:52:00 AM	60	8/20/01 11:58:00 AM	63	8/20/01 12:04:00 PM	58
8/20/01 11:47:00 AM	72	8/20/01 11:53:00 AM	63	8/20/01 11:58:00 AM	59	8/20/01 12:04:00 PM	60
8/20/01 11:47:00 AM	72	8/20/01 11:53:00 AM	63	8/20/01 11:59:00 AM	58	8/20/01 12:04:00 PM	65
8/20/01 11:47:00 AM	71	8/20/01 11:53:00 AM	60	8/20/01 11:59:00 AM	63	8/20/01 12:05:00 PM	62
8/20/01 11:47:00 AM	70	8/20/01 11:53:00 AM	60	8/20/01 11:59:00 AM	68	8/20/01 12:05:00 PM	68
8/20/01 11:47:00 AM	66	8/20/01 11:53:00 AM	59	8/20/01 11:59:00 AM	70	8/20/01 12:05:00 PM	73
8/20/01 11:48:00 AM	71	8/20/01 11:53:00 AM	61	8/20/01 11:59:00 AM	74	8/20/01 12:05:00 PM	65
8/20/01 11:48:00 AM	64	8/20/01 11:54:00 AM	59	8/20/01 11:59:00 AM	71	8/20/01 12:05:00 PM	61
8/20/01 11:48:00 AM	68	8/20/01 11:54:00 AM	58	8/20/01 12:00:00 PM	69	8/20/01 12:05:00 PM	64
8/20/01 11:48:00 AM	62	8/20/01 11:54:00 AM	58	8/20/01 12:00:00 PM	65	8/20/01 12:06:00 PM	58
8/20/01 11:48:00 AM	63	8/20/01 11:54:00 AM	58	8/20/01 12:00:00 PM	68	8/20/01 12:06:00 PM	63
8/20/01 11:48:00 AM	67	8/20/01 11:54:00 AM	61	8/20/01 12:00:00 PM	67	8/20/01 12:06:00 PM	62
8/20/01 11:49:00 AM	63	8/20/01 11:54:00 AM	61	8/20/01 12:00:00 PM	72	8/20/01 12:06:00 PM	68
8/20/01 11:49:00 AM	63	8/20/01 11:55:00 AM	64	8/20/01 12:00:00 PM	70	8/20/01 12:06:00 PM	68
8/20/01 11:49:00 AM	64	8/20/01 11:55:00 AM	62	8/20/01 12:01:00 PM	67	8/20/01 12:06:00 PM	71
8/20/01 11:49:00 AM	65	8/20/01 11:55:00 AM	61	8/20/01 12:01:00 PM	60	8/20/01 12:07:00 PM	78
8/20/01 11:49:00 AM	64	8/20/01 11:55:00 AM	69	8/20/01 12:01:00 PM	59	8/20/01 12:07:00 PM	70
8/20/01 11:49:00 AM	71	8/20/01 11:55:00 AM	68	8/20/01 12:01:00 PM	59	8/20/01 12:07:00 PM	62
8/20/01 11:50:00 AM	64	8/20/01 11:55:00 AM	67	8/20/01 12:01:00 PM	64	8/20/01 12:07:00 PM	62
8/20/01 11:50:00 AM	65	8/20/01 11:56:00 AM	65	8/20/01 12:01:00 PM	72	8/20/01 12:07:00 PM	63
8/20/01 11:50:00 AM	64	8/20/01 11:56:00 AM	61	8/20/01 12:02:00 PM	69	8/20/01 12:07:00 PM	61
8/20/01 11:50:00 AM	69	8/20/01 11:56:00 AM	62	8/20/01 12:02:00 PM	68	8/20/01 12:08:00 PM	62
8/20/01 11:50:00 AM	71	8/20/01 11:56:00 AM	63	8/20/01 12:02:00 PM	67	8/20/01 12:08:00 PM	65
8/20/01 11:50:00 AM	68	8/20/01 11:56:00 AM	66	8/20/01 12:02:00 PM	64	8/20/01 12:08:00 PM	58
8/20/01 11:51:00 AM	68	8/20/01 11:56:00 AM	64	8/20/01 12:02:00 PM	66	8/20/01 12:08:00 PM	60
8/20/01 11:51:00 AM	68	8/20/01 11:57:00 AM	64	8/20/01 12:02:00 PM	64	8/20/01 12:08:00 PM	58
8/20/01 11:51:00 AM	67	8/20/01 11:57:00 AM	64	8/20/01 12:03:00 PM	62	8/20/01 12:08:00 PM	60
8/20/01 11:51:00 AM	65	8/20/01 11:57:00 AM	64	8/20/01 12:03:00 PM	63	8/20/01 12:09:00 PM	60
8/20/01 11:51:00 AM	69	8/20/01 11:57:00 AM	64	8/20/01 12:03:00 PM	69	8/20/01 12:09:00 PM	59
8/20/01 11:51:00 AM	68	8/20/01 11:57:00 AM	63	8/20/01 12:03:00 PM	69	8/20/01 12:09:00 PM	63

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 12:09:00 PM	64	8/20/01 12:15:00 PM	55	8/20/01 12:21:00 PM	49	8/20/01 12:27:00 PM	50
8/20/01 12:09:00 PM	64	8/20/01 12:15:00 PM	60	8/20/01 12:21:00 PM	48	8/20/01 12:27:00 PM	49
8/20/01 12:09:00 PM	61	8/20/01 12:15:00 PM	58	8/20/01 12:21:00 PM	44	8/20/01 12:27:00 PM	51
8/20/01 12:10:00 PM	62	8/20/01 12:15:00 PM	60	8/20/01 12:21:00 PM	48	8/20/01 12:27:00 PM	51
8/20/01 12:10:00 PM	58	8/20/01 12:16:00 PM	60	8/20/01 12:21:00 PM	51	8/20/01 12:27:00 PM	52
8/20/01 12:10:00 PM	58	8/20/01 12:16:00 PM	62	8/20/01 12:22:00 PM	44	8/20/01 12:27:00 PM	51
8/20/01 12:10:00 PM	60	8/20/01 12:16:00 PM	61	8/20/01 12:22:00 PM	44	8/20/01 12:28:00 PM	42
8/20/01 12:10:00 PM	59	8/20/01 12:16:00 PM	57	8/20/01 12:22:00 PM	48	8/20/01 12:28:00 PM	45
8/20/01 12:10:00 PM	56	8/20/01 12:16:00 PM	58	8/20/01 12:22:00 PM	47	8/20/01 12:28:00 PM	45
8/20/01 12:11:00 PM	63	8/20/01 12:16:00 PM	61	8/20/01 12:22:00 PM	51	8/20/01 12:28:00 PM	46
8/20/01 12:11:00 PM	63	8/20/01 12:17:00 PM	63	8/20/01 12:22:00 PM	46	8/20/01 12:28:00 PM	45
8/20/01 12:11:00 PM	57	8/20/01 12:17:00 PM	60	8/20/01 12:23:00 PM	51	8/20/01 12:28:00 PM	46
8/20/01 12:11:00 PM	55	8/20/01 12:17:00 PM	60	8/20/01 12:23:00 PM	55	8/20/01 12:29:00 PM	43
8/20/01 12:11:00 PM	58	8/20/01 12:17:00 PM	58	8/20/01 12:23:00 PM	50	8/20/01 12:29:00 PM	45
8/20/01 12:11:00 PM	58	8/20/01 12:17:00 PM	51	8/20/01 12:23:00 PM	51	8/20/01 12:29:00 PM	49
8/20/01 12:12:00 PM	59	8/20/01 12:17:00 PM	52	8/20/01 12:23:00 PM	52	8/20/01 12:29:00 PM	50
8/20/01 12:12:00 PM	56	8/20/01 12:18:00 PM	55	8/20/01 12:23:00 PM	53	8/20/01 12:29:00 PM	45
8/20/01 12:12:00 PM	60	8/20/01 12:18:00 PM	56	8/20/01 12:24:00 PM	52	8/20/01 12:29:00 PM	47
8/20/01 12:12:00 PM	58	8/20/01 12:18:00 PM	50	8/20/01 12:24:00 PM	58	8/20/01 12:30:00 PM	49
8/20/01 12:12:00 PM	58	8/20/01 12:18:00 PM	50	8/20/01 12:24:00 PM	54	8/20/01 12:30:00 PM	47
8/20/01 12:12:00 PM	56	8/20/01 12:18:00 PM	54	8/20/01 12:24:00 PM	59	8/20/01 12:30:00 PM	49
8/20/01 12:13:00 PM	57	8/20/01 12:18:00 PM	54	8/20/01 12:24:00 PM	48	8/20/01 12:30:00 PM	49
8/20/01 12:13:00 PM	56	8/20/01 12:19:00 PM	53	8/20/01 12:24:00 PM	51	8/20/01 12:30:00 PM	44
8/20/01 12:13:00 PM	60	8/20/01 12:19:00 PM	51	8/20/01 12:25:00 PM	53	8/20/01 12:30:00 PM	50
8/20/01 12:13:00 PM	64	8/20/01 12:19:00 PM	51	8/20/01 12:25:00 PM	48	8/20/01 12:31:00 PM	47
8/20/01 12:13:00 PM	58	8/20/01 12:19:00 PM	51	8/20/01 12:25:00 PM	51	8/20/01 12:31:00 PM	45
8/20/01 12:13:00 PM	60	8/20/01 12:19:00 PM	50	8/20/01 12:25:00 PM	46	8/20/01 12:31:00 PM	46
8/20/01 12:14:00 PM	60	8/20/01 12:19:00 PM	50	8/20/01 12:25:00 PM	46	8/20/01 12:31:00 PM	49
8/20/01 12:14:00 PM	62	8/20/01 12:20:00 PM	45	8/20/01 12:25:00 PM	49	8/20/01 12:31:00 PM	50
8/20/01 12:14:00 PM	59	8/20/01 12:20:00 PM	53	8/20/01 12:26:00 PM	47	8/20/01 12:31:00 PM	49
8/20/01 12:14:00 PM	60	8/20/01 12:20:00 PM	52	8/20/01 12:26:00 PM	74	8/20/01 12:32:00 PM	45
8/20/01 12:14:00 PM	55	8/20/01 12:20:00 PM	60	8/20/01 12:26:00 PM	55	8/20/01 12:32:00 PM	47
8/20/01 12:14:00 PM	53	8/20/01 12:20:00 PM	59	8/20/01 12:26:00 PM	50	8/20/01 12:32:00 PM	44
8/20/01 12:15:00 PM	54	8/20/01 12:20:00 PM	60	8/20/01 12:26:00 PM	50	8/20/01 12:32:00 PM	47
8/20/01 12:15:00 PM	57	8/20/01 12:21:00 PM	56	8/20/01 12:26:00 PM	46	8/20/01 12:32:00 PM	44

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 12:32:00 PM	46	8/20/01 12:38:00 PM	43	8/20/01 12:44:00 PM	40	8/20/01 12:50:00 PM	41
8/20/01 12:33:00 PM	47	8/20/01 12:38:00 PM	42	8/20/01 12:44:00 PM	44	8/20/01 12:50:00 PM	41
8/20/01 12:33:00 PM	49	8/20/01 12:39:00 PM	42	8/20/01 12:44:00 PM	42	8/20/01 12:50:00 PM	38
8/20/01 12:33:00 PM	46	8/20/01 12:39:00 PM	42	8/20/01 12:45:00 PM	41	8/20/01 12:50:00 PM	41
8/20/01 12:33:00 PM	48	8/20/01 12:39:00 PM	44	8/20/01 12:45:00 PM	42	8/20/01 12:51:00 PM	54
8/20/01 12:33:00 PM	43	8/20/01 12:39:00 PM	40	8/20/01 12:45:00 PM	43	8/20/01 12:51:00 PM	41
8/20/01 12:33:00 PM	45	8/20/01 12:39:00 PM	41	8/20/01 12:45:00 PM	48	8/20/01 12:51:00 PM	41
8/20/01 12:34:00 PM	47	8/20/01 12:39:00 PM	40	8/20/01 12:45:00 PM	46	8/20/01 12:51:00 PM	45
8/20/01 12:34:00 PM	48	8/20/01 12:40:00 PM	39	8/20/01 12:45:00 PM	40	8/20/01 12:51:00 PM	43
8/20/01 12:34:00 PM	45	8/20/01 12:40:00 PM	42	8/20/01 12:46:00 PM	43	8/20/01 12:51:00 PM	44
8/20/01 12:34:00 PM	48	8/20/01 12:40:00 PM	52	8/20/01 12:46:00 PM	44	8/20/01 12:52:00 PM	40
8/20/01 12:34:00 PM	48	8/20/01 12:40:00 PM	49	8/20/01 12:46:00 PM	45	8/20/01 12:52:00 PM	50
8/20/01 12:34:00 PM	50	8/20/01 12:40:00 PM	45	8/20/01 12:46:00 PM	45	8/20/01 12:52:00 PM	44
8/20/01 12:35:00 PM	47	8/20/01 12:40:00 PM	42	8/20/01 12:46:00 PM	47	8/20/01 12:52:00 PM	47
8/20/01 12:35:00 PM	44	8/20/01 12:41:00 PM	44	8/20/01 12:46:00 PM	38	8/20/01 12:52:00 PM	45
8/20/01 12:35:00 PM	45	8/20/01 12:41:00 PM	46	8/20/01 12:47:00 PM	46	8/20/01 12:52:00 PM	41
8/20/01 12:35:00 PM	50	8/20/01 12:41:00 PM	40	8/20/01 12:47:00 PM	44	8/20/01 12:53:00 PM	41
8/20/01 12:35:00 PM	48	8/20/01 12:41:00 PM	44	8/20/01 12:47:00 PM	45	8/20/01 12:53:00 PM	41
8/20/01 12:35:00 PM	45	8/20/01 12:41:00 PM	44	8/20/01 12:47:00 PM	45	8/20/01 12:53:00 PM	42
8/20/01 12:36:00 PM	42	8/20/01 12:41:00 PM	41	8/20/01 12:47:00 PM	41	8/20/01 12:53:00 PM	38
8/20/01 12:36:00 PM	45	8/20/01 12:42:00 PM	44	8/20/01 12:47:00 PM	35	8/20/01 12:53:00 PM	36
8/20/01 12:36:00 PM	42	8/20/01 12:42:00 PM	40	8/20/01 12:48:00 PM	50	8/20/01 12:53:00 PM	40
8/20/01 12:36:00 PM	48	8/20/01 12:42:00 PM	42	8/20/01 12:48:00 PM	49	8/20/01 12:54:00 PM	41
8/20/01 12:36:00 PM	45	8/20/01 12:42:00 PM	46	8/20/01 12:48:00 PM	44	8/20/01 12:54:00 PM	43
8/20/01 12:36:00 PM	43	8/20/01 12:42:00 PM	41	8/20/01 12:48:00 PM	43	8/20/01 12:54:00 PM	44
8/20/01 12:37:00 PM	42	8/20/01 12:42:00 PM	40	8/20/01 12:48:00 PM	41	8/20/01 12:54:00 PM	38
8/20/01 12:37:00 PM	42	8/20/01 12:43:00 PM	42	8/20/01 12:48:00 PM	39	8/20/01 12:54:00 PM	41
8/20/01 12:37:00 PM	45	8/20/01 12:43:00 PM	49	8/20/01 12:49:00 PM	44	8/20/01 12:54:00 PM	40
8/20/01 12:37:00 PM	47	8/20/01 12:43:00 PM	41	8/20/01 12:49:00 PM	40	8/20/01 12:55:00 PM	43
8/20/01 12:37:00 PM	42	8/20/01 12:43:00 PM	38	8/20/01 12:49:00 PM	43	8/20/01 12:55:00 PM	45
8/20/01 12:37:00 PM	44	8/20/01 12:43:00 PM	44	8/20/01 12:49:00 PM	44	8/20/01 12:55:00 PM	40
8/20/01 12:38:00 PM	56	8/20/01 12:43:00 PM	43	8/20/01 12:49:00 PM	52	8/20/01 12:55:00 PM	38
8/20/01 12:38:00 PM	52	8/20/01 12:44:00 PM	48	8/20/01 12:49:00 PM	43	8/20/01 12:55:00 PM	38
8/20/01 12:38:00 PM	42	8/20/01 12:44:00 PM	42	8/20/01 12:50:00 PM	43	8/20/01 12:55:00 PM	36
8/20/01 12:38:00 PM	40	8/20/01 12:44:00 PM	39	8/20/01 12:50:00 PM	44	8/20/01 12:56:00 PM	42

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 12:56:00 PM	38	8/20/01 1:02:00 PM	44	8/20/01 1:07:00 PM	55	8/20/01 1:13:00 PM	43
8/20/01 12:56:00 PM	39	8/20/01 1:02:00 PM	43	8/20/01 1:08:00 PM	45	8/20/01 1:13:00 PM	42
8/20/01 12:56:00 PM	42	8/20/01 1:02:00 PM	44	8/20/01 1:08:00 PM	44	8/20/01 1:14:00 PM	45
8/20/01 12:56:00 PM	43	8/20/01 1:02:00 PM	40	8/20/01 1:08:00 PM	51	8/20/01 1:14:00 PM	55
8/20/01 12:56:00 PM	43	8/20/01 1:02:00 PM	41	8/20/01 1:08:00 PM	50	8/20/01 1:14:00 PM	48
8/20/01 12:57:00 PM	46	8/20/01 1:02:00 PM	44	8/20/01 1:08:00 PM	40	8/20/01 1:14:00 PM	47
8/20/01 12:57:00 PM	40	8/20/01 1:03:00 PM	41	8/20/01 1:08:00 PM	38	8/20/01 1:14:00 PM	44
8/20/01 12:57:00 PM	42	8/20/01 1:03:00 PM	40	8/20/01 1:09:00 PM	43	8/20/01 1:14:00 PM	44
8/20/01 12:57:00 PM	42	8/20/01 1:03:00 PM	40	8/20/01 1:09:00 PM	43	8/20/01 1:15:00 PM	43
8/20/01 12:57:00 PM	41	8/20/01 1:03:00 PM	38	8/20/01 1:09:00 PM	40	8/20/01 1:15:00 PM	49
8/20/01 12:57:00 PM	37	8/20/01 1:03:00 PM	42	8/20/01 1:09:00 PM	42	8/20/01 1:15:00 PM	44
8/20/01 12:58:00 PM	38	8/20/01 1:03:00 PM	47	8/20/01 1:09:00 PM	35	8/20/01 1:15:00 PM	45
8/20/01 12:58:00 PM	46	8/20/01 1:04:00 PM	39	8/20/01 1:09:00 PM	43	8/20/01 1:15:00 PM	45
8/20/01 12:58:00 PM	42	8/20/01 1:04:00 PM	38	8/20/01 1:10:00 PM	41	8/20/01 1:15:00 PM	39
8/20/01 12:58:00 PM	40	8/20/01 1:04:00 PM	44	8/20/01 1:10:00 PM	39	8/20/01 1:16:00 PM	42
8/20/01 12:58:00 PM	38	8/20/01 1:04:00 PM	43	8/20/01 1:10:00 PM	41	8/20/01 1:16:00 PM	42
8/20/01 12:58:00 PM	36	8/20/01 1:04:00 PM	46	8/20/01 1:10:00 PM	45	8/20/01 1:16:00 PM	40
8/20/01 12:59:00 PM	36	8/20/01 1:04:00 PM	59	8/20/01 1:10:00 PM	44	8/20/01 1:16:00 PM	43
8/20/01 12:59:00 PM	40	8/20/01 1:05:00 PM	50	8/20/01 1:10:00 PM	44	8/20/01 1:16:00 PM	45
8/20/01 12:59:00 PM	38	8/20/01 1:05:00 PM	43	8/20/01 1:11:00 PM	41	8/20/01 1:16:00 PM	45
8/20/01 12:59:00 PM	40	8/20/01 1:05:00 PM	43	8/20/01 1:11:00 PM	42	8/20/01 1:17:00 PM	43
8/20/01 12:59:00 PM	43	8/20/01 1:05:00 PM	42	8/20/01 1:11:00 PM	42	8/20/01 1:17:00 PM	39
8/20/01 12:59:00 PM	36	8/20/01 1:05:00 PM	47	8/20/01 1:11:00 PM	41	8/20/01 1:17:00 PM	37
8/20/01 1:00:00 PM	40	8/20/01 1:05:00 PM	39	8/20/01 1:11:00 PM	46	8/20/01 1:17:00 PM	37
8/20/01 1:00:00 PM	39	8/20/01 1:06:00 PM	40	8/20/01 1:11:00 PM	48	8/20/01 1:17:00 PM	38
8/20/01 1:00:00 PM	43	8/20/01 1:06:00 PM	42	8/20/01 1:12:00 PM	42	8/20/01 1:17:00 PM	43
8/20/01 1:00:00 PM	44	8/20/01 1:06:00 PM	39	8/20/01 1:12:00 PM	42	8/20/01 1:18:00 PM	42
8/20/01 1:00:00 PM	41	8/20/01 1:06:00 PM	38	8/20/01 1:12:00 PM	47	8/20/01 1:18:00 PM	43
8/20/01 1:00:00 PM	41	8/20/01 1:06:00 PM	38	8/20/01 1:12:00 PM	42	8/20/01 1:18:00 PM	46
8/20/01 1:01:00 PM	43	8/20/01 1:06:00 PM	41	8/20/01 1:12:00 PM	43	8/20/01 1:18:00 PM	48
8/20/01 1:01:00 PM	43	8/20/01 1:07:00 PM	38	8/20/01 1:12:00 PM	39	8/20/01 1:18:00 PM	42
8/20/01 1:01:00 PM	44	8/20/01 1:07:00 PM	37	8/20/01 1:13:00 PM	44	8/20/01 1:18:00 PM	46
8/20/01 1:01:00 PM	54	8/20/01 1:07:00 PM	41	8/20/01 1:13:00 PM	44	8/20/01 1:19:00 PM	42
8/20/01 1:01:00 PM	51	8/20/01 1:07:00 PM	45	8/20/01 1:13:00 PM	39	8/20/01 1:19:00 PM	45
8/20/01 1:01:00 PM	45	8/20/01 1:07:00 PM	42	8/20/01 1:13:00 PM	37	8/20/01 1:19:00 PM	49

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 1:19:00 PM	45	8/20/01 1:25:00 PM	41	8/20/01 1:31:00 PM	42	8/20/01 1:37:00 PM	47
8/20/01 1:19:00 PM	44	8/20/01 1:25:00 PM	44	8/20/01 1:31:00 PM	43	8/20/01 1:37:00 PM	46
8/20/01 1:19:00 PM	45	8/20/01 1:25:00 PM	43	8/20/01 1:31:00 PM	41	8/20/01 1:37:00 PM	48
8/20/01 1:20:00 PM	43	8/20/01 1:25:00 PM	42	8/20/01 1:31:00 PM	43	8/20/01 1:37:00 PM	46
8/20/01 1:20:00 PM	42	8/20/01 1:26:00 PM	36	8/20/01 1:31:00 PM	44	8/20/01 1:37:00 PM	44
8/20/01 1:20:00 PM	47	8/20/01 1:26:00 PM	43	8/20/01 1:32:00 PM	43	8/20/01 1:37:00 PM	45
8/20/01 1:20:00 PM	44	8/20/01 1:26:00 PM	39	8/20/01 1:32:00 PM	47	8/20/01 1:38:00 PM	41
8/20/01 1:20:00 PM	42	8/20/01 1:26:00 PM	41	8/20/01 1:32:00 PM	45	8/20/01 1:38:00 PM	50
8/20/01 1:20:00 PM	42	8/20/01 1:26:00 PM	39	8/20/01 1:32:00 PM	45	8/20/01 1:38:00 PM	48
8/20/01 1:21:00 PM	47	8/20/01 1:26:00 PM	40	8/20/01 1:32:00 PM	45	8/20/01 1:38:00 PM	52
8/20/01 1:21:00 PM	39	8/20/01 1:27:00 PM	42	8/20/01 1:32:00 PM	46	8/20/01 1:38:00 PM	51
8/20/01 1:21:00 PM	42	8/20/01 1:27:00 PM	46	8/20/01 1:33:00 PM	52	8/20/01 1:38:00 PM	47
8/20/01 1:21:00 PM	41	8/20/01 1:27:00 PM	43	8/20/01 1:33:00 PM	47	8/20/01 1:39:00 PM	49
8/20/01 1:21:00 PM	38	8/20/01 1:27:00 PM	46	8/20/01 1:33:00 PM	43	8/20/01 1:39:00 PM	47
8/20/01 1:21:00 PM	36	8/20/01 1:27:00 PM	44	8/20/01 1:33:00 PM	44	8/20/01 1:39:00 PM	48
8/20/01 1:22:00 PM	39	8/20/01 1:27:00 PM	39	8/20/01 1:33:00 PM	43	8/20/01 1:39:00 PM	42
8/20/01 1:22:00 PM	37	8/20/01 1:28:00 PM	46	8/20/01 1:33:00 PM	42	8/20/01 1:39:00 PM	41
8/20/01 1:22:00 PM	41	8/20/01 1:28:00 PM	47	8/20/01 1:34:00 PM	50	8/20/01 1:39:00 PM	44
8/20/01 1:22:00 PM	43	8/20/01 1:28:00 PM	43	8/20/01 1:34:00 PM	47	8/20/01 1:40:00 PM	45
8/20/01 1:22:00 PM	39	8/20/01 1:28:00 PM	44	8/20/01 1:34:00 PM	46	8/20/01 1:40:00 PM	49
8/20/01 1:22:00 PM	39	8/20/01 1:28:00 PM	44	8/20/01 1:34:00 PM	45	8/20/01 1:40:00 PM	48
8/20/01 1:23:00 PM	41	8/20/01 1:28:00 PM	45	8/20/01 1:34:00 PM	43	8/20/01 1:40:00 PM	49
8/20/01 1:23:00 PM	45	8/20/01 1:29:00 PM	45	8/20/01 1:34:00 PM	44	8/20/01 1:40:00 PM	48
8/20/01 1:23:00 PM	43	8/20/01 1:29:00 PM	44	8/20/01 1:35:00 PM	44	8/20/01 1:40:00 PM	44
8/20/01 1:23:00 PM	43	8/20/01 1:29:00 PM	43	8/20/01 1:35:00 PM	47	8/20/01 1:41:00 PM	47
8/20/01 1:23:00 PM	47	8/20/01 1:29:00 PM	41	8/20/01 1:35:00 PM	45	8/20/01 1:41:00 PM	50
8/20/01 1:23:00 PM	41	8/20/01 1:29:00 PM	44	8/20/01 1:35:00 PM	46	8/20/01 1:41:00 PM	46
8/20/01 1:24:00 PM	44	8/20/01 1:29:00 PM	43	8/20/01 1:35:00 PM	48	8/20/01 1:41:00 PM	43
8/20/01 1:24:00 PM	39	8/20/01 1:30:00 PM	44	8/20/01 1:35:00 PM	47	8/20/01 1:41:00 PM	46
8/20/01 1:24:00 PM	38	8/20/01 1:30:00 PM	45	8/20/01 1:36:00 PM	50	8/20/01 1:41:00 PM	46
8/20/01 1:24:00 PM	37	8/20/01 1:30:00 PM	43	8/20/01 1:36:00 PM	49	8/20/01 1:42:00 PM	43
8/20/01 1:24:00 PM	40	8/20/01 1:30:00 PM	43	8/20/01 1:36:00 PM	43	8/20/01 1:42:00 PM	42
8/20/01 1:24:00 PM	39	8/20/01 1:30:00 PM	44	8/20/01 1:36:00 PM	44	8/20/01 1:42:00 PM	50
8/20/01 1:25:00 PM	44	8/20/01 1:30:00 PM	41	8/20/01 1:36:00 PM	43	8/20/01 1:42:00 PM	44
8/20/01 1:25:00 PM	41	8/20/01 1:31:00 PM	41	8/20/01 1:36:00 PM	42	8/20/01 1:42:00 PM	42

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 1:42:00 PM	39	8/20/01 1:48:00 PM	49	8/20/01 1:54:00 PM	42	8/20/01 2:00:00 PM	46
8/20/01 1:43:00 PM	41	8/20/01 1:48:00 PM	48	8/20/01 1:54:00 PM	48	8/20/01 2:00:00 PM	49
8/20/01 1:43:00 PM	46	8/20/01 1:49:00 PM	43	8/20/01 1:54:00 PM	42	8/20/01 2:00:00 PM	49
8/20/01 1:43:00 PM	46	8/20/01 1:49:00 PM	52	8/20/01 1:55:00 PM	42	8/20/01 2:00:00 PM	46
8/20/01 1:43:00 PM	45	8/20/01 1:49:00 PM	45	8/20/01 1:55:00 PM	61	8/20/01 2:01:00 PM	44
8/20/01 1:43:00 PM	44	8/20/01 1:49:00 PM	41	8/20/01 1:55:00 PM	48	8/20/01 2:01:00 PM	42
8/20/01 1:43:00 PM	41	8/20/01 1:49:00 PM	43	8/20/01 1:55:00 PM	44	8/20/01 2:01:00 PM	47
8/20/01 1:44:00 PM	41	8/20/01 1:49:00 PM	45	8/20/01 1:55:00 PM	41	8/20/01 2:01:00 PM	46
8/20/01 1:44:00 PM	40	8/20/01 1:50:00 PM	47	8/20/01 1:55:00 PM	44	8/20/01 2:01:00 PM	45
8/20/01 1:44:00 PM	43	8/20/01 1:50:00 PM	43	8/20/01 1:56:00 PM	46	8/20/01 2:01:00 PM	47
8/20/01 1:44:00 PM	44	8/20/01 1:50:00 PM	46	8/20/01 1:56:00 PM	48	8/20/01 2:02:00 PM	46
8/20/01 1:44:00 PM	46	8/20/01 1:50:00 PM	40	8/20/01 1:56:00 PM	46	8/20/01 2:02:00 PM	46
8/20/01 1:44:00 PM	43	8/20/01 1:50:00 PM	43	8/20/01 1:56:00 PM	47	8/20/01 2:02:00 PM	48
8/20/01 1:45:00 PM	44	8/20/01 1:50:00 PM	44	8/20/01 1:56:00 PM	46	8/20/01 2:02:00 PM	48
8/20/01 1:45:00 PM	57	8/20/01 1:51:00 PM	40	8/20/01 1:56:00 PM	46	8/20/01 2:02:00 PM	45
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8/20/01 1:45:00 PM	50	8/20/01 1:51:00 PM	40	8/20/01 1:57:00 PM	56	8/20/01 2:03:00 PM	49
8/20/01 1:45:00 PM	48	8/20/01 1:51:00 PM	43	8/20/01 1:57:00 PM	54	8/20/01 2:03:00 PM	52
8/20/01 1:45:00 PM	48	8/20/01 1:51:00 PM	47	8/20/01 1:57:00 PM	50	8/20/01 2:03:00 PM	54
8/20/01 1:46:00 PM	43	8/20/01 1:51:00 PM	41	8/20/01 1:57:00 PM	49	8/20/01 2:03:00 PM	50
8/20/01 1:46:00 PM	46	8/20/01 1:52:00 PM	47	8/20/01 1:57:00 PM	48	8/20/01 2:03:00 PM	48
8/20/01 1:46:00 PM	43	8/20/01 1:52:00 PM	46	8/20/01 1:58:00 PM	57	8/20/01 2:03:00 PM	50
8/20/01 1:46:00 PM	41	8/20/01 1:52:00 PM	46	8/20/01 1:58:00 PM	47	8/20/01 2:04:00 PM	47
8/20/01 1:46:00 PM	37	8/20/01 1:52:00 PM	45	8/20/01 1:58:00 PM	49	8/20/01 2:04:00 PM	47
8/20/01 1:46:00 PM	38	8/20/01 1:52:00 PM	46	8/20/01 1:58:00 PM	46	8/20/01 2:04:00 PM	48
8/20/01 1:47:00 PM	42	8/20/01 1:52:00 PM	48	8/20/01 1:58:00 PM	48	8/20/01 2:04:00 PM	54
8/20/01 1:47:00 PM	43	8/20/01 1:53:00 PM	48	8/20/01 1:58:00 PM	44	8/20/01 2:04:00 PM	50
8/20/01 1:47:00 PM	42	8/20/01 1:53:00 PM	46	8/20/01 1:59:00 PM	41	8/20/01 2:04:00 PM	47
8/20/01 1:47:00 PM	42	8/20/01 1:53:00 PM	52	8/20/01 1:59:00 PM	44	8/20/01 2:05:00 PM	49
8/20/01 1:47:00 PM	50	8/20/01 1:53:00 PM	46	8/20/01 1:59:00 PM	47	8/20/01 2:05:00 PM	49
8/20/01 1:47:00 PM	48	8/20/01 1:53:00 PM	40	8/20/01 1:59:00 PM	44	8/20/01 2:05:00 PM	46
8/20/01 1:48:00 PM	51	8/20/01 1:53:00 PM	46	8/20/01 1:59:00 PM	51	8/20/01 2:05:00 PM	47
8/20/01 1:48:00 PM	42	8/20/01 1:54:00 PM	43	8/20/01 1:59:00 PM	48	8/20/01 2:05:00 PM	45
8/20/01 1:48:00 PM	40	8/20/01 1:54:00 PM	46	8/20/01 2:00:00 PM	52	8/20/01 2:05:00 PM	48
8/20/01 1:48:00 PM	41	8/20/01 1:54:00 PM	52	8/20/01 2:00:00 PM	49	8/20/01 2:06:00 PM	51

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 2:06:00 PM	53	8/20/01 2:12:00 PM	50	8/20/01 2:17:00 PM	49	8/20/01 2:23:00 PM	49
8/20/01 2:06:00 PM	48	8/20/01 2:12:00 PM	54	8/20/01 2:18:00 PM	46	8/20/01 2:23:00 PM	48
8/20/01 2:06:00 PM	46	8/20/01 2:12:00 PM	54	8/20/01 2:18:00 PM	46	8/20/01 2:24:00 PM	44
8/20/01 2:06:00 PM	49	8/20/01 2:12:00 PM	50	8/20/01 2:18:00 PM	45	8/20/01 2:24:00 PM	50
8/20/01 2:06:00 PM	44	8/20/01 2:12:00 PM	48	8/20/01 2:18:00 PM	47	8/20/01 2:24:00 PM	59
8/20/01 2:07:00 PM	47	8/20/01 2:12:00 PM	51	8/20/01 2:18:00 PM	46	8/20/01 2:24:00 PM	50
8/20/01 2:07:00 PM	53	8/20/01 2:13:00 PM	53	8/20/01 2:18:00 PM	48	8/20/01 2:24:00 PM	49
8/20/01 2:07:00 PM	48	8/20/01 2:13:00 PM	54	8/20/01 2:19:00 PM	51	8/20/01 2:24:00 PM	51
8/20/01 2:07:00 PM	48	8/20/01 2:13:00 PM	48	8/20/01 2:19:00 PM	51	8/20/01 2:25:00 PM	49
8/20/01 2:07:00 PM	46	8/20/01 2:13:00 PM	49	8/20/01 2:19:00 PM	47	8/20/01 2:25:00 PM	46
8/20/01 2:07:00 PM	47	8/20/01 2:13:00 PM	51	8/20/01 2:19:00 PM	46	8/20/01 2:25:00 PM	49
8/20/01 2:08:00 PM	47	8/20/01 2:13:00 PM	50	8/20/01 2:19:00 PM	47	8/20/01 2:25:00 PM	47
8/20/01 2:08:00 PM	53	8/20/01 2:14:00 PM	53	8/20/01 2:19:00 PM	48	8/20/01 2:25:00 PM	50
8/20/01 2:08:00 PM	52	8/20/01 2:14:00 PM	53	8/20/01 2:20:00 PM	52	8/20/01 2:25:00 PM	48
8/20/01 2:08:00 PM	54	8/20/01 2:14:00 PM	53	8/20/01 2:20:00 PM	52	8/20/01 2:26:00 PM	47
8/20/01 2:08:00 PM	53	8/20/01 2:14:00 PM	50	8/20/01 2:20:00 PM	58	8/20/01 2:26:00 PM	45
8/20/01 2:08:00 PM	50	8/20/01 2:14:00 PM	50	8/20/01 2:20:00 PM	66	8/20/01 2:26:00 PM	47
8/20/01 2:09:00 PM	53	8/20/01 2:14:00 PM	52	8/20/01 2:20:00 PM	60	8/20/01 2:26:00 PM	47
8/20/01 2:09:00 PM	56	8/20/01 2:15:00 PM	50	8/20/01 2:20:00 PM	50	8/20/01 2:26:00 PM	50
8/20/01 2:09:00 PM	49	8/20/01 2:15:00 PM	48	8/20/01 2:21:00 PM	46	8/20/01 2:26:00 PM	49
8/20/01 2:09:00 PM	45	8/20/01 2:15:00 PM	54	8/20/01 2:21:00 PM	47	8/20/01 2:27:00 PM	47
8/20/01 2:09:00 PM	48	8/20/01 2:15:00 PM	54	8/20/01 2:21:00 PM	49	8/20/01 2:27:00 PM	47
8/20/01 2:09:00 PM	48	8/20/01 2:15:00 PM	46	8/20/01 2:21:00 PM	50	8/20/01 2:27:00 PM	47
8/20/01 2:10:00 PM	53	8/20/01 2:15:00 PM	46	8/20/01 2:21:00 PM	51	8/20/01 2:27:00 PM	48
8/20/01 2:10:00 PM	51	8/20/01 2:16:00 PM	45	8/20/01 2:21:00 PM	53	8/20/01 2:27:00 PM	50
8/20/01 2:10:00 PM	57	8/20/01 2:16:00 PM	52	8/20/01 2:22:00 PM	58	8/20/01 2:27:00 PM	55
8/20/01 2:10:00 PM	56	8/20/01 2:16:00 PM	52	8/20/01 2:22:00 PM	53	8/20/01 2:28:00 PM	52
8/20/01 2:10:00 PM	50	8/20/01 2:16:00 PM	48	8/20/01 2:22:00 PM	50	8/20/01 2:28:00 PM	44
8/20/01 2:10:00 PM	49	8/20/01 2:16:00 PM	50	8/20/01 2:22:00 PM	50	8/20/01 2:28:00 PM	45
8/20/01 2:11:00 PM	45	8/20/01 2:16:00 PM	49	8/20/01 2:22:00 PM	54	8/20/01 2:28:00 PM	46
8/20/01 2:11:00 PM	54	8/20/01 2:17:00 PM	45	8/20/01 2:22:00 PM	52	8/20/01 2:28:00 PM	48
8/20/01 2:11:00 PM	50	8/20/01 2:17:00 PM	49	8/20/01 2:23:00 PM	53	8/20/01 2:28:00 PM	46
8/20/01 2:11:00 PM	51	8/20/01 2:17:00 PM	51	8/20/01 2:23:00 PM	45	8/20/01 2:29:00 PM	48
8/20/01 2:11:00 PM	50	8/20/01 2:17:00 PM	52	8/20/01 2:23:00 PM	44	8/20/01 2:29:00 PM	48
8/20/01 2:11:00 PM	55	8/20/01 2:17:00 PM	47	8/20/01 2:23:00 PM	52	8/20/01 2:29:00 PM	48

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 2:29:00 PM	54	8/20/01 2:35:00 PM	55	8/20/01 2:41:00 PM	52	8/20/01 2:47:00 PM	51
8/20/01 2:29:00 PM	53	8/20/01 2:35:00 PM	58	8/20/01 2:41:00 PM	55	8/20/01 2:47:00 PM	55
8/20/01 2:29:00 PM	50	8/20/01 2:35:00 PM	53	8/20/01 2:41:00 PM	57	8/20/01 2:47:00 PM	50
8/20/01 2:30:00 PM	50	8/20/01 2:35:00 PM	51	8/20/01 2:41:00 PM	51	8/20/01 2:47:00 PM	49
8/20/01 2:30:00 PM	52	8/20/01 2:36:00 PM	51	8/20/01 2:41:00 PM	56	8/20/01 2:47:00 PM	50
8/20/01 2:30:00 PM	49	8/20/01 2:36:00 PM	53	8/20/01 2:42:00 PM	58	8/20/01 2:47:00 PM	56
8/20/01 2:30:00 PM	50	8/20/01 2:36:00 PM	48	8/20/01 2:42:00 PM	55	8/20/01 2:48:00 PM	56
8/20/01 2:30:00 PM	50	8/20/01 2:36:00 PM	46	8/20/01 2:42:00 PM	51	8/20/01 2:48:00 PM	58
8/20/01 2:30:00 PM	50	8/20/01 2:36:00 PM	46	8/20/01 2:42:00 PM	48	8/20/01 2:48:00 PM	55
8/20/01 2:31:00 PM	49	8/20/01 2:36:00 PM	46	8/20/01 2:42:00 PM	53	8/20/01 2:48:00 PM	53
8/20/01 2:31:00 PM	50	8/20/01 2:37:00 PM	46	8/20/01 2:42:00 PM	54	8/20/01 2:48:00 PM	56
8/20/01 2:31:00 PM	54	8/20/01 2:37:00 PM	48	8/20/01 2:43:00 PM	53	8/20/01 2:48:00 PM	62
8/20/01 2:31:00 PM	51	8/20/01 2:37:00 PM	48	8/20/01 2:43:00 PM	56	8/20/01 2:49:00 PM	57
8/20/01 2:31:00 PM	49	8/20/01 2:37:00 PM	50	8/20/01 2:43:00 PM	52	8/20/01 2:49:00 PM	54
8/20/01 2:31:00 PM	53	8/20/01 2:37:00 PM	49	8/20/01 2:43:00 PM	53	8/20/01 2:49:00 PM	49
8/20/01 2:32:00 PM	55	8/20/01 2:37:00 PM	52	8/20/01 2:43:00 PM	56	8/20/01 2:49:00 PM	52
8/20/01 2:32:00 PM	51	8/20/01 2:38:00 PM	50	8/20/01 2:43:00 PM	52	8/20/01 2:49:00 PM	50
8/20/01 2:32:00 PM	47	8/20/01 2:38:00 PM	48	8/20/01 2:44:00 PM	55	8/20/01 2:49:00 PM	53
8/20/01 2:32:00 PM	48	8/20/01 2:38:00 PM	51	8/20/01 2:44:00 PM	54	8/20/01 2:50:00 PM	52
8/20/01 2:32:00 PM	53	8/20/01 2:38:00 PM	52	8/20/01 2:44:00 PM	53	8/20/01 2:50:00 PM	56
8/20/01 2:32:00 PM	50	8/20/01 2:38:00 PM	53	8/20/01 2:44:00 PM	53	8/20/01 2:50:00 PM	51
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8/20/01 2:33:00 PM	53	8/20/01 2:39:00 PM	50	8/20/01 2:44:00 PM	51	8/20/01 2:50:00 PM	52
8/20/01 2:33:00 PM	54	8/20/01 2:39:00 PM	49	8/20/01 2:45:00 PM	52	8/20/01 2:50:00 PM	53
8/20/01 2:33:00 PM	63	8/20/01 2:39:00 PM	51	8/20/01 2:45:00 PM	52	8/20/01 2:51:00 PM	56
8/20/01 2:33:00 PM	58	8/20/01 2:39:00 PM	50	8/20/01 2:45:00 PM	54	8/20/01 2:51:00 PM	53
8/20/01 2:33:00 PM	52	8/20/01 2:39:00 PM	53	8/20/01 2:45:00 PM	57	8/20/01 2:51:00 PM	58
8/20/01 2:34:00 PM	52	8/20/01 2:39:00 PM	51	8/20/01 2:45:00 PM	50	8/20/01 2:51:00 PM	54
8/20/01 2:34:00 PM	61	8/20/01 2:40:00 PM	50	8/20/01 2:45:00 PM	50	8/20/01 2:51:00 PM	49
8/20/01 2:34:00 PM	53	8/20/01 2:40:00 PM	50	8/20/01 2:46:00 PM	53	8/20/01 2:51:00 PM	48
8/20/01 2:34:00 PM	53	8/20/01 2:40:00 PM	55	8/20/01 2:46:00 PM	55	8/20/01 2:52:00 PM	47
8/20/01 2:34:00 PM	54	8/20/01 2:40:00 PM	54	8/20/01 2:46:00 PM	54	8/20/01 2:52:00 PM	50
8/20/01 2:34:00 PM	56	8/20/01 2:40:00 PM	53	8/20/01 2:46:00 PM	55	8/20/01 2:52:00 PM	47
8/20/01 2:35:00 PM	55	8/20/01 2:40:00 PM	54	8/20/01 2:46:00 PM	53	8/20/01 2:52:00 PM	52
8/20/01 2:35:00 PM	54	8/20/01 2:41:00 PM	53	8/20/01 2:46:00 PM	51	8/20/01 2:52:00 PM	52

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 2:52:00 PM	50	8/20/01 2:58:00 PM	52	8/20/01 3:04:00 PM	63	8/20/01 3:10:00 PM	52
8/20/01 2:53:00 PM	54	8/20/01 2:58:00 PM	54	8/20/01 3:04:00 PM	53	8/20/01 3:10:00 PM	53
8/20/01 2:53:00 PM	54	8/20/01 2:59:00 PM	50	8/20/01 3:04:00 PM	50	8/20/01 3:10:00 PM	48
8/20/01 2:53:00 PM	51	8/20/01 2:59:00 PM	50	8/20/01 3:05:00 PM	53	8/20/01 3:10:00 PM	56
8/20/01 2:53:00 PM	51	8/20/01 2:59:00 PM	52	8/20/01 3:05:00 PM	53	8/20/01 3:11:00 PM	57
8/20/01 2:53:00 PM	52	8/20/01 2:59:00 PM	51	8/20/01 3:05:00 PM	52	8/20/01 3:11:00 PM	52
8/20/01 2:53:00 PM	53	8/20/01 2:59:00 PM	57	8/20/01 3:05:00 PM	52	8/20/01 3:11:00 PM	51
8/20/01 2:54:00 PM	54	8/20/01 2:59:00 PM	60	8/20/01 3:05:00 PM	52	8/20/01 3:11:00 PM	54
8/20/01 2:54:00 PM	54	8/20/01 3:00:00 PM	57	8/20/01 3:05:00 PM	59	8/20/01 3:11:00 PM	59
8/20/01 2:54:00 PM	51	8/20/01 3:00:00 PM	51	8/20/01 3:06:00 PM	52	8/20/01 3:11:00 PM	56
8/20/01 2:54:00 PM	54	8/20/01 3:00:00 PM	54	8/20/01 3:06:00 PM	53	8/20/01 3:12:00 PM	55
8/20/01 2:54:00 PM	55	8/20/01 3:00:00 PM	57	8/20/01 3:06:00 PM	53	8/20/01 3:12:00 PM	52
8/20/01 2:54:00 PM	51	8/20/01 3:00:00 PM	55	8/20/01 3:06:00 PM	56	8/20/01 3:12:00 PM	50
8/20/01 2:55:00 PM	52	8/20/01 3:00:00 PM	54	8/20/01 3:06:00 PM	59	8/20/01 3:12:00 PM	57
8/20/01 2:55:00 PM	47	8/20/01 3:01:00 PM	55	8/20/01 3:06:00 PM	54	8/20/01 3:12:00 PM	54
8/20/01 2:55:00 PM	52	8/20/01 3:01:00 PM	54	8/20/01 3:07:00 PM	53	8/20/01 3:12:00 PM	55
8/20/01 2:55:00 PM	50	8/20/01 3:01:00 PM	55	8/20/01 3:07:00 PM	52	8/20/01 3:13:00 PM	55
8/20/01 2:55:00 PM	50	8/20/01 3:01:00 PM	56	8/20/01 3:07:00 PM	51	8/20/01 3:13:00 PM	59
8/20/01 2:55:00 PM	52	8/20/01 3:01:00 PM	57	8/20/01 3:07:00 PM	52	8/20/01 3:13:00 PM	56
8/20/01 2:56:00 PM	53	8/20/01 3:01:00 PM	56	8/20/01 3:07:00 PM	53	8/20/01 3:13:00 PM	56
8/20/01 2:56:00 PM	54	8/20/01 3:02:00 PM	63	8/20/01 3:07:00 PM	54	8/20/01 3:13:00 PM	52
8/20/01 2:56:00 PM	55	8/20/01 3:02:00 PM	58	8/20/01 3:08:00 PM	53	8/20/01 3:13:00 PM	51
8/20/01 2:56:00 PM	53	8/20/01 3:02:00 PM	60	8/20/01 3:08:00 PM	54	8/20/01 3:14:00 PM	53
8/20/01 2:56:00 PM	53	8/20/01 3:02:00 PM	57	8/20/01 3:08:00 PM	52	8/20/01 3:14:00 PM	51
8/20/01 2:56:00 PM	55	8/20/01 3:02:00 PM	56	8/20/01 3:08:00 PM	51	8/20/01 3:14:00 PM	51
8/20/01 2:57:00 PM	59	8/20/01 3:02:00 PM	55	8/20/01 3:08:00 PM	54	8/20/01 3:14:00 PM	53
8/20/01 2:57:00 PM	55	8/20/01 3:03:00 PM	52	8/20/01 3:08:00 PM	55	8/20/01 3:14:00 PM	53
8/20/01 2:57:00 PM	48	8/20/01 3:03:00 PM	54	8/20/01 3:09:00 PM	52	8/20/01 3:14:00 PM	50
8/20/01 2:57:00 PM	51	8/20/01 3:03:00 PM	59	8/20/01 3:09:00 PM	51	8/20/01 3:15:00 PM	55
8/20/01 2:57:00 PM	53	8/20/01 3:03:00 PM	53	8/20/01 3:09:00 PM	58	8/20/01 3:15:00 PM	52
8/20/01 2:57:00 PM	53	8/20/01 3:03:00 PM	52	8/20/01 3:09:00 PM	52	8/20/01 3:15:00 PM	53
8/20/01 2:58:00 PM	52	8/20/01 3:03:00 PM	52	8/20/01 3:09:00 PM	49	8/20/01 3:15:00 PM	53
8/20/01 2:58:00 PM	55	8/20/01 3:04:00 PM	52	8/20/01 3:09:00 PM	50	8/20/01 3:15:00 PM	52
8/20/01 2:58:00 PM	56	8/20/01 3:04:00 PM	54	8/20/01 3:10:00 PM	53	8/20/01 3:15:00 PM	56
8/20/01 2:58:00 PM	51	8/20/01 3:04:00 PM	56	8/20/01 3:10:00 PM	52	8/20/01 3:16:00 PM	54

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 3:16:00 PM	53	8/20/01 3:22:00 PM	52	8/20/01 3:27:00 PM	52	8/20/01 3:33:00 PM	54
8/20/01 3:16:00 PM	50	8/20/01 3:22:00 PM	52	8/20/01 3:28:00 PM	55	8/20/01 3:33:00 PM	56
8/20/01 3:16:00 PM	52	8/20/01 3:22:00 PM	52	8/20/01 3:28:00 PM	54	8/20/01 3:34:00 PM	59
8/20/01 3:16:00 PM	52	8/20/01 3:22:00 PM	49	8/20/01 3:28:00 PM	56	8/20/01 3:34:00 PM	52
8/20/01 3:16:00 PM	53	8/20/01 3:22:00 PM	49	8/20/01 3:28:00 PM	55	8/20/01 3:34:00 PM	61
8/20/01 3:17:00 PM	58	8/20/01 3:22:00 PM	53	8/20/01 3:28:00 PM	56	8/20/01 3:34:00 PM	60
8/20/01 3:17:00 PM	54	8/20/01 3:23:00 PM	57	8/20/01 3:28:00 PM	53	8/20/01 3:34:00 PM	53
8/20/01 3:17:00 PM	57	8/20/01 3:23:00 PM	56	8/20/01 3:29:00 PM	58	8/20/01 3:34:00 PM	52
8/20/01 3:17:00 PM	50	8/20/01 3:23:00 PM	56	8/20/01 3:29:00 PM	54	8/20/01 3:35:00 PM	54
8/20/01 3:17:00 PM	56	8/20/01 3:23:00 PM	54	8/20/01 3:29:00 PM	53	8/20/01 3:35:00 PM	56
8/20/01 3:17:00 PM	54	8/20/01 3:23:00 PM	57	8/20/01 3:29:00 PM	52	8/20/01 3:35:00 PM	56
8/20/01 3:18:00 PM	49	8/20/01 3:23:00 PM	54	8/20/01 3:29:00 PM	50	8/20/01 3:35:00 PM	56
8/20/01 3:18:00 PM	53	8/20/01 3:24:00 PM	51	8/20/01 3:29:00 PM	50	8/20/01 3:35:00 PM	53
8/20/01 3:18:00 PM	53	8/20/01 3:24:00 PM	54	8/20/01 3:30:00 PM	53	8/20/01 3:35:00 PM	58
8/20/01 3:18:00 PM	49	8/20/01 3:24:00 PM	53	8/20/01 3:30:00 PM	48	8/20/01 3:36:00 PM	56
8/20/01 3:18:00 PM	55	8/20/01 3:24:00 PM	52	8/20/01 3:30:00 PM	55	8/20/01 3:36:00 PM	50
8/20/01 3:18:00 PM	58	8/20/01 3:24:00 PM	52	8/20/01 3:30:00 PM	58	8/20/01 3:36:00 PM	57
8/20/01 3:19:00 PM	50	8/20/01 3:24:00 PM	58	8/20/01 3:30:00 PM	56	8/20/01 3:36:00 PM	55
8/20/01 3:19:00 PM	49	8/20/01 3:25:00 PM	55	8/20/01 3:30:00 PM	54	8/20/01 3:36:00 PM	67
8/20/01 3:19:00 PM	53	8/20/01 3:25:00 PM	58	8/20/01 3:31:00 PM	59	8/20/01 3:36:00 PM	60
8/20/01 3:19:00 PM	52	8/20/01 3:25:00 PM	51	8/20/01 3:31:00 PM	53	8/20/01 3:37:00 PM	58
8/20/01 3:19:00 PM	52	8/20/01 3:25:00 PM	54	8/20/01 3:31:00 PM	50	8/20/01 3:37:00 PM	60
8/20/01 3:19:00 PM	53	8/20/01 3:25:00 PM	50	8/20/01 3:31:00 PM	49	8/20/01 3:37:00 PM	66
8/20/01 3:20:00 PM	53	8/20/01 3:25:00 PM	52	8/20/01 3:31:00 PM	58	8/20/01 3:37:00 PM	62
8/20/01 3:20:00 PM	48	8/20/01 3:26:00 PM	51	8/20/01 3:31:00 PM	59	8/20/01 3:37:00 PM	59
8/20/01 3:20:00 PM	50	8/20/01 3:26:00 PM	46	8/20/01 3:32:00 PM	60	8/20/01 3:37:00 PM	57
8/20/01 3:20:00 PM	52	8/20/01 3:26:00 PM	49	8/20/01 3:32:00 PM	61	8/20/01 3:38:00 PM	64
8/20/01 3:20:00 PM	51	8/20/01 3:26:00 PM	51	8/20/01 3:32:00 PM	55	8/20/01 3:38:00 PM	56
8/20/01 3:20:00 PM	53	8/20/01 3:26:00 PM	52	8/20/01 3:32:00 PM	50	8/20/01 3:38:00 PM	59
8/20/01 3:21:00 PM	52	8/20/01 3:26:00 PM	53	8/20/01 3:32:00 PM	54	8/20/01 3:38:00 PM	57
8/20/01 3:21:00 PM	50	8/20/01 3:27:00 PM	54	8/20/01 3:32:00 PM	56	8/20/01 3:38:00 PM	56
8/20/01 3:21:00 PM	48	8/20/01 3:27:00 PM	54	8/20/01 3:33:00 PM	56	8/20/01 3:38:00 PM	55
8/20/01 3:21:00 PM	53	8/20/01 3:27:00 PM	53	8/20/01 3:33:00 PM	51	8/20/01 3:39:00 PM	56
8/20/01 3:21:00 PM	55	8/20/01 3:27:00 PM	51	8/20/01 3:33:00 PM	55	8/20/01 3:39:00 PM	57
8/20/01 3:21:00 PM	56	8/20/01 3:27:00 PM	55	8/20/01 3:33:00 PM	57	8/20/01 3:39:00 PM	50

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/20/01 3:39:00 PM	50	8/20/01 3:45:00 PM	56	8/20/01 3:51:00 PM	52	8/20/01 3:57:00 PM	52
8/20/01 3:39:00 PM	56	8/20/01 3:45:00 PM	53	8/20/01 3:51:00 PM	54	8/20/01 3:57:00 PM	57
8/20/01 3:39:00 PM	58	8/20/01 3:45:00 PM	55	8/20/01 3:51:00 PM	54	8/20/01 3:57:00 PM	57
8/20/01 3:40:00 PM	56	8/20/01 3:45:00 PM	56	8/20/01 3:51:00 PM	50	8/20/01 3:57:00 PM	54
8/20/01 3:40:00 PM	52	8/20/01 3:46:00 PM	53	8/20/01 3:51:00 PM	54	8/20/01 3:57:00 PM	56
8/20/01 3:40:00 PM	54	8/20/01 3:46:00 PM	48	8/20/01 3:52:00 PM	63	8/20/01 3:57:00 PM	56
8/20/01 3:40:00 PM	56	8/20/01 3:46:00 PM	53	8/20/01 3:52:00 PM	67	8/20/01 3:58:00 PM	60
8/20/01 3:40:00 PM	58	8/20/01 3:46:00 PM	50	8/20/01 3:52:00 PM	56	8/20/01 3:58:00 PM	62
8/20/01 3:40:00 PM	54	8/20/01 3:46:00 PM	52	8/20/01 3:52:00 PM	56	8/20/01 3:58:00 PM	66
8/20/01 3:41:00 PM	62	8/20/01 3:46:00 PM	54	8/20/01 3:52:00 PM	58	8/20/01 3:58:00 PM	59
8/20/01 3:41:00 PM	57	8/20/01 3:47:00 PM	59	8/20/01 3:52:00 PM	57	8/20/01 3:58:00 PM	56
8/20/01 3:41:00 PM	57	8/20/01 3:47:00 PM	55	8/20/01 3:53:00 PM	55	8/20/01 3:58:00 PM	49
8/20/01 3:41:00 PM	60	8/20/01 3:47:00 PM	54	8/20/01 3:53:00 PM	53	8/20/01 3:59:00 PM	51
8/20/01 3:41:00 PM	60	8/20/01 3:47:00 PM	56	8/20/01 3:53:00 PM	56	8/20/01 3:59:00 PM	56
8/20/01 3:41:00 PM	58	8/20/01 3:47:00 PM	54	8/20/01 3:53:00 PM	52	8/20/01 3:59:00 PM	54
8/20/01 3:42:00 PM	54	8/20/01 3:47:00 PM	54	8/20/01 3:53:00 PM	52	8/20/01 3:59:00 PM	61
8/20/01 3:42:00 PM	55	8/20/01 3:48:00 PM	55	8/20/01 3:53:00 PM	52	8/20/01 3:59:00 PM	57
8/20/01 3:42:00 PM	52	8/20/01 3:48:00 PM	57	8/20/01 3:54:00 PM	52	8/20/01 3:59:00 PM	60
8/20/01 3:42:00 PM	56	8/20/01 3:48:00 PM	59	8/20/01 3:54:00 PM	54	8/20/01 4:00:00 PM	59
8/20/01 3:42:00 PM	54	8/20/01 3:48:00 PM	58	8/20/01 3:54:00 PM	55	8/20/01 4:00:00 PM	56
8/20/01 3:42:00 PM	54	8/20/01 3:48:00 PM	56	8/20/01 3:54:00 PM	51	8/20/01 4:00:00 PM	56
8/20/01 3:43:00 PM	54	8/20/01 3:48:00 PM	51	8/20/01 3:54:00 PM	54	8/20/01 4:00:00 PM	57
8/20/01 3:43:00 PM	49	8/20/01 3:49:00 PM	52	8/20/01 3:54:00 PM	51	8/20/01 4:00:00 PM	57
8/20/01 3:43:00 PM	48	8/20/01 3:49:00 PM	57	8/20/01 3:55:00 PM	52	8/20/01 4:00:00 PM	56
8/20/01 3:43:00 PM	54	8/20/01 3:49:00 PM	53	8/20/01 3:55:00 PM	53	8/22/01 8:20:00 AM	48
8/20/01 3:43:00 PM	50	8/20/01 3:49:00 PM	50	8/20/01 3:55:00 PM	50	8/22/01 8:21:00 AM	33
8/20/01 3:43:00 PM	56	8/20/01 3:49:00 PM	56	8/20/01 3:55:00 PM	52	8/22/01 8:22:00 AM	14
8/20/01 3:44:00 PM	54	8/20/01 3:49:00 PM	55	8/20/01 3:55:00 PM	53	8/22/01 8:23:00 AM	14
8/20/01 3:44:00 PM	53	8/20/01 3:50:00 PM	55	8/20/01 3:55:00 PM	58	8/22/01 8:24:00 AM	14
8/20/01 3:44:00 PM	56	8/20/01 3:50:00 PM	60	8/20/01 3:56:00 PM	50	8/22/01 8:25:00 AM	29
8/20/01 3:44:00 PM	60	8/20/01 3:50:00 PM	58	8/20/01 3:56:00 PM	49	8/22/01 8:26:00 AM	50
8/20/01 3:44:00 PM	56	8/20/01 3:50:00 PM	54	8/20/01 3:56:00 PM	51	8/22/01 8:27:00 AM	15
8/20/01 3:44:00 PM	54	8/20/01 3:50:00 PM	51	8/20/01 3:56:00 PM	52	8/22/01 8:28:00 AM	16
8/20/01 3:45:00 PM	55	8/20/01 3:50:00 PM	53	8/20/01 3:56:00 PM	49	8/22/01 8:29:00 AM	14
8/20/01 3:45:00 PM	53	8/20/01 3:51:00 PM	54	8/20/01 3:56:00 PM	49	8/22/01 8:30:00 AM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/22/01 8:31:00 AM	13	8/22/01 9:06:00 AM	14	8/22/01 9:41:00 AM	16	8/22/01 10:16:00 AM	13
8/22/01 8:32:00 AM	14	8/22/01 9:07:00 AM	16	8/22/01 9:42:00 AM	20	8/22/01 10:17:00 AM	13
8/22/01 8:33:00 AM	16	8/22/01 9:08:00 AM	16	8/22/01 9:43:00 AM	14	8/22/01 10:18:00 AM	14
8/22/01 8:34:00 AM	16	8/22/01 9:09:00 AM	14	8/22/01 9:44:00 AM	15	8/22/01 10:19:00 AM	17
8/22/01 8:35:00 AM	15	8/22/01 9:10:00 AM	14	8/22/01 9:45:00 AM	19	8/22/01 10:20:00 AM	14
8/22/01 8:36:00 AM	17	8/22/01 9:11:00 AM	15	8/22/01 9:46:00 AM	14	8/22/01 10:21:00 AM	12
8/22/01 8:37:00 AM	16	8/22/01 9:12:00 AM	15	8/22/01 9:47:00 AM	12	8/22/01 10:22:00 AM	15
8/22/01 8:38:00 AM	16	8/22/01 9:13:00 AM	16	8/22/01 9:48:00 AM	15	8/22/01 10:23:00 AM	18
8/22/01 8:39:00 AM	15	8/22/01 9:14:00 AM	13	8/22/01 9:49:00 AM	15	8/22/01 10:24:00 AM	13
8/22/01 8:40:00 AM	15	8/22/01 9:15:00 AM	16	8/22/01 9:50:00 AM	16	8/22/01 10:25:00 AM	12
8/22/01 8:41:00 AM	17	8/22/01 9:16:00 AM	13	8/22/01 9:51:00 AM	13	8/22/01 10:26:00 AM	12
8/22/01 8:42:00 AM	17	8/22/01 9:17:00 AM	14	8/22/01 9:52:00 AM	14	8/22/01 10:27:00 AM	12
8/22/01 8:43:00 AM	15	8/22/01 9:18:00 AM	14	8/22/01 9:53:00 AM	13	8/22/01 10:28:00 AM	14
8/22/01 8:44:00 AM	14	8/22/01 9:19:00 AM	16	8/22/01 9:54:00 AM	14	8/22/01 10:29:00 AM	16
8/22/01 8:45:00 AM	17	8/22/01 9:20:00 AM	17	8/22/01 9:55:00 AM	13	8/22/01 10:30:00 AM	19
8/22/01 8:46:00 AM	12	8/22/01 9:21:00 AM	13	8/22/01 9:56:00 AM	13	8/22/01 10:31:00 AM	15
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8/22/01 8:48:00 AM	14	8/22/01 9:23:00 AM	18	8/22/01 9:58:00 AM	17	8/22/01 10:33:00 AM	17
8/22/01 8:49:00 AM	14	8/22/01 9:24:00 AM	15	8/22/01 9:59:00 AM	14	8/22/01 10:34:00 AM	15
8/22/01 8:50:00 AM	12	8/22/01 9:25:00 AM	13	8/22/01 10:00:00 AM	20	8/22/01 10:35:00 AM	16
8/22/01 8:51:00 AM	14	8/22/01 9:26:00 AM	17	8/22/01 10:01:00 AM	22	8/22/01 10:36:00 AM	18
8/22/01 8:52:00 AM	15	8/22/01 9:27:00 AM	16	8/22/01 10:02:00 AM	18	8/22/01 10:37:00 AM	13
8/22/01 8:53:00 AM	19	8/22/01 9:28:00 AM	14	8/22/01 10:03:00 AM	16	8/22/01 10:38:00 AM	14
8/22/01 8:54:00 AM	15	8/22/01 9:29:00 AM	13	8/22/01 10:04:00 AM	17	8/22/01 10:39:00 AM	18
8/22/01 8:55:00 AM	17	8/22/01 9:30:00 AM	14	8/22/01 10:05:00 AM	12	8/22/01 10:40:00 AM	13
8/22/01 8:56:00 AM	17	8/22/01 9:31:00 AM	14	8/22/01 10:06:00 AM	15	8/22/01 10:41:00 AM	14
8/22/01 8:57:00 AM	18	8/22/01 9:32:00 AM	14	8/22/01 10:07:00 AM	17	8/22/01 10:42:00 AM	15
8/22/01 8:58:00 AM	15	8/22/01 9:33:00 AM	21	8/22/01 10:08:00 AM	13	8/22/01 10:43:00 AM	17
8/22/01 8:59:00 AM	15	8/22/01 9:34:00 AM	14	8/22/01 10:09:00 AM	14	8/22/01 10:44:00 AM	15
8/22/01 9:00:00 AM	14	8/22/01 9:35:00 AM	15	8/22/01 10:10:00 AM	14	8/22/01 10:45:00 AM	17
8/22/01 9:01:00 AM	14	8/22/01 9:36:00 AM	13	8/22/01 10:11:00 AM	13	8/22/01 10:46:00 AM	18
8/22/01 9:02:00 AM	15	8/22/01 9:37:00 AM	14	8/22/01 10:12:00 AM	14	8/22/01 10:47:00 AM	14
8/22/01 9:03:00 AM	12	8/22/01 9:38:00 AM	13	8/22/01 10:13:00 AM	12	8/22/01 10:48:00 AM	14
8/22/01 9:04:00 AM	14	8/22/01 9:39:00 AM	13	8/22/01 10:14:00 AM	15	8/22/01 10:49:00 AM	15
8/22/01 9:05:00 AM	16	8/22/01 9:40:00 AM	14	8/22/01 10:15:00 AM	13	8/22/01 10:50:00 AM	19

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/22/01 10:51:00 AM	15	8/22/01 11:26:00 AM	55	8/22/01 12:01:00 PM	12	8/22/01 12:36:00 PM	41
8/22/01 10:52:00 AM	13	8/22/01 11:27:00 AM	64	8/22/01 12:02:00 PM	12	8/22/01 12:37:00 PM	35
8/22/01 10:53:00 AM	21	8/22/01 11:28:00 AM	15	8/22/01 12:03:00 PM	14	8/22/01 12:38:00 PM	16
8/22/01 10:54:00 AM	15	8/22/01 11:29:00 AM	17	8/22/01 12:04:00 PM	13	8/22/01 12:39:00 PM	25
8/22/01 10:55:00 AM	15	8/22/01 11:30:00 AM	15	8/22/01 12:05:00 PM	15	8/22/01 12:40:00 PM	52
8/22/01 10:56:00 AM	16	8/22/01 11:31:00 AM	15	8/22/01 12:06:00 PM	15	8/22/01 12:41:00 PM	30
8/22/01 10:57:00 AM	16	8/22/01 11:32:00 AM	14	8/22/01 12:07:00 PM	66	8/22/01 12:42:00 PM	48
8/22/01 10:58:00 AM	17	8/22/01 11:33:00 AM	18	8/22/01 12:08:00 PM	18	8/22/01 12:43:00 PM	37
8/22/01 10:59:00 AM	17	8/22/01 11:34:00 AM	19	8/22/01 12:09:00 PM	14	8/22/01 12:44:00 PM	66
8/22/01 11:00:00 AM	14	8/22/01 11:35:00 AM	15	8/22/01 12:10:00 PM	14	8/22/01 12:45:00 PM	68
8/22/01 11:01:00 AM	20	8/22/01 11:36:00 AM	14	8/22/01 12:11:00 PM	15	8/22/01 12:46:00 PM	22
8/22/01 11:02:00 AM	19	8/22/01 11:37:00 AM	13	8/22/01 12:12:00 PM	17	8/22/01 12:47:00 PM	30
8/22/01 11:03:00 AM	18	8/22/01 11:38:00 AM	14	8/22/01 12:13:00 PM	18	8/22/01 12:48:00 PM	30
8/22/01 11:04:00 AM	21	8/22/01 11:39:00 AM	14	8/22/01 12:14:00 PM	18	8/22/01 12:49:00 PM	65
8/22/01 11:05:00 AM	14	8/22/01 11:40:00 AM	15	8/22/01 12:15:00 PM	13	8/22/01 12:50:00 PM	59
8/22/01 11:06:00 AM	16	8/22/01 11:41:00 AM	17	8/22/01 12:16:00 PM	15	8/22/01 12:51:00 PM	37
8/22/01 11:07:00 AM	14	8/22/01 11:42:00 AM	14	8/22/01 12:17:00 PM	20	8/22/01 12:52:00 PM	36
8/22/01 11:08:00 AM	17	8/22/01 11:43:00 AM	14	8/22/01 12:18:00 PM	42	8/22/01 12:53:00 PM	52
8/22/01 11:09:00 AM	16	8/22/01 11:44:00 AM	13	8/22/01 12:19:00 PM	30	8/22/01 12:54:00 PM	42
8/22/01 11:10:00 AM	18	8/22/01 11:45:00 AM	12	8/22/01 12:20:00 PM	39	8/22/01 12:55:00 PM	58
8/22/01 11:11:00 AM	16	8/22/01 11:46:00 AM	13	8/22/01 12:21:00 PM	27	8/22/01 12:56:00 PM	40
8/22/01 11:12:00 AM	14	8/22/01 11:47:00 AM	16	8/22/01 12:22:00 PM	18	8/22/01 12:57:00 PM	33
8/22/01 11:13:00 AM	16	8/22/01 11:48:00 AM	13	8/22/01 12:23:00 PM	15	8/22/01 12:58:00 PM	40
8/22/01 11:14:00 AM	14	8/22/01 11:49:00 AM	13	8/22/01 12:24:00 PM	24	8/22/01 12:59:00 PM	79
8/22/01 11:15:00 AM	17	8/22/01 11:50:00 AM	14	8/22/01 12:25:00 PM	15	8/22/01 1:00:00 PM	62
8/22/01 11:16:00 AM	17	8/22/01 11:51:00 AM	15	8/22/01 12:26:00 PM	26	8/22/01 1:01:00 PM	41
8/22/01 11:17:00 AM	15	8/22/01 11:52:00 AM	13	8/22/01 12:27:00 PM	30	8/22/01 1:02:00 PM	12
8/22/01 11:18:00 AM	16	8/22/01 11:53:00 AM	13	8/22/01 12:28:00 PM	27	8/22/01 1:03:00 PM	14
8/22/01 11:19:00 AM	14	8/22/01 11:54:00 AM	13	8/22/01 12:29:00 PM	36	8/22/01 1:04:00 PM	16
8/22/01 11:20:00 AM	14	8/22/01 11:55:00 AM	14	8/22/01 12:30:00 PM	45	8/22/01 1:05:00 PM	14
8/22/01 11:21:00 AM	14	8/22/01 11:56:00 AM	17	8/22/01 12:31:00 PM	31	8/22/01 1:06:00 PM	15
8/22/01 11:22:00 AM	15	8/22/01 11:57:00 AM	17	8/22/01 12:32:00 PM	29	8/22/01 1:07:00 PM	14
8/22/01 11:23:00 AM	13	8/22/01 11:58:00 AM	16	8/22/01 12:33:00 PM	28	8/22/01 1:08:00 PM	14
8/22/01 11:24:00 AM	13	8/22/01 11:59:00 AM	17	8/22/01 12:34:00 PM	18	8/22/01 1:09:00 PM	15
8/22/01 11:25:00 AM	17	8/22/01 12:00:00 PM	13	8/22/01 12:35:00 PM	18	8/22/01 1:10:00 PM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/22/01 1:11:00 PM	14	8/22/01 1:46:00 PM	12	8/27/01 10:25:00 AM	22	8/27/01 11:00:00 AM	6
8/22/01 1:12:00 PM	14	8/22/01 1:47:00 PM	12	8/27/01 10:26:00 AM	9	8/27/01 11:01:00 AM	5
8/22/01 1:13:00 PM	15	8/22/01 1:48:00 PM	14	8/27/01 10:27:00 AM	6	8/27/01 11:02:00 AM	8
8/22/01 1:14:00 PM	16	8/22/01 1:49:00 PM	19	8/27/01 10:28:00 AM	6	8/27/01 11:03:00 AM	8
8/22/01 1:15:00 PM	15	8/22/01 1:50:00 PM	14	8/27/01 10:29:00 AM	7	8/27/01 11:04:00 AM	6
8/22/01 1:16:00 PM	13	8/22/01 1:51:00 PM	15	8/27/01 10:30:00 AM	9	8/27/01 11:05:00 AM	8
8/22/01 1:17:00 PM	14	8/22/01 1:52:00 PM	13	8/27/01 10:31:00 AM	11	8/27/01 11:06:00 AM	8
8/22/01 1:18:00 PM	14	8/22/01 1:53:00 PM	31	8/27/01 10:32:00 AM	7	8/27/01 11:07:00 AM	5
8/22/01 1:19:00 PM	14	8/22/01 1:54:00 PM	15	8/27/01 10:33:00 AM	9	8/27/01 11:08:00 AM	8
8/22/01 1:20:00 PM	14	8/22/01 1:55:00 PM	14	8/27/01 10:34:00 AM	5	8/27/01 11:09:00 AM	8
8/22/01 1:21:00 PM	13	8/22/01 1:56:00 PM	14	8/27/01 10:35:00 AM	6	8/27/01 11:10:00 AM	6
8/22/01 1:22:00 PM	15	8/22/01 1:57:00 PM	14	8/27/01 10:36:00 AM	8	8/27/01 11:11:00 AM	11
8/22/01 1:23:00 PM	16	8/22/01 1:58:00 PM	11	8/27/01 10:37:00 AM	6	8/27/01 11:12:00 AM	15
8/22/01 1:24:00 PM	14	8/22/01 1:59:00 PM	12	8/27/01 10:38:00 AM	9	8/27/01 11:13:00 AM	6
8/22/01 1:25:00 PM	13	8/22/01 2:00:00 PM	14	8/27/01 10:39:00 AM	4	8/27/01 11:14:00 AM	11
8/22/01 1:26:00 PM	15	8/22/01 2:01:00 PM	11	8/27/01 10:40:00 AM	5	8/27/01 11:15:00 AM	10
8/22/01 1:27:00 PM	13	8/22/01 2:02:00 PM	14	8/27/01 10:41:00 AM	5	8/27/01 11:16:00 AM	4
8/22/01 1:28:00 PM	25	8/22/01 2:03:00 PM	14	8/27/01 10:42:00 AM	6	8/27/01 11:17:00 AM	2
8/22/01 1:29:00 PM	17	8/22/01 2:04:00 PM	11	8/27/01 10:43:00 AM	10	8/27/01 11:18:00 AM	4
8/22/01 1:30:00 PM	15	8/22/01 2:05:00 PM	13	8/27/01 10:44:00 AM	7	8/27/01 11:19:00 AM	6
8/22/01 1:31:00 PM	14	8/22/01 2:06:00 PM	14	8/27/01 10:45:00 AM	6	8/27/01 11:20:00 AM	5
8/22/01 1:32:00 PM	12	8/22/01 2:07:00 PM	15	8/27/01 10:46:00 AM	9	8/27/01 11:21:00 AM	5
8/22/01 1:33:00 PM	16	8/22/01 2:08:00 PM	15	8/27/01 10:47:00 AM	7	8/27/01 11:22:00 AM	6
8/22/01 1:34:00 PM	17	8/22/01 2:09:00 PM	15	8/27/01 10:48:00 AM	8	8/27/01 11:23:00 AM	5
8/22/01 1:35:00 PM	14	8/22/01 2:10:00 PM	13	8/27/01 10:49:00 AM	7	8/27/01 11:24:00 AM	10
8/22/01 1:36:00 PM	14	8/22/01 2:11:00 PM	16	8/27/01 10:50:00 AM	3	8/27/01 11:25:00 AM	8
8/22/01 1:37:00 PM	14	8/22/01 2:12:00 PM	14	8/27/01 10:51:00 AM	5	8/27/01 11:26:00 AM	5
8/22/01 1:38:00 PM	16	8/22/01 2:13:00 PM	15	8/27/01 10:52:00 AM	6	8/27/01 11:27:00 AM	7
8/22/01 1:39:00 PM	18	8/22/01 2:14:00 PM	14	8/27/01 10:53:00 AM	4	8/27/01 11:28:00 AM	17
8/22/01 1:40:00 PM	16	8/22/01 2:15:00 PM	14	8/27/01 10:54:00 AM	4	8/27/01 11:29:00 AM	3
8/22/01 1:41:00 PM	14	8/22/01 2:16:00 PM	14	8/27/01 10:55:00 AM	6	8/27/01 11:30:00 AM	20
8/22/01 1:42:00 PM	13	8/22/01 2:17:00 PM	13	8/27/01 10:56:00 AM	4	8/27/01 11:31:00 AM	5
8/22/01 1:43:00 PM	16	8/22/01 2:18:00 PM	13	8/27/01 10:57:00 AM	6	8/27/01 11:32:00 AM	5
8/22/01 1:44:00 PM	14	8/22/01 2:19:00 PM	14	8/27/01 10:58:00 AM	5	8/27/01 11:33:00 AM	6
8/22/01 1:45:00 PM	14	8/22/01 2:20:00 PM	16	8/27/01 10:59:00 AM	8	8/27/01 11:34:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/27/01 11:35:00 AM	8	8/27/01 12:10:00 PM	7	8/27/01 12:45:00 PM	8	8/27/01 1:20:00 PM	8
8/27/01 11:36:00 AM	8	8/27/01 12:11:00 PM	5	8/27/01 12:46:00 PM	13	8/27/01 1:21:00 PM	3
8/27/01 11:37:00 AM	7	8/27/01 12:12:00 PM	5	8/27/01 12:47:00 PM	8	8/27/01 1:22:00 PM	6
8/27/01 11:38:00 AM	9	8/27/01 12:13:00 PM	4	8/27/01 12:48:00 PM	7	8/27/01 1:23:00 PM	6
8/27/01 11:39:00 AM	11	8/27/01 12:14:00 PM	5	8/27/01 12:49:00 PM	4	8/27/01 1:24:00 PM	5
8/27/01 11:40:00 AM	4	8/27/01 12:15:00 PM	8	8/27/01 12:50:00 PM	5	8/27/01 1:25:00 PM	4
8/27/01 11:41:00 AM	7	8/27/01 12:16:00 PM	5	8/27/01 12:51:00 PM	5	8/27/01 1:26:00 PM	8
8/27/01 11:42:00 AM	18	8/27/01 12:17:00 PM	4	8/27/01 12:52:00 PM	5	8/27/01 1:27:00 PM	6
8/27/01 11:43:00 AM	54	8/27/01 12:18:00 PM	6	8/27/01 12:53:00 PM	7	8/27/01 1:28:00 PM	9
8/27/01 11:44:00 AM	12	8/27/01 12:19:00 PM	9	8/27/01 12:54:00 PM	4	8/27/01 1:29:00 PM	7
8/27/01 11:45:00 AM	4	8/27/01 12:20:00 PM	6	8/27/01 12:55:00 PM	4	8/27/01 1:30:00 PM	7
8/27/01 11:46:00 AM	4	8/27/01 12:21:00 PM	5	8/27/01 12:56:00 PM	4	8/27/01 1:31:00 PM	5
8/27/01 11:47:00 AM	8	8/27/01 12:22:00 PM	6	8/27/01 12:57:00 PM	8	8/27/01 1:32:00 PM	6
8/27/01 11:48:00 AM	5	8/27/01 12:23:00 PM	8	8/27/01 12:58:00 PM	4	8/27/01 1:33:00 PM	9
8/27/01 11:49:00 AM	10	8/27/01 12:24:00 PM	6	8/27/01 12:59:00 PM	17	8/27/01 1:34:00 PM	9
8/27/01 11:50:00 AM	4	8/27/01 12:25:00 PM	7	8/27/01 1:00:00 PM	4	8/27/01 1:35:00 PM	4
8/27/01 11:51:00 AM	7	8/27/01 12:26:00 PM	6	8/27/01 1:01:00 PM	7	8/27/01 1:36:00 PM	22
8/27/01 11:52:00 AM	10	8/27/01 12:27:00 PM	6	8/27/01 1:02:00 PM	3	8/27/01 1:37:00 PM	11
8/27/01 11:53:00 AM	4	8/27/01 12:28:00 PM	5	8/27/01 1:03:00 PM	5	8/27/01 1:38:00 PM	5
8/27/01 11:54:00 AM	5	8/27/01 12:29:00 PM	4	8/27/01 1:04:00 PM	4	8/27/01 1:39:00 PM	8
8/27/01 11:55:00 AM	12	8/27/01 12:30:00 PM	3	8/27/01 1:05:00 PM	8	8/27/01 1:40:00 PM	7
8/27/01 11:56:00 AM	5	8/27/01 12:31:00 PM	4	8/27/01 1:06:00 PM	6	8/27/01 1:41:00 PM	5
8/27/01 11:57:00 AM	8	8/27/01 12:32:00 PM	6	8/27/01 1:07:00 PM	4	8/27/01 1:42:00 PM	6
8/27/01 11:58:00 AM	5	8/27/01 12:33:00 PM	5	8/27/01 1:08:00 PM	14	8/27/01 1:43:00 PM	9
8/27/01 11:59:00 AM	4	8/27/01 12:34:00 PM	4	8/27/01 1:09:00 PM	8	8/27/01 1:44:00 PM	7
8/27/01 12:00:00 PM	3	8/27/01 12:35:00 PM	4	8/27/01 1:10:00 PM	6	8/27/01 1:45:00 PM	10
8/27/01 12:01:00 PM	5	8/27/01 12:36:00 PM	4	8/27/01 1:11:00 PM	6	8/27/01 1:46:00 PM	8
8/27/01 12:02:00 PM	8	8/27/01 12:37:00 PM	4	8/27/01 1:12:00 PM	6	8/27/01 1:47:00 PM	50
8/27/01 12:03:00 PM	5	8/27/01 12:38:00 PM	6	8/27/01 1:13:00 PM	7	8/27/01 1:48:00 PM	21
8/27/01 12:04:00 PM	5	8/27/01 12:39:00 PM	4	8/27/01 1:14:00 PM	3	8/27/01 1:49:00 PM	8
8/27/01 12:05:00 PM	4	8/27/01 12:40:00 PM	6	8/27/01 1:15:00 PM	8	8/27/01 1:50:00 PM	11
8/27/01 12:06:00 PM	3	8/27/01 12:41:00 PM	7	8/27/01 1:16:00 PM	10	8/27/01 1:51:00 PM	6
8/27/01 12:07:00 PM	5	8/27/01 12:42:00 PM	5	8/27/01 1:17:00 PM	6	8/27/01 1:52:00 PM	8
8/27/01 12:08:00 PM	3	8/27/01 12:43:00 PM	4	8/27/01 1:18:00 PM	7	8/27/01 1:53:00 PM	12
8/27/01 12:09:00 PM	6	8/27/01 12:44:00 PM	6	8/27/01 1:19:00 PM	6	8/27/01 1:54:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
8/27/01 1:55:00 PM	8	8/27/01 2:30:00 PM	6	8/27/01 3:05:00 PM	10	8/27/01 3:40:00 PM	4
8/27/01 1:56:00 PM	8	8/27/01 2:31:00 PM	6	8/27/01 3:06:00 PM	7	8/27/01 3:41:00 PM	8
8/27/01 1:57:00 PM	4	8/27/01 2:32:00 PM	6	8/27/01 3:07:00 PM	7	8/27/01 3:42:00 PM	7
8/27/01 1:58:00 PM	10	8/27/01 2:33:00 PM	5	8/27/01 3:08:00 PM	13	8/27/01 3:43:00 PM	7
8/27/01 1:59:00 PM	12	8/27/01 2:34:00 PM	4	8/27/01 3:09:00 PM	8	8/27/01 3:44:00 PM	11
8/27/01 2:00:00 PM	5	8/27/01 2:35:00 PM	6	8/27/01 3:10:00 PM	9	8/27/01 3:45:00 PM	9
8/27/01 2:01:00 PM	18	8/27/01 2:36:00 PM	19	8/27/01 3:11:00 PM	5	8/27/01 3:46:00 PM	9
8/27/01 2:02:00 PM	32	8/27/01 2:37:00 PM	6	8/27/01 3:12:00 PM	8	8/27/01 3:47:00 PM	14
8/27/01 2:03:00 PM	10	8/27/01 2:38:00 PM	10	8/27/01 3:13:00 PM	8	8/27/01 3:48:00 PM	13
8/27/01 2:04:00 PM	5	8/27/01 2:39:00 PM	10	8/27/01 3:14:00 PM	7	8/27/01 3:49:00 PM	13
8/27/01 2:05:00 PM	6	8/27/01 2:40:00 PM	16	8/27/01 3:15:00 PM	7	8/27/01 3:50:00 PM	16
8/27/01 2:06:00 PM	6	8/27/01 2:41:00 PM	10	8/27/01 3:16:00 PM	8	8/27/01 3:51:00 PM	6
8/27/01 2:07:00 PM	7	8/27/01 2:42:00 PM	8	8/27/01 3:17:00 PM	5	8/27/01 3:52:00 PM	6
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8/27/01 2:09:00 PM	6	8/27/01 2:44:00 PM	13	8/27/01 3:19:00 PM	6	8/27/01 3:54:00 PM	6
8/27/01 2:10:00 PM	6	8/27/01 2:45:00 PM	36	8/27/01 3:20:00 PM	7	8/27/01 3:55:00 PM	23
8/27/01 2:11:00 PM	5	8/27/01 2:46:00 PM	8	8/27/01 3:21:00 PM	5	8/27/01 3:56:00 PM	6
8/27/01 2:12:00 PM	5	8/27/01 2:47:00 PM	9	8/27/01 3:22:00 PM	16	8/27/01 3:57:00 PM	6
8/27/01 2:13:00 PM	5	8/27/01 2:48:00 PM	35	8/27/01 3:23:00 PM	80	8/27/01 3:58:00 PM	6
8/27/01 2:14:00 PM	5	8/27/01 2:49:00 PM	9	8/27/01 3:24:00 PM	52	9/4/01 9:19:00 AM	36
8/27/01 2:15:00 PM	4	8/27/01 2:50:00 PM	5	8/27/01 3:25:00 PM	6	9/4/01 9:20:00 AM	37
8/27/01 2:16:00 PM	7	8/27/01 2:51:00 PM	6	8/27/01 3:26:00 PM	39	9/4/01 9:21:00 AM	43
8/27/01 2:17:00 PM	4	8/27/01 2:52:00 PM	12	8/27/01 3:27:00 PM	11	9/4/01 9:22:00 AM	25
8/27/01 2:18:00 PM	5	8/27/01 2:53:00 PM	6	8/27/01 3:28:00 PM	12	9/4/01 9:23:00 AM	24
8/27/01 2:19:00 PM	5	8/27/01 2:54:00 PM	12	8/27/01 3:29:00 PM	13	9/4/01 9:24:00 AM	24
8/27/01 2:20:00 PM	6	8/27/01 2:55:00 PM	48	8/27/01 3:30:00 PM	6	9/4/01 9:25:00 AM	25
8/27/01 2:21:00 PM	5	8/27/01 2:56:00 PM	8	8/27/01 3:31:00 PM	9	9/4/01 9:26:00 AM	67
8/27/01 2:22:00 PM	5	8/27/01 2:57:00 PM	24	8/27/01 3:32:00 PM	6	9/4/01 9:27:00 AM	51
8/27/01 2:23:00 PM	12	8/27/01 2:58:00 PM	17	8/27/01 3:33:00 PM	6	9/4/01 9:28:00 AM	26
8/27/01 2:24:00 PM	24	8/27/01 2:59:00 PM	20	8/27/01 3:34:00 PM	5	9/4/01 9:29:00 AM	23
8/27/01 2:25:00 PM	5	8/27/01 3:00:00 PM	14	8/27/01 3:35:00 PM	18	9/4/01 9:30:00 AM	24
8/27/01 2:26:00 PM	7	8/27/01 3:01:00 PM	12	8/27/01 3:36:00 PM	8	9/4/01 9:31:00 AM	24
8/27/01 2:27:00 PM	6	8/27/01 3:02:00 PM	12	8/27/01 3:37:00 PM	7	9/4/01 9:32:00 AM	26
8/27/01 2:28:00 PM	7	8/27/01 3:03:00 PM	5	8/27/01 3:38:00 PM	5	9/4/01 9:33:00 AM	26
8/27/01 2:29:00 PM	4	8/27/01 3:04:00 PM	7	8/27/01 3:39:00 PM	6	9/4/01 9:34:00 AM	24

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
9/4/01 9:35:00 AM	26	9/4/01 10:10:00 AM	30	9/4/01 10:45:00 AM	34	9/4/01 11:20:00 AM	21
9/4/01 9:36:00 AM	23	9/4/01 10:11:00 AM	31	9/4/01 10:46:00 AM	37	9/4/01 11:21:00 AM	20
9/4/01 9:37:00 AM	24	9/4/01 10:12:00 AM	28	9/4/01 10:47:00 AM	31	9/4/01 11:22:00 AM	20
9/4/01 9:38:00 AM	27	9/4/01 10:13:00 AM	29	9/4/01 10:48:00 AM	30	9/4/01 11:23:00 AM	20
9/4/01 9:39:00 AM	24	9/4/01 10:14:00 AM	28	9/4/01 10:49:00 AM	30	9/4/01 11:24:00 AM	20
9/4/01 9:40:00 AM	24	9/4/01 10:15:00 AM	28	9/4/01 10:50:00 AM	29	9/4/01 11:25:00 AM	20
9/4/01 9:41:00 AM	24	9/4/01 10:16:00 AM	30	9/4/01 10:51:00 AM	29	9/4/01 11:26:00 AM	20
9/4/01 9:42:00 AM	23	9/4/01 10:17:00 AM	30	9/4/01 10:52:00 AM	29	9/4/01 11:27:00 AM	24
9/4/01 9:43:00 AM	30	9/4/01 10:18:00 AM	29	9/4/01 10:53:00 AM	27	9/4/01 11:28:00 AM	22
9/4/01 9:44:00 AM	26	9/4/01 10:19:00 AM	29	9/4/01 10:54:00 AM	26	9/4/01 11:29:00 AM	23
9/4/01 9:45:00 AM	25	9/4/01 10:20:00 AM	29	9/4/01 10:55:00 AM	27	9/4/01 11:30:00 AM	22
9/4/01 9:46:00 AM	26	9/4/01 10:21:00 AM	30	9/4/01 10:56:00 AM	26	9/4/01 11:31:00 AM	40
9/4/01 9:47:00 AM	25	9/4/01 10:22:00 AM	31	9/4/01 10:57:00 AM	26	9/4/01 11:32:00 AM	37
9/4/01 9:48:00 AM	23	9/4/01 10:23:00 AM	32	9/4/01 10:58:00 AM	25	9/4/01 11:33:00 AM	34
9/4/01 9:49:00 AM	26	9/4/01 10:24:00 AM	34	9/4/01 10:59:00 AM	25	9/4/01 11:34:00 AM	34
9/4/01 9:50:00 AM	24	9/4/01 10:25:00 AM	56	9/4/01 11:00:00 AM	25	9/4/01 11:35:00 AM	32
9/4/01 9:51:00 AM	25	9/4/01 10:26:00 AM	39	9/4/01 11:01:00 AM	25	9/4/01 11:36:00 AM	32
9/4/01 9:52:00 AM	25	9/4/01 10:27:00 AM	30	9/4/01 11:02:00 AM	24	9/4/01 11:37:00 AM	41
9/4/01 9:53:00 AM	28	9/4/01 10:28:00 AM	36	9/4/01 11:03:00 AM	24	9/4/01 11:38:00 AM	60
9/4/01 9:54:00 AM	52	9/4/01 10:29:00 AM	33	9/4/01 11:04:00 AM	23	9/10/01 8:14:00 AM	54
9/4/01 9:55:00 AM	35	9/4/01 10:30:00 AM	29	9/4/01 11:05:00 AM	23	9/10/01 8:15:00 AM	32
9/4/01 9:56:00 AM	27	9/4/01 10:31:00 AM	34	9/4/01 11:06:00 AM	23	9/10/01 8:16:00 AM	31
9/4/01 9:57:00 AM	27	9/4/01 10:32:00 AM	32	9/4/01 11:07:00 AM	23	9/10/01 8:17:00 AM	30
9/4/01 9:58:00 AM	29	9/4/01 10:33:00 AM	33	9/4/01 11:08:00 AM	22	9/10/01 8:18:00 AM	31
9/4/01 9:59:00 AM	27	9/4/01 10:34:00 AM	32	9/4/01 11:09:00 AM	22	9/10/01 8:19:00 AM	32
9/4/01 10:00:00 AM	26	9/4/01 10:35:00 AM	30	9/4/01 11:10:00 AM	22	9/10/01 8:20:00 AM	29
9/4/01 10:01:00 AM	25	9/4/01 10:36:00 AM	30	9/4/01 11:11:00 AM	22	9/10/01 8:21:00 AM	32
9/4/01 10:02:00 AM	26	9/4/01 10:37:00 AM	32	9/4/01 11:12:00 AM	22	9/10/01 8:22:00 AM	33
9/4/01 10:03:00 AM	28	9/4/01 10:38:00 AM	31	9/4/01 11:13:00 AM	22	9/10/01 8:23:00 AM	34
9/4/01 10:04:00 AM	26	9/4/01 10:39:00 AM	83	9/4/01 11:14:00 AM	22	9/10/01 8:24:00 AM	35
9/4/01 10:05:00 AM	27	9/4/01 10:40:00 AM	37	9/4/01 11:15:00 AM	22	9/10/01 8:25:00 AM	36
9/4/01 10:06:00 AM	26	9/4/01 10:41:00 AM	36	9/4/01 11:16:00 AM	21	9/10/01 8:26:00 AM	48
9/4/01 10:07:00 AM	27	9/4/01 10:42:00 AM	33	9/4/01 11:17:00 AM	21	9/10/01 8:27:00 AM	49
9/4/01 10:08:00 AM	28	9/4/01 10:43:00 AM	33	9/4/01 11:18:00 AM	21	9/10/01 8:28:00 AM	47
9/4/01 10:09:00 AM	30	9/4/01 10:44:00 AM	32	9/4/01 11:19:00 AM	21	9/10/01 8:29:00 AM	36

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
9/10/01 8:30:00 AM	38	9/10/01 9:05:00 AM	25	9/10/01 9:40:00 AM	34	9/10/01 10:15:00 AM	23
9/10/01 8:31:00 AM	42	9/10/01 9:06:00 AM	26	9/10/01 9:41:00 AM	28	9/10/01 10:16:00 AM	46
9/10/01 8:32:00 AM	44	9/10/01 9:07:00 AM	26	9/10/01 9:42:00 AM	109	9/10/01 10:17:00 AM	26
9/10/01 8:33:00 AM	45	9/10/01 9:08:00 AM	26	9/10/01 9:43:00 AM	31	9/10/01 10:18:00 AM	26
9/10/01 8:34:00 AM	46	9/10/01 9:09:00 AM	24	9/10/01 9:44:00 AM	27	9/10/01 10:19:00 AM	28
9/10/01 8:35:00 AM	44	9/10/01 9:10:00 AM	26	9/10/01 9:45:00 AM	34	9/10/01 10:20:00 AM	22
9/10/01 8:36:00 AM	48	9/10/01 9:11:00 AM	28	9/10/01 9:46:00 AM	22	9/10/01 10:21:00 AM	49
9/10/01 8:37:00 AM	44	9/10/01 9:12:00 AM	92	9/10/01 9:47:00 AM	24	9/10/01 10:22:00 AM	36
9/10/01 8:38:00 AM	45	9/10/01 9:13:00 AM	32	9/10/01 9:48:00 AM	31	9/10/01 10:23:00 AM	21
9/10/01 8:39:00 AM	43	9/10/01 9:14:00 AM	97	9/10/01 9:49:00 AM	24	9/10/01 10:24:00 AM	20
9/10/01 8:40:00 AM	37	9/10/01 9:15:00 AM	24	9/10/01 9:50:00 AM	24	9/10/01 10:25:00 AM	32
9/10/01 8:41:00 AM	39	9/10/01 9:16:00 AM	25	9/10/01 9:51:00 AM	25	9/10/01 10:26:00 AM	30
9/10/01 8:42:00 AM	41	9/10/01 9:17:00 AM	26	9/10/01 9:52:00 AM	22	9/10/01 10:27:00 AM	21
9/10/01 8:43:00 AM	42	9/10/01 9:18:00 AM	28	9/10/01 9:53:00 AM	23	9/10/01 10:28:00 AM	21
9/10/01 8:44:00 AM	39	9/10/01 9:19:00 AM	25	9/10/01 9:54:00 AM	27	9/10/01 10:29:00 AM	17
9/10/01 8:45:00 AM	45	9/10/01 9:20:00 AM	22	9/10/01 9:55:00 AM	23	9/10/01 10:30:00 AM	20
9/10/01 8:46:00 AM	48	9/10/01 9:21:00 AM	18	9/10/01 9:56:00 AM	25	9/10/01 10:31:00 AM	18
9/10/01 8:47:00 AM	45	9/10/01 9:22:00 AM	20	9/10/01 9:57:00 AM	23	9/10/01 10:32:00 AM	19
9/10/01 8:48:00 AM	44	9/10/01 9:23:00 AM	21	9/10/01 9:58:00 AM	28	9/10/01 10:33:00 AM	23
9/10/01 8:49:00 AM	42	9/10/01 9:24:00 AM	20	9/10/01 9:59:00 AM	24	9/10/01 10:34:00 AM	19
9/10/01 8:50:00 AM	39	9/10/01 9:25:00 AM	20	9/10/01 10:00:00 AM	28	9/10/01 10:35:00 AM	18
9/10/01 8:51:00 AM	44	9/10/01 9:26:00 AM	18	9/10/01 10:01:00 AM	22	9/10/01 10:36:00 AM	19
9/10/01 8:52:00 AM	38	9/10/01 9:27:00 AM	24	9/10/01 10:02:00 AM	19	9/10/01 10:37:00 AM	26
9/10/01 8:53:00 AM	40	9/10/01 9:28:00 AM	18	9/10/01 10:03:00 AM	27	9/10/01 10:38:00 AM	37
9/10/01 8:54:00 AM	41	9/10/01 9:29:00 AM	23	9/10/01 10:04:00 AM	26	9/10/01 10:39:00 AM	20
9/10/01 8:55:00 AM	40	9/10/01 9:30:00 AM	31	9/10/01 10:05:00 AM	20	9/10/01 10:40:00 AM	41
9/10/01 8:56:00 AM	41	9/10/01 9:31:00 AM	18	9/10/01 10:06:00 AM	23	9/10/01 10:41:00 AM	37
9/10/01 8:57:00 AM	40	9/10/01 9:32:00 AM	20	9/10/01 10:07:00 AM	28	9/10/01 10:42:00 AM	21
9/10/01 8:58:00 AM	37	9/10/01 9:33:00 AM	26	9/10/01 10:08:00 AM	22	9/10/01 10:43:00 AM	23
9/10/01 8:59:00 AM	38	9/10/01 9:34:00 AM	24	9/10/01 10:09:00 AM	22	9/10/01 10:44:00 AM	20
9/10/01 9:00:00 AM	34	9/10/01 9:35:00 AM	22	9/10/01 10:10:00 AM	22	9/10/01 10:45:00 AM	23
9/10/01 9:01:00 AM	31	9/10/01 9:36:00 AM	21	9/10/01 10:11:00 AM	22	9/10/01 10:46:00 AM	23
9/10/01 9:02:00 AM	28	9/10/01 9:37:00 AM	18	9/10/01 10:12:00 AM	23	9/10/01 10:47:00 AM	23
9/10/01 9:03:00 AM	27	9/10/01 9:38:00 AM	21	9/10/01 10:13:00 AM	22	9/10/01 10:48:00 AM	20
9/10/01 9:04:00 AM	24	9/10/01 9:39:00 AM	158	9/10/01 10:14:00 AM	46	9/10/01 10:49:00 AM	22

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
9/10/01 10:50:00 AM	26	9/10/01 11:25:00 AM	25	9/10/01 12:00:00 PM	50	9/10/01 12:35:00 PM	30
9/10/01 10:51:00 AM	20	9/10/01 11:26:00 AM	23	9/10/01 12:01:00 PM	30	9/10/01 12:36:00 PM	57
9/10/01 10:52:00 AM	19	9/10/01 11:27:00 AM	24	9/10/01 12:02:00 PM	31	9/10/01 12:37:00 PM	36
9/10/01 10:53:00 AM	24	9/10/01 11:28:00 AM	26	9/10/01 12:03:00 PM	37	9/10/01 12:38:00 PM	31
9/10/01 10:54:00 AM	33	9/10/01 11:29:00 AM	26	9/10/01 12:04:00 PM	28	9/10/01 12:39:00 PM	33
9/10/01 10:55:00 AM	24	9/10/01 11:30:00 AM	30	9/10/01 12:05:00 PM	35	9/10/01 12:40:00 PM	34
9/10/01 10:56:00 AM	23	9/10/01 11:31:00 AM	103	9/10/01 12:06:00 PM	60	9/10/01 12:41:00 PM	86
9/10/01 10:57:00 AM	24	9/10/01 11:32:00 AM	23	9/10/01 12:07:00 PM	43	9/10/01 12:42:00 PM	35
9/10/01 10:58:00 AM	24	9/10/01 11:33:00 AM	24	9/10/01 12:08:00 PM	65	9/10/01 12:43:00 PM	31
9/10/01 10:59:00 AM	40	9/10/01 11:34:00 AM	32	9/10/01 12:09:00 PM	28	9/10/01 12:44:00 PM	44
9/10/01 11:00:00 AM	30	9/10/01 11:35:00 AM	28	9/10/01 12:10:00 PM	29	9/10/01 12:45:00 PM	39
9/10/01 11:01:00 AM	33	9/10/01 11:36:00 AM	31	9/10/01 12:11:00 PM	32	9/10/01 12:46:00 PM	32
9/10/01 11:02:00 AM	55	9/10/01 11:37:00 AM	27	9/10/01 12:12:00 PM	29	9/10/01 12:47:00 PM	33
9/10/01 11:03:00 AM	25	9/10/01 11:38:00 AM	28	9/10/01 12:13:00 PM	31	9/10/01 12:48:00 PM	31
9/10/01 11:04:00 AM	27	9/10/01 11:39:00 AM	28	9/10/01 12:14:00 PM	46	9/10/01 12:49:00 PM	39
9/10/01 11:05:00 AM	50	9/10/01 11:40:00 AM	26	9/10/01 12:15:00 PM	52	9/10/01 12:50:00 PM	31
9/10/01 11:06:00 AM	41	9/10/01 11:41:00 AM	34	9/10/01 12:16:00 PM	30	9/10/01 12:51:00 PM	33
9/10/01 11:07:00 AM	23	9/10/01 11:42:00 AM	35	9/10/01 12:17:00 PM	30	9/10/01 12:52:00 PM	31
9/10/01 11:08:00 AM	25	9/10/01 11:43:00 AM	33	9/10/01 12:18:00 PM	47	9/10/01 12:53:00 PM	43
9/10/01 11:09:00 AM	26	9/10/01 11:44:00 AM	41	9/10/01 12:19:00 PM	58	9/10/01 12:54:00 PM	30
9/10/01 11:10:00 AM	27	9/10/01 11:45:00 AM	43	9/10/01 12:20:00 PM	34	9/10/01 12:55:00 PM	32
9/10/01 11:11:00 AM	24	9/10/01 11:46:00 AM	29	9/10/01 12:21:00 PM	45	9/10/01 12:56:00 PM	38
9/10/01 11:12:00 AM	33	9/10/01 11:47:00 AM	37	9/10/01 12:22:00 PM	36	9/10/01 12:57:00 PM	36
9/10/01 11:13:00 AM	71	9/10/01 11:48:00 AM	26	9/10/01 12:23:00 PM	45	9/10/01 12:58:00 PM	33
9/10/01 11:14:00 AM	27	9/10/01 11:49:00 AM	44	9/10/01 12:24:00 PM	32	9/10/01 12:59:00 PM	32
9/10/01 11:15:00 AM	36	9/10/01 11:50:00 AM	37	9/10/01 12:25:00 PM	52	9/10/01 1:00:00 PM	33
9/10/01 11:16:00 AM	26	9/10/01 11:51:00 AM	27	9/10/01 12:26:00 PM	43	9/10/01 1:01:00 PM	37
9/10/01 11:17:00 AM	24	9/10/01 11:52:00 AM	26	9/10/01 12:27:00 PM	28	9/10/01 1:02:00 PM	30
9/10/01 11:18:00 AM	29	9/10/01 11:53:00 AM	27	9/10/01 12:28:00 PM	36	9/10/01 1:03:00 PM	32
9/10/01 11:19:00 AM	27	9/10/01 11:54:00 AM	29	9/10/01 12:29:00 PM	32	9/10/01 1:04:00 PM	30
9/10/01 11:20:00 AM	25	9/10/01 11:55:00 AM	30	9/10/01 12:30:00 PM	36	9/10/01 1:05:00 PM	31
9/10/01 11:21:00 AM	28	9/10/01 11:56:00 AM	46	9/10/01 12:31:00 PM	45	9/10/01 1:06:00 PM	45
9/10/01 11:22:00 AM	25	9/10/01 11:57:00 AM	63	9/10/01 12:32:00 PM	215	9/10/01 1:07:00 PM	32
9/10/01 11:23:00 AM	25	9/10/01 11:58:00 AM	37	9/10/01 12:33:00 PM	34	9/10/01 1:08:00 PM	30
9/10/01 11:24:00 AM	36	9/10/01 11:59:00 AM	40	9/10/01 12:34:00 PM	34	9/10/01 1:09:00 PM	30

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
9/10/01 1:10:00 PM	50	9/10/01 1:45:00 PM	34	10/8/01 11:50:00 AM	15	10/8/01 12:25:00 PM	0
9/10/01 1:11:00 PM	31	9/10/01 1:46:00 PM	30	10/8/01 11:51:00 AM	9	10/8/01 12:26:00 PM	0
9/10/01 1:12:00 PM	33	9/10/01 1:47:00 PM	33	10/8/01 11:52:00 AM	16	10/8/01 12:27:00 PM	2
9/10/01 1:13:00 PM	34	9/10/01 1:48:00 PM	37	10/8/01 11:53:00 AM	14	10/8/01 12:28:00 PM	8
9/10/01 1:14:00 PM	34	9/10/01 1:49:00 PM	33	10/8/01 11:54:00 AM	6	10/8/01 12:29:00 PM	4
9/10/01 1:15:00 PM	32	9/10/01 1:50:00 PM	157	10/8/01 11:55:00 AM	12	10/8/01 12:30:00 PM	4
9/10/01 1:16:00 PM	31	10/8/01 11:21:00 AM	15	10/8/01 11:56:00 AM	10	10/8/01 12:31:00 PM	4
9/10/01 1:17:00 PM	33	10/8/01 11:22:00 AM	9	10/8/01 11:57:00 AM	3	10/8/01 12:32:00 PM	2
9/10/01 1:18:00 PM	34	10/8/01 11:23:00 AM	13	10/8/01 11:58:00 AM	6	10/8/01 12:33:00 PM	1
9/10/01 1:19:00 PM	30	10/8/01 11:24:00 AM	10	10/8/01 11:59:00 AM	3	10/8/01 12:34:00 PM	5
9/10/01 1:20:00 PM	30	10/8/01 11:25:00 AM	14	10/8/01 12:00:00 PM	5	10/8/01 12:35:00 PM	0
9/10/01 1:21:00 PM	32	10/8/01 11:26:00 AM	11	10/8/01 12:01:00 PM	1	10/8/01 12:36:00 PM	167
9/10/01 1:22:00 PM	29	10/8/01 11:27:00 AM	4	10/8/01 12:02:00 PM	0	10/8/01 12:37:00 PM	32
9/10/01 1:23:00 PM	31	10/8/01 11:28:00 AM	5	10/8/01 12:03:00 PM	5	10/8/01 12:38:00 PM	44
9/10/01 1:24:00 PM	48	10/8/01 11:29:00 AM	8	10/8/01 12:04:00 PM	2	10/8/01 12:39:00 PM	78
9/10/01 1:25:00 PM	36	10/8/01 11:30:00 AM	9	10/8/01 12:05:00 PM	4	10/8/01 12:40:00 PM	142
9/10/01 1:26:00 PM	34	10/8/01 11:31:00 AM	8	10/8/01 12:06:00 PM	1	10/8/01 12:41:00 PM	165
9/10/01 1:27:00 PM	38	10/8/01 11:32:00 AM	14	10/8/01 12:07:00 PM	0	10/8/01 12:42:00 PM	263
9/10/01 1:28:00 PM	31	10/8/01 11:33:00 AM	31	10/8/01 12:08:00 PM	0	10/8/01 12:43:00 PM	158
9/10/01 1:29:00 PM	32	10/8/01 11:34:00 AM	23	10/8/01 12:09:00 PM	0	10/8/01 12:44:00 PM	15
9/10/01 1:30:00 PM	35	10/8/01 11:35:00 AM	12	10/8/01 12:10:00 PM	0	10/8/01 12:45:00 PM	168
9/10/01 1:31:00 PM	45	10/8/01 11:36:00 AM	10	10/8/01 12:11:00 PM	0	10/8/01 12:46:00 PM	5299
9/10/01 1:32:00 PM	30	10/8/01 11:37:00 AM	10	10/8/01 12:12:00 PM	0	10/8/01 12:47:00 PM	3311
9/10/01 1:33:00 PM	34	10/8/01 11:38:00 AM	16	10/8/01 12:13:00 PM	0	10/8/01 12:48:00 PM	2570
9/10/01 1:34:00 PM	32	10/8/01 11:39:00 AM	10	10/8/01 12:14:00 PM	0	10/8/01 12:49:00 PM	501
9/10/01 1:35:00 PM	30	10/8/01 11:40:00 AM	4	10/8/01 12:15:00 PM	0	10/8/01 12:50:00 PM	20214
9/10/01 1:36:00 PM	31	10/8/01 11:41:00 AM	5	10/8/01 12:16:00 PM	0	10/8/01 12:51:00 PM	15910
9/10/01 1:37:00 PM	36	10/8/01 11:42:00 AM	0	10/8/01 12:17:00 PM	0	10/8/01 12:52:00 PM	3522
9/10/01 1:38:00 PM	29	10/8/01 11:43:00 AM	2	10/8/01 12:18:00 PM	0	10/8/01 12:53:00 PM	440
9/10/01 1:39:00 PM	29	10/8/01 11:44:00 AM	1	10/8/01 12:19:00 PM	0	10/8/01 12:54:00 PM	260
9/10/01 1:40:00 PM	30	10/8/01 11:45:00 AM	2	10/8/01 12:20:00 PM	0	10/8/01 12:55:00 PM	170
9/10/01 1:41:00 PM	30	10/8/01 11:46:00 AM	76	10/8/01 12:21:00 PM	0	10/8/01 12:56:00 PM	744
9/10/01 1:42:00 PM	32	10/8/01 11:47:00 AM	16	10/8/01 12:22:00 PM	0	10/8/01 12:57:00 PM	271
9/10/01 1:43:00 PM	31	10/8/01 11:48:00 AM	10	10/8/01 12:23:00 PM	0	10/8/01 12:58:00 PM	47
9/10/01 1:44:00 PM	33	10/8/01 11:49:00 AM	8	10/8/01 12:24:00 PM	0	10/8/01 12:59:00 PM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
10/8/01 1:00:00 PM	0	10/8/01 1:37:00 PM	140	10/8/01 2:12:00 PM	35	10/11/01 8:10:00 AM	66
10/8/01 1:01:00 PM	0	10/8/01 1:38:00 PM	371	10/8/01 2:13:00 PM	0	10/11/01 8:11:00 AM	63
10/8/01 1:02:00 PM	0	10/8/01 1:39:00 PM	273	10/8/01 2:14:00 PM	11	10/11/01 8:12:00 AM	62
10/8/01 1:03:00 PM	5	10/8/01 1:40:00 PM	136	10/8/01 2:15:00 PM	1	10/11/01 8:13:00 AM	57
10/8/01 1:04:00 PM	2	10/8/01 1:41:00 PM	131	10/8/01 2:16:00 PM	3	10/11/01 8:14:00 AM	27
10/8/01 1:05:00 PM	2	10/8/01 1:42:00 PM	34	10/8/01 2:17:00 PM	23	10/11/01 8:15:00 AM	16
10/8/01 1:06:00 PM	8	10/8/01 1:43:00 PM	0	10/8/01 2:18:00 PM	3	10/11/01 8:16:00 AM	16
10/8/01 1:07:00 PM	0	10/8/01 1:44:00 PM	0	10/8/01 2:19:00 PM	6	10/11/01 8:17:00 AM	15
10/8/01 1:08:00 PM	1	10/8/01 1:45:00 PM	50	10/8/01 2:20:00 PM	9	10/11/01 8:18:00 AM	14
10/8/01 1:09:00 PM	1	10/8/01 1:46:00 PM	22	10/8/01 2:21:00 PM	11	10/11/01 8:19:00 AM	16
10/8/01 1:10:00 PM	0	10/8/01 1:47:00 PM	12	10/8/01 2:22:00 PM	7	10/11/01 8:20:00 AM	15
10/8/01 1:11:00 PM	1	10/8/01 1:48:00 PM	9	10/8/01 2:23:00 PM	6	10/11/01 8:21:00 AM	16
10/8/01 1:12:00 PM	2	10/8/01 1:49:00 PM	19	10/11/01 7:47:00 AM	90	10/11/01 8:22:00 AM	20
10/8/01 1:13:00 PM	0	10/8/01 1:50:00 PM	12	10/11/01 7:48:00 AM	90	10/11/01 8:23:00 AM	16
10/8/01 1:14:00 PM	0	10/8/01 1:51:00 PM	36	10/11/01 7:49:00 AM	88	10/11/01 8:24:00 AM	16
10/8/01 1:15:00 PM	0	10/8/01 1:52:00 PM	23	10/11/01 7:50:00 AM	89	10/11/01 8:25:00 AM	23
10/8/01 1:16:00 PM	2	10/8/01 1:53:00 PM	18	10/11/01 7:51:00 AM	86	10/11/01 8:26:00 AM	26
10/8/01 1:17:00 PM	0	10/8/01 1:54:00 PM	3	10/11/01 7:52:00 AM	86	10/11/01 8:27:00 AM	29
10/8/01 1:18:00 PM	0	10/8/01 1:55:00 PM	3	10/11/01 7:53:00 AM	89	10/11/01 8:28:00 AM	29
10/8/01 1:19:00 PM	1	10/8/01 1:56:00 PM	3	10/11/01 7:54:00 AM	82	10/11/01 8:29:00 AM	32
10/8/01 1:20:00 PM	141	10/8/01 1:57:00 PM	4	10/11/01 7:55:00 AM	82	10/11/01 8:30:00 AM	35
10/8/01 1:23:00 PM	0	10/8/01 1:58:00 PM	9	10/11/01 7:56:00 AM	77	10/11/01 8:31:00 AM	24
10/8/01 1:24:00 PM	1	10/8/01 1:59:00 PM	10	10/11/01 7:57:00 AM	77	10/11/01 8:32:00 AM	22
10/8/01 1:25:00 PM	29	10/8/01 2:00:00 PM	0	10/11/01 7:58:00 AM	73	10/11/01 8:33:00 AM	48
10/8/01 1:26:00 PM	2	10/8/01 2:01:00 PM	6	10/11/01 7:59:00 AM	75	10/11/01 8:34:00 AM	45
10/8/01 1:27:00 PM	1	10/8/01 2:02:00 PM	1	10/11/01 8:00:00 AM	71	10/11/01 8:35:00 AM	31
10/8/01 1:28:00 PM	1	10/8/01 2:03:00 PM	3	10/11/01 8:01:00 AM	69	10/11/01 8:36:00 AM	26
10/8/01 1:29:00 PM	0	10/8/01 2:04:00 PM	92	10/11/01 8:02:00 AM	71	10/11/01 8:37:00 AM	45
10/8/01 1:30:00 PM	4	10/8/01 2:05:00 PM	8	10/11/01 8:03:00 AM	73	10/11/01 8:38:00 AM	44
10/8/01 1:31:00 PM	5	10/8/01 2:06:00 PM	11	10/11/01 8:04:00 AM	72	10/11/01 8:39:00 AM	21
10/8/01 1:32:00 PM	9	10/8/01 2:07:00 PM	1	10/11/01 8:05:00 AM	70	10/11/01 8:40:00 AM	16
10/8/01 1:33:00 PM	8	10/8/01 2:08:00 PM	7	10/11/01 8:06:00 AM	72	10/11/01 8:41:00 AM	15
10/8/01 1:34:00 PM	10	10/8/01 2:09:00 PM	4	10/11/01 8:07:00 AM	71	10/11/01 8:42:00 AM	16
10/8/01 1:35:00 PM	4	10/8/01 2:10:00 PM	7	10/11/01 8:08:00 AM	66	10/11/01 8:43:00 AM	25
10/8/01 1:36:00 PM	1	10/8/01 2:11:00 PM	11	10/11/01 8:09:00 AM	67	10/11/01 8:44:00 AM	32

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
10/11/01 8:45:00 AM	30	10/11/01 9:20:00 AM	27	10/11/01 9:55:00 AM	24	10/11/01 10:30:00 AM	18
10/11/01 8:46:00 AM	37	10/11/01 9:21:00 AM	23	10/11/01 9:56:00 AM	46	10/11/01 10:31:00 AM	18
10/11/01 8:47:00 AM	54	10/11/01 9:22:00 AM	24	10/11/01 9:57:00 AM	36	10/11/01 10:32:00 AM	18
10/11/01 8:48:00 AM	41	10/11/01 9:23:00 AM	26	10/11/01 9:58:00 AM	26	10/11/01 10:33:00 AM	18
10/11/01 8:49:00 AM	44	10/11/01 9:24:00 AM	32	10/11/01 9:59:00 AM	26	10/11/01 10:34:00 AM	19
10/11/01 8:50:00 AM	32	10/11/01 9:25:00 AM	26	10/11/01 10:00:00 AM	24	10/11/01 10:35:00 AM	18
10/11/01 8:51:00 AM	26	10/11/01 9:26:00 AM	24	10/11/01 10:01:00 AM	25	10/11/01 10:36:00 AM	17
10/11/01 8:52:00 AM	39	10/11/01 9:27:00 AM	27	10/11/01 10:02:00 AM	25	10/11/01 10:37:00 AM	18
10/11/01 8:53:00 AM	48	10/11/01 9:28:00 AM	41	10/11/01 10:03:00 AM	24	10/11/01 10:38:00 AM	19
10/11/01 8:54:00 AM	36	10/11/01 9:29:00 AM	32	10/11/01 10:04:00 AM	22	10/11/01 10:39:00 AM	20
10/11/01 8:55:00 AM	30	10/11/01 9:30:00 AM	24	10/11/01 10:05:00 AM	22	10/11/01 10:40:00 AM	20
10/11/01 8:56:00 AM	27	10/11/01 9:31:00 AM	27	10/11/01 10:06:00 AM	23	10/11/01 10:41:00 AM	18
10/11/01 8:57:00 AM	25	10/11/01 9:32:00 AM	26	10/11/01 10:07:00 AM	23	10/11/01 10:42:00 AM	20
10/11/01 8:58:00 AM	23	10/11/01 9:33:00 AM	24	10/11/01 10:08:00 AM	23	10/11/01 10:43:00 AM	19
10/11/01 8:59:00 AM	20	10/11/01 9:34:00 AM	24	10/11/01 10:09:00 AM	22	10/11/01 10:44:00 AM	18
10/11/01 9:00:00 AM	18	10/11/01 9:35:00 AM	26	10/11/01 10:10:00 AM	23	10/11/01 10:45:00 AM	18
10/11/01 9:01:00 AM	18	10/11/01 9:36:00 AM	31	10/11/01 10:11:00 AM	22	10/11/01 10:46:00 AM	17
10/11/01 9:02:00 AM	16	10/11/01 9:37:00 AM	26	10/11/01 10:12:00 AM	22	10/11/01 10:47:00 AM	18
10/11/01 9:03:00 AM	15	10/11/01 9:38:00 AM	25	10/11/01 10:13:00 AM	22	10/11/01 10:48:00 AM	19
10/11/01 9:04:00 AM	15	10/11/01 9:39:00 AM	25	10/11/01 10:14:00 AM	22	10/11/01 10:49:00 AM	17
10/11/01 9:05:00 AM	14	10/11/01 9:40:00 AM	25	10/11/01 10:15:00 AM	23	10/11/01 10:50:00 AM	19
10/11/01 9:06:00 AM	13	10/11/01 9:41:00 AM	26	10/11/01 10:16:00 AM	22	10/11/01 10:51:00 AM	19
10/11/01 9:07:00 AM	12	10/11/01 9:42:00 AM	26	10/11/01 10:17:00 AM	24	10/11/01 10:52:00 AM	18
10/11/01 9:08:00 AM	12	10/11/01 9:43:00 AM	25	10/11/01 10:18:00 AM	24	10/11/01 10:53:00 AM	18
10/11/01 9:09:00 AM	12	10/11/01 9:44:00 AM	24	10/11/01 10:19:00 AM	22	10/11/01 10:54:00 AM	17
10/11/01 9:10:00 AM	11	10/11/01 9:45:00 AM	23	10/11/01 10:20:00 AM	22	10/11/01 10:55:00 AM	17
10/11/01 9:11:00 AM	11	10/11/01 9:46:00 AM	25	10/11/01 10:21:00 AM	20	10/11/01 10:56:00 AM	19
10/11/01 9:12:00 AM	10	10/11/01 9:47:00 AM	24	10/11/01 10:22:00 AM	18	10/11/01 10:57:00 AM	16
10/11/01 9:13:00 AM	16	10/11/01 9:48:00 AM	24	10/11/01 10:23:00 AM	20	10/11/01 10:58:00 AM	16
10/11/01 9:14:00 AM	22	10/11/01 9:49:00 AM	24	10/11/01 10:24:00 AM	20	10/11/01 10:59:00 AM	18
10/11/01 9:15:00 AM	27	10/11/01 9:50:00 AM	55	10/11/01 10:25:00 AM	20	10/11/01 11:00:00 AM	16
10/11/01 9:16:00 AM	47	10/11/01 9:51:00 AM	25	10/11/01 10:26:00 AM	22	10/11/01 11:01:00 AM	16
10/11/01 9:17:00 AM	39	10/11/01 9:52:00 AM	25	10/11/01 10:27:00 AM	22	10/11/01 11:02:00 AM	18
10/11/01 9:18:00 AM	33	10/11/01 9:53:00 AM	25	10/11/01 10:28:00 AM	20	10/11/01 11:03:00 AM	16
10/11/01 9:19:00 AM	29	10/11/01 9:54:00 AM	24	10/11/01 10:29:00 AM	21	10/11/01 11:04:00 AM	17

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
10/11/01 11:05:00 AM	17	10/11/01 11:40:00 AM	16	10/11/01 12:15:00 PM	15	10/11/01 12:50:00 PM	13
10/11/01 11:06:00 AM	16	10/11/01 11:41:00 AM	18	10/11/01 12:16:00 PM	15	10/11/01 12:51:00 PM	13
10/11/01 11:07:00 AM	17	10/11/01 11:42:00 AM	17	10/11/01 12:17:00 PM	16	10/11/01 12:52:00 PM	12
10/11/01 11:08:00 AM	17	10/11/01 11:43:00 AM	15	10/11/01 12:18:00 PM	16	10/11/01 12:53:00 PM	13
10/11/01 11:09:00 AM	16	10/11/01 11:44:00 AM	16	10/11/01 12:19:00 PM	16	10/11/01 12:54:00 PM	13
10/11/01 11:10:00 AM	16	10/11/01 11:45:00 AM	15	10/11/01 12:20:00 PM	16	10/11/01 12:55:00 PM	13
10/11/01 11:11:00 AM	16	10/11/01 11:46:00 AM	17	10/11/01 12:21:00 PM	22	10/11/01 12:56:00 PM	12
10/11/01 11:12:00 AM	16	10/11/01 11:47:00 AM	16	10/11/01 12:22:00 PM	16	10/11/01 12:57:00 PM	13
10/11/01 11:13:00 AM	16	10/11/01 11:48:00 AM	15	10/11/01 12:23:00 PM	14	10/11/01 12:58:00 PM	14
10/11/01 11:14:00 AM	16	10/11/01 11:49:00 AM	15	10/11/01 12:24:00 PM	13	10/11/01 12:59:00 PM	14
10/11/01 11:15:00 AM	17	10/11/01 11:50:00 AM	15	10/11/01 12:25:00 PM	14	10/11/01 1:00:00 PM	13
10/11/01 11:16:00 AM	16	10/11/01 11:51:00 AM	15	10/11/01 12:26:00 PM	20	10/11/01 1:01:00 PM	14
10/11/01 11:17:00 AM	16	10/11/01 11:52:00 AM	18	10/11/01 12:27:00 PM	16	10/11/01 1:02:00 PM	13
10/11/01 11:18:00 AM	16	10/11/01 11:53:00 AM	18	10/11/01 12:28:00 PM	22	10/11/01 1:03:00 PM	17
10/11/01 11:19:00 AM	17	10/11/01 11:54:00 AM	19	10/11/01 12:29:00 PM	24	10/11/01 1:04:00 PM	24
10/11/01 11:20:00 AM	16	10/11/01 11:55:00 AM	16	10/11/01 12:30:00 PM	16	10/11/01 1:05:00 PM	48
10/11/01 11:21:00 AM	16	10/11/01 11:56:00 AM	15	10/11/01 12:31:00 PM	23	10/11/01 1:06:00 PM	14
10/11/01 11:22:00 AM	18	10/11/01 11:57:00 AM	15	10/11/01 12:32:00 PM	16	10/11/01 1:07:00 PM	14
10/11/01 11:23:00 AM	16	10/11/01 11:58:00 AM	15	10/11/01 12:33:00 PM	44	10/11/01 1:08:00 PM	12
10/11/01 11:24:00 AM	17	10/11/01 11:59:00 AM	16	10/11/01 12:34:00 PM	16	10/11/01 1:09:00 PM	13
10/11/01 11:25:00 AM	17	10/11/01 12:00:00 PM	17	10/11/01 12:35:00 PM	14	10/11/01 1:10:00 PM	13
10/11/01 11:26:00 AM	16	10/11/01 12:01:00 PM	16	10/11/01 12:36:00 PM	14	10/11/01 1:11:00 PM	13
10/11/01 11:27:00 AM	16	10/11/01 12:02:00 PM	15	10/11/01 12:37:00 PM	14	10/11/01 1:12:00 PM	13
10/11/01 11:28:00 AM	17	10/11/01 12:03:00 PM	15	10/11/01 12:38:00 PM	14	10/11/01 1:13:00 PM	13
10/11/01 11:29:00 AM	17	10/11/01 12:04:00 PM	15	10/11/01 12:39:00 PM	15	10/11/01 1:14:00 PM	14
10/11/01 11:30:00 AM	17	10/11/01 12:05:00 PM	15	10/11/01 12:40:00 PM	17	10/11/01 1:15:00 PM	13
10/11/01 11:31:00 AM	16	10/11/01 12:06:00 PM	14	10/11/01 12:41:00 PM	13	10/11/01 1:16:00 PM	14
10/11/01 11:32:00 AM	19	10/11/01 12:07:00 PM	15	10/11/01 12:42:00 PM	13	10/11/01 1:17:00 PM	13
10/11/01 11:33:00 AM	25	10/11/01 12:08:00 PM	14	10/11/01 12:43:00 PM	13	10/11/01 1:18:00 PM	12
10/11/01 11:34:00 AM	17	10/11/01 12:09:00 PM	14	10/11/01 12:44:00 PM	14	10/11/01 1:19:00 PM	12
10/11/01 11:35:00 AM	16	10/11/01 12:10:00 PM	16	10/11/01 12:45:00 PM	39	10/11/01 1:20:00 PM	14
10/11/01 11:36:00 AM	17	10/11/01 12:11:00 PM	16	10/11/01 12:46:00 PM	28	10/11/01 1:21:00 PM	13
10/11/01 11:37:00 AM	15	10/11/01 12:12:00 PM	16	10/11/01 12:47:00 PM	16	10/11/01 1:22:00 PM	13
10/11/01 11:38:00 AM	15	10/11/01 12:13:00 PM	15	10/11/01 12:48:00 PM	14	10/11/01 1:23:00 PM	14
10/11/01 11:39:00 AM	15	10/11/01 12:14:00 PM	16	10/11/01 12:49:00 PM	14	10/11/01 1:24:00 PM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
10/11/01 1:25:00 PM	14	10/11/01 2:00:00 PM	12	10/11/01 2:35:00 PM	13	10/11/01 3:10:00 PM	14
10/11/01 1:26:00 PM	13	10/11/01 2:01:00 PM	11	10/11/01 2:36:00 PM	13	10/11/01 3:11:00 PM	13
10/11/01 1:27:00 PM	13	10/11/01 2:02:00 PM	12	10/11/01 2:37:00 PM	13	10/11/01 3:12:00 PM	14
10/11/01 1:28:00 PM	12	10/11/01 2:03:00 PM	13	10/11/01 2:38:00 PM	12	10/11/01 3:13:00 PM	14
10/11/01 1:29:00 PM	12	10/11/01 2:04:00 PM	12	10/11/01 2:39:00 PM	13	10/11/01 3:14:00 PM	15
10/11/01 1:30:00 PM	13	10/11/01 2:05:00 PM	12	10/11/01 2:40:00 PM	12	10/11/01 3:15:00 PM	14
10/11/01 1:31:00 PM	13	10/11/01 2:06:00 PM	14	10/11/01 2:41:00 PM	14	10/11/01 3:16:00 PM	15
10/11/01 1:32:00 PM	14	10/11/01 2:07:00 PM	12	10/11/01 2:42:00 PM	14	10/11/01 3:17:00 PM	14
10/11/01 1:33:00 PM	16	10/11/01 2:08:00 PM	13	10/11/01 2:43:00 PM	15	10/11/01 3:18:00 PM	13
10/11/01 1:34:00 PM	15	10/11/01 2:09:00 PM	14	10/11/01 2:44:00 PM	15	10/11/01 3:19:00 PM	14
10/11/01 1:35:00 PM	13	10/11/01 2:10:00 PM	14	10/11/01 2:45:00 PM	15	10/11/01 3:20:00 PM	15
10/11/01 1:36:00 PM	13	10/11/01 2:11:00 PM	12	10/11/01 2:46:00 PM	14	10/11/01 3:21:00 PM	15
10/11/01 1:37:00 PM	13	10/11/01 2:12:00 PM	12	10/11/01 2:47:00 PM	16	10/11/01 3:22:00 PM	14
10/11/01 1:38:00 PM	14	10/11/01 2:13:00 PM	12	10/11/01 2:48:00 PM	14	10/11/01 3:23:00 PM	14
10/11/01 1:39:00 PM	12	10/11/01 2:14:00 PM	12	10/11/01 2:49:00 PM	15	10/11/01 3:24:00 PM	17
10/11/01 1:40:00 PM	13	10/11/01 2:15:00 PM	12	10/11/01 2:50:00 PM	13	10/11/01 3:25:00 PM	14
10/11/01 1:41:00 PM	14	10/11/01 2:16:00 PM	12	10/11/01 2:51:00 PM	15	10/11/01 3:26:00 PM	13
10/11/01 1:42:00 PM	12	10/11/01 2:17:00 PM	12	10/11/01 2:52:00 PM	14	10/11/01 3:27:00 PM	13
10/11/01 1:43:00 PM	17	10/11/01 2:18:00 PM	12	10/11/01 2:53:00 PM	14	10/11/01 3:28:00 PM	16
10/11/01 1:44:00 PM	13	10/11/01 2:19:00 PM	12	10/11/01 2:54:00 PM	14	10/11/01 3:29:00 PM	13
10/11/01 1:45:00 PM	13	10/11/01 2:20:00 PM	12	10/11/01 2:55:00 PM	14	10/11/01 3:30:00 PM	13
10/11/01 1:46:00 PM	13	10/11/01 2:21:00 PM	14	10/11/01 2:56:00 PM	13	10/11/01 3:31:00 PM	13
10/11/01 1:47:00 PM	14	10/11/01 2:22:00 PM	13	10/11/01 2:57:00 PM	13	10/11/01 3:32:00 PM	13
10/11/01 1:48:00 PM	12	10/11/01 2:23:00 PM	13	10/11/01 2:58:00 PM	13	10/11/01 3:33:00 PM	12
10/11/01 1:49:00 PM	14	10/11/01 2:24:00 PM	12	10/11/01 2:59:00 PM	12	10/11/01 3:34:00 PM	12
10/11/01 1:50:00 PM	13	10/11/01 2:25:00 PM	12	10/11/01 3:00:00 PM	12	10/11/01 3:35:00 PM	12
10/11/01 1:51:00 PM	13	10/11/01 2:26:00 PM	13	10/11/01 3:01:00 PM	14	10/11/01 3:36:00 PM	12
10/11/01 1:52:00 PM	13	10/11/01 2:27:00 PM	14	10/11/01 3:02:00 PM	14	10/11/01 3:37:00 PM	16
10/11/01 1:53:00 PM	12	10/11/01 2:28:00 PM	14	10/11/01 3:03:00 PM	13	10/11/01 3:38:00 PM	14
10/11/01 1:54:00 PM	13	10/11/01 2:29:00 PM	13	10/11/01 3:04:00 PM	14	10/11/01 3:39:00 PM	14
10/11/01 1:55:00 PM	14	10/11/01 2:30:00 PM	13	10/11/01 3:05:00 PM	13	10/11/01 3:40:00 PM	13
10/11/01 1:56:00 PM	14	10/11/01 2:31:00 PM	13	10/11/01 3:06:00 PM	12	10/11/01 3:41:00 PM	15
10/11/01 1:57:00 PM	13	10/11/01 2:32:00 PM	13	10/11/01 3:07:00 PM	13	10/11/01 3:42:00 PM	18
10/11/01 1:58:00 PM	13	10/11/01 2:33:00 PM	13	10/11/01 3:08:00 PM	14	10/11/01 3:43:00 PM	14
10/11/01 1:59:00 PM	12	10/11/01 2:34:00 PM	13	10/11/01 3:09:00 PM	14	10/11/01 3:44:00 PM	14

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
10/11/01 3:45:00 PM	14	4/10/02 10:22:00 AM	4	4/10/02 11:03:00 AM	3	4/10/02 11:44:00 AM	3
10/11/01 3:46:00 PM	13	4/10/02 10:23:00 AM	4	4/10/02 11:04:00 AM	3	4/10/02 11:45:00 AM	3
10/11/01 3:47:00 PM	14	4/10/02 10:25:00 AM	3	4/10/02 11:05:00 AM	3	4/10/02 11:46:00 AM	2
10/11/01 3:48:00 PM	15	4/10/02 10:26:00 AM	14	4/10/02 11:07:00 AM	2	4/10/02 11:47:00 AM	2
10/11/01 3:49:00 PM	18	4/10/02 10:27:00 AM	123	4/10/02 11:08:00 AM	2	4/10/02 11:49:00 AM	2
10/11/01 3:50:00 PM	15	4/10/02 10:28:00 AM	3	4/10/02 11:09:00 AM	2	4/10/02 11:50:00 AM	3
10/11/01 3:51:00 PM	13	4/10/02 10:29:00 AM	3	4/10/02 11:10:00 AM	2	4/10/02 11:51:00 AM	3
10/11/01 3:52:00 PM	14	4/10/02 10:30:00 AM	2	4/10/02 11:11:00 AM	3	4/10/02 11:52:00 AM	2
10/11/01 3:53:00 PM	14	4/10/02 10:32:00 AM	2	4/10/02 11:12:00 AM	2	4/10/02 11:53:00 AM	3
10/11/01 3:54:00 PM	13	4/10/02 10:33:00 AM	3	4/10/02 11:14:00 AM	2	4/10/02 11:54:00 AM	2
10/11/01 3:55:00 PM	13	4/10/02 10:34:00 AM	280	4/10/02 11:15:00 AM	2	4/10/02 11:56:00 AM	2
10/11/01 3:56:00 PM	15	4/10/02 10:35:00 AM	5	4/10/02 11:16:00 AM	3	4/10/02 11:57:00 AM	2
10/11/01 3:57:00 PM	14	4/10/02 10:36:00 AM	3	4/10/02 11:17:00 AM	3	4/10/02 11:58:00 AM	2
10/11/01 3:58:00 PM	16	4/10/02 10:37:00 AM	3	4/10/02 11:18:00 AM	3	4/10/02 11:59:00 AM	2
10/11/01 3:59:00 PM	15	4/10/02 10:39:00 AM	4	4/10/02 11:19:00 AM	3	4/10/02 12:00:00 PM	3
10/11/01 4:00:00 PM	14	4/10/02 10:40:00 AM	2	4/10/02 11:21:00 AM	2	4/10/02 12:01:00 PM	3
10/11/01 4:01:00 PM	14	4/10/02 10:41:00 AM	3	4/10/02 11:22:00 AM	2	4/10/02 12:03:00 PM	3
10/11/01 4:02:00 PM	14	4/10/02 10:42:00 AM	2	4/10/02 11:23:00 AM	2	4/10/02 12:04:00 PM	4
10/11/01 4:03:00 PM	14	4/10/02 10:43:00 AM	3	4/10/02 11:24:00 AM	2	4/10/02 12:05:00 PM	2
10/11/01 4:04:00 PM	14	4/10/02 10:44:00 AM	3	4/10/02 11:25:00 AM	2	4/10/02 12:06:00 PM	2
10/11/01 4:05:00 PM	13	4/10/02 10:46:00 AM	2	4/10/02 11:26:00 AM	2	4/10/02 12:07:00 PM	2
10/11/01 4:06:00 PM	14	4/10/02 10:47:00 AM	3	4/10/02 11:28:00 AM	2	4/10/02 12:08:00 PM	2
10/11/01 4:07:00 PM	13	4/10/02 10:48:00 AM	3	4/10/02 11:29:00 AM	2	4/10/02 12:10:00 PM	2
10/11/01 4:08:00 PM	13	4/10/02 10:49:00 AM	2	4/10/02 11:30:00 AM	2	4/10/02 12:11:00 PM	2
10/11/01 4:09:00 PM	14	4/10/02 10:50:00 AM	2	4/10/02 11:31:00 AM	3	4/10/02 12:12:00 PM	2
10/11/01 4:10:00 PM	14	4/10/02 10:51:00 AM	2	4/10/02 11:32:00 AM	3	4/10/02 12:13:00 PM	2
10/11/01 4:11:00 PM	14	4/10/02 10:53:00 AM	2	4/10/02 11:33:00 AM	3	4/10/02 12:14:00 PM	3
4/10/02 10:13:00 AM	6	4/10/02 10:54:00 AM	3	4/10/02 11:35:00 AM	14	4/10/02 12:15:00 PM	3
4/10/02 10:14:00 AM	3	4/10/02 10:55:00 AM	2	4/10/02 11:36:00 AM	4	4/10/02 12:17:00 PM	3
4/10/02 10:15:00 AM	140	4/10/02 10:56:00 AM	2	4/10/02 11:37:00 AM	4	4/10/02 12:18:00 PM	2
4/10/02 10:16:00 AM	100	4/10/02 10:57:00 AM	2	4/10/02 11:38:00 AM	3	4/10/02 12:19:00 PM	2
4/10/02 10:18:00 AM	5	4/10/02 10:58:00 AM	2	4/10/02 11:39:00 AM	2	4/10/02 12:20:00 PM	2
4/10/02 10:19:00 AM	3	4/10/02 11:00:00 AM	4	4/10/02 11:40:00 AM	3	4/10/02 12:21:00 PM	2
4/10/02 10:20:00 AM	3	4/10/02 11:01:00 AM	2	4/10/02 11:42:00 AM	3	4/10/02 12:22:00 PM	2
4/10/02 10:21:00 AM	3	4/10/02 11:02:00 AM	3	4/10/02 11:43:00 AM	7	4/10/02 12:24:00 PM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/10/02 12:25:00 PM	6	4/10/02 1:06:00 PM	3	4/10/02 1:46:00 PM	2	4/10/02 2:27:00 PM	5
4/10/02 12:26:00 PM	5	4/10/02 1:07:00 PM	3	4/10/02 1:48:00 PM	2	4/10/02 2:28:00 PM	4
4/10/02 12:27:00 PM	6	4/10/02 1:08:00 PM	3	4/10/02 1:49:00 PM	2	4/10/02 2:30:00 PM	4
4/10/02 12:28:00 PM	4	4/10/02 1:09:00 PM	2	4/10/02 1:50:00 PM	2	4/10/02 2:31:00 PM	4
4/10/02 12:29:00 PM	4	4/10/02 1:10:00 PM	2	4/10/02 1:51:00 PM	2	4/10/02 2:32:00 PM	5
4/10/02 12:31:00 PM	4	4/10/02 1:11:00 PM	2	4/10/02 1:52:00 PM	3	4/10/02 2:33:00 PM	4
4/10/02 12:32:00 PM	3	4/10/02 1:13:00 PM	5	4/10/02 1:53:00 PM	2	4/10/02 2:34:00 PM	4
4/10/02 12:33:00 PM	3	4/10/02 1:14:00 PM	8	4/10/02 1:55:00 PM	10	4/10/02 2:35:00 PM	4
4/10/02 12:34:00 PM	3	4/10/02 1:15:00 PM	3	4/10/02 1:56:00 PM	4	4/10/02 2:37:00 PM	4
4/10/02 12:35:00 PM	2	4/10/02 1:16:00 PM	3	4/10/02 1:57:00 PM	3	4/10/02 2:38:00 PM	4
4/10/02 12:36:00 PM	2	4/10/02 1:17:00 PM	2	4/10/02 1:58:00 PM	21	4/10/02 2:39:00 PM	5
4/10/02 12:38:00 PM	3	4/10/02 1:18:00 PM	2	4/10/02 1:59:00 PM	6	4/10/02 2:40:00 PM	4
4/10/02 12:39:00 PM	3	4/10/02 1:20:00 PM	2	4/10/02 2:00:00 PM	2	4/10/02 2:41:00 PM	9
4/10/02 12:40:00 PM	2	4/10/02 1:21:00 PM	2	4/10/02 2:02:00 PM	3	4/10/02 2:42:00 PM	4
4/10/02 12:41:00 PM	3	4/10/02 1:22:00 PM	2	4/10/02 2:03:00 PM	4	4/10/02 2:44:00 PM	3
4/10/02 12:42:00 PM	3	4/10/02 1:23:00 PM	2	4/10/02 2:04:00 PM	3	4/10/02 2:45:00 PM	2
4/10/02 12:43:00 PM	3	4/10/02 1:24:00 PM	2	4/10/02 2:05:00 PM	2	4/10/02 2:46:00 PM	2
4/10/02 12:45:00 PM	4	4/10/02 1:25:00 PM	2	4/10/02 2:06:00 PM	3	4/10/02 2:47:00 PM	3
4/10/02 12:46:00 PM	4	4/10/02 1:27:00 PM	3	4/10/02 2:07:00 PM	18	4/10/02 2:48:00 PM	3
4/10/02 12:47:00 PM	3	4/10/02 1:28:00 PM	2	4/10/02 2:09:00 PM	4	4/10/02 2:49:00 PM	3
4/10/02 12:48:00 PM	3	4/10/02 1:29:00 PM	2	4/10/02 2:10:00 PM	4	4/10/02 2:51:00 PM	3
4/10/02 12:49:00 PM	2	4/10/02 1:30:00 PM	2	4/10/02 2:11:00 PM	3	4/10/02 2:52:00 PM	3
4/10/02 12:50:00 PM	4	4/10/02 1:31:00 PM	2	4/10/02 2:12:00 PM	3	4/10/02 2:53:00 PM	3
4/10/02 12:52:00 PM	3	4/10/02 1:32:00 PM	2	4/10/02 2:13:00 PM	2	4/10/02 2:54:00 PM	3
4/10/02 12:53:00 PM	2	4/10/02 1:34:00 PM	2	4/10/02 2:14:00 PM	2	4/10/02 2:55:00 PM	3
4/10/02 12:54:00 PM	3	4/10/02 1:35:00 PM	2	4/10/02 2:16:00 PM	2	4/10/02 2:56:00 PM	3
4/10/02 12:55:00 PM	4	4/10/02 1:36:00 PM	2	4/10/02 2:17:00 PM	2	4/10/02 2:58:00 PM	4
4/10/02 12:56:00 PM	8	4/10/02 1:37:00 PM	2	4/10/02 2:18:00 PM	2	4/10/02 2:59:00 PM	2
4/10/02 12:57:00 PM	3	4/10/02 1:38:00 PM	2	4/10/02 2:19:00 PM	5	4/10/02 3:00:00 PM	7
4/10/02 12:59:00 PM	3	4/10/02 1:39:00 PM	2	4/10/02 2:20:00 PM	5	4/10/02 3:01:00 PM	3
4/10/02 1:00:00 PM	2	4/10/02 1:41:00 PM	2	4/10/02 2:21:00 PM	4	4/10/02 3:02:00 PM	2
4/10/02 1:01:00 PM	2	4/10/02 1:42:00 PM	2	4/10/02 2:23:00 PM	5	4/10/02 3:03:00 PM	3
4/10/02 1:02:00 PM	2	4/10/02 1:43:00 PM	2	4/10/02 2:24:00 PM	5	4/10/02 3:05:00 PM	2
4/10/02 1:03:00 PM	2	4/10/02 1:44:00 PM	2	4/10/02 2:25:00 PM	5	4/10/02 3:06:00 PM	8
4/10/02 1:04:00 PM	2	4/10/02 1:45:00 PM	2	4/10/02 2:26:00 PM	4	4/10/02 3:07:00 PM	16

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/10/02 3:08:00 PM	49	4/10/02 3:49:00 PM	1	4/11/02 8:06:00 AM	9	4/11/02 8:41:00 AM	6
4/10/02 3:09:00 PM	4	4/10/02 3:50:00 PM	2	4/11/02 8:07:00 AM	9	4/11/02 8:42:00 AM	5
4/10/02 3:10:00 PM	23	4/10/02 3:51:00 PM	2	4/11/02 8:08:00 AM	9	4/11/02 8:43:00 AM	5
4/10/02 3:12:00 PM	56	4/10/02 3:52:00 PM	2	4/11/02 8:09:00 AM	9	4/11/02 8:44:00 AM	5
4/10/02 3:13:00 PM	123	4/10/02 3:54:00 PM	1	4/11/02 8:10:00 AM	9	4/11/02 8:45:00 AM	5
4/10/02 3:14:00 PM	181	4/10/02 3:55:00 PM	1	4/11/02 8:11:00 AM	10	4/11/02 8:46:00 AM	5
4/10/02 3:15:00 PM	8	4/10/02 3:56:00 PM	1	4/11/02 8:12:00 AM	9	4/11/02 8:47:00 AM	5
4/10/02 3:16:00 PM	2	4/10/02 3:57:00 PM	1	4/11/02 8:13:00 AM	9	4/11/02 8:48:00 AM	5
4/10/02 3:17:00 PM	9	4/10/02 3:58:00 PM	2	4/11/02 8:14:00 AM	10	4/11/02 8:49:00 AM	5
4/10/02 3:19:00 PM	3	4/10/02 3:59:00 PM	2	4/11/02 8:15:00 AM	14	4/11/02 8:50:00 AM	412
4/10/02 3:20:00 PM	2	4/10/02 4:01:00 PM	2	4/11/02 8:16:00 AM	6	4/11/02 8:51:00 AM	97
4/10/02 3:21:00 PM	13	4/10/02 4:02:00 PM	2	4/11/02 8:17:00 AM	6	4/11/02 8:52:00 AM	6
4/10/02 3:22:00 PM	2	4/10/02 4:03:00 PM	1	4/11/02 8:18:00 AM	5	4/11/02 8:53:00 AM	6
4/10/02 3:23:00 PM	2	4/10/02 4:04:00 PM	1	4/11/02 8:19:00 AM	5	4/11/02 8:54:00 AM	6
4/10/02 3:24:00 PM	5	4/10/02 4:05:00 PM	2	4/11/02 8:20:00 AM	6	4/11/02 8:55:00 AM	7
4/10/02 3:26:00 PM	6	4/10/02 4:06:00 PM	1	4/11/02 8:21:00 AM	5	4/11/02 8:56:00 AM	6
4/10/02 3:27:00 PM	21	4/10/02 4:08:00 PM	2	4/11/02 8:22:00 AM	5	4/11/02 8:57:00 AM	6
4/10/02 3:28:00 PM	15	4/10/02 4:09:00 PM	2	4/11/02 8:23:00 AM	5	4/11/02 8:58:00 AM	6
4/10/02 3:29:00 PM	3	4/10/02 4:10:00 PM	2	4/11/02 8:24:00 AM	5	4/11/02 8:59:00 AM	6
4/10/02 3:30:00 PM	3	4/10/02 4:11:00 PM	1	4/11/02 8:25:00 AM	11	4/11/02 9:00:00 AM	6
4/10/02 3:31:00 PM	61	4/10/02 4:12:00 PM	2	4/11/02 8:26:00 AM	16	4/11/02 9:01:00 AM	9
4/10/02 3:33:00 PM	35	4/10/02 4:13:00 PM	6	4/11/02 8:27:00 AM	6	4/11/02 9:02:00 AM	8
4/10/02 3:34:00 PM	3	4/10/02 4:15:00 PM	4	4/11/02 8:28:00 AM	5	4/11/02 9:03:00 AM	7
4/10/02 3:35:00 PM	3	4/11/02 7:54:00 AM	24	4/11/02 8:29:00 AM	5	4/11/02 9:04:00 AM	6
4/10/02 3:36:00 PM	2	4/11/02 7:55:00 AM	22	4/11/02 8:30:00 AM	5	4/11/02 9:05:00 AM	7
4/10/02 3:37:00 PM	2	4/11/02 7:56:00 AM	23	4/11/02 8:31:00 AM	5	4/11/02 9:06:00 AM	6
4/10/02 3:38:00 PM	2	4/11/02 7:57:00 AM	51	4/11/02 8:32:00 AM	5	4/11/02 9:07:00 AM	7
4/10/02 3:40:00 PM	2	4/11/02 7:58:00 AM	210	4/11/02 8:33:00 AM	8	4/11/02 9:08:00 AM	7
4/10/02 3:41:00 PM	2	4/11/02 7:59:00 AM	36	4/11/02 8:34:00 AM	8	4/11/02 9:09:00 AM	6
4/10/02 3:42:00 PM	2	4/11/02 8:00:00 AM	8	4/11/02 8:35:00 AM	6	4/11/02 9:10:00 AM	6
4/10/02 3:43:00 PM	2	4/11/02 8:01:00 AM	9	4/11/02 8:36:00 AM	5	4/11/02 9:11:00 AM	6
4/10/02 3:44:00 PM	2	4/11/02 8:02:00 AM	8	4/11/02 8:37:00 AM	5	4/11/02 9:12:00 AM	6
4/10/02 3:45:00 PM	2	4/11/02 8:03:00 AM	8	4/11/02 8:38:00 AM	5	4/11/02 9:13:00 AM	6
4/10/02 3:47:00 PM	2	4/11/02 8:04:00 AM	8	4/11/02 8:39:00 AM	5	4/11/02 9:14:00 AM	6
4/10/02 3:48:00 PM	2	4/11/02 8:05:00 AM	9	4/11/02 8:40:00 AM	5	4/11/02 9:15:00 AM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/11/02 9:16:00 AM	6	4/11/02 9:51:00 AM	5	4/11/02 10:26:00 AM	5	4/11/02 11:01:00 AM	6
4/11/02 9:17:00 AM	6	4/11/02 9:52:00 AM	5	4/11/02 10:27:00 AM	5	4/11/02 11:02:00 AM	4
4/11/02 9:18:00 AM	6	4/11/02 9:53:00 AM	6	4/11/02 10:28:00 AM	5	4/11/02 11:03:00 AM	4
4/11/02 9:19:00 AM	6	4/11/02 9:54:00 AM	5	4/11/02 10:29:00 AM	5	4/11/02 11:04:00 AM	4
4/11/02 9:20:00 AM	6	4/11/02 9:55:00 AM	5	4/11/02 10:30:00 AM	5	4/11/02 11:05:00 AM	7
4/11/02 9:21:00 AM	6	4/11/02 9:56:00 AM	5	4/11/02 10:31:00 AM	5	4/11/02 11:06:00 AM	4
4/11/02 9:22:00 AM	6	4/11/02 9:57:00 AM	5	4/11/02 10:32:00 AM	5	4/11/02 11:07:00 AM	5
4/11/02 9:23:00 AM	6	4/11/02 9:58:00 AM	5	4/11/02 10:33:00 AM	5	4/11/02 11:08:00 AM	4
4/11/02 9:24:00 AM	5	4/11/02 9:59:00 AM	5	4/11/02 10:34:00 AM	5	4/11/02 11:09:00 AM	4
4/11/02 9:25:00 AM	7	4/11/02 10:00:00 AM	5	4/11/02 10:35:00 AM	5	4/11/02 11:10:00 AM	4
4/11/02 9:26:00 AM	6	4/11/02 10:01:00 AM	5	4/11/02 10:36:00 AM	5	4/11/02 11:11:00 AM	4
4/11/02 9:27:00 AM	6	4/11/02 10:02:00 AM	5	4/11/02 10:37:00 AM	5	4/11/02 11:12:00 AM	4
4/11/02 9:28:00 AM	6	4/11/02 10:03:00 AM	5	4/11/02 10:38:00 AM	5	4/11/02 11:13:00 AM	4
4/11/02 9:29:00 AM	6	4/11/02 10:04:00 AM	5	4/11/02 10:39:00 AM	5	4/11/02 11:14:00 AM	4
4/11/02 9:30:00 AM	5	4/11/02 10:05:00 AM	5	4/11/02 10:40:00 AM	33	4/11/02 11:15:00 AM	4
4/11/02 9:31:00 AM	5	4/11/02 10:06:00 AM	6	4/11/02 10:41:00 AM	73	4/11/02 11:16:00 AM	4
4/11/02 9:32:00 AM	5	4/11/02 10:07:00 AM	6	4/11/02 10:42:00 AM	8	4/11/02 11:17:00 AM	4
4/11/02 9:33:00 AM	5	4/11/02 10:08:00 AM	6	4/11/02 10:43:00 AM	6	4/11/02 11:18:00 AM	4
4/11/02 9:34:00 AM	7	4/11/02 10:09:00 AM	6	4/11/02 10:44:00 AM	5	4/11/02 11:19:00 AM	4
4/11/02 9:35:00 AM	6	4/11/02 10:10:00 AM	5	4/11/02 10:45:00 AM	5	4/11/02 11:20:00 AM	4
4/11/02 9:36:00 AM	6	4/11/02 10:11:00 AM	5	4/11/02 10:46:00 AM	5	4/11/02 11:21:00 AM	4
4/11/02 9:37:00 AM	5	4/11/02 10:12:00 AM	5	4/11/02 10:47:00 AM	4	4/11/02 11:22:00 AM	5
4/11/02 9:38:00 AM	6	4/11/02 10:13:00 AM	5	4/11/02 10:48:00 AM	6	4/11/02 11:23:00 AM	7
4/11/02 9:39:00 AM	6	4/11/02 10:14:00 AM	5	4/11/02 10:49:00 AM	5	4/11/02 11:24:00 AM	6
4/11/02 9:40:00 AM	6	4/11/02 10:15:00 AM	5	4/11/02 10:50:00 AM	4	4/11/02 11:25:00 AM	4
4/11/02 9:41:00 AM	6	4/11/02 10:16:00 AM	5	4/11/02 10:51:00 AM	4	4/11/02 11:26:00 AM	4
4/11/02 9:42:00 AM	6	4/11/02 10:17:00 AM	5	4/11/02 10:52:00 AM	5	4/11/02 11:27:00 AM	5
4/11/02 9:43:00 AM	6	4/11/02 10:18:00 AM	5	4/11/02 10:53:00 AM	4	4/11/02 11:28:00 AM	4
4/11/02 9:44:00 AM	6	4/11/02 10:19:00 AM	5	4/11/02 10:54:00 AM	70	4/11/02 11:29:00 AM	4
4/11/02 9:45:00 AM	5	4/11/02 10:20:00 AM	5	4/11/02 10:55:00 AM	12	4/11/02 11:30:00 AM	4
4/11/02 9:46:00 AM	5	4/11/02 10:21:00 AM	5	4/11/02 10:56:00 AM	4	4/11/02 11:31:00 AM	4
4/11/02 9:47:00 AM	6	4/11/02 10:22:00 AM	6	4/11/02 10:57:00 AM	4	4/11/02 11:32:00 AM	4
4/11/02 9:48:00 AM	5	4/11/02 10:23:00 AM	5	4/11/02 10:58:00 AM	4	4/11/02 11:33:00 AM	4
4/11/02 9:49:00 AM	5	4/11/02 10:24:00 AM	5	4/11/02 10:59:00 AM	6	4/11/02 11:34:00 AM	4
4/11/02 9:50:00 AM	6	4/11/02 10:25:00 AM	5	4/11/02 11:00:00 AM	8	4/11/02 11:35:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/11/02 11:36:00 AM	4	4/11/02 12:11:00 PM	7	4/11/02 12:46:00 PM	7	4/11/02 1:21:00 PM	7
4/11/02 11:37:00 AM	4	4/11/02 12:12:00 PM	8	4/11/02 12:47:00 PM	25	4/11/02 1:22:00 PM	6
4/11/02 11:38:00 AM	4	4/11/02 12:13:00 PM	7	4/11/02 12:48:00 PM	8	4/11/02 1:23:00 PM	6
4/11/02 11:39:00 AM	4	4/11/02 12:14:00 PM	7	4/11/02 12:49:00 PM	5	4/11/02 1:24:00 PM	6
4/11/02 11:40:00 AM	4	4/11/02 12:15:00 PM	7	4/11/02 12:50:00 PM	5	4/11/02 1:25:00 PM	6
4/11/02 11:41:00 AM	4	4/11/02 12:16:00 PM	7	4/11/02 12:51:00 PM	5	4/11/02 1:26:00 PM	8
4/11/02 11:42:00 AM	4	4/11/02 12:17:00 PM	7	4/11/02 12:52:00 PM	5	4/11/02 1:27:00 PM	7
4/11/02 11:43:00 AM	4	4/11/02 12:18:00 PM	7	4/11/02 12:53:00 PM	5	4/11/02 1:28:00 PM	6
4/11/02 11:44:00 AM	4	4/11/02 12:19:00 PM	8	4/11/02 12:54:00 PM	5	4/11/02 1:29:00 PM	6
4/11/02 11:45:00 AM	5	4/11/02 12:20:00 PM	8	4/11/02 12:55:00 PM	5	4/11/02 1:30:00 PM	6
4/11/02 11:46:00 AM	5	4/11/02 12:21:00 PM	7	4/11/02 12:56:00 PM	11	4/11/02 1:31:00 PM	6
4/11/02 11:47:00 AM	5	4/11/02 12:22:00 PM	8	4/11/02 12:57:00 PM	8	4/11/02 1:32:00 PM	6
4/11/02 11:48:00 AM	5	4/11/02 12:23:00 PM	7	4/11/02 12:58:00 PM	5	4/11/02 1:33:00 PM	6
4/11/02 11:49:00 AM	5	4/11/02 12:24:00 PM	7	4/11/02 12:59:00 PM	4	4/11/02 1:34:00 PM	7
4/11/02 11:50:00 AM	4	4/11/02 12:25:00 PM	7	4/11/02 1:00:00 PM	5	4/11/02 1:35:00 PM	7
4/11/02 11:51:00 AM	5	4/11/02 12:26:00 PM	7	4/11/02 1:01:00 PM	5	4/11/02 1:36:00 PM	7
4/11/02 11:52:00 AM	6	4/11/02 12:27:00 PM	7	4/11/02 1:02:00 PM	6	4/11/02 1:37:00 PM	8
4/11/02 11:53:00 AM	6	4/11/02 12:28:00 PM	7	4/11/02 1:03:00 PM	4	4/11/02 1:38:00 PM	8
4/11/02 11:54:00 AM	4	4/11/02 12:29:00 PM	7	4/11/02 1:04:00 PM	5	4/11/02 1:39:00 PM	9
4/11/02 11:55:00 AM	4	4/11/02 12:30:00 PM	7	4/11/02 1:05:00 PM	4	4/11/02 1:40:00 PM	7
4/11/02 11:56:00 AM	5	4/11/02 12:31:00 PM	12	4/11/02 1:06:00 PM	5	4/11/02 1:41:00 PM	5
4/11/02 11:57:00 AM	4	4/11/02 12:32:00 PM	10	4/11/02 1:07:00 PM	5	4/11/02 1:42:00 PM	6
4/11/02 11:58:00 AM	4	4/11/02 12:33:00 PM	8	4/11/02 1:08:00 PM	6	4/11/02 1:43:00 PM	5
4/11/02 11:59:00 AM	4	4/11/02 12:34:00 PM	8	4/11/02 1:09:00 PM	5	4/11/02 1:44:00 PM	5
4/11/02 12:00:00 PM	4	4/11/02 12:35:00 PM	8	4/11/02 1:10:00 PM	6	4/11/02 1:45:00 PM	6
4/11/02 12:01:00 PM	4	4/11/02 12:36:00 PM	8	4/11/02 1:11:00 PM	5	4/11/02 1:46:00 PM	6
4/11/02 12:02:00 PM	4	4/11/02 12:37:00 PM	9	4/11/02 1:12:00 PM	5	4/11/02 1:47:00 PM	7
4/11/02 12:03:00 PM	5	4/11/02 12:38:00 PM	12	4/11/02 1:13:00 PM	5	4/11/02 1:48:00 PM	6
4/11/02 12:04:00 PM	106	4/11/02 12:39:00 PM	10	4/11/02 1:14:00 PM	7	4/11/02 1:49:00 PM	6
4/11/02 12:05:00 PM	198	4/11/02 12:40:00 PM	12	4/11/02 1:15:00 PM	5	4/11/02 1:50:00 PM	6
4/11/02 12:06:00 PM	317	4/11/02 12:41:00 PM	12	4/11/02 1:16:00 PM	4	4/11/02 1:51:00 PM	7
4/11/02 12:07:00 PM	160	4/11/02 12:42:00 PM	9	4/11/02 1:17:00 PM	5	4/11/02 1:52:00 PM	10
4/11/02 12:08:00 PM	7	4/11/02 12:43:00 PM	9	4/11/02 1:18:00 PM	8	4/11/02 1:53:00 PM	7
4/11/02 12:09:00 PM	8	4/11/02 12:44:00 PM	8	4/11/02 1:19:00 PM	15	4/11/02 1:54:00 PM	7
4/11/02 12:10:00 PM	7	4/11/02 12:45:00 PM	8	4/11/02 1:20:00 PM	6	4/11/02 1:55:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/11/02 1:56:00 PM	6	4/11/02 2:31:00 PM	4	4/11/02 3:06:00 PM	5	4/11/02 3:41:00 PM	6
4/11/02 1:57:00 PM	5	4/11/02 2:32:00 PM	4	4/11/02 3:07:00 PM	5	4/11/02 3:42:00 PM	6
4/11/02 1:58:00 PM	6	4/11/02 2:33:00 PM	4	4/11/02 3:08:00 PM	5	4/11/02 3:43:00 PM	6
4/11/02 1:59:00 PM	6	4/11/02 2:34:00 PM	4	4/11/02 3:09:00 PM	5	4/11/02 3:44:00 PM	5
4/11/02 2:00:00 PM	7	4/11/02 2:35:00 PM	4	4/11/02 3:10:00 PM	5	4/11/02 3:45:00 PM	8
4/11/02 2:01:00 PM	7	4/11/02 2:36:00 PM	4	4/11/02 3:11:00 PM	6	4/11/02 3:46:00 PM	7
4/11/02 2:02:00 PM	7	4/11/02 2:37:00 PM	4	4/11/02 3:12:00 PM	4	4/11/02 3:47:00 PM	7
4/11/02 2:03:00 PM	6	4/11/02 2:38:00 PM	5	4/11/02 3:13:00 PM	5	4/11/02 3:48:00 PM	6
4/11/02 2:04:00 PM	6	4/11/02 2:39:00 PM	5	4/11/02 3:14:00 PM	6	4/11/02 3:49:00 PM	5
4/11/02 2:05:00 PM	6	4/11/02 2:40:00 PM	4	4/11/02 3:15:00 PM	5	4/11/02 3:50:00 PM	5
4/11/02 2:06:00 PM	5	4/11/02 2:41:00 PM	4	4/11/02 3:16:00 PM	4	4/11/02 3:51:00 PM	5
4/11/02 2:07:00 PM	5	4/11/02 2:42:00 PM	4	4/11/02 3:17:00 PM	4	4/11/02 3:52:00 PM	5
4/11/02 2:08:00 PM	5	4/11/02 2:43:00 PM	5	4/11/02 3:18:00 PM	4	4/11/02 3:53:00 PM	5
4/11/02 2:09:00 PM	5	4/11/02 2:44:00 PM	4	4/11/02 3:19:00 PM	4	4/11/02 3:54:00 PM	5
4/11/02 2:10:00 PM	5	4/11/02 2:45:00 PM	4	4/11/02 3:20:00 PM	5	4/11/02 3:55:00 PM	5
4/11/02 2:11:00 PM	5	4/11/02 2:46:00 PM	4	4/11/02 3:21:00 PM	5	4/11/02 3:56:00 PM	5
4/11/02 2:12:00 PM	5	4/11/02 2:47:00 PM	4	4/11/02 3:22:00 PM	5	4/11/02 3:57:00 PM	5
4/11/02 2:13:00 PM	5	4/11/02 2:48:00 PM	4	4/11/02 3:23:00 PM	4	4/11/02 3:58:00 PM	6
4/11/02 2:14:00 PM	5	4/11/02 2:49:00 PM	6	4/11/02 3:24:00 PM	5	4/11/02 3:59:00 PM	7
4/11/02 2:15:00 PM	5	4/11/02 2:50:00 PM	5	4/11/02 3:25:00 PM	5	4/11/02 4:00:00 PM	10
4/11/02 2:16:00 PM	4	4/11/02 2:51:00 PM	6	4/11/02 3:26:00 PM	5	4/11/02 4:01:00 PM	10
4/11/02 2:17:00 PM	5	4/11/02 2:52:00 PM	6	4/11/02 3:27:00 PM	4	4/11/02 4:02:00 PM	6
4/11/02 2:18:00 PM	5	4/11/02 2:53:00 PM	5	4/11/02 3:28:00 PM	4	4/11/02 4:03:00 PM	7
4/11/02 2:19:00 PM	5	4/11/02 2:54:00 PM	6	4/11/02 3:29:00 PM	4	4/11/02 4:04:00 PM	6
4/11/02 2:20:00 PM	5	4/11/02 2:55:00 PM	5	4/11/02 3:30:00 PM	4	4/11/02 4:05:00 PM	6
4/11/02 2:21:00 PM	5	4/11/02 2:56:00 PM	5	4/11/02 3:31:00 PM	4	4/11/02 4:06:00 PM	5
4/11/02 2:22:00 PM	5	4/11/02 2:57:00 PM	5	4/11/02 3:32:00 PM	5	4/11/02 4:07:00 PM	6
4/11/02 2:23:00 PM	5	4/11/02 2:58:00 PM	5	4/11/02 3:33:00 PM	4	4/11/02 4:08:00 PM	6
4/11/02 2:24:00 PM	4	4/11/02 2:59:00 PM	5	4/11/02 3:34:00 PM	4	4/11/02 4:09:00 PM	6
4/11/02 2:25:00 PM	4	4/11/02 3:00:00 PM	5	4/11/02 3:35:00 PM	4	4/11/02 4:10:00 PM	6
4/11/02 2:26:00 PM	5	4/11/02 3:01:00 PM	6	4/11/02 3:36:00 PM	4	4/11/02 4:11:00 PM	9
4/11/02 2:27:00 PM	4	4/11/02 3:02:00 PM	5	4/11/02 3:37:00 PM	4	4/11/02 4:12:00 PM	8
4/11/02 2:28:00 PM	4	4/11/02 3:03:00 PM	5	4/11/02 3:38:00 PM	4	4/11/02 4:13:00 PM	9
4/11/02 2:29:00 PM	4	4/11/02 3:04:00 PM	5	4/11/02 3:39:00 PM	4	4/11/02 4:14:00 PM	7
4/11/02 2:30:00 PM	4	4/11/02 3:05:00 PM	5	4/11/02 3:40:00 PM	6	4/12/02 8:30:00 AM	25

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/12/02 8:31:00 AM	22	4/12/02 9:06:00 AM	56	4/12/02 9:41:00 AM	5	4/12/02 10:16:00 AM	4
4/12/02 8:32:00 AM	26	4/12/02 9:07:00 AM	36	4/12/02 9:42:00 AM	5	4/12/02 10:17:00 AM	5
4/12/02 8:33:00 AM	19	4/12/02 9:08:00 AM	22	4/12/02 9:43:00 AM	4	4/12/02 10:18:00 AM	4
4/12/02 8:34:00 AM	143	4/12/02 9:09:00 AM	20	4/12/02 9:44:00 AM	6	4/12/02 10:19:00 AM	4
4/12/02 8:35:00 AM	59	4/12/02 9:10:00 AM	44	4/12/02 9:45:00 AM	7	4/12/02 10:20:00 AM	4
4/12/02 8:36:00 AM	7	4/12/02 9:11:00 AM	65	4/12/02 9:46:00 AM	5	4/12/02 10:21:00 AM	4
4/12/02 8:37:00 AM	6	4/12/02 9:12:00 AM	41	4/12/02 9:47:00 AM	5	4/12/02 10:22:00 AM	3
4/12/02 8:38:00 AM	5	4/12/02 9:13:00 AM	43	4/12/02 9:48:00 AM	4	4/12/02 10:23:00 AM	3
4/12/02 8:39:00 AM	28	4/12/02 9:14:00 AM	34	4/12/02 9:49:00 AM	11	4/12/02 10:24:00 AM	4
4/12/02 8:40:00 AM	1075	4/12/02 9:15:00 AM	38	4/12/02 9:50:00 AM	9	4/12/02 10:25:00 AM	4
4/12/02 8:41:00 AM	38	4/12/02 9:16:00 AM	58	4/12/02 9:51:00 AM	4	4/12/02 10:26:00 AM	4
4/12/02 8:42:00 AM	43	4/12/02 9:17:00 AM	29	4/12/02 9:52:00 AM	4	4/12/02 10:27:00 AM	4
4/12/02 8:43:00 AM	41	4/12/02 9:18:00 AM	12	4/12/02 9:53:00 AM	4	4/12/02 10:28:00 AM	4
4/12/02 8:44:00 AM	15	4/12/02 9:19:00 AM	8	4/12/02 9:54:00 AM	4	4/12/02 10:29:00 AM	4
4/12/02 8:45:00 AM	35	4/12/02 9:20:00 AM	7	4/12/02 9:55:00 AM	4	4/12/02 10:30:00 AM	4
4/12/02 8:46:00 AM	12	4/12/02 9:21:00 AM	16	4/12/02 9:56:00 AM	4	4/12/02 10:31:00 AM	3
4/12/02 8:47:00 AM	9	4/12/02 9:22:00 AM	46	4/12/02 9:57:00 AM	8	4/12/02 10:32:00 AM	4
4/12/02 8:48:00 AM	7	4/12/02 9:23:00 AM	10	4/12/02 9:58:00 AM	4	4/12/02 10:33:00 AM	4
4/12/02 8:49:00 AM	24	4/12/02 9:24:00 AM	5	4/12/02 9:59:00 AM	4	4/12/02 10:34:00 AM	15
4/12/02 8:50:00 AM	408	4/12/02 9:25:00 AM	5	4/12/02 10:00:00 AM	7	4/12/02 10:35:00 AM	5
4/12/02 8:51:00 AM	55	4/12/02 9:26:00 AM	4	4/12/02 10:01:00 AM	5	4/12/02 10:36:00 AM	5
4/12/02 8:52:00 AM	55	4/12/02 9:27:00 AM	4	4/12/02 10:02:00 AM	4	4/12/02 10:37:00 AM	5
4/12/02 8:53:00 AM	21	4/12/02 9:28:00 AM	4	4/12/02 10:03:00 AM	5	4/12/02 10:38:00 AM	5
4/12/02 8:54:00 AM	27	4/12/02 9:29:00 AM	5	4/12/02 10:04:00 AM	4	4/12/02 10:39:00 AM	6
4/12/02 8:55:00 AM	11	4/12/02 9:30:00 AM	4	4/12/02 10:05:00 AM	4	4/12/02 10:40:00 AM	7
4/12/02 8:56:00 AM	39	4/12/02 9:31:00 AM	4	4/12/02 10:06:00 AM	4	4/12/02 10:41:00 AM	6
4/12/02 8:57:00 AM	24	4/12/02 9:32:00 AM	4	4/12/02 10:07:00 AM	4	4/12/02 10:42:00 AM	6
4/12/02 8:58:00 AM	28	4/12/02 9:33:00 AM	5	4/12/02 10:08:00 AM	4	4/12/02 10:43:00 AM	6
4/12/02 8:59:00 AM	32	4/12/02 9:34:00 AM	5	4/12/02 10:09:00 AM	4	4/12/02 10:44:00 AM	8
4/12/02 9:00:00 AM	16	4/12/02 9:35:00 AM	4	4/12/02 10:10:00 AM	4	4/12/02 10:45:00 AM	4
4/12/02 9:01:00 AM	22	4/12/02 9:36:00 AM	7	4/12/02 10:11:00 AM	4	4/12/02 10:46:00 AM	5
4/12/02 9:02:00 AM	79	4/12/02 9:37:00 AM	5	4/12/02 10:12:00 AM	5	4/12/02 10:47:00 AM	6
4/12/02 9:03:00 AM	21	4/12/02 9:38:00 AM	5	4/12/02 10:13:00 AM	17	4/12/02 10:48:00 AM	5
4/12/02 9:04:00 AM	5	4/12/02 9:39:00 AM	5	4/12/02 10:14:00 AM	23	4/12/02 10:49:00 AM	6
4/12/02 9:05:00 AM	36	4/12/02 9:40:00 AM	5	4/12/02 10:15:00 AM	4	4/12/02 10:50:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/12/02 10:51:00 AM	5	4/16/02 7:40:00 AM	16	4/16/02 8:15:00 AM	14	4/16/02 8:50:00 AM	14
4/12/02 10:52:00 AM	6	4/16/02 7:41:00 AM	17	4/16/02 8:16:00 AM	14	4/16/02 8:51:00 AM	12
4/12/02 10:53:00 AM	6	4/16/02 7:42:00 AM	16	4/16/02 8:17:00 AM	15	4/16/02 8:52:00 AM	12
4/12/02 10:54:00 AM	6	4/16/02 7:43:00 AM	21	4/16/02 8:18:00 AM	14	4/16/02 8:53:00 AM	12
4/12/02 10:55:00 AM	5	4/16/02 7:44:00 AM	15	4/16/02 8:19:00 AM	22	4/16/02 8:54:00 AM	16
4/12/02 10:56:00 AM	4	4/16/02 7:45:00 AM	17	4/16/02 8:20:00 AM	17	4/16/02 8:55:00 AM	13
4/12/02 10:57:00 AM	6	4/16/02 7:46:00 AM	18	4/16/02 8:21:00 AM	18	4/16/02 8:56:00 AM	17
4/12/02 10:58:00 AM	5	4/16/02 7:47:00 AM	16	4/16/02 8:22:00 AM	15	4/16/02 8:57:00 AM	31
4/12/02 10:59:00 AM	5	4/16/02 7:48:00 AM	17	4/16/02 8:23:00 AM	16	4/16/02 8:58:00 AM	17
4/12/02 11:00:00 AM	6	4/16/02 7:49:00 AM	16	4/16/02 8:24:00 AM	16	4/16/02 8:59:00 AM	14
4/12/02 11:01:00 AM	6	4/16/02 7:50:00 AM	17	4/16/02 8:25:00 AM	14	4/16/02 9:00:00 AM	14
4/12/02 11:02:00 AM	5	4/16/02 7:51:00 AM	16	4/16/02 8:26:00 AM	15	4/16/02 9:01:00 AM	17
4/12/02 11:03:00 AM	7	4/16/02 7:52:00 AM	16	4/16/02 8:27:00 AM	18	4/16/02 9:02:00 AM	14
4/12/02 11:04:00 AM	8	4/16/02 7:53:00 AM	16	4/16/02 8:28:00 AM	14	4/16/02 9:03:00 AM	15
4/12/02 11:05:00 AM	8	4/16/02 7:54:00 AM	16	4/16/02 8:29:00 AM	15	4/16/02 9:04:00 AM	14
4/12/02 11:06:00 AM	7	4/16/02 7:55:00 AM	17	4/16/02 8:30:00 AM	14	4/16/02 9:05:00 AM	15
4/12/02 11:07:00 AM	12	4/16/02 7:56:00 AM	17	4/16/02 8:31:00 AM	15	4/16/02 9:06:00 AM	14
4/12/02 11:08:00 AM	15	4/16/02 7:57:00 AM	18	4/16/02 8:32:00 AM	17	4/16/02 9:07:00 AM	14
4/12/02 11:09:00 AM	11	4/16/02 7:58:00 AM	18	4/16/02 8:33:00 AM	15	4/16/02 9:08:00 AM	16
4/12/02 11:10:00 AM	12	4/16/02 7:59:00 AM	18	4/16/02 8:34:00 AM	15	4/16/02 9:09:00 AM	16
4/12/02 11:11:00 AM	10	4/16/02 8:00:00 AM	18	4/16/02 8:35:00 AM	14	4/16/02 9:10:00 AM	14
4/12/02 11:12:00 AM	11	4/16/02 8:01:00 AM	16	4/16/02 8:36:00 AM	13	4/16/02 9:11:00 AM	14
4/12/02 11:13:00 AM	17	4/16/02 8:02:00 AM	18	4/16/02 8:37:00 AM	16	4/16/02 9:12:00 AM	14
4/12/02 11:14:00 AM	35	4/16/02 8:03:00 AM	25	4/16/02 8:38:00 AM	15	4/16/02 9:13:00 AM	13
4/12/02 11:15:00 AM	10	4/16/02 8:04:00 AM	23	4/16/02 8:39:00 AM	13	4/16/02 9:14:00 AM	13
4/12/02 11:16:00 AM	11	4/16/02 8:05:00 AM	16	4/16/02 8:40:00 AM	14	4/16/02 9:15:00 AM	16
4/12/02 11:17:00 AM	8	4/16/02 8:06:00 AM	19	4/16/02 8:41:00 AM	13	4/16/02 9:16:00 AM	16
4/12/02 11:18:00 AM	7	4/16/02 8:07:00 AM	16	4/16/02 8:42:00 AM	16	4/16/02 9:17:00 AM	14
4/12/02 11:19:00 AM	7	4/16/02 8:08:00 AM	15	4/16/02 8:43:00 AM	13	4/16/02 9:18:00 AM	14
4/12/02 11:20:00 AM	8	4/16/02 8:09:00 AM	15	4/16/02 8:44:00 AM	12	4/16/02 9:19:00 AM	13
4/12/02 11:21:00 AM	6	4/16/02 8:10:00 AM	18	4/16/02 8:45:00 AM	13	4/16/02 9:20:00 AM	14
4/12/02 11:22:00 AM	8	4/16/02 8:11:00 AM	16	4/16/02 8:46:00 AM	13	4/16/02 9:21:00 AM	14
4/12/02 11:23:00 AM	7	4/16/02 8:12:00 AM	15	4/16/02 8:47:00 AM	12	4/16/02 9:22:00 AM	14
4/12/02 11:24:00 AM	9	4/16/02 8:13:00 AM	17	4/16/02 8:48:00 AM	13	4/16/02 9:23:00 AM	14
4/16/02 7:39:00 AM	18	4/16/02 8:14:00 AM	14	4/16/02 8:49:00 AM	15	4/16/02 9:24:00 AM	13

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/16/02 9:25:00 AM	13	4/16/02 10:00:00 AM	17	4/16/02 10:35:00 AM	11	4/16/02 11:10:00 AM	10
4/16/02 9:26:00 AM	12	4/16/02 10:01:00 AM	16	4/16/02 10:36:00 AM	11	4/16/02 11:11:00 AM	10
4/16/02 9:27:00 AM	13	4/16/02 10:02:00 AM	13	4/16/02 10:37:00 AM	11	4/16/02 11:12:00 AM	10
4/16/02 9:28:00 AM	17	4/16/02 10:03:00 AM	13	4/16/02 10:38:00 AM	11	4/16/02 11:13:00 AM	10
4/16/02 9:29:00 AM	12	4/16/02 10:04:00 AM	13	4/16/02 10:39:00 AM	11	4/16/02 11:14:00 AM	10
4/16/02 9:30:00 AM	12	4/16/02 10:05:00 AM	12	4/16/02 10:40:00 AM	10	4/16/02 11:15:00 AM	10
4/16/02 9:31:00 AM	13	4/16/02 10:06:00 AM	13	4/16/02 10:41:00 AM	10	4/16/02 11:16:00 AM	12
4/16/02 9:32:00 AM	12	4/16/02 10:07:00 AM	14	4/16/02 10:42:00 AM	11	4/16/02 11:17:00 AM	14
4/16/02 9:33:00 AM	14	4/16/02 10:08:00 AM	12	4/16/02 10:43:00 AM	11	4/16/02 11:18:00 AM	10
4/16/02 9:34:00 AM	13	4/16/02 10:09:00 AM	13	4/16/02 10:44:00 AM	12	4/16/02 11:19:00 AM	11
4/16/02 9:35:00 AM	18	4/16/02 10:10:00 AM	12	4/16/02 10:45:00 AM	12	4/16/02 11:20:00 AM	10
4/16/02 9:36:00 AM	15	4/16/02 10:11:00 AM	12	4/16/02 10:46:00 AM	13	4/16/02 11:21:00 AM	10
4/16/02 9:37:00 AM	13	4/16/02 10:12:00 AM	12	4/16/02 10:47:00 AM	12	4/16/02 11:22:00 AM	9
4/16/02 9:38:00 AM	13	4/16/02 10:13:00 AM	14	4/16/02 10:48:00 AM	11	4/16/02 11:23:00 AM	9
4/16/02 9:39:00 AM	13	4/16/02 10:14:00 AM	13	4/16/02 10:49:00 AM	15	4/16/02 11:24:00 AM	9
4/16/02 9:40:00 AM	12	4/16/02 10:15:00 AM	12	4/16/02 10:50:00 AM	12	4/16/02 11:25:00 AM	10
4/16/02 9:41:00 AM	13	4/16/02 10:16:00 AM	13	4/16/02 10:51:00 AM	14	4/16/02 11:26:00 AM	10
4/16/02 9:42:00 AM	14	4/16/02 10:17:00 AM	12	4/16/02 10:52:00 AM	12	4/16/02 11:27:00 AM	10
4/16/02 9:43:00 AM	14	4/16/02 10:18:00 AM	13	4/16/02 10:53:00 AM	12	4/16/02 11:28:00 AM	9
4/16/02 9:44:00 AM	14	4/16/02 10:19:00 AM	14	4/16/02 10:54:00 AM	12	4/16/02 11:29:00 AM	11
4/16/02 9:45:00 AM	13	4/16/02 10:20:00 AM	12	4/16/02 10:55:00 AM	13	4/16/02 11:30:00 AM	10
4/16/02 9:46:00 AM	13	4/16/02 10:21:00 AM	13	4/16/02 10:56:00 AM	11	4/16/02 11:31:00 AM	10
4/16/02 9:47:00 AM	15	4/16/02 10:22:00 AM	13	4/16/02 10:57:00 AM	12	4/16/02 11:32:00 AM	10
4/16/02 9:48:00 AM	13	4/16/02 10:23:00 AM	13	4/16/02 10:58:00 AM	11	4/16/02 11:33:00 AM	10
4/16/02 9:49:00 AM	13	4/16/02 10:24:00 AM	13	4/16/02 10:59:00 AM	11	4/16/02 11:34:00 AM	9
4/16/02 9:50:00 AM	13	4/16/02 10:25:00 AM	18	4/16/02 11:00:00 AM	11	4/16/02 11:35:00 AM	10
4/16/02 9:51:00 AM	12	4/16/02 10:26:00 AM	12	4/16/02 11:01:00 AM	11	4/16/02 11:36:00 AM	10
4/16/02 9:52:00 AM	14	4/16/02 10:27:00 AM	12	4/16/02 11:02:00 AM	10	4/16/02 11:37:00 AM	9
4/16/02 9:53:00 AM	15	4/16/02 10:28:00 AM	12	4/16/02 11:03:00 AM	10	4/16/02 11:38:00 AM	9
4/16/02 9:54:00 AM	19	4/16/02 10:29:00 AM	15	4/16/02 11:04:00 AM	10	4/16/02 11:39:00 AM	9
4/16/02 9:55:00 AM	13	4/16/02 10:30:00 AM	13	4/16/02 11:05:00 AM	10	4/16/02 11:40:00 AM	9
4/16/02 9:56:00 AM	12	4/16/02 10:31:00 AM	12	4/16/02 11:06:00 AM	10	4/16/02 11:41:00 AM	9
4/16/02 9:57:00 AM	12	4/16/02 10:32:00 AM	14	4/16/02 11:07:00 AM	11	4/16/02 11:42:00 AM	9
4/16/02 9:58:00 AM	12	4/16/02 10:33:00 AM	13	4/16/02 11:08:00 AM	10	4/16/02 11:43:00 AM	8
4/16/02 9:59:00 AM	14	4/16/02 10:34:00 AM	12	4/16/02 11:09:00 AM	10	4/16/02 11:44:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/16/02 11:45:00 AM	9	4/16/02 12:20:00 PM	9	4/16/02 12:55:00 PM	8	4/16/02 1:30:00 PM	8
4/16/02 11:46:00 AM	9	4/16/02 12:21:00 PM	6	4/16/02 12:56:00 PM	8	4/16/02 1:31:00 PM	8
4/16/02 11:47:00 AM	9	4/16/02 12:22:00 PM	8	4/16/02 12:57:00 PM	7	4/16/02 1:32:00 PM	8
4/16/02 11:48:00 AM	10	4/16/02 12:23:00 PM	8	4/16/02 12:58:00 PM	8	4/16/02 1:33:00 PM	8
4/16/02 11:49:00 AM	9	4/16/02 12:24:00 PM	8	4/16/02 12:59:00 PM	9	4/16/02 1:34:00 PM	7
4/16/02 11:50:00 AM	9	4/16/02 12:25:00 PM	7	4/16/02 1:00:00 PM	7	4/16/02 1:35:00 PM	9
4/16/02 11:51:00 AM	9	4/16/02 12:26:00 PM	9	4/16/02 1:01:00 PM	8	4/16/02 1:36:00 PM	8
4/16/02 11:52:00 AM	10	4/16/02 12:27:00 PM	8	4/16/02 1:02:00 PM	8	4/16/02 1:37:00 PM	8
4/16/02 11:53:00 AM	9	4/16/02 12:28:00 PM	7	4/16/02 1:03:00 PM	8	4/16/02 1:38:00 PM	8
4/16/02 11:54:00 AM	8	4/16/02 12:29:00 PM	7	4/16/02 1:04:00 PM	8	4/16/02 1:39:00 PM	8
4/16/02 11:55:00 AM	8	4/16/02 12:30:00 PM	8	4/16/02 1:05:00 PM	8	4/16/02 1:40:00 PM	8
4/16/02 11:56:00 AM	10	4/16/02 12:31:00 PM	12	4/16/02 1:06:00 PM	8	4/16/02 1:41:00 PM	8
4/16/02 11:57:00 AM	9	4/16/02 12:32:00 PM	7	4/16/02 1:07:00 PM	8	4/16/02 1:42:00 PM	8
4/16/02 11:58:00 AM	8	4/16/02 12:33:00 PM	8	4/16/02 1:08:00 PM	9	4/16/02 1:43:00 PM	8
4/16/02 11:59:00 AM	8	4/16/02 12:34:00 PM	9	4/16/02 1:09:00 PM	8	4/16/02 1:44:00 PM	7
4/16/02 12:00:00 PM	8	4/16/02 12:35:00 PM	10	4/16/02 1:10:00 PM	7	4/16/02 1:45:00 PM	8
4/16/02 12:01:00 PM	8	4/16/02 12:36:00 PM	11	4/16/02 1:11:00 PM	7	4/16/02 1:46:00 PM	8
4/16/02 12:02:00 PM	9	4/16/02 12:37:00 PM	10	4/16/02 1:12:00 PM	7	4/16/02 1:47:00 PM	8
4/16/02 12:03:00 PM	8	4/16/02 12:38:00 PM	8	4/16/02 1:13:00 PM	8	4/16/02 1:48:00 PM	8
4/16/02 12:04:00 PM	9	4/16/02 12:39:00 PM	8	4/16/02 1:14:00 PM	8	4/16/02 1:49:00 PM	8
4/16/02 12:05:00 PM	8	4/16/02 12:40:00 PM	9	4/16/02 1:15:00 PM	9	4/16/02 1:50:00 PM	9
4/16/02 12:06:00 PM	8	4/16/02 12:41:00 PM	8	4/16/02 1:16:00 PM	7	4/16/02 1:51:00 PM	7
4/16/02 12:07:00 PM	8	4/16/02 12:42:00 PM	9	4/16/02 1:17:00 PM	7	4/16/02 1:52:00 PM	9
4/16/02 12:08:00 PM	8	4/16/02 12:43:00 PM	8	4/16/02 1:18:00 PM	8	4/16/02 1:53:00 PM	8
4/16/02 12:09:00 PM	8	4/16/02 12:44:00 PM	8	4/16/02 1:19:00 PM	8	4/16/02 1:54:00 PM	8
4/16/02 12:10:00 PM	9	4/16/02 12:45:00 PM	8	4/16/02 1:20:00 PM	7	4/16/02 1:55:00 PM	9
4/16/02 12:11:00 PM	7	4/16/02 12:46:00 PM	8	4/16/02 1:21:00 PM	8	4/16/02 1:56:00 PM	8
4/16/02 12:12:00 PM	8	4/16/02 12:47:00 PM	8	4/16/02 1:22:00 PM	10	4/16/02 1:57:00 PM	7
4/16/02 12:13:00 PM	7	4/16/02 12:48:00 PM	9	4/16/02 1:23:00 PM	8	4/16/02 1:58:00 PM	7
4/16/02 12:14:00 PM	7	4/16/02 12:49:00 PM	8	4/16/02 1:24:00 PM	7	4/16/02 1:59:00 PM	9
4/16/02 12:15:00 PM	7	4/16/02 12:50:00 PM	8	4/16/02 1:25:00 PM	8	4/16/02 2:00:00 PM	7
4/16/02 12:16:00 PM	8	4/16/02 12:51:00 PM	8	4/16/02 1:26:00 PM	8	4/16/02 2:01:00 PM	9
4/16/02 12:17:00 PM	14	4/16/02 12:52:00 PM	8	4/16/02 1:27:00 PM	8	4/16/02 2:02:00 PM	8
4/16/02 12:18:00 PM	6	4/16/02 12:53:00 PM	8	4/16/02 1:28:00 PM	7	4/16/02 2:03:00 PM	8
4/16/02 12:19:00 PM	6	4/16/02 12:54:00 PM	8	4/16/02 1:29:00 PM	8	4/16/02 2:04:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/16/02 2:05:00 PM	9	4/16/02 2:40:00 PM	8	4/16/02 3:15:00 PM	8	4/16/02 3:50:00 PM	6
4/16/02 2:06:00 PM	9	4/16/02 2:41:00 PM	10	4/16/02 3:16:00 PM	8	4/16/02 3:51:00 PM	7
4/16/02 2:07:00 PM	8	4/16/02 2:42:00 PM	8	4/16/02 3:17:00 PM	8	4/16/02 3:52:00 PM	7
4/16/02 2:08:00 PM	8	4/16/02 2:43:00 PM	8	4/16/02 3:18:00 PM	8	4/16/02 3:53:00 PM	6
4/16/02 2:09:00 PM	9	4/16/02 2:44:00 PM	8	4/16/02 3:19:00 PM	8	4/16/02 3:54:00 PM	6
4/16/02 2:10:00 PM	8	4/16/02 2:45:00 PM	9	4/16/02 3:20:00 PM	7	4/16/02 3:55:00 PM	6
4/16/02 2:11:00 PM	8	4/16/02 2:46:00 PM	10	4/16/02 3:21:00 PM	7	4/16/02 3:56:00 PM	7
4/16/02 2:12:00 PM	9	4/16/02 2:47:00 PM	8	4/16/02 3:22:00 PM	6	4/16/02 3:57:00 PM	6
4/16/02 2:13:00 PM	8	4/16/02 2:48:00 PM	9	4/16/02 3:23:00 PM	7	4/16/02 3:58:00 PM	6
4/16/02 2:14:00 PM	8	4/16/02 2:49:00 PM	8	4/16/02 3:24:00 PM	6	4/16/02 3:59:00 PM	6
4/16/02 2:15:00 PM	9	4/16/02 2:50:00 PM	10	4/16/02 3:25:00 PM	7	4/16/02 4:00:00 PM	5
4/16/02 2:16:00 PM	8	4/16/02 2:51:00 PM	9	4/16/02 3:26:00 PM	6	4/16/02 4:01:00 PM	7
4/16/02 2:17:00 PM	7	4/16/02 2:52:00 PM	9	4/16/02 3:27:00 PM	6	4/16/02 4:02:00 PM	5
4/16/02 2:18:00 PM	10	4/16/02 2:53:00 PM	9	4/16/02 3:28:00 PM	7	4/16/02 4:03:00 PM	5
4/16/02 2:19:00 PM	9	4/16/02 2:54:00 PM	8	4/16/02 3:29:00 PM	8	4/16/02 4:04:00 PM	6
4/16/02 2:20:00 PM	10	4/16/02 2:55:00 PM	8	4/16/02 3:30:00 PM	7	4/16/02 4:05:00 PM	6
4/16/02 2:21:00 PM	9	4/16/02 2:56:00 PM	8	4/16/02 3:31:00 PM	6	4/16/02 4:06:00 PM	6
4/16/02 2:22:00 PM	10	4/16/02 2:57:00 PM	8	4/16/02 3:32:00 PM	6	4/16/02 4:07:00 PM	6
4/16/02 2:23:00 PM	8	4/16/02 2:58:00 PM	8	4/16/02 3:33:00 PM	7	4/16/02 4:08:00 PM	6
4/16/02 2:24:00 PM	9	4/16/02 2:59:00 PM	8	4/16/02 3:34:00 PM	7	4/16/02 4:09:00 PM	6
4/16/02 2:25:00 PM	8	4/16/02 3:00:00 PM	8	4/16/02 3:35:00 PM	6	4/16/02 4:10:00 PM	5
4/16/02 2:26:00 PM	8	4/16/02 3:01:00 PM	7	4/16/02 3:36:00 PM	6	4/16/02 4:11:00 PM	6
4/16/02 2:27:00 PM	8	4/16/02 3:02:00 PM	8	4/16/02 3:37:00 PM	6	4/16/02 4:12:00 PM	6
4/16/02 2:28:00 PM	10	4/16/02 3:03:00 PM	8	4/16/02 3:38:00 PM	6	4/16/02 4:13:00 PM	6
4/16/02 2:29:00 PM	8	4/16/02 3:04:00 PM	7	4/16/02 3:39:00 PM	8	4/16/02 4:14:00 PM	6
4/16/02 2:30:00 PM	8	4/16/02 3:05:00 PM	7	4/16/02 3:40:00 PM	6	4/16/02 4:15:00 PM	5
4/16/02 2:31:00 PM	9	4/16/02 3:06:00 PM	8	4/16/02 3:41:00 PM	6	4/16/02 4:16:00 PM	5
4/16/02 2:32:00 PM	8	4/16/02 3:07:00 PM	8	4/16/02 3:42:00 PM	7	4/16/02 4:17:00 PM	7
4/16/02 2:33:00 PM	8	4/16/02 3:08:00 PM	7	4/16/02 3:43:00 PM	6	4/16/02 4:18:00 PM	6
4/16/02 2:34:00 PM	8	4/16/02 3:09:00 PM	8	4/16/02 3:44:00 PM	7	4/16/02 4:19:00 PM	6
4/16/02 2:35:00 PM	8	4/16/02 3:10:00 PM	8	4/16/02 3:45:00 PM	6	4/16/02 4:20:00 PM	5
4/16/02 2:36:00 PM	8	4/16/02 3:11:00 PM	8	4/16/02 3:46:00 PM	6	4/16/02 4:21:00 PM	5
4/16/02 2:37:00 PM	9	4/16/02 3:12:00 PM	8	4/16/02 3:47:00 PM	7	4/16/02 4:22:00 PM	5
4/16/02 2:38:00 PM	9	4/16/02 3:13:00 PM	8	4/16/02 3:48:00 PM	7	4/16/02 4:23:00 PM	5
4/16/02 2:39:00 PM	8	4/16/02 3:14:00 PM	8	4/16/02 3:49:00 PM	6	4/16/02 4:24:00 PM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/16/02 4:25:00 PM	5	4/16/02 5:00:00 PM	6	4/17/02 11:04:00 AM	6	4/17/02 11:39:00 AM	7
4/16/02 4:26:00 PM	6	4/16/02 5:01:00 PM	6	4/17/02 11:05:00 AM	5	4/17/02 11:40:00 AM	6
4/16/02 4:27:00 PM	5	4/16/02 5:02:00 PM	7	4/17/02 11:06:00 AM	7	4/17/02 11:41:00 AM	6
4/16/02 4:28:00 PM	6	4/16/02 5:03:00 PM	7	4/17/02 11:07:00 AM	10	4/17/02 11:42:00 AM	6
4/16/02 4:29:00 PM	7	4/16/02 5:04:00 PM	7	4/17/02 11:08:00 AM	7	4/17/02 11:43:00 AM	6
4/16/02 4:30:00 PM	6	4/16/02 5:05:00 PM	8	4/17/02 11:09:00 AM	9	4/17/02 11:44:00 AM	5
4/16/02 4:31:00 PM	6	4/16/02 5:06:00 PM	7	4/17/02 11:10:00 AM	8	4/17/02 11:45:00 AM	6
4/16/02 4:32:00 PM	10	4/16/02 5:07:00 PM	10	4/17/02 11:11:00 AM	7	4/17/02 11:46:00 AM	4
4/16/02 4:33:00 PM	20	4/16/02 5:08:00 PM	7	4/17/02 11:12:00 AM	5	4/17/02 11:47:00 AM	6
4/16/02 4:34:00 PM	5	4/16/02 5:09:00 PM	5	4/17/02 11:13:00 AM	6	4/17/02 11:48:00 AM	6
4/16/02 4:35:00 PM	6	4/16/02 5:10:00 PM	6	4/17/02 11:14:00 AM	6	4/17/02 11:49:00 AM	6
4/16/02 4:36:00 PM	6	4/16/02 5:11:00 PM	5	4/17/02 11:15:00 AM	5	4/17/02 11:50:00 AM	6
4/16/02 4:37:00 PM	6	4/16/02 5:12:00 PM	5	4/17/02 11:16:00 AM	6	4/17/02 11:51:00 AM	7
4/16/02 4:38:00 PM	7	4/16/02 5:13:00 PM	5	4/17/02 11:17:00 AM	4	4/17/02 11:52:00 AM	5
4/16/02 4:39:00 PM	6	4/16/02 5:14:00 PM	5	4/17/02 11:18:00 AM	5	4/17/02 11:53:00 AM	6
4/16/02 4:40:00 PM	7	4/16/02 5:15:00 PM	6	4/17/02 11:19:00 AM	4	4/17/02 11:54:00 AM	5
4/16/02 4:41:00 PM	7	4/16/02 5:16:00 PM	6	4/17/02 11:20:00 AM	5	4/17/02 11:55:00 AM	5
4/16/02 4:42:00 PM	6	4/16/02 5:17:00 PM	7	4/17/02 11:21:00 AM	4	4/17/02 11:56:00 AM	5
4/16/02 4:43:00 PM	7	4/16/02 5:18:00 PM	12	4/17/02 11:22:00 AM	5	4/17/02 11:57:00 AM	6
4/16/02 4:44:00 PM	6	4/17/02 10:48:00 AM	30	4/17/02 11:23:00 AM	5	4/17/02 11:58:00 AM	6
4/16/02 4:45:00 PM	8	4/17/02 10:49:00 AM	27	4/17/02 11:24:00 AM	5	4/17/02 11:59:00 AM	6
4/16/02 4:46:00 PM	6	4/17/02 10:50:00 AM	29	4/17/02 11:25:00 AM	5	4/17/02 12:00:00 PM	6
4/16/02 4:47:00 PM	7	4/17/02 10:51:00 AM	24	4/17/02 11:26:00 AM	5	4/17/02 12:01:00 PM	6
4/16/02 4:48:00 PM	7	4/17/02 10:52:00 AM	7	4/17/02 11:27:00 AM	4	4/17/02 12:02:00 PM	5
4/16/02 4:49:00 PM	6	4/17/02 10:53:00 AM	7	4/17/02 11:28:00 AM	4	4/17/02 12:03:00 PM	6
4/16/02 4:50:00 PM	6	4/17/02 10:54:00 AM	7	4/17/02 11:29:00 AM	5	4/17/02 12:04:00 PM	7
4/16/02 4:51:00 PM	6	4/17/02 10:55:00 AM	6	4/17/02 11:30:00 AM	6	4/17/02 12:05:00 PM	5
4/16/02 4:52:00 PM	6	4/17/02 10:56:00 AM	7	4/17/02 11:31:00 AM	5	4/17/02 12:06:00 PM	7
4/16/02 4:53:00 PM	7	4/17/02 10:57:00 AM	8	4/17/02 11:32:00 AM	5	4/17/02 12:07:00 PM	6
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4/16/02 4:55:00 PM	7	4/17/02 10:59:00 AM	6	4/17/02 11:34:00 AM	5	4/17/02 12:09:00 PM	6
4/16/02 4:56:00 PM	7	4/17/02 11:00:00 AM	6	4/17/02 11:35:00 AM	5	4/17/02 12:10:00 PM	6
4/16/02 4:57:00 PM	6	4/17/02 11:01:00 AM	18	4/17/02 11:36:00 AM	5	4/17/02 12:11:00 PM	6
4/16/02 4:58:00 PM	7	4/17/02 11:02:00 AM	20	4/17/02 11:37:00 AM	5	4/17/02 12:12:00 PM	7
4/16/02 4:59:00 PM	7	4/17/02 11:03:00 AM	9	4/17/02 11:38:00 AM	6	4/17/02 12:13:00 PM	60

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/17/02 12:14:00 PM	9	4/17/02 12:49:00 PM	7	4/17/02 1:24:00 PM	6	4/17/02 1:59:00 PM	6
4/17/02 12:15:00 PM	9	4/17/02 12:50:00 PM	6	4/17/02 1:25:00 PM	6	4/17/02 2:00:00 PM	6
4/17/02 12:16:00 PM	7	4/17/02 12:51:00 PM	6	4/17/02 1:26:00 PM	6	4/17/02 2:01:00 PM	5
4/17/02 12:17:00 PM	6	4/17/02 12:52:00 PM	6	4/17/02 1:27:00 PM	6	4/17/02 2:02:00 PM	5
4/17/02 12:18:00 PM	7	4/17/02 12:53:00 PM	6	4/17/02 1:28:00 PM	6	4/17/02 2:03:00 PM	5
4/17/02 12:19:00 PM	6	4/17/02 12:54:00 PM	5	4/17/02 1:29:00 PM	6	4/17/02 2:04:00 PM	6
4/17/02 12:20:00 PM	6	4/17/02 12:55:00 PM	7	4/17/02 1:30:00 PM	6	4/17/02 2:05:00 PM	7
4/17/02 12:21:00 PM	6	4/17/02 12:56:00 PM	5	4/17/02 1:31:00 PM	6	4/17/02 2:06:00 PM	8
4/17/02 12:22:00 PM	7	4/17/02 12:57:00 PM	5	4/17/02 1:32:00 PM	6	4/17/02 2:07:00 PM	6
4/17/02 12:23:00 PM	6	4/17/02 12:58:00 PM	6	4/17/02 1:33:00 PM	6	4/17/02 2:08:00 PM	6
4/17/02 12:24:00 PM	8	4/17/02 12:59:00 PM	7	4/17/02 1:34:00 PM	6	4/17/02 2:09:00 PM	7
4/17/02 12:25:00 PM	7	4/17/02 1:00:00 PM	6	4/17/02 1:35:00 PM	6	4/17/02 2:10:00 PM	6
4/17/02 12:26:00 PM	8	4/17/02 1:01:00 PM	5	4/17/02 1:36:00 PM	6	4/17/02 2:11:00 PM	7
4/17/02 12:27:00 PM	7	4/17/02 1:02:00 PM	5	4/17/02 1:37:00 PM	6	4/17/02 2:12:00 PM	5
4/17/02 12:28:00 PM	6	4/17/02 1:03:00 PM	6	4/17/02 1:38:00 PM	6	4/17/02 2:13:00 PM	5
4/17/02 12:29:00 PM	7	4/17/02 1:04:00 PM	5	4/17/02 1:39:00 PM	6	4/17/02 2:14:00 PM	5
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4/17/02 12:31:00 PM	6	4/17/02 1:06:00 PM	6	4/17/02 1:41:00 PM	6	4/17/02 2:16:00 PM	7
4/17/02 12:32:00 PM	6	4/17/02 1:07:00 PM	6	4/17/02 1:42:00 PM	6	4/17/02 2:17:00 PM	6
4/17/02 12:33:00 PM	5	4/17/02 1:08:00 PM	6	4/17/02 1:43:00 PM	5	4/17/02 2:18:00 PM	6
4/17/02 12:34:00 PM	7	4/17/02 1:09:00 PM	6	4/17/02 1:44:00 PM	6	4/17/02 2:19:00 PM	7
4/17/02 12:35:00 PM	6	4/17/02 1:10:00 PM	6	4/17/02 1:45:00 PM	5	4/17/02 2:20:00 PM	6
4/17/02 12:36:00 PM	6	4/17/02 1:11:00 PM	6	4/17/02 1:46:00 PM	5	4/17/02 2:21:00 PM	5
4/17/02 12:37:00 PM	7	4/17/02 1:12:00 PM	7	4/17/02 1:47:00 PM	6	4/17/02 2:22:00 PM	5
4/17/02 12:38:00 PM	7	4/17/02 1:13:00 PM	6	4/17/02 1:48:00 PM	6	4/17/02 2:23:00 PM	5
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4/17/02 12:41:00 PM	6	4/17/02 1:16:00 PM	6	4/17/02 1:51:00 PM	5	4/17/02 2:26:00 PM	5
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4/17/02 12:47:00 PM	6	4/17/02 1:22:00 PM	6	4/17/02 1:57:00 PM	6	4/17/02 2:32:00 PM	5
4/17/02 12:48:00 PM	6	4/17/02 1:23:00 PM	7	4/17/02 1:58:00 PM	6	4/17/02 2:33:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/17/02 2:34:00 PM	4	4/17/02 3:09:00 PM	5	4/17/02 3:44:00 PM	6	4/17/02 4:19:00 PM	7
4/17/02 2:35:00 PM	4	4/17/02 3:10:00 PM	5	4/17/02 3:45:00 PM	5	4/17/02 4:20:00 PM	5
4/17/02 2:36:00 PM	5	4/17/02 3:11:00 PM	5	4/17/02 3:46:00 PM	5	4/17/02 4:21:00 PM	5
4/17/02 2:37:00 PM	5	4/17/02 3:12:00 PM	6	4/17/02 3:47:00 PM	6	4/17/02 4:22:00 PM	6
4/17/02 2:38:00 PM	5	4/17/02 3:13:00 PM	6	4/17/02 3:48:00 PM	5	4/17/02 4:23:00 PM	5
4/17/02 2:39:00 PM	5	4/17/02 3:14:00 PM	5	4/17/02 3:49:00 PM	5	4/17/02 4:24:00 PM	5
4/17/02 2:40:00 PM	6	4/17/02 3:15:00 PM	6	4/17/02 3:50:00 PM	5	4/17/02 4:25:00 PM	6
4/17/02 2:41:00 PM	5	4/17/02 3:16:00 PM	5	4/17/02 3:51:00 PM	5	4/17/02 4:26:00 PM	6
4/17/02 2:42:00 PM	4	4/17/02 3:17:00 PM	5	4/17/02 3:52:00 PM	5	4/17/02 4:27:00 PM	5
4/17/02 2:43:00 PM	5	4/17/02 3:18:00 PM	5	4/17/02 3:53:00 PM	6	4/17/02 4:28:00 PM	5
4/17/02 2:44:00 PM	4	4/17/02 3:19:00 PM	5	4/17/02 3:54:00 PM	6	4/17/02 4:29:00 PM	7
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4/17/02 3:04:00 PM	5	4/17/02 3:39:00 PM	5	4/17/02 4:14:00 PM	5	4/17/02 4:49:00 PM	5
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4/17/02 3:08:00 PM	6	4/17/02 3:43:00 PM	6	4/17/02 4:18:00 PM	5	4/17/02 4:53:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
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4/17/02 4:55:00 PM	5	4/17/02 5:30:00 PM	4	4/17/02 6:05:00 PM	4	4/18/02 7:57:00 AM	6
4/17/02 4:56:00 PM	5	4/17/02 5:31:00 PM	6	4/17/02 6:06:00 PM	4	4/18/02 7:58:00 AM	5
4/17/02 4:57:00 PM	5	4/17/02 5:32:00 PM	4	4/17/02 6:07:00 PM	3	4/18/02 7:59:00 AM	6
4/17/02 4:58:00 PM	6	4/17/02 5:33:00 PM	5	4/17/02 6:08:00 PM	4	4/18/02 8:00:00 AM	5
4/17/02 4:59:00 PM	5	4/17/02 5:34:00 PM	8	4/17/02 6:09:00 PM	4	4/18/02 8:01:00 AM	6
4/17/02 5:00:00 PM	5	4/17/02 5:35:00 PM	5	4/17/02 6:10:00 PM	4	4/18/02 8:02:00 AM	6
4/17/02 5:01:00 PM	5	4/17/02 5:36:00 PM	4	4/17/02 6:11:00 PM	4	4/18/02 8:03:00 AM	6
4/17/02 5:02:00 PM	6	4/17/02 5:37:00 PM	4	4/17/02 6:12:00 PM	5	4/18/02 8:04:00 AM	6
4/17/02 5:03:00 PM	6	4/17/02 5:38:00 PM	4	4/17/02 6:13:00 PM	3	4/18/02 8:05:00 AM	5
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4/17/02 5:17:00 PM	3	4/17/02 5:52:00 PM	4	4/18/02 7:44:00 AM	8	4/18/02 8:19:00 AM	5
4/17/02 5:18:00 PM	5	4/17/02 5:53:00 PM	4	4/18/02 7:45:00 AM	6	4/18/02 8:20:00 AM	5
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Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/18/02 8:31:00 AM	5	4/18/02 9:06:00 AM	5	4/19/02 7:57:00 AM	5	4/19/02 8:32:00 AM	8
4/18/02 8:32:00 AM	5	4/18/02 9:07:00 AM	6	4/19/02 7:58:00 AM	6	4/19/02 8:33:00 AM	8
4/18/02 8:33:00 AM	10	4/18/02 9:08:00 AM	5	4/19/02 7:59:00 AM	6	4/19/02 8:34:00 AM	7
4/18/02 8:34:00 AM	12	4/18/02 9:09:00 AM	5	4/19/02 8:00:00 AM	6	4/19/02 8:35:00 AM	7
4/18/02 8:35:00 AM	5	4/18/02 9:10:00 AM	5	4/19/02 8:01:00 AM	6	4/19/02 8:36:00 AM	8
4/18/02 8:36:00 AM	5	4/19/02 7:27:00 AM	8	4/19/02 8:02:00 AM	6	4/19/02 8:37:00 AM	7
4/18/02 8:37:00 AM	6	4/19/02 7:28:00 AM	7	4/19/02 8:03:00 AM	6	4/19/02 8:38:00 AM	7
4/18/02 8:38:00 AM	5	4/19/02 7:29:00 AM	5	4/19/02 8:04:00 AM	6	4/19/02 8:39:00 AM	7
4/18/02 8:39:00 AM	5	4/19/02 7:30:00 AM	5	4/19/02 8:05:00 AM	6	4/19/02 8:40:00 AM	7
4/18/02 8:40:00 AM	5	4/19/02 7:31:00 AM	8	4/19/02 8:06:00 AM	6	4/19/02 8:41:00 AM	7
4/18/02 8:41:00 AM	5	4/19/02 7:32:00 AM	5	4/19/02 8:07:00 AM	7	4/19/02 8:42:00 AM	7
4/18/02 8:42:00 AM	5	4/19/02 7:33:00 AM	6	4/19/02 8:08:00 AM	6	4/19/02 8:43:00 AM	7
4/18/02 8:43:00 AM	5	4/19/02 7:34:00 AM	5	4/19/02 8:09:00 AM	6	4/19/02 8:44:00 AM	7
4/18/02 8:44:00 AM	5	4/19/02 7:35:00 AM	6	4/19/02 8:10:00 AM	6	4/19/02 8:45:00 AM	7
4/18/02 8:45:00 AM	4	4/19/02 7:36:00 AM	6	4/19/02 8:11:00 AM	7	4/19/02 8:46:00 AM	7
4/18/02 8:46:00 AM	4	4/19/02 7:37:00 AM	5	4/19/02 8:12:00 AM	6	4/19/02 8:47:00 AM	7
4/18/02 8:47:00 AM	5	4/19/02 7:38:00 AM	6	4/19/02 8:13:00 AM	6	4/19/02 8:48:00 AM	7
4/18/02 8:48:00 AM	5	4/19/02 7:39:00 AM	6	4/19/02 8:14:00 AM	6	4/19/02 8:49:00 AM	7
4/18/02 8:49:00 AM	5	4/19/02 7:40:00 AM	6	4/19/02 8:15:00 AM	6	4/19/02 8:50:00 AM	7
4/18/02 8:50:00 AM	4	4/19/02 7:41:00 AM	8	4/19/02 8:16:00 AM	7	4/19/02 8:51:00 AM	7
4/18/02 8:51:00 AM	4	4/19/02 7:42:00 AM	6	4/19/02 8:17:00 AM	6	4/19/02 8:52:00 AM	7
4/18/02 8:52:00 AM	5	4/19/02 7:43:00 AM	6	4/19/02 8:18:00 AM	7	4/19/02 8:53:00 AM	7
4/18/02 8:53:00 AM	5	4/19/02 7:44:00 AM	6	4/19/02 8:19:00 AM	7	4/19/02 8:54:00 AM	7
4/18/02 8:54:00 AM	5	4/19/02 7:45:00 AM	6	4/19/02 8:20:00 AM	7	4/19/02 8:55:00 AM	7
4/18/02 8:55:00 AM	5	4/19/02 7:46:00 AM	6	4/19/02 8:21:00 AM	7	4/19/02 8:56:00 AM	6
4/18/02 8:56:00 AM	5	4/19/02 7:47:00 AM	6	4/19/02 8:22:00 AM	7	4/19/02 8:57:00 AM	7
4/18/02 8:57:00 AM	6	4/19/02 7:48:00 AM	6	4/19/02 8:23:00 AM	7	4/19/02 8:58:00 AM	7
4/18/02 8:58:00 AM	6	4/19/02 7:49:00 AM	6	4/19/02 8:24:00 AM	7	4/19/02 8:59:00 AM	7
4/18/02 8:59:00 AM	6	4/19/02 7:50:00 AM	7	4/19/02 8:25:00 AM	8	4/19/02 9:00:00 AM	6
4/18/02 9:00:00 AM	7	4/19/02 7:51:00 AM	6	4/19/02 8:26:00 AM	7	4/19/02 9:01:00 AM	7
4/18/02 9:01:00 AM	6	4/19/02 7:52:00 AM	6	4/19/02 8:27:00 AM	7	4/19/02 9:02:00 AM	6
4/18/02 9:02:00 AM	6	4/19/02 7:53:00 AM	6	4/19/02 8:28:00 AM	7	4/19/02 9:03:00 AM	7
4/18/02 9:03:00 AM	6	4/19/02 7:54:00 AM	6	4/19/02 8:29:00 AM	7	4/19/02 9:04:00 AM	6
4/18/02 9:04:00 AM	6	4/19/02 7:55:00 AM	5	4/19/02 8:30:00 AM	7	4/19/02 9:05:00 AM	7
4/18/02 9:05:00 AM	7	4/19/02 7:56:00 AM	6	4/19/02 8:31:00 AM	7	4/19/02 9:06:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/19/02 9:07:00 AM	7	4/19/02 9:42:00 AM	8	4/19/02 10:17:00 AM	15	4/19/02 10:52:00 AM	7
4/19/02 9:08:00 AM	7	4/19/02 9:43:00 AM	7	4/19/02 10:18:00 AM	11	4/19/02 10:53:00 AM	7
4/19/02 9:09:00 AM	7	4/19/02 9:44:00 AM	8	4/19/02 10:19:00 AM	9	4/19/02 10:54:00 AM	7
4/19/02 9:10:00 AM	7	4/19/02 9:45:00 AM	8	4/19/02 10:20:00 AM	7	4/19/02 10:55:00 AM	7
4/19/02 9:11:00 AM	7	4/19/02 9:46:00 AM	7	4/19/02 10:21:00 AM	7	4/19/02 10:56:00 AM	7
4/19/02 9:12:00 AM	7	4/19/02 9:47:00 AM	7	4/19/02 10:22:00 AM	7	4/19/02 10:57:00 AM	7
4/19/02 9:13:00 AM	8	4/19/02 9:48:00 AM	7	4/19/02 10:23:00 AM	7	4/19/02 10:58:00 AM	7
4/19/02 9:14:00 AM	8	4/19/02 9:49:00 AM	7	4/19/02 10:24:00 AM	7	4/19/02 10:59:00 AM	8
4/19/02 9:15:00 AM	7	4/19/02 9:50:00 AM	8	4/19/02 10:25:00 AM	7	4/19/02 11:00:00 AM	7
4/19/02 9:16:00 AM	7	4/19/02 9:51:00 AM	10	4/19/02 10:26:00 AM	7	4/19/02 11:01:00 AM	7
4/19/02 9:17:00 AM	8	4/19/02 9:52:00 AM	9	4/19/02 10:27:00 AM	7	4/19/02 11:02:00 AM	8
4/19/02 9:18:00 AM	8	4/19/02 9:53:00 AM	10	4/19/02 10:28:00 AM	7	4/19/02 11:03:00 AM	8
4/19/02 9:19:00 AM	8	4/19/02 9:54:00 AM	8	4/19/02 10:29:00 AM	7	4/19/02 11:04:00 AM	8
4/19/02 9:20:00 AM	7	4/19/02 9:55:00 AM	7	4/19/02 10:30:00 AM	8	4/19/02 11:05:00 AM	8
4/19/02 9:21:00 AM	8	4/19/02 9:56:00 AM	7	4/19/02 10:31:00 AM	7	4/19/02 11:06:00 AM	8
4/19/02 9:22:00 AM	8	4/19/02 9:57:00 AM	7	4/19/02 10:32:00 AM	8	4/19/02 11:07:00 AM	8
4/19/02 9:23:00 AM	8	4/19/02 9:58:00 AM	7	4/19/02 10:33:00 AM	7	4/19/02 11:08:00 AM	8
4/19/02 9:24:00 AM	8	4/19/02 9:59:00 AM	7	4/19/02 10:34:00 AM	7	4/19/02 11:09:00 AM	8
4/19/02 9:25:00 AM	8	4/19/02 10:00:00 AM	8	4/19/02 10:35:00 AM	7	4/19/02 11:10:00 AM	8
4/19/02 9:26:00 AM	8	4/19/02 10:01:00 AM	7	4/19/02 10:36:00 AM	7	4/19/02 11:11:00 AM	8
4/19/02 9:27:00 AM	8	4/19/02 10:02:00 AM	8	4/19/02 10:37:00 AM	7	4/19/02 11:12:00 AM	8
4/19/02 9:28:00 AM	8	4/19/02 10:03:00 AM	8	4/19/02 10:38:00 AM	7	4/19/02 11:13:00 AM	8
4/19/02 9:29:00 AM	9	4/19/02 10:04:00 AM	7	4/19/02 10:39:00 AM	7	4/19/02 11:14:00 AM	8
4/19/02 9:30:00 AM	8	4/19/02 10:05:00 AM	8	4/19/02 10:40:00 AM	7	4/19/02 11:15:00 AM	8
4/19/02 9:31:00 AM	8	4/19/02 10:06:00 AM	10	4/19/02 10:41:00 AM	7	4/19/02 11:16:00 AM	8
4/19/02 9:32:00 AM	8	4/19/02 10:07:00 AM	8	4/19/02 10:42:00 AM	7	4/19/02 11:17:00 AM	9
4/19/02 9:33:00 AM	8	4/19/02 10:08:00 AM	10	4/19/02 10:43:00 AM	7	4/19/02 11:18:00 AM	8
4/19/02 9:34:00 AM	8	4/19/02 10:09:00 AM	8	4/19/02 10:44:00 AM	7	4/19/02 11:19:00 AM	8
4/19/02 9:35:00 AM	7	4/19/02 10:10:00 AM	8	4/19/02 10:45:00 AM	7	4/19/02 11:20:00 AM	8
4/19/02 9:36:00 AM	8	4/19/02 10:11:00 AM	8	4/19/02 10:46:00 AM	7	4/19/02 11:21:00 AM	8
4/19/02 9:37:00 AM	8	4/19/02 10:12:00 AM	8	4/19/02 10:47:00 AM	7	4/19/02 11:22:00 AM	7
4/19/02 9:38:00 AM	8	4/19/02 10:13:00 AM	7	4/19/02 10:48:00 AM	7	4/19/02 11:23:00 AM	8
4/19/02 9:39:00 AM	8	4/19/02 10:14:00 AM	8	4/19/02 10:49:00 AM	7	4/19/02 11:24:00 AM	8
4/19/02 9:40:00 AM	8	4/19/02 10:15:00 AM	8	4/19/02 10:50:00 AM	7	4/19/02 11:25:00 AM	8
4/19/02 9:41:00 AM	8	4/19/02 10:16:00 AM	9	4/19/02 10:51:00 AM	7	4/19/02 11:26:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/19/02 11:27:00 AM	8	4/23/02 9:49:00 AM	4	4/23/02 10:24:00 AM	4	4/23/02 10:59:00 AM	4
4/19/02 11:28:00 AM	8	4/23/02 9:50:00 AM	4	4/23/02 10:25:00 AM	3	4/23/02 11:00:00 AM	3
4/19/02 11:29:00 AM	8	4/23/02 9:51:00 AM	3	4/23/02 10:26:00 AM	3	4/23/02 11:01:00 AM	3
4/19/02 11:30:00 AM	8	4/23/02 9:52:00 AM	4	4/23/02 10:27:00 AM	3	4/23/02 11:02:00 AM	3
4/19/02 11:31:00 AM	8	4/23/02 9:53:00 AM	4	4/23/02 10:28:00 AM	3	4/23/02 11:03:00 AM	3
4/19/02 11:32:00 AM	9	4/23/02 9:54:00 AM	5	4/23/02 10:29:00 AM	3	4/23/02 11:04:00 AM	3
4/19/02 11:33:00 AM	8	4/23/02 9:55:00 AM	4	4/23/02 10:30:00 AM	3	4/23/02 11:05:00 AM	3
4/19/02 11:34:00 AM	8	4/23/02 9:56:00 AM	4	4/23/02 10:31:00 AM	3	4/23/02 11:06:00 AM	4
4/19/02 11:35:00 AM	8	4/23/02 9:57:00 AM	4	4/23/02 10:32:00 AM	3	4/23/02 11:07:00 AM	3
4/19/02 11:36:00 AM	8	4/23/02 9:58:00 AM	4	4/23/02 10:33:00 AM	3	4/23/02 11:08:00 AM	3
4/19/02 11:37:00 AM	8	4/23/02 9:59:00 AM	4	4/23/02 10:34:00 AM	3	4/23/02 11:09:00 AM	2
4/19/02 11:38:00 AM	8	4/23/02 10:00:00 AM	4	4/23/02 10:35:00 AM	3	4/23/02 11:10:00 AM	3
4/19/02 11:39:00 AM	9	4/23/02 10:01:00 AM	4	4/23/02 10:36:00 AM	3	4/23/02 11:11:00 AM	2
4/19/02 11:40:00 AM	8	4/23/02 10:02:00 AM	4	4/23/02 10:37:00 AM	3	4/23/02 11:12:00 AM	2
4/23/02 9:28:00 AM	9	4/23/02 10:03:00 AM	6	4/23/02 10:38:00 AM	3	4/23/02 11:13:00 AM	3
4/23/02 9:29:00 AM	8	4/23/02 10:04:00 AM	4	4/23/02 10:39:00 AM	3	4/23/02 11:14:00 AM	3
4/23/02 9:30:00 AM	7	4/23/02 10:05:00 AM	4	4/23/02 10:40:00 AM	3	4/23/02 11:15:00 AM	2
4/23/02 9:31:00 AM	9	4/23/02 10:06:00 AM	3	4/23/02 10:41:00 AM	2	4/23/02 11:16:00 AM	2
4/23/02 9:32:00 AM	5	4/23/02 10:07:00 AM	4	4/23/02 10:42:00 AM	3	4/23/02 11:17:00 AM	2
4/23/02 9:33:00 AM	3	4/23/02 10:08:00 AM	4	4/23/02 10:43:00 AM	3	4/23/02 11:18:00 AM	3
4/23/02 9:34:00 AM	2	4/23/02 10:09:00 AM	4	4/23/02 10:44:00 AM	3	4/23/02 11:19:00 AM	3
4/23/02 9:35:00 AM	3	4/23/02 10:10:00 AM	4	4/23/02 10:45:00 AM	3	4/23/02 11:20:00 AM	3
4/23/02 9:36:00 AM	3	4/23/02 10:11:00 AM	4	4/23/02 10:46:00 AM	4	4/23/02 11:21:00 AM	4
4/23/02 9:37:00 AM	3	4/23/02 10:12:00 AM	4	4/23/02 10:47:00 AM	3	4/23/02 11:22:00 AM	4
4/23/02 9:38:00 AM	21	4/23/02 10:13:00 AM	3	4/23/02 10:48:00 AM	3	4/23/02 11:23:00 AM	2
4/23/02 9:39:00 AM	4	4/23/02 10:14:00 AM	4	4/23/02 10:49:00 AM	4	4/23/02 11:24:00 AM	4
4/23/02 9:40:00 AM	3	4/23/02 10:15:00 AM	4	4/23/02 10:50:00 AM	3	4/23/02 11:25:00 AM	4
4/23/02 9:41:00 AM	3	4/23/02 10:16:00 AM	4	4/23/02 10:51:00 AM	3	4/23/02 11:26:00 AM	3
4/23/02 9:42:00 AM	3	4/23/02 10:17:00 AM	4	4/23/02 10:52:00 AM	3	4/23/02 11:27:00 AM	3
4/23/02 9:43:00 AM	4	4/23/02 10:18:00 AM	6	4/23/02 10:53:00 AM	3	4/23/02 11:28:00 AM	3
4/23/02 9:44:00 AM	4	4/23/02 10:19:00 AM	5	4/23/02 10:54:00 AM	3	4/23/02 11:29:00 AM	3
4/23/02 9:45:00 AM	3	4/23/02 10:20:00 AM	3	4/23/02 10:55:00 AM	3	4/23/02 11:30:00 AM	3
4/23/02 9:46:00 AM	3	4/23/02 10:21:00 AM	4	4/23/02 10:56:00 AM	3	4/23/02 11:31:00 AM	3
4/23/02 9:47:00 AM	3	4/23/02 10:22:00 AM	8	4/23/02 10:57:00 AM	3	4/23/02 11:32:00 AM	3
4/23/02 9:48:00 AM	4	4/23/02 10:23:00 AM	4	4/23/02 10:58:00 AM	3	4/23/02 11:33:00 AM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/23/02 11:34:00 AM	2	4/23/02 12:09:00 PM	2	4/23/02 12:44:00 PM	3	4/23/02 1:19:00 PM	3
4/23/02 11:35:00 AM	3	4/23/02 12:10:00 PM	3	4/23/02 12:45:00 PM	3	4/23/02 1:20:00 PM	3
4/23/02 11:36:00 AM	3	4/23/02 12:11:00 PM	2	4/23/02 12:46:00 PM	3	4/23/02 1:21:00 PM	3
4/23/02 11:37:00 AM	2	4/23/02 12:12:00 PM	3	4/23/02 12:47:00 PM	3	4/23/02 1:22:00 PM	2
4/23/02 11:38:00 AM	3	4/23/02 12:13:00 PM	2	4/23/02 12:48:00 PM	3	4/23/02 1:23:00 PM	3
4/23/02 11:39:00 AM	3	4/23/02 12:14:00 PM	2	4/23/02 12:49:00 PM	3	4/23/02 1:24:00 PM	2
4/23/02 11:40:00 AM	3	4/23/02 12:15:00 PM	2	4/23/02 12:50:00 PM	3	4/23/02 1:25:00 PM	2
4/23/02 11:41:00 AM	2	4/23/02 12:16:00 PM	3	4/23/02 12:51:00 PM	3	4/23/02 1:26:00 PM	2
4/23/02 11:42:00 AM	3	4/23/02 12:17:00 PM	2	4/23/02 12:52:00 PM	3	4/23/02 1:27:00 PM	3
4/23/02 11:43:00 AM	2	4/23/02 12:18:00 PM	3	4/23/02 12:53:00 PM	3	4/23/02 1:28:00 PM	2
4/23/02 11:44:00 AM	3	4/23/02 12:19:00 PM	3	4/23/02 12:54:00 PM	3	4/23/02 1:29:00 PM	3
4/23/02 11:45:00 AM	2	4/23/02 12:20:00 PM	3	4/23/02 12:55:00 PM	3	4/23/02 1:30:00 PM	2
4/23/02 11:46:00 AM	2	4/23/02 12:21:00 PM	3	4/23/02 12:56:00 PM	3	4/23/02 1:31:00 PM	3
4/23/02 11:47:00 AM	3	4/23/02 12:22:00 PM	2	4/23/02 12:57:00 PM	3	4/23/02 1:32:00 PM	3
4/23/02 11:48:00 AM	3	4/23/02 12:23:00 PM	3	4/23/02 12:58:00 PM	3	4/23/02 1:33:00 PM	3
4/23/02 11:49:00 AM	2	4/23/02 12:24:00 PM	3	4/23/02 12:59:00 PM	3	4/23/02 1:34:00 PM	3
4/23/02 11:50:00 AM	2	4/23/02 12:25:00 PM	3	4/23/02 1:00:00 PM	3	4/23/02 1:35:00 PM	2
4/23/02 11:51:00 AM	2	4/23/02 12:26:00 PM	3	4/23/02 1:01:00 PM	3	4/23/02 1:36:00 PM	3
4/23/02 11:52:00 AM	3	4/23/02 12:27:00 PM	3	4/23/02 1:02:00 PM	3	4/23/02 1:37:00 PM	2
4/23/02 11:53:00 AM	4	4/23/02 12:28:00 PM	3	4/23/02 1:03:00 PM	3	4/23/02 1:38:00 PM	3
4/23/02 11:54:00 AM	2	4/23/02 12:29:00 PM	3	4/23/02 1:04:00 PM	3	4/23/02 1:39:00 PM	3
4/23/02 11:55:00 AM	2	4/23/02 12:30:00 PM	3	4/23/02 1:05:00 PM	2	4/23/02 1:40:00 PM	3
4/23/02 11:56:00 AM	2	4/23/02 12:31:00 PM	3	4/23/02 1:06:00 PM	3	4/23/02 1:41:00 PM	2
4/23/02 11:57:00 AM	2	4/23/02 12:32:00 PM	3	4/23/02 1:07:00 PM	3	4/23/02 1:42:00 PM	2
4/23/02 11:58:00 AM	3	4/23/02 12:33:00 PM	3	4/23/02 1:08:00 PM	2	4/23/02 1:43:00 PM	3
4/23/02 11:59:00 AM	2	4/23/02 12:34:00 PM	3	4/23/02 1:09:00 PM	3	4/23/02 1:44:00 PM	2
4/23/02 12:00:00 PM	3	4/23/02 12:35:00 PM	3	4/23/02 1:10:00 PM	3	4/23/02 1:45:00 PM	2
4/23/02 12:01:00 PM	3	4/23/02 12:36:00 PM	3	4/23/02 1:11:00 PM	3	4/23/02 1:46:00 PM	2
4/23/02 12:02:00 PM	3	4/23/02 12:37:00 PM	3	4/23/02 1:12:00 PM	2	4/23/02 1:47:00 PM	3
4/23/02 12:03:00 PM	3	4/23/02 12:38:00 PM	3	4/23/02 1:13:00 PM	3	4/23/02 1:48:00 PM	2
4/23/02 12:04:00 PM	3	4/23/02 12:39:00 PM	3	4/23/02 1:14:00 PM	3	4/23/02 1:49:00 PM	2
4/23/02 12:05:00 PM	3	4/23/02 12:40:00 PM	3	4/23/02 1:15:00 PM	3	4/23/02 1:50:00 PM	2
4/23/02 12:06:00 PM	2	4/23/02 12:41:00 PM	3	4/23/02 1:16:00 PM	3	4/23/02 1:51:00 PM	2
4/23/02 12:07:00 PM	2	4/23/02 12:42:00 PM	3	4/23/02 1:17:00 PM	3	4/23/02 1:52:00 PM	3
4/23/02 12:08:00 PM	2	4/23/02 12:43:00 PM	3	4/23/02 1:18:00 PM	3	4/23/02 1:53:00 PM	2

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/23/02 1:54:00 PM	2	4/23/02 2:29:00 PM	3	4/23/02 3:04:00 PM	3	4/23/02 3:39:00 PM	3
4/23/02 1:55:00 PM	2	4/23/02 2:30:00 PM	2	4/23/02 3:05:00 PM	3	4/23/02 3:40:00 PM	3
4/23/02 1:56:00 PM	2	4/23/02 2:31:00 PM	2	4/23/02 3:06:00 PM	3	4/23/02 3:41:00 PM	3
4/23/02 1:57:00 PM	3	4/23/02 2:32:00 PM	4	4/23/02 3:07:00 PM	3	4/23/02 3:42:00 PM	3
4/23/02 1:58:00 PM	2	4/23/02 2:33:00 PM	3	4/23/02 3:08:00 PM	3	4/23/02 3:43:00 PM	3
4/23/02 1:59:00 PM	2	4/23/02 2:34:00 PM	4	4/23/02 3:09:00 PM	3	4/23/02 3:44:00 PM	2
4/23/02 2:00:00 PM	2	4/23/02 2:35:00 PM	3	4/23/02 3:10:00 PM	3	4/23/02 3:45:00 PM	4
4/23/02 2:01:00 PM	2	4/23/02 2:36:00 PM	3	4/23/02 3:11:00 PM	3	4/23/02 3:46:00 PM	3
4/23/02 2:02:00 PM	3	4/23/02 2:37:00 PM	3	4/23/02 3:12:00 PM	3	4/23/02 3:47:00 PM	3
4/23/02 2:03:00 PM	2	4/23/02 2:38:00 PM	4	4/23/02 3:13:00 PM	3	4/23/02 3:48:00 PM	3
4/23/02 2:04:00 PM	2	4/23/02 2:39:00 PM	2	4/23/02 3:14:00 PM	3	4/23/02 3:49:00 PM	3
4/23/02 2:05:00 PM	3	4/23/02 2:40:00 PM	2	4/23/02 3:15:00 PM	3	4/23/02 3:50:00 PM	3
4/23/02 2:06:00 PM	3	4/23/02 2:41:00 PM	3	4/23/02 3:16:00 PM	3	4/23/02 3:51:00 PM	3
4/23/02 2:07:00 PM	2	4/23/02 2:42:00 PM	3	4/23/02 3:17:00 PM	3	4/23/02 3:52:00 PM	3
4/23/02 2:08:00 PM	2	4/23/02 2:43:00 PM	3	4/23/02 3:18:00 PM	3	4/23/02 3:53:00 PM	3
4/23/02 2:09:00 PM	2	4/23/02 2:44:00 PM	3	4/23/02 3:19:00 PM	3	4/23/02 3:54:00 PM	2
4/23/02 2:10:00 PM	2	4/23/02 2:45:00 PM	3	4/23/02 3:20:00 PM	3	4/23/02 3:55:00 PM	3
4/23/02 2:11:00 PM	3	4/23/02 2:46:00 PM	3	4/23/02 3:21:00 PM	3	4/23/02 3:56:00 PM	3
4/23/02 2:12:00 PM	3	4/23/02 2:47:00 PM	3	4/23/02 3:22:00 PM	3	4/23/02 3:57:00 PM	2
4/23/02 2:13:00 PM	2	4/23/02 2:48:00 PM	2	4/23/02 3:23:00 PM	3	4/23/02 3:58:00 PM	2
4/23/02 2:14:00 PM	2	4/23/02 2:49:00 PM	3	4/23/02 3:24:00 PM	3	4/23/02 3:59:00 PM	3
4/23/02 2:15:00 PM	3	4/23/02 2:50:00 PM	5	4/23/02 3:25:00 PM	3	4/23/02 4:00:00 PM	2
4/23/02 2:16:00 PM	2	4/23/02 2:51:00 PM	2	4/23/02 3:26:00 PM	3	4/23/02 4:01:00 PM	2
4/23/02 2:17:00 PM	2	4/23/02 2:52:00 PM	2	4/23/02 3:27:00 PM	4	4/23/02 4:02:00 PM	2
4/23/02 2:18:00 PM	2	4/23/02 2:53:00 PM	2	4/23/02 3:28:00 PM	3	4/23/02 4:03:00 PM	2
4/23/02 2:19:00 PM	2	4/23/02 2:54:00 PM	3	4/23/02 3:29:00 PM	3	4/23/02 4:04:00 PM	3
4/23/02 2:20:00 PM	2	4/23/02 2:55:00 PM	2	4/23/02 3:30:00 PM	2	4/23/02 4:05:00 PM	3
4/23/02 2:21:00 PM	3	4/23/02 2:56:00 PM	2	4/23/02 3:31:00 PM	2	4/23/02 4:06:00 PM	3
4/23/02 2:22:00 PM	2	4/23/02 2:57:00 PM	2	4/23/02 3:32:00 PM	2	4/23/02 4:07:00 PM	3
4/23/02 2:23:00 PM	2	4/23/02 2:58:00 PM	2	4/23/02 3:33:00 PM	8	4/23/02 4:08:00 PM	2
4/23/02 2:24:00 PM	3	4/23/02 2:59:00 PM	2	4/23/02 3:34:00 PM	2	4/23/02 4:09:00 PM	3
4/23/02 2:25:00 PM	3	4/23/02 3:00:00 PM	2	4/23/02 3:35:00 PM	3	4/23/02 4:10:00 PM	2
4/23/02 2:26:00 PM	2	4/23/02 3:01:00 PM	2	4/23/02 3:36:00 PM	3	4/23/02 4:11:00 PM	2
4/23/02 2:27:00 PM	3	4/23/02 3:02:00 PM	2	4/23/02 3:37:00 PM	4	4/23/02 4:12:00 PM	3
4/23/02 2:28:00 PM	2	4/23/02 3:03:00 PM	3	4/23/02 3:38:00 PM	2	4/23/02 4:13:00 PM	2

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/23/02 4:14:00 PM	3	4/23/02 4:49:00 PM	2	4/23/02 5:24:00 PM	3	4/23/02 5:59:00 PM	2
4/23/02 4:15:00 PM	2	4/23/02 4:50:00 PM	3	4/23/02 5:25:00 PM	2	4/23/02 6:00:00 PM	3
4/23/02 4:16:00 PM	3	4/23/02 4:51:00 PM	3	4/23/02 5:26:00 PM	3	4/23/02 6:01:00 PM	2
4/23/02 4:17:00 PM	3	4/23/02 4:52:00 PM	2	4/23/02 5:27:00 PM	3	4/23/02 6:02:00 PM	2
4/23/02 4:18:00 PM	2	4/23/02 4:53:00 PM	2	4/23/02 5:28:00 PM	2	4/23/02 6:03:00 PM	2
4/23/02 4:19:00 PM	3	4/23/02 4:54:00 PM	3	4/23/02 5:29:00 PM	3	4/23/02 6:04:00 PM	2
4/23/02 4:20:00 PM	3	4/23/02 4:55:00 PM	2	4/23/02 5:30:00 PM	2	4/23/02 6:05:00 PM	2
4/23/02 4:21:00 PM	2	4/23/02 4:56:00 PM	2	4/23/02 5:31:00 PM	3	4/23/02 6:06:00 PM	2
4/23/02 4:22:00 PM	3	4/23/02 4:57:00 PM	3	4/23/02 5:32:00 PM	3	4/23/02 6:07:00 PM	2
4/23/02 4:23:00 PM	3	4/23/02 4:58:00 PM	2	4/23/02 5:33:00 PM	3	4/23/02 6:08:00 PM	2
4/23/02 4:24:00 PM	3	4/23/02 4:59:00 PM	4	4/23/02 5:34:00 PM	3	4/23/02 6:09:00 PM	2
4/23/02 4:25:00 PM	4	4/23/02 5:00:00 PM	3	4/23/02 5:35:00 PM	2	4/23/02 6:10:00 PM	3
4/23/02 4:26:00 PM	2	4/23/02 5:01:00 PM	2	4/23/02 5:36:00 PM	2	4/23/02 6:11:00 PM	2
4/23/02 4:27:00 PM	2	4/23/02 5:02:00 PM	2	4/23/02 5:37:00 PM	2	4/23/02 6:12:00 PM	3
4/23/02 4:28:00 PM	3	4/23/02 5:03:00 PM	3	4/23/02 5:38:00 PM	2	4/30/02 10:12:00 AM	3
4/23/02 4:29:00 PM	2	4/23/02 5:04:00 PM	2	4/23/02 5:39:00 PM	3	4/30/02 10:13:00 AM	3
4/23/02 4:30:00 PM	3	4/23/02 5:05:00 PM	3	4/23/02 5:40:00 PM	2	4/30/02 10:14:00 AM	4
4/23/02 4:31:00 PM	2	4/23/02 5:06:00 PM	3	4/23/02 5:41:00 PM	2	4/30/02 10:15:00 AM	3
4/23/02 4:32:00 PM	3	4/23/02 5:07:00 PM	2	4/23/02 5:42:00 PM	3	4/30/02 10:16:00 AM	4
4/23/02 4:33:00 PM	2	4/23/02 5:08:00 PM	2	4/23/02 5:43:00 PM	2	4/30/02 10:17:00 AM	3
4/23/02 4:34:00 PM	2	4/23/02 5:09:00 PM	2	4/23/02 5:44:00 PM	2	4/30/02 10:18:00 AM	3
4/23/02 4:35:00 PM	3	4/23/02 5:10:00 PM	3	4/23/02 5:45:00 PM	2	4/30/02 10:19:00 AM	3
4/23/02 4:36:00 PM	2	4/23/02 5:11:00 PM	3	4/23/02 5:46:00 PM	3	4/30/02 10:20:00 AM	3
4/23/02 4:37:00 PM	2	4/23/02 5:12:00 PM	3	4/23/02 5:47:00 PM	2	4/30/02 10:21:00 AM	3
4/23/02 4:38:00 PM	3	4/23/02 5:13:00 PM	2	4/23/02 5:48:00 PM	3	4/30/02 10:22:00 AM	3
4/23/02 4:39:00 PM	2	4/23/02 5:14:00 PM	3	4/23/02 5:49:00 PM	2	4/30/02 10:23:00 AM	3
4/23/02 4:40:00 PM	2	4/23/02 5:15:00 PM	2	4/23/02 5:50:00 PM	2	4/30/02 10:24:00 AM	3
4/23/02 4:41:00 PM	2	4/23/02 5:16:00 PM	2	4/23/02 5:51:00 PM	3	4/30/02 10:25:00 AM	4
4/23/02 4:42:00 PM	2	4/23/02 5:17:00 PM	2	4/23/02 5:52:00 PM	2	4/30/02 10:26:00 AM	4
4/23/02 4:43:00 PM	2	4/23/02 5:18:00 PM	2	4/23/02 5:53:00 PM	2	4/30/02 10:27:00 AM	4
4/23/02 4:44:00 PM	2	4/23/02 5:19:00 PM	2	4/23/02 5:54:00 PM	2	4/30/02 10:28:00 AM	4
4/23/02 4:45:00 PM	2	4/23/02 5:20:00 PM	2	4/23/02 5:55:00 PM	2	4/30/02 10:29:00 AM	4
4/23/02 4:46:00 PM	2	4/23/02 5:21:00 PM	2	4/23/02 5:56:00 PM	2	4/30/02 10:30:00 AM	4
4/23/02 4:47:00 PM	2	4/23/02 5:22:00 PM	3	4/23/02 5:57:00 PM	3	4/30/02 10:31:00 AM	4
4/23/02 4:48:00 PM	2	4/23/02 5:23:00 PM	2	4/23/02 5:58:00 PM	2	4/30/02 10:32:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/30/02 10:33:00 AM	4	4/30/02 11:08:00 AM	3	4/30/02 11:43:00 AM	4	4/30/02 12:18:00 PM	4
4/30/02 10:34:00 AM	7	4/30/02 11:09:00 AM	3	4/30/02 11:44:00 AM	4	4/30/02 12:19:00 PM	4
4/30/02 10:35:00 AM	3	4/30/02 11:10:00 AM	4	4/30/02 11:45:00 AM	3	4/30/02 12:20:00 PM	4
4/30/02 10:36:00 AM	4	4/30/02 11:11:00 AM	3	4/30/02 11:46:00 AM	4	4/30/02 12:21:00 PM	4
4/30/02 10:37:00 AM	3	4/30/02 11:12:00 AM	3	4/30/02 11:47:00 AM	4	4/30/02 12:22:00 PM	4
4/30/02 10:38:00 AM	3	4/30/02 11:13:00 AM	3	4/30/02 11:48:00 AM	4	4/30/02 12:23:00 PM	4
4/30/02 10:39:00 AM	4	4/30/02 11:14:00 AM	3	4/30/02 11:49:00 AM	4	4/30/02 12:24:00 PM	4
4/30/02 10:40:00 AM	3	4/30/02 11:15:00 AM	3	4/30/02 11:50:00 AM	4	4/30/02 12:25:00 PM	3
4/30/02 10:41:00 AM	3	4/30/02 11:16:00 AM	3	4/30/02 11:51:00 AM	4	4/30/02 12:26:00 PM	4
4/30/02 10:42:00 AM	4	4/30/02 11:17:00 AM	3	4/30/02 11:52:00 AM	4	4/30/02 12:27:00 PM	4
4/30/02 10:43:00 AM	3	4/30/02 11:18:00 AM	3	4/30/02 11:53:00 AM	4	4/30/02 12:28:00 PM	4
4/30/02 10:44:00 AM	4	4/30/02 11:19:00 AM	3	4/30/02 11:54:00 AM	4	4/30/02 12:29:00 PM	4
4/30/02 10:45:00 AM	4	4/30/02 11:20:00 AM	3	4/30/02 11:55:00 AM	4	4/30/02 12:30:00 PM	4
4/30/02 10:46:00 AM	3	4/30/02 11:21:00 AM	4	4/30/02 11:56:00 AM	4	4/30/02 12:31:00 PM	4
4/30/02 10:47:00 AM	4	4/30/02 11:22:00 AM	4	4/30/02 11:57:00 AM	5	4/30/02 12:32:00 PM	5
4/30/02 10:48:00 AM	3	4/30/02 11:23:00 AM	4	4/30/02 11:58:00 AM	6	4/30/02 12:33:00 PM	4
4/30/02 10:49:00 AM	4	4/30/02 11:24:00 AM	4	4/30/02 11:59:00 AM	4	4/30/02 12:34:00 PM	6
4/30/02 10:50:00 AM	4	4/30/02 11:25:00 AM	4	4/30/02 12:00:00 PM	4	4/30/02 12:35:00 PM	5
4/30/02 10:51:00 AM	3	4/30/02 11:26:00 AM	3	4/30/02 12:01:00 PM	4	4/30/02 12:36:00 PM	6
4/30/02 10:52:00 AM	4	4/30/02 11:27:00 AM	4	4/30/02 12:02:00 PM	4	4/30/02 12:37:00 PM	4
4/30/02 10:53:00 AM	7	4/30/02 11:28:00 AM	6	4/30/02 12:03:00 PM	4	4/30/02 12:38:00 PM	6
4/30/02 10:54:00 AM	4	4/30/02 11:29:00 AM	4	4/30/02 12:04:00 PM	4	4/30/02 12:39:00 PM	5
4/30/02 10:55:00 AM	3	4/30/02 11:30:00 AM	4	4/30/02 12:05:00 PM	4	4/30/02 12:40:00 PM	6
4/30/02 10:56:00 AM	5	4/30/02 11:31:00 AM	4	4/30/02 12:06:00 PM	4	4/30/02 12:41:00 PM	7
4/30/02 10:57:00 AM	4	4/30/02 11:32:00 AM	4	4/30/02 12:07:00 PM	4	4/30/02 12:42:00 PM	7
4/30/02 10:58:00 AM	4	4/30/02 11:33:00 AM	4	4/30/02 12:08:00 PM	4	4/30/02 12:43:00 PM	7
4/30/02 10:59:00 AM	4	4/30/02 11:34:00 AM	4	4/30/02 12:09:00 PM	5	4/30/02 12:44:00 PM	6
4/30/02 11:00:00 AM	3	4/30/02 11:35:00 AM	4	4/30/02 12:10:00 PM	5	4/30/02 12:45:00 PM	6
4/30/02 11:01:00 AM	4	4/30/02 11:36:00 AM	4	4/30/02 12:11:00 PM	5	4/30/02 12:46:00 PM	5
4/30/02 11:02:00 AM	4	4/30/02 11:37:00 AM	3	4/30/02 12:12:00 PM	4	4/30/02 12:47:00 PM	7
4/30/02 11:03:00 AM	3	4/30/02 11:38:00 AM	4	4/30/02 12:13:00 PM	4	4/30/02 12:48:00 PM	6
4/30/02 11:04:00 AM	4	4/30/02 11:39:00 AM	4	4/30/02 12:14:00 PM	4	4/30/02 12:49:00 PM	7
4/30/02 11:05:00 AM	4	4/30/02 11:40:00 AM	4	4/30/02 12:15:00 PM	4	4/30/02 12:50:00 PM	6
4/30/02 11:06:00 AM	3	4/30/02 11:41:00 AM	4	4/30/02 12:16:00 PM	4	4/30/02 12:51:00 PM	4
4/30/02 11:07:00 AM	3	4/30/02 11:42:00 AM	4	4/30/02 12:17:00 PM	4	4/30/02 12:52:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/30/02 12:53:00 PM	4	4/30/02 1:28:00 PM	5	4/30/02 2:03:00 PM	6	4/30/02 2:38:00 PM	5
4/30/02 12:54:00 PM	4	4/30/02 1:29:00 PM	5	4/30/02 2:04:00 PM	5	4/30/02 2:39:00 PM	6
4/30/02 12:55:00 PM	5	4/30/02 1:30:00 PM	5	4/30/02 2:05:00 PM	5	4/30/02 2:40:00 PM	5
4/30/02 12:56:00 PM	6	4/30/02 1:31:00 PM	4	4/30/02 2:06:00 PM	4	4/30/02 2:41:00 PM	5
4/30/02 12:57:00 PM	5	4/30/02 1:32:00 PM	4	4/30/02 2:07:00 PM	4	4/30/02 2:42:00 PM	5
4/30/02 12:58:00 PM	5	4/30/02 1:33:00 PM	4	4/30/02 2:08:00 PM	4	4/30/02 2:43:00 PM	6
4/30/02 12:59:00 PM	4	4/30/02 1:34:00 PM	4	4/30/02 2:09:00 PM	4	4/30/02 2:44:00 PM	5
4/30/02 1:00:00 PM	5	4/30/02 1:35:00 PM	4	4/30/02 2:10:00 PM	4	4/30/02 2:45:00 PM	5
4/30/02 1:01:00 PM	26	4/30/02 1:36:00 PM	4	4/30/02 2:11:00 PM	4	4/30/02 2:46:00 PM	9
4/30/02 1:02:00 PM	4	4/30/02 1:37:00 PM	4	4/30/02 2:12:00 PM	4	4/30/02 2:47:00 PM	8
4/30/02 1:03:00 PM	4	4/30/02 1:38:00 PM	4	4/30/02 2:13:00 PM	4	4/30/02 2:48:00 PM	6
4/30/02 1:04:00 PM	6	4/30/02 1:39:00 PM	4	4/30/02 2:14:00 PM	4	4/30/02 2:49:00 PM	4
4/30/02 1:05:00 PM	5	4/30/02 1:40:00 PM	4	4/30/02 2:15:00 PM	4	4/30/02 2:50:00 PM	4
4/30/02 1:06:00 PM	5	4/30/02 1:41:00 PM	4	4/30/02 2:16:00 PM	4	4/30/02 2:51:00 PM	4
4/30/02 1:07:00 PM	5	4/30/02 1:42:00 PM	4	4/30/02 2:17:00 PM	4	4/30/02 2:52:00 PM	4
4/30/02 1:08:00 PM	5	4/30/02 1:43:00 PM	4	4/30/02 2:18:00 PM	4	4/30/02 2:53:00 PM	5
4/30/02 1:09:00 PM	5	4/30/02 1:44:00 PM	4	4/30/02 2:19:00 PM	4	4/30/02 2:54:00 PM	5
4/30/02 1:10:00 PM	5	4/30/02 1:45:00 PM	4	4/30/02 2:20:00 PM	4	4/30/02 2:55:00 PM	5
4/30/02 1:11:00 PM	5	4/30/02 1:46:00 PM	5	4/30/02 2:21:00 PM	4	4/30/02 2:56:00 PM	4
4/30/02 1:12:00 PM	6	4/30/02 1:47:00 PM	4	4/30/02 2:22:00 PM	3	4/30/02 2:57:00 PM	4
4/30/02 1:13:00 PM	5	4/30/02 1:48:00 PM	4	4/30/02 2:23:00 PM	4	4/30/02 2:58:00 PM	4
4/30/02 1:14:00 PM	5	4/30/02 1:49:00 PM	4	4/30/02 2:24:00 PM	4	4/30/02 2:59:00 PM	3
4/30/02 1:15:00 PM	5	4/30/02 1:50:00 PM	4	4/30/02 2:25:00 PM	4	4/30/02 3:00:00 PM	4
4/30/02 1:16:00 PM	5	4/30/02 1:51:00 PM	4	4/30/02 2:26:00 PM	3	4/30/02 3:01:00 PM	4
4/30/02 1:17:00 PM	5	4/30/02 1:52:00 PM	4	4/30/02 2:27:00 PM	4	4/30/02 3:02:00 PM	4
4/30/02 1:18:00 PM	5	4/30/02 1:53:00 PM	4	4/30/02 2:28:00 PM	4	4/30/02 3:03:00 PM	4
4/30/02 1:19:00 PM	5	4/30/02 1:54:00 PM	4	4/30/02 2:29:00 PM	3	4/30/02 3:04:00 PM	5
4/30/02 1:20:00 PM	5	4/30/02 1:55:00 PM	4	4/30/02 2:30:00 PM	4	4/30/02 3:05:00 PM	4
4/30/02 1:21:00 PM	5	4/30/02 1:56:00 PM	4	4/30/02 2:31:00 PM	4	4/30/02 3:06:00 PM	4
4/30/02 1:22:00 PM	4	4/30/02 1:57:00 PM	4	4/30/02 2:32:00 PM	4	4/30/02 3:07:00 PM	4
4/30/02 1:23:00 PM	4	4/30/02 1:58:00 PM	4	4/30/02 2:33:00 PM	7	4/30/02 3:08:00 PM	4
4/30/02 1:24:00 PM	4	4/30/02 1:59:00 PM	4	4/30/02 2:34:00 PM	8	4/30/02 3:09:00 PM	3
4/30/02 1:25:00 PM	5	4/30/02 2:00:00 PM	4	4/30/02 2:35:00 PM	7	4/30/02 3:10:00 PM	4
4/30/02 1:26:00 PM	5	4/30/02 2:01:00 PM	4	4/30/02 2:36:00 PM	7	4/30/02 3:11:00 PM	4
4/30/02 1:27:00 PM	4	4/30/02 2:02:00 PM	4	4/30/02 2:37:00 PM	7	4/30/02 3:12:00 PM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/30/02 3:13:00 PM	4	4/30/02 3:48:00 PM	3	4/30/02 4:23:00 PM	4	4/30/02 4:58:00 PM	5
4/30/02 3:14:00 PM	4	4/30/02 3:49:00 PM	3	4/30/02 4:24:00 PM	4	4/30/02 4:59:00 PM	5
4/30/02 3:15:00 PM	4	4/30/02 3:50:00 PM	3	4/30/02 4:25:00 PM	4	4/30/02 5:00:00 PM	5
4/30/02 3:16:00 PM	4	4/30/02 3:51:00 PM	3	4/30/02 4:26:00 PM	4	4/30/02 5:01:00 PM	5
4/30/02 3:17:00 PM	4	4/30/02 3:52:00 PM	3	4/30/02 4:27:00 PM	4	4/30/02 5:02:00 PM	5
4/30/02 3:18:00 PM	4	4/30/02 3:53:00 PM	3	4/30/02 4:28:00 PM	5	4/30/02 5:03:00 PM	5
4/30/02 3:19:00 PM	4	4/30/02 3:54:00 PM	3	4/30/02 4:29:00 PM	4	4/30/02 5:04:00 PM	5
4/30/02 3:20:00 PM	4	4/30/02 3:55:00 PM	3	4/30/02 4:30:00 PM	4	4/30/02 5:05:00 PM	5
4/30/02 3:21:00 PM	4	4/30/02 3:56:00 PM	3	4/30/02 4:31:00 PM	4	4/30/02 5:06:00 PM	5
4/30/02 3:22:00 PM	4	4/30/02 3:57:00 PM	3	4/30/02 4:32:00 PM	4	4/30/02 5:07:00 PM	6
4/30/02 3:23:00 PM	4	4/30/02 3:58:00 PM	3	4/30/02 4:33:00 PM	4	4/30/02 5:08:00 PM	5
4/30/02 3:24:00 PM	4	4/30/02 3:59:00 PM	3	4/30/02 4:34:00 PM	4	4/30/02 5:09:00 PM	5
4/30/02 3:25:00 PM	4	4/30/02 4:00:00 PM	3	4/30/02 4:35:00 PM	4	4/30/02 5:10:00 PM	5
4/30/02 3:26:00 PM	3	4/30/02 4:01:00 PM	3	4/30/02 4:36:00 PM	4	4/30/02 5:11:00 PM	4
4/30/02 3:27:00 PM	3	4/30/02 4:02:00 PM	3	4/30/02 4:37:00 PM	4	4/30/02 5:12:00 PM	4
4/30/02 3:28:00 PM	4	4/30/02 4:03:00 PM	3	4/30/02 4:38:00 PM	4	4/30/02 5:13:00 PM	4
4/30/02 3:29:00 PM	4	4/30/02 4:04:00 PM	4	4/30/02 4:39:00 PM	4	4/30/02 5:14:00 PM	4
4/30/02 3:30:00 PM	4	4/30/02 4:05:00 PM	3	4/30/02 4:40:00 PM	4	4/30/02 5:15:00 PM	4
4/30/02 3:31:00 PM	4	4/30/02 4:06:00 PM	3	4/30/02 4:41:00 PM	4	4/30/02 5:16:00 PM	4
4/30/02 3:32:00 PM	4	4/30/02 4:07:00 PM	3	4/30/02 4:42:00 PM	5	4/30/02 5:17:00 PM	4
4/30/02 3:33:00 PM	3	4/30/02 4:08:00 PM	3	4/30/02 4:43:00 PM	4	4/30/02 5:18:00 PM	4
4/30/02 3:34:00 PM	3	4/30/02 4:09:00 PM	4	4/30/02 4:44:00 PM	5	4/30/02 5:19:00 PM	5
4/30/02 3:35:00 PM	4	4/30/02 4:10:00 PM	4	4/30/02 4:45:00 PM	5	4/30/02 5:20:00 PM	6
4/30/02 3:36:00 PM	3	4/30/02 4:11:00 PM	4	4/30/02 4:46:00 PM	5	4/30/02 5:21:00 PM	6
4/30/02 3:37:00 PM	3	4/30/02 4:12:00 PM	3	4/30/02 4:47:00 PM	5	4/30/02 5:22:00 PM	7
4/30/02 3:38:00 PM	4	4/30/02 4:13:00 PM	4	4/30/02 4:48:00 PM	5	4/30/02 5:23:00 PM	6
4/30/02 3:39:00 PM	3	4/30/02 4:14:00 PM	4	4/30/02 4:49:00 PM	5	4/30/02 5:24:00 PM	6
4/30/02 3:40:00 PM	3	4/30/02 4:15:00 PM	4	4/30/02 4:50:00 PM	5	4/30/02 5:25:00 PM	6
4/30/02 3:41:00 PM	4	4/30/02 4:16:00 PM	4	4/30/02 4:51:00 PM	5	4/30/02 5:26:00 PM	6
4/30/02 3:42:00 PM	3	4/30/02 4:17:00 PM	4	4/30/02 4:52:00 PM	5	4/30/02 5:27:00 PM	5
4/30/02 3:43:00 PM	4	4/30/02 4:18:00 PM	4	4/30/02 4:53:00 PM	5	4/30/02 5:28:00 PM	6
4/30/02 3:44:00 PM	4	4/30/02 4:19:00 PM	4	4/30/02 4:54:00 PM	5	4/30/02 5:29:00 PM	5
4/30/02 3:45:00 PM	3	4/30/02 4:20:00 PM	4	4/30/02 4:55:00 PM	5	4/30/02 5:30:00 PM	6
4/30/02 3:46:00 PM	3	4/30/02 4:21:00 PM	4	4/30/02 4:56:00 PM	5	4/30/02 5:31:00 PM	5
4/30/02 3:47:00 PM	3	4/30/02 4:22:00 PM	4	4/30/02 4:57:00 PM	5	4/30/02 5:32:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
4/30/02 5:33:00 PM	6	5/6/02 10:58:00 AM	4	5/6/02 11:33:00 AM	5	5/6/02 12:08:00 PM	6
4/30/02 5:34:00 PM	5	5/6/02 10:59:00 AM	4	5/6/02 11:34:00 AM	5	5/6/02 12:09:00 PM	6
5/6/02 10:25:00 AM	41	5/6/02 11:00:00 AM	4	5/6/02 11:35:00 AM	5	5/6/02 12:10:00 PM	6
5/6/02 10:26:00 AM	3	5/6/02 11:01:00 AM	4	5/6/02 11:36:00 AM	5	5/6/02 12:11:00 PM	6
5/6/02 10:27:00 AM	2	5/6/02 11:02:00 AM	4	5/6/02 11:37:00 AM	5	5/6/02 12:12:00 PM	7
5/6/02 10:28:00 AM	3	5/6/02 11:03:00 AM	4	5/6/02 11:38:00 AM	5	5/6/02 12:13:00 PM	6
5/6/02 10:29:00 AM	3	5/6/02 11:04:00 AM	4	5/6/02 11:39:00 AM	6	5/6/02 12:14:00 PM	6
5/6/02 10:30:00 AM	79	5/6/02 11:05:00 AM	4	5/6/02 11:40:00 AM	5	5/6/02 12:15:00 PM	6
5/6/02 10:31:00 AM	2	5/6/02 11:06:00 AM	4	5/6/02 11:41:00 AM	5	5/6/02 12:16:00 PM	6
5/6/02 10:32:00 AM	2	5/6/02 11:07:00 AM	5	5/6/02 11:42:00 AM	6	5/6/02 12:17:00 PM	6
5/6/02 10:33:00 AM	3	5/6/02 11:08:00 AM	4	5/6/02 11:43:00 AM	6	5/6/02 12:18:00 PM	6
5/6/02 10:34:00 AM	2	5/6/02 11:09:00 AM	5	5/6/02 11:44:00 AM	5	5/6/02 12:19:00 PM	6
5/6/02 10:35:00 AM	2	5/6/02 11:10:00 AM	4	5/6/02 11:45:00 AM	5	5/6/02 12:20:00 PM	6
5/6/02 10:36:00 AM	2	5/6/02 11:11:00 AM	4	5/6/02 11:46:00 AM	6	5/6/02 12:21:00 PM	6
5/6/02 10:37:00 AM	2	5/6/02 11:12:00 AM	6	5/6/02 11:47:00 AM	6	5/6/02 12:22:00 PM	7
5/6/02 10:38:00 AM	2	5/6/02 11:13:00 AM	5	5/6/02 11:48:00 AM	6	5/6/02 12:23:00 PM	6
5/6/02 10:39:00 AM	2	5/6/02 11:14:00 AM	4	5/6/02 11:49:00 AM	6	5/6/02 12:24:00 PM	6
5/6/02 10:40:00 AM	2	5/6/02 11:15:00 AM	5	5/6/02 11:50:00 AM	13	5/6/02 12:25:00 PM	6
5/6/02 10:41:00 AM	5	5/6/02 11:16:00 AM	4	5/6/02 11:51:00 AM	8	5/6/02 12:26:00 PM	6
5/6/02 10:42:00 AM	2	5/6/02 11:17:00 AM	5	5/6/02 11:52:00 AM	5	5/6/02 12:27:00 PM	6
5/6/02 10:43:00 AM	2	5/6/02 11:18:00 AM	4	5/6/02 11:53:00 AM	6	5/6/02 12:28:00 PM	7
5/6/02 10:44:00 AM	3	5/6/02 11:19:00 AM	5	5/6/02 11:54:00 AM	6	5/6/02 12:29:00 PM	7
5/6/02 10:45:00 AM	2	5/6/02 11:20:00 AM	5	5/6/02 11:55:00 AM	6	5/6/02 12:30:00 PM	6
5/6/02 10:46:00 AM	4	5/6/02 11:21:00 AM	5	5/6/02 11:56:00 AM	6	5/6/02 12:31:00 PM	7
5/6/02 10:47:00 AM	5	5/6/02 11:22:00 AM	5	5/6/02 11:57:00 AM	6	5/6/02 12:32:00 PM	7
5/6/02 10:48:00 AM	2	5/6/02 11:23:00 AM	5	5/6/02 11:58:00 AM	5	5/6/02 12:33:00 PM	6
5/6/02 10:49:00 AM	3	5/6/02 11:24:00 AM	5	5/6/02 11:59:00 AM	6	5/6/02 12:34:00 PM	6
5/6/02 10:50:00 AM	3	5/6/02 11:25:00 AM	5	5/6/02 12:00:00 PM	6	5/6/02 12:35:00 PM	7
5/6/02 10:51:00 AM	3	5/6/02 11:26:00 AM	5	5/6/02 12:01:00 PM	6	5/6/02 12:36:00 PM	6
5/6/02 10:52:00 AM	3	5/6/02 11:27:00 AM	5	5/6/02 12:02:00 PM	7	5/6/02 12:37:00 PM	7
5/6/02 10:53:00 AM	4	5/6/02 11:28:00 AM	5	5/6/02 12:03:00 PM	6	5/6/02 12:38:00 PM	6
5/6/02 10:54:00 AM	4	5/6/02 11:29:00 AM	6	5/6/02 12:04:00 PM	7	5/6/02 12:39:00 PM	6
5/6/02 10:55:00 AM	4	5/6/02 11:30:00 AM	5	5/6/02 12:05:00 PM	6	5/6/02 12:40:00 PM	7
5/6/02 10:56:00 AM	4	5/6/02 11:31:00 AM	5	5/6/02 12:06:00 PM	6	5/6/02 12:41:00 PM	6
5/6/02 10:57:00 AM	4	5/6/02 11:32:00 AM	6	5/6/02 12:07:00 PM	6	5/6/02 12:42:00 PM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/6/02 12:43:00 PM	7	5/6/02 1:18:00 PM	7	5/6/02 1:53:00 PM	6	5/6/02 2:28:00 PM	7
5/6/02 12:44:00 PM	8	5/6/02 1:19:00 PM	6	5/6/02 1:54:00 PM	7	5/6/02 2:29:00 PM	8
5/6/02 12:45:00 PM	6	5/6/02 1:20:00 PM	7	5/6/02 1:55:00 PM	6	5/6/02 2:30:00 PM	8
5/6/02 12:46:00 PM	6	5/6/02 1:21:00 PM	7	5/6/02 1:56:00 PM	6	5/6/02 2:31:00 PM	7
5/6/02 12:47:00 PM	7	5/6/02 1:22:00 PM	7	5/6/02 1:57:00 PM	7	5/6/02 2:32:00 PM	7
5/6/02 12:48:00 PM	7	5/6/02 1:23:00 PM	7	5/6/02 1:58:00 PM	7	5/6/02 2:33:00 PM	7
5/6/02 12:49:00 PM	7	5/6/02 1:24:00 PM	7	5/6/02 1:59:00 PM	7	5/6/02 2:34:00 PM	7
5/6/02 12:50:00 PM	7	5/6/02 1:25:00 PM	7	5/6/02 2:00:00 PM	7	5/6/02 2:35:00 PM	7
5/6/02 12:51:00 PM	7	5/6/02 1:26:00 PM	7	5/6/02 2:01:00 PM	7	5/6/02 2:36:00 PM	7
5/6/02 12:52:00 PM	7	5/6/02 1:27:00 PM	7	5/6/02 2:02:00 PM	6	5/6/02 2:37:00 PM	7
5/6/02 12:53:00 PM	6	5/6/02 1:28:00 PM	7	5/6/02 2:03:00 PM	7	5/6/02 2:38:00 PM	7
5/6/02 12:54:00 PM	6	5/6/02 1:29:00 PM	7	5/6/02 2:04:00 PM	7	5/6/02 2:39:00 PM	7
5/6/02 12:55:00 PM	7	5/6/02 1:30:00 PM	7	5/6/02 2:05:00 PM	7	5/6/02 2:40:00 PM	7
5/6/02 12:56:00 PM	7	5/6/02 1:31:00 PM	6	5/6/02 2:06:00 PM	7	5/6/02 2:41:00 PM	6
5/6/02 12:57:00 PM	6	5/6/02 1:32:00 PM	7	5/6/02 2:07:00 PM	7	5/6/02 2:42:00 PM	7
5/6/02 12:58:00 PM	7	5/6/02 1:33:00 PM	6	5/6/02 2:08:00 PM	7	5/6/02 2:43:00 PM	7
5/6/02 12:59:00 PM	6	5/6/02 1:34:00 PM	7	5/6/02 2:09:00 PM	7	5/6/02 2:44:00 PM	7
5/6/02 1:00:00 PM	7	5/6/02 1:35:00 PM	7	5/6/02 2:10:00 PM	9	5/6/02 2:45:00 PM	7
5/6/02 1:01:00 PM	7	5/6/02 1:36:00 PM	7	5/6/02 2:11:00 PM	7	5/6/02 2:46:00 PM	7
5/6/02 1:02:00 PM	6	5/6/02 1:37:00 PM	7	5/6/02 2:12:00 PM	7	5/6/02 2:47:00 PM	7
5/6/02 1:03:00 PM	7	5/6/02 1:38:00 PM	7	5/6/02 2:13:00 PM	7	5/6/02 2:48:00 PM	7
5/6/02 1:04:00 PM	7	5/6/02 1:39:00 PM	6	5/6/02 2:14:00 PM	7	5/6/02 2:49:00 PM	7
5/6/02 1:05:00 PM	6	5/6/02 1:40:00 PM	7	5/6/02 2:15:00 PM	7	5/6/02 2:50:00 PM	7
5/6/02 1:06:00 PM	6	5/6/02 1:41:00 PM	7	5/6/02 2:16:00 PM	7	5/6/02 2:51:00 PM	7
5/6/02 1:07:00 PM	6	5/6/02 1:42:00 PM	7	5/6/02 2:17:00 PM	7	5/6/02 2:52:00 PM	7
5/6/02 1:08:00 PM	6	5/6/02 1:43:00 PM	8	5/6/02 2:18:00 PM	8	5/6/02 2:53:00 PM	8
5/6/02 1:09:00 PM	7	5/6/02 1:44:00 PM	7	5/6/02 2:19:00 PM	7	5/6/02 2:54:00 PM	8
5/6/02 1:10:00 PM	7	5/6/02 1:45:00 PM	7	5/6/02 2:20:00 PM	7	5/6/02 2:55:00 PM	7
5/6/02 1:11:00 PM	7	5/6/02 1:46:00 PM	7	5/6/02 2:21:00 PM	6	5/6/02 2:56:00 PM	7
5/6/02 1:12:00 PM	7	5/6/02 1:47:00 PM	7	5/6/02 2:22:00 PM	7	5/6/02 2:57:00 PM	7
5/6/02 1:13:00 PM	6	5/6/02 1:48:00 PM	7	5/6/02 2:23:00 PM	6	5/6/02 2:58:00 PM	7
5/6/02 1:14:00 PM	6	5/6/02 1:49:00 PM	6	5/6/02 2:24:00 PM	7	5/6/02 2:59:00 PM	7
5/6/02 1:15:00 PM	6	5/6/02 1:50:00 PM	7	5/6/02 2:25:00 PM	7	5/6/02 3:00:00 PM	7
5/6/02 1:16:00 PM	7	5/6/02 1:51:00 PM	7	5/6/02 2:26:00 PM	7	5/6/02 3:01:00 PM	7
5/6/02 1:17:00 PM	6	5/6/02 1:52:00 PM	7	5/6/02 2:27:00 PM	7	5/6/02 3:02:00 PM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/6/02 3:03:00 PM	6	5/7/02 8:06:00 AM	5	5/7/02 8:41:00 AM	6	5/7/02 9:16:00 AM	5
5/6/02 3:04:00 PM	7	5/7/02 8:07:00 AM	4	5/7/02 8:42:00 AM	5	5/7/02 9:17:00 AM	5
5/6/02 3:05:00 PM	7	5/7/02 8:08:00 AM	5	5/7/02 8:43:00 AM	5	5/7/02 9:18:00 AM	6
5/6/02 3:06:00 PM	7	5/7/02 8:09:00 AM	4	5/7/02 8:44:00 AM	5	5/7/02 9:19:00 AM	9
5/6/02 3:07:00 PM	8	5/7/02 8:10:00 AM	4	5/7/02 8:45:00 AM	5	5/7/02 9:20:00 AM	5
5/6/02 3:08:00 PM	7	5/7/02 8:11:00 AM	5	5/7/02 8:46:00 AM	5	5/7/02 9:21:00 AM	5
5/6/02 3:09:00 PM	7	5/7/02 8:12:00 AM	5	5/7/02 8:47:00 AM	5	5/7/02 9:22:00 AM	5
5/6/02 3:10:00 PM	8	5/7/02 8:13:00 AM	4	5/7/02 8:48:00 AM	4	5/7/02 9:23:00 AM	5
5/6/02 3:11:00 PM	7	5/7/02 8:14:00 AM	5	5/7/02 8:49:00 AM	5	5/7/02 9:24:00 AM	5
5/6/02 3:12:00 PM	7	5/7/02 8:15:00 AM	5	5/7/02 8:50:00 AM	4	5/7/02 9:25:00 AM	5
5/6/02 3:13:00 PM	7	5/7/02 8:16:00 AM	5	5/7/02 8:51:00 AM	5	5/7/02 9:26:00 AM	5
5/6/02 3:14:00 PM	7	5/7/02 8:17:00 AM	6	5/7/02 8:52:00 AM	5	5/7/02 9:27:00 AM	4
5/6/02 3:15:00 PM	6	5/7/02 8:18:00 AM	5	5/7/02 8:53:00 AM	5	5/7/02 9:28:00 AM	4
5/6/02 3:16:00 PM	7	5/7/02 8:19:00 AM	5	5/7/02 8:54:00 AM	5	5/7/02 9:29:00 AM	6
5/6/02 3:17:00 PM	7	5/7/02 8:20:00 AM	5	5/7/02 8:55:00 AM	5	5/7/02 9:30:00 AM	4
5/6/02 3:18:00 PM	7	5/7/02 8:21:00 AM	4	5/7/02 8:56:00 AM	5	5/7/02 9:31:00 AM	5
5/6/02 3:19:00 PM	6	5/7/02 8:22:00 AM	5	5/7/02 8:57:00 AM	6	5/7/02 9:32:00 AM	6
5/6/02 3:20:00 PM	6	5/7/02 8:23:00 AM	5	5/7/02 8:58:00 AM	5	5/7/02 9:33:00 AM	4
5/6/02 3:21:00 PM	7	5/7/02 8:24:00 AM	5	5/7/02 8:59:00 AM	5	5/7/02 9:34:00 AM	4
5/6/02 3:22:00 PM	6	5/7/02 8:25:00 AM	5	5/7/02 9:00:00 AM	4	5/7/02 9:35:00 AM	4
5/6/02 3:23:00 PM	7	5/7/02 8:26:00 AM	6	5/7/02 9:01:00 AM	4	5/7/02 9:36:00 AM	4
5/6/02 3:24:00 PM	7	5/7/02 8:27:00 AM	5	5/7/02 9:02:00 AM	5	5/7/02 9:37:00 AM	4
5/6/02 3:25:00 PM	6	5/7/02 8:28:00 AM	6	5/7/02 9:03:00 AM	5	5/7/02 9:38:00 AM	4
5/6/02 3:26:00 PM	7	5/7/02 8:29:00 AM	5	5/7/02 9:04:00 AM	5	5/7/02 9:39:00 AM	4
5/6/02 3:27:00 PM	8	5/7/02 8:30:00 AM	5	5/7/02 9:05:00 AM	5	5/7/02 9:40:00 AM	4
5/6/02 3:28:00 PM	6	5/7/02 8:31:00 AM	5	5/7/02 9:06:00 AM	4	5/7/02 9:41:00 AM	4
5/6/02 3:29:00 PM	6	5/7/02 8:32:00 AM	5	5/7/02 9:07:00 AM	5	5/7/02 9:42:00 AM	4
5/6/02 3:30:00 PM	8	5/7/02 8:33:00 AM	5	5/7/02 9:08:00 AM	5	5/7/02 9:43:00 AM	4
5/6/02 3:31:00 PM	6	5/7/02 8:34:00 AM	4	5/7/02 9:09:00 AM	5	5/7/02 9:44:00 AM	4
5/6/02 3:32:00 PM	6	5/7/02 8:35:00 AM	4	5/7/02 9:10:00 AM	4	5/7/02 9:45:00 AM	4
5/6/02 3:33:00 PM	6	5/7/02 8:36:00 AM	5	5/7/02 9:11:00 AM	5	5/7/02 9:46:00 AM	4
5/6/02 3:34:00 PM	7	5/7/02 8:37:00 AM	4	5/7/02 9:12:00 AM	5	5/7/02 9:47:00 AM	4
5/7/02 8:03:00 AM	6	5/7/02 8:38:00 AM	4	5/7/02 9:13:00 AM	5	5/7/02 9:48:00 AM	4
5/7/02 8:04:00 AM	4	5/7/02 8:39:00 AM	4	5/7/02 9:14:00 AM	5	5/7/02 9:49:00 AM	4
5/7/02 8:05:00 AM	4	5/7/02 8:40:00 AM	5	5/7/02 9:15:00 AM	6	5/7/02 9:50:00 AM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/02 9:51:00 AM	4	5/7/02 10:26:00 AM	5	5/7/02 11:01:00 AM	5	5/7/02 11:36:00 AM	5
5/7/02 9:52:00 AM	4	5/7/02 10:27:00 AM	5	5/7/02 11:02:00 AM	5	5/7/02 11:37:00 AM	5
5/7/02 9:53:00 AM	4	5/7/02 10:28:00 AM	5	5/7/02 11:03:00 AM	5	5/7/02 11:38:00 AM	5
5/7/02 9:54:00 AM	4	5/7/02 10:29:00 AM	5	5/7/02 11:04:00 AM	5	5/7/02 11:39:00 AM	6
5/7/02 9:55:00 AM	3	5/7/02 10:30:00 AM	4	5/7/02 11:05:00 AM	5	5/7/02 11:40:00 AM	5
5/7/02 9:56:00 AM	4	5/7/02 10:31:00 AM	4	5/7/02 11:06:00 AM	6	5/7/02 11:41:00 AM	6
5/7/02 9:57:00 AM	4	5/7/02 10:32:00 AM	6	5/7/02 11:07:00 AM	6	5/7/02 11:42:00 AM	5
5/7/02 9:58:00 AM	4	5/7/02 10:33:00 AM	4	5/7/02 11:08:00 AM	5	5/7/02 11:43:00 AM	5
5/7/02 9:59:00 AM	4	5/7/02 10:34:00 AM	5	5/7/02 11:09:00 AM	5	5/7/02 11:44:00 AM	6
5/7/02 10:00:00 AM	4	5/7/02 10:35:00 AM	4	5/7/02 11:10:00 AM	5	5/7/02 11:45:00 AM	5
5/7/02 10:01:00 AM	4	5/7/02 10:36:00 AM	4	5/7/02 11:11:00 AM	5	5/7/02 11:46:00 AM	5
5/7/02 10:02:00 AM	3	5/7/02 10:37:00 AM	5	5/7/02 11:12:00 AM	5	5/7/02 11:47:00 AM	6
5/7/02 10:03:00 AM	4	5/7/02 10:38:00 AM	4	5/7/02 11:13:00 AM	5	5/7/02 11:48:00 AM	5
5/7/02 10:04:00 AM	3	5/7/02 10:39:00 AM	5	5/7/02 11:14:00 AM	5	5/7/02 11:49:00 AM	5
5/7/02 10:05:00 AM	4	5/7/02 10:40:00 AM	5	5/7/02 11:15:00 AM	6	5/7/02 11:50:00 AM	5
5/7/02 10:06:00 AM	4	5/7/02 10:41:00 AM	5	5/7/02 11:16:00 AM	6	5/7/02 11:51:00 AM	5
5/7/02 10:07:00 AM	3	5/7/02 10:42:00 AM	5	5/7/02 11:17:00 AM	5	5/7/02 11:52:00 AM	5
5/7/02 10:08:00 AM	4	5/7/02 10:43:00 AM	5	5/7/02 11:18:00 AM	6	5/7/02 11:53:00 AM	6
5/7/02 10:09:00 AM	4	5/7/02 10:44:00 AM	5	5/7/02 11:19:00 AM	5	5/7/02 11:54:00 AM	5
5/7/02 10:10:00 AM	4	5/7/02 10:45:00 AM	5	5/7/02 11:20:00 AM	6	5/7/02 11:55:00 AM	6
5/7/02 10:11:00 AM	3	5/7/02 10:46:00 AM	9	5/7/02 11:21:00 AM	5	5/7/02 11:56:00 AM	5
5/7/02 10:12:00 AM	4	5/7/02 10:47:00 AM	4	5/7/02 11:22:00 AM	6	5/7/02 11:57:00 AM	6
5/7/02 10:13:00 AM	3	5/7/02 10:48:00 AM	5	5/7/02 11:23:00 AM	5	5/7/02 11:58:00 AM	5
5/7/02 10:14:00 AM	4	5/7/02 10:49:00 AM	5	5/7/02 11:24:00 AM	5	5/7/02 11:59:00 AM	6
5/7/02 10:15:00 AM	4	5/7/02 10:50:00 AM	5	5/7/02 11:25:00 AM	6	5/7/02 12:00:00 PM	6
5/7/02 10:16:00 AM	4	5/7/02 10:51:00 AM	5	5/7/02 11:26:00 AM	7	5/7/02 12:01:00 PM	6
5/7/02 10:17:00 AM	4	5/7/02 10:52:00 AM	5	5/7/02 11:27:00 AM	6	5/7/02 12:02:00 PM	6
5/7/02 10:18:00 AM	3	5/7/02 10:53:00 AM	5	5/7/02 11:28:00 AM	6	5/7/02 12:03:00 PM	5
5/7/02 10:19:00 AM	4	5/7/02 10:54:00 AM	5	5/7/02 11:29:00 AM	6	5/7/02 12:04:00 PM	6
5/7/02 10:20:00 AM	4	5/7/02 10:55:00 AM	5	5/7/02 11:30:00 AM	6	5/7/02 12:05:00 PM	6
5/7/02 10:21:00 AM	4	5/7/02 10:56:00 AM	5	5/7/02 11:31:00 AM	5	5/7/02 12:06:00 PM	6
5/7/02 10:22:00 AM	3	5/7/02 10:57:00 AM	5	5/7/02 11:32:00 AM	6	5/7/02 12:07:00 PM	6
5/7/02 10:23:00 AM	4	5/7/02 10:58:00 AM	5	5/7/02 11:33:00 AM	6	5/7/02 12:08:00 PM	6
5/7/02 10:24:00 AM	4	5/7/02 10:59:00 AM	6	5/7/02 11:34:00 AM	6	5/7/02 12:09:00 PM	6
5/7/02 10:25:00 AM	6	5/7/02 11:00:00 AM	6	5/7/02 11:35:00 AM	6	5/7/02 12:10:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/02 12:11:00 PM	6	5/7/02 12:46:00 PM	6	5/7/02 1:21:00 PM	7	5/7/02 1:56:00 PM	7
5/7/02 12:12:00 PM	6	5/7/02 12:47:00 PM	6	5/7/02 1:22:00 PM	6	5/7/02 1:57:00 PM	7
5/7/02 12:13:00 PM	6	5/7/02 12:48:00 PM	6	5/7/02 1:23:00 PM	7	5/7/02 1:58:00 PM	7
5/7/02 12:14:00 PM	6	5/7/02 12:49:00 PM	6	5/7/02 1:24:00 PM	7	5/7/02 1:59:00 PM	6
5/7/02 12:15:00 PM	6	5/7/02 12:50:00 PM	6	5/7/02 1:25:00 PM	7	5/7/02 2:00:00 PM	7
5/7/02 12:16:00 PM	6	5/7/02 12:51:00 PM	6	5/7/02 1:26:00 PM	7	5/7/02 2:01:00 PM	7
5/7/02 12:17:00 PM	6	5/7/02 12:52:00 PM	6	5/7/02 1:27:00 PM	7	5/7/02 2:02:00 PM	7
5/7/02 12:18:00 PM	6	5/7/02 12:53:00 PM	6	5/7/02 1:28:00 PM	7	5/7/02 2:03:00 PM	8
5/7/02 12:19:00 PM	6	5/7/02 12:54:00 PM	6	5/7/02 1:29:00 PM	7	5/7/02 2:04:00 PM	10
5/7/02 12:20:00 PM	6	5/7/02 12:55:00 PM	6	5/7/02 1:30:00 PM	7	5/7/02 2:05:00 PM	7
5/7/02 12:21:00 PM	6	5/7/02 12:56:00 PM	6	5/7/02 1:31:00 PM	7	5/7/02 2:06:00 PM	7
5/7/02 12:22:00 PM	6	5/7/02 12:57:00 PM	6	5/7/02 1:32:00 PM	6	5/7/02 2:07:00 PM	7
5/7/02 12:23:00 PM	6	5/7/02 12:58:00 PM	6	5/7/02 1:33:00 PM	7	5/7/02 2:08:00 PM	7
5/7/02 12:24:00 PM	6	5/7/02 12:59:00 PM	6	5/7/02 1:34:00 PM	7	5/7/02 2:09:00 PM	7
5/7/02 12:25:00 PM	6	5/7/02 1:00:00 PM	6	5/7/02 1:35:00 PM	7	5/7/02 2:10:00 PM	7
5/7/02 12:26:00 PM	6	5/7/02 1:01:00 PM	6	5/7/02 1:36:00 PM	7	5/7/02 2:11:00 PM	7
5/7/02 12:27:00 PM	6	5/7/02 1:02:00 PM	6	5/7/02 1:37:00 PM	7	5/7/02 2:12:00 PM	7
5/7/02 12:28:00 PM	6	5/7/02 1:03:00 PM	7	5/7/02 1:38:00 PM	7	5/7/02 2:13:00 PM	7
5/7/02 12:29:00 PM	6	5/7/02 1:04:00 PM	211	5/7/02 1:39:00 PM	7	5/7/02 2:14:00 PM	7
5/7/02 12:30:00 PM	6	5/7/02 1:05:00 PM	7	5/7/02 1:40:00 PM	8	5/7/02 2:15:00 PM	7
5/7/02 12:31:00 PM	6	5/7/02 1:06:00 PM	7	5/7/02 1:41:00 PM	7	5/7/02 2:16:00 PM	7
5/7/02 12:32:00 PM	6	5/7/02 1:07:00 PM	7	5/7/02 1:42:00 PM	7	5/7/02 2:17:00 PM	7
5/7/02 12:33:00 PM	5	5/7/02 1:08:00 PM	7	5/7/02 1:43:00 PM	6	5/7/02 2:18:00 PM	7
5/7/02 12:34:00 PM	6	5/7/02 1:09:00 PM	7	5/7/02 1:44:00 PM	6	5/7/02 2:19:00 PM	7
5/7/02 12:35:00 PM	6	5/7/02 1:10:00 PM	8	5/7/02 1:45:00 PM	6	5/7/02 2:20:00 PM	7
5/7/02 12:36:00 PM	6	5/7/02 1:11:00 PM	7	5/7/02 1:46:00 PM	7	5/7/02 2:21:00 PM	7
5/7/02 12:37:00 PM	6	5/7/02 1:12:00 PM	7	5/7/02 1:47:00 PM	6	5/7/02 2:22:00 PM	7
5/7/02 12:38:00 PM	6	5/7/02 1:13:00 PM	7	5/7/02 1:48:00 PM	6	5/7/02 2:23:00 PM	7
5/7/02 12:39:00 PM	6	5/7/02 1:14:00 PM	7	5/7/02 1:49:00 PM	7	5/7/02 2:24:00 PM	7
5/7/02 12:40:00 PM	6	5/7/02 1:15:00 PM	7	5/7/02 1:50:00 PM	7	5/7/02 2:25:00 PM	17
5/7/02 12:41:00 PM	6	5/7/02 1:16:00 PM	7	5/7/02 1:51:00 PM	6	5/7/02 2:26:00 PM	9
5/7/02 12:42:00 PM	6	5/7/02 1:17:00 PM	7	5/7/02 1:52:00 PM	6	5/7/02 2:27:00 PM	7
5/7/02 12:43:00 PM	6	5/7/02 1:18:00 PM	7	5/7/02 1:53:00 PM	7	5/7/02 2:28:00 PM	8
5/7/02 12:44:00 PM	6	5/7/02 1:19:00 PM	7	5/7/02 1:54:00 PM	6	5/7/02 2:29:00 PM	7
5/7/02 12:45:00 PM	6	5/7/02 1:20:00 PM	7	5/7/02 1:55:00 PM	7	5/7/02 2:30:00 PM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/02 2:31:00 PM	7	5/7/02 3:06:00 PM	7	5/7/02 3:41:00 PM	8	5/7/02 4:16:00 PM	8
5/7/02 2:32:00 PM	8	5/7/02 3:07:00 PM	7	5/7/02 3:42:00 PM	7	5/7/02 4:17:00 PM	7
5/7/02 2:33:00 PM	8	5/7/02 3:08:00 PM	7	5/7/02 3:43:00 PM	8	5/7/02 4:18:00 PM	7
5/7/02 2:34:00 PM	7	5/7/02 3:09:00 PM	7	5/7/02 3:44:00 PM	8	5/7/02 4:19:00 PM	8
5/7/02 2:35:00 PM	7	5/7/02 3:10:00 PM	7	5/7/02 3:45:00 PM	7	5/7/02 4:20:00 PM	8
5/7/02 2:36:00 PM	8	5/7/02 3:11:00 PM	7	5/7/02 3:46:00 PM	7	5/7/02 4:21:00 PM	9
5/7/02 2:37:00 PM	7	5/7/02 3:12:00 PM	8	5/7/02 3:47:00 PM	8	5/7/02 4:22:00 PM	8
5/7/02 2:38:00 PM	7	5/7/02 3:13:00 PM	8	5/7/02 3:48:00 PM	7	5/7/02 4:23:00 PM	8
5/7/02 2:39:00 PM	7	5/7/02 3:14:00 PM	8	5/7/02 3:49:00 PM	8	5/7/02 4:24:00 PM	8
5/7/02 2:40:00 PM	7	5/7/02 3:15:00 PM	7	5/7/02 3:50:00 PM	7	5/7/02 4:25:00 PM	8
5/7/02 2:41:00 PM	7	5/7/02 3:16:00 PM	7	5/7/02 3:51:00 PM	7	5/7/02 4:26:00 PM	7
5/7/02 2:42:00 PM	7	5/7/02 3:17:00 PM	8	5/7/02 3:52:00 PM	8	5/7/02 4:27:00 PM	7
5/7/02 2:43:00 PM	7	5/7/02 3:18:00 PM	7	5/7/02 3:53:00 PM	8	5/7/02 4:28:00 PM	8
5/7/02 2:44:00 PM	7	5/7/02 3:19:00 PM	8	5/7/02 3:54:00 PM	8	5/7/02 4:29:00 PM	8
5/7/02 2:45:00 PM	7	5/7/02 3:20:00 PM	7	5/7/02 3:55:00 PM	7	5/7/02 4:30:00 PM	8
5/7/02 2:46:00 PM	7	5/7/02 3:21:00 PM	7	5/7/02 3:56:00 PM	8	5/7/02 4:31:00 PM	8
5/7/02 2:47:00 PM	8	5/7/02 3:22:00 PM	7	5/7/02 3:57:00 PM	7	5/7/02 4:32:00 PM	8
5/7/02 2:48:00 PM	8	5/7/02 3:23:00 PM	8	5/7/02 3:58:00 PM	7	5/7/02 4:33:00 PM	8
5/7/02 2:49:00 PM	7	5/7/02 3:24:00 PM	7	5/7/02 3:59:00 PM	7	5/7/02 4:34:00 PM	8
5/7/02 2:50:00 PM	7	5/7/02 3:25:00 PM	7	5/7/02 4:00:00 PM	8	5/7/02 4:35:00 PM	8
5/7/02 2:51:00 PM	7	5/7/02 3:26:00 PM	8	5/7/02 4:01:00 PM	8	5/7/02 4:36:00 PM	8
5/7/02 2:52:00 PM	7	5/7/02 3:27:00 PM	7	5/7/02 4:02:00 PM	7	5/7/02 4:37:00 PM	8
5/7/02 2:53:00 PM	7	5/7/02 3:28:00 PM	7	5/7/02 4:03:00 PM	8	5/7/02 4:38:00 PM	9
5/7/02 2:54:00 PM	8	5/7/02 3:29:00 PM	8	5/7/02 4:04:00 PM	7	5/7/02 4:39:00 PM	8
5/7/02 2:55:00 PM	8	5/7/02 3:30:00 PM	9	5/7/02 4:05:00 PM	8	5/7/02 4:40:00 PM	8
5/7/02 2:56:00 PM	7	5/7/02 3:31:00 PM	7	5/7/02 4:06:00 PM	7	5/7/02 4:41:00 PM	8
5/7/02 2:57:00 PM	7	5/7/02 3:32:00 PM	8	5/7/02 4:07:00 PM	7	5/7/02 4:42:00 PM	8
5/7/02 2:58:00 PM	7	5/7/02 3:33:00 PM	7	5/7/02 4:08:00 PM	7	5/7/02 4:43:00 PM	8
5/7/02 2:59:00 PM	8	5/7/02 3:34:00 PM	7	5/7/02 4:09:00 PM	8	5/7/02 4:44:00 PM	8
5/7/02 3:00:00 PM	7	5/7/02 3:35:00 PM	7	5/7/02 4:10:00 PM	7	5/7/02 4:45:00 PM	8
5/7/02 3:01:00 PM	8	5/7/02 3:36:00 PM	8	5/7/02 4:11:00 PM	8	5/7/02 4:46:00 PM	8
5/7/02 3:02:00 PM	7	5/7/02 3:37:00 PM	7	5/7/02 4:12:00 PM	7	5/7/02 4:47:00 PM	8
5/7/02 3:03:00 PM	7	5/7/02 3:38:00 PM	8	5/7/02 4:13:00 PM	8	5/7/02 4:48:00 PM	9
5/7/02 3:04:00 PM	7	5/7/02 3:39:00 PM	7	5/7/02 4:14:00 PM	7	5/7/02 4:49:00 PM	9
5/7/02 3:05:00 PM	7	5/7/02 3:40:00 PM	8	5/7/02 4:15:00 PM	8	5/7/02 4:50:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/7/02 4:51:00 PM	8	5/9/02 8:27:00 AM	3	5/9/02 9:02:00 AM	3	5/9/02 9:37:00 AM	3
5/7/02 4:52:00 PM	8	5/9/02 8:28:00 AM	4	5/9/02 9:03:00 AM	3	5/9/02 9:38:00 AM	4
5/7/02 4:53:00 PM	8	5/9/02 8:29:00 AM	4	5/9/02 9:04:00 AM	3	5/9/02 9:39:00 AM	4
5/7/02 4:54:00 PM	8	5/9/02 8:30:00 AM	3	5/9/02 9:05:00 AM	3	5/9/02 9:40:00 AM	3
5/7/02 4:55:00 PM	7	5/9/02 8:31:00 AM	4	5/9/02 9:06:00 AM	4	5/9/02 9:41:00 AM	3
5/7/02 4:56:00 PM	8	5/9/02 8:32:00 AM	4	5/9/02 9:07:00 AM	3	5/9/02 9:42:00 AM	4
5/7/02 4:57:00 PM	8	5/9/02 8:33:00 AM	3	5/9/02 9:08:00 AM	4	5/9/02 9:43:00 AM	3
5/9/02 7:59:00 AM	5	5/9/02 8:34:00 AM	3	5/9/02 9:09:00 AM	3	5/9/02 9:44:00 AM	3
5/9/02 8:00:00 AM	5	5/9/02 8:35:00 AM	3	5/9/02 9:10:00 AM	3	5/9/02 9:45:00 AM	3
5/9/02 8:01:00 AM	7	5/9/02 8:36:00 AM	4	5/9/02 9:11:00 AM	4	5/9/02 9:46:00 AM	3
5/9/02 8:02:00 AM	6	5/9/02 8:37:00 AM	3	5/9/02 9:12:00 AM	3	5/9/02 9:47:00 AM	4
5/9/02 8:03:00 AM	5	5/9/02 8:38:00 AM	4	5/9/02 9:13:00 AM	4	5/9/02 9:48:00 AM	3
5/9/02 8:04:00 AM	6	5/9/02 8:39:00 AM	3	5/9/02 9:14:00 AM	4	5/9/02 9:49:00 AM	3
5/9/02 8:05:00 AM	6	5/9/02 8:40:00 AM	3	5/9/02 9:15:00 AM	4	5/9/02 9:50:00 AM	3
5/9/02 8:06:00 AM	5	5/9/02 8:41:00 AM	3	5/9/02 9:16:00 AM	4	5/9/02 9:51:00 AM	4
5/9/02 8:07:00 AM	4	5/9/02 8:42:00 AM	3	5/9/02 9:17:00 AM	5	5/9/02 9:52:00 AM	3
5/9/02 8:08:00 AM	4	5/9/02 8:43:00 AM	3	5/9/02 9:18:00 AM	5	5/9/02 9:53:00 AM	3
5/9/02 8:09:00 AM	4	5/9/02 8:44:00 AM	4	5/9/02 9:19:00 AM	4	5/9/02 9:54:00 AM	3
5/9/02 8:10:00 AM	4	5/9/02 8:45:00 AM	3	5/9/02 9:20:00 AM	4	5/9/02 9:55:00 AM	4
5/9/02 8:11:00 AM	4	5/9/02 8:46:00 AM	3	5/9/02 9:21:00 AM	6	5/9/02 9:56:00 AM	3
5/9/02 8:12:00 AM	4	5/9/02 8:47:00 AM	3	5/9/02 9:22:00 AM	4	5/9/02 9:57:00 AM	3
5/9/02 8:13:00 AM	5	5/9/02 8:48:00 AM	4	5/9/02 9:23:00 AM	4	5/9/02 9:58:00 AM	3
5/9/02 8:14:00 AM	5	5/9/02 8:49:00 AM	3	5/9/02 9:24:00 AM	4	5/9/02 9:59:00 AM	4
5/9/02 8:15:00 AM	4	5/9/02 8:50:00 AM	3	5/9/02 9:25:00 AM	4	5/9/02 10:00:00 AM	3
5/9/02 8:16:00 AM	4	5/9/02 8:51:00 AM	3	5/9/02 9:26:00 AM	4	5/9/02 10:01:00 AM	4
5/9/02 8:17:00 AM	8	5/9/02 8:52:00 AM	3	5/9/02 9:27:00 AM	4	5/9/02 10:02:00 AM	3
5/9/02 8:18:00 AM	5	5/9/02 8:53:00 AM	4	5/9/02 9:28:00 AM	8	5/9/02 10:03:00 AM	3
5/9/02 8:19:00 AM	5	5/9/02 8:54:00 AM	4	5/9/02 9:29:00 AM	5	5/9/02 10:04:00 AM	3
5/9/02 8:20:00 AM	5	5/9/02 8:55:00 AM	4	5/9/02 9:30:00 AM	4	5/9/02 10:05:00 AM	4
5/9/02 8:21:00 AM	6	5/9/02 8:56:00 AM	3	5/9/02 9:31:00 AM	4	5/9/02 10:06:00 AM	4
5/9/02 8:22:00 AM	5	5/9/02 8:57:00 AM	4	5/9/02 9:32:00 AM	4	5/9/02 10:07:00 AM	3
5/9/02 8:23:00 AM	5	5/9/02 8:58:00 AM	3	5/9/02 9:33:00 AM	4	5/9/02 10:08:00 AM	4
5/9/02 8:24:00 AM	4	5/9/02 8:59:00 AM	4	5/9/02 9:34:00 AM	4	5/9/02 10:09:00 AM	3
5/9/02 8:25:00 AM	4	5/9/02 9:00:00 AM	3	5/9/02 9:35:00 AM	4	5/9/02 10:10:00 AM	3
5/9/02 8:26:00 AM	4	5/9/02 9:01:00 AM	3	5/9/02 9:36:00 AM	4	5/9/02 10:11:00 AM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/9/02 10:12:00 AM	3	5/9/02 10:47:00 AM	3	5/16/02 9:33:00 AM	3	5/16/02 10:08:00 AM	3
5/9/02 10:13:00 AM	3	5/9/02 10:48:00 AM	5	5/16/02 9:34:00 AM	2	5/16/02 10:09:00 AM	3
5/9/02 10:14:00 AM	3	5/9/02 10:49:00 AM	3	5/16/02 9:35:00 AM	3	5/16/02 10:10:00 AM	3
5/9/02 10:15:00 AM	3	5/9/02 10:50:00 AM	6	5/16/02 9:36:00 AM	5	5/16/02 10:11:00 AM	3
5/9/02 10:16:00 AM	4	5/16/02 9:02:00 AM	14	5/16/02 9:37:00 AM	3	5/16/02 10:12:00 AM	3
5/9/02 10:17:00 AM	4	5/16/02 9:03:00 AM	24	5/16/02 9:38:00 AM	2	5/16/02 10:13:00 AM	3
5/9/02 10:18:00 AM	3	5/16/02 9:04:00 AM	18	5/16/02 9:39:00 AM	3	5/16/02 10:14:00 AM	3
5/9/02 10:19:00 AM	3	5/16/02 9:05:00 AM	25	5/16/02 9:40:00 AM	3	5/16/02 10:15:00 AM	3
5/9/02 10:20:00 AM	3	5/16/02 9:06:00 AM	4	5/16/02 9:41:00 AM	3	5/16/02 10:16:00 AM	3
5/9/02 10:21:00 AM	3	5/16/02 9:07:00 AM	5	5/16/02 9:42:00 AM	3	5/16/02 10:17:00 AM	3
5/9/02 10:22:00 AM	3	5/16/02 9:08:00 AM	5	5/16/02 9:43:00 AM	3	5/16/02 10:18:00 AM	3
5/9/02 10:23:00 AM	3	5/16/02 9:09:00 AM	4	5/16/02 9:44:00 AM	3	5/16/02 10:19:00 AM	3
5/9/02 10:24:00 AM	3	5/16/02 9:10:00 AM	12	5/16/02 9:45:00 AM	3	5/16/02 10:20:00 AM	3
5/9/02 10:25:00 AM	3	5/16/02 9:11:00 AM	12	5/16/02 9:46:00 AM	2	5/16/02 10:21:00 AM	3
5/9/02 10:26:00 AM	3	5/16/02 9:12:00 AM	9	5/16/02 9:47:00 AM	3	5/16/02 10:22:00 AM	4
5/9/02 10:27:00 AM	3	5/16/02 9:13:00 AM	4	5/16/02 9:48:00 AM	3	5/16/02 10:23:00 AM	4
5/9/02 10:28:00 AM	3	5/16/02 9:14:00 AM	4	5/16/02 9:49:00 AM	3	5/16/02 10:24:00 AM	3
5/9/02 10:29:00 AM	3	5/16/02 9:15:00 AM	4	5/16/02 9:50:00 AM	3	5/16/02 10:25:00 AM	3
5/9/02 10:30:00 AM	3	5/16/02 9:16:00 AM	4	5/16/02 9:51:00 AM	3	5/16/02 10:26:00 AM	3
5/9/02 10:31:00 AM	3	5/16/02 9:17:00 AM	3	5/16/02 9:52:00 AM	3	5/16/02 10:27:00 AM	3
5/9/02 10:32:00 AM	3	5/16/02 9:18:00 AM	3	5/16/02 9:53:00 AM	3	5/16/02 10:28:00 AM	3
5/9/02 10:33:00 AM	3	5/16/02 9:19:00 AM	3	5/16/02 9:54:00 AM	3	5/16/02 10:29:00 AM	3
5/9/02 10:34:00 AM	3	5/16/02 9:20:00 AM	3	5/16/02 9:55:00 AM	3	5/16/02 10:30:00 AM	3
5/9/02 10:35:00 AM	3	5/16/02 9:21:00 AM	3	5/16/02 9:56:00 AM	3	5/16/02 10:31:00 AM	4
5/9/02 10:36:00 AM	31	5/16/02 9:22:00 AM	2	5/16/02 9:57:00 AM	4	5/16/02 10:32:00 AM	3
5/9/02 10:37:00 AM	4	5/16/02 9:23:00 AM	3	5/16/02 9:58:00 AM	3	5/16/02 10:33:00 AM	4
5/9/02 10:38:00 AM	4	5/16/02 9:24:00 AM	4	5/16/02 9:59:00 AM	4	5/16/02 10:34:00 AM	4
5/9/02 10:39:00 AM	4	5/16/02 9:25:00 AM	9	5/16/02 10:00:00 AM	3	5/16/02 10:35:00 AM	64
5/9/02 10:40:00 AM	4	5/16/02 9:26:00 AM	3	5/16/02 10:01:00 AM	3	5/16/02 10:36:00 AM	27
5/9/02 10:41:00 AM	3	5/16/02 9:27:00 AM	3	5/16/02 10:02:00 AM	3	5/16/02 10:37:00 AM	8
5/9/02 10:42:00 AM	4	5/16/02 9:28:00 AM	4	5/16/02 10:03:00 AM	4	5/16/02 10:38:00 AM	18
5/9/02 10:43:00 AM	4	5/16/02 9:29:00 AM	3	5/16/02 10:04:00 AM	3	5/16/02 10:39:00 AM	14
5/9/02 10:44:00 AM	3	5/16/02 9:30:00 AM	3	5/16/02 10:05:00 AM	2	5/16/02 10:40:00 AM	4
5/9/02 10:45:00 AM	3	5/16/02 9:31:00 AM	3	5/16/02 10:06:00 AM	3	5/16/02 10:41:00 AM	3
5/9/02 10:46:00 AM	4	5/16/02 9:32:00 AM	3	5/16/02 10:07:00 AM	3	5/16/02 10:42:00 AM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/16/02 10:43:00 AM	4	5/16/02 11:18:00 AM	4	5/16/02 11:53:00 AM	13	5/16/02 12:28:00 PM	4
5/16/02 10:44:00 AM	4	5/16/02 11:19:00 AM	4	5/16/02 11:54:00 AM	6	5/16/02 12:29:00 PM	5
5/16/02 10:45:00 AM	3	5/16/02 11:20:00 AM	4	5/16/02 11:55:00 AM	4	5/16/02 12:30:00 PM	5
5/16/02 10:46:00 AM	3	5/16/02 11:21:00 AM	4	5/16/02 11:56:00 AM	9	5/16/02 12:31:00 PM	4
5/16/02 10:47:00 AM	3	5/16/02 11:22:00 AM	4	5/16/02 11:57:00 AM	5	5/16/02 12:32:00 PM	5
5/16/02 10:48:00 AM	3	5/16/02 11:23:00 AM	4	5/16/02 11:58:00 AM	4	5/16/02 12:33:00 PM	4
5/16/02 10:49:00 AM	4	5/16/02 11:24:00 AM	4	5/16/02 11:59:00 AM	4	5/16/02 12:34:00 PM	4
5/16/02 10:50:00 AM	4	5/16/02 11:25:00 AM	5	5/16/02 12:00:00 PM	4	5/16/02 12:35:00 PM	5
5/16/02 10:51:00 AM	4	5/16/02 11:26:00 AM	4	5/16/02 12:01:00 PM	4	5/16/02 12:36:00 PM	5
5/16/02 10:52:00 AM	3	5/16/02 11:27:00 AM	4	5/16/02 12:02:00 PM	4	5/16/02 12:37:00 PM	6
5/16/02 10:53:00 AM	4	5/16/02 11:28:00 AM	6	5/16/02 12:03:00 PM	6	5/16/02 12:38:00 PM	5
5/16/02 10:54:00 AM	4	5/16/02 11:29:00 AM	4	5/16/02 12:04:00 PM	5	5/16/02 12:39:00 PM	5
5/16/02 10:55:00 AM	3	5/16/02 11:30:00 AM	5	5/16/02 12:05:00 PM	4	5/16/02 12:40:00 PM	5
5/16/02 10:56:00 AM	3	5/16/02 11:31:00 AM	4	5/16/02 12:06:00 PM	4	5/16/02 12:41:00 PM	10
5/16/02 10:57:00 AM	4	5/16/02 11:32:00 AM	4	5/16/02 12:07:00 PM	4	5/16/02 12:42:00 PM	6
5/16/02 10:58:00 AM	3	5/16/02 11:33:00 AM	4	5/16/02 12:08:00 PM	7	5/16/02 12:43:00 PM	5
5/16/02 10:59:00 AM	3	5/16/02 11:34:00 AM	4	5/16/02 12:09:00 PM	34	5/16/02 12:44:00 PM	6
5/16/02 11:00:00 AM	4	5/16/02 11:35:00 AM	4	5/16/02 12:10:00 PM	17	5/16/02 12:45:00 PM	7
5/16/02 11:01:00 AM	3	5/16/02 11:36:00 AM	4	5/16/02 12:11:00 PM	4	5/16/02 12:46:00 PM	5
5/16/02 11:02:00 AM	4	5/16/02 11:37:00 AM	4	5/16/02 12:12:00 PM	4	5/16/02 12:47:00 PM	6
5/16/02 11:03:00 AM	4	5/16/02 11:38:00 AM	4	5/16/02 12:13:00 PM	4	5/16/02 12:48:00 PM	7
5/16/02 11:04:00 AM	3	5/16/02 11:39:00 AM	4	5/16/02 12:14:00 PM	4	5/16/02 12:49:00 PM	6
5/16/02 11:05:00 AM	4	5/16/02 11:40:00 AM	4	5/16/02 12:15:00 PM	4	5/16/02 12:50:00 PM	6
5/16/02 11:06:00 AM	4	5/16/02 11:41:00 AM	4	5/16/02 12:16:00 PM	4	5/16/02 12:51:00 PM	6
5/16/02 11:07:00 AM	3	5/16/02 11:42:00 AM	4	5/16/02 12:17:00 PM	4	5/16/02 12:52:00 PM	6
5/16/02 11:08:00 AM	3	5/16/02 11:43:00 AM	4	5/16/02 12:18:00 PM	4	5/16/02 12:53:00 PM	5
5/16/02 11:09:00 AM	3	5/16/02 11:44:00 AM	4	5/16/02 12:19:00 PM	4	5/16/02 12:54:00 PM	6
5/16/02 11:10:00 AM	3	5/16/02 11:45:00 AM	4	5/16/02 12:20:00 PM	4	5/16/02 12:55:00 PM	7
5/16/02 11:11:00 AM	3	5/16/02 11:46:00 AM	4	5/16/02 12:21:00 PM	4	5/16/02 12:56:00 PM	6
5/16/02 11:12:00 AM	3	5/16/02 11:47:00 AM	4	5/16/02 12:22:00 PM	4	5/16/02 12:57:00 PM	6
5/16/02 11:13:00 AM	3	5/16/02 11:48:00 AM	4	5/16/02 12:23:00 PM	4	5/16/02 12:58:00 PM	6
5/16/02 11:14:00 AM	4	5/16/02 11:49:00 AM	4	5/16/02 12:24:00 PM	4	5/16/02 12:59:00 PM	7
5/16/02 11:15:00 AM	4	5/16/02 11:50:00 AM	4	5/16/02 12:25:00 PM	4	5/16/02 1:00:00 PM	6
5/16/02 11:16:00 AM	4	5/16/02 11:51:00 AM	5	5/16/02 12:26:00 PM	5	5/16/02 1:01:00 PM	6
5/16/02 11:17:00 AM	3	5/16/02 11:52:00 AM	115	5/16/02 12:27:00 PM	5	5/16/02 1:02:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/16/02 1:03:00 PM	6	5/16/02 1:38:00 PM	7	5/16/02 2:13:00 PM	8	5/16/02 2:48:00 PM	7
5/16/02 1:04:00 PM	6	5/16/02 1:39:00 PM	7	5/16/02 2:14:00 PM	7	5/16/02 2:49:00 PM	6
5/16/02 1:05:00 PM	6	5/16/02 1:40:00 PM	7	5/16/02 2:15:00 PM	6	5/16/02 2:50:00 PM	6
5/16/02 1:06:00 PM	6	5/16/02 1:41:00 PM	6	5/16/02 2:16:00 PM	7	5/16/02 2:51:00 PM	6
5/16/02 1:07:00 PM	7	5/16/02 1:42:00 PM	7	5/16/02 2:17:00 PM	6	5/16/02 2:52:00 PM	6
5/16/02 1:08:00 PM	6	5/16/02 1:43:00 PM	6	5/16/02 2:18:00 PM	6	5/16/02 2:53:00 PM	6
5/16/02 1:09:00 PM	6	5/16/02 1:44:00 PM	6	5/16/02 2:19:00 PM	7	5/16/02 2:54:00 PM	7
5/16/02 1:10:00 PM	7	5/16/02 1:45:00 PM	6	5/16/02 2:20:00 PM	7	5/16/02 2:55:00 PM	7
5/16/02 1:11:00 PM	7	5/16/02 1:46:00 PM	6	5/16/02 2:21:00 PM	7	5/16/02 2:56:00 PM	6
5/16/02 1:12:00 PM	6	5/16/02 1:47:00 PM	6	5/16/02 2:22:00 PM	7	5/16/02 2:57:00 PM	6
5/16/02 1:13:00 PM	6	5/16/02 1:48:00 PM	6	5/16/02 2:23:00 PM	6	5/16/02 2:58:00 PM	6
5/16/02 1:14:00 PM	7	5/16/02 1:49:00 PM	7	5/16/02 2:24:00 PM	6	5/16/02 2:59:00 PM	6
5/16/02 1:15:00 PM	7	5/16/02 1:50:00 PM	6	5/16/02 2:25:00 PM	6	5/16/02 3:00:00 PM	6
5/16/02 1:16:00 PM	7	5/16/02 1:51:00 PM	7	5/16/02 2:26:00 PM	6	5/16/02 3:01:00 PM	6
5/16/02 1:17:00 PM	7	5/16/02 1:52:00 PM	6	5/16/02 2:27:00 PM	6	5/16/02 3:02:00 PM	6
5/16/02 1:18:00 PM	7	5/16/02 1:53:00 PM	6	5/16/02 2:28:00 PM	6	5/16/02 3:03:00 PM	6
5/16/02 1:19:00 PM	6	5/16/02 1:54:00 PM	7	5/16/02 2:29:00 PM	6	5/16/02 3:04:00 PM	6
5/16/02 1:20:00 PM	6	5/16/02 1:55:00 PM	7	5/16/02 2:30:00 PM	7	5/16/02 3:05:00 PM	6
5/16/02 1:21:00 PM	6	5/16/02 1:56:00 PM	6	5/16/02 2:31:00 PM	7	5/16/02 3:06:00 PM	6
5/16/02 1:22:00 PM	6	5/16/02 1:57:00 PM	7	5/16/02 2:32:00 PM	7	5/16/02 3:07:00 PM	8
5/16/02 1:23:00 PM	6	5/16/02 1:58:00 PM	7	5/16/02 2:33:00 PM	6	5/16/02 3:08:00 PM	7
5/16/02 1:24:00 PM	7	5/16/02 1:59:00 PM	6	5/16/02 2:34:00 PM	6	5/16/02 3:09:00 PM	7
5/16/02 1:25:00 PM	6	5/16/02 2:00:00 PM	7	5/16/02 2:35:00 PM	7	5/16/02 3:10:00 PM	7
5/16/02 1:26:00 PM	6	5/16/02 2:01:00 PM	7	5/16/02 2:36:00 PM	7	5/16/02 3:11:00 PM	7
5/16/02 1:27:00 PM	6	5/16/02 2:02:00 PM	7	5/16/02 2:37:00 PM	6	5/16/02 3:12:00 PM	9
5/16/02 1:28:00 PM	7	5/16/02 2:03:00 PM	8	5/16/02 2:38:00 PM	6	5/16/02 3:13:00 PM	7
5/16/02 1:29:00 PM	7	5/16/02 2:04:00 PM	6	5/16/02 2:39:00 PM	7	5/16/02 3:14:00 PM	6
5/16/02 1:30:00 PM	7	5/16/02 2:05:00 PM	6	5/16/02 2:40:00 PM	5	5/16/02 3:15:00 PM	7
5/16/02 1:31:00 PM	6	5/16/02 2:06:00 PM	7	5/16/02 2:41:00 PM	6	5/16/02 3:16:00 PM	6
5/16/02 1:32:00 PM	6	5/16/02 2:07:00 PM	7	5/16/02 2:42:00 PM	6	5/16/02 3:17:00 PM	6
5/16/02 1:33:00 PM	7	5/16/02 2:08:00 PM	6	5/16/02 2:43:00 PM	6	5/16/02 3:18:00 PM	6
5/16/02 1:34:00 PM	7	5/16/02 2:09:00 PM	6	5/16/02 2:44:00 PM	6	5/16/02 3:19:00 PM	6
5/16/02 1:35:00 PM	6	5/16/02 2:10:00 PM	6	5/16/02 2:45:00 PM	6	5/16/02 3:20:00 PM	6
5/16/02 1:36:00 PM	6	5/16/02 2:11:00 PM	7	5/16/02 2:46:00 PM	6	5/16/02 3:21:00 PM	7
5/16/02 1:37:00 PM	6	5/16/02 2:12:00 PM	6	5/16/02 2:47:00 PM	6	5/16/02 3:22:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/16/02 3:23:00 PM	6	5/16/02 3:58:00 PM	7	5/16/02 4:33:00 PM	6	5/20/02 10:50:00 AM	3
5/16/02 3:24:00 PM	6	5/16/02 3:59:00 PM	6	5/16/02 4:34:00 PM	6	5/20/02 10:51:00 AM	3
5/16/02 3:25:00 PM	6	5/16/02 4:00:00 PM	5	5/16/02 4:35:00 PM	6	5/20/02 10:52:00 AM	3
5/16/02 3:26:00 PM	6	5/16/02 4:01:00 PM	6	5/16/02 4:36:00 PM	5	5/20/02 10:53:00 AM	3
5/16/02 3:27:00 PM	6	5/16/02 4:02:00 PM	6	5/16/02 4:37:00 PM	6	5/20/02 10:54:00 AM	3
5/16/02 3:28:00 PM	6	5/16/02 4:03:00 PM	8	5/16/02 4:38:00 PM	6	5/20/02 10:55:00 AM	3
5/16/02 3:29:00 PM	6	5/16/02 4:04:00 PM	6	5/16/02 4:39:00 PM	6	5/20/02 10:56:00 AM	3
5/16/02 3:30:00 PM	7	5/16/02 4:05:00 PM	7	5/16/02 4:40:00 PM	6	5/20/02 10:57:00 AM	7
5/16/02 3:31:00 PM	6	5/16/02 4:06:00 PM	6	5/16/02 4:41:00 PM	6	5/20/02 10:58:00 AM	9
5/16/02 3:32:00 PM	6	5/16/02 4:07:00 PM	6	5/16/02 4:42:00 PM	6	5/20/02 10:59:00 AM	4
5/16/02 3:33:00 PM	6	5/16/02 4:08:00 PM	6	5/16/02 4:43:00 PM	6	5/20/02 11:00:00 AM	3
5/16/02 3:34:00 PM	7	5/16/02 4:09:00 PM	6	5/16/02 4:44:00 PM	6	5/20/02 11:01:00 AM	3
5/16/02 3:35:00 PM	6	5/16/02 4:10:00 PM	5	5/20/02 10:27:00 AM	52	5/20/02 11:02:00 AM	3
5/16/02 3:36:00 PM	6	5/16/02 4:11:00 PM	6	5/20/02 10:28:00 AM	33	5/20/02 11:03:00 AM	5
5/16/02 3:37:00 PM	5	5/16/02 4:12:00 PM	6	5/20/02 10:29:00 AM	34	5/20/02 11:04:00 AM	4
5/16/02 3:38:00 PM	6	5/16/02 4:13:00 PM	6	5/20/02 10:30:00 AM	23	5/20/02 11:05:00 AM	2
5/16/02 3:39:00 PM	6	5/16/02 4:14:00 PM	6	5/20/02 10:31:00 AM	355	5/20/02 11:06:00 AM	8
5/16/02 3:40:00 PM	6	5/16/02 4:15:00 PM	5	5/20/02 10:32:00 AM	9	5/20/02 11:07:00 AM	3
5/16/02 3:41:00 PM	6	5/16/02 4:16:00 PM	5	5/20/02 10:33:00 AM	2	5/20/02 11:08:00 AM	3
5/16/02 3:42:00 PM	6	5/16/02 4:17:00 PM	7	5/20/02 10:34:00 AM	2	5/20/02 11:09:00 AM	3
5/16/02 3:43:00 PM	6	5/16/02 4:18:00 PM	6	5/20/02 10:35:00 AM	3	5/20/02 11:10:00 AM	3
5/16/02 3:44:00 PM	6	5/16/02 4:19:00 PM	6	5/20/02 10:36:00 AM	3	5/20/02 11:11:00 AM	3
5/16/02 3:45:00 PM	6	5/16/02 4:20:00 PM	6	5/20/02 10:37:00 AM	2	5/20/02 11:12:00 AM	3
5/16/02 3:46:00 PM	6	5/16/02 4:21:00 PM	5	5/20/02 10:38:00 AM	2	5/20/02 11:13:00 AM	2
5/16/02 3:47:00 PM	6	5/16/02 4:22:00 PM	6	5/20/02 10:39:00 AM	3	5/20/02 11:14:00 AM	2
5/16/02 3:48:00 PM	6	5/16/02 4:23:00 PM	7	5/20/02 10:40:00 AM	3	5/20/02 11:15:00 AM	2
5/16/02 3:49:00 PM	6	5/16/02 4:24:00 PM	6	5/20/02 10:41:00 AM	3	5/20/02 11:16:00 AM	2
5/16/02 3:50:00 PM	5	5/16/02 4:25:00 PM	6	5/20/02 10:42:00 AM	4	5/20/02 11:17:00 AM	3
5/16/02 3:51:00 PM	6	5/16/02 4:26:00 PM	6	5/20/02 10:43:00 AM	3	5/20/02 11:18:00 AM	3
5/16/02 3:52:00 PM	6	5/16/02 4:27:00 PM	6	5/20/02 10:44:00 AM	3	5/20/02 11:19:00 AM	6
5/16/02 3:53:00 PM	6	5/16/02 4:28:00 PM	6	5/20/02 10:45:00 AM	3	5/20/02 11:20:00 AM	4
5/16/02 3:54:00 PM	5	5/16/02 4:29:00 PM	6	5/20/02 10:46:00 AM	4	5/20/02 11:21:00 AM	4
5/16/02 3:55:00 PM	6	5/16/02 4:30:00 PM	5	5/20/02 10:47:00 AM	3	5/20/02 11:22:00 AM	3
5/16/02 3:56:00 PM	6	5/16/02 4:31:00 PM	6	5/20/02 10:48:00 AM	2	5/20/02 11:23:00 AM	3
5/16/02 3:57:00 PM	6	5/16/02 4:32:00 PM	7	5/20/02 10:49:00 AM	3	5/20/02 11:24:00 AM	11

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/20/02 11:25:00 AM	8	5/20/02 12:00:00 PM	4	5/20/02 12:35:00 PM	4	5/20/02 1:10:00 PM	4
5/20/02 11:26:00 AM	8	5/20/02 12:01:00 PM	4	5/20/02 12:36:00 PM	4	5/20/02 1:11:00 PM	5
5/20/02 11:27:00 AM	4	5/20/02 12:02:00 PM	4	5/20/02 12:37:00 PM	7	5/20/02 1:12:00 PM	6
5/20/02 11:28:00 AM	4	5/20/02 12:03:00 PM	4	5/20/02 12:38:00 PM	5	5/20/02 1:13:00 PM	4
5/20/02 11:29:00 AM	4	5/20/02 12:04:00 PM	6	5/20/02 12:39:00 PM	4	5/20/02 1:14:00 PM	4
5/20/02 11:30:00 AM	4	5/20/02 12:05:00 PM	4	5/20/02 12:40:00 PM	4	5/20/02 1:15:00 PM	4
5/20/02 11:31:00 AM	3	5/20/02 12:06:00 PM	3	5/20/02 12:41:00 PM	5	5/20/02 1:16:00 PM	4
5/20/02 11:32:00 AM	4	5/20/02 12:07:00 PM	4	5/20/02 12:42:00 PM	5	5/20/02 1:17:00 PM	4
5/20/02 11:33:00 AM	4	5/20/02 12:08:00 PM	4	5/20/02 12:43:00 PM	6	5/20/02 1:18:00 PM	4
5/20/02 11:34:00 AM	8	5/20/02 12:09:00 PM	3	5/20/02 12:44:00 PM	4	5/20/02 1:19:00 PM	4
5/20/02 11:35:00 AM	5	5/20/02 12:10:00 PM	3	5/20/02 12:45:00 PM	5	5/20/02 1:20:00 PM	4
5/20/02 11:36:00 AM	4	5/20/02 12:11:00 PM	4	5/20/02 12:46:00 PM	5	5/20/02 1:21:00 PM	4
5/20/02 11:37:00 AM	4	5/20/02 12:12:00 PM	4	5/20/02 12:47:00 PM	4	5/20/02 1:22:00 PM	4
5/20/02 11:38:00 AM	4	5/20/02 12:13:00 PM	5	5/20/02 12:48:00 PM	4	5/20/02 1:23:00 PM	4
5/20/02 11:39:00 AM	4	5/20/02 12:14:00 PM	6	5/20/02 12:49:00 PM	5	5/20/02 1:24:00 PM	4
5/20/02 11:40:00 AM	4	5/20/02 12:15:00 PM	5	5/20/02 12:50:00 PM	5	5/20/02 1:25:00 PM	4
5/20/02 11:41:00 AM	5	5/20/02 12:16:00 PM	5	5/20/02 12:51:00 PM	4	5/20/02 1:26:00 PM	3
5/20/02 11:42:00 AM	4	5/20/02 12:17:00 PM	4	5/20/02 12:52:00 PM	4	5/20/02 1:27:00 PM	4
5/20/02 11:43:00 AM	3	5/20/02 12:18:00 PM	4	5/20/02 12:53:00 PM	4	5/20/02 1:28:00 PM	4
5/20/02 11:44:00 AM	4	5/20/02 12:19:00 PM	4	5/20/02 12:54:00 PM	6	5/20/02 1:29:00 PM	4
5/20/02 11:45:00 AM	4	5/20/02 12:20:00 PM	4	5/20/02 12:55:00 PM	4	5/20/02 1:30:00 PM	4
5/20/02 11:46:00 AM	5	5/20/02 12:21:00 PM	4	5/20/02 12:56:00 PM	4	5/20/02 1:31:00 PM	4
5/20/02 11:47:00 AM	4	5/20/02 12:22:00 PM	4	5/20/02 12:57:00 PM	5	5/20/02 1:32:00 PM	4
5/20/02 11:48:00 AM	6	5/20/02 12:23:00 PM	4	5/20/02 12:58:00 PM	4	5/20/02 1:33:00 PM	4
5/20/02 11:49:00 AM	7	5/20/02 12:24:00 PM	5	5/20/02 12:59:00 PM	4	5/20/02 1:34:00 PM	4
5/20/02 11:50:00 AM	5	5/20/02 12:25:00 PM	4	5/20/02 1:00:00 PM	4	5/20/02 1:35:00 PM	3
5/20/02 11:51:00 AM	4	5/20/02 12:26:00 PM	8	5/20/02 1:01:00 PM	4	5/20/02 1:36:00 PM	4
5/20/02 11:52:00 AM	4	5/20/02 12:27:00 PM	5	5/20/02 1:02:00 PM	4	5/20/02 1:37:00 PM	4
5/20/02 11:53:00 AM	3	5/20/02 12:28:00 PM	4	5/20/02 1:03:00 PM	4	5/20/02 1:38:00 PM	3
5/20/02 11:54:00 AM	4	5/20/02 12:29:00 PM	5	5/20/02 1:04:00 PM	4	5/20/02 1:39:00 PM	4
5/20/02 11:55:00 AM	3	5/20/02 12:30:00 PM	4	5/20/02 1:05:00 PM	4	5/20/02 1:40:00 PM	4
5/20/02 11:56:00 AM	4	5/20/02 12:31:00 PM	4	5/20/02 1:06:00 PM	4	5/20/02 1:41:00 PM	4
5/20/02 11:57:00 AM	4	5/20/02 12:32:00 PM	5	5/20/02 1:07:00 PM	4	5/20/02 1:42:00 PM	4
5/20/02 11:58:00 AM	3	5/20/02 12:33:00 PM	5	5/20/02 1:08:00 PM	4	5/20/02 1:43:00 PM	4
5/20/02 11:59:00 AM	3	5/20/02 12:34:00 PM	4	5/20/02 1:09:00 PM	4	5/20/02 1:44:00 PM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/20/02 1:45:00 PM	4	5/20/02 2:20:00 PM	4	5/20/02 2:55:00 PM	4	5/20/02 3:30:00 PM	4
5/20/02 1:46:00 PM	4	5/20/02 2:21:00 PM	4	5/20/02 2:56:00 PM	4	5/20/02 3:31:00 PM	4
5/20/02 1:47:00 PM	4	5/20/02 2:22:00 PM	4	5/20/02 2:57:00 PM	4	5/20/02 3:32:00 PM	4
5/20/02 1:48:00 PM	4	5/20/02 2:23:00 PM	4	5/20/02 2:58:00 PM	4	5/20/02 3:33:00 PM	4
5/20/02 1:49:00 PM	4	5/20/02 2:24:00 PM	4	5/20/02 2:59:00 PM	4	5/20/02 3:34:00 PM	4
5/20/02 1:50:00 PM	4	5/20/02 2:25:00 PM	4	5/20/02 3:00:00 PM	4	5/20/02 3:35:00 PM	4
5/20/02 1:51:00 PM	4	5/20/02 2:26:00 PM	4	5/20/02 3:01:00 PM	4	5/20/02 3:36:00 PM	4
5/20/02 1:52:00 PM	4	5/20/02 2:27:00 PM	4	5/20/02 3:02:00 PM	4	5/20/02 3:37:00 PM	4
5/20/02 1:53:00 PM	4	5/20/02 2:28:00 PM	4	5/20/02 3:03:00 PM	4	5/20/02 3:38:00 PM	4
5/20/02 1:54:00 PM	4	5/20/02 2:29:00 PM	14	5/20/02 3:04:00 PM	4	5/20/02 3:39:00 PM	4
5/20/02 1:55:00 PM	5	5/20/02 2:30:00 PM	4	5/20/02 3:05:00 PM	4	5/20/02 3:40:00 PM	4
5/20/02 1:56:00 PM	4	5/20/02 2:31:00 PM	4	5/20/02 3:06:00 PM	4	5/20/02 3:41:00 PM	4
5/20/02 1:57:00 PM	4	5/20/02 2:32:00 PM	4	5/20/02 3:07:00 PM	4	5/20/02 3:42:00 PM	4
5/20/02 1:58:00 PM	4	5/20/02 2:33:00 PM	4	5/20/02 3:08:00 PM	4	5/20/02 3:43:00 PM	4
5/20/02 1:59:00 PM	4	5/20/02 2:34:00 PM	4	5/20/02 3:09:00 PM	4	5/20/02 3:44:00 PM	4
5/20/02 2:00:00 PM	4	5/20/02 2:35:00 PM	4	5/20/02 3:10:00 PM	4	5/20/02 3:45:00 PM	4
5/20/02 2:01:00 PM	4	5/20/02 2:36:00 PM	4	5/20/02 3:11:00 PM	4	5/20/02 3:46:00 PM	4
5/20/02 2:02:00 PM	4	5/20/02 2:37:00 PM	4	5/20/02 3:12:00 PM	4	5/20/02 3:47:00 PM	4
5/20/02 2:03:00 PM	4	5/20/02 2:38:00 PM	4	5/20/02 3:13:00 PM	4	5/20/02 3:48:00 PM	4
5/20/02 2:04:00 PM	4	5/20/02 2:39:00 PM	4	5/20/02 3:14:00 PM	4	5/20/02 3:49:00 PM	4
5/20/02 2:05:00 PM	4	5/20/02 2:40:00 PM	4	5/20/02 3:15:00 PM	4	5/20/02 3:50:00 PM	5
5/20/02 2:06:00 PM	4	5/20/02 2:41:00 PM	4	5/20/02 3:16:00 PM	4	5/20/02 3:51:00 PM	4
5/20/02 2:07:00 PM	4	5/20/02 2:42:00 PM	4	5/20/02 3:17:00 PM	4	5/20/02 3:52:00 PM	4
5/20/02 2:08:00 PM	4	5/20/02 2:43:00 PM	4	5/20/02 3:18:00 PM	4	5/20/02 3:53:00 PM	4
5/20/02 2:09:00 PM	4	5/20/02 2:44:00 PM	7	5/20/02 3:19:00 PM	4	5/20/02 3:54:00 PM	4
5/20/02 2:10:00 PM	4	5/20/02 2:45:00 PM	4	5/20/02 3:20:00 PM	4	5/20/02 3:55:00 PM	4
5/20/02 2:11:00 PM	4	5/20/02 2:46:00 PM	5	5/20/02 3:21:00 PM	4	5/20/02 3:56:00 PM	4
5/20/02 2:12:00 PM	4	5/20/02 2:47:00 PM	4	5/20/02 3:22:00 PM	4	5/20/02 3:57:00 PM	4
5/20/02 2:13:00 PM	4	5/20/02 2:48:00 PM	4	5/20/02 3:23:00 PM	4	5/20/02 3:58:00 PM	4
5/20/02 2:14:00 PM	4	5/20/02 2:49:00 PM	4	5/20/02 3:24:00 PM	4	5/20/02 3:59:00 PM	4
5/20/02 2:15:00 PM	4	5/20/02 2:50:00 PM	4	5/20/02 3:25:00 PM	4	5/20/02 4:00:00 PM	4
5/20/02 2:16:00 PM	4	5/20/02 2:51:00 PM	5	5/20/02 3:26:00 PM	4	5/20/02 4:01:00 PM	4
5/20/02 2:17:00 PM	4	5/20/02 2:52:00 PM	4	5/20/02 3:27:00 PM	4	5/20/02 4:02:00 PM	4
5/20/02 2:18:00 PM	4	5/20/02 2:53:00 PM	4	5/20/02 3:28:00 PM	4	5/20/02 4:03:00 PM	4
5/20/02 2:19:00 PM	4	5/20/02 2:54:00 PM	4	5/20/02 3:29:00 PM	4	5/20/02 4:04:00 PM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/20/02 4:05:00 PM	4	5/21/02 8:14:00 AM	3	5/21/02 8:49:00 AM	3	5/21/02 9:24:00 AM	3
5/20/02 4:06:00 PM	4	5/21/02 8:15:00 AM	3	5/21/02 8:50:00 AM	3	5/21/02 9:25:00 AM	3
5/20/02 4:07:00 PM	4	5/21/02 8:16:00 AM	2	5/21/02 8:51:00 AM	3	5/21/02 9:26:00 AM	3
5/20/02 4:08:00 PM	4	5/21/02 8:17:00 AM	3	5/21/02 8:52:00 AM	5	5/21/02 9:27:00 AM	2
5/20/02 4:09:00 PM	4	5/21/02 8:18:00 AM	3	5/21/02 8:53:00 AM	44	5/21/02 9:28:00 AM	3
5/20/02 4:10:00 PM	4	5/21/02 8:19:00 AM	2	5/21/02 8:54:00 AM	128	5/21/02 9:29:00 AM	3
5/20/02 4:11:00 PM	4	5/21/02 8:20:00 AM	2	5/21/02 8:55:00 AM	236	5/21/02 9:30:00 AM	3
5/20/02 4:12:00 PM	4	5/21/02 8:21:00 AM	3	5/21/02 8:56:00 AM	624	5/21/02 9:31:00 AM	3
5/20/02 4:13:00 PM	4	5/21/02 8:22:00 AM	3	5/21/02 8:57:00 AM	24	5/21/02 9:32:00 AM	3
5/20/02 4:14:00 PM	4	5/21/02 8:23:00 AM	3	5/21/02 8:58:00 AM	12	5/21/02 9:33:00 AM	3
5/20/02 4:15:00 PM	4	5/21/02 8:24:00 AM	3	5/21/02 8:59:00 AM	11	5/21/02 9:34:00 AM	3
5/20/02 4:16:00 PM	4	5/21/02 8:25:00 AM	3	5/21/02 9:00:00 AM	3	5/21/02 9:35:00 AM	3
5/20/02 4:17:00 PM	4	5/21/02 8:26:00 AM	3	5/21/02 9:01:00 AM	4	5/21/02 9:36:00 AM	4
5/20/02 4:18:00 PM	4	5/21/02 8:27:00 AM	3	5/21/02 9:02:00 AM	6	5/21/02 9:37:00 AM	3
5/20/02 4:19:00 PM	4	5/21/02 8:28:00 AM	2	5/21/02 9:03:00 AM	3	5/21/02 9:38:00 AM	3
5/20/02 4:20:00 PM	4	5/21/02 8:29:00 AM	3	5/21/02 9:04:00 AM	4	5/21/02 9:39:00 AM	3
5/20/02 4:21:00 PM	4	5/21/02 8:30:00 AM	3	5/21/02 9:05:00 AM	3	5/21/02 9:40:00 AM	4
5/20/02 4:22:00 PM	4	5/21/02 8:31:00 AM	3	5/21/02 9:06:00 AM	3	5/21/02 9:41:00 AM	3
5/20/02 4:23:00 PM	4	5/21/02 8:32:00 AM	3	5/21/02 9:07:00 AM	3	5/21/02 9:42:00 AM	5
5/20/02 4:24:00 PM	4	5/21/02 8:33:00 AM	3	5/21/02 9:08:00 AM	3	5/21/02 9:43:00 AM	3
5/20/02 4:25:00 PM	4	5/21/02 8:34:00 AM	3	5/21/02 9:09:00 AM	3	5/21/02 9:44:00 AM	3
5/21/02 8:00:00 AM	25	5/21/02 8:35:00 AM	54	5/21/02 9:10:00 AM	3	5/21/02 9:45:00 AM	3
5/21/02 8:01:00 AM	2	5/21/02 8:36:00 AM	3	5/21/02 9:11:00 AM	3	5/21/02 9:46:00 AM	3
5/21/02 8:02:00 AM	3	5/21/02 8:37:00 AM	3	5/21/02 9:12:00 AM	3	5/21/02 9:47:00 AM	4
5/21/02 8:03:00 AM	3	5/21/02 8:38:00 AM	3	5/21/02 9:13:00 AM	7	5/21/02 9:48:00 AM	4
5/21/02 8:04:00 AM	6	5/21/02 8:39:00 AM	3	5/21/02 9:14:00 AM	3	5/21/02 9:49:00 AM	4
5/21/02 8:05:00 AM	6	5/21/02 8:40:00 AM	3	5/21/02 9:15:00 AM	11	5/21/02 9:50:00 AM	3
5/21/02 8:06:00 AM	17	5/21/02 8:41:00 AM	3	5/21/02 9:16:00 AM	29	5/21/02 9:51:00 AM	4
5/21/02 8:07:00 AM	16	5/21/02 8:42:00 AM	3	5/21/02 9:17:00 AM	4	5/21/02 9:52:00 AM	3
5/21/02 8:08:00 AM	2	5/21/02 8:43:00 AM	3	5/21/02 9:18:00 AM	9	5/21/02 9:53:00 AM	3
5/21/02 8:09:00 AM	3	5/21/02 8:44:00 AM	3	5/21/02 9:19:00 AM	12	5/21/02 9:54:00 AM	4
5/21/02 8:10:00 AM	3	5/21/02 8:45:00 AM	3	5/21/02 9:20:00 AM	49	5/21/02 9:55:00 AM	4
5/21/02 8:11:00 AM	2	5/21/02 8:46:00 AM	3	5/21/02 9:21:00 AM	5	5/21/02 9:56:00 AM	3
5/21/02 8:12:00 AM	3	5/21/02 8:47:00 AM	3	5/21/02 9:22:00 AM	6	5/21/02 9:57:00 AM	3
5/21/02 8:13:00 AM	3	5/21/02 8:48:00 AM	3	5/21/02 9:23:00 AM	83	5/21/02 9:58:00 AM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/21/02 9:59:00 AM	3	5/21/02 10:34:00 AM	3	5/21/02 11:09:00 AM	3	5/21/02 11:44:00 AM	3
5/21/02 10:00:00 AM	6	5/21/02 10:35:00 AM	3	5/21/02 11:10:00 AM	3	5/21/02 11:45:00 AM	3
5/21/02 10:01:00 AM	3	5/21/02 10:36:00 AM	3	5/21/02 11:11:00 AM	3	5/21/02 11:46:00 AM	3
5/21/02 10:02:00 AM	3	5/21/02 10:37:00 AM	3	5/21/02 11:12:00 AM	3	5/21/02 11:47:00 AM	3
5/21/02 10:03:00 AM	3	5/21/02 10:38:00 AM	3	5/21/02 11:13:00 AM	3	5/21/02 11:48:00 AM	3
5/21/02 10:04:00 AM	3	5/21/02 10:39:00 AM	2	5/21/02 11:14:00 AM	3	5/21/02 11:49:00 AM	2
5/21/02 10:05:00 AM	4	5/21/02 10:40:00 AM	3	5/21/02 11:15:00 AM	3	5/21/02 11:50:00 AM	3
5/21/02 10:06:00 AM	3	5/21/02 10:41:00 AM	3	5/21/02 11:16:00 AM	3	5/21/02 11:51:00 AM	3
5/21/02 10:07:00 AM	30	5/21/02 10:42:00 AM	3	5/21/02 11:17:00 AM	3	5/21/02 11:52:00 AM	3
5/21/02 10:08:00 AM	10	5/21/02 10:43:00 AM	3	5/21/02 11:18:00 AM	3	5/21/02 11:53:00 AM	3
5/21/02 10:09:00 AM	3	5/21/02 10:44:00 AM	3	5/21/02 11:19:00 AM	3	5/21/02 11:54:00 AM	3
5/21/02 10:10:00 AM	3	5/21/02 10:45:00 AM	3	5/21/02 11:20:00 AM	3	5/21/02 11:55:00 AM	3
5/21/02 10:11:00 AM	3	5/21/02 10:46:00 AM	3	5/21/02 11:21:00 AM	3	5/21/02 11:56:00 AM	2
5/21/02 10:12:00 AM	3	5/21/02 10:47:00 AM	3	5/21/02 11:22:00 AM	3	5/21/02 11:57:00 AM	3
5/21/02 10:13:00 AM	3	5/21/02 10:48:00 AM	3	5/21/02 11:23:00 AM	3	5/21/02 11:58:00 AM	3
5/21/02 10:14:00 AM	3	5/21/02 10:49:00 AM	3	5/21/02 11:24:00 AM	3	5/21/02 11:59:00 AM	2
5/21/02 10:15:00 AM	3	5/21/02 10:50:00 AM	3	5/21/02 11:25:00 AM	3	5/21/02 12:00:00 PM	2
5/21/02 10:16:00 AM	2	5/21/02 10:51:00 AM	3	5/21/02 11:26:00 AM	3	5/21/02 12:01:00 PM	3
5/21/02 10:17:00 AM	3	5/21/02 10:52:00 AM	3	5/21/02 11:27:00 AM	3	5/21/02 12:02:00 PM	2
5/21/02 10:18:00 AM	3	5/21/02 10:53:00 AM	3	5/21/02 11:28:00 AM	3	5/21/02 12:03:00 PM	2
5/21/02 10:19:00 AM	2	5/21/02 10:54:00 AM	3	5/21/02 11:29:00 AM	3	5/21/02 12:04:00 PM	3
5/21/02 10:20:00 AM	3	5/21/02 10:55:00 AM	3	5/21/02 11:30:00 AM	3	5/21/02 12:05:00 PM	2
5/21/02 10:21:00 AM	3	5/21/02 10:56:00 AM	3	5/21/02 11:31:00 AM	3	5/21/02 12:06:00 PM	2
5/21/02 10:22:00 AM	3	5/21/02 10:57:00 AM	3	5/21/02 11:32:00 AM	3	5/21/02 12:07:00 PM	3
5/21/02 10:23:00 AM	3	5/21/02 10:58:00 AM	3	5/21/02 11:33:00 AM	3	5/21/02 12:08:00 PM	4
5/21/02 10:24:00 AM	3	5/21/02 10:59:00 AM	3	5/21/02 11:34:00 AM	3	5/21/02 12:09:00 PM	3
5/21/02 10:25:00 AM	3	5/21/02 11:00:00 AM	3	5/21/02 11:35:00 AM	3	5/21/02 12:10:00 PM	3
5/21/02 10:26:00 AM	3	5/21/02 11:01:00 AM	3	5/21/02 11:36:00 AM	3	5/21/02 12:11:00 PM	2
5/21/02 10:27:00 AM	3	5/21/02 11:02:00 AM	3	5/21/02 11:37:00 AM	3	5/21/02 12:12:00 PM	2
5/21/02 10:28:00 AM	3	5/21/02 11:03:00 AM	3	5/21/02 11:38:00 AM	3	5/21/02 12:13:00 PM	3
5/21/02 10:29:00 AM	3	5/21/02 11:04:00 AM	2	5/21/02 11:39:00 AM	3	5/21/02 12:14:00 PM	3
5/21/02 10:30:00 AM	3	5/21/02 11:05:00 AM	3	5/21/02 11:40:00 AM	3	5/21/02 12:15:00 PM	2
5/21/02 10:31:00 AM	2	5/21/02 11:06:00 AM	3	5/21/02 11:41:00 AM	2	5/21/02 12:16:00 PM	2
5/21/02 10:32:00 AM	3	5/21/02 11:07:00 AM	3	5/21/02 11:42:00 AM	3	5/21/02 12:17:00 PM	3
5/21/02 10:33:00 AM	3	5/21/02 11:08:00 AM	3	5/21/02 11:43:00 AM	3	5/21/02 12:18:00 PM	2

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/21/02 12:19:00 PM	2	5/21/02 12:54:00 PM	4	5/21/02 1:29:00 PM	4	5/21/02 2:04:00 PM	4
5/21/02 12:20:00 PM	3	5/21/02 12:55:00 PM	11	5/21/02 1:30:00 PM	3	5/21/02 2:05:00 PM	4
5/21/02 12:21:00 PM	2	5/21/02 12:56:00 PM	2	5/21/02 1:31:00 PM	4	5/21/02 2:06:00 PM	4
5/21/02 12:22:00 PM	2	5/21/02 12:57:00 PM	3	5/21/02 1:32:00 PM	3	5/21/02 2:07:00 PM	4
5/21/02 12:23:00 PM	3	5/21/02 12:58:00 PM	2	5/21/02 1:33:00 PM	3	5/21/02 2:08:00 PM	4
5/21/02 12:24:00 PM	3	5/21/02 12:59:00 PM	3	5/21/02 1:34:00 PM	3	5/21/02 2:09:00 PM	4
5/21/02 12:25:00 PM	2	5/21/02 1:00:00 PM	2	5/21/02 1:35:00 PM	3	5/21/02 2:10:00 PM	5
5/21/02 12:26:00 PM	2	5/21/02 1:01:00 PM	3	5/21/02 1:36:00 PM	3	5/21/02 2:11:00 PM	6
5/21/02 12:27:00 PM	3	5/21/02 1:02:00 PM	2	5/21/02 1:37:00 PM	3	5/21/02 2:12:00 PM	4
5/21/02 12:28:00 PM	3	5/21/02 1:03:00 PM	3	5/21/02 1:38:00 PM	3	5/21/02 2:13:00 PM	5
5/21/02 12:29:00 PM	2	5/21/02 1:04:00 PM	2	5/21/02 1:39:00 PM	3	5/21/02 2:14:00 PM	4
5/21/02 12:30:00 PM	3	5/21/02 1:05:00 PM	2	5/21/02 1:40:00 PM	3	5/21/02 2:15:00 PM	4
5/21/02 12:31:00 PM	3	5/21/02 1:06:00 PM	3	5/21/02 1:41:00 PM	3	5/21/02 2:16:00 PM	4
5/21/02 12:32:00 PM	3	5/21/02 1:07:00 PM	2	5/21/02 1:42:00 PM	4	5/21/02 2:17:00 PM	4
5/21/02 12:33:00 PM	3	5/21/02 1:08:00 PM	2	5/21/02 1:43:00 PM	3	5/21/02 2:18:00 PM	4
5/21/02 12:34:00 PM	2	5/21/02 1:09:00 PM	2	5/21/02 1:44:00 PM	4	5/21/02 2:19:00 PM	5
5/21/02 12:35:00 PM	3	5/21/02 1:10:00 PM	2	5/21/02 1:45:00 PM	4	5/21/02 2:20:00 PM	4
5/21/02 12:36:00 PM	3	5/21/02 1:11:00 PM	2	5/21/02 1:46:00 PM	3	5/21/02 2:21:00 PM	4
5/21/02 12:37:00 PM	2	5/21/02 1:12:00 PM	2	5/21/02 1:47:00 PM	3	5/21/02 2:22:00 PM	4
5/21/02 12:38:00 PM	3	5/21/02 1:13:00 PM	2	5/21/02 1:48:00 PM	3	5/21/02 2:23:00 PM	4
5/21/02 12:39:00 PM	3	5/21/02 1:14:00 PM	2	5/21/02 1:49:00 PM	4	5/21/02 2:24:00 PM	4
5/21/02 12:40:00 PM	3	5/21/02 1:15:00 PM	2	5/21/02 1:50:00 PM	3	5/21/02 2:25:00 PM	4
5/21/02 12:41:00 PM	2	5/21/02 1:16:00 PM	2	5/21/02 1:51:00 PM	3	5/21/02 2:26:00 PM	4
5/21/02 12:42:00 PM	3	5/21/02 1:17:00 PM	2	5/21/02 1:52:00 PM	3	5/21/02 2:27:00 PM	4
5/21/02 12:43:00 PM	3	5/21/02 1:18:00 PM	3	5/21/02 1:53:00 PM	3	5/21/02 2:28:00 PM	4
5/21/02 12:44:00 PM	3	5/21/02 1:19:00 PM	3	5/21/02 1:54:00 PM	4	5/21/02 2:29:00 PM	4
5/21/02 12:45:00 PM	4	5/21/02 1:20:00 PM	3	5/21/02 1:55:00 PM	4	5/21/02 2:30:00 PM	18
5/21/02 12:46:00 PM	3	5/21/02 1:21:00 PM	3	5/21/02 1:56:00 PM	3	5/21/02 2:31:00 PM	8
5/21/02 12:47:00 PM	3	5/21/02 1:22:00 PM	4	5/21/02 1:57:00 PM	3	5/21/02 2:32:00 PM	4
5/21/02 12:48:00 PM	2	5/21/02 1:23:00 PM	9	5/21/02 1:58:00 PM	3	5/21/02 2:33:00 PM	15
5/21/02 12:49:00 PM	3	5/21/02 1:24:00 PM	3	5/21/02 1:59:00 PM	4	5/21/02 2:34:00 PM	5
5/21/02 12:50:00 PM	3	5/21/02 1:25:00 PM	3	5/21/02 2:00:00 PM	4	5/21/02 2:35:00 PM	6
5/21/02 12:51:00 PM	2	5/21/02 1:26:00 PM	3	5/21/02 2:01:00 PM	4	5/21/02 2:36:00 PM	5
5/21/02 12:52:00 PM	3	5/21/02 1:27:00 PM	2	5/21/02 2:02:00 PM	4	5/21/02 2:37:00 PM	5
5/21/02 12:53:00 PM	3	5/21/02 1:28:00 PM	3	5/21/02 2:03:00 PM	4	5/21/02 2:38:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/21/02 2:39:00 PM	4	5/21/02 3:14:00 PM	4	5/23/02 7:55:00 AM	5	5/23/02 8:30:00 AM	4
5/21/02 2:40:00 PM	5	5/21/02 3:15:00 PM	4	5/23/02 7:56:00 AM	4	5/23/02 8:31:00 AM	3
5/21/02 2:41:00 PM	4	5/21/02 3:16:00 PM	4	5/23/02 7:57:00 AM	5	5/23/02 8:32:00 AM	4
5/21/02 2:42:00 PM	8	5/21/02 3:17:00 PM	3	5/23/02 7:58:00 AM	4	5/23/02 8:33:00 AM	4
5/21/02 2:43:00 PM	5	5/21/02 3:18:00 PM	3	5/23/02 7:59:00 AM	5	5/23/02 8:34:00 AM	4
5/21/02 2:44:00 PM	5	5/21/02 3:19:00 PM	3	5/23/02 8:00:00 AM	5	5/23/02 8:35:00 AM	4
5/21/02 2:45:00 PM	4	5/21/02 3:20:00 PM	4	5/23/02 8:01:00 AM	5	5/23/02 8:36:00 AM	5
5/21/02 2:46:00 PM	5	5/21/02 3:21:00 PM	3	5/23/02 8:02:00 AM	5	5/23/02 8:37:00 AM	4
5/21/02 2:47:00 PM	4	5/21/02 3:22:00 PM	3	5/23/02 8:03:00 AM	5	5/23/02 8:38:00 AM	4
5/21/02 2:48:00 PM	5	5/21/02 3:23:00 PM	3	5/23/02 8:04:00 AM	5	5/23/02 8:39:00 AM	4
5/21/02 2:49:00 PM	5	5/21/02 3:24:00 PM	3	5/23/02 8:05:00 AM	4	5/23/02 8:40:00 AM	4
5/21/02 2:50:00 PM	4	5/21/02 3:25:00 PM	3	5/23/02 8:06:00 AM	5	5/23/02 8:41:00 AM	4
5/21/02 2:51:00 PM	4	5/21/02 3:26:00 PM	4	5/23/02 8:07:00 AM	4	5/23/02 8:42:00 AM	4
5/21/02 2:52:00 PM	4	5/21/02 3:27:00 PM	4	5/23/02 8:08:00 AM	5	5/23/02 8:43:00 AM	4
5/21/02 2:53:00 PM	4	5/21/02 3:28:00 PM	3	5/23/02 8:09:00 AM	5	5/23/02 8:44:00 AM	4
5/21/02 2:54:00 PM	5	5/21/02 3:29:00 PM	3	5/23/02 8:10:00 AM	4	5/23/02 8:45:00 AM	4
5/21/02 2:55:00 PM	6	5/21/02 3:30:00 PM	4	5/23/02 8:11:00 AM	4	5/23/02 8:46:00 AM	4
5/21/02 2:56:00 PM	8	5/21/02 3:31:00 PM	4	5/23/02 8:12:00 AM	5	5/23/02 8:47:00 AM	4
5/21/02 2:57:00 PM	9	5/21/02 3:32:00 PM	3	5/23/02 8:13:00 AM	5	5/23/02 8:48:00 AM	4
5/21/02 2:58:00 PM	8	5/21/02 3:33:00 PM	3	5/23/02 8:14:00 AM	4	5/23/02 8:49:00 AM	5
5/21/02 2:59:00 PM	6	5/21/02 3:34:00 PM	3	5/23/02 8:15:00 AM	4	5/23/02 8:50:00 AM	4
5/21/02 3:00:00 PM	5	5/21/02 3:35:00 PM	3	5/23/02 8:16:00 AM	4	5/23/02 8:51:00 AM	4
5/21/02 3:01:00 PM	6	5/21/02 3:36:00 PM	4	5/23/02 8:17:00 AM	4	5/23/02 8:52:00 AM	4
5/21/02 3:02:00 PM	6	5/21/02 3:37:00 PM	7	5/23/02 8:18:00 AM	4	5/23/02 8:53:00 AM	5
5/21/02 3:03:00 PM	8	5/21/02 3:38:00 PM	5	5/23/02 8:19:00 AM	4	5/23/02 8:54:00 AM	5
5/21/02 3:04:00 PM	5	5/21/02 3:39:00 PM	4	5/23/02 8:20:00 AM	4	5/23/02 8:55:00 AM	5
5/21/02 3:05:00 PM	4	5/23/02 7:46:00 AM	7	5/23/02 8:21:00 AM	4	5/23/02 8:56:00 AM	5
5/21/02 3:06:00 PM	5	5/23/02 7:47:00 AM	6	5/23/02 8:22:00 AM	4	5/23/02 8:57:00 AM	5
5/21/02 3:07:00 PM	5	5/23/02 7:48:00 AM	8	5/23/02 8:23:00 AM	4	5/23/02 8:58:00 AM	5
5/21/02 3:08:00 PM	5	5/23/02 7:49:00 AM	89	5/23/02 8:24:00 AM	4	5/23/02 8:59:00 AM	5
5/21/02 3:09:00 PM	5	5/23/02 7:50:00 AM	6	5/23/02 8:25:00 AM	4	5/23/02 9:00:00 AM	5
5/21/02 3:10:00 PM	5	5/23/02 7:51:00 AM	14	5/23/02 8:26:00 AM	4	5/23/02 9:01:00 AM	5
5/21/02 3:11:00 PM	5	5/23/02 7:52:00 AM	6	5/23/02 8:27:00 AM	4	5/23/02 9:02:00 AM	5
5/21/02 3:12:00 PM	4	5/23/02 7:53:00 AM	6	5/23/02 8:28:00 AM	4	5/23/02 9:03:00 AM	5
5/21/02 3:13:00 PM	4	5/23/02 7:54:00 AM	18	5/23/02 8:29:00 AM	4	5/23/02 9:04:00 AM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/23/02 9:05:00 AM	5	5/23/02 9:40:00 AM	5	5/23/02 10:15:00 AM	6	5/23/02 10:50:00 AM	6
5/23/02 9:06:00 AM	5	5/23/02 9:41:00 AM	5	5/23/02 10:16:00 AM	6	5/23/02 10:51:00 AM	16
5/23/02 9:07:00 AM	5	5/23/02 9:42:00 AM	6	5/23/02 10:17:00 AM	6	5/23/02 10:52:00 AM	6
5/23/02 9:08:00 AM	5	5/23/02 9:43:00 AM	6	5/23/02 10:18:00 AM	6	5/23/02 10:53:00 AM	6
5/23/02 9:09:00 AM	5	5/23/02 9:44:00 AM	5	5/23/02 10:19:00 AM	6	5/23/02 10:54:00 AM	7
5/23/02 9:10:00 AM	5	5/23/02 9:45:00 AM	6	5/23/02 10:20:00 AM	6	5/23/02 10:55:00 AM	6
5/23/02 9:11:00 AM	5	5/23/02 9:46:00 AM	5	5/23/02 10:21:00 AM	6	5/23/02 10:56:00 AM	6
5/23/02 9:12:00 AM	5	5/23/02 9:47:00 AM	5	5/23/02 10:22:00 AM	6	5/23/02 10:57:00 AM	6
5/23/02 9:13:00 AM	5	5/23/02 9:48:00 AM	6	5/23/02 10:23:00 AM	6	5/23/02 10:58:00 AM	6
5/23/02 9:14:00 AM	5	5/23/02 9:49:00 AM	6	5/23/02 10:24:00 AM	6	5/23/02 10:59:00 AM	7
5/23/02 9:15:00 AM	5	5/23/02 9:50:00 AM	6	5/23/02 10:25:00 AM	6	5/23/02 11:00:00 AM	6
5/23/02 9:16:00 AM	5	5/23/02 9:51:00 AM	6	5/23/02 10:26:00 AM	6	5/23/02 11:01:00 AM	6
5/23/02 9:17:00 AM	5	5/23/02 9:52:00 AM	6	5/23/02 10:27:00 AM	6	5/23/02 11:02:00 AM	6
5/23/02 9:18:00 AM	5	5/23/02 9:53:00 AM	5	5/23/02 10:28:00 AM	6	5/23/02 11:03:00 AM	7
5/23/02 9:19:00 AM	5	5/23/02 9:54:00 AM	6	5/23/02 10:29:00 AM	6	5/23/02 11:04:00 AM	6
5/23/02 9:20:00 AM	5	5/23/02 9:55:00 AM	5	5/23/02 10:30:00 AM	6	5/23/02 11:05:00 AM	6
5/23/02 9:21:00 AM	5	5/23/02 9:56:00 AM	6	5/23/02 10:31:00 AM	6	5/23/02 11:06:00 AM	6
5/23/02 9:22:00 AM	5	5/23/02 9:57:00 AM	6	5/23/02 10:32:00 AM	6	5/23/02 11:07:00 AM	7
5/23/02 9:23:00 AM	5	5/23/02 9:58:00 AM	6	5/23/02 10:33:00 AM	6	5/23/02 11:08:00 AM	7
5/23/02 9:24:00 AM	5	5/23/02 9:59:00 AM	6	5/23/02 10:34:00 AM	5	5/23/02 11:09:00 AM	6
5/23/02 9:25:00 AM	5	5/23/02 10:00:00 AM	5	5/23/02 10:35:00 AM	6	5/23/02 11:10:00 AM	6
5/23/02 9:26:00 AM	5	5/23/02 10:01:00 AM	6	5/23/02 10:36:00 AM	6	5/23/02 11:11:00 AM	6
5/23/02 9:27:00 AM	5	5/23/02 10:02:00 AM	6	5/23/02 10:37:00 AM	6	5/23/02 11:12:00 AM	7
5/23/02 9:28:00 AM	5	5/23/02 10:03:00 AM	6	5/23/02 10:38:00 AM	6	5/23/02 11:13:00 AM	6
5/23/02 9:29:00 AM	5	5/23/02 10:04:00 AM	6	5/23/02 10:39:00 AM	6	5/23/02 11:14:00 AM	7
5/23/02 9:30:00 AM	5	5/23/02 10:05:00 AM	7	5/23/02 10:40:00 AM	6	5/23/02 11:15:00 AM	6
5/23/02 9:31:00 AM	5	5/23/02 10:06:00 AM	6	5/23/02 10:41:00 AM	7	5/23/02 11:16:00 AM	6
5/23/02 9:32:00 AM	5	5/23/02 10:07:00 AM	6	5/23/02 10:42:00 AM	7	5/23/02 11:17:00 AM	6
5/23/02 9:33:00 AM	5	5/23/02 10:08:00 AM	6	5/23/02 10:43:00 AM	6	5/23/02 11:18:00 AM	6
5/23/02 9:34:00 AM	6	5/23/02 10:09:00 AM	6	5/23/02 10:44:00 AM	7	5/23/02 11:19:00 AM	6
5/23/02 9:35:00 AM	5	5/23/02 10:10:00 AM	5	5/23/02 10:45:00 AM	6	5/23/02 11:20:00 AM	6
5/23/02 9:36:00 AM	5	5/23/02 10:11:00 AM	6	5/23/02 10:46:00 AM	7	5/23/02 11:21:00 AM	7
5/23/02 9:37:00 AM	6	5/23/02 10:12:00 AM	11	5/23/02 10:47:00 AM	7	5/23/02 11:22:00 AM	6
5/23/02 9:38:00 AM	5	5/23/02 10:13:00 AM	6	5/23/02 10:48:00 AM	6	5/23/02 11:23:00 AM	6
5/23/02 9:39:00 AM	5	5/23/02 10:14:00 AM	6	5/23/02 10:49:00 AM	6	5/23/02 11:24:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/23/02 11:25:00 AM	6	5/23/02 12:00:00 PM	7	5/23/02 12:35:00 PM	6	5/23/02 1:10:00 PM	6
5/23/02 11:26:00 AM	6	5/23/02 12:01:00 PM	7	5/23/02 12:36:00 PM	6	5/23/02 1:11:00 PM	16
5/23/02 11:27:00 AM	7	5/23/02 12:02:00 PM	6	5/23/02 12:37:00 PM	8	5/23/02 1:12:00 PM	8
5/23/02 11:28:00 AM	7	5/23/02 12:03:00 PM	6	5/23/02 12:38:00 PM	6	5/23/02 1:13:00 PM	6
5/23/02 11:29:00 AM	6	5/23/02 12:04:00 PM	6	5/23/02 12:39:00 PM	6	5/23/02 1:14:00 PM	6
5/23/02 11:30:00 AM	6	5/23/02 12:05:00 PM	7	5/23/02 12:40:00 PM	6	5/23/02 1:15:00 PM	7
5/23/02 11:31:00 AM	6	5/23/02 12:06:00 PM	6	5/23/02 12:41:00 PM	7	5/23/02 1:16:00 PM	7
5/23/02 11:32:00 AM	6	5/23/02 12:07:00 PM	7	5/23/02 12:42:00 PM	7	5/23/02 1:17:00 PM	8
5/23/02 11:33:00 AM	7	5/23/02 12:08:00 PM	6	5/23/02 12:43:00 PM	7	5/23/02 1:18:00 PM	6
5/23/02 11:34:00 AM	7	5/23/02 12:09:00 PM	7	5/23/02 12:44:00 PM	7	5/23/02 1:19:00 PM	6
5/23/02 11:35:00 AM	7	5/23/02 12:10:00 PM	7	5/23/02 12:45:00 PM	6	5/23/02 1:20:00 PM	7
5/23/02 11:36:00 AM	7	5/23/02 12:11:00 PM	6	5/23/02 12:46:00 PM	7	5/23/02 1:21:00 PM	7
5/23/02 11:37:00 AM	6	5/23/02 12:12:00 PM	7	5/23/02 12:47:00 PM	6	5/23/02 1:22:00 PM	6
5/23/02 11:38:00 AM	6	5/23/02 12:13:00 PM	6	5/23/02 12:48:00 PM	6	5/23/02 1:23:00 PM	6
5/23/02 11:39:00 AM	6	5/23/02 12:14:00 PM	7	5/23/02 12:49:00 PM	7	5/23/02 1:24:00 PM	7
5/23/02 11:40:00 AM	7	5/23/02 12:15:00 PM	7	5/23/02 12:50:00 PM	7	5/23/02 1:25:00 PM	7
5/23/02 11:41:00 AM	10	5/23/02 12:16:00 PM	7	5/23/02 12:51:00 PM	7	5/23/02 1:26:00 PM	6
5/23/02 11:42:00 AM	15	5/23/02 12:17:00 PM	6	5/23/02 12:52:00 PM	7	5/23/02 1:27:00 PM	6
5/23/02 11:43:00 AM	8	5/23/02 12:18:00 PM	6	5/23/02 12:53:00 PM	7	5/23/02 1:28:00 PM	7
5/23/02 11:44:00 AM	7	5/23/02 12:19:00 PM	6	5/23/02 12:54:00 PM	6	5/23/02 1:29:00 PM	7
5/23/02 11:45:00 AM	7	5/23/02 12:20:00 PM	7	5/23/02 12:55:00 PM	7	5/23/02 1:30:00 PM	7
5/23/02 11:46:00 AM	7	5/23/02 12:21:00 PM	7	5/23/02 12:56:00 PM	7	5/23/02 1:31:00 PM	6
5/23/02 11:47:00 AM	6	5/23/02 12:22:00 PM	7	5/23/02 12:57:00 PM	6	5/23/02 1:32:00 PM	6
5/23/02 11:48:00 AM	7	5/23/02 12:23:00 PM	6	5/23/02 12:58:00 PM	6	5/23/02 1:33:00 PM	7
5/23/02 11:49:00 AM	7	5/23/02 12:24:00 PM	7	5/23/02 12:59:00 PM	7	5/23/02 1:34:00 PM	6
5/23/02 11:50:00 AM	6	5/23/02 12:25:00 PM	6	5/23/02 1:00:00 PM	6	5/23/02 1:35:00 PM	6
5/23/02 11:51:00 AM	6	5/23/02 12:26:00 PM	7	5/23/02 1:01:00 PM	7	5/23/02 1:36:00 PM	7
5/23/02 11:52:00 AM	6	5/23/02 12:27:00 PM	6	5/23/02 1:02:00 PM	10	5/23/02 1:37:00 PM	7
5/23/02 11:53:00 AM	6	5/23/02 12:28:00 PM	7	5/23/02 1:03:00 PM	7	5/23/02 1:38:00 PM	6
5/23/02 11:54:00 AM	7	5/23/02 12:29:00 PM	6	5/23/02 1:04:00 PM	7	5/23/02 1:39:00 PM	6
5/23/02 11:55:00 AM	7	5/23/02 12:30:00 PM	6	5/23/02 1:05:00 PM	7	5/23/02 1:40:00 PM	6
5/23/02 11:56:00 AM	7	5/23/02 12:31:00 PM	6	5/23/02 1:06:00 PM	17	5/23/02 1:41:00 PM	6
5/23/02 11:57:00 AM	7	5/23/02 12:32:00 PM	6	5/23/02 1:07:00 PM	7	5/23/02 1:42:00 PM	6
5/23/02 11:58:00 AM	7	5/23/02 12:33:00 PM	6	5/23/02 1:08:00 PM	6	5/23/02 1:43:00 PM	7
5/23/02 11:59:00 AM	7	5/23/02 12:34:00 PM	6	5/23/02 1:09:00 PM	7	5/23/02 1:44:00 PM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/23/02 1:45:00 PM	6	5/23/02 2:20:00 PM	7	5/23/02 2:55:00 PM	10	5/23/02 3:30:00 PM	6
5/23/02 1:46:00 PM	7	5/23/02 2:21:00 PM	6	5/23/02 2:56:00 PM	8	5/23/02 3:31:00 PM	7
5/23/02 1:47:00 PM	6	5/23/02 2:22:00 PM	7	5/23/02 2:57:00 PM	7	5/23/02 3:32:00 PM	8
5/23/02 1:48:00 PM	6	5/23/02 2:23:00 PM	7	5/23/02 2:58:00 PM	6	5/23/02 3:33:00 PM	6
5/23/02 1:49:00 PM	7	5/23/02 2:24:00 PM	7	5/23/02 2:59:00 PM	7	5/23/02 3:34:00 PM	6
5/23/02 1:50:00 PM	7	5/23/02 2:25:00 PM	6	5/23/02 3:00:00 PM	6	5/23/02 3:35:00 PM	7
5/23/02 1:51:00 PM	6	5/23/02 2:26:00 PM	9	5/23/02 3:01:00 PM	6	5/23/02 3:36:00 PM	7
5/23/02 1:52:00 PM	7	5/23/02 2:27:00 PM	7	5/23/02 3:02:00 PM	6	5/23/02 3:37:00 PM	7
5/23/02 1:53:00 PM	7	5/23/02 2:28:00 PM	7	5/23/02 3:03:00 PM	7	5/23/02 3:38:00 PM	6
5/23/02 1:54:00 PM	7	5/23/02 2:29:00 PM	6	5/23/02 3:04:00 PM	6	5/23/02 3:39:00 PM	7
5/23/02 1:55:00 PM	7	5/23/02 2:30:00 PM	6	5/23/02 3:05:00 PM	7	5/23/02 3:40:00 PM	7
5/23/02 1:56:00 PM	7	5/23/02 2:31:00 PM	7	5/23/02 3:06:00 PM	7	5/23/02 3:41:00 PM	7
5/23/02 1:57:00 PM	7	5/23/02 2:32:00 PM	11	5/23/02 3:07:00 PM	6	5/23/02 3:42:00 PM	6
5/23/02 1:58:00 PM	7	5/23/02 2:33:00 PM	7	5/23/02 3:08:00 PM	7	5/23/02 3:43:00 PM	7
5/23/02 1:59:00 PM	7	5/23/02 2:34:00 PM	7	5/23/02 3:09:00 PM	6	5/23/02 3:44:00 PM	7
5/23/02 2:00:00 PM	7	5/23/02 2:35:00 PM	6	5/23/02 3:10:00 PM	6	5/23/02 3:45:00 PM	6
5/23/02 2:01:00 PM	6	5/23/02 2:36:00 PM	6	5/23/02 3:11:00 PM	7	5/23/02 3:46:00 PM	6
5/23/02 2:02:00 PM	6	5/23/02 2:37:00 PM	6	5/23/02 3:12:00 PM	7	5/23/02 3:47:00 PM	6
5/23/02 2:03:00 PM	7	5/23/02 2:38:00 PM	6	5/23/02 3:13:00 PM	6	5/23/02 3:48:00 PM	7
5/23/02 2:04:00 PM	7	5/23/02 2:39:00 PM	6	5/23/02 3:14:00 PM	7	5/23/02 3:49:00 PM	7
5/23/02 2:05:00 PM	6	5/23/02 2:40:00 PM	7	5/23/02 3:15:00 PM	7	5/23/02 3:50:00 PM	6
5/23/02 2:06:00 PM	6	5/23/02 2:41:00 PM	6	5/23/02 3:16:00 PM	7	5/23/02 3:51:00 PM	6
5/23/02 2:07:00 PM	7	5/23/02 2:42:00 PM	6	5/23/02 3:17:00 PM	6	5/23/02 3:52:00 PM	6
5/23/02 2:08:00 PM	6	5/23/02 2:43:00 PM	6	5/23/02 3:18:00 PM	7	5/23/02 3:53:00 PM	34
5/23/02 2:09:00 PM	6	5/23/02 2:44:00 PM	6	5/23/02 3:19:00 PM	6	5/23/02 3:54:00 PM	7
5/23/02 2:10:00 PM	6	5/23/02 2:45:00 PM	8	5/23/02 3:20:00 PM	7	5/23/02 3:55:00 PM	8
5/23/02 2:11:00 PM	6	5/23/02 2:46:00 PM	6	5/23/02 3:21:00 PM	7	5/23/02 3:56:00 PM	7
5/23/02 2:12:00 PM	7	5/23/02 2:47:00 PM	6	5/23/02 3:22:00 PM	6	5/23/02 3:57:00 PM	6
5/23/02 2:13:00 PM	6	5/23/02 2:48:00 PM	6	5/23/02 3:23:00 PM	7	5/23/02 3:58:00 PM	6
5/23/02 2:14:00 PM	6	5/23/02 2:49:00 PM	6	5/23/02 3:24:00 PM	6	5/23/02 3:59:00 PM	6
5/23/02 2:15:00 PM	6	5/23/02 2:50:00 PM	6	5/23/02 3:25:00 PM	7	5/23/02 4:00:00 PM	6
5/23/02 2:16:00 PM	7	5/23/02 2:51:00 PM	6	5/23/02 3:26:00 PM	6	5/23/02 4:01:00 PM	6
5/23/02 2:17:00 PM	6	5/23/02 2:52:00 PM	6	5/23/02 3:27:00 PM	6	5/23/02 4:02:00 PM	6
5/23/02 2:18:00 PM	6	5/23/02 2:53:00 PM	7	5/23/02 3:28:00 PM	6	5/23/02 4:03:00 PM	7
5/23/02 2:19:00 PM	6	5/23/02 2:54:00 PM	6	5/23/02 3:29:00 PM	6	5/23/02 4:04:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/23/02 4:05:00 PM	6	5/23/02 4:40:00 PM	6	5/24/02 7:47:00 AM	4	5/24/02 8:22:00 AM	4
5/23/02 4:06:00 PM	6	5/23/02 4:41:00 PM	6	5/24/02 7:48:00 AM	7	5/24/02 8:23:00 AM	5
5/23/02 4:07:00 PM	6	5/23/02 4:42:00 PM	6	5/24/02 7:49:00 AM	12	5/24/02 8:24:00 AM	4
5/23/02 4:08:00 PM	6	5/23/02 4:43:00 PM	6	5/24/02 7:50:00 AM	4	5/24/02 8:25:00 AM	4
5/23/02 4:09:00 PM	5	5/23/02 4:44:00 PM	6	5/24/02 7:51:00 AM	3	5/24/02 8:26:00 AM	4
5/23/02 4:10:00 PM	6	5/23/02 4:45:00 PM	6	5/24/02 7:52:00 AM	5	5/24/02 8:27:00 AM	3
5/23/02 4:11:00 PM	5	5/23/02 4:46:00 PM	6	5/24/02 7:53:00 AM	3	5/24/02 8:28:00 AM	3
5/23/02 4:12:00 PM	6	5/23/02 4:47:00 PM	6	5/24/02 7:54:00 AM	4	5/24/02 8:29:00 AM	3
5/23/02 4:13:00 PM	6	5/23/02 4:48:00 PM	7	5/24/02 7:55:00 AM	3	5/24/02 8:30:00 AM	4
5/23/02 4:14:00 PM	6	5/23/02 4:49:00 PM	6	5/24/02 7:56:00 AM	4	5/24/02 8:31:00 AM	4
5/23/02 4:15:00 PM	6	5/23/02 4:50:00 PM	6	5/24/02 7:57:00 AM	4	5/24/02 8:32:00 AM	4
5/23/02 4:16:00 PM	6	5/23/02 4:51:00 PM	6	5/24/02 7:58:00 AM	5	5/24/02 8:33:00 AM	4
5/23/02 4:17:00 PM	5	5/23/02 4:52:00 PM	6	5/24/02 7:59:00 AM	4	5/24/02 8:34:00 AM	4
5/23/02 4:18:00 PM	7	5/23/02 4:53:00 PM	6	5/24/02 8:00:00 AM	4	5/24/02 8:35:00 AM	4
5/23/02 4:19:00 PM	6	5/23/02 4:54:00 PM	6	5/24/02 8:01:00 AM	4	5/24/02 8:36:00 AM	4
5/23/02 4:20:00 PM	6	5/23/02 4:55:00 PM	6	5/24/02 8:02:00 AM	4	5/24/02 8:37:00 AM	4
5/23/02 4:21:00 PM	5	5/23/02 4:56:00 PM	7	5/24/02 8:03:00 AM	4	5/24/02 8:38:00 AM	5
5/23/02 4:22:00 PM	5	5/23/02 4:57:00 PM	7	5/24/02 8:04:00 AM	4	5/24/02 8:39:00 AM	4
5/23/02 4:23:00 PM	5	5/23/02 4:58:00 PM	7	5/24/02 8:05:00 AM	4	5/24/02 8:40:00 AM	3
5/23/02 4:24:00 PM	6	5/23/02 4:59:00 PM	7	5/24/02 8:06:00 AM	4	5/24/02 8:41:00 AM	4
5/23/02 4:25:00 PM	6	5/23/02 5:00:00 PM	8	5/24/02 8:07:00 AM	4	5/24/02 8:42:00 AM	4
5/23/02 4:26:00 PM	6	5/23/02 5:01:00 PM	8	5/24/02 8:08:00 AM	4	5/24/02 8:43:00 AM	4
5/23/02 4:27:00 PM	6	5/23/02 5:02:00 PM	7	5/24/02 8:09:00 AM	4	5/24/02 8:44:00 AM	4
5/23/02 4:28:00 PM	6	5/23/02 5:03:00 PM	7	5/24/02 8:10:00 AM	4	5/24/02 8:45:00 AM	4
5/23/02 4:29:00 PM	6	5/23/02 5:04:00 PM	7	5/24/02 8:11:00 AM	4	5/24/02 8:46:00 AM	4
5/23/02 4:30:00 PM	6	5/23/02 5:05:00 PM	7	5/24/02 8:12:00 AM	4	5/24/02 8:47:00 AM	7
5/23/02 4:31:00 PM	6	5/23/02 5:06:00 PM	7	5/24/02 8:13:00 AM	4	5/24/02 8:48:00 AM	4
5/23/02 4:32:00 PM	5	5/23/02 5:07:00 PM	7	5/24/02 8:14:00 AM	4	5/24/02 8:49:00 AM	4
5/23/02 4:33:00 PM	6	5/23/02 5:08:00 PM	7	5/24/02 8:15:00 AM	4	5/24/02 8:50:00 AM	4
5/23/02 4:34:00 PM	6	5/23/02 5:09:00 PM	13	5/24/02 8:16:00 AM	4	5/24/02 8:51:00 AM	4
5/23/02 4:35:00 PM	6	5/23/02 5:10:00 PM	9	5/24/02 8:17:00 AM	4	5/24/02 8:52:00 AM	4
5/23/02 4:36:00 PM	6	5/23/02 5:11:00 PM	7	5/24/02 8:18:00 AM	4	5/24/02 8:53:00 AM	4
5/23/02 4:37:00 PM	6	5/24/02 7:44:00 AM	5	5/24/02 8:19:00 AM	5	5/24/02 8:54:00 AM	4
5/23/02 4:38:00 PM	6	5/24/02 7:45:00 AM	4	5/24/02 8:20:00 AM	4	5/24/02 8:55:00 AM	4
5/23/02 4:39:00 PM	6	5/24/02 7:46:00 AM	3	5/24/02 8:21:00 AM	4	5/24/02 8:56:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/24/02 8:57:00 AM	4	5/24/02 9:32:00 AM	5	5/24/02 10:07:00 AM	6	5/24/02 10:42:00 AM	7
5/24/02 8:58:00 AM	4	5/24/02 9:33:00 AM	6	5/24/02 10:08:00 AM	6	5/24/02 10:43:00 AM	7
5/24/02 8:59:00 AM	4	5/24/02 9:34:00 AM	6	5/24/02 10:09:00 AM	6	5/24/02 10:44:00 AM	7
5/24/02 9:00:00 AM	4	5/24/02 9:35:00 AM	6	5/24/02 10:10:00 AM	6	5/24/02 10:45:00 AM	8
5/24/02 9:01:00 AM	4	5/24/02 9:36:00 AM	5	5/24/02 10:11:00 AM	6	5/24/02 10:46:00 AM	7
5/24/02 9:02:00 AM	5	5/24/02 9:37:00 AM	5	5/24/02 10:12:00 AM	7	5/24/02 10:47:00 AM	7
5/24/02 9:03:00 AM	5	5/24/02 9:38:00 AM	5	5/24/02 10:13:00 AM	8	5/24/02 10:48:00 AM	6
5/24/02 9:04:00 AM	5	5/24/02 9:39:00 AM	6	5/24/02 10:14:00 AM	6	5/24/02 10:49:00 AM	7
5/24/02 9:05:00 AM	5	5/24/02 9:40:00 AM	5	5/24/02 10:15:00 AM	7	5/24/02 10:50:00 AM	15
5/24/02 9:06:00 AM	5	5/24/02 9:41:00 AM	5	5/24/02 10:16:00 AM	7	5/24/02 10:51:00 AM	20
5/24/02 9:07:00 AM	6	5/24/02 9:42:00 AM	5	5/24/02 10:17:00 AM	7	5/24/02 10:52:00 AM	9
5/24/02 9:08:00 AM	4	5/24/02 9:43:00 AM	6	5/24/02 10:18:00 AM	8	5/24/02 10:53:00 AM	7
5/24/02 9:09:00 AM	5	5/24/02 9:44:00 AM	5	5/24/02 10:19:00 AM	6	5/24/02 10:54:00 AM	7
5/24/02 9:10:00 AM	5	5/24/02 9:45:00 AM	5	5/24/02 10:20:00 AM	7	5/24/02 10:55:00 AM	6
5/24/02 9:11:00 AM	5	5/24/02 9:46:00 AM	5	5/24/02 10:21:00 AM	7	5/24/02 10:56:00 AM	24
5/24/02 9:12:00 AM	4	5/24/02 9:47:00 AM	5	5/24/02 10:22:00 AM	7	5/24/02 10:57:00 AM	8
5/24/02 9:13:00 AM	5	5/24/02 9:48:00 AM	5	5/24/02 10:23:00 AM	7	5/24/02 10:58:00 AM	6
5/24/02 9:14:00 AM	5	5/24/02 9:49:00 AM	6	5/24/02 10:24:00 AM	7	5/24/02 10:59:00 AM	6
5/24/02 9:15:00 AM	5	5/24/02 9:50:00 AM	6	5/24/02 10:25:00 AM	7	5/24/02 11:00:00 AM	6
5/24/02 9:16:00 AM	5	5/24/02 9:51:00 AM	6	5/24/02 10:26:00 AM	7	5/24/02 11:01:00 AM	6
5/24/02 9:17:00 AM	4	5/24/02 9:52:00 AM	5	5/24/02 10:27:00 AM	7	5/24/02 11:02:00 AM	7
5/24/02 9:18:00 AM	5	5/24/02 9:53:00 AM	6	5/24/02 10:28:00 AM	7	5/24/02 11:03:00 AM	6
5/24/02 9:19:00 AM	5	5/24/02 9:54:00 AM	5	5/24/02 10:29:00 AM	6	5/24/02 11:04:00 AM	6
5/24/02 9:20:00 AM	5	5/24/02 9:55:00 AM	5	5/24/02 10:30:00 AM	8	5/24/02 11:05:00 AM	6
5/24/02 9:21:00 AM	6	5/24/02 9:56:00 AM	5	5/24/02 10:31:00 AM	6	5/24/02 11:06:00 AM	7
5/24/02 9:22:00 AM	6	5/24/02 9:57:00 AM	6	5/24/02 10:32:00 AM	6	5/24/02 11:07:00 AM	8
5/24/02 9:23:00 AM	5	5/24/02 9:58:00 AM	7	5/24/02 10:33:00 AM	7	5/24/02 11:08:00 AM	6
5/24/02 9:24:00 AM	6	5/24/02 9:59:00 AM	6	5/24/02 10:34:00 AM	7	5/24/02 11:09:00 AM	6
5/24/02 9:25:00 AM	5	5/24/02 10:00:00 AM	6	5/24/02 10:35:00 AM	6	5/24/02 11:10:00 AM	7
5/24/02 9:26:00 AM	5	5/24/02 10:01:00 AM	6	5/24/02 10:36:00 AM	7	5/24/02 11:11:00 AM	7
5/24/02 9:27:00 AM	6	5/24/02 10:02:00 AM	12	5/24/02 10:37:00 AM	7	5/24/02 11:12:00 AM	6
5/24/02 9:28:00 AM	5	5/24/02 10:03:00 AM	6	5/24/02 10:38:00 AM	7	5/24/02 11:13:00 AM	7
5/24/02 9:29:00 AM	5	5/24/02 10:04:00 AM	6	5/24/02 10:39:00 AM	8	5/24/02 11:14:00 AM	7
5/24/02 9:30:00 AM	6	5/24/02 10:05:00 AM	6	5/24/02 10:40:00 AM	7	5/24/02 11:15:00 AM	7
5/24/02 9:31:00 AM	6	5/24/02 10:06:00 AM	6	5/24/02 10:41:00 AM	7	5/24/02 11:16:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/24/02 11:17:00 AM	6	5/24/02 11:52:00 AM	7	5/24/02 12:27:00 PM	12	5/24/02 1:02:00 PM	9
5/24/02 11:18:00 AM	7	5/24/02 11:53:00 AM	7	5/24/02 12:28:00 PM	8	5/24/02 1:03:00 PM	8
5/24/02 11:19:00 AM	7	5/24/02 11:54:00 AM	7	5/24/02 12:29:00 PM	9	5/24/02 1:04:00 PM	9
5/24/02 11:20:00 AM	8	5/24/02 11:55:00 AM	7	5/24/02 12:30:00 PM	9	5/24/02 1:05:00 PM	8
5/24/02 11:21:00 AM	8	5/24/02 11:56:00 AM	7	5/24/02 12:31:00 PM	8	5/24/02 1:06:00 PM	9
5/24/02 11:22:00 AM	8	5/24/02 11:57:00 AM	8	5/24/02 12:32:00 PM	8	5/24/02 1:07:00 PM	9
5/24/02 11:23:00 AM	8	5/24/02 11:58:00 AM	7	5/24/02 12:33:00 PM	9	5/24/02 1:08:00 PM	9
5/24/02 11:24:00 AM	37	5/24/02 11:59:00 AM	8	5/24/02 12:34:00 PM	9	5/24/02 1:09:00 PM	9
5/24/02 11:25:00 AM	7	5/24/02 12:00:00 PM	8	5/24/02 12:35:00 PM	9	5/24/02 1:10:00 PM	10
5/24/02 11:26:00 AM	7	5/24/02 12:01:00 PM	8	5/24/02 12:36:00 PM	8	5/24/02 1:11:00 PM	10
5/24/02 11:27:00 AM	8	5/24/02 12:02:00 PM	8	5/24/02 12:37:00 PM	8	5/24/02 1:12:00 PM	13
5/24/02 11:28:00 AM	8	5/24/02 12:03:00 PM	8	5/24/02 12:38:00 PM	8	5/30/02 7:47:00 AM	37
5/24/02 11:29:00 AM	7	5/24/02 12:04:00 PM	8	5/24/02 12:39:00 PM	9	5/30/02 7:48:00 AM	40
5/24/02 11:30:00 AM	8	5/24/02 12:05:00 PM	8	5/24/02 12:40:00 PM	9	5/30/02 7:49:00 AM	6
5/24/02 11:31:00 AM	7	5/24/02 12:06:00 PM	8	5/24/02 12:41:00 PM	9	5/30/02 7:50:00 AM	6
5/24/02 11:32:00 AM	7	5/24/02 12:07:00 PM	8	5/24/02 12:42:00 PM	10	5/30/02 7:51:00 AM	5
5/24/02 11:33:00 AM	8	5/24/02 12:08:00 PM	8	5/24/02 12:43:00 PM	9	5/30/02 7:52:00 AM	5
5/24/02 11:34:00 AM	8	5/24/02 12:09:00 PM	9	5/24/02 12:44:00 PM	9	5/30/02 7:53:00 AM	6
5/24/02 11:35:00 AM	8	5/24/02 12:10:00 PM	8	5/24/02 12:45:00 PM	8	5/30/02 7:54:00 AM	6
5/24/02 11:36:00 AM	7	5/24/02 12:11:00 PM	11	5/24/02 12:46:00 PM	8	5/30/02 7:55:00 AM	5
5/24/02 11:37:00 AM	7	5/24/02 12:12:00 PM	8	5/24/02 12:47:00 PM	9	5/30/02 7:56:00 AM	6
5/24/02 11:38:00 AM	7	5/24/02 12:13:00 PM	8	5/24/02 12:48:00 PM	7	5/30/02 7:57:00 AM	6
5/24/02 11:39:00 AM	7	5/24/02 12:14:00 PM	9	5/24/02 12:49:00 PM	8	5/30/02 7:58:00 AM	6
5/24/02 11:40:00 AM	11	5/24/02 12:15:00 PM	8	5/24/02 12:50:00 PM	8	5/30/02 7:59:00 AM	6
5/24/02 11:41:00 AM	9	5/24/02 12:16:00 PM	8	5/24/02 12:51:00 PM	10	5/30/02 8:00:00 AM	107
5/24/02 11:42:00 AM	7	5/24/02 12:17:00 PM	7	5/24/02 12:52:00 PM	10	5/30/02 8:01:00 AM	8
5/24/02 11:43:00 AM	7	5/24/02 12:18:00 PM	8	5/24/02 12:53:00 PM	10	5/30/02 8:02:00 AM	7
5/24/02 11:44:00 AM	6	5/24/02 12:19:00 PM	8	5/24/02 12:54:00 PM	10	5/30/02 8:03:00 AM	7
5/24/02 11:45:00 AM	7	5/24/02 12:20:00 PM	8	5/24/02 12:55:00 PM	15	5/30/02 8:04:00 AM	8
5/24/02 11:46:00 AM	9	5/24/02 12:21:00 PM	9	5/24/02 12:56:00 PM	8	5/30/02 8:05:00 AM	7
5/24/02 11:47:00 AM	7	5/24/02 12:22:00 PM	8	5/24/02 12:57:00 PM	9	5/30/02 8:06:00 AM	6
5/24/02 11:48:00 AM	7	5/24/02 12:23:00 PM	8	5/24/02 12:58:00 PM	8	5/30/02 8:07:00 AM	7
5/24/02 11:49:00 AM	7	5/24/02 12:24:00 PM	8	5/24/02 12:59:00 PM	8	5/30/02 8:08:00 AM	8
5/24/02 11:50:00 AM	7	5/24/02 12:25:00 PM	8	5/24/02 1:00:00 PM	9	5/30/02 8:09:00 AM	8
5/24/02 11:51:00 AM	7	5/24/02 12:26:00 PM	8	5/24/02 1:01:00 PM	10	5/30/02 8:10:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/30/02 8:11:00 AM	8	5/30/02 8:46:00 AM	7	5/30/02 9:21:00 AM	5	5/30/02 9:56:00 AM	7
5/30/02 8:12:00 AM	7	5/30/02 8:47:00 AM	8	5/30/02 9:22:00 AM	5	5/30/02 9:57:00 AM	6
5/30/02 8:13:00 AM	7	5/30/02 8:48:00 AM	7	5/30/02 9:23:00 AM	5	5/30/02 9:58:00 AM	7
5/30/02 8:14:00 AM	7	5/30/02 8:49:00 AM	7	5/30/02 9:24:00 AM	5	5/30/02 9:59:00 AM	6
5/30/02 8:15:00 AM	7	5/30/02 8:50:00 AM	7	5/30/02 9:25:00 AM	5	5/30/02 10:00:00 AM	7
5/30/02 8:16:00 AM	7	5/30/02 8:51:00 AM	7	5/30/02 9:26:00 AM	5	5/30/02 10:01:00 AM	7
5/30/02 8:17:00 AM	7	5/30/02 8:52:00 AM	7	5/30/02 9:27:00 AM	4	5/30/02 10:02:00 AM	7
5/30/02 8:18:00 AM	8	5/30/02 8:53:00 AM	7	5/30/02 9:28:00 AM	5	5/30/02 10:03:00 AM	6
5/30/02 8:19:00 AM	7	5/30/02 8:54:00 AM	7	5/30/02 9:29:00 AM	6	5/30/02 10:04:00 AM	6
5/30/02 8:20:00 AM	7	5/30/02 8:55:00 AM	7	5/30/02 9:30:00 AM	4	5/30/02 10:05:00 AM	7
5/30/02 8:21:00 AM	7	5/30/02 8:56:00 AM	8	5/30/02 9:31:00 AM	4	5/30/02 10:06:00 AM	6
5/30/02 8:22:00 AM	7	5/30/02 8:57:00 AM	7	5/30/02 9:32:00 AM	5	5/30/02 10:07:00 AM	7
5/30/02 8:23:00 AM	7	5/30/02 8:58:00 AM	8	5/30/02 9:33:00 AM	5	5/30/02 10:08:00 AM	6
5/30/02 8:24:00 AM	8	5/30/02 8:59:00 AM	12	5/30/02 9:34:00 AM	5	5/30/02 10:09:00 AM	6
5/30/02 8:25:00 AM	7	5/30/02 9:00:00 AM	574	5/30/02 9:35:00 AM	5	5/30/02 10:10:00 AM	7
5/30/02 8:26:00 AM	7	5/30/02 9:01:00 AM	389	5/30/02 9:36:00 AM	5	5/30/02 10:11:00 AM	7
5/30/02 8:27:00 AM	7	5/30/02 9:02:00 AM	8	5/30/02 9:37:00 AM	5	5/30/02 10:12:00 AM	7
5/30/02 8:28:00 AM	7	5/30/02 9:03:00 AM	6	5/30/02 9:38:00 AM	5	5/30/02 10:13:00 AM	7
5/30/02 8:29:00 AM	8	5/30/02 9:04:00 AM	6	5/30/02 9:39:00 AM	5	5/30/02 10:14:00 AM	7
5/30/02 8:30:00 AM	7	5/30/02 9:05:00 AM	7	5/30/02 9:40:00 AM	5	5/30/02 10:15:00 AM	7
5/30/02 8:31:00 AM	8	5/30/02 9:06:00 AM	14	5/30/02 9:41:00 AM	5	5/30/02 10:16:00 AM	7
5/30/02 8:32:00 AM	7	5/30/02 9:07:00 AM	6	5/30/02 9:42:00 AM	5	5/30/02 10:17:00 AM	7
5/30/02 8:33:00 AM	8	5/30/02 9:08:00 AM	5	5/30/02 9:43:00 AM	6	5/30/02 10:18:00 AM	8
5/30/02 8:34:00 AM	8	5/30/02 9:09:00 AM	5	5/30/02 9:44:00 AM	5	5/30/02 10:19:00 AM	7
5/30/02 8:35:00 AM	8	5/30/02 9:10:00 AM	6	5/30/02 9:45:00 AM	7	5/30/02 10:20:00 AM	7
5/30/02 8:36:00 AM	8	5/30/02 9:11:00 AM	6	5/30/02 9:46:00 AM	5	5/30/02 10:21:00 AM	8
5/30/02 8:37:00 AM	8	5/30/02 9:12:00 AM	6	5/30/02 9:47:00 AM	6	5/30/02 10:22:00 AM	7
5/30/02 8:38:00 AM	8	5/30/02 9:13:00 AM	9	5/30/02 9:48:00 AM	5	5/30/02 10:23:00 AM	7
5/30/02 8:39:00 AM	8	5/30/02 9:14:00 AM	5	5/30/02 9:49:00 AM	5	5/30/02 10:24:00 AM	6
5/30/02 8:40:00 AM	9	5/30/02 9:15:00 AM	5	5/30/02 9:50:00 AM	5	5/30/02 10:25:00 AM	7
5/30/02 8:41:00 AM	8	5/30/02 9:16:00 AM	5	5/30/02 9:51:00 AM	6	5/30/02 10:26:00 AM	7
5/30/02 8:42:00 AM	7	5/30/02 9:17:00 AM	5	5/30/02 9:52:00 AM	126	5/30/02 10:27:00 AM	6
5/30/02 8:43:00 AM	7	5/30/02 9:18:00 AM	5	5/30/02 9:53:00 AM	128	5/30/02 10:28:00 AM	7
5/30/02 8:44:00 AM	8	5/30/02 9:19:00 AM	5	5/30/02 9:54:00 AM	44	5/30/02 10:29:00 AM	7
5/30/02 8:45:00 AM	7	5/30/02 9:20:00 AM	5	5/30/02 9:55:00 AM	7	5/30/02 10:30:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/30/02 10:31:00 AM	6	5/30/02 11:06:00 AM	12	5/30/02 11:41:00 AM	8	5/30/02 12:16:00 PM	8
5/30/02 10:32:00 AM	7	5/30/02 11:07:00 AM	10	5/30/02 11:42:00 AM	10	5/30/02 12:17:00 PM	8
5/30/02 10:33:00 AM	7	5/30/02 11:08:00 AM	8	5/30/02 11:43:00 AM	9	5/30/02 12:18:00 PM	8
5/30/02 10:34:00 AM	7	5/30/02 11:09:00 AM	8	5/30/02 11:44:00 AM	11	5/30/02 12:19:00 PM	8
5/30/02 10:35:00 AM	7	5/30/02 11:10:00 AM	8	5/30/02 11:45:00 AM	8	5/30/02 12:20:00 PM	8
5/30/02 10:36:00 AM	7	5/30/02 11:11:00 AM	8	5/30/02 11:46:00 AM	9	5/30/02 12:21:00 PM	8
5/30/02 10:37:00 AM	7	5/30/02 11:12:00 AM	9	5/30/02 11:47:00 AM	9	5/30/02 12:22:00 PM	9
5/30/02 10:38:00 AM	7	5/30/02 11:13:00 AM	8	5/30/02 11:48:00 AM	8	5/30/02 12:23:00 PM	9
5/30/02 10:39:00 AM	7	5/30/02 11:14:00 AM	8	5/30/02 11:49:00 AM	8	5/30/02 12:24:00 PM	9
5/30/02 10:40:00 AM	8	5/30/02 11:15:00 AM	8	5/30/02 11:50:00 AM	8	5/30/02 12:25:00 PM	9
5/30/02 10:41:00 AM	6	5/30/02 11:16:00 AM	8	5/30/02 11:51:00 AM	8	5/30/02 12:26:00 PM	8
5/30/02 10:42:00 AM	7	5/30/02 11:17:00 AM	11	5/30/02 11:52:00 AM	8	5/30/02 12:27:00 PM	9
5/30/02 10:43:00 AM	7	5/30/02 11:18:00 AM	8	5/30/02 11:53:00 AM	8	5/30/02 12:28:00 PM	9
5/30/02 10:44:00 AM	6	5/30/02 11:19:00 AM	8	5/30/02 11:54:00 AM	8	5/30/02 12:29:00 PM	9
5/30/02 10:45:00 AM	6	5/30/02 11:20:00 AM	8	5/30/02 11:55:00 AM	8	5/30/02 12:30:00 PM	9
5/30/02 10:46:00 AM	7	5/30/02 11:21:00 AM	8	5/30/02 11:56:00 AM	8	5/30/02 12:31:00 PM	9
5/30/02 10:47:00 AM	7	5/30/02 11:22:00 AM	8	5/30/02 11:57:00 AM	8	5/30/02 12:32:00 PM	9
5/30/02 10:48:00 AM	7	5/30/02 11:23:00 AM	8	5/30/02 11:58:00 AM	8	5/30/02 12:33:00 PM	9
5/30/02 10:49:00 AM	6	5/30/02 11:24:00 AM	8	5/30/02 11:59:00 AM	8	5/30/02 12:34:00 PM	9
5/30/02 10:50:00 AM	7	5/30/02 11:25:00 AM	9	5/30/02 12:00:00 PM	8	5/30/02 12:35:00 PM	9
5/30/02 10:51:00 AM	6	5/30/02 11:26:00 AM	8	5/30/02 12:01:00 PM	8	5/30/02 12:36:00 PM	8
5/30/02 10:52:00 AM	6	5/30/02 11:27:00 AM	8	5/30/02 12:02:00 PM	8	5/30/02 12:37:00 PM	9
5/30/02 10:53:00 AM	8	5/30/02 11:28:00 AM	10	5/30/02 12:03:00 PM	8	5/30/02 12:38:00 PM	9
5/30/02 10:54:00 AM	14	5/30/02 11:29:00 AM	9	5/30/02 12:04:00 PM	8	5/30/02 12:39:00 PM	9
5/30/02 10:55:00 AM	8	5/30/02 11:30:00 AM	9	5/30/02 12:05:00 PM	8	5/30/02 12:40:00 PM	10
5/30/02 10:56:00 AM	9	5/30/02 11:31:00 AM	8	5/30/02 12:06:00 PM	8	5/30/02 12:41:00 PM	9
5/30/02 10:57:00 AM	9	5/30/02 11:32:00 AM	8	5/30/02 12:07:00 PM	8	5/30/02 12:42:00 PM	8
5/30/02 10:58:00 AM	8	5/30/02 11:33:00 AM	9	5/30/02 12:08:00 PM	8	5/30/02 12:43:00 PM	9
5/30/02 10:59:00 AM	8	5/30/02 11:34:00 AM	8	5/30/02 12:09:00 PM	8	5/30/02 12:44:00 PM	9
5/30/02 11:00:00 AM	10	5/30/02 11:35:00 AM	8	5/30/02 12:10:00 PM	13	5/30/02 12:45:00 PM	9
5/30/02 11:01:00 AM	8	5/30/02 11:36:00 AM	11	5/30/02 12:11:00 PM	9	5/30/02 12:46:00 PM	9
5/30/02 11:02:00 AM	9	5/30/02 11:37:00 AM	11	5/30/02 12:12:00 PM	8	5/30/02 12:47:00 PM	9
5/30/02 11:03:00 AM	8	5/30/02 11:38:00 AM	9	5/30/02 12:13:00 PM	8	5/30/02 12:48:00 PM	9
5/30/02 11:04:00 AM	8	5/30/02 11:39:00 AM	8	5/30/02 12:14:00 PM	9	5/30/02 12:49:00 PM	9
5/30/02 11:05:00 AM	9	5/30/02 11:40:00 AM	8	5/30/02 12:15:00 PM	8	5/30/02 12:50:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/30/02 12:51:00 PM	9	5/30/02 1:26:00 PM	9	5/30/02 2:01:00 PM	11	5/30/02 2:36:00 PM	12
5/30/02 12:52:00 PM	9	5/30/02 1:27:00 PM	9	5/30/02 2:02:00 PM	11	5/30/02 2:37:00 PM	15
5/30/02 12:53:00 PM	9	5/30/02 1:28:00 PM	9	5/30/02 2:03:00 PM	10	5/30/02 2:38:00 PM	17
5/30/02 12:54:00 PM	8	5/30/02 1:29:00 PM	9	5/30/02 2:04:00 PM	11	5/30/02 2:39:00 PM	12
5/30/02 12:55:00 PM	9	5/30/02 1:30:00 PM	9	5/30/02 2:05:00 PM	10	5/30/02 2:40:00 PM	13
5/30/02 12:56:00 PM	10	5/30/02 1:31:00 PM	9	5/30/02 2:06:00 PM	10	5/30/02 2:41:00 PM	15
5/30/02 12:57:00 PM	10	5/30/02 1:32:00 PM	9	5/30/02 2:07:00 PM	11	5/30/02 2:42:00 PM	13
5/30/02 12:58:00 PM	9	5/30/02 1:33:00 PM	9	5/30/02 2:08:00 PM	10	5/30/02 2:43:00 PM	10
5/30/02 12:59:00 PM	9	5/30/02 1:34:00 PM	9	5/30/02 2:09:00 PM	9	5/30/02 2:44:00 PM	11
5/30/02 1:00:00 PM	10	5/30/02 1:35:00 PM	9	5/30/02 2:10:00 PM	10	5/30/02 2:45:00 PM	13
5/30/02 1:01:00 PM	9	5/30/02 1:36:00 PM	10	5/30/02 2:11:00 PM	10	5/30/02 2:46:00 PM	12
5/30/02 1:02:00 PM	9	5/30/02 1:37:00 PM	14	5/30/02 2:12:00 PM	9	5/30/02 2:47:00 PM	12
5/30/02 1:03:00 PM	10	5/30/02 1:38:00 PM	20	5/30/02 2:13:00 PM	10	5/30/02 2:48:00 PM	11
5/30/02 1:04:00 PM	10	5/30/02 1:39:00 PM	11	5/30/02 2:14:00 PM	10	5/30/02 2:49:00 PM	12
5/30/02 1:05:00 PM	9	5/30/02 1:40:00 PM	9	5/30/02 2:15:00 PM	10	5/30/02 2:50:00 PM	13
5/30/02 1:06:00 PM	9	5/30/02 1:41:00 PM	9	5/30/02 2:16:00 PM	9	5/30/02 2:51:00 PM	12
5/30/02 1:07:00 PM	9	5/30/02 1:42:00 PM	10	5/30/02 2:17:00 PM	9	5/30/02 2:52:00 PM	12
5/30/02 1:08:00 PM	9	5/30/02 1:43:00 PM	9	5/30/02 2:18:00 PM	12	5/30/02 2:53:00 PM	12
5/30/02 1:09:00 PM	9	5/30/02 1:44:00 PM	9	5/30/02 2:19:00 PM	18	5/30/02 2:54:00 PM	11
5/30/02 1:10:00 PM	8	5/30/02 1:45:00 PM	9	5/30/02 2:20:00 PM	18	5/30/02 2:55:00 PM	11
5/30/02 1:11:00 PM	9	5/30/02 1:46:00 PM	10	5/30/02 2:21:00 PM	20	5/30/02 2:56:00 PM	10
5/30/02 1:12:00 PM	8	5/30/02 1:47:00 PM	10	5/30/02 2:22:00 PM	15	5/30/02 2:57:00 PM	10
5/30/02 1:13:00 PM	8	5/30/02 1:48:00 PM	9	5/30/02 2:23:00 PM	11	5/30/02 2:58:00 PM	10
5/30/02 1:14:00 PM	8	5/30/02 1:49:00 PM	10	5/30/02 2:24:00 PM	11	5/30/02 2:59:00 PM	9
5/30/02 1:15:00 PM	8	5/30/02 1:50:00 PM	10	5/30/02 2:25:00 PM	11	5/30/02 3:00:00 PM	9
5/30/02 1:16:00 PM	8	5/30/02 1:51:00 PM	14	5/30/02 2:26:00 PM	11	5/30/02 3:01:00 PM	9
5/30/02 1:17:00 PM	8	5/30/02 1:52:00 PM	9	5/30/02 2:27:00 PM	11	5/30/02 3:02:00 PM	10
5/30/02 1:18:00 PM	8	5/30/02 1:53:00 PM	115	5/30/02 2:28:00 PM	16	5/30/02 3:03:00 PM	9
5/30/02 1:19:00 PM	8	5/30/02 1:54:00 PM	12	5/30/02 2:29:00 PM	10	5/30/02 3:04:00 PM	9
5/30/02 1:20:00 PM	9	5/30/02 1:55:00 PM	13	5/30/02 2:30:00 PM	11	5/30/02 3:05:00 PM	9
5/30/02 1:21:00 PM	8	5/30/02 1:56:00 PM	12	5/30/02 2:31:00 PM	9	5/30/02 3:06:00 PM	9
5/30/02 1:22:00 PM	8	5/30/02 1:57:00 PM	12	5/30/02 2:32:00 PM	9	5/30/02 3:07:00 PM	9
5/30/02 1:23:00 PM	9	5/30/02 1:58:00 PM	11	5/30/02 2:33:00 PM	9	5/30/02 3:08:00 PM	8
5/30/02 1:24:00 PM	8	5/30/02 1:59:00 PM	11	5/30/02 2:34:00 PM	9	5/30/02 3:09:00 PM	9
5/30/02 1:25:00 PM	9	5/30/02 2:00:00 PM	11	5/30/02 2:35:00 PM	10	5/30/02 3:10:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
5/30/02 3:11:00 PM	9	5/30/02 3:46:00 PM	11	5/30/02 4:21:00 PM	8	6/4/02 9:33:00 AM	3
5/30/02 3:12:00 PM	8	5/30/02 3:47:00 PM	8	5/30/02 4:22:00 PM	8	6/4/02 9:34:00 AM	3
5/30/02 3:13:00 PM	8	5/30/02 3:48:00 PM	12	5/30/02 4:23:00 PM	8	6/4/02 9:35:00 AM	2
5/30/02 3:14:00 PM	8	5/30/02 3:49:00 PM	19	5/30/02 4:24:00 PM	8	6/4/02 9:36:00 AM	1
5/30/02 3:15:00 PM	8	5/30/02 3:50:00 PM	18	5/30/02 4:25:00 PM	8	6/4/02 9:37:00 AM	0
5/30/02 3:16:00 PM	8	5/30/02 3:51:00 PM	11	5/30/02 4:26:00 PM	8	6/4/02 9:38:00 AM	1
5/30/02 3:17:00 PM	8	5/30/02 3:52:00 PM	9	5/30/02 4:27:00 PM	7	6/4/02 9:39:00 AM	1
5/30/02 3:18:00 PM	9	5/30/02 3:53:00 PM	8	5/30/02 4:28:00 PM	7	6/4/02 9:40:00 AM	1
5/30/02 3:19:00 PM	8	5/30/02 3:54:00 PM	8	5/30/02 4:29:00 PM	7	6/4/02 9:41:00 AM	1
5/30/02 3:20:00 PM	8	5/30/02 3:55:00 PM	7	5/30/02 4:30:00 PM	8	6/4/02 9:42:00 AM	1
5/30/02 3:21:00 PM	8	5/30/02 3:56:00 PM	7	5/30/02 4:31:00 PM	7	6/4/02 9:43:00 AM	1
5/30/02 3:22:00 PM	8	5/30/02 3:57:00 PM	8	5/30/02 4:32:00 PM	7	6/4/02 9:44:00 AM	2
5/30/02 3:23:00 PM	8	5/30/02 3:58:00 PM	15	5/30/02 4:33:00 PM	7	6/4/02 9:45:00 AM	1
5/30/02 3:24:00 PM	8	5/30/02 3:59:00 PM	10	5/30/02 4:34:00 PM	7	6/4/02 9:46:00 AM	21
5/30/02 3:25:00 PM	7	5/30/02 4:00:00 PM	9	5/30/02 4:35:00 PM	7	6/4/02 9:47:00 AM	2
5/30/02 3:26:00 PM	8	5/30/02 4:01:00 PM	12	5/30/02 4:36:00 PM	7	6/4/02 9:48:00 AM	1
5/30/02 3:27:00 PM	7	5/30/02 4:02:00 PM	12	5/30/02 4:37:00 PM	7	6/4/02 9:49:00 AM	1
5/30/02 3:28:00 PM	16	5/30/02 4:03:00 PM	11	5/30/02 4:38:00 PM	8	6/4/02 9:50:00 AM	1
5/30/02 3:29:00 PM	17	5/30/02 4:04:00 PM	14	6/4/02 9:16:00 AM	3	6/4/02 9:51:00 AM	1
5/30/02 3:30:00 PM	14	5/30/02 4:05:00 PM	10	6/4/02 9:17:00 AM	2	6/4/02 9:52:00 AM	1
5/30/02 3:31:00 PM	11	5/30/02 4:06:00 PM	12	6/4/02 9:18:00 AM	2	6/4/02 9:53:00 AM	1
5/30/02 3:32:00 PM	12	5/30/02 4:07:00 PM	10	6/4/02 9:19:00 AM	4	6/4/02 9:54:00 AM	1
5/30/02 3:33:00 PM	12	5/30/02 4:08:00 PM	10	6/4/02 9:20:00 AM	2	6/4/02 9:55:00 AM	1
5/30/02 3:34:00 PM	11	5/30/02 4:09:00 PM	10	6/4/02 9:21:00 AM	2	6/4/02 9:56:00 AM	1
5/30/02 3:35:00 PM	10	5/30/02 4:10:00 PM	9	6/4/02 9:22:00 AM	1	6/4/02 9:57:00 AM	1
5/30/02 3:36:00 PM	12	5/30/02 4:11:00 PM	10	6/4/02 9:23:00 AM	1	6/4/02 9:58:00 AM	2
5/30/02 3:37:00 PM	49	5/30/02 4:12:00 PM	10	6/4/02 9:24:00 AM	1	6/4/02 9:59:00 AM	1
5/30/02 3:38:00 PM	19	5/30/02 4:13:00 PM	9	6/4/02 9:25:00 AM	0	6/4/02 10:00:00 AM	1
5/30/02 3:39:00 PM	10	5/30/02 4:14:00 PM	9	6/4/02 9:26:00 AM	1	6/4/02 10:01:00 AM	2
5/30/02 3:40:00 PM	11	5/30/02 4:15:00 PM	9	6/4/02 9:27:00 AM	1	6/4/02 10:02:00 AM	2
5/30/02 3:41:00 PM	12	5/30/02 4:16:00 PM	9	6/4/02 9:28:00 AM	1	6/4/02 10:03:00 AM	1
5/30/02 3:42:00 PM	12	5/30/02 4:17:00 PM	9	6/4/02 9:29:00 AM	1	6/4/02 10:04:00 AM	1
5/30/02 3:43:00 PM	9	5/30/02 4:18:00 PM	8	6/4/02 9:30:00 AM	1	6/4/02 10:05:00 AM	2
5/30/02 3:44:00 PM	8	5/30/02 4:19:00 PM	8	6/4/02 9:31:00 AM	2	6/4/02 10:06:00 AM	2
5/30/02 3:45:00 PM	11	5/30/02 4:20:00 PM	8	6/4/02 9:32:00 AM	4	6/4/02 10:07:00 AM	2

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/4/02 10:08:00 AM	2	6/4/02 10:43:00 AM	2	6/4/02 11:18:00 AM	2	6/4/02 11:53:00 AM	1
6/4/02 10:09:00 AM	2	6/4/02 10:44:00 AM	2	6/4/02 11:19:00 AM	2	6/4/02 11:54:00 AM	2
6/4/02 10:10:00 AM	2	6/4/02 10:45:00 AM	2	6/4/02 11:20:00 AM	2	6/4/02 11:55:00 AM	14
6/4/02 10:11:00 AM	2	6/4/02 10:46:00 AM	2	6/4/02 11:21:00 AM	2	6/4/02 11:56:00 AM	2
6/4/02 10:12:00 AM	2	6/4/02 10:47:00 AM	2	6/4/02 11:22:00 AM	2	6/4/02 11:57:00 AM	8
6/4/02 10:13:00 AM	1	6/4/02 10:48:00 AM	2	6/4/02 11:23:00 AM	2	6/4/02 11:58:00 AM	10
6/4/02 10:14:00 AM	3	6/4/02 10:49:00 AM	3	6/4/02 11:24:00 AM	2	6/4/02 11:59:00 AM	2
6/4/02 10:15:00 AM	2	6/4/02 10:50:00 AM	4	6/4/02 11:25:00 AM	2	6/4/02 12:00:00 PM	2
6/4/02 10:16:00 AM	2	6/4/02 10:51:00 AM	5	6/4/02 11:26:00 AM	2	6/4/02 12:01:00 PM	2
6/4/02 10:17:00 AM	1	6/4/02 10:52:00 AM	4	6/4/02 11:27:00 AM	2	6/7/02 7:27:00 AM	22
6/4/02 10:18:00 AM	1	6/4/02 10:53:00 AM	2	6/4/02 11:28:00 AM	2	6/7/02 7:28:00 AM	27
6/4/02 10:19:00 AM	2	6/4/02 10:54:00 AM	2	6/4/02 11:29:00 AM	2	6/7/02 7:29:00 AM	3
6/4/02 10:20:00 AM	2	6/4/02 10:55:00 AM	4	6/4/02 11:30:00 AM	2	6/7/02 7:30:00 AM	2
6/4/02 10:21:00 AM	2	6/4/02 10:56:00 AM	3	6/4/02 11:31:00 AM	2	6/7/02 7:31:00 AM	3
6/4/02 10:22:00 AM	2	6/4/02 10:57:00 AM	2	6/4/02 11:32:00 AM	2	6/7/02 7:32:00 AM	3
6/4/02 10:23:00 AM	2	6/4/02 10:58:00 AM	2	6/4/02 11:33:00 AM	2	6/7/02 7:33:00 AM	3
6/4/02 10:24:00 AM	2	6/4/02 10:59:00 AM	3	6/4/02 11:34:00 AM	2	6/7/02 7:34:00 AM	3
6/4/02 10:25:00 AM	2	6/4/02 11:00:00 AM	2	6/4/02 11:35:00 AM	2	6/7/02 7:35:00 AM	4
6/4/02 10:26:00 AM	2	6/4/02 11:01:00 AM	2	6/4/02 11:36:00 AM	2	6/7/02 7:36:00 AM	3
6/4/02 10:27:00 AM	2	6/4/02 11:02:00 AM	3	6/4/02 11:37:00 AM	2	6/7/02 7:37:00 AM	3
6/4/02 10:28:00 AM	2	6/4/02 11:03:00 AM	5	6/4/02 11:38:00 AM	2	6/7/02 7:38:00 AM	3
6/4/02 10:29:00 AM	3	6/4/02 11:04:00 AM	2	6/4/02 11:39:00 AM	2	6/7/02 7:39:00 AM	4
6/4/02 10:30:00 AM	4	6/4/02 11:05:00 AM	2	6/4/02 11:40:00 AM	2	6/7/02 7:40:00 AM	3
6/4/02 10:31:00 AM	2	6/4/02 11:06:00 AM	2	6/4/02 11:41:00 AM	2	6/7/02 7:41:00 AM	10
6/4/02 10:32:00 AM	2	6/4/02 11:07:00 AM	3	6/4/02 11:42:00 AM	2	6/7/02 7:42:00 AM	3
6/4/02 10:33:00 AM	2	6/4/02 11:08:00 AM	2	6/4/02 11:43:00 AM	1	6/7/02 7:43:00 AM	3
6/4/02 10:34:00 AM	3	6/4/02 11:09:00 AM	2	6/4/02 11:44:00 AM	1	6/7/02 7:44:00 AM	3
6/4/02 10:35:00 AM	2	6/4/02 11:10:00 AM	2	6/4/02 11:45:00 AM	2	6/7/02 7:45:00 AM	3
6/4/02 10:36:00 AM	3	6/4/02 11:11:00 AM	2	6/4/02 11:46:00 AM	1	6/7/02 7:46:00 AM	3
6/4/02 10:37:00 AM	2	6/4/02 11:12:00 AM	2	6/4/02 11:47:00 AM	1	6/7/02 7:47:00 AM	3
6/4/02 10:38:00 AM	2	6/4/02 11:13:00 AM	2	6/4/02 11:48:00 AM	2	6/7/02 7:48:00 AM	3
6/4/02 10:39:00 AM	2	6/4/02 11:14:00 AM	3	6/4/02 11:49:00 AM	2	6/7/02 7:49:00 AM	4
6/4/02 10:40:00 AM	2	6/4/02 11:15:00 AM	2	6/4/02 11:50:00 AM	2	6/7/02 7:50:00 AM	3
6/4/02 10:41:00 AM	2	6/4/02 11:16:00 AM	2	6/4/02 11:51:00 AM	2	6/7/02 7:51:00 AM	3
6/4/02 10:42:00 AM	2	6/4/02 11:17:00 AM	2	6/4/02 11:52:00 AM	3	6/7/02 7:52:00 AM	3

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/7/02 7:53:00 AM	3	6/7/02 8:28:00 AM	3	6/7/02 9:03:00 AM	3	6/7/02 9:38:00 AM	3
6/7/02 7:54:00 AM	3	6/7/02 8:29:00 AM	3	6/7/02 9:04:00 AM	3	6/7/02 9:39:00 AM	3
6/7/02 7:55:00 AM	3	6/7/02 8:30:00 AM	3	6/7/02 9:05:00 AM	3	6/7/02 9:40:00 AM	3
6/7/02 7:56:00 AM	3	6/7/02 8:31:00 AM	3	6/7/02 9:06:00 AM	2	6/7/02 9:41:00 AM	3
6/7/02 7:57:00 AM	3	6/7/02 8:32:00 AM	3	6/7/02 9:07:00 AM	3	6/7/02 9:42:00 AM	3
6/7/02 7:58:00 AM	3	6/7/02 8:33:00 AM	3	6/7/02 9:08:00 AM	3	6/7/02 9:43:00 AM	3
6/7/02 7:59:00 AM	3	6/7/02 8:34:00 AM	4	6/7/02 9:09:00 AM	2	6/7/02 9:44:00 AM	3
6/7/02 8:00:00 AM	3	6/7/02 8:35:00 AM	3	6/7/02 9:10:00 AM	2	6/7/02 9:45:00 AM	3
6/7/02 8:01:00 AM	3	6/7/02 8:36:00 AM	2	6/7/02 9:11:00 AM	3	6/7/02 9:46:00 AM	3
6/7/02 8:02:00 AM	4	6/7/02 8:37:00 AM	3	6/7/02 9:12:00 AM	2	6/7/02 9:47:00 AM	3
6/7/02 8:03:00 AM	4	6/7/02 8:38:00 AM	3	6/7/02 9:13:00 AM	2	6/7/02 9:48:00 AM	3
6/7/02 8:04:00 AM	3	6/7/02 8:39:00 AM	3	6/7/02 9:14:00 AM	3	6/7/02 9:49:00 AM	4
6/7/02 8:05:00 AM	4	6/7/02 8:40:00 AM	4	6/7/02 9:15:00 AM	2	6/7/02 9:50:00 AM	3
6/7/02 8:06:00 AM	3	6/7/02 8:41:00 AM	4	6/7/02 9:16:00 AM	3	6/7/02 9:51:00 AM	3
6/7/02 8:07:00 AM	3	6/7/02 8:42:00 AM	3	6/7/02 9:17:00 AM	3	6/7/02 9:52:00 AM	4
6/7/02 8:08:00 AM	3	6/7/02 8:43:00 AM	5	6/7/02 9:18:00 AM	4	6/7/02 9:53:00 AM	3
6/7/02 8:09:00 AM	3	6/7/02 8:44:00 AM	4	6/7/02 9:19:00 AM	3	6/7/02 9:54:00 AM	4
6/7/02 8:10:00 AM	3	6/7/02 8:45:00 AM	3	6/7/02 9:20:00 AM	6	6/7/02 9:55:00 AM	4
6/7/02 8:11:00 AM	3	6/7/02 8:46:00 AM	3	6/7/02 9:21:00 AM	3	6/7/02 9:56:00 AM	4
6/7/02 8:12:00 AM	3	6/7/02 8:47:00 AM	3	6/7/02 9:22:00 AM	2	6/7/02 9:57:00 AM	3
6/7/02 8:13:00 AM	3	6/7/02 8:48:00 AM	3	6/7/02 9:23:00 AM	2	6/7/02 9:58:00 AM	3
6/7/02 8:14:00 AM	3	6/7/02 8:49:00 AM	3	6/7/02 9:24:00 AM	2	6/7/02 9:59:00 AM	3
6/7/02 8:15:00 AM	3	6/7/02 8:50:00 AM	2	6/7/02 9:25:00 AM	3	6/7/02 10:00:00 AM	4
6/7/02 8:16:00 AM	4	6/7/02 8:51:00 AM	3	6/7/02 9:26:00 AM	3	6/7/02 10:01:00 AM	4
6/7/02 8:17:00 AM	4	6/7/02 8:52:00 AM	3	6/7/02 9:27:00 AM	2	6/7/02 10:02:00 AM	4
6/7/02 8:18:00 AM	2	6/7/02 8:53:00 AM	5	6/7/02 9:28:00 AM	2	6/7/02 10:03:00 AM	3
6/7/02 8:19:00 AM	3	6/7/02 8:54:00 AM	3	6/7/02 9:29:00 AM	3	6/7/02 10:04:00 AM	3
6/7/02 8:20:00 AM	3	6/7/02 8:55:00 AM	3	6/7/02 9:30:00 AM	2	6/7/02 10:05:00 AM	3
6/7/02 8:21:00 AM	3	6/7/02 8:56:00 AM	3	6/7/02 9:31:00 AM	3	6/7/02 10:06:00 AM	3
6/7/02 8:22:00 AM	3	6/7/02 8:57:00 AM	2	6/7/02 9:32:00 AM	3	6/7/02 10:07:00 AM	4
6/7/02 8:23:00 AM	3	6/7/02 8:58:00 AM	3	6/7/02 9:33:00 AM	3	6/7/02 10:08:00 AM	3
6/7/02 8:24:00 AM	3	6/7/02 8:59:00 AM	3	6/7/02 9:34:00 AM	3	6/7/02 10:09:00 AM	3
6/7/02 8:25:00 AM	3	6/7/02 9:00:00 AM	3	6/7/02 9:35:00 AM	3	6/7/02 10:10:00 AM	4
6/7/02 8:26:00 AM	3	6/7/02 9:01:00 AM	3	6/7/02 9:36:00 AM	3	6/7/02 10:11:00 AM	3
6/7/02 8:27:00 AM	3	6/7/02 9:02:00 AM	3	6/7/02 9:37:00 AM	3	6/7/02 10:12:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/7/02 10:13:00 AM	3	6/10/02 10:17:00 AM	2	6/10/02 10:52:00 AM	5	6/10/02 11:27:00 AM	7
6/7/02 10:14:00 AM	4	6/10/02 10:18:00 AM	3	6/10/02 10:53:00 AM	5	6/10/02 11:28:00 AM	6
6/7/02 10:15:00 AM	3	6/10/02 10:19:00 AM	3	6/10/02 10:54:00 AM	6	6/10/02 11:29:00 AM	5
6/7/02 10:16:00 AM	4	6/10/02 10:20:00 AM	3	6/10/02 10:55:00 AM	8	6/10/02 11:30:00 AM	5
6/7/02 10:17:00 AM	3	6/10/02 10:21:00 AM	3	6/10/02 10:56:00 AM	5	6/10/02 11:31:00 AM	5
6/7/02 10:18:00 AM	3	6/10/02 10:22:00 AM	3	6/10/02 10:57:00 AM	5	6/10/02 11:32:00 AM	5
6/7/02 10:19:00 AM	4	6/10/02 10:23:00 AM	3	6/10/02 10:58:00 AM	5	6/10/02 11:33:00 AM	11
6/7/02 10:20:00 AM	4	6/10/02 10:24:00 AM	17	6/10/02 10:59:00 AM	6	6/10/02 11:34:00 AM	8
6/7/02 10:21:00 AM	3	6/10/02 10:25:00 AM	10	6/10/02 11:00:00 AM	8	6/10/02 11:35:00 AM	8
6/7/02 10:22:00 AM	4	6/10/02 10:26:00 AM	36	6/10/02 11:01:00 AM	6	6/10/02 11:36:00 AM	8
6/7/02 10:23:00 AM	3	6/10/02 10:27:00 AM	4	6/10/02 11:02:00 AM	6	6/10/02 11:37:00 AM	8
6/7/02 10:24:00 AM	4	6/10/02 10:28:00 AM	4	6/10/02 11:03:00 AM	6	6/10/02 11:38:00 AM	6
6/7/02 10:25:00 AM	3	6/10/02 10:29:00 AM	4	6/10/02 11:04:00 AM	6	6/10/02 11:39:00 AM	5
6/7/02 10:26:00 AM	4	6/10/02 10:30:00 AM	4	6/10/02 11:05:00 AM	8	6/10/02 11:40:00 AM	6
6/7/02 10:27:00 AM	4	6/10/02 10:31:00 AM	4	6/10/02 11:06:00 AM	6	6/10/02 11:41:00 AM	7
6/7/02 10:28:00 AM	4	6/10/02 10:32:00 AM	4	6/10/02 11:07:00 AM	5	6/10/02 11:42:00 AM	10
6/7/02 10:29:00 AM	4	6/10/02 10:33:00 AM	4	6/10/02 11:08:00 AM	6	6/10/02 11:43:00 AM	8
6/7/02 10:30:00 AM	4	6/10/02 10:34:00 AM	6	6/10/02 11:09:00 AM	6	6/10/02 11:44:00 AM	6
6/7/02 10:31:00 AM	4	6/10/02 10:35:00 AM	7	6/10/02 11:10:00 AM	5	6/10/02 11:45:00 AM	6
6/7/02 10:32:00 AM	4	6/10/02 10:36:00 AM	5	6/10/02 11:11:00 AM	6	6/10/02 11:46:00 AM	6
6/7/02 10:33:00 AM	4	6/10/02 10:37:00 AM	4	6/10/02 11:12:00 AM	6	6/10/02 11:47:00 AM	5
6/7/02 10:34:00 AM	4	6/10/02 10:38:00 AM	4	6/10/02 11:13:00 AM	7	6/10/02 11:48:00 AM	9
6/7/02 10:35:00 AM	4	6/10/02 10:39:00 AM	4	6/10/02 11:14:00 AM	6	6/10/02 11:49:00 AM	6
6/7/02 10:36:00 AM	4	6/10/02 10:40:00 AM	4	6/10/02 11:15:00 AM	7	6/10/02 11:50:00 AM	7
6/7/02 10:37:00 AM	4	6/10/02 10:41:00 AM	4	6/10/02 11:16:00 AM	7	6/10/02 11:51:00 AM	7
6/7/02 10:38:00 AM	4	6/10/02 10:42:00 AM	4	6/10/02 11:17:00 AM	5	6/10/02 11:52:00 AM	6
6/7/02 10:39:00 AM	4	6/10/02 10:43:00 AM	4	6/10/02 11:18:00 AM	6	6/10/02 11:53:00 AM	6
6/7/02 10:40:00 AM	4	6/10/02 10:44:00 AM	5	6/10/02 11:19:00 AM	6	6/10/02 11:54:00 AM	8
6/7/02 10:41:00 AM	4	6/10/02 10:45:00 AM	5	6/10/02 11:20:00 AM	4	6/10/02 11:55:00 AM	6
6/7/02 10:42:00 AM	4	6/10/02 10:46:00 AM	4	6/10/02 11:21:00 AM	4	6/10/02 11:56:00 AM	6
6/7/02 10:43:00 AM	4	6/10/02 10:47:00 AM	5	6/10/02 11:22:00 AM	5	6/10/02 11:57:00 AM	6
6/7/02 10:44:00 AM	4	6/10/02 10:48:00 AM	4	6/10/02 11:23:00 AM	6	6/10/02 11:58:00 AM	6
6/10/02 10:14:00 AM	2	6/10/02 10:49:00 AM	6	6/10/02 11:24:00 AM	6	6/10/02 11:59:00 AM	6
6/10/02 10:15:00 AM	3	6/10/02 10:50:00 AM	6	6/10/02 11:25:00 AM	6	6/10/02 12:00:00 PM	6
6/10/02 10:16:00 AM	2	6/10/02 10:51:00 AM	6	6/10/02 11:26:00 AM	6	6/10/02 12:01:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/10/02 12:02:00 PM	6	6/10/02 12:37:00 PM	6	6/10/02 1:12:00 PM	6	6/10/02 1:47:00 PM	5
6/10/02 12:03:00 PM	6	6/10/02 12:38:00 PM	6	6/10/02 1:13:00 PM	5	6/10/02 1:48:00 PM	5
6/10/02 12:04:00 PM	8	6/10/02 12:39:00 PM	7	6/10/02 1:14:00 PM	5	6/10/02 1:49:00 PM	6
6/10/02 12:05:00 PM	5	6/10/02 12:40:00 PM	7	6/10/02 1:15:00 PM	5	6/10/02 1:50:00 PM	6
6/10/02 12:06:00 PM	6	6/10/02 12:41:00 PM	8	6/10/02 1:16:00 PM	6	6/10/02 1:51:00 PM	5
6/10/02 12:07:00 PM	10	6/10/02 12:42:00 PM	6	6/10/02 1:17:00 PM	6	6/10/02 1:52:00 PM	5
6/10/02 12:08:00 PM	8	6/10/02 12:43:00 PM	6	6/10/02 1:18:00 PM	6	6/10/02 1:53:00 PM	6
6/10/02 12:09:00 PM	5	6/10/02 12:44:00 PM	5	6/10/02 1:19:00 PM	6	6/10/02 1:54:00 PM	5
6/10/02 12:10:00 PM	5	6/10/02 12:45:00 PM	6	6/10/02 1:20:00 PM	5	6/10/02 1:55:00 PM	6
6/10/02 12:11:00 PM	5	6/10/02 12:46:00 PM	5	6/10/02 1:21:00 PM	5	6/10/02 1:56:00 PM	5
6/10/02 12:12:00 PM	6	6/10/02 12:47:00 PM	7	6/10/02 1:22:00 PM	5	6/10/02 1:57:00 PM	5
6/10/02 12:13:00 PM	7	6/10/02 12:48:00 PM	6	6/10/02 1:23:00 PM	5	6/10/02 1:58:00 PM	6
6/10/02 12:14:00 PM	8	6/10/02 12:49:00 PM	5	6/10/02 1:24:00 PM	5	6/10/02 1:59:00 PM	5
6/10/02 12:15:00 PM	6	6/10/02 12:50:00 PM	5	6/10/02 1:25:00 PM	5	6/10/02 2:00:00 PM	5
6/10/02 12:16:00 PM	7	6/10/02 12:51:00 PM	7	6/10/02 1:26:00 PM	5	6/10/02 2:01:00 PM	6
6/10/02 12:17:00 PM	7	6/10/02 12:52:00 PM	8	6/10/02 1:27:00 PM	6	6/10/02 2:02:00 PM	6
6/10/02 12:18:00 PM	6	6/10/02 12:53:00 PM	5	6/10/02 1:28:00 PM	6	6/10/02 2:03:00 PM	13
6/10/02 12:19:00 PM	7	6/10/02 12:54:00 PM	5	6/10/02 1:29:00 PM	7	6/10/02 2:04:00 PM	8
6/10/02 12:20:00 PM	6	6/10/02 12:55:00 PM	6	6/10/02 1:30:00 PM	6	6/10/02 2:05:00 PM	6
6/10/02 12:21:00 PM	5	6/10/02 12:56:00 PM	5	6/10/02 1:31:00 PM	6	6/10/02 2:06:00 PM	7
6/10/02 12:22:00 PM	5	6/10/02 12:57:00 PM	5	6/10/02 1:32:00 PM	5	6/10/02 2:07:00 PM	13
6/10/02 12:23:00 PM	6	6/10/02 12:58:00 PM	6	6/10/02 1:33:00 PM	6	6/10/02 2:08:00 PM	6
6/10/02 12:24:00 PM	6	6/10/02 12:59:00 PM	5	6/10/02 1:34:00 PM	7	6/10/02 2:09:00 PM	6
6/10/02 12:25:00 PM	6	6/10/02 1:00:00 PM	5	6/10/02 1:35:00 PM	5	6/10/02 2:10:00 PM	6
6/10/02 12:26:00 PM	6	6/10/02 1:01:00 PM	6	6/10/02 1:36:00 PM	8	6/10/02 2:11:00 PM	5
6/10/02 12:27:00 PM	6	6/10/02 1:02:00 PM	5	6/10/02 1:37:00 PM	5	6/10/02 2:12:00 PM	6
6/10/02 12:28:00 PM	8	6/10/02 1:03:00 PM	5	6/10/02 1:38:00 PM	5	6/10/02 2:13:00 PM	5
6/10/02 12:29:00 PM	5	6/10/02 1:04:00 PM	5	6/10/02 1:39:00 PM	5	6/10/02 2:14:00 PM	7
6/10/02 12:30:00 PM	5	6/10/02 1:05:00 PM	5	6/10/02 1:40:00 PM	6	6/10/02 2:15:00 PM	6
6/10/02 12:31:00 PM	6	6/10/02 1:06:00 PM	5	6/10/02 1:41:00 PM	5	6/10/02 2:16:00 PM	4
6/10/02 12:32:00 PM	6	6/10/02 1:07:00 PM	5	6/10/02 1:42:00 PM	5	6/10/02 2:17:00 PM	5
6/10/02 12:33:00 PM	7	6/10/02 1:08:00 PM	6	6/10/02 1:43:00 PM	5	6/10/02 2:18:00 PM	6
6/10/02 12:34:00 PM	6	6/10/02 1:09:00 PM	5	6/10/02 1:44:00 PM	5	6/10/02 2:19:00 PM	5
6/10/02 12:35:00 PM	9	6/10/02 1:10:00 PM	5	6/10/02 1:45:00 PM	5	6/10/02 2:20:00 PM	6
6/10/02 12:36:00 PM	8	6/10/02 1:11:00 PM	5	6/10/02 1:46:00 PM	5	6/10/02 2:21:00 PM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/10/02 2:22:00 PM	6	6/10/02 2:57:00 PM	6	6/10/02 3:32:00 PM	11	6/10/02 4:07:00 PM	6
6/10/02 2:23:00 PM	6	6/10/02 2:58:00 PM	5	6/10/02 3:33:00 PM	5	6/10/02 4:08:00 PM	5
6/10/02 2:24:00 PM	7	6/10/02 2:59:00 PM	5	6/10/02 3:34:00 PM	5	6/10/02 4:09:00 PM	6
6/10/02 2:25:00 PM	7	6/10/02 3:00:00 PM	5	6/10/02 3:35:00 PM	5	6/10/02 4:10:00 PM	6
6/10/02 2:26:00 PM	7	6/10/02 3:01:00 PM	5	6/10/02 3:36:00 PM	5	6/10/02 4:11:00 PM	6
6/10/02 2:27:00 PM	5	6/10/02 3:02:00 PM	5	6/10/02 3:37:00 PM	5	6/10/02 4:12:00 PM	5
6/10/02 2:28:00 PM	6	6/10/02 3:03:00 PM	5	6/10/02 3:38:00 PM	5	6/10/02 4:13:00 PM	5
6/10/02 2:29:00 PM	6	6/10/02 3:04:00 PM	7	6/10/02 3:39:00 PM	5	6/10/02 4:14:00 PM	6
6/10/02 2:30:00 PM	6	6/10/02 3:05:00 PM	5	6/10/02 3:40:00 PM	5	6/10/02 4:15:00 PM	6
6/10/02 2:31:00 PM	7	6/10/02 3:06:00 PM	8	6/10/02 3:41:00 PM	5	6/10/02 4:16:00 PM	6
6/10/02 2:32:00 PM	5	6/10/02 3:07:00 PM	6	6/10/02 3:42:00 PM	5	6/10/02 4:17:00 PM	5
6/10/02 2:33:00 PM	6	6/10/02 3:08:00 PM	7	6/10/02 3:43:00 PM	5	6/10/02 4:18:00 PM	6
6/10/02 2:34:00 PM	6	6/10/02 3:09:00 PM	6	6/10/02 3:44:00 PM	6	6/10/02 4:19:00 PM	6
6/10/02 2:35:00 PM	5	6/10/02 3:10:00 PM	6	6/10/02 3:45:00 PM	6	6/10/02 4:20:00 PM	6
6/10/02 2:36:00 PM	6	6/10/02 3:11:00 PM	6	6/10/02 3:46:00 PM	7	6/10/02 4:21:00 PM	6
6/10/02 2:37:00 PM	6	6/10/02 3:12:00 PM	6	6/10/02 3:47:00 PM	5	6/10/02 4:22:00 PM	5
6/10/02 2:38:00 PM	5	6/10/02 3:13:00 PM	5	6/10/02 3:48:00 PM	5	6/10/02 4:23:00 PM	7
6/10/02 2:39:00 PM	5	6/10/02 3:14:00 PM	6	6/10/02 3:49:00 PM	5	6/10/02 4:24:00 PM	6
6/10/02 2:40:00 PM	5	6/10/02 3:15:00 PM	7	6/10/02 3:50:00 PM	5	6/10/02 4:25:00 PM	5
6/10/02 2:41:00 PM	5	6/10/02 3:16:00 PM	6	6/10/02 3:51:00 PM	9	6/10/02 4:26:00 PM	5
6/10/02 2:42:00 PM	5	6/10/02 3:17:00 PM	5	6/10/02 3:52:00 PM	5	6/10/02 4:27:00 PM	5
6/10/02 2:43:00 PM	5	6/10/02 3:18:00 PM	6	6/10/02 3:53:00 PM	5	6/10/02 4:28:00 PM	5
6/10/02 2:44:00 PM	5	6/10/02 3:19:00 PM	10	6/10/02 3:54:00 PM	5	6/10/02 4:29:00 PM	5
6/10/02 2:45:00 PM	5	6/10/02 3:20:00 PM	6	6/10/02 3:55:00 PM	5	6/10/02 4:30:00 PM	6
6/10/02 2:46:00 PM	5	6/10/02 3:21:00 PM	9	6/10/02 3:56:00 PM	6	6/10/02 4:31:00 PM	7
6/10/02 2:47:00 PM	6	6/10/02 3:22:00 PM	7	6/10/02 3:57:00 PM	7	6/10/02 4:32:00 PM	6
6/10/02 2:48:00 PM	5	6/10/02 3:23:00 PM	7	6/10/02 3:58:00 PM	6	6/10/02 4:33:00 PM	6
6/10/02 2:49:00 PM	5	6/10/02 3:24:00 PM	5	6/10/02 3:59:00 PM	6	6/10/02 4:34:00 PM	5
6/10/02 2:50:00 PM	5	6/10/02 3:25:00 PM	5	6/10/02 4:00:00 PM	5	6/10/02 4:35:00 PM	6
6/10/02 2:51:00 PM	5	6/10/02 3:26:00 PM	6	6/10/02 4:01:00 PM	6	6/10/02 4:36:00 PM	5
6/10/02 2:52:00 PM	5	6/10/02 3:27:00 PM	6	6/10/02 4:02:00 PM	5	6/10/02 4:37:00 PM	5
6/10/02 2:53:00 PM	5	6/10/02 3:28:00 PM	5	6/10/02 4:03:00 PM	6	6/10/02 4:38:00 PM	5
6/10/02 2:54:00 PM	5	6/10/02 3:29:00 PM	8	6/10/02 4:04:00 PM	7	6/10/02 4:39:00 PM	5
6/10/02 2:55:00 PM	5	6/10/02 3:30:00 PM	7	6/10/02 4:05:00 PM	6	6/10/02 4:40:00 PM	6
6/10/02 2:56:00 PM	5	6/10/02 3:31:00 PM	8	6/10/02 4:06:00 PM	7	6/10/02 4:41:00 PM	5

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/10/02 4:42:00 PM	6	6/10/02 5:17:00 PM	5	6/10/02 5:52:00 PM	5	6/11/02 8:04:00 AM	8
6/10/02 4:43:00 PM	5	6/10/02 5:18:00 PM	5	6/10/02 5:53:00 PM	5	6/11/02 8:05:00 AM	6
6/10/02 4:44:00 PM	5	6/10/02 5:19:00 PM	6	6/10/02 5:54:00 PM	6	6/11/02 8:06:00 AM	6
6/10/02 4:45:00 PM	5	6/10/02 5:20:00 PM	6	6/10/02 5:55:00 PM	5	6/11/02 8:07:00 AM	6
6/10/02 4:46:00 PM	5	6/10/02 5:21:00 PM	5	6/10/02 5:56:00 PM	6	6/11/02 8:08:00 AM	6
6/10/02 4:47:00 PM	6	6/10/02 5:22:00 PM	4	6/10/02 5:57:00 PM	5	6/11/02 8:09:00 AM	6
6/10/02 4:48:00 PM	5	6/10/02 5:23:00 PM	6	6/10/02 5:58:00 PM	5	6/11/02 8:10:00 AM	6
6/10/02 4:49:00 PM	5	6/10/02 5:24:00 PM	5	6/10/02 5:59:00 PM	6	6/11/02 8:11:00 AM	6
6/10/02 4:50:00 PM	5	6/10/02 5:25:00 PM	5	6/10/02 6:00:00 PM	6	6/11/02 8:12:00 AM	7
6/10/02 4:51:00 PM	6	6/10/02 5:26:00 PM	4	6/10/02 6:01:00 PM	5	6/11/02 8:13:00 AM	6
6/10/02 4:52:00 PM	6	6/10/02 5:27:00 PM	6	6/10/02 6:02:00 PM	5	6/11/02 8:14:00 AM	8
6/10/02 4:53:00 PM	6	6/10/02 5:28:00 PM	5	6/10/02 6:03:00 PM	7	6/11/02 8:15:00 AM	7
6/10/02 4:54:00 PM	6	6/10/02 5:29:00 PM	5	6/10/02 6:04:00 PM	8	6/11/02 8:16:00 AM	6
6/10/02 4:55:00 PM	7	6/10/02 5:30:00 PM	5	6/10/02 6:05:00 PM	10	6/11/02 8:17:00 AM	6
6/10/02 4:56:00 PM	6	6/10/02 5:31:00 PM	5	6/10/02 6:06:00 PM	10	6/11/02 8:18:00 AM	7
6/10/02 4:57:00 PM	6	6/10/02 5:32:00 PM	5	6/10/02 6:07:00 PM	6	6/11/02 8:19:00 AM	7
6/10/02 4:58:00 PM	6	6/10/02 5:33:00 PM	5	6/10/02 6:08:00 PM	8	6/11/02 8:20:00 AM	9
6/10/02 4:59:00 PM	7	6/10/02 5:34:00 PM	5	6/10/02 6:09:00 PM	6	6/11/02 8:21:00 AM	6
6/10/02 5:00:00 PM	6	6/10/02 5:35:00 PM	5	6/10/02 6:10:00 PM	20	6/11/02 8:22:00 AM	6
6/10/02 5:01:00 PM	5	6/10/02 5:36:00 PM	5	6/10/02 6:11:00 PM	66	6/11/02 8:23:00 AM	7
6/10/02 5:02:00 PM	5	6/10/02 5:37:00 PM	5	6/11/02 7:49:00 AM	22	6/11/02 8:24:00 AM	7
6/10/02 5:03:00 PM	5	6/10/02 5:38:00 PM	6	6/11/02 7:50:00 AM	6	6/11/02 8:25:00 AM	7
6/10/02 5:04:00 PM	6	6/10/02 5:39:00 PM	6	6/11/02 7:51:00 AM	6	6/11/02 8:26:00 AM	8
6/10/02 5:05:00 PM	6	6/10/02 5:40:00 PM	5	6/11/02 7:52:00 AM	6	6/11/02 8:27:00 AM	8
6/10/02 5:06:00 PM	6	6/10/02 5:41:00 PM	5	6/11/02 7:53:00 AM	6	6/11/02 8:28:00 AM	7
6/10/02 5:07:00 PM	26	6/10/02 5:42:00 PM	6	6/11/02 7:54:00 AM	6	6/11/02 8:29:00 AM	7
6/10/02 5:08:00 PM	6	6/10/02 5:43:00 PM	8	6/11/02 7:55:00 AM	6	6/11/02 8:30:00 AM	7
6/10/02 5:09:00 PM	5	6/10/02 5:44:00 PM	6	6/11/02 7:56:00 AM	6	6/11/02 8:31:00 AM	7
6/10/02 5:10:00 PM	6	6/10/02 5:45:00 PM	5	6/11/02 7:57:00 AM	6	6/11/02 8:32:00 AM	7
6/10/02 5:11:00 PM	5	6/10/02 5:46:00 PM	5	6/11/02 7:58:00 AM	6	6/11/02 8:33:00 AM	7
6/10/02 5:12:00 PM	5	6/10/02 5:47:00 PM	5	6/11/02 7:59:00 AM	6	6/11/02 8:34:00 AM	7
6/10/02 5:13:00 PM	6	6/10/02 5:48:00 PM	5	6/11/02 8:00:00 AM	7	6/11/02 8:35:00 AM	7
6/10/02 5:14:00 PM	5	6/10/02 5:49:00 PM	6	6/11/02 8:01:00 AM	6	6/11/02 8:36:00 AM	7
6/10/02 5:15:00 PM	6	6/10/02 5:50:00 PM	5	6/11/02 8:02:00 AM	6	6/11/02 8:37:00 AM	8
6/10/02 5:16:00 PM	5	6/10/02 5:51:00 PM	5	6/11/02 8:03:00 AM	6	6/11/02 8:38:00 AM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/11/02 8:39:00 AM	7	6/11/02 9:14:00 AM	8	6/11/02 9:49:00 AM	8	6/11/02 10:24:00 AM	8
6/11/02 8:40:00 AM	7	6/11/02 9:15:00 AM	8	6/11/02 9:50:00 AM	10	6/11/02 10:25:00 AM	8
6/11/02 8:41:00 AM	7	6/11/02 9:16:00 AM	8	6/11/02 9:51:00 AM	8	6/11/02 10:26:00 AM	8
6/11/02 8:42:00 AM	7	6/11/02 9:17:00 AM	7	6/11/02 9:52:00 AM	8	6/11/02 10:27:00 AM	8
6/11/02 8:43:00 AM	8	6/11/02 9:18:00 AM	8	6/11/02 9:53:00 AM	8	6/11/02 10:28:00 AM	7
6/11/02 8:44:00 AM	8	6/11/02 9:19:00 AM	7	6/11/02 9:54:00 AM	7	6/11/02 10:29:00 AM	8
6/11/02 8:45:00 AM	7	6/11/02 9:20:00 AM	8	6/11/02 9:55:00 AM	7	6/11/02 10:30:00 AM	8
6/11/02 8:46:00 AM	8	6/11/02 9:21:00 AM	7	6/11/02 9:56:00 AM	7	6/11/02 10:31:00 AM	9
6/11/02 8:47:00 AM	7	6/11/02 9:22:00 AM	7	6/11/02 9:57:00 AM	7	6/11/02 10:32:00 AM	8
6/11/02 8:48:00 AM	7	6/11/02 9:23:00 AM	7	6/11/02 9:58:00 AM	7	6/11/02 10:33:00 AM	8
6/11/02 8:49:00 AM	8	6/11/02 9:24:00 AM	8	6/11/02 9:59:00 AM	7	6/11/02 10:34:00 AM	8
6/11/02 8:50:00 AM	7	6/11/02 9:25:00 AM	7	6/11/02 10:00:00 AM	7	6/11/02 10:35:00 AM	8
6/11/02 8:51:00 AM	7	6/11/02 9:26:00 AM	7	6/11/02 10:01:00 AM	7	6/11/02 10:36:00 AM	8
6/11/02 8:52:00 AM	9	6/11/02 9:27:00 AM	8	6/11/02 10:02:00 AM	7	6/11/02 10:37:00 AM	9
6/11/02 8:53:00 AM	7	6/11/02 9:28:00 AM	7	6/11/02 10:03:00 AM	7	6/11/02 10:38:00 AM	8
6/11/02 8:54:00 AM	6	6/11/02 9:29:00 AM	7	6/11/02 10:04:00 AM	7	6/11/02 10:39:00 AM	8
6/11/02 8:55:00 AM	7	6/11/02 9:30:00 AM	8	6/11/02 10:05:00 AM	7	6/11/02 10:40:00 AM	8
6/11/02 8:56:00 AM	7	6/11/02 9:31:00 AM	8	6/11/02 10:06:00 AM	7	6/11/02 10:41:00 AM	9
6/11/02 8:57:00 AM	8	6/11/02 9:32:00 AM	7	6/11/02 10:07:00 AM	7	6/11/02 10:42:00 AM	8
6/11/02 8:58:00 AM	8	6/11/02 9:33:00 AM	7	6/11/02 10:08:00 AM	7	6/11/02 10:43:00 AM	8
6/11/02 8:59:00 AM	7	6/11/02 9:34:00 AM	8	6/11/02 10:09:00 AM	7	6/11/02 10:44:00 AM	8
6/11/02 9:00:00 AM	8	6/11/02 9:35:00 AM	8	6/11/02 10:10:00 AM	7	6/11/02 10:45:00 AM	9
6/11/02 9:01:00 AM	8	6/11/02 9:36:00 AM	8	6/11/02 10:11:00 AM	7	6/11/02 10:46:00 AM	10
6/11/02 9:02:00 AM	8	6/11/02 9:37:00 AM	8	6/11/02 10:12:00 AM	8	6/11/02 10:47:00 AM	9
6/11/02 9:03:00 AM	8	6/11/02 9:38:00 AM	7	6/11/02 10:13:00 AM	7	6/11/02 10:48:00 AM	12
6/11/02 9:04:00 AM	8	6/11/02 9:39:00 AM	8	6/11/02 10:14:00 AM	7	6/11/02 10:49:00 AM	10
6/11/02 9:05:00 AM	8	6/11/02 9:40:00 AM	8	6/11/02 10:15:00 AM	8	6/11/02 10:50:00 AM	8
6/11/02 9:06:00 AM	8	6/11/02 9:41:00 AM	8	6/11/02 10:16:00 AM	7	6/11/02 10:51:00 AM	9
6/11/02 9:07:00 AM	8	6/11/02 9:42:00 AM	8	6/11/02 10:17:00 AM	7	6/11/02 10:52:00 AM	8
6/11/02 9:08:00 AM	8	6/11/02 9:43:00 AM	8	6/11/02 10:18:00 AM	8	6/11/02 10:53:00 AM	9
6/11/02 9:09:00 AM	8	6/11/02 9:44:00 AM	8	6/11/02 10:19:00 AM	8	6/11/02 10:54:00 AM	9
6/11/02 9:10:00 AM	8	6/11/02 9:45:00 AM	8	6/11/02 10:20:00 AM	8	6/11/02 10:55:00 AM	9
6/11/02 9:11:00 AM	7	6/11/02 9:46:00 AM	7	6/11/02 10:21:00 AM	8	6/11/02 10:56:00 AM	9
6/11/02 9:12:00 AM	8	6/11/02 9:47:00 AM	7	6/11/02 10:22:00 AM	8	6/11/02 10:57:00 AM	9
6/11/02 9:13:00 AM	8	6/11/02 9:48:00 AM	8	6/11/02 10:23:00 AM	8	6/11/02 10:58:00 AM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/11/02 10:59:00 AM	8	6/11/02 11:34:00 AM	10	6/11/02 12:09:00 PM	9	6/11/02 12:44:00 PM	9
6/11/02 11:00:00 AM	9	6/11/02 11:35:00 AM	10	6/11/02 12:10:00 PM	8	6/11/02 12:45:00 PM	8
6/11/02 11:01:00 AM	9	6/11/02 11:36:00 AM	10	6/11/02 12:11:00 PM	8	6/11/02 12:46:00 PM	8
6/11/02 11:02:00 AM	10	6/11/02 11:37:00 AM	9	6/11/02 12:12:00 PM	8	6/11/02 12:47:00 PM	9
6/11/02 11:03:00 AM	10	6/11/02 11:38:00 AM	9	6/11/02 12:13:00 PM	8	6/11/02 12:48:00 PM	9
6/11/02 11:04:00 AM	9	6/11/02 11:39:00 AM	9	6/11/02 12:14:00 PM	10	6/11/02 12:49:00 PM	9
6/11/02 11:05:00 AM	9	6/11/02 11:40:00 AM	8	6/11/02 12:15:00 PM	8	6/11/02 12:50:00 PM	9
6/11/02 11:06:00 AM	9	6/11/02 11:41:00 AM	9	6/11/02 12:16:00 PM	8	6/11/02 12:51:00 PM	9
6/11/02 11:07:00 AM	8	6/11/02 11:42:00 AM	9	6/11/02 12:17:00 PM	8	6/11/02 12:52:00 PM	9
6/11/02 11:08:00 AM	9	6/11/02 11:43:00 AM	9	6/11/02 12:18:00 PM	8	6/11/02 12:53:00 PM	9
6/11/02 11:09:00 AM	9	6/11/02 11:44:00 AM	9	6/11/02 12:19:00 PM	9	6/11/02 12:54:00 PM	9
6/11/02 11:10:00 AM	9	6/11/02 11:45:00 AM	9	6/11/02 12:20:00 PM	9	6/11/02 12:55:00 PM	9
6/11/02 11:11:00 AM	10	6/11/02 11:46:00 AM	10	6/11/02 12:21:00 PM	8	6/11/02 12:56:00 PM	9
6/11/02 11:12:00 AM	10	6/11/02 11:47:00 AM	10	6/11/02 12:22:00 PM	9	6/11/02 12:57:00 PM	8
6/11/02 11:13:00 AM	9	6/11/02 11:48:00 AM	9	6/11/02 12:23:00 PM	9	6/11/02 12:58:00 PM	9
6/11/02 11:14:00 AM	9	6/11/02 11:49:00 AM	9	6/11/02 12:24:00 PM	9	6/11/02 12:59:00 PM	9
6/11/02 11:15:00 AM	9	6/11/02 11:50:00 AM	9	6/11/02 12:25:00 PM	8	6/11/02 1:00:00 PM	9
6/11/02 11:16:00 AM	9	6/11/02 11:51:00 AM	10	6/11/02 12:26:00 PM	9	6/11/02 1:01:00 PM	8
6/11/02 11:17:00 AM	9	6/11/02 11:52:00 AM	9	6/11/02 12:27:00 PM	9	6/11/02 1:02:00 PM	8
6/11/02 11:18:00 AM	9	6/11/02 11:53:00 AM	9	6/11/02 12:28:00 PM	9	6/11/02 1:03:00 PM	9
6/11/02 11:19:00 AM	9	6/11/02 11:54:00 AM	10	6/11/02 12:29:00 PM	9	6/11/02 1:04:00 PM	8
6/11/02 11:20:00 AM	9	6/11/02 11:55:00 AM	9	6/11/02 12:30:00 PM	10	6/11/02 1:05:00 PM	9
6/11/02 11:21:00 AM	10	6/11/02 11:56:00 AM	9	6/11/02 12:31:00 PM	8	6/11/02 1:06:00 PM	9
6/11/02 11:22:00 AM	9	6/11/02 11:57:00 AM	9	6/11/02 12:32:00 PM	9	6/11/02 1:07:00 PM	9
6/11/02 11:23:00 AM	9	6/11/02 11:58:00 AM	9	6/11/02 12:33:00 PM	9	6/11/02 1:08:00 PM	10
6/11/02 11:24:00 AM	9	6/11/02 11:59:00 AM	9	6/11/02 12:34:00 PM	9	6/11/02 1:09:00 PM	10
6/11/02 11:25:00 AM	9	6/11/02 12:00:00 PM	9	6/11/02 12:35:00 PM	10	6/11/02 1:10:00 PM	9
6/11/02 11:26:00 AM	8	6/11/02 12:01:00 PM	9	6/11/02 12:36:00 PM	8	6/11/02 1:11:00 PM	10
6/11/02 11:27:00 AM	9	6/11/02 12:02:00 PM	9	6/11/02 12:37:00 PM	9	6/11/02 1:12:00 PM	11
6/11/02 11:28:00 AM	9	6/11/02 12:03:00 PM	9	6/11/02 12:38:00 PM	8	6/11/02 1:13:00 PM	10
6/11/02 11:29:00 AM	10	6/11/02 12:04:00 PM	8	6/11/02 12:39:00 PM	8	6/11/02 1:14:00 PM	10
6/11/02 11:30:00 AM	9	6/11/02 12:05:00 PM	9	6/11/02 12:40:00 PM	9	6/11/02 1:15:00 PM	10
6/11/02 11:31:00 AM	9	6/11/02 12:06:00 PM	9	6/11/02 12:41:00 PM	8	6/11/02 1:16:00 PM	9
6/11/02 11:32:00 AM	9	6/11/02 12:07:00 PM	8	6/11/02 12:42:00 PM	8	6/11/02 1:17:00 PM	9
6/11/02 11:33:00 AM	9	6/11/02 12:08:00 PM	8	6/11/02 12:43:00 PM	8	6/11/02 1:18:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/11/02 1:19:00 PM	10	6/11/02 1:54:00 PM	8	6/11/02 2:29:00 PM	8	6/11/02 3:04:00 PM	8
6/11/02 1:20:00 PM	10	6/11/02 1:55:00 PM	9	6/11/02 2:30:00 PM	10	6/11/02 3:05:00 PM	10
6/11/02 1:21:00 PM	11	6/11/02 1:56:00 PM	8	6/11/02 2:31:00 PM	9	6/11/02 3:06:00 PM	10
6/11/02 1:22:00 PM	10	6/11/02 1:57:00 PM	9	6/11/02 2:32:00 PM	8	6/11/02 3:07:00 PM	8
6/11/02 1:23:00 PM	10	6/11/02 1:58:00 PM	10	6/11/02 2:33:00 PM	8	6/11/02 3:08:00 PM	8
6/11/02 1:24:00 PM	10	6/11/02 1:59:00 PM	9	6/11/02 2:34:00 PM	8	6/11/02 3:09:00 PM	8
6/11/02 1:25:00 PM	10	6/11/02 2:00:00 PM	9	6/11/02 2:35:00 PM	8	6/11/02 3:10:00 PM	8
6/11/02 1:26:00 PM	9	6/11/02 2:01:00 PM	10	6/11/02 2:36:00 PM	9	6/11/02 3:11:00 PM	8
6/11/02 1:27:00 PM	10	6/11/02 2:02:00 PM	8	6/11/02 2:37:00 PM	7	6/11/02 3:12:00 PM	9
6/11/02 1:28:00 PM	10	6/11/02 2:03:00 PM	9	6/11/02 2:38:00 PM	8	6/11/02 3:13:00 PM	9
6/11/02 1:29:00 PM	9	6/11/02 2:04:00 PM	10	6/11/02 2:39:00 PM	8	6/11/02 3:14:00 PM	8
6/11/02 1:30:00 PM	9	6/11/02 2:05:00 PM	9	6/11/02 2:40:00 PM	8	6/11/02 3:15:00 PM	9
6/11/02 1:31:00 PM	9	6/11/02 2:06:00 PM	9	6/11/02 2:41:00 PM	8	6/11/02 3:16:00 PM	8
6/11/02 1:32:00 PM	9	6/11/02 2:07:00 PM	10	6/11/02 2:42:00 PM	9	6/11/02 3:17:00 PM	8
6/11/02 1:33:00 PM	9	6/11/02 2:08:00 PM	10	6/11/02 2:43:00 PM	8	6/11/02 3:18:00 PM	8
6/11/02 1:34:00 PM	9	6/11/02 2:09:00 PM	9	6/11/02 2:44:00 PM	8	6/11/02 3:19:00 PM	9
6/11/02 1:35:00 PM	9	6/11/02 2:10:00 PM	10	6/11/02 2:45:00 PM	7	6/11/02 3:20:00 PM	8
6/11/02 1:36:00 PM	11	6/11/02 2:11:00 PM	9	6/11/02 2:46:00 PM	7	6/11/02 3:21:00 PM	8
6/11/02 1:37:00 PM	9	6/11/02 2:12:00 PM	11	6/11/02 2:47:00 PM	8	6/11/02 3:22:00 PM	8
6/11/02 1:38:00 PM	8	6/11/02 2:13:00 PM	9	6/11/02 2:48:00 PM	8	6/11/02 3:23:00 PM	10
6/11/02 1:39:00 PM	9	6/11/02 2:14:00 PM	9	6/11/02 2:49:00 PM	7	6/11/02 3:24:00 PM	8
6/11/02 1:40:00 PM	9	6/11/02 2:15:00 PM	9	6/11/02 2:50:00 PM	8	6/11/02 3:25:00 PM	8
6/11/02 1:41:00 PM	8	6/11/02 2:16:00 PM	9	6/11/02 2:51:00 PM	8	6/11/02 3:26:00 PM	8
6/11/02 1:42:00 PM	8	6/11/02 2:17:00 PM	9	6/11/02 2:52:00 PM	8	6/11/02 3:27:00 PM	8
6/11/02 1:43:00 PM	10	6/11/02 2:18:00 PM	9	6/11/02 2:53:00 PM	8	6/11/02 3:28:00 PM	9
6/11/02 1:44:00 PM	8	6/11/02 2:19:00 PM	10	6/11/02 2:54:00 PM	8	6/11/02 3:29:00 PM	8
6/11/02 1:45:00 PM	9	6/11/02 2:20:00 PM	9	6/11/02 2:55:00 PM	8	6/11/02 3:30:00 PM	10
6/11/02 1:46:00 PM	9	6/11/02 2:21:00 PM	11	6/11/02 2:56:00 PM	8	6/11/02 3:31:00 PM	9
6/11/02 1:47:00 PM	9	6/11/02 2:22:00 PM	9	6/11/02 2:57:00 PM	8	6/11/02 3:32:00 PM	9
6/11/02 1:48:00 PM	9	6/11/02 2:23:00 PM	9	6/11/02 2:58:00 PM	8	6/11/02 3:33:00 PM	9
6/11/02 1:49:00 PM	8	6/11/02 2:24:00 PM	9	6/11/02 2:59:00 PM	8	6/11/02 3:34:00 PM	10
6/11/02 1:50:00 PM	9	6/11/02 2:25:00 PM	9	6/11/02 3:00:00 PM	8	6/11/02 3:35:00 PM	11
6/11/02 1:51:00 PM	9	6/11/02 2:26:00 PM	9	6/11/02 3:01:00 PM	10	6/11/02 3:36:00 PM	10
6/11/02 1:52:00 PM	8	6/11/02 2:27:00 PM	11	6/11/02 3:02:00 PM	8	6/11/02 3:37:00 PM	9
6/11/02 1:53:00 PM	9	6/11/02 2:28:00 PM	10	6/11/02 3:03:00 PM	8	6/11/02 3:38:00 PM	9

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/11/02 3:39:00 PM	8	6/11/02 4:14:00 PM	8	6/11/02 4:49:00 PM	8	6/11/02 5:24:00 PM	7
6/11/02 3:40:00 PM	9	6/11/02 4:15:00 PM	8	6/11/02 4:50:00 PM	8	6/11/02 5:25:00 PM	8
6/11/02 3:41:00 PM	9	6/11/02 4:16:00 PM	8	6/11/02 4:51:00 PM	8	6/11/02 5:26:00 PM	8
6/11/02 3:42:00 PM	9	6/11/02 4:17:00 PM	8	6/11/02 4:52:00 PM	9	6/11/02 5:27:00 PM	8
6/11/02 3:43:00 PM	9	6/11/02 4:18:00 PM	8	6/11/02 4:53:00 PM	9	6/11/02 5:28:00 PM	8
6/11/02 3:44:00 PM	10	6/11/02 4:19:00 PM	9	6/11/02 4:54:00 PM	9	6/11/02 5:29:00 PM	6
6/11/02 3:45:00 PM	9	6/11/02 4:20:00 PM	10	6/11/02 4:55:00 PM	10	6/11/02 5:30:00 PM	8
6/11/02 3:46:00 PM	10	6/11/02 4:21:00 PM	10	6/11/02 4:56:00 PM	8	6/11/02 5:31:00 PM	8
6/11/02 3:47:00 PM	10	6/11/02 4:22:00 PM	8	6/11/02 4:57:00 PM	12	6/11/02 5:32:00 PM	7
6/11/02 3:48:00 PM	10	6/11/02 4:23:00 PM	9	6/11/02 4:58:00 PM	9	6/11/02 5:33:00 PM	8
6/11/02 3:49:00 PM	9	6/11/02 4:24:00 PM	9	6/11/02 4:59:00 PM	10	6/11/02 5:34:00 PM	8
6/11/02 3:50:00 PM	9	6/11/02 4:25:00 PM	8	6/11/02 5:00:00 PM	9	6/11/02 5:35:00 PM	8
6/11/02 3:51:00 PM	8	6/11/02 4:26:00 PM	8	6/11/02 5:01:00 PM	9	6/11/02 5:36:00 PM	8
6/11/02 3:52:00 PM	8	6/11/02 4:27:00 PM	9	6/11/02 5:02:00 PM	8	6/11/02 5:37:00 PM	9
6/11/02 3:53:00 PM	7	6/11/02 4:28:00 PM	10	6/11/02 5:03:00 PM	8	6/11/02 5:38:00 PM	9
6/11/02 3:54:00 PM	9	6/11/02 4:29:00 PM	8	6/11/02 5:04:00 PM	8	6/11/02 5:39:00 PM	7
6/11/02 3:55:00 PM	9	6/11/02 4:30:00 PM	9	6/11/02 5:05:00 PM	7	6/11/02 5:40:00 PM	9
6/11/02 3:56:00 PM	8	6/11/02 4:31:00 PM	8	6/11/02 5:06:00 PM	8	6/11/02 5:41:00 PM	10
6/11/02 3:57:00 PM	8	6/11/02 4:32:00 PM	10	6/11/02 5:07:00 PM	9	6/11/02 5:42:00 PM	22
6/11/02 3:58:00 PM	8	6/11/02 4:33:00 PM	10	6/11/02 5:08:00 PM	8	6/11/02 5:43:00 PM	19
6/11/02 3:59:00 PM	8	6/11/02 4:34:00 PM	11	6/11/02 5:09:00 PM	8	6/11/02 5:44:00 PM	31
6/11/02 4:00:00 PM	8	6/11/02 4:35:00 PM	8	6/11/02 5:10:00 PM	8	6/11/02 5:45:00 PM	8
6/11/02 4:01:00 PM	8	6/11/02 4:36:00 PM	8	6/11/02 5:11:00 PM	7	6/11/02 5:46:00 PM	9
6/11/02 4:02:00 PM	10	6/11/02 4:37:00 PM	9	6/11/02 5:12:00 PM	8	6/11/02 5:47:00 PM	9
6/11/02 4:03:00 PM	8	6/11/02 4:38:00 PM	8	6/11/02 5:13:00 PM	9	6/11/02 5:48:00 PM	9
6/11/02 4:04:00 PM	9	6/11/02 4:39:00 PM	8	6/11/02 5:14:00 PM	8	6/11/02 5:49:00 PM	7
6/11/02 4:05:00 PM	8	6/11/02 4:40:00 PM	9	6/11/02 5:15:00 PM	7	6/11/02 5:50:00 PM	7
6/11/02 4:06:00 PM	8	6/11/02 4:41:00 PM	10	6/11/02 5:16:00 PM	8	6/11/02 5:51:00 PM	7
6/11/02 4:07:00 PM	8	6/11/02 4:42:00 PM	10	6/11/02 5:17:00 PM	7	6/11/02 5:52:00 PM	7
6/11/02 4:08:00 PM	8	6/11/02 4:43:00 PM	8	6/11/02 5:18:00 PM	7	6/11/02 5:53:00 PM	7
6/11/02 4:09:00 PM	8	6/11/02 4:44:00 PM	9	6/11/02 5:19:00 PM	8	6/11/02 5:54:00 PM	7
6/11/02 4:10:00 PM	7	6/11/02 4:45:00 PM	8	6/11/02 5:20:00 PM	7	6/11/02 5:55:00 PM	7
6/11/02 4:11:00 PM	8	6/11/02 4:46:00 PM	8	6/11/02 5:21:00 PM	7	6/11/02 5:56:00 PM	7
6/11/02 4:12:00 PM	8	6/11/02 4:47:00 PM	9	6/11/02 5:22:00 PM	7	6/11/02 5:57:00 PM	8
6/11/02 4:13:00 PM	8	6/11/02 4:48:00 PM	8	6/11/02 5:23:00 PM	8	6/11/02 5:58:00 PM	7

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/11/02 5:59:00 PM	7	6/12/02 7:44:00 AM	5	6/12/02 8:19:00 AM	6	6/12/02 8:54:00 AM	7
6/11/02 6:00:00 PM	56	6/12/02 7:45:00 AM	5	6/12/02 8:20:00 AM	5	6/12/02 8:55:00 AM	8
6/11/02 6:01:00 PM	9	6/12/02 7:46:00 AM	5	6/12/02 8:21:00 AM	6	6/12/02 8:56:00 AM	7
6/11/02 6:02:00 PM	8	6/12/02 7:47:00 AM	5	6/12/02 8:22:00 AM	6	6/12/02 8:57:00 AM	7
6/11/02 6:03:00 PM	8	6/12/02 7:48:00 AM	5	6/12/02 8:23:00 AM	5	6/12/02 8:58:00 AM	6
6/11/02 6:04:00 PM	8	6/12/02 7:49:00 AM	4	6/12/02 8:24:00 AM	5	6/12/02 8:59:00 AM	6
6/11/02 6:05:00 PM	7	6/12/02 7:50:00 AM	5	6/12/02 8:25:00 AM	5	6/12/02 9:00:00 AM	6
6/11/02 6:06:00 PM	7	6/12/02 7:51:00 AM	5	6/12/02 8:26:00 AM	6	6/12/02 9:01:00 AM	6
6/11/02 6:07:00 PM	7	6/12/02 7:52:00 AM	5	6/12/02 8:27:00 AM	7	6/12/02 9:02:00 AM	6
6/11/02 6:08:00 PM	7	6/12/02 7:53:00 AM	5	6/12/02 8:28:00 AM	6	6/12/02 9:03:00 AM	6
6/11/02 6:09:00 PM	7	6/12/02 7:54:00 AM	5	6/12/02 8:29:00 AM	6	6/12/02 9:04:00 AM	6
6/11/02 6:10:00 PM	8	6/12/02 7:55:00 AM	6	6/12/02 8:30:00 AM	6	6/12/02 9:05:00 AM	6
6/11/02 6:11:00 PM	7	6/12/02 7:56:00 AM	6	6/12/02 8:31:00 AM	6	6/12/02 9:06:00 AM	6
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6/11/02 6:13:00 PM	8	6/12/02 7:58:00 AM	5	6/12/02 8:33:00 AM	6	6/12/02 9:08:00 AM	7
6/11/02 6:14:00 PM	7	6/12/02 7:59:00 AM	7	6/12/02 8:34:00 AM	5	6/12/02 9:09:00 AM	6
6/11/02 6:15:00 PM	8	6/12/02 8:00:00 AM	7	6/12/02 8:35:00 AM	5	6/12/02 9:10:00 AM	6
6/11/02 6:16:00 PM	7	6/12/02 8:01:00 AM	5	6/12/02 8:36:00 AM	5	6/12/02 9:11:00 AM	5
6/11/02 6:17:00 PM	8	6/12/02 8:02:00 AM	6	6/12/02 8:37:00 AM	5	6/12/02 9:12:00 AM	6
6/11/02 6:18:00 PM	8	6/12/02 8:03:00 AM	6	6/12/02 8:38:00 AM	5	6/12/02 9:13:00 AM	6
6/11/02 6:19:00 PM	8	6/12/02 8:04:00 AM	6	6/12/02 8:39:00 AM	5	6/12/02 9:14:00 AM	6
6/11/02 6:20:00 PM	8	6/12/02 8:05:00 AM	6	6/12/02 8:40:00 AM	5	6/12/02 9:15:00 AM	6
6/11/02 6:21:00 PM	22	6/12/02 8:06:00 AM	5	6/12/02 8:41:00 AM	6	6/12/02 9:16:00 AM	6
6/11/02 6:22:00 PM	8	6/12/02 8:07:00 AM	6	6/12/02 8:42:00 AM	5	6/12/02 9:17:00 AM	6
6/11/02 6:23:00 PM	8	6/12/02 8:08:00 AM	7	6/12/02 8:43:00 AM	6	6/12/02 9:18:00 AM	6
6/11/02 6:24:00 PM	8	6/12/02 8:09:00 AM	5	6/12/02 8:44:00 AM	6	6/12/02 9:19:00 AM	6
6/11/02 6:25:00 PM	8	6/12/02 8:10:00 AM	6	6/12/02 8:45:00 AM	6	6/12/02 9:20:00 AM	6
6/11/02 6:26:00 PM	13	6/12/02 8:11:00 AM	6	6/12/02 8:46:00 AM	6	6/12/02 9:21:00 AM	6
6/11/02 6:27:00 PM	9	6/12/02 8:12:00 AM	8	6/12/02 8:47:00 AM	6	6/12/02 9:22:00 AM	6
6/12/02 7:38:00 AM	9	6/12/02 8:13:00 AM	6	6/12/02 8:48:00 AM	6	6/12/02 9:23:00 AM	18
6/12/02 7:39:00 AM	13	6/12/02 8:14:00 AM	16	6/12/02 8:49:00 AM	5	6/12/02 9:24:00 AM	6
6/12/02 7:40:00 AM	3	6/12/02 8:15:00 AM	5	6/12/02 8:50:00 AM	5	6/12/02 9:25:00 AM	7
6/12/02 7:41:00 AM	4	6/12/02 8:16:00 AM	6	6/12/02 8:51:00 AM	6	6/12/02 9:26:00 AM	7
6/12/02 7:42:00 AM	4	6/12/02 8:17:00 AM	5	6/12/02 8:52:00 AM	6	6/12/02 9:27:00 AM	6
6/12/02 7:43:00 AM	5	6/12/02 8:18:00 AM	5	6/12/02 8:53:00 AM	6	6/12/02 9:28:00 AM	8

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/12/02 9:29:00 AM	8	6/12/02 10:04:00 AM	5	6/12/02 10:39:00 AM	6	6/12/02 11:14:00 AM	9
6/12/02 9:30:00 AM	6	6/12/02 10:05:00 AM	5	6/12/02 10:40:00 AM	7	6/12/02 11:15:00 AM	8
6/12/02 9:31:00 AM	6	6/12/02 10:06:00 AM	4	6/12/02 10:41:00 AM	6	6/12/02 11:16:00 AM	9
6/12/02 9:32:00 AM	6	6/12/02 10:07:00 AM	4	6/12/02 10:42:00 AM	6	6/12/02 11:17:00 AM	9
6/12/02 9:33:00 AM	6	6/12/02 10:08:00 AM	4	6/12/02 10:43:00 AM	7	6/12/02 11:18:00 AM	9
6/12/02 9:34:00 AM	6	6/12/02 10:09:00 AM	4	6/12/02 10:44:00 AM	6	6/12/02 11:19:00 AM	9
6/12/02 9:35:00 AM	6	6/12/02 10:10:00 AM	4	6/12/02 10:45:00 AM	6	6/12/02 11:20:00 AM	9
6/12/02 9:36:00 AM	6	6/12/02 10:11:00 AM	5	6/12/02 10:46:00 AM	6	6/12/02 11:21:00 AM	8
6/12/02 9:37:00 AM	6	6/12/02 10:12:00 AM	4	6/12/02 10:47:00 AM	6	6/12/02 11:22:00 AM	9
6/12/02 9:38:00 AM	6	6/12/02 10:13:00 AM	5	6/12/02 10:48:00 AM	6	6/12/02 11:23:00 AM	8
6/12/02 9:39:00 AM	6	6/12/02 10:14:00 AM	5	6/12/02 10:49:00 AM	6	6/12/02 11:24:00 AM	8
6/12/02 9:40:00 AM	6	6/12/02 10:15:00 AM	5	6/12/02 10:50:00 AM	6	6/12/02 11:25:00 AM	8
6/12/02 9:41:00 AM	6	6/12/02 10:16:00 AM	4	6/12/02 10:51:00 AM	6	6/12/02 11:26:00 AM	8
6/12/02 9:42:00 AM	6	6/12/02 10:17:00 AM	4	6/12/02 10:52:00 AM	6	6/12/02 11:27:00 AM	8
6/12/02 9:43:00 AM	6	6/12/02 10:18:00 AM	4	6/12/02 10:53:00 AM	6	6/12/02 11:28:00 AM	8
6/12/02 9:44:00 AM	6	6/12/02 10:19:00 AM	4	6/12/02 10:54:00 AM	7	6/12/02 11:29:00 AM	8
6/12/02 9:45:00 AM	6	6/12/02 10:20:00 AM	5	6/12/02 10:55:00 AM	7	6/12/02 11:30:00 AM	8
6/12/02 9:46:00 AM	6	6/12/02 10:21:00 AM	4	6/12/02 10:56:00 AM	7	6/12/02 11:31:00 AM	8
6/12/02 9:47:00 AM	6	6/12/02 10:22:00 AM	4	6/12/02 10:57:00 AM	8	6/12/02 11:32:00 AM	8
6/12/02 9:48:00 AM	6	6/12/02 10:23:00 AM	5	6/12/02 10:58:00 AM	8	6/12/02 11:33:00 AM	8
6/12/02 9:49:00 AM	6	6/12/02 10:24:00 AM	4	6/12/02 10:59:00 AM	9	6/12/02 11:34:00 AM	8
6/12/02 9:50:00 AM	5	6/12/02 10:25:00 AM	5	6/12/02 11:00:00 AM	9	6/12/02 11:35:00 AM	11
6/12/02 9:51:00 AM	5	6/12/02 10:26:00 AM	4	6/12/02 11:01:00 AM	9	6/12/02 11:36:00 AM	14
6/12/02 9:52:00 AM	5	6/12/02 10:27:00 AM	7	6/12/02 11:02:00 AM	10	6/12/02 11:37:00 AM	16
6/12/02 9:53:00 AM	5	6/12/02 10:28:00 AM	6	6/12/02 11:03:00 AM	10	6/12/02 11:38:00 AM	16
6/12/02 9:54:00 AM	5	6/12/02 10:29:00 AM	6	6/12/02 11:04:00 AM	12	6/12/02 11:39:00 AM	17
6/12/02 9:55:00 AM	5	6/12/02 10:30:00 AM	7	6/12/02 11:05:00 AM	10	6/12/02 11:40:00 AM	15
6/12/02 9:56:00 AM	4	6/12/02 10:31:00 AM	6	6/12/02 11:06:00 AM	9	6/12/02 11:41:00 AM	15
6/12/02 9:57:00 AM	5	6/12/02 10:32:00 AM	7	6/12/02 11:07:00 AM	9	6/12/02 11:42:00 AM	14
6/12/02 9:58:00 AM	5	6/12/02 10:33:00 AM	7	6/12/02 11:08:00 AM	9	6/12/02 11:43:00 AM	15
6/12/02 9:59:00 AM	5	6/12/02 10:34:00 AM	7	6/12/02 11:09:00 AM	9	6/12/02 11:44:00 AM	14
6/12/02 10:00:00 AM	5	6/12/02 10:35:00 AM	6	6/12/02 11:10:00 AM	9	6/12/02 11:45:00 AM	16
6/12/02 10:01:00 AM	5	6/12/02 10:36:00 AM	7	6/12/02 11:11:00 AM	9	6/12/02 11:46:00 AM	15
6/12/02 10:02:00 AM	5	6/12/02 10:37:00 AM	7	6/12/02 11:12:00 AM	9	6/12/02 11:47:00 AM	17
6/12/02 10:03:00 AM	4	6/12/02 10:38:00 AM	7	6/12/02 11:13:00 AM	9	6/12/02 11:48:00 AM	15

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/12/02 11:49:00 AM	17	6/12/02 12:24:00 PM	8	6/12/02 12:59:00 PM	4	6/12/02 1:34:00 PM	4
6/12/02 11:50:00 AM	17	6/12/02 12:25:00 PM	10	6/12/02 1:00:00 PM	8	6/12/02 1:35:00 PM	4
6/12/02 11:51:00 AM	17	6/12/02 12:26:00 PM	8	6/12/02 1:01:00 PM	5	6/12/02 1:36:00 PM	7
6/12/02 11:52:00 AM	18	6/12/02 12:27:00 PM	8	6/12/02 1:02:00 PM	4	6/12/02 1:37:00 PM	5
6/12/02 11:53:00 AM	18	6/12/02 12:28:00 PM	8	6/12/02 1:03:00 PM	4	6/12/02 1:38:00 PM	5
6/12/02 11:54:00 AM	18	6/12/02 12:29:00 PM	7	6/12/02 1:04:00 PM	4	6/12/02 1:39:00 PM	4
6/12/02 11:55:00 AM	16	6/12/02 12:30:00 PM	8	6/12/02 1:05:00 PM	4	6/12/02 1:40:00 PM	5
6/12/02 11:56:00 AM	16	6/12/02 12:31:00 PM	12	6/12/02 1:06:00 PM	5	6/12/02 1:41:00 PM	8
6/12/02 11:57:00 AM	18	6/12/02 12:32:00 PM	11	6/12/02 1:07:00 PM	4	6/12/02 1:42:00 PM	35
6/12/02 11:58:00 AM	22	6/12/02 12:33:00 PM	14	6/12/02 1:08:00 PM	4	6/12/02 1:43:00 PM	13
6/12/02 11:59:00 AM	16	6/12/02 12:34:00 PM	9	6/12/02 1:09:00 PM	4	6/12/02 1:44:00 PM	8
6/12/02 12:00:00 PM	16	6/12/02 12:35:00 PM	11	6/12/02 1:10:00 PM	4	6/12/02 1:45:00 PM	8
6/12/02 12:01:00 PM	15	6/12/02 12:36:00 PM	9	6/12/02 1:11:00 PM	4	6/12/02 1:46:00 PM	5
6/12/02 12:02:00 PM	18	6/12/02 12:37:00 PM	8	6/12/02 1:12:00 PM	14	6/12/02 1:47:00 PM	5
6/12/02 12:03:00 PM	21	6/12/02 12:38:00 PM	7	6/12/02 1:13:00 PM	5	6/12/02 1:48:00 PM	4
6/12/02 12:04:00 PM	18	6/12/02 12:39:00 PM	7	6/12/02 1:14:00 PM	5	6/12/02 1:49:00 PM	6
6/12/02 12:05:00 PM	17	6/12/02 12:40:00 PM	8	6/12/02 1:15:00 PM	5	6/12/02 1:50:00 PM	14
6/12/02 12:06:00 PM	17	6/12/02 12:41:00 PM	6	6/12/02 1:16:00 PM	6	6/12/02 1:51:00 PM	11
6/12/02 12:07:00 PM	16	6/12/02 12:42:00 PM	6	6/12/02 1:17:00 PM	4	6/12/02 1:52:00 PM	20
6/12/02 12:08:00 PM	18	6/12/02 12:43:00 PM	7	6/12/02 1:18:00 PM	4	6/12/02 1:53:00 PM	9
6/12/02 12:09:00 PM	20	6/12/02 12:44:00 PM	7	6/12/02 1:19:00 PM	4	6/12/02 1:54:00 PM	10
6/12/02 12:10:00 PM	19	6/12/02 12:45:00 PM	7	6/12/02 1:20:00 PM	4	6/12/02 1:55:00 PM	10
6/12/02 12:11:00 PM	17	6/12/02 12:46:00 PM	8	6/12/02 1:21:00 PM	11	6/12/02 1:56:00 PM	9
6/12/02 12:12:00 PM	16	6/12/02 12:47:00 PM	7	6/12/02 1:22:00 PM	5	6/12/02 1:57:00 PM	7
6/12/02 12:13:00 PM	16	6/12/02 12:48:00 PM	7	6/12/02 1:23:00 PM	5	6/12/02 1:58:00 PM	8
6/12/02 12:14:00 PM	16	6/12/02 12:49:00 PM	6	6/12/02 1:24:00 PM	8	6/12/02 1:59:00 PM	9
6/12/02 12:15:00 PM	15	6/12/02 12:50:00 PM	5	6/12/02 1:25:00 PM	10	6/12/02 2:00:00 PM	7
6/12/02 12:16:00 PM	15	6/12/02 12:51:00 PM	6	6/12/02 1:26:00 PM	6	6/12/02 2:01:00 PM	7
6/12/02 12:17:00 PM	16	6/12/02 12:52:00 PM	4	6/12/02 1:27:00 PM	7	6/12/02 2:02:00 PM	9
6/12/02 12:18:00 PM	15	6/12/02 12:53:00 PM	4	6/12/02 1:28:00 PM	10	6/12/02 2:03:00 PM	9
6/12/02 12:19:00 PM	14	6/12/02 12:54:00 PM	5	6/12/02 1:29:00 PM	8	6/12/02 2:04:00 PM	10
6/12/02 12:20:00 PM	18	6/12/02 12:55:00 PM	4	6/12/02 1:30:00 PM	6	6/12/02 2:05:00 PM	10
6/12/02 12:21:00 PM	12	6/12/02 12:56:00 PM	4	6/12/02 1:31:00 PM	6	6/12/02 2:06:00 PM	12
6/12/02 12:22:00 PM	10	6/12/02 12:57:00 PM	5	6/12/02 1:32:00 PM	5	6/12/02 2:07:00 PM	10
6/12/02 12:23:00 PM	12	6/12/02 12:58:00 PM	5	6/12/02 1:33:00 PM	4	6/12/02 2:08:00 PM	12

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/12/02 2:09:00 PM	9	6/12/02 2:44:00 PM	3	6/12/02 3:19:00 PM	2	6/12/02 3:54:00 PM	2
6/12/02 2:10:00 PM	8	6/12/02 2:45:00 PM	4	6/12/02 3:20:00 PM	2	6/12/02 3:55:00 PM	2
6/12/02 2:11:00 PM	9	6/12/02 2:46:00 PM	3	6/12/02 3:21:00 PM	2	6/12/02 3:56:00 PM	2
6/12/02 2:12:00 PM	8	6/12/02 2:47:00 PM	3	6/12/02 3:22:00 PM	2	6/12/02 3:57:00 PM	2
6/12/02 2:13:00 PM	8	6/12/02 2:48:00 PM	3	6/12/02 3:23:00 PM	2	6/12/02 3:58:00 PM	4
6/12/02 2:14:00 PM	8	6/12/02 2:49:00 PM	4	6/12/02 3:24:00 PM	2	6/12/02 3:59:00 PM	5
6/12/02 2:15:00 PM	7	6/12/02 2:50:00 PM	2	6/12/02 3:25:00 PM	2	6/12/02 4:00:00 PM	23
6/12/02 2:16:00 PM	8	6/12/02 2:51:00 PM	3	6/12/02 3:26:00 PM	2	6/12/02 4:01:00 PM	10
6/12/02 2:17:00 PM	19	6/12/02 2:52:00 PM	2	6/12/02 3:27:00 PM	2	6/12/02 4:02:00 PM	4
6/12/02 2:18:00 PM	7	6/12/02 2:53:00 PM	3	6/12/02 3:28:00 PM	2	6/12/02 4:03:00 PM	6
6/12/02 2:19:00 PM	16	6/12/02 2:54:00 PM	2	6/12/02 3:29:00 PM	2	6/12/02 4:04:00 PM	7
6/12/02 2:20:00 PM	8	6/12/02 2:55:00 PM	2	6/12/02 3:30:00 PM	2	6/12/02 4:05:00 PM	7
6/12/02 2:21:00 PM	9	6/12/02 2:56:00 PM	2	6/12/02 3:31:00 PM	2	6/12/02 4:06:00 PM	5
6/12/02 2:22:00 PM	8	6/12/02 2:57:00 PM	2	6/12/02 3:32:00 PM	2	6/12/02 4:07:00 PM	5
6/12/02 2:23:00 PM	8	6/12/02 2:58:00 PM	2	6/12/02 3:33:00 PM	2	6/12/02 4:08:00 PM	5
6/12/02 2:24:00 PM	9	6/12/02 2:59:00 PM	2	6/12/02 3:34:00 PM	2	6/12/02 4:09:00 PM	4
6/12/02 2:25:00 PM	9	6/12/02 3:00:00 PM	2	6/12/02 3:35:00 PM	2	6/12/02 4:10:00 PM	3
6/12/02 2:26:00 PM	8	6/12/02 3:01:00 PM	2	6/12/02 3:36:00 PM	2	6/12/02 4:11:00 PM	3
6/12/02 2:27:00 PM	6	6/12/02 3:02:00 PM	2	6/12/02 3:37:00 PM	2	6/12/02 4:12:00 PM	3
6/12/02 2:28:00 PM	5	6/12/02 3:03:00 PM	2	6/12/02 3:38:00 PM	2	6/12/02 4:13:00 PM	4
6/12/02 2:29:00 PM	7	6/12/02 3:04:00 PM	2	6/12/02 3:39:00 PM	2	6/12/02 4:14:00 PM	7
6/12/02 2:30:00 PM	4	6/12/02 3:05:00 PM	2	6/12/02 3:40:00 PM	2	6/14/02 7:38:00 AM	4
6/12/02 2:31:00 PM	5	6/12/02 3:06:00 PM	2	6/12/02 3:41:00 PM	2	6/14/02 7:39:00 AM	4
6/12/02 2:32:00 PM	5	6/12/02 3:07:00 PM	2	6/12/02 3:42:00 PM	2	6/14/02 7:40:00 AM	4
6/12/02 2:33:00 PM	3	6/12/02 3:08:00 PM	2	6/12/02 3:43:00 PM	2	6/14/02 7:41:00 AM	4
6/12/02 2:34:00 PM	3	6/12/02 3:09:00 PM	2	6/12/02 3:44:00 PM	2	6/14/02 7:42:00 AM	5
6/12/02 2:35:00 PM	4	6/12/02 3:10:00 PM	2	6/12/02 3:45:00 PM	2	6/14/02 7:43:00 AM	8
6/12/02 2:36:00 PM	5	6/12/02 3:11:00 PM	2	6/12/02 3:46:00 PM	2	6/14/02 7:44:00 AM	5
6/12/02 2:37:00 PM	4	6/12/02 3:12:00 PM	2	6/12/02 3:47:00 PM	2	6/14/02 7:45:00 AM	5
6/12/02 2:38:00 PM	4	6/12/02 3:13:00 PM	2	6/12/02 3:48:00 PM	2	6/14/02 7:46:00 AM	6
6/12/02 2:39:00 PM	3	6/12/02 3:14:00 PM	2	6/12/02 3:49:00 PM	2	6/14/02 7:47:00 AM	15
6/12/02 2:40:00 PM	3	6/12/02 3:15:00 PM	2	6/12/02 3:50:00 PM	2	6/14/02 7:48:00 AM	4
6/12/02 2:41:00 PM	4	6/12/02 3:16:00 PM	2	6/12/02 3:51:00 PM	2	6/14/02 7:49:00 AM	5
6/12/02 2:42:00 PM	3	6/12/02 3:17:00 PM	2	6/12/02 3:52:00 PM	2	6/14/02 7:50:00 AM	6
6/12/02 2:43:00 PM	2	6/12/02 3:18:00 PM	2	6/12/02 3:53:00 PM	2	6/14/02 7:51:00 AM	4

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/14/02 7:52:00 AM	5	6/14/02 8:27:00 AM	43	6/14/02 9:02:00 AM	4	6/14/02 9:37:00 AM	5
6/14/02 7:53:00 AM	5	6/14/02 8:28:00 AM	15	6/14/02 9:03:00 AM	4	6/14/02 9:38:00 AM	5
6/14/02 7:54:00 AM	4	6/14/02 8:29:00 AM	6	6/14/02 9:04:00 AM	4	6/14/02 9:39:00 AM	5
6/14/02 7:55:00 AM	5	6/14/02 8:30:00 AM	5	6/14/02 9:05:00 AM	4	6/14/02 9:40:00 AM	5
6/14/02 7:56:00 AM	4	6/14/02 8:31:00 AM	5	6/14/02 9:06:00 AM	8	6/14/02 9:41:00 AM	5
6/14/02 7:57:00 AM	4	6/14/02 8:32:00 AM	4	6/14/02 9:07:00 AM	4	6/14/02 9:42:00 AM	4
6/14/02 7:58:00 AM	5	6/14/02 8:33:00 AM	4	6/14/02 9:08:00 AM	5	6/14/02 9:43:00 AM	5
6/14/02 7:59:00 AM	5	6/14/02 8:34:00 AM	4	6/14/02 9:09:00 AM	4	6/14/02 9:44:00 AM	5
6/14/02 8:00:00 AM	5	6/14/02 8:35:00 AM	4	6/14/02 9:10:00 AM	5	6/14/02 9:45:00 AM	6
6/14/02 8:01:00 AM	4	6/14/02 8:36:00 AM	4	6/14/02 9:11:00 AM	5	6/14/02 9:46:00 AM	5
6/14/02 8:02:00 AM	5	6/14/02 8:37:00 AM	5	6/14/02 9:12:00 AM	5	6/14/02 9:47:00 AM	17
6/14/02 8:03:00 AM	5	6/14/02 8:38:00 AM	5	6/14/02 9:13:00 AM	5	6/14/02 9:48:00 AM	17
6/14/02 8:04:00 AM	6	6/14/02 8:39:00 AM	6	6/14/02 9:14:00 AM	5	6/14/02 9:49:00 AM	14
6/14/02 8:05:00 AM	5	6/14/02 8:40:00 AM	7	6/14/02 9:15:00 AM	5	6/14/02 9:50:00 AM	8
6/14/02 8:06:00 AM	6	6/14/02 8:41:00 AM	6	6/14/02 9:16:00 AM	4	6/14/02 9:51:00 AM	5
6/14/02 8:07:00 AM	5	6/14/02 8:42:00 AM	5	6/14/02 9:17:00 AM	5	6/14/02 9:52:00 AM	5
6/14/02 8:08:00 AM	5	6/14/02 8:43:00 AM	6	6/14/02 9:18:00 AM	4	6/14/02 9:53:00 AM	5
6/14/02 8:09:00 AM	5	6/14/02 8:44:00 AM	10	6/14/02 9:19:00 AM	4	6/14/02 9:54:00 AM	5
6/14/02 8:10:00 AM	6	6/14/02 8:45:00 AM	14	6/14/02 9:20:00 AM	5	6/14/02 9:55:00 AM	5
6/14/02 8:11:00 AM	8	6/14/02 8:46:00 AM	78	6/14/02 9:21:00 AM	4	6/14/02 9:56:00 AM	5
6/14/02 8:12:00 AM	6	6/14/02 8:47:00 AM	39	6/14/02 9:22:00 AM	4	6/14/02 9:57:00 AM	6
6/14/02 8:13:00 AM	5	6/14/02 8:48:00 AM	8	6/14/02 9:23:00 AM	4	6/14/02 9:58:00 AM	5
6/14/02 8:14:00 AM	5	6/14/02 8:49:00 AM	10	6/14/02 9:24:00 AM	5	6/14/02 9:59:00 AM	6
6/14/02 8:15:00 AM	8	6/14/02 8:50:00 AM	13	6/14/02 9:25:00 AM	5	6/14/02 10:00:00 AM	7
6/14/02 8:16:00 AM	9	6/14/02 8:51:00 AM	103	6/14/02 9:26:00 AM	5	6/14/02 10:01:00 AM	6
6/14/02 8:17:00 AM	8	6/14/02 8:52:00 AM	60	6/14/02 9:27:00 AM	5	6/14/02 10:02:00 AM	5
6/14/02 8:18:00 AM	6	6/14/02 8:53:00 AM	57	6/14/02 9:28:00 AM	5	6/14/02 10:03:00 AM	5
6/14/02 8:19:00 AM	7	6/14/02 8:54:00 AM	15	6/14/02 9:29:00 AM	4	6/14/02 10:04:00 AM	5
6/14/02 8:20:00 AM	8	6/14/02 8:55:00 AM	26	6/14/02 9:30:00 AM	5	6/14/02 10:05:00 AM	5
6/14/02 8:21:00 AM	11	6/14/02 8:56:00 AM	30	6/14/02 9:31:00 AM	5	6/14/02 10:06:00 AM	5
6/14/02 8:22:00 AM	12	6/14/02 8:57:00 AM	14	6/14/02 9:32:00 AM	5	6/14/02 10:07:00 AM	5
6/14/02 8:23:00 AM	7	6/14/02 8:58:00 AM	11	6/14/02 9:33:00 AM	5	6/14/02 10:08:00 AM	5
6/14/02 8:24:00 AM	54	6/14/02 8:59:00 AM	6	6/14/02 9:34:00 AM	5	6/14/02 10:09:00 AM	11
6/14/02 8:25:00 AM	36	6/14/02 9:00:00 AM	4	6/14/02 9:35:00 AM	5	6/14/02 10:10:00 AM	5
6/14/02 8:26:00 AM	96	6/14/02 9:01:00 AM	4	6/14/02 9:36:00 AM	5	6/14/02 10:11:00 AM	6

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
6/14/02 10:12:00 AM	5	6/14/02 10:47:00 AM	4	11/20/02 10:11:00 AM	40	11/20/02 10:46:00 AM	36
6/14/02 10:13:00 AM	6	6/14/02 10:48:00 AM	4	11/20/02 10:12:00 AM	42	11/20/02 10:47:00 AM	36
6/14/02 10:14:00 AM	5	6/14/02 10:49:00 AM	5	11/20/02 10:13:00 AM	37	11/20/02 10:48:00 AM	38
6/14/02 10:15:00 AM	5	11/20/02 9:39:00 AM	32	11/20/02 10:14:00 AM	35	11/20/02 10:49:00 AM	34
6/14/02 10:16:00 AM	5	11/20/02 9:40:00 AM	34	11/20/02 10:15:00 AM	41	11/20/02 10:50:00 AM	35
6/14/02 10:17:00 AM	7	11/20/02 9:41:00 AM	33	11/20/02 10:16:00 AM	38	11/20/02 10:51:00 AM	31
6/14/02 10:18:00 AM	5	11/20/02 9:42:00 AM	35	11/20/02 10:17:00 AM	40	11/20/02 10:52:00 AM	33
6/14/02 10:19:00 AM	5	11/20/02 9:43:00 AM	34	11/20/02 10:18:00 AM	44	11/20/02 10:53:00 AM	35
6/14/02 10:20:00 AM	5	11/20/02 9:44:00 AM	38	11/20/02 10:19:00 AM	50	11/20/02 10:54:00 AM	37
6/14/02 10:21:00 AM	6	11/20/02 9:45:00 AM	36	11/20/02 10:20:00 AM	40	11/20/02 10:55:00 AM	32
6/14/02 10:22:00 AM	35	11/20/02 9:46:00 AM	34	11/20/02 10:21:00 AM	62	11/20/02 10:56:00 AM	44
6/14/02 10:23:00 AM	14	11/20/02 9:47:00 AM	34	11/20/02 10:22:00 AM	43	11/20/02 10:57:00 AM	42
6/14/02 10:24:00 AM	7	11/20/02 9:48:00 AM	37	11/20/02 10:23:00 AM	40	11/20/02 10:58:00 AM	41
6/14/02 10:25:00 AM	5	11/20/02 9:49:00 AM	40	11/20/02 10:24:00 AM	47	11/20/02 10:59:00 AM	36
6/14/02 10:26:00 AM	8	11/20/02 9:50:00 AM	37	11/20/02 10:25:00 AM	35	11/20/02 11:00:00 AM	35
6/14/02 10:27:00 AM	6	11/20/02 9:51:00 AM	37	11/20/02 10:26:00 AM	43	11/20/02 11:01:00 AM	30
6/14/02 10:28:00 AM	5	11/20/02 9:52:00 AM	43	11/20/02 10:27:00 AM	48	11/20/02 11:02:00 AM	30
6/14/02 10:29:00 AM	5	11/20/02 9:53:00 AM	36	11/20/02 10:28:00 AM	51	11/20/02 11:03:00 AM	36
6/14/02 10:30:00 AM	6	11/20/02 9:54:00 AM	36	11/20/02 10:29:00 AM	49	11/20/02 11:04:00 AM	43
6/14/02 10:31:00 AM	5	11/20/02 9:55:00 AM	35	11/20/02 10:30:00 AM	41	11/20/02 11:05:00 AM	57
6/14/02 10:32:00 AM	5	11/20/02 9:56:00 AM	37	11/20/02 10:31:00 AM	40	11/20/02 11:06:00 AM	37
6/14/02 10:33:00 AM	5	11/20/02 9:57:00 AM	38	11/20/02 10:32:00 AM	43	11/20/02 11:07:00 AM	31
6/14/02 10:34:00 AM	43	11/20/02 9:58:00 AM	41	11/20/02 10:33:00 AM	41	11/20/02 11:08:00 AM	31
6/14/02 10:35:00 AM	5	11/20/02 9:59:00 AM	39	11/20/02 10:34:00 AM	41	11/20/02 11:09:00 AM	27
6/14/02 10:36:00 AM	5	11/20/02 10:00:00 AM	35	11/20/02 10:35:00 AM	41	11/20/02 11:10:00 AM	27
6/14/02 10:37:00 AM	4	11/20/02 10:01:00 AM	35	11/20/02 10:36:00 AM	36	11/20/02 11:11:00 AM	34
6/14/02 10:38:00 AM	5	11/20/02 10:02:00 AM	36	11/20/02 10:37:00 AM	36	11/20/02 11:12:00 AM	33
6/14/02 10:39:00 AM	4	11/20/02 10:03:00 AM	38	11/20/02 10:38:00 AM	37	11/20/02 11:13:00 AM	30
6/14/02 10:40:00 AM	4	11/20/02 10:04:00 AM	37	11/20/02 10:39:00 AM	35	11/20/02 11:14:00 AM	25
6/14/02 10:41:00 AM	5	11/20/02 10:05:00 AM	36	11/20/02 10:40:00 AM	33	11/20/02 11:15:00 AM	27
6/14/02 10:42:00 AM	4	11/20/02 10:06:00 AM	38	11/20/02 10:41:00 AM	35	11/20/02 11:16:00 AM	41
6/14/02 10:43:00 AM	4	11/20/02 10:07:00 AM	36	11/20/02 10:42:00 AM	35	11/20/02 11:17:00 AM	33
6/14/02 10:44:00 AM	4	11/20/02 10:08:00 AM	39	11/20/02 10:43:00 AM	35	11/20/02 11:18:00 AM	38
6/14/02 10:45:00 AM	5	11/20/02 10:09:00 AM	35	11/20/02 10:44:00 AM	40	11/20/02 11:19:00 AM	32
6/14/02 10:46:00 AM	4	11/20/02 10:10:00 AM	37	11/20/02 10:45:00 AM	38	11/20/02 11:20:00 AM	37

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
11/20/02 11:21:00 AM	34	11/20/02 11:56:00 AM	29	11/20/02 12:31:00 PM	23	11/20/02 1:06:00 PM	27
11/20/02 11:22:00 AM	30	11/20/02 11:57:00 AM	26	11/20/02 12:32:00 PM	22	11/20/02 1:07:00 PM	25
11/20/02 11:23:00 AM	27	11/20/02 11:58:00 AM	28	11/20/02 12:33:00 PM	25	11/20/02 1:08:00 PM	24
11/20/02 11:24:00 AM	33	11/20/02 11:59:00 AM	26	11/20/02 12:34:00 PM	26	11/20/02 1:09:00 PM	26
11/20/02 11:25:00 AM	32	11/20/02 12:00:00 PM	24	11/20/02 12:35:00 PM	21	11/20/02 1:10:00 PM	29
11/20/02 11:26:00 AM	35	11/20/02 12:01:00 PM	26	11/20/02 12:36:00 PM	22	11/20/02 1:11:00 PM	36
11/20/02 11:27:00 AM	33	11/20/02 12:02:00 PM	29	11/20/02 12:37:00 PM	23	11/20/02 1:12:00 PM	26
11/20/02 11:28:00 AM	30	11/20/02 12:03:00 PM	26	11/20/02 12:38:00 PM	28	11/20/02 1:13:00 PM	31
11/20/02 11:29:00 AM	32	11/20/02 12:04:00 PM	28	11/20/02 12:39:00 PM	25	11/20/02 1:14:00 PM	26
11/20/02 11:30:00 AM	32	11/20/02 12:05:00 PM	29	11/20/02 12:40:00 PM	24	11/20/02 1:15:00 PM	23
11/20/02 11:31:00 AM	28	11/20/02 12:06:00 PM	31	11/20/02 12:41:00 PM	42	11/20/02 1:16:00 PM	23
11/20/02 11:32:00 AM	25	11/20/02 12:07:00 PM	25	11/20/02 12:42:00 PM	27	11/20/02 1:17:00 PM	22
11/20/02 11:33:00 AM	27	11/20/02 12:08:00 PM	38	11/20/02 12:43:00 PM	25	11/20/02 1:18:00 PM	22
11/20/02 11:34:00 AM	35	11/20/02 12:09:00 PM	28	11/20/02 12:44:00 PM	23	11/20/02 1:19:00 PM	21
11/20/02 11:35:00 AM	37	11/20/02 12:10:00 PM	31	11/20/02 12:45:00 PM	25	11/20/02 1:20:00 PM	23
11/20/02 11:36:00 AM	27	11/20/02 12:11:00 PM	24	11/20/02 12:46:00 PM	40	11/20/02 1:21:00 PM	24
11/20/02 11:37:00 AM	26	11/20/02 12:12:00 PM	30	11/20/02 12:47:00 PM	32	11/20/02 1:22:00 PM	24
11/20/02 11:38:00 AM	32	11/20/02 12:13:00 PM	29	11/20/02 12:48:00 PM	26	11/20/02 1:23:00 PM	24
11/20/02 11:39:00 AM	28	11/20/02 12:14:00 PM	35	11/20/02 12:49:00 PM	29	11/20/02 1:24:00 PM	24
11/20/02 11:40:00 AM	30	11/20/02 12:15:00 PM	27	11/20/02 12:50:00 PM	27	11/20/02 1:25:00 PM	24
11/20/02 11:41:00 AM	26	11/20/02 12:16:00 PM	28	11/20/02 12:51:00 PM	29	11/20/02 1:26:00 PM	31
11/20/02 11:42:00 AM	28	11/20/02 12:17:00 PM	41	11/20/02 12:52:00 PM	27	11/20/02 1:27:00 PM	22
11/20/02 11:43:00 AM	37	11/20/02 12:18:00 PM	29	11/20/02 12:53:00 PM	28	11/20/02 1:28:00 PM	33
11/20/02 11:44:00 AM	28	11/20/02 12:19:00 PM	39	11/20/02 12:54:00 PM	26	11/20/02 1:29:00 PM	24
11/20/02 11:45:00 AM	33	11/20/02 12:20:00 PM	35	11/20/02 12:55:00 PM	28	11/20/02 1:30:00 PM	22
11/20/02 11:46:00 AM	30	11/20/02 12:21:00 PM	32	11/20/02 12:56:00 PM	26	11/20/02 1:31:00 PM	22
11/20/02 11:47:00 AM	27	11/20/02 12:22:00 PM	27	11/20/02 12:57:00 PM	27	11/20/02 1:32:00 PM	26
11/20/02 11:48:00 AM	31	11/20/02 12:23:00 PM	27	11/20/02 12:58:00 PM	24	11/20/02 1:33:00 PM	25
11/20/02 11:49:00 AM	31	11/20/02 12:24:00 PM	24	11/20/02 12:59:00 PM	25	11/20/02 1:34:00 PM	24
11/20/02 11:50:00 AM	29	11/20/02 12:25:00 PM	29	11/20/02 1:00:00 PM	27	11/20/02 1:35:00 PM	24
11/20/02 11:51:00 AM	25	11/20/02 12:26:00 PM	27	11/20/02 1:01:00 PM	25	11/20/02 1:36:00 PM	23
11/20/02 11:52:00 AM	31	11/20/02 12:27:00 PM	25	11/20/02 1:02:00 PM	28	11/20/02 1:37:00 PM	24
11/20/02 11:53:00 AM	25	11/20/02 12:28:00 PM	25	11/20/02 1:03:00 PM	23	11/20/02 1:38:00 PM	26
11/20/02 11:54:00 AM	28	11/20/02 12:29:00 PM	26	11/20/02 1:04:00 PM	23	11/20/02 1:39:00 PM	26
11/20/02 11:55:00 AM	30	11/20/02 12:30:00 PM	28	11/20/02 1:05:00 PM	24	11/20/02 1:40:00 PM	26

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
11/20/02 1:41:00 PM	22	11/20/02 2:16:00 PM	29	11/20/02 2:51:00 PM	23	11/20/02 3:26:00 PM	35
11/20/02 1:42:00 PM	21	11/20/02 2:17:00 PM	26	11/20/02 2:52:00 PM	32	11/20/02 3:27:00 PM	34
11/20/02 1:43:00 PM	21	11/20/02 2:18:00 PM	30	11/20/02 2:53:00 PM	31	11/20/02 3:28:00 PM	35
11/20/02 1:44:00 PM	19	11/20/02 2:19:00 PM	29	11/20/02 2:54:00 PM	29	11/20/02 3:29:00 PM	28
11/20/02 1:45:00 PM	21	11/20/02 2:20:00 PM	27	11/20/02 2:55:00 PM	30	11/20/02 3:30:00 PM	35
11/20/02 1:46:00 PM	22	11/20/02 2:21:00 PM	41	11/20/02 2:56:00 PM	32	11/20/02 3:31:00 PM	33
11/20/02 1:47:00 PM	22	11/20/02 2:22:00 PM	37	11/20/02 2:57:00 PM	28	11/20/02 3:32:00 PM	34
11/20/02 1:48:00 PM	32	11/20/02 2:23:00 PM	30	11/20/02 2:58:00 PM	32	11/20/02 3:33:00 PM	38
11/20/02 1:49:00 PM	29	11/20/02 2:24:00 PM	28	11/20/02 2:59:00 PM	38	11/20/02 3:34:00 PM	38
11/20/02 1:50:00 PM	30	11/20/02 2:25:00 PM	29	11/20/02 3:00:00 PM	38	11/20/02 3:35:00 PM	37
11/20/02 1:51:00 PM	28	11/20/02 2:26:00 PM	29	11/20/02 3:01:00 PM	51	11/20/02 3:36:00 PM	35
11/20/02 1:52:00 PM	30	11/20/02 2:27:00 PM	28	11/20/02 3:02:00 PM	36	11/20/02 3:37:00 PM	32
11/20/02 1:53:00 PM	26	11/20/02 2:28:00 PM	27	11/20/02 3:03:00 PM	33	11/20/02 3:38:00 PM	36
11/20/02 1:54:00 PM	22	11/20/02 2:29:00 PM	29	11/20/02 3:04:00 PM	39	11/20/02 3:39:00 PM	37
11/20/02 1:55:00 PM	22	11/20/02 2:30:00 PM	32	11/20/02 3:05:00 PM	36	11/20/02 3:40:00 PM	42
11/20/02 1:56:00 PM	22	11/20/02 2:31:00 PM	31	11/20/02 3:06:00 PM	33	11/20/02 3:41:00 PM	41
11/20/02 1:57:00 PM	23	11/20/02 2:32:00 PM	24	11/20/02 3:07:00 PM	38	11/20/02 3:42:00 PM	33
11/20/02 1:58:00 PM	21	11/20/02 2:33:00 PM	32	11/20/02 3:08:00 PM	52	11/20/02 3:43:00 PM	35
11/20/02 1:59:00 PM	22	11/20/02 2:34:00 PM	42	11/20/02 3:09:00 PM	31	11/20/02 3:44:00 PM	30
11/20/02 2:00:00 PM	27	11/20/02 2:35:00 PM	26	11/20/02 3:10:00 PM	39	11/20/02 3:45:00 PM	33
11/20/02 2:01:00 PM	27	11/20/02 2:36:00 PM	25	11/20/02 3:11:00 PM	47	11/20/02 3:46:00 PM	38
11/20/02 2:02:00 PM	35	11/20/02 2:37:00 PM	28	11/20/02 3:12:00 PM	41	11/20/02 3:47:00 PM	33
11/20/02 2:03:00 PM	25	11/20/02 2:38:00 PM	28	11/20/02 3:13:00 PM	41	11/20/02 3:48:00 PM	35
11/20/02 2:04:00 PM	28	11/20/02 2:39:00 PM	28	11/20/02 3:14:00 PM	31	11/20/02 3:49:00 PM	34
11/20/02 2:05:00 PM	26	11/20/02 2:40:00 PM	28	11/20/02 3:15:00 PM	26	11/20/02 3:50:00 PM	37
11/20/02 2:06:00 PM	26	11/20/02 2:41:00 PM	32	11/20/02 3:16:00 PM	35	11/20/02 3:51:00 PM	42
11/20/02 2:07:00 PM	24	11/20/02 2:42:00 PM	27	11/20/02 3:17:00 PM	31	11/20/02 3:52:00 PM	34
11/20/02 2:08:00 PM	26	11/20/02 2:43:00 PM	26	11/20/02 3:18:00 PM	31	11/20/02 3:53:00 PM	34
11/20/02 2:09:00 PM	24	11/20/02 2:44:00 PM	27	11/20/02 3:19:00 PM	36	11/20/02 3:54:00 PM	36
11/20/02 2:10:00 PM	23	11/20/02 2:45:00 PM	31	11/20/02 3:20:00 PM	43	11/20/02 3:55:00 PM	34
11/20/02 2:11:00 PM	24	11/20/02 2:46:00 PM	26	11/20/02 3:21:00 PM	42	11/20/02 3:56:00 PM	36
11/20/02 2:12:00 PM	26	11/20/02 2:47:00 PM	30	11/20/02 3:22:00 PM	38	11/20/02 3:57:00 PM	33
11/20/02 2:13:00 PM	27	11/20/02 2:48:00 PM	29	11/20/02 3:23:00 PM	36	11/20/02 3:58:00 PM	38
11/20/02 2:14:00 PM	26	11/20/02 2:49:00 PM	28	11/20/02 3:24:00 PM	32	11/20/02 3:59:00 PM	38
11/20/02 2:15:00 PM	24	11/20/02 2:50:00 PM	28	11/20/02 3:25:00 PM	30	11/20/02 4:00:00 PM	38

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
11/20/02 4:01:00 PM	36	11/20/02 4:36:00 PM	40	11/20/02 5:11:00 PM	33	11/25/02 10:32:00 AM	35
11/20/02 4:02:00 PM	31	11/20/02 4:37:00 PM	42	11/20/02 5:12:00 PM	36	11/25/02 10:33:00 AM	35
11/20/02 4:03:00 PM	30	11/20/02 4:38:00 PM	39	11/20/02 5:13:00 PM	40	11/25/02 10:34:00 AM	36
11/20/02 4:04:00 PM	33	11/20/02 4:39:00 PM	40	11/20/02 5:14:00 PM	37	11/25/02 10:35:00 AM	37
11/20/02 4:05:00 PM	31	11/20/02 4:40:00 PM	40	11/20/02 5:15:00 PM	44	11/25/02 10:36:00 AM	36
11/20/02 4:06:00 PM	33	11/20/02 4:41:00 PM	40	11/20/02 5:16:00 PM	42	11/25/02 10:37:00 AM	35
11/20/02 4:07:00 PM	30	11/20/02 4:42:00 PM	38	11/20/02 5:17:00 PM	37	11/25/02 10:38:00 AM	36
11/20/02 4:08:00 PM	33	11/20/02 4:43:00 PM	38	11/20/02 5:18:00 PM	37	11/25/02 10:39:00 AM	34
11/20/02 4:09:00 PM	33	11/20/02 4:44:00 PM	39	11/20/02 5:19:00 PM	36	11/25/02 10:40:00 AM	33
11/20/02 4:10:00 PM	35	11/20/02 4:45:00 PM	41	11/20/02 5:20:00 PM	276	11/25/02 10:41:00 AM	34
11/20/02 4:11:00 PM	34	11/20/02 4:46:00 PM	41	11/25/02 10:07:00 AM	145	11/25/02 10:42:00 AM	35
11/20/02 4:12:00 PM	34	11/20/02 4:47:00 PM	40	11/25/02 10:08:00 AM	144	11/25/02 10:43:00 AM	37
11/20/02 4:13:00 PM	43	11/20/02 4:48:00 PM	39	11/25/02 10:09:00 AM	143	11/25/02 10:44:00 AM	36
11/20/02 4:14:00 PM	39	11/20/02 4:49:00 PM	38	11/25/02 10:10:00 AM	150	11/25/02 10:45:00 AM	36
11/20/02 4:15:00 PM	39	11/20/02 4:50:00 PM	40	11/25/02 10:11:00 AM	147	11/25/02 10:46:00 AM	36
11/20/02 4:16:00 PM	40	11/20/02 4:51:00 PM	43	11/25/02 10:12:00 AM	142	11/25/02 10:47:00 AM	37
11/20/02 4:17:00 PM	32	11/20/02 4:52:00 PM	38	11/25/02 10:13:00 AM	148	11/25/02 10:48:00 AM	37
11/20/02 4:18:00 PM	37	11/20/02 4:53:00 PM	39	11/25/02 10:14:00 AM	138	11/25/02 10:49:00 AM	39
11/20/02 4:19:00 PM	35	11/20/02 4:54:00 PM	41	11/25/02 10:15:00 AM	126	11/25/02 10:50:00 AM	38
11/20/02 4:20:00 PM	36	11/20/02 4:55:00 PM	47	11/25/02 10:16:00 AM	134	11/25/02 10:51:00 AM	38
11/20/02 4:21:00 PM	37	11/20/02 4:56:00 PM	37	11/25/02 10:17:00 AM	114	11/25/02 10:52:00 AM	36
11/20/02 4:22:00 PM	41	11/20/02 4:57:00 PM	35	11/25/02 10:18:00 AM	39	11/25/02 10:53:00 AM	37
11/20/02 4:23:00 PM	41	11/20/02 4:58:00 PM	35	11/25/02 10:19:00 AM	30	11/25/02 10:54:00 AM	36
11/20/02 4:24:00 PM	37	11/20/02 4:59:00 PM	38	11/25/02 10:20:00 AM	36	11/25/02 10:55:00 AM	36
11/20/02 4:25:00 PM	34	11/20/02 5:00:00 PM	38	11/25/02 10:21:00 AM	36	11/25/02 10:56:00 AM	37
11/20/02 4:26:00 PM	37	11/20/02 5:01:00 PM	37	11/25/02 10:22:00 AM	33	11/25/02 10:57:00 AM	38
11/20/02 4:27:00 PM	39	11/20/02 5:02:00 PM	37	11/25/02 10:23:00 AM	33	11/25/02 10:58:00 AM	38
11/20/02 4:28:00 PM	44	11/20/02 5:03:00 PM	37	11/25/02 10:24:00 AM	34	11/25/02 10:59:00 AM	38
11/20/02 4:29:00 PM	40	11/20/02 5:04:00 PM	37	11/25/02 10:25:00 AM	34	11/25/02 11:00:00 AM	38
11/20/02 4:30:00 PM	38	11/20/02 5:05:00 PM	36	11/25/02 10:26:00 AM	34	11/25/02 11:01:00 AM	37
11/20/02 4:31:00 PM	41	11/20/02 5:06:00 PM	34	11/25/02 10:27:00 AM	35	11/25/02 11:02:00 AM	36
11/20/02 4:32:00 PM	34	11/20/02 5:07:00 PM	34	11/25/02 10:28:00 AM	34	11/25/02 11:03:00 AM	37
11/20/02 4:33:00 PM	38	11/20/02 5:08:00 PM	36	11/25/02 10:29:00 AM	34	11/25/02 11:04:00 AM	38
11/20/02 4:34:00 PM	46	11/20/02 5:09:00 PM	36	11/25/02 10:30:00 AM	34	11/25/02 11:05:00 AM	38
11/20/02 4:35:00 PM	39	11/20/02 5:10:00 PM	35	11/25/02 10:31:00 AM	35	11/25/02 11:06:00 AM	37

Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentration (ug/m3)	Date/Time	Concentrati (ug/m3)
11/25/02 11:07:00 AM	38						
11/25/02 11:08:00 AM	38						
11/25/02 11:09:00 AM	36						
11/25/02 11:10:00 AM	38						
11/25/02 11:11:00 AM	41						